Appendix D

Laboratory Analytical Data Reports

Electronic Comprehensive Validation Package (eCVP)

Vera Belitsky Vera Belitsky 07-26-2021

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WORK ORDER #: 2107241A

Work Order Summary

CLIENT:	Mr. Robert Kohlhardt AECOM 2020 L Street, Suite 400 Sacramento, CA 95811	**BILL TO:**	Mr. Jerry Montgomery SWPPQueen 7202 Gloria Drive #25 Sacramento, CA 95831
PHONE:	916-679-2000	**P.O. #**	
FAX:	916-679-2900	**PROJECT #**	60632793.6 SMUD 59th ST.
DATE RECEIVED:	07/10/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/23/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-VW43A-02	TO-15	9.6 "Hg	10 psi
02A	SG-VW43B-02	TO-15	5.9 "Hg	10 psi
03A	SG-VW45A-03	TO-15	7.6 "Hg	9.9 psi
04A	SG-VW45B-02	TO-15	8 "Hg	10 psi
05A	SG-VW46A-02	TO-15	7.1 "Hg	10 psi
06A	SG-VW46B-02	TO-15	6.3 "Hg	10 psi
07A	SG-VW44A-02	TO-15	7.8 "Hg	10 psi
08A	SG-VW44B-02	TO-15	8 "Hg	10 psi
09A	SG-VW47A-02	TO-15	6.9 "Hg	10 psi
10A	SG-VW47A-03	TO-15	6.9 "Hg	9.9 psi
11A	SG-VW47B-02	TO-15	7.1 "Hg	9.8 psi
12A	SG-VW48A-03	TO-15	6.1 "Hg	9.8 psi
13A	SG-VW48B-02	TO-15	6.5 "Hg	9.8 psi
14A	SG-VW49A-03	TO-15	5.3 "Hg	9.9 psi
15A	SG-VW49B-02	TO-15	7.1 "Hg	10 psi
16A	SG-VW50A-03	TO-15	6.1 "Hg	10 psi
17A	SG-VW50B-02	TO-15	6.3 "Hg	9.9 psi
18A	SG-VW31A-02	TO-15	7.1 "Hg	9.9 psi
19A	SG-VW31B-02	TO-15	8.2 "Hg	9.7 psi
20A	SG-VW31B-03	TO-15	7.6 "Hg	10 psi
21A	SG-VW26A-02	TO-15	5.9 "Hg	10.1 psi
22A	SG-VW35A-02	TO-15	6.3 "Hg	9.9 psi
23A	SG-VW35B-02	TO-15	7.1 "Hg	10 psi

Continued on next page

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FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
24A	Lab Blank	TO-15	NA	NA
24B	Lab Blank	TO-15	NA	NA
25A	CCV	TO-15	NA	NA
25B	CCV	TO-15	NA	NA
26A	LCS	TO-15	NA	NA
26AA	LCSD	TO-15	NA	NA
26B	LCS	TO-15	NA	NA
26BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/23/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
AECOM
Workorder# 2107241A

Twenty-three 1 Liter Summa Canister samples were received on July 10, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

A revised Chain of Custody (COC) was provided by the client on 7/15/21.

Analytical Notes

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Dilution was performed on sample SG-VW43B-02 due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
SG-VW43A-02	2107241A-01A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW43B-02	2107241A-02A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW45A-03	2107241A-03A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW45B-02	2107241A-04A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW46A-02	2107241A-05A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW46B-02	2107241A-06A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW44A-02	2107241A-07A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW44B-02	2107241A-08A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW47A-02	2107241A-09A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW47A-03	2107241A-10A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW47B-02	2107241A-11A	07/08/2021	07/10/2021	NA	14	07/22/2021	NA	GOOD
SG-VW48A-03	2107241A-12A	07/09/2021	07/10/2021	NA	13	07/22/2021	NA	GOOD
SG-VW48B-02	2107241A-13A	07/09/2021	07/10/2021	NA	13	07/22/2021	NA	GOOD
SG-VW49A-03	2107241A-14A	07/09/2021	07/10/2021	NA	13	07/22/2021	NA	GOOD
SG-VW49B-02	2107241A-15A	07/09/2021	07/10/2021	NA	13	07/22/2021	NA	GOOD
SG-VW50A-03	2107241A-16A	07/09/2021	07/10/2021	NA	13	07/22/2021	NA	GOOD
SG-VW50B-02	2107241A-17A	07/09/2021	07/10/2021	NA	14	07/23/2021	NA	GOOD
SG-VW31A-02	2107241A-18A	07/09/2021	07/10/2021	NA	14	07/23/2021	NA	GOOD
SG-VW31B-02	2107241A-19A	07/09/2021	07/10/2021	NA	14	07/23/2021	NA	GOOD
SG-VW31B-03	2107241A-20A	07/09/2021	07/10/2021	NA	14	07/23/2021	NA	GOOD
SG-VW26A-02	2107241A-21A	07/09/2021	07/10/2021	NA	14	07/23/2021	NA	GOOD
SG-VW35A-02	2107241A-22A	07/09/2021	07/10/2021	NA	14	07/23/2021	NA	GOOD
SG-VW35B-02	2107241A-23A	07/09/2021	07/10/2021	NA	14	07/23/2021	NA	GOOD
Lab Blank	2107241A-24A	NA	NA	NA	NA	07/22/2021	NA	GOOD
Lab Blank	2107241A-24B	NA	NA	NA	NA	07/22/2021	NA	GOOD
CCV	2107241A-25A	NA	NA	NA	NA	07/22/2021	NA	GOOD
CCV	2107241A-25B	NA	NA	NA	NA	07/22/2021	NA	GOOD
LCS	2107241A-26A	NA	NA	NA	NA	07/22/2021	NA	GOOD
LCSD	2107241A-26AA	NA	NA	NA	NA	07/22/2021	NA	GOOD
LCS	2107241A-26B	NA	NA	NA	NA	07/22/2021	NA	GOOD
LCSD	2107241A-26BB	NA	NA	NA	NA	07/22/2021	NA	GOOD

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW43A-02

Lab ID#: 2107241A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	12	12	23	24
Acetone	12	53	29	130
2-Propanol	4.9	37	12	92
Tetrachloroethene	1.2	1.6	8.4	11
Propylene	4.9	5.9	8.5	10

Client Sample ID: SG-VW43B-02

Lab ID#: 2107241A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	13	13	31	32
2-Propanol	5.2	9.0	13	22
Chloroform	1.3	6.2	6.4	30
Tetrachloroethene	1.3	1.7	8.8	12
1,1-Difluoroethane	5.2	14	14	37

Client Sample ID: SG-VW45A-03

Lab ID#: 2107241A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	29	27	69
2-Propanol	4.5	10	11	25
Trichloroethene	1.1	1.4	6.0	7.8
Tetrachloroethene	1.1	1.6	7.6	11
Propylene	4.5	5.7	7.7	9.8

Client Sample ID: SG-VW45B-02

Lab ID#: 2107241A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	11	13	22	25
Acetone	11	17	27	40

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW45B-02

Lab ID#: 2107241A-04A

2-Propanol	4.6	6.1	11	15
Chloroform	1.1	2.7	5.6	13
Toluene	1.1	1.3	4.3	4.9
Tetrachloroethene	1.1	1.4	7.8	9.2
tert-Butyl alcohol	4.6	6.3	14	19

Client Sample ID: SG-VW46A-02

Lab ID#: 2107241A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	22	26	52
2-Propanol	4.4	5.6	11	14
Tetrachloroethene	1.1	2.9	7.5	20

Client Sample ID: SG-VW46B-02

Lab ID#: 2107241A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Carbon Disulfide	4.3	48	13	150
Chloroform	1.1	1.6	5.2	7.9
1,4-Dioxane	4.3	22	15	80
Tetrachloroethene	1.1	1.5	7.2	10

Client Sample ID: SG-VW44A-02

Lab ID#: 2107241A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	31	27	74
2-Propanol	4.5	14	11	33
Carbon Disulfide	4.5	4.9	14	15
Chloroform	1.1	6.3	5.5	30
Toluene	1.1	2.2	4.3	8.2
Tetrachloroethene	1.1	2.0	7.7	14
m,p-Xylene	1.1	2.4	4.9	11

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW44A-02

Lab ID#: 2107241A-07A

1,2,4-Trimethylbenzene	1.1	1.4	5.6	7.2
TPH ref. to Gasoline (MW=100)	110	340	460	1400
1,1-Difluoroethane	4.5	92	12	250

Client Sample ID: SG-VW44B-02

Lab ID#: 2107241A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	25	27	58
2-Propanol	4.6	13	11	33
Chloroform	1.1	9.7	5.6	47
Trichloroethene	1.1	1.2	6.2	6.4
Tetrachloroethene	1.1	2.6	7.8	17

Client Sample ID: SG-VW47A-02

Lab ID#: 2107241A-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	19	26	46
2-Propanol	4.4	11	11	27
Tetrachloroethene	1.1	4.0	7.4	27
m,p-Xylene	1.1	1.4	4.7	6.2
tert-Butyl alcohol	4.4	12	13	38

Client Sample ID: SG-VW47A-03

Lab ID#: 2107241A-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	15	26	35
Tetrachloroethene	1.1	3.9	7.4	27

Client Sample ID: SG-VW47B-02

Lab ID#: 2107241A-11A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW47B-02

Lab ID#: 2107241A-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	12	26	29
2-Propanol	4.4	7.2	11	18
Chloroform	1.1	72	5.3	350
Tetrachloroethene	1.1	1.4	7.4	9.6
Chlorobenzene	1.1	73	5.0	340
1,1-Difluoroethane	4.4	54	12	150

Client Sample ID: SG-VW48A-03

Lab ID#: 2107241A-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	10	27	25	64
2-Propanol	4.2	23	10	57
Chloroform	1.0	1.4	5.1	6.8
Tetrachloroethene	1.0	14	7.1	95

Client Sample ID: SG-VW48B-02

Lab ID#: 2107241A-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	110	25	260
2-Propanol	4.3	25	10	62
Chloroform	1.1	29	5.2	140
Tetrachloroethene	1.1	5.4	7.2	37
1,1-Difluoroethane	4.3	8.9	12	24
Propylene	4.3	40	7.3	69

Client Sample ID: SG-VW49A-03

Lab ID#: 2107241A-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	10	22	24	54

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW49A-03

Lab ID#: 2107241A-14A

2-Propanol	4.1	9.1	10	22
Chloroform	1.0	1.3	5.0	6.3
Tetrachloroethene	1.0	21	6.9	140
Cumene	1.0	1.1	5.0	5.5

Client Sample ID: SG-VW49B-02

Lab ID#: 2107241A-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	11	11	21	21
Acetone	11	17	26	40
2-Propanol	4.4	9.1	11	22
Chloroform	1.1	6.5	5.4	32
Benzene	1.1	1.4	3.5	4.5
Tetrachloroethene	1.1	14	7.5	93
Cumene	1.1	2.9	5.4	14
tert-Butyl alcohol	4.4	7.0	13	21

Client Sample ID: SG-VW50A-03

Lab ID#: 2107241A-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.0	46	7.2	310

Client Sample ID: SG-VW50B-02

Lab ID#: 2107241A-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.1	3.6	5.2	18
Tetrachloroethene	1.1	35	7.2	240
1,1-Difluoroethane	4.2	200	11	530

Client Sample ID: SG-VW31A-02

Lab ID#: 2107241A-18A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW31A-02

Lab ID#: 2107241A-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	15	26	36
Tetrachloroethene	1.1	26	7.4	170

Client Sample ID: SG-VW31B-02

Lab ID#: 2107241A-19A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	58	27	140
2-Propanol	4.6	12	11	29
Carbon Disulfide	4.6	6.6	14	20
Toluene	1.1	5.6	4.3	21
Tetrachloroethene	1.1	12	7.7	81
1,1-Difluoroethane	4.6	33	12	88

Client Sample ID: SG-VW31B-03

Lab ID#: 2107241A-20A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	30	27	72
2-Propanol	4.5	19	11	46
Toluene	1.1	4.7	4.2	18
Tetrachloroethene	1.1	12	7.6	80

Client Sample ID: SG-VW26A-02

Lab ID#: 2107241A-21A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.2	5.0	10	12
Toluene	1.0	4.1	4.0	15
Tetrachloroethene	1.0	8.2	7.1	55
m,p-Xylene	1.0	1.9	4.6	8.2
o-Xylene	1.0	1.4	4.6	5.9

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW26A-02

Lab ID#: 2107241A-21A

4-Ethyltoluene	1.0	1.2	5.2	5.7
1,1-Difluoroethane	4.2	7.7	11	21

Client Sample ID: SG-VW35A-02

Lab ID#: 2107241A-22A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	11	12	20	22
Acetone	11	15	25	37
2-Propanol	4.2	6.3	10	15
Tetrachloroethene	1.1	70	7.2	470
1,1-Difluoroethane	4.2	180	11	470

Client Sample ID: SG-VW35B-02

Lab ID#: 2107241A-23A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	11	13	21	24
Acetone	11	25	26	60
2-Propanol	4.4	6.2	11	15
Chloroform	1.1	4.8	5.4	23
Tetrachloroethene	1.1	28	7.5	190
tert-Butyl alcohol	4.4	11	13	34
1,1-Difluoroethane	4.4	19	12	50

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Client Sample ID: SG-VW43A-02

Lab ID#: 2107241A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072215**	**Date of Collection: 7/8/21 12:10:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 7/22/21 06:15 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.1	Not Detected
Freon 114	1.2	Not Detected	8.6	Not Detected
Chloromethane	12	Not Detected	26	Not Detected
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,3-Butadiene	1.2	Not Detected	2.7	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	4.9	Not Detected	13	Not Detected
Freon 11	1.2	Not Detected	6.9	Not Detected
Ethanol	12	12	23	24
Freon 113	1.2	Not Detected	9.5	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Acetone	12	53	29	130
2-Propanol	4.9	37	12	92
Carbon Disulfide	4.9	Not Detected	15	Not Detected
3-Chloropropene	4.9	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Methyl tert-butyl ether	4.9	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Hexane	1.2	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.6	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Cyclohexane	1.2	Not Detected	4.2	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.8	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.8	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Heptane	1.2	Not Detected	5.1	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.7	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected
Bromodichloromethane	1.2	Not Detected	8.3	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	5.0	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Tetrachloroethene	1.2	1.6	8.4	11
2-Hexanone	4.9	Not Detected	20	Not Detected

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Client Sample ID: SG-VW43A-02

Lab ID#: 2107241A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072215**	**Date of Collection:**	**7/8/21 12:10:00 PM**
Dil. Factor:	**2.47**	**Date of Analysis:**	**7/22/21 06:15 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.5	Not Detected
Chlorobenzene	1.2	Not Detected	5.7	Not Detected
Ethyl Benzene	1.2	Not Detected	5.4	Not Detected
m,p-Xylene	1.2	Not Detected	5.4	Not Detected
o-Xylene	1.2	Not Detected	5.4	Not Detected
Styrene	1.2	Not Detected	5.3	Not Detected
Bromoform	1.2	Not Detected	13	Not Detected
Cumene	1.2	Not Detected	6.1	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.5	Not Detected
Propylbenzene	1.2	Not Detected	6.1	Not Detected
4-Ethyltoluene	1.2	Not Detected	6.1	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.4	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,2,4-Trichlorobenzene	4.9	Not Detected	37	Not Detected
Hexachlorobutadiene	4.9	Not Detected	53	Not Detected
Naphthalene	2.5	Not Detected	13	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	500	Not Detected
Freon 134a	4.9	Not Detected	21	Not Detected
Acrolein	4.9	Not Detected	11	Not Detected
Acrylonitrile	4.9	Not Detected	11	Not Detected
tert-Amyl methyl ether	4.9	Not Detected	21	Not Detected
tert-Butyl alcohol	4.9	Not Detected	15	Not Detected
1,2-Dibromo-3-chloropropane	4.9	Not Detected	48	Not Detected
Dibromomethane	4.9	Not Detected	35	Not Detected
1,1-Difluoroethane	4.9	Not Detected	13	Not Detected
Isopropyl ether	4.9	Not Detected	21	Not Detected
Ethyl Acetate	4.9	Not Detected	18	Not Detected
Ethyl-tert-butyl ether	4.9	Not Detected	21	Not Detected
Hexachloroethane	4.9	Not Detected	48	Not Detected
Iodomethane	12	Not Detected	72	Not Detected
Propylene	4.9	5.9	8.5	10
1,1,1,2-Tetrachloroethane	4.9	Not Detected	34	Not Detected
1,2,3-Trichloropropane	4.9	Not Detected	30	Not Detected
Vinyl Acetate	4.9	Not Detected	17	Not Detected
Vinyl Bromide	4.9	Not Detected	22	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW43A-02

Lab ID#: 2107241A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072215**	**Date of Collection: 7/8/21 12:10:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 7/22/21 06:15 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072215.d
Lab Smp Id: 2107241A-01A
Inj Date : 22-JUL-2021 18:15
Operator : LD Inst ID: msdp.i
Smp Info : 200mL N3379
Misc Info : 9.6 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 8
Dil Factor: 2.47000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	158641	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	121963				48.23- 108.23	76.88
5.785	5.778 (1.000)	49	332904				150.57- 210.57	209.85
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	571926	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	84692				0.00- 45.71	14.81
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	589966	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	307329				23.78- 83.78	52.09
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	223591	25.5388	25.539		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	112164				27.21- 87.21	50.16
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	631244	25.4172	25.417		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66757				0.00- 40.44	10.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	412683			34.95- 94.95	65.38
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	373472	24.6522	24.652	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	456327			95.92- 155.92	122.19
10.921	10.921 (1.154)	176	357950			66.89- 126.89	95.84
5 Propylene					CAS #: 115-07-1		
1.689	1.689 (0.292)	41	17347	2.38955	5.902	80.00- 120.00	100.00
1.689	1.689 (0.292)	42	10937			35.28- 95.28	63.05
1.689	1.689 (0.292)	39	12639			38.35- 98.35	72.86
39 Ethanol					CAS #: 64-17-5		
3.271	3.242 (0.565)	46	8006	5.08888	12.570	80.00- 120.00	100.00
3.264	3.242 (0.564)	45	19817			511.19- 571.19	247.50
47 Acetone					CAS #: 67-64-1		
3.730	3.715 (0.645)	58	89510	21.5223	53.160	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	328994			302.95- 362.95	367.55
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	252864	15.0857	37.262	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	60605			0.00- 47.19	23.97
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	8980	0.66787	1.650	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	7606			47.84- 107.84	84.69
8.464	8.464 (0.895)	131	8593			45.29- 105.29	95.68

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072215.d
Lab Smp Id: 2107241A-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 9.6 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	158641	-0.38
108 1,4-Difluorobenze	573285	343971	802599	571926	-0.24
153 Chlorobenzene-d5	571549	342929	800169	589966	3.22

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:40

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-01A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 9.6 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.539	102.16	70-130
$ 134 Toluene-d8	25.000	25.417	101.67	70-130
$ 170 4-Bromofluorobenz	25.000	24.652	98.61	70-130

Data File: /chem/msdp.i/22JUL21.b/p072215.d

Date : 22-JUL-2021 18:15

Client ID:

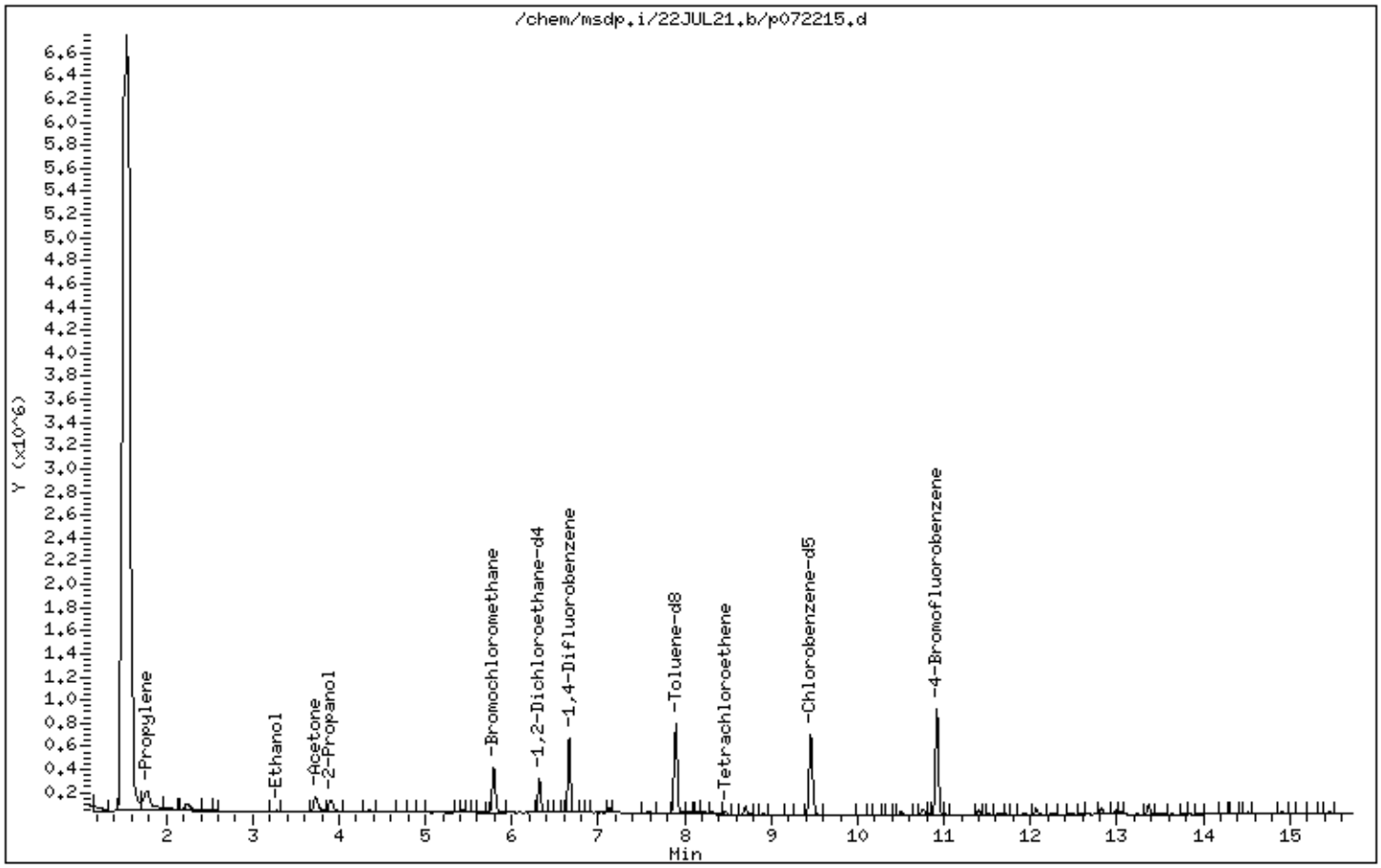
Instrument: msdp.i

Sample Info: 200mL N3379

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072215.d

Date : 22-JUL-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3379

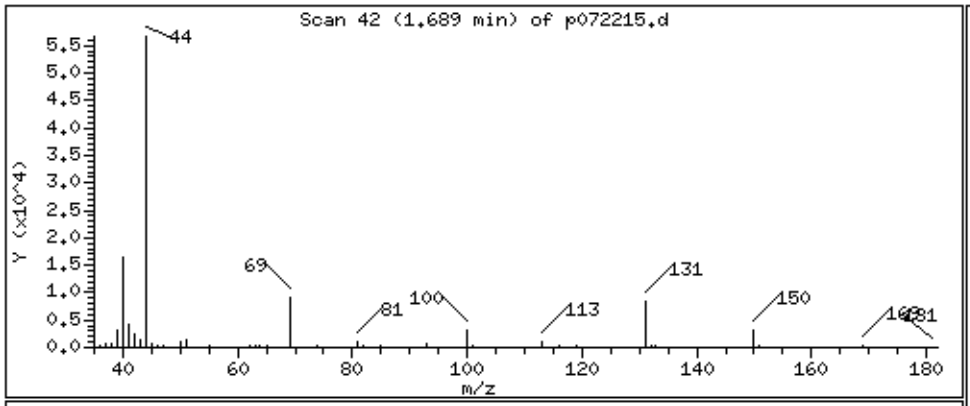
Operator: LD

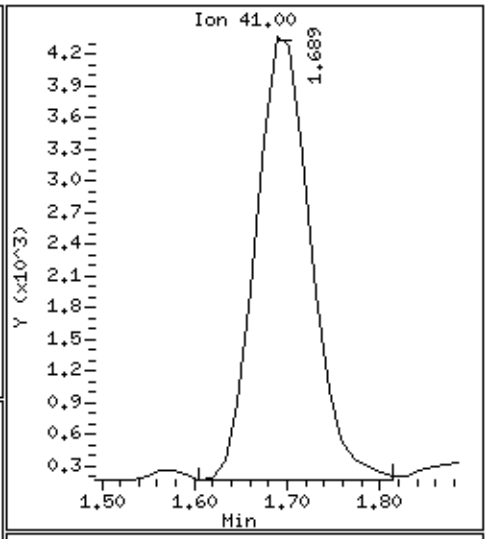
Column phase: RTX-624

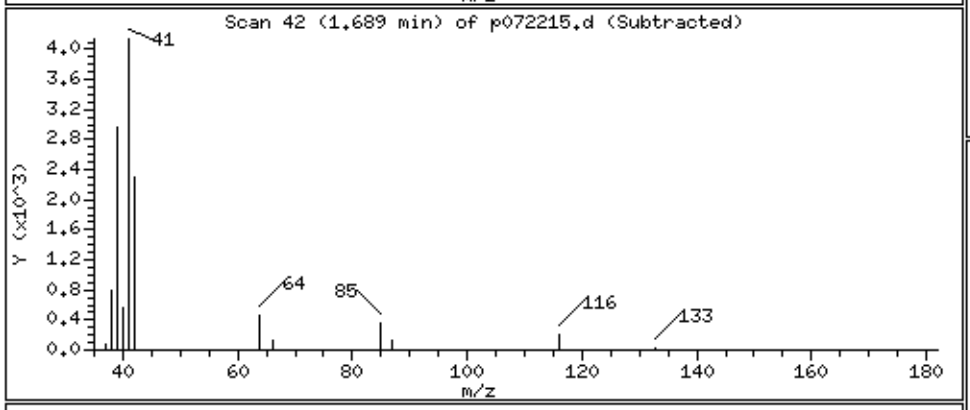
Column diameter: 0.25

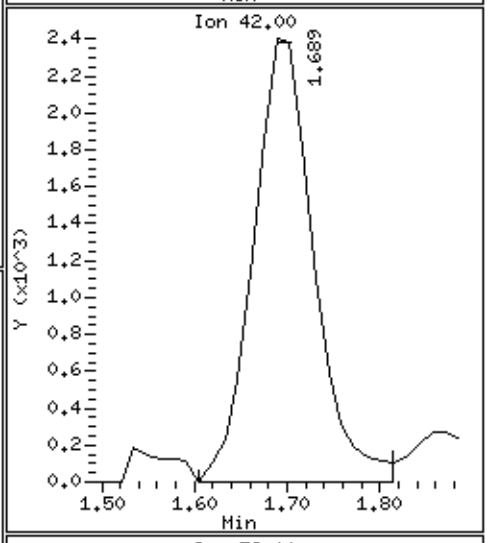
5 Propylene

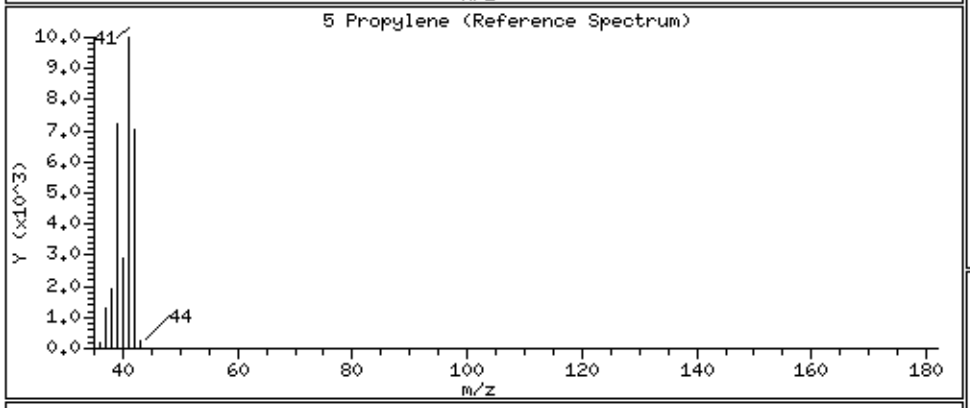
Concentration: 5.902 PPBV

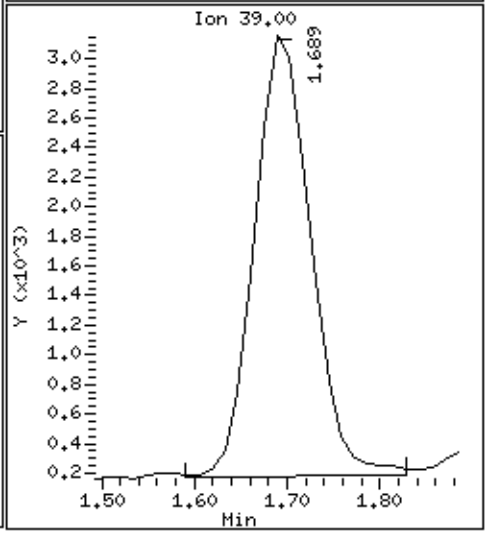


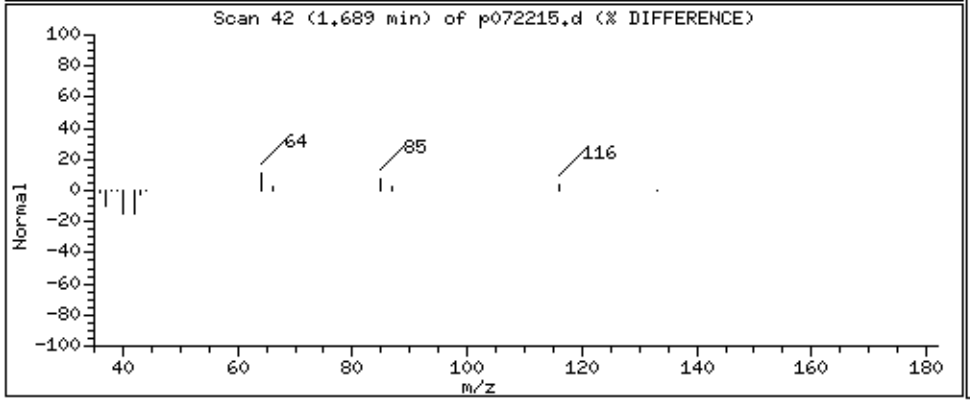












Data File: /chem/msdp.i/22JUL21.b/p072215.d

Date : 22-JUL-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3379

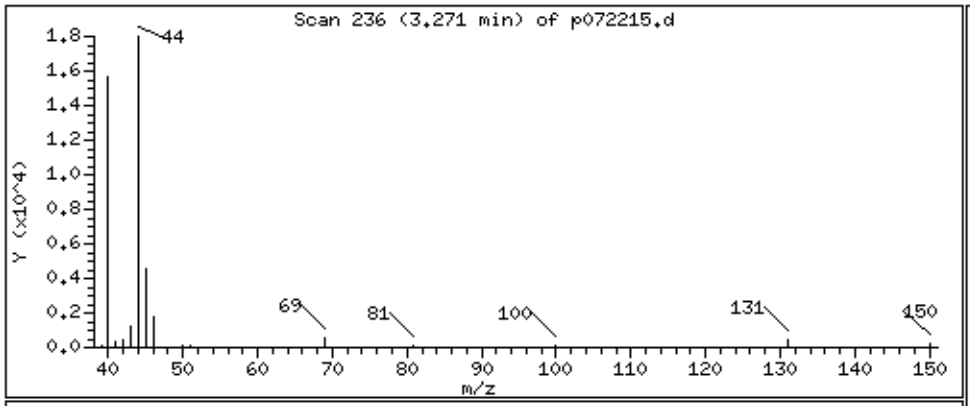
Operator: LD

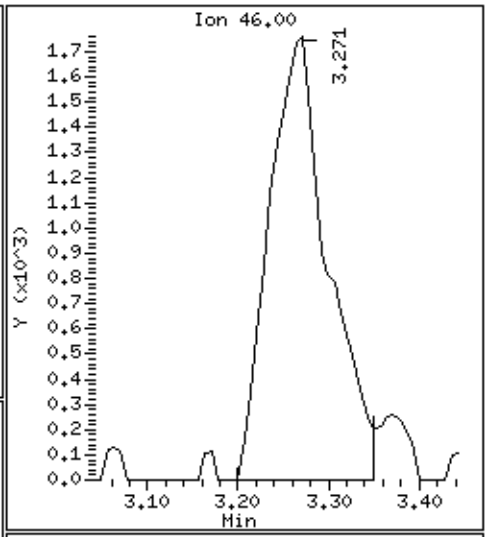
Column phase: RTX-624

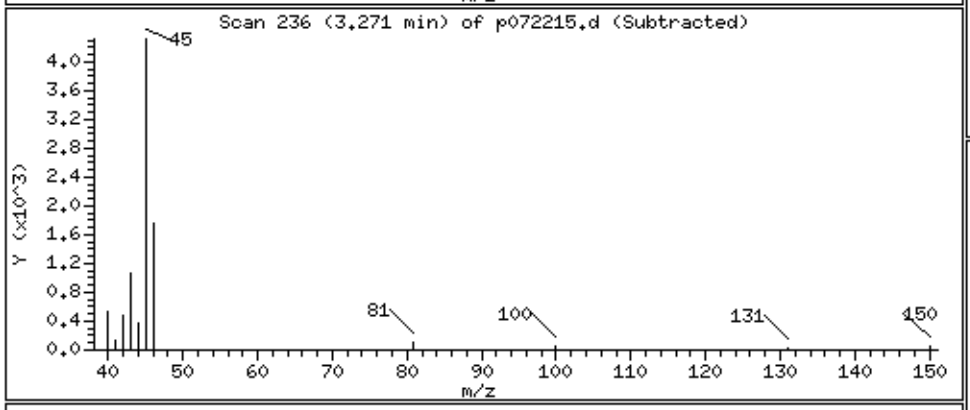
Column diameter: 0.25

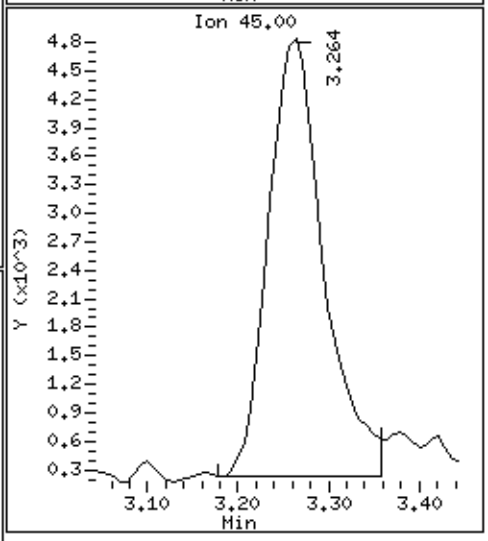
39 Ethanol

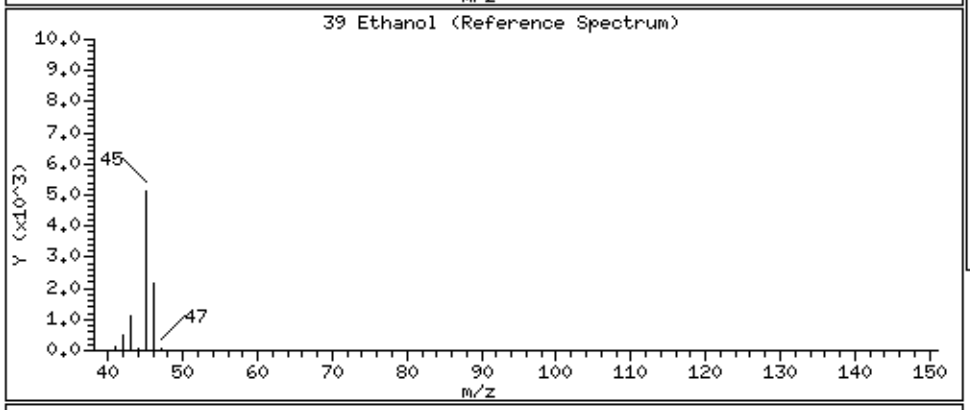
Concentration: 12.570 PPBV

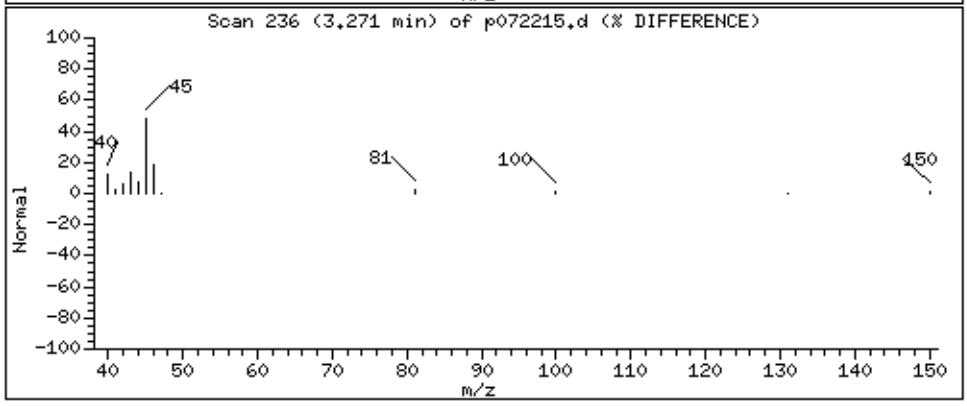












Data File: /chem/msdp.i/22JUL21.b/p072215.d

Date : 22-JUL-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3379

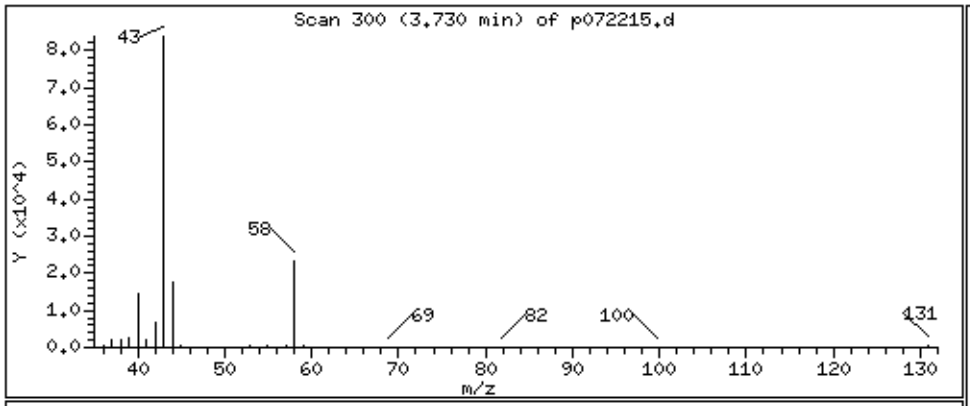
Operator: LD

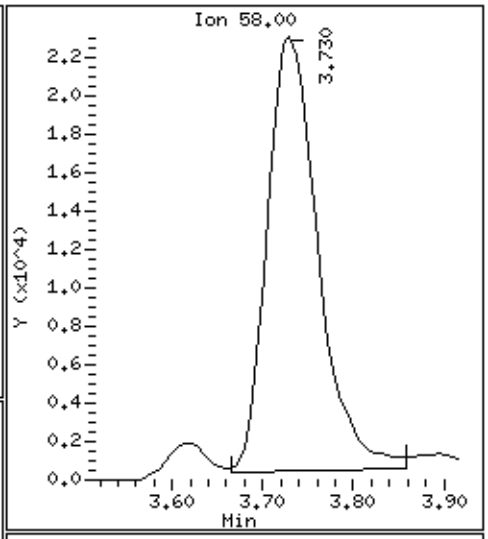
Column phase: RTX-624

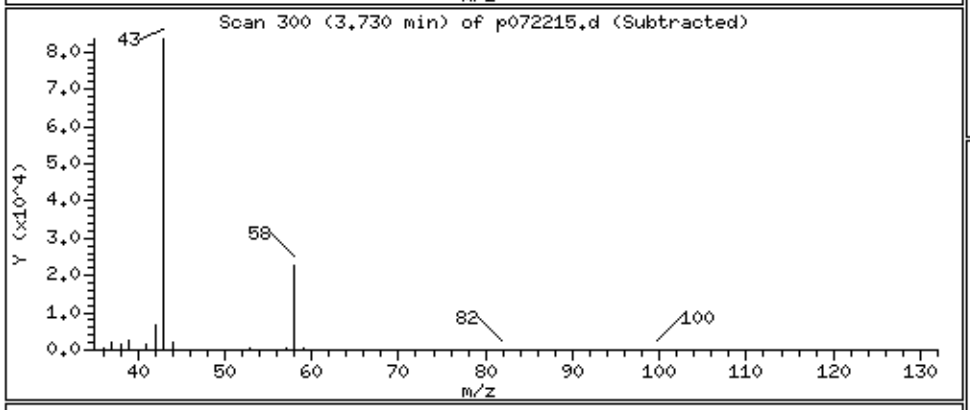
Column diameter: 0.25

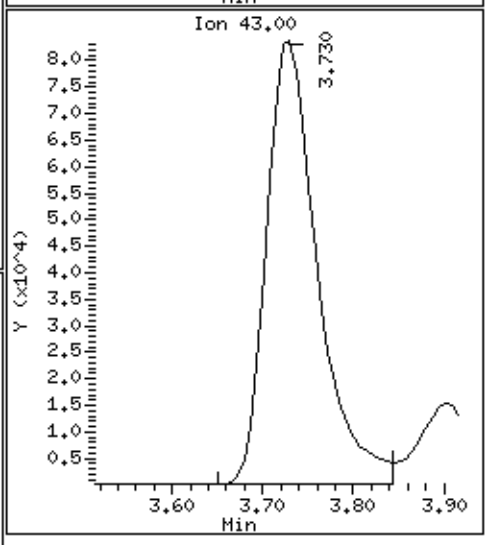
47 Acetone

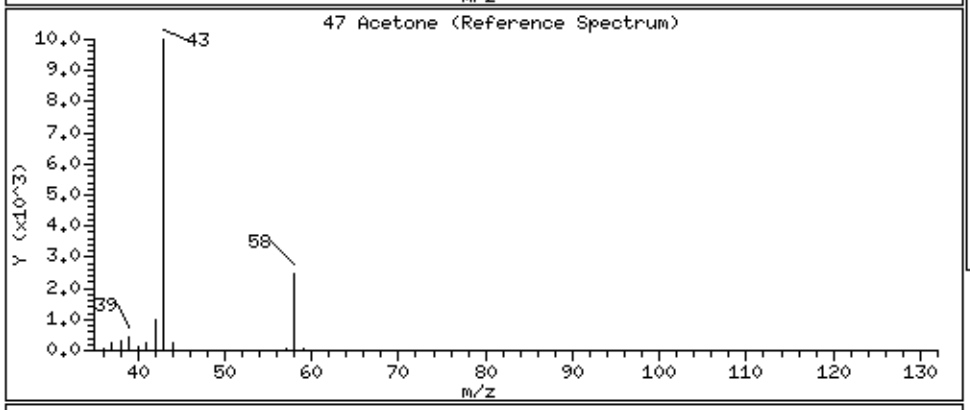
Concentration: 53.160 PPBV

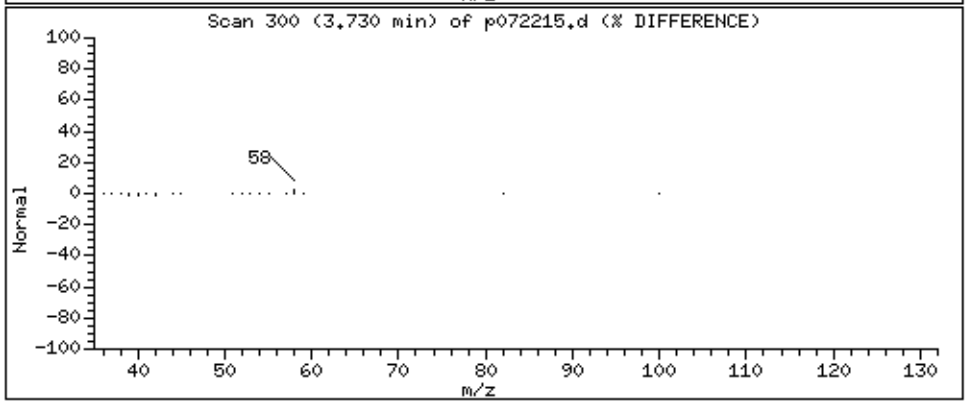












Data File: /chem/msdp.i/22JUL21.b/p072215.d

Date : 22-JUL-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3379

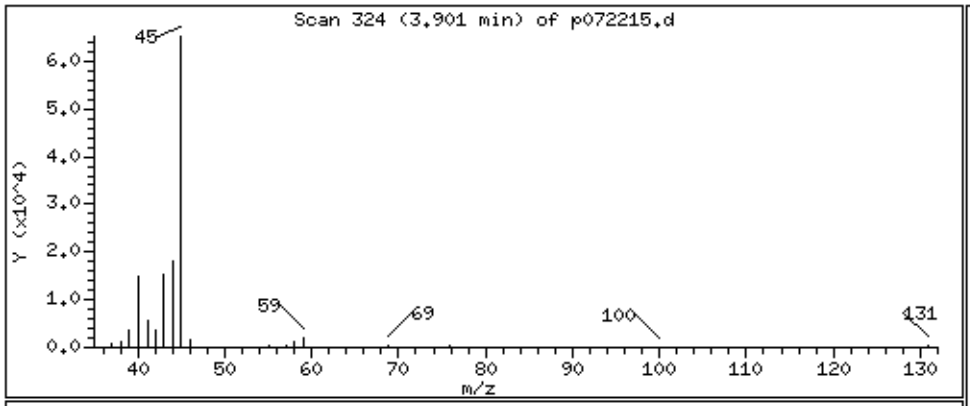
Operator: LD

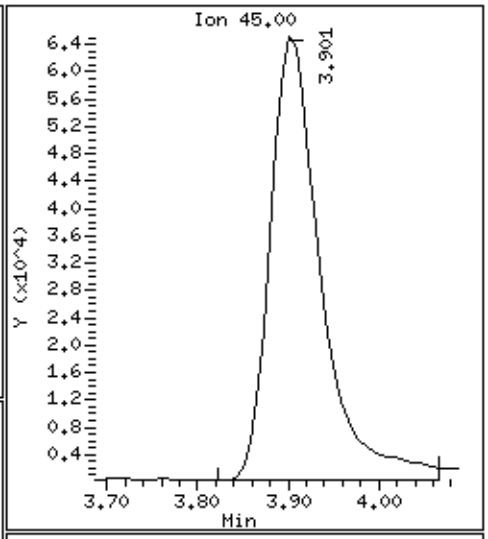
Column phase: RTX-624

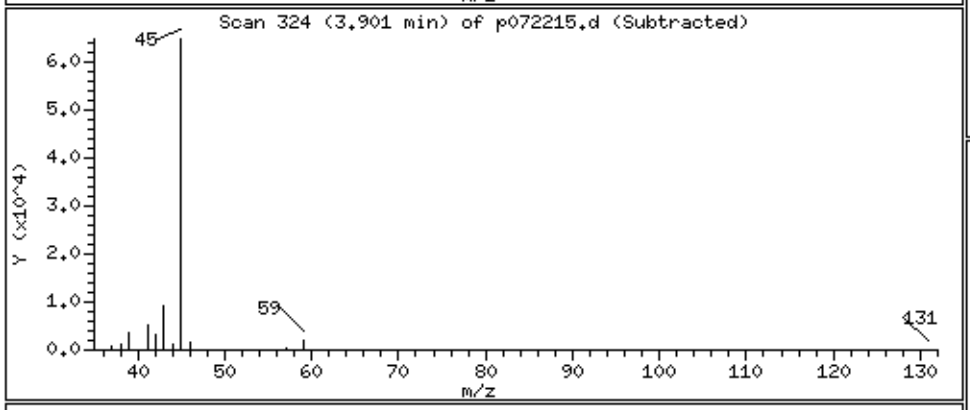
Column diameter: 0.25

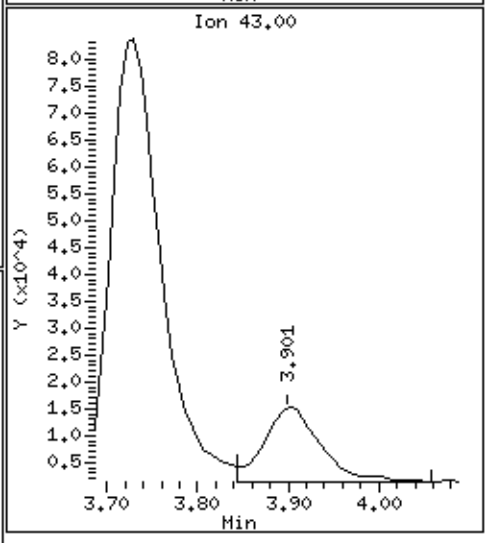
52 2-Propanol

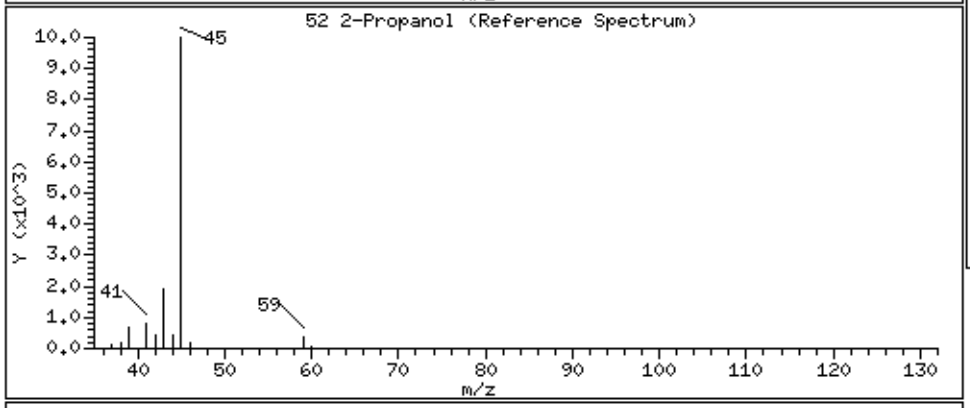
Concentration: 37.262 PPBV

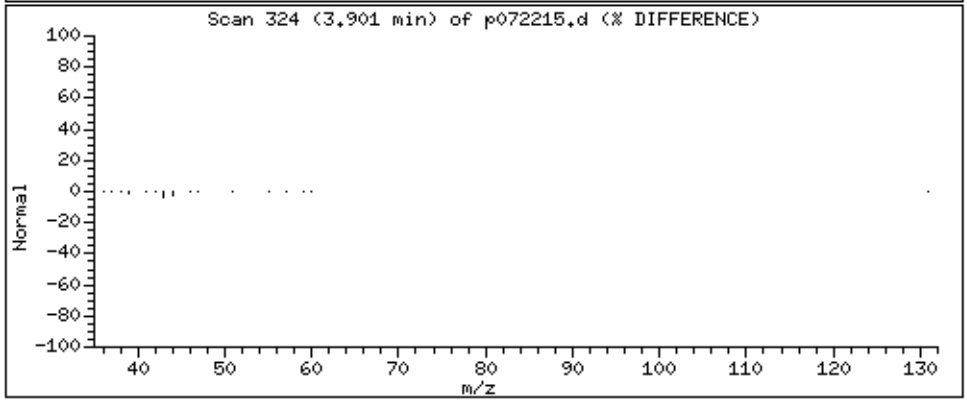












Data File: /chem/msdp.i/22JUL21.b/p072215.d

Date : 22-JUL-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3379

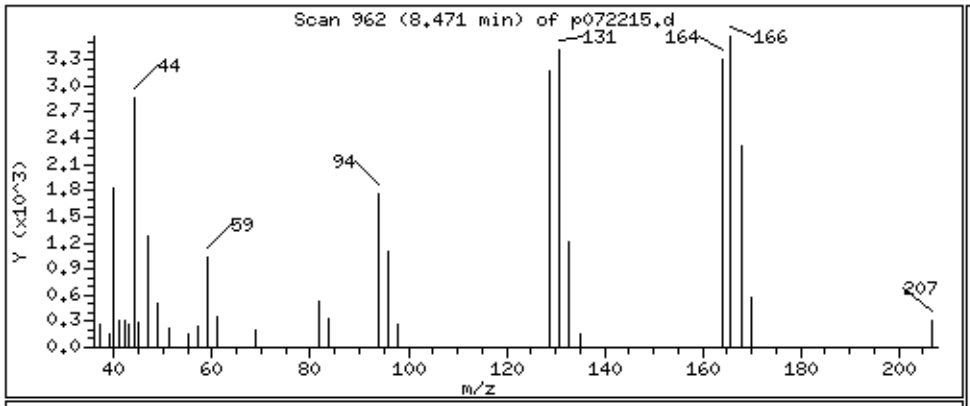
Operator: LD

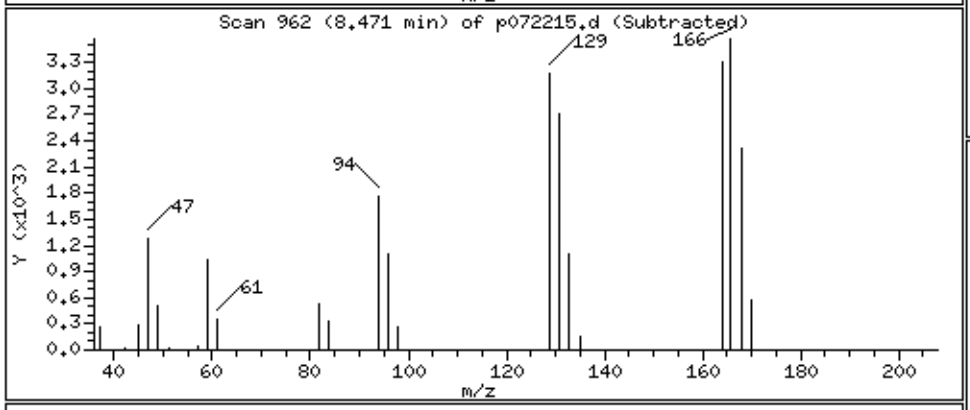
Column phase: RTX-624

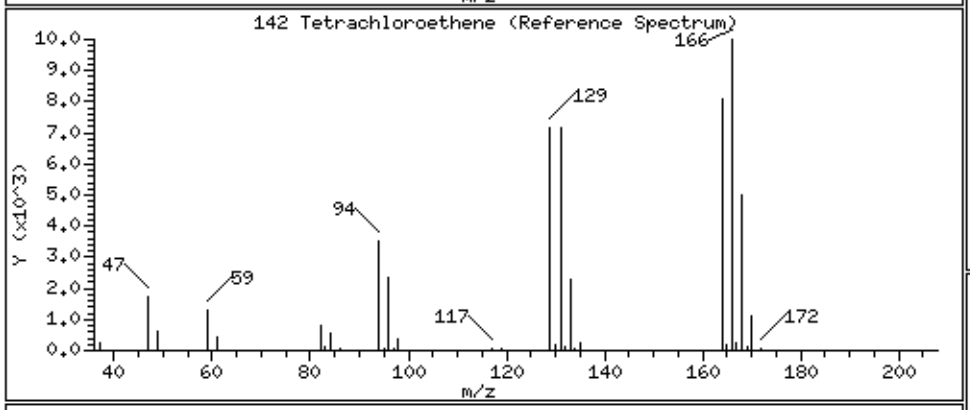
Column diameter: 0.25

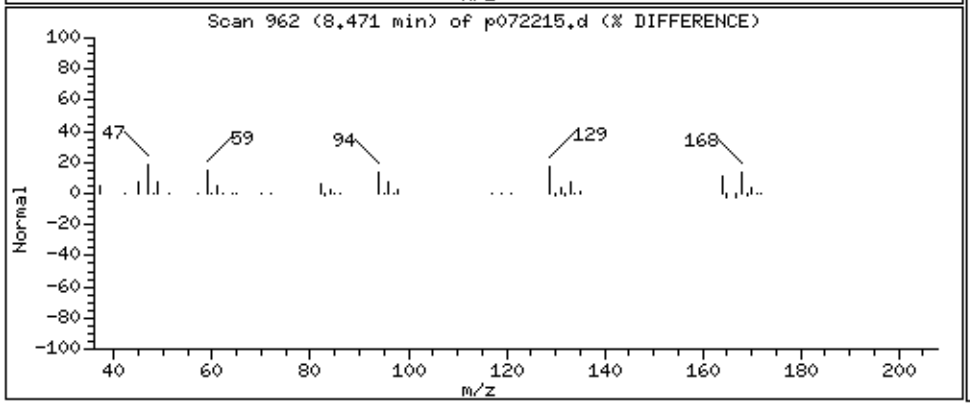
142 Tetrachloroethene

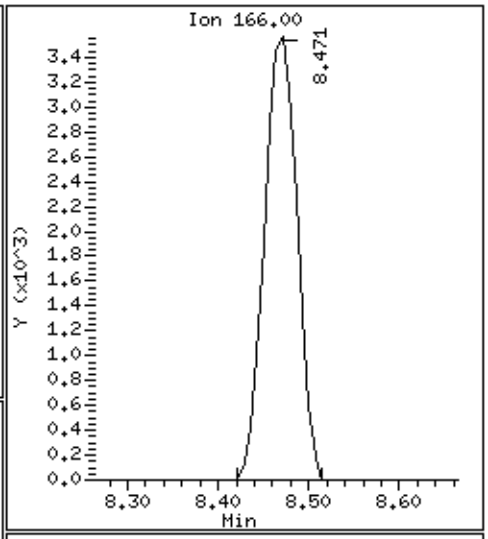
Concentration: 1.650 PPBV

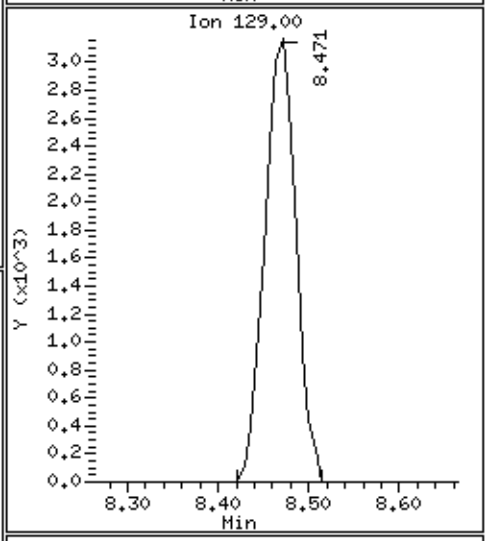


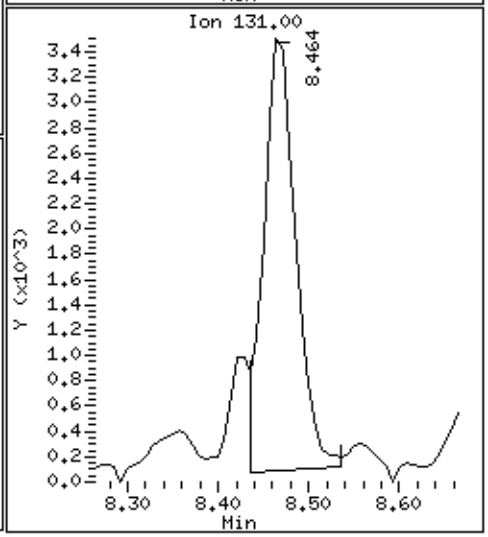












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Client Sample ID: SG-VW43B-02

Lab ID#: 2107241A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072216**	**Date of Collection:**	**7/8/21 12:45:00 PM**
Dil. Factor:	**2.61**	**Date of Analysis:**	**7/22/21 06:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.3	Not Detected	6.4	Not Detected
Freon 114	1.3	Not Detected	9.1	Not Detected
Chloromethane	13	Not Detected	27	Not Detected
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,3-Butadiene	1.3	Not Detected	2.9	Not Detected
Bromomethane	13	Not Detected	51	Not Detected
Chloroethane	5.2	Not Detected	14	Not Detected
Freon 11	1.3	Not Detected	7.3	Not Detected
Ethanol	13	Not Detected	24	Not Detected
Freon 113	1.3	Not Detected	10	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Acetone	13	13	31	32
2-Propanol	5.2	9.0	13	22
Carbon Disulfide	5.2	Not Detected	16	Not Detected
3-Chloropropene	5.2	Not Detected	16	Not Detected
Methylene Chloride	13	Not Detected	45	Not Detected
Methyl tert-butyl ether	5.2	Not Detected	19	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Hexane	1.3	Not Detected	4.6	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.2	Not Detected	15	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.8	Not Detected
Chloroform	1.3	6.2	6.4	30
1,1,1-Trichloroethane	1.3	Not Detected	7.1	Not Detected
Cyclohexane	1.3	Not Detected	4.5	Not Detected
Carbon Tetrachloride	1.3	Not Detected	8.2	Not Detected
2,2,4-Trimethylpentane	1.3	Not Detected	6.1	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Heptane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	Not Detected	7.0	Not Detected
1,2-Dichloropropane	1.3	Not Detected	6.0	Not Detected
1,4-Dioxane	5.2	Not Detected	19	Not Detected
Bromodichloromethane	1.3	Not Detected	8.7	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	5.9	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.3	Not Detected
Toluene	1.3	Not Detected	4.9	Not Detected
trans-1,3-Dichloropropene	1.3	Not Detected	5.9	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.1	Not Detected
Tetrachloroethene	1.3	1.7	8.8	12
2-Hexanone	5.2	Not Detected	21	Not Detected

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Client Sample ID: SG-VW43B-02

Lab ID#: 2107241A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072216**	**Date of Collection:**	**7/8/21 12:45:00 PM**
Dil. Factor:	**2.61**	**Date of Analysis:**	**7/22/21 06:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	10	Not Detected
Chlorobenzene	1.3	Not Detected	6.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
Styrene	1.3	Not Detected	5.6	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
Cumene	1.3	Not Detected	6.4	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	9.0	Not Detected
Propylbenzene	1.3	Not Detected	6.4	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.4	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.4	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.4	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.8	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
1,2,4-Trichlorobenzene	5.2	Not Detected	39	Not Detected
Hexachlorobutadiene	5.2	Not Detected	56	Not Detected
Naphthalene	2.6	Not Detected	14	Not Detected
TPH ref. to Gasoline (MW=100)	130	Not Detected	530	Not Detected
Freon 134a	5.2	Not Detected	22	Not Detected
Acrolein	5.2	Not Detected	12	Not Detected
Acrylonitrile	5.2	Not Detected	11	Not Detected
tert-Amyl methyl ether	5.2	Not Detected	22	Not Detected
tert-Butyl alcohol	5.2	Not Detected	16	Not Detected
1,2-Dibromo-3-chloropropane	5.2	Not Detected	50	Not Detected
Dibromomethane	5.2	Not Detected	37	Not Detected
1,1-Difluoroethane	5.2	14	14	37
Isopropyl ether	5.2	Not Detected	22	Not Detected
Ethyl Acetate	5.2	Not Detected	19	Not Detected
Ethyl-tert-butyl ether	5.2	Not Detected	22	Not Detected
Hexachloroethane	5.2	Not Detected	50	Not Detected
Iodomethane	13	Not Detected	76	Not Detected
Propylene	5.2	Not Detected	9.0	Not Detected
1,1,1,2-Tetrachloroethane	5.2	Not Detected	36	Not Detected
1,2,3-Trichloropropane	5.2	Not Detected	31	Not Detected
Vinyl Acetate	5.2	Not Detected	18	Not Detected
Vinyl Bromide	5.2	Not Detected	23	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW43B-02

Lab ID#: 2107241A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072216**	**Date of Collection: 7/8/21 12:45:00 PM**	
Dil. Factor:	**2.61**	**Date of Analysis: 7/22/21 06:45 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072216.d
Lab Smp Id: 2107241A-02A
Inj Date : 22-JUL-2021 18:45
Operator : LD Inst ID: msdp.i
Smp Info : 160mL N1999
Misc Info : 5.9 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 9
Dil Factor: 2.61000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	156225	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	121880				48.23- 108.23	78.02
5.785	5.778 (1.000)	49	335911				150.57- 210.57	215.02
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	567522	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	81114				0.00- 45.71	14.29
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	580867	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	298734				23.78- 83.78	51.43
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	224746	26.0677	26.068		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	109701				27.21- 87.21	48.81
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	616502	25.0163	25.016		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67080				0.00- 40.44	10.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	403136			34.95- 94.95	65.39
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	359851	24.1252	24.125	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	437369			95.92- 155.92	121.54
10.921	10.921 (1.154)	176	344357			66.89- 126.89	95.69
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	18516	5.22884	13.647	80.00- 120.00	100.00
1.772	1.745 (0.306)	51	4579111			597.63- 657.63	24730.33
1.758	1.703 (0.304)	47	92396			33.72- 93.72	499.00
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	20990	5.12500	13.376	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	83499			302.95- 362.95	397.79
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	56958	3.45062	9.006	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	12799			0.00- 47.19	22.47
92 Chloroform					CAS #: 67-66-3		
5.842	5.843 (1.010)	83	32517	2.39222	6.244	80.00- 120.00	100.00
5.842	5.843 (1.010)	85	20449			34.70- 94.70	62.89
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	8806	0.66518	1.736	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	7313			47.84- 107.84	83.05
8.471	8.464 (0.895)	131	7674			45.29- 105.29	87.15

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072216.d
Lab Smp Id: 2107241A-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	156225	-1.90
108 1,4-Difluorobenze	573285	343971	802599	567522	-1.01
153 Chlorobenzene-d5	571549	342929	800169	580867	1.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:40

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-02A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.068	104.27	70-130
$ 134 Toluene-d8	25.000	25.016	100.07	70-130
$ 170 4-Bromofluorobenz	25.000	24.125	96.50	70-130

Data File: /chem/msdp.i/22JUL21.b/p072216.d

Date : 22-JUL-2021 18:45

Client ID:

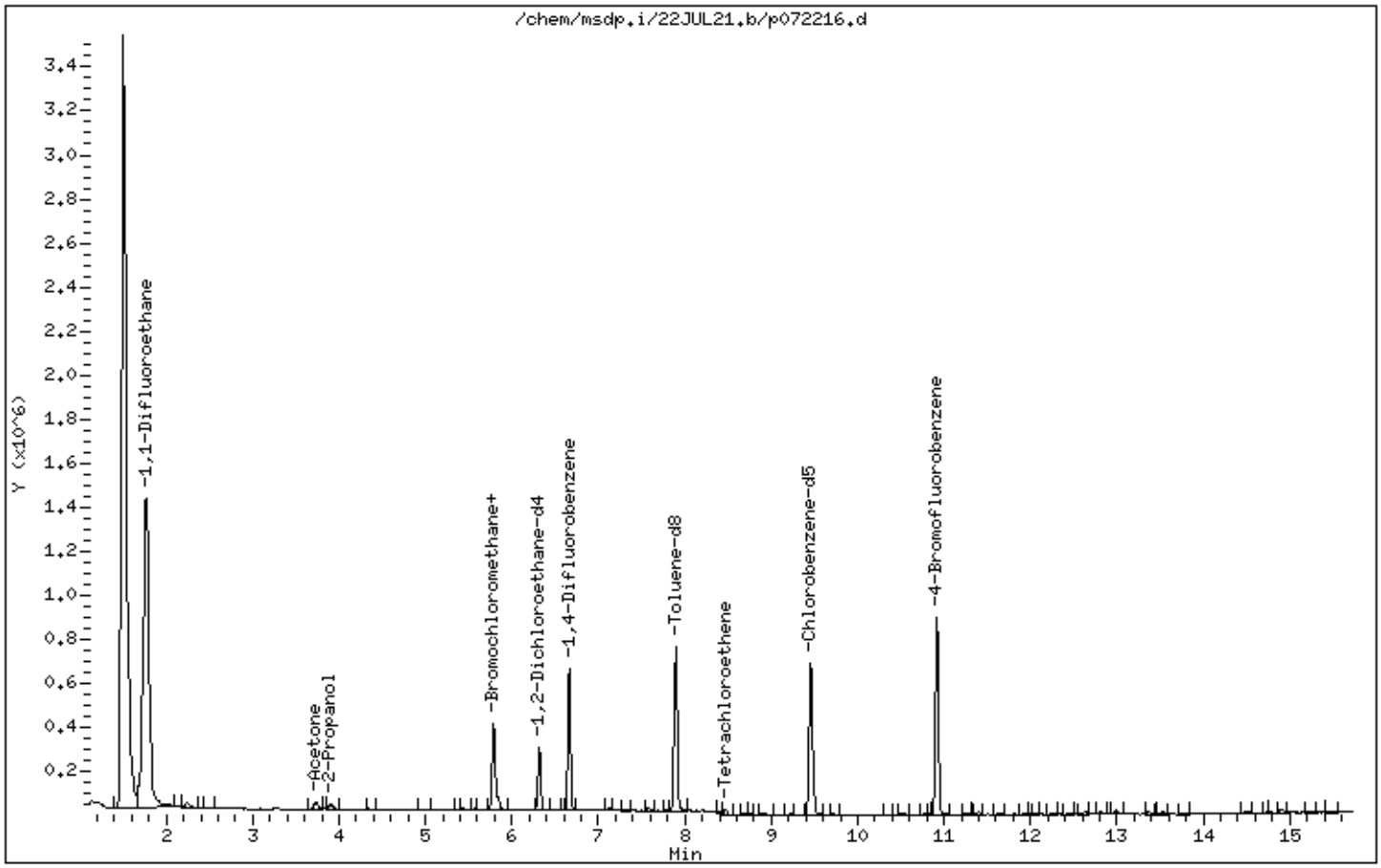
Instrument: msdp.i

Sample Info: 160mL N1999

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072216.d

Date : 22-JUL-2021 18:45

Client ID:

Instrument: msdp.i

Sample Info: 160mL N1999

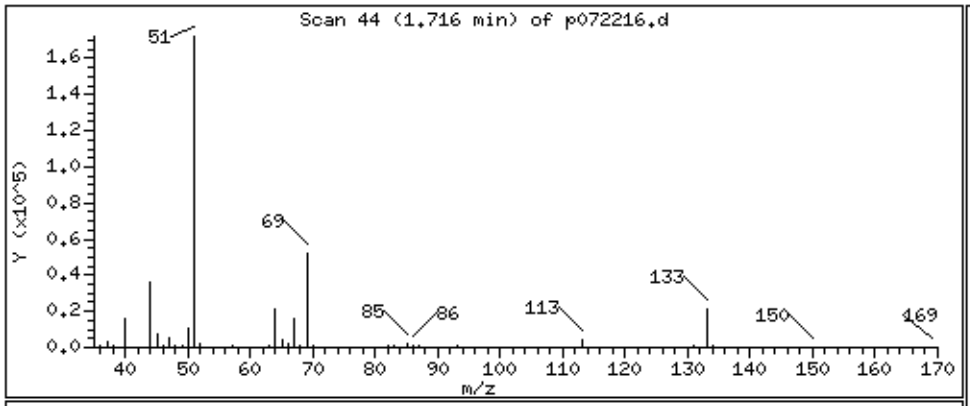
Operator: LD

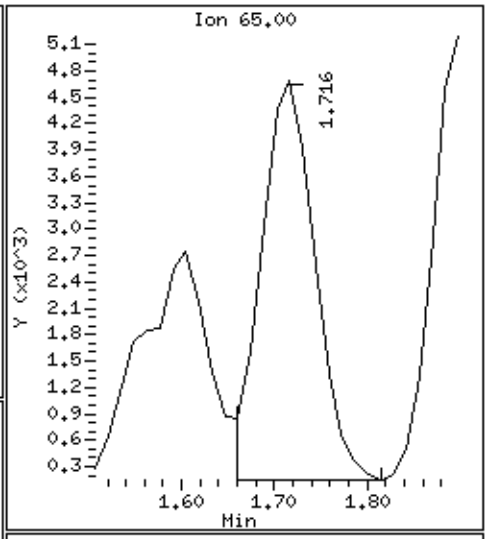
Column phase: RTX-624

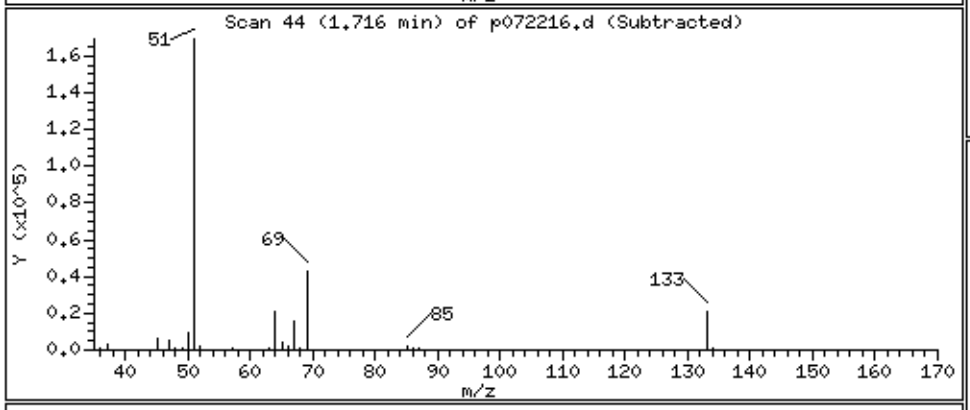
Column diameter: 0.25

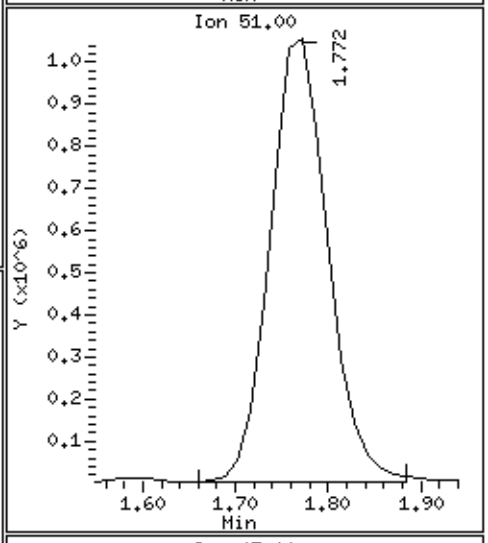
7 1,1-Difluoroethane

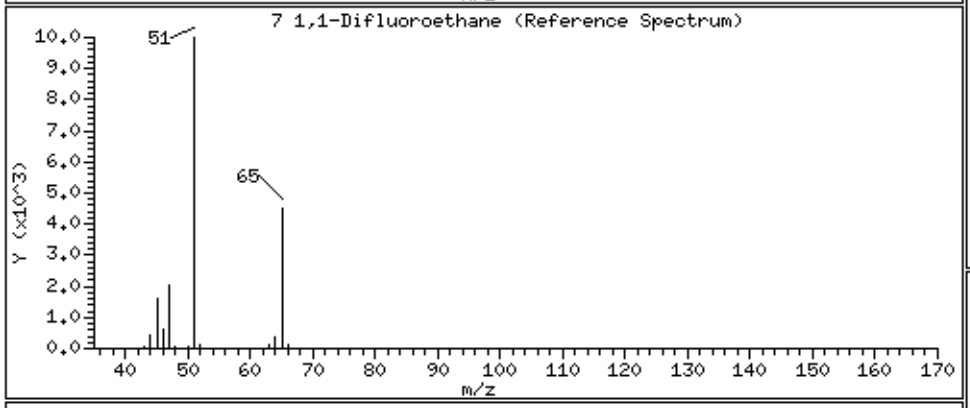
Concentration: 13.647 PPBV

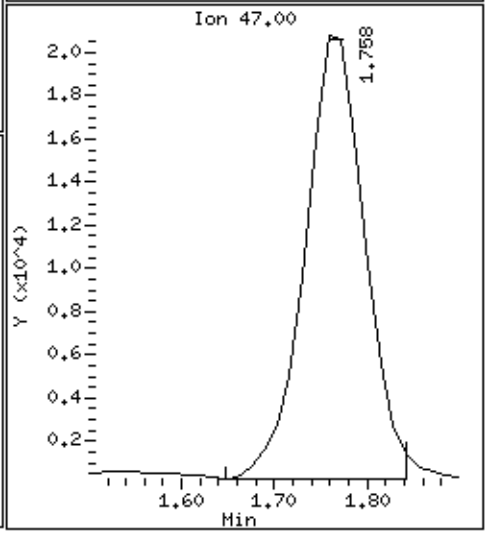


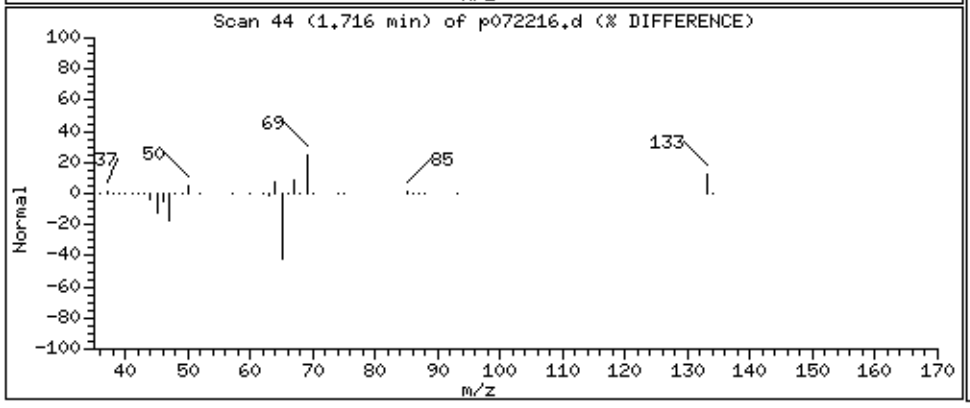












Data File: /chem/msdp.i/22JUL21.b/p072216.d

Date : 22-JUL-2021 18:45

Client ID:

Instrument: msdp.i

Sample Info: 160mL N1999

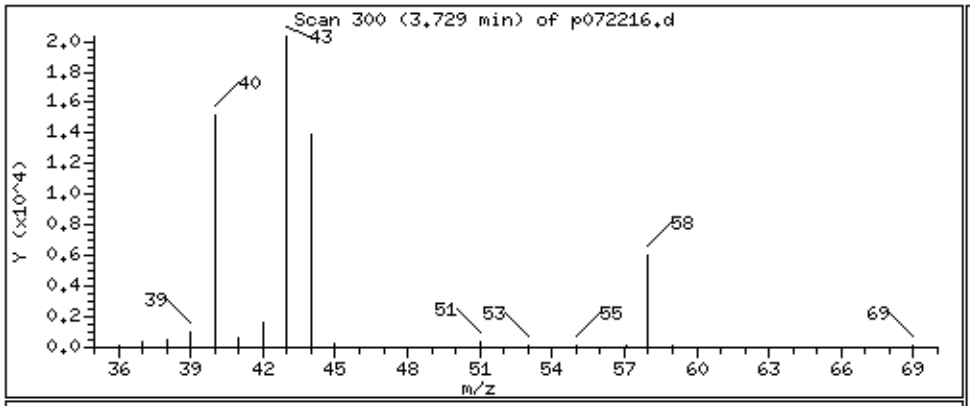
Operator: LD

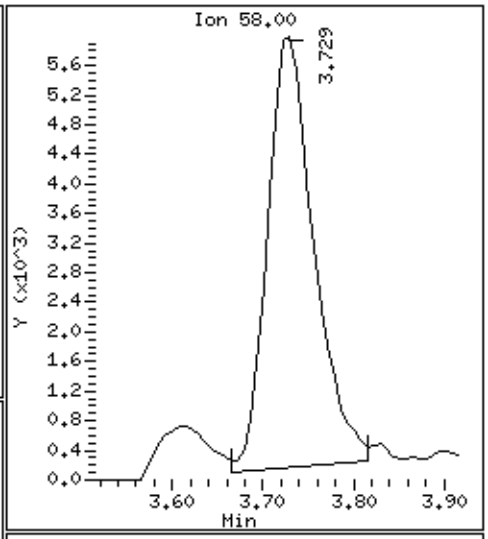
Column phase: RTX-624

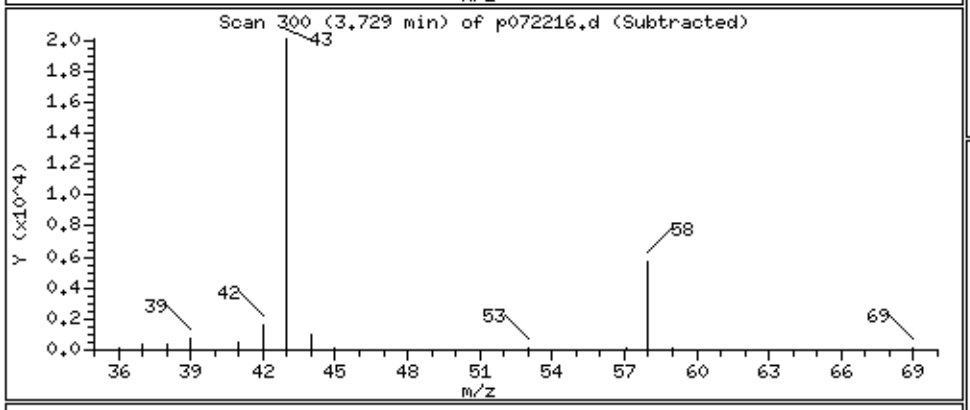
Column diameter: 0.25

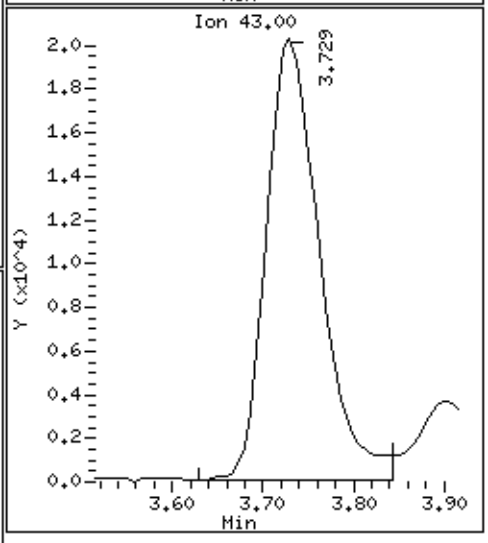
47 Acetone

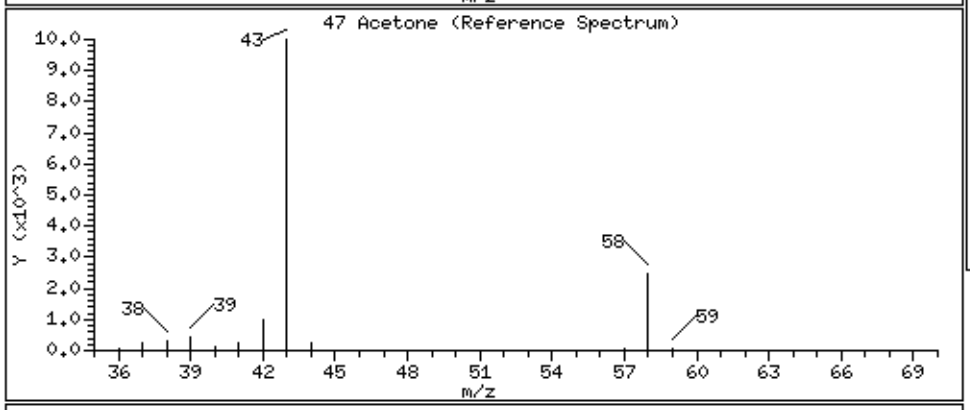
Concentration: 13.376 PPBV

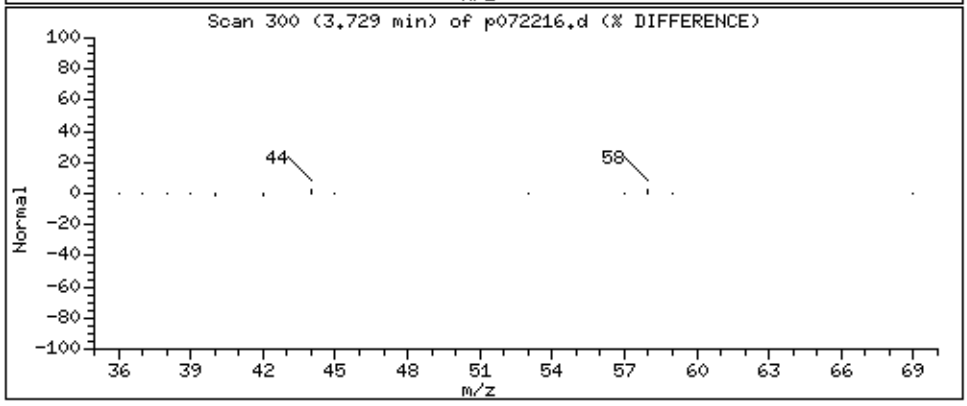












Data File: /chem/msdp.i/22JUL21.b/p072216.d

Date : 22-JUL-2021 18:45

Client ID:

Instrument: msdp.i

Sample Info: 160mL N1999

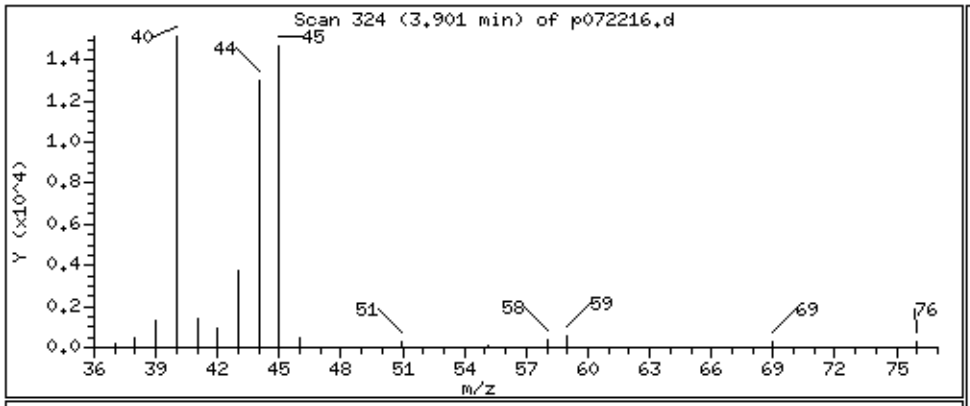
Operator: LD

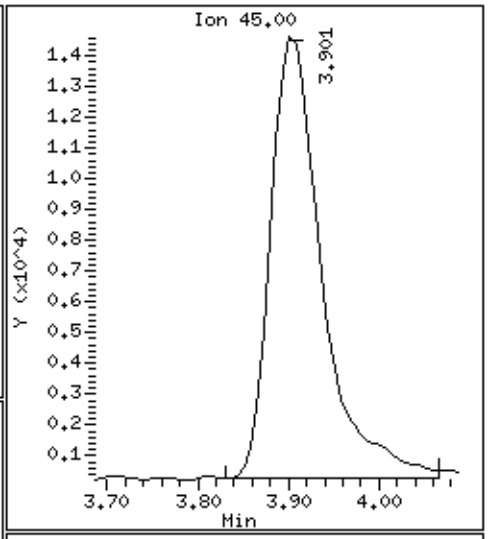
Column phase: RTX-624

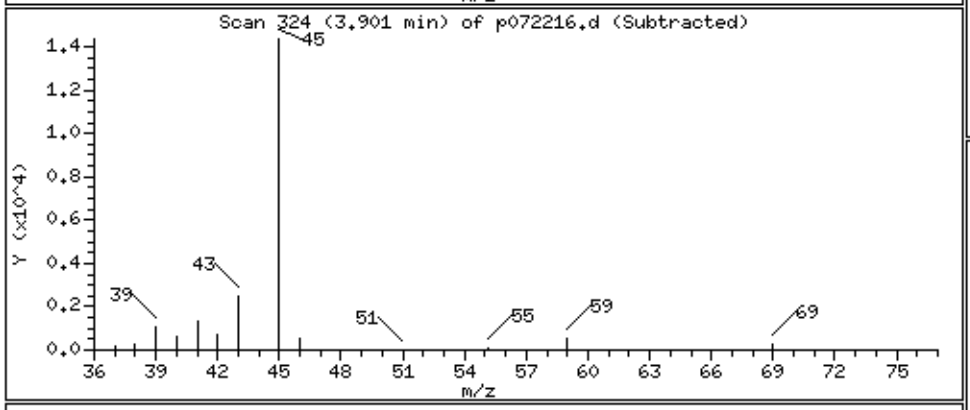
Column diameter: 0.25

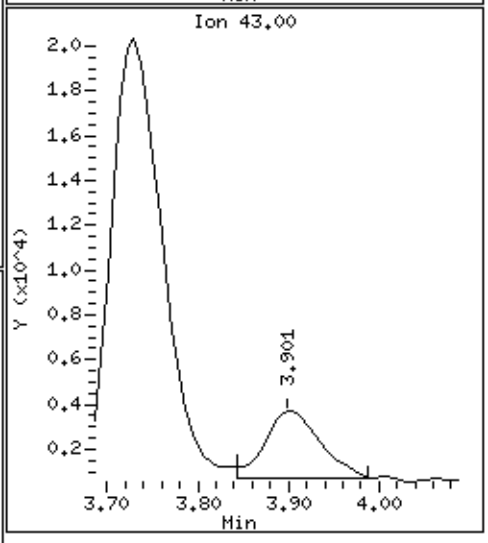
52 2-Propanol

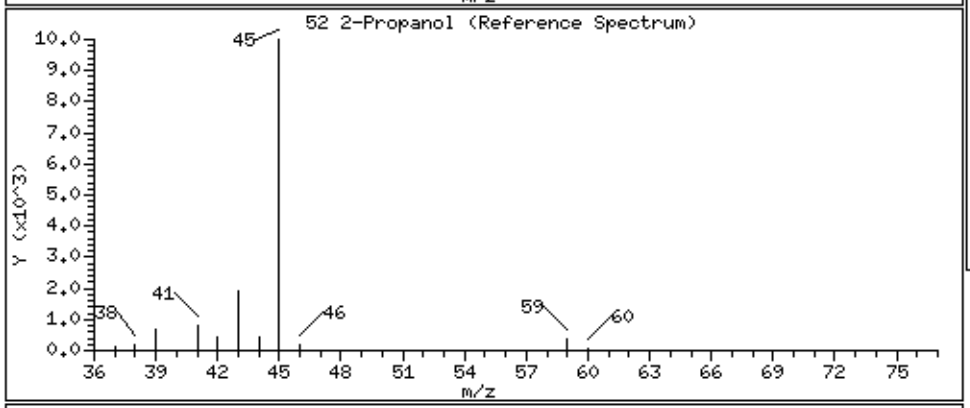
Concentration: 9.006 PPBV

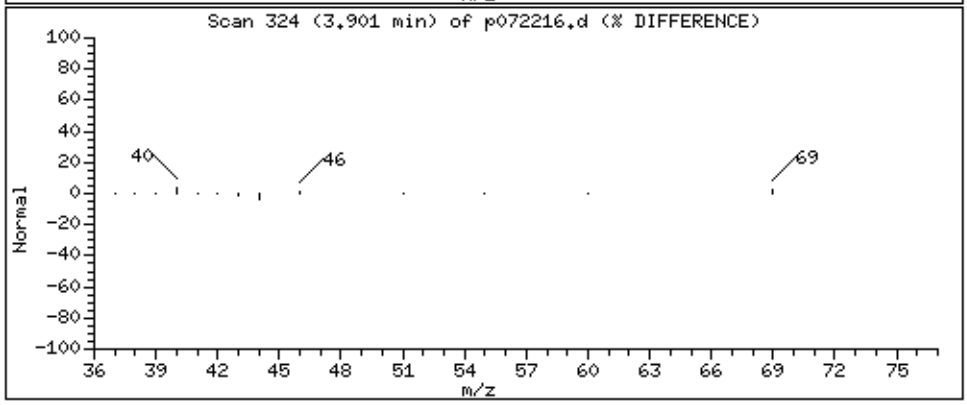












Data File: /chem/msdp.i/22JUL21.b/p072216.d

Date : 22-JUL-2021 18:45

Client ID:

Instrument: msdp.i

Sample Info: 160mL N1999

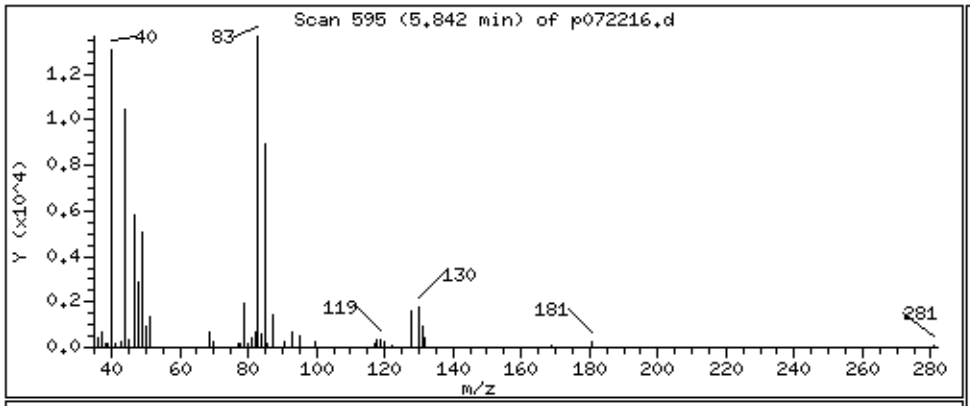
Operator: LD

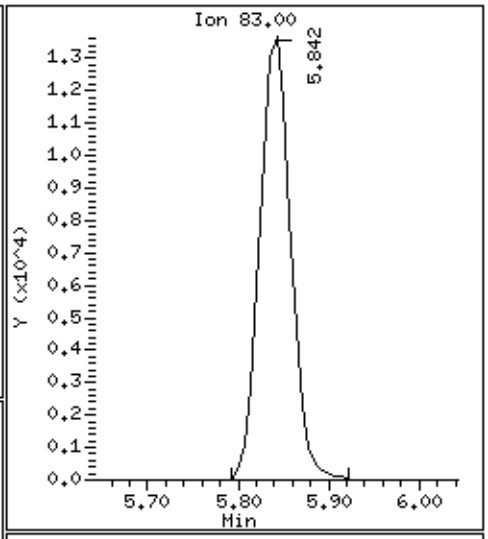
Column phase: RTX-624

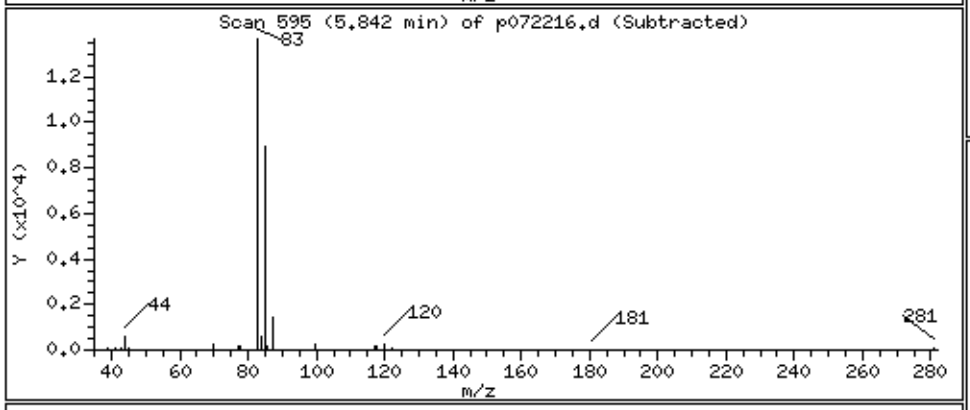
Column diameter: 0.25

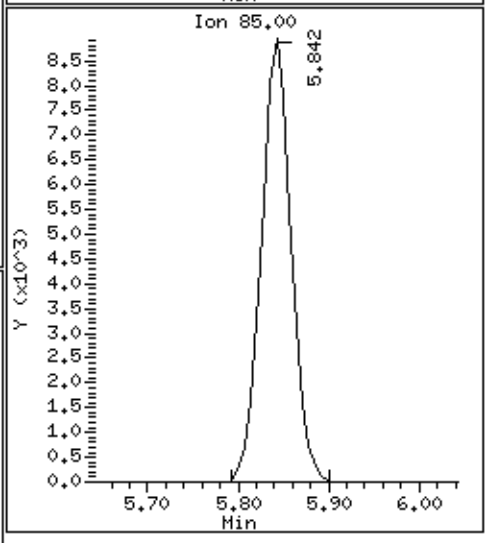
92 Chloroform

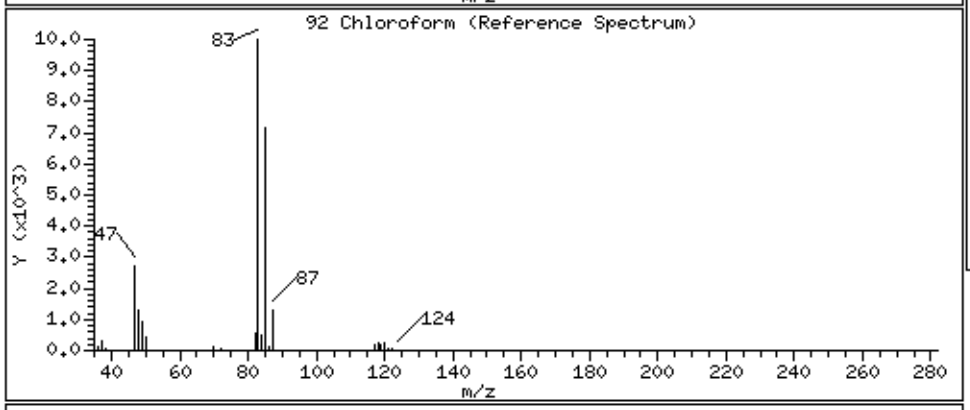
Concentration: 6.244 PPBV

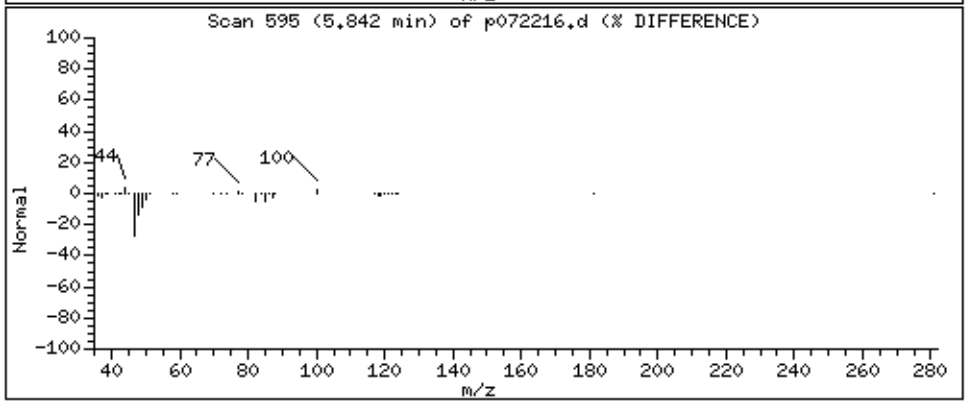












Data File: /chem/msdp.i/22JUL21.b/p072216.d

Date : 22-JUL-2021 18:45

Client ID:

Instrument: msdp.i

Sample Info: 160mL N1999

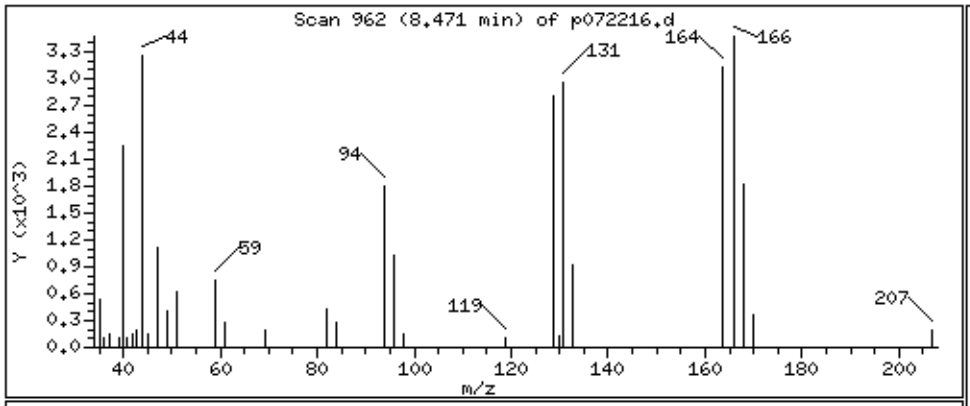
Operator: LD

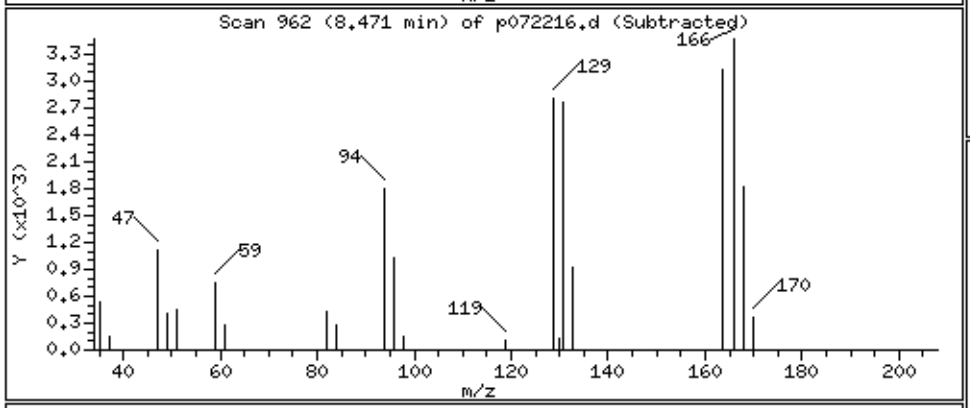
Column phase: RTX-624

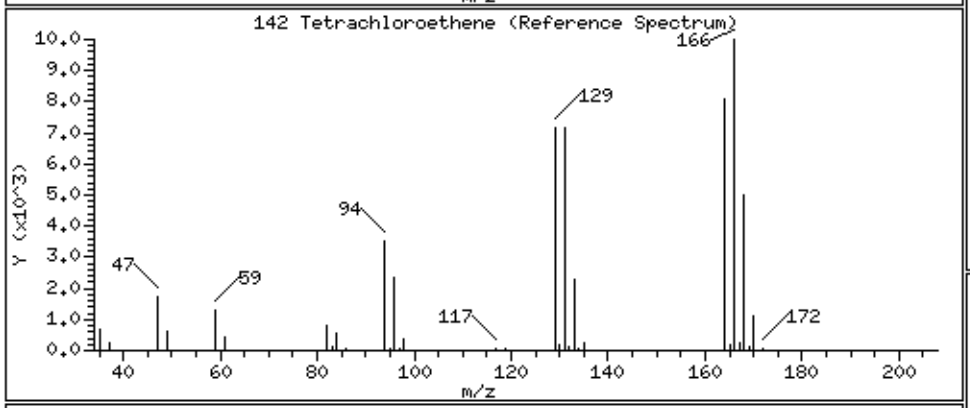
Column diameter: 0.25

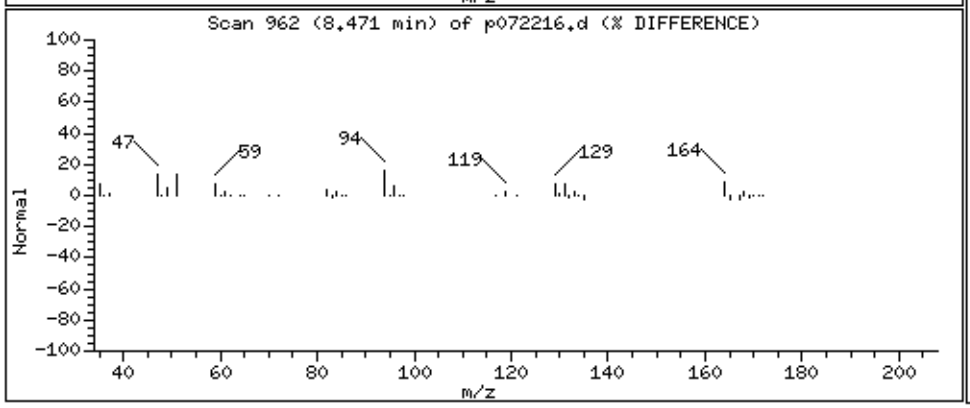
142 Tetrachloroethene

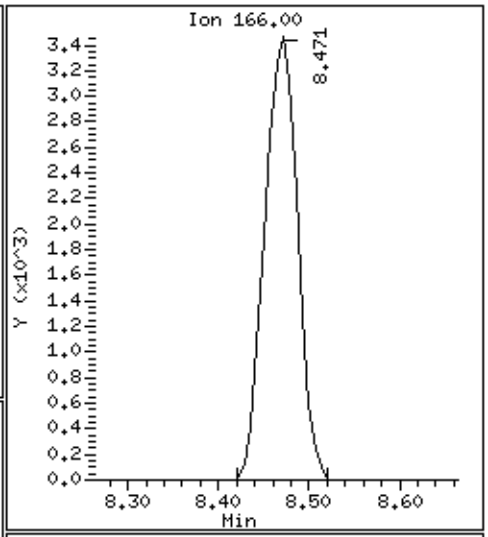
Concentration: 1.736 PPBV

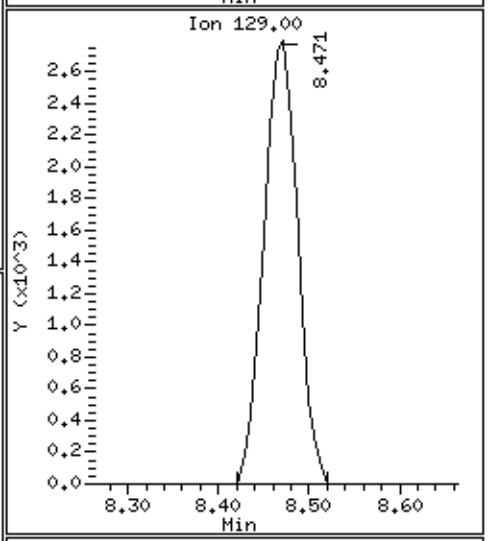


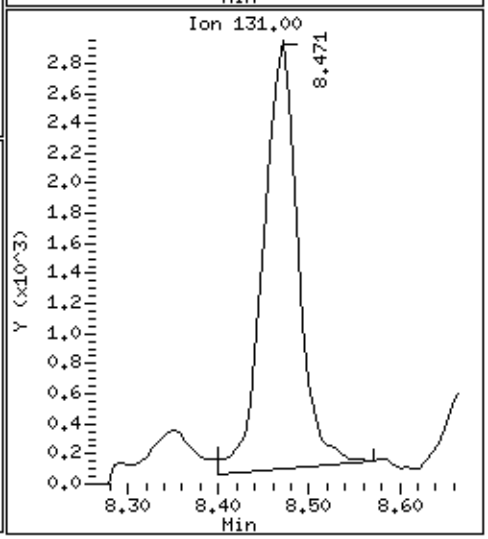












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Client Sample ID: SG-VW45A-03

Lab ID#: 2107241A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072217**	**Date of Collection:**	**7/8/21 1:58:00 PM**
Dil. Factor:	**2.24**	**Date of Analysis:**	**7/22/21 07:15 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.5	Not Detected
Freon 114	1.1	Not Detected	7.8	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	4.5	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.3	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Freon 113	1.1	Not Detected	8.6	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	29	27	69
2-Propanol	4.5	10	11	25
Carbon Disulfide	4.5	Not Detected	14	Not Detected
3-Chloropropene	4.5	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
Methyl tert-butyl ether	4.5	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.5	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Chloroform	1.1	Not Detected	5.5	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.0	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.2	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.5	Not Detected
Heptane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	1.4	6.0	7.8
1,2-Dichloropropane	1.1	Not Detected	5.2	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.5	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.6	Not Detected
Toluene	1.1	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Tetrachloroethene	1.1	1.6	7.6	11
2-Hexanone	4.5	Not Detected	18	Not Detected

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Client Sample ID: SG-VW45A-03

Lab ID#: 2107241A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072217**	**Date of Collection:**	**7/8/21 1:58:00 PM**
Dil. Factor:	**2.24**	**Date of Analysis:**	**7/22/21 07:15 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.5	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.6	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.5	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.7	Not Detected
Propylbenzene	1.1	Not Detected	5.5	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.5	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.8	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,2,4-Trichlorobenzene	4.5	Not Detected	33	Not Detected
Hexachlorobutadiene	4.5	Not Detected	48	Not Detected
Naphthalene	2.2	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	460	Not Detected
Freon 134a	4.5	Not Detected	19	Not Detected
Acrolein	4.5	Not Detected	10	Not Detected
Acrylonitrile	4.5	Not Detected	9.7	Not Detected
tert-Amyl methyl ether	4.5	Not Detected	19	Not Detected
tert-Butyl alcohol	4.5	Not Detected	14	Not Detected
1,2-Dibromo-3-chloropropane	4.5	Not Detected	43	Not Detected
Dibromomethane	4.5	Not Detected	32	Not Detected
1,1-Difluoroethane	4.5	Not Detected	12	Not Detected
Isopropyl ether	4.5	Not Detected	19	Not Detected
Ethyl Acetate	4.5	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.5	Not Detected	19	Not Detected
Hexachloroethane	4.5	Not Detected	43	Not Detected
Iodomethane	11	Not Detected	65	Not Detected
Propylene	4.5	5.7	7.7	9.8
1,1,1,2-Tetrachloroethane	4.5	Not Detected	31	Not Detected
1,2,3-Trichloropropane	4.5	Not Detected	27	Not Detected
Vinyl Acetate	4.5	Not Detected	16	Not Detected
Vinyl Bromide	4.5	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW45A-03

Lab ID#: 2107241A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072217**	**Date of Collection:**	**7/8/21 1:58:00 PM**
Dil. Factor:	**2.24**	**Date of Analysis:**	**7/22/21 07:15 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072217.d
Lab Smp Id: 2107241A-03A
Inj Date : 22-JUL-2021 19:15
Operator : LD Inst ID: msdp.i
Smp Info : 200mL B2201
Misc Info : 7.6 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 10
Dil Factor: 2.24000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	153416	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	120571				48.23- 108.23	78.59
5.785	5.778 (1.000)	49	328407				150.57- 210.57	214.06
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	566893	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	82360				0.00- 45.71	14.53
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	579275	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	299577				23.78- 83.78	51.72
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	220200	26.0080	26.008		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110469				27.21- 87.21	50.17
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	610206	24.7883	24.788		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65250				0.00- 40.44	10.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	396784			34.95- 94.95	65.02
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	363575	24.4418	24.442	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	438877			95.92- 155.92	120.71
10.921	10.921 (1.154)	176	344284			66.89- 126.89	94.69
5 Propylene					CAS #: 115-07-1		
1.688	1.689 (0.292)	41	17938	2.55511	5.723	80.00- 120.00	100.00
1.688	1.689 (0.292)	42	12947			35.28- 95.28	72.18
1.688	1.689 (0.292)	39	15419			38.35- 98.35	85.96
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	52108	12.9558	29.021	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	195388			302.95- 362.95	374.96
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	73586	4.53960	10.169	80.00- 120.00	100.00
3.909	3.887 (0.676)	43	18738			0.00- 47.19	25.46
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	5908	0.65084	1.458	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	5689			76.29- 136.29	96.30
6.867	6.867 (1.030)	97	3432			33.63- 93.63	58.11
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	9332	0.70685	1.583	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	6996			47.84- 107.84	74.97
8.464	8.464 (0.895)	131	8076			45.29- 105.29	86.54

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072217.d
Lab Smp Id: 2107241A-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.6 Hg->9.9 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	153416	-3.66
108 1,4-Difluorobenze	573285	343971	802599	566893	-1.11
153 Chlorobenzene-d5	571549	342929	800169	579275	1.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:40

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-03A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.6 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.008	104.03	70-130
$ 134 Toluene-d8	25.000	24.788	99.15	70-130
$ 170 4-Bromofluorobenz	25.000	24.442	97.77	70-130

Data File: /chem/msdp.i/22JUL21.b/p072217.d

Date : 22-JUL-2021 19:15

Client ID:

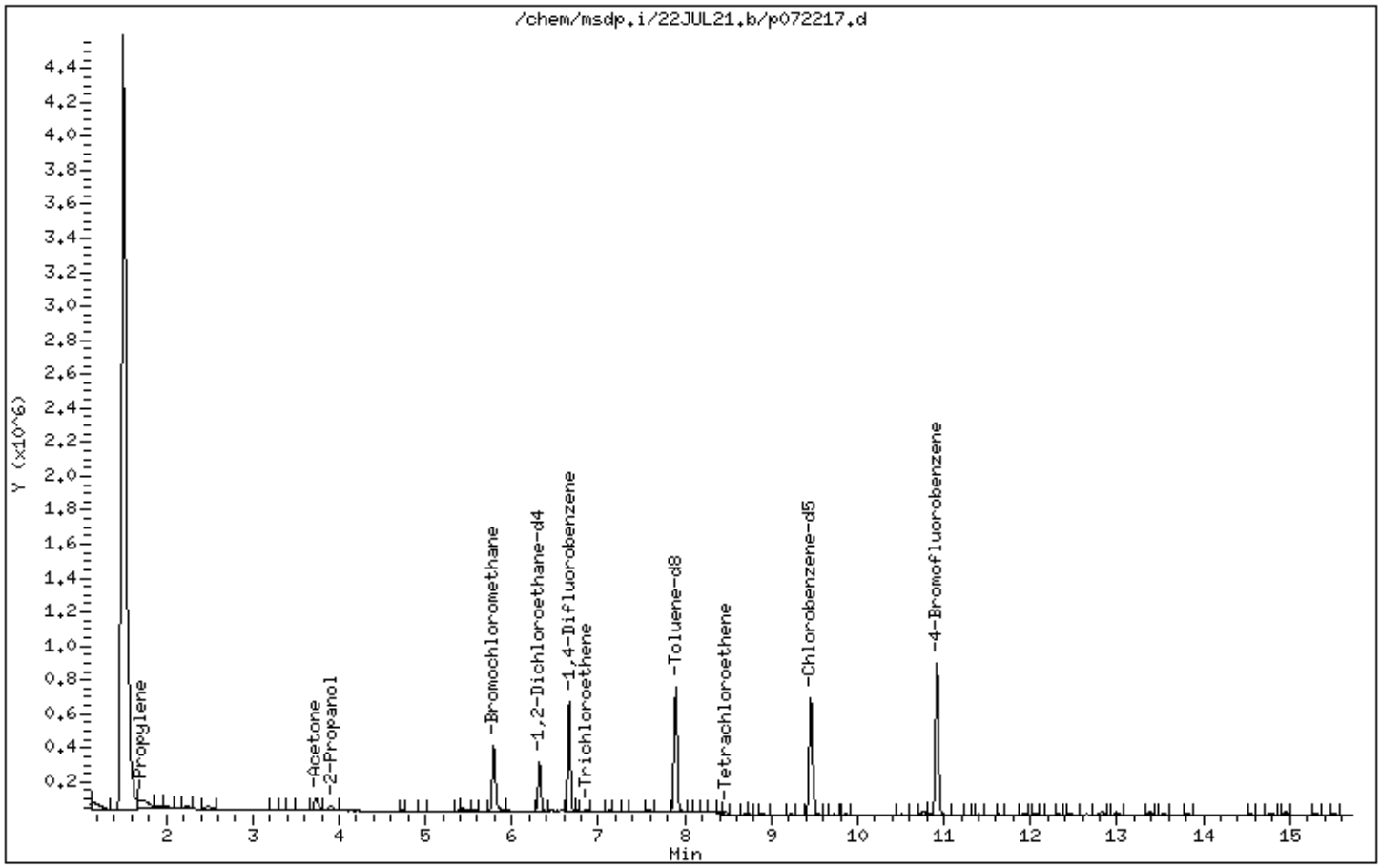
Instrument: msdp.i

Sample Info: 200mL B2201

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072217.d

Date : 22-JUL-2021 19:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL B2201

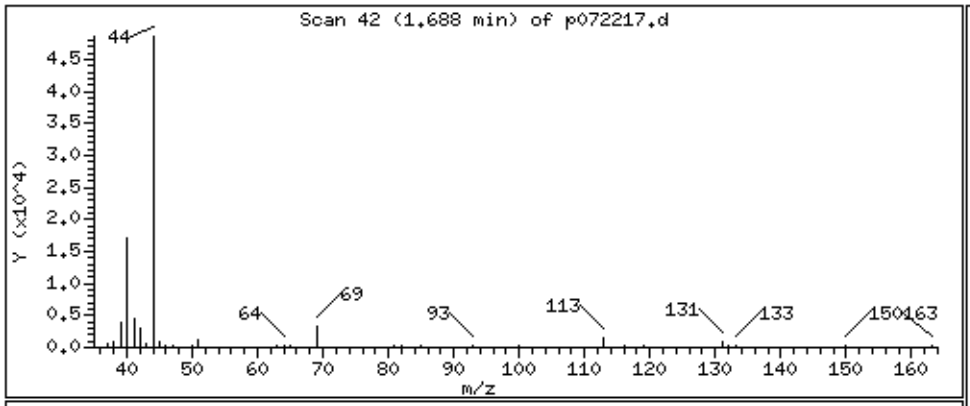
Operator: LD

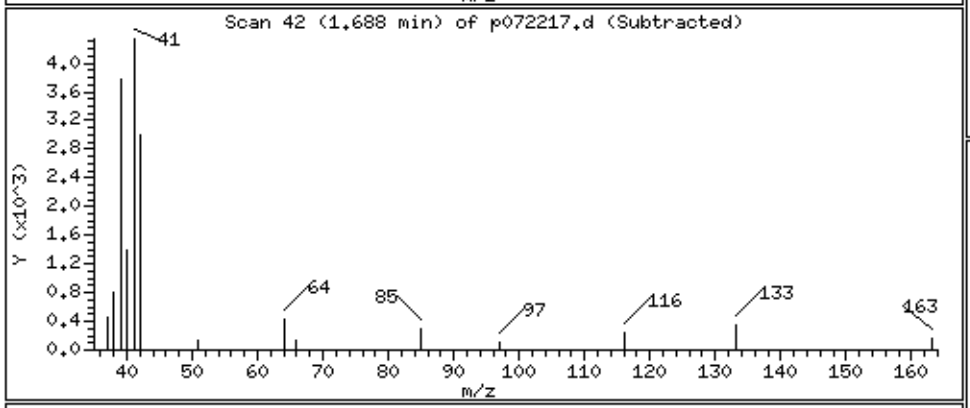
Column phase: RTX-624

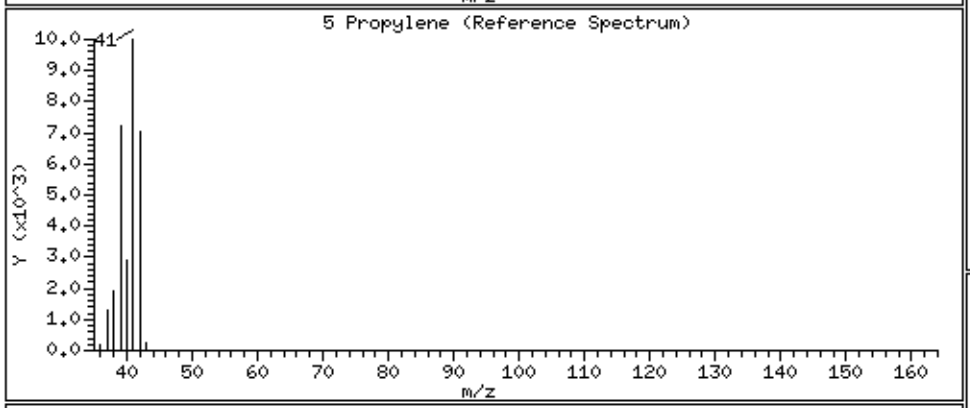
Column diameter: 0.25

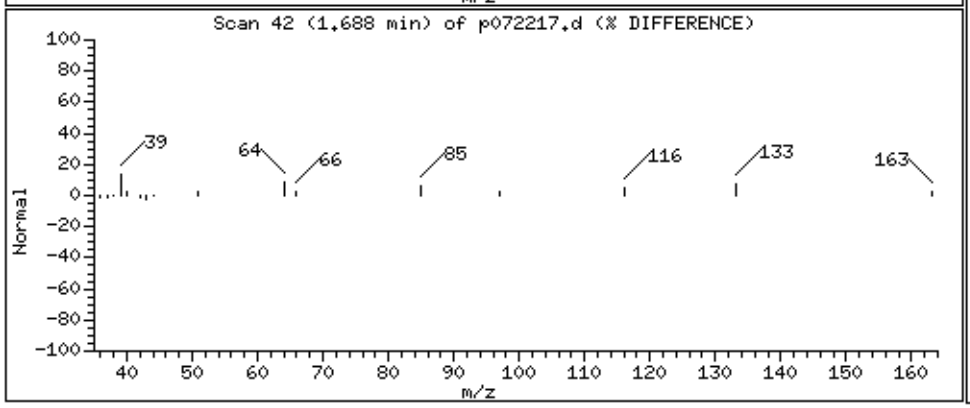
5 Propylene

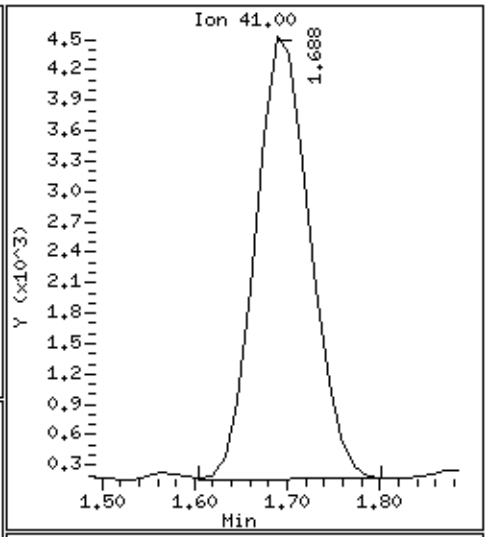
Concentration: 5.723 PPBV

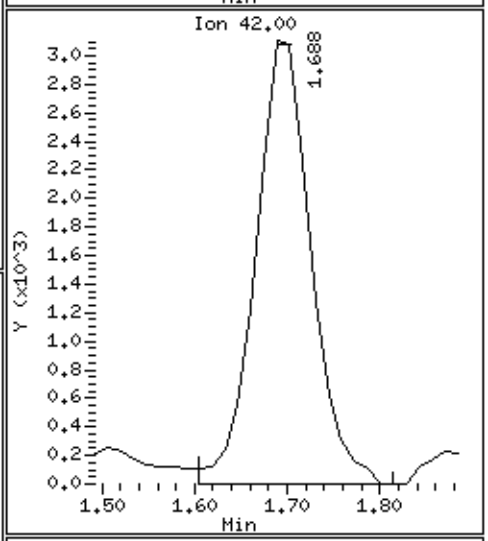


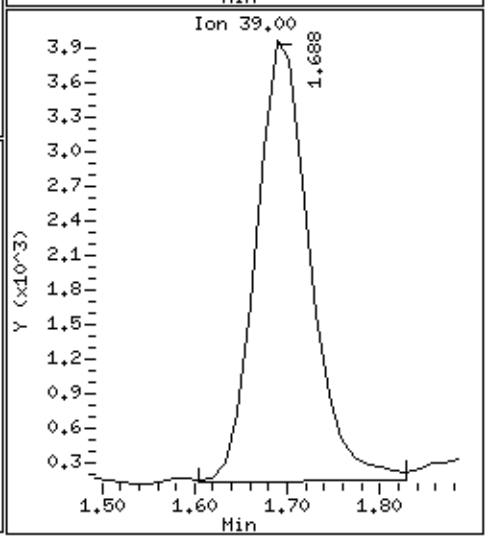












Data File: /chem/msdp.i/22JUL21.b/p072217.d

Date : 22-JUL-2021 19:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL B2201

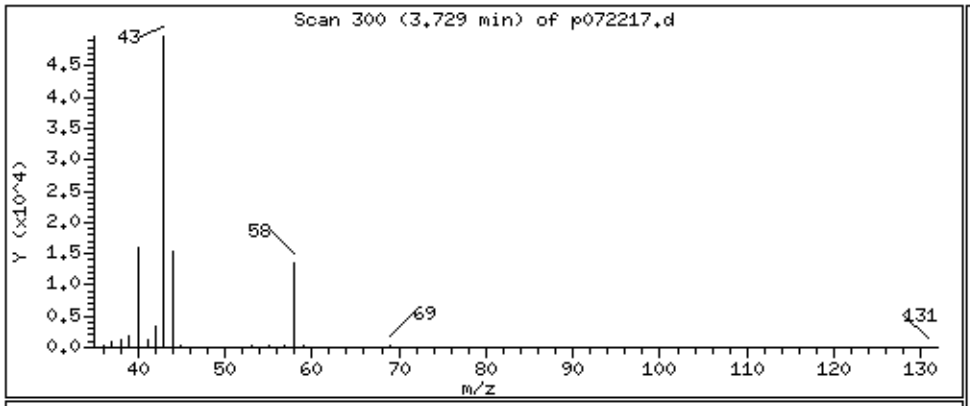
Operator: LD

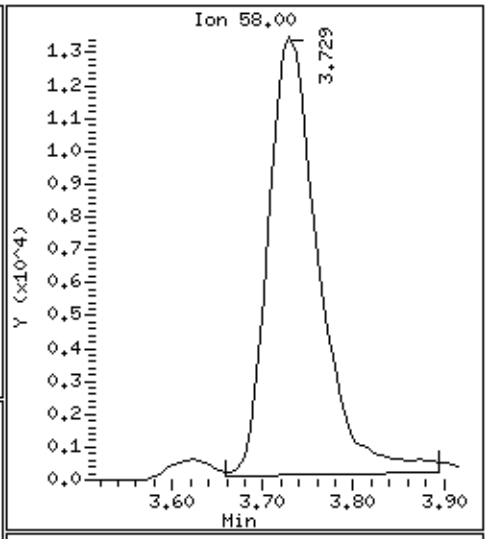
Column phase: RTX-624

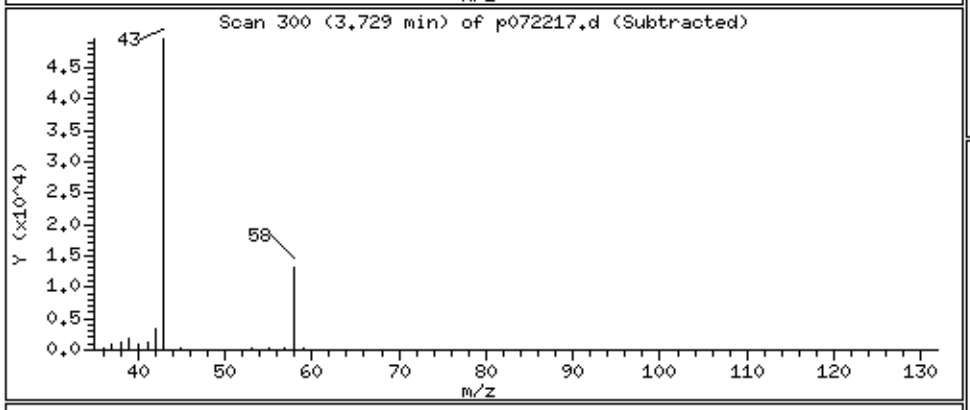
Column diameter: 0.25

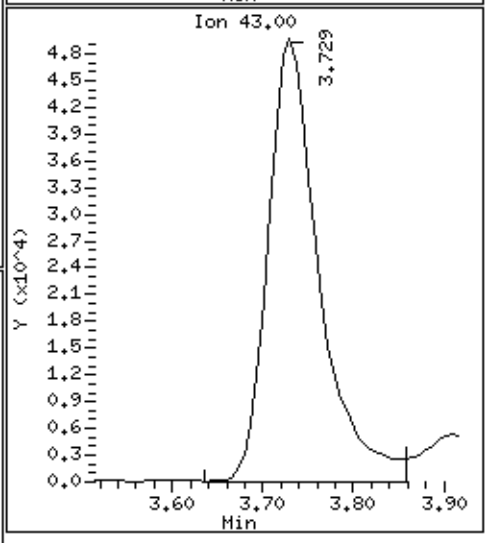
47 Acetone

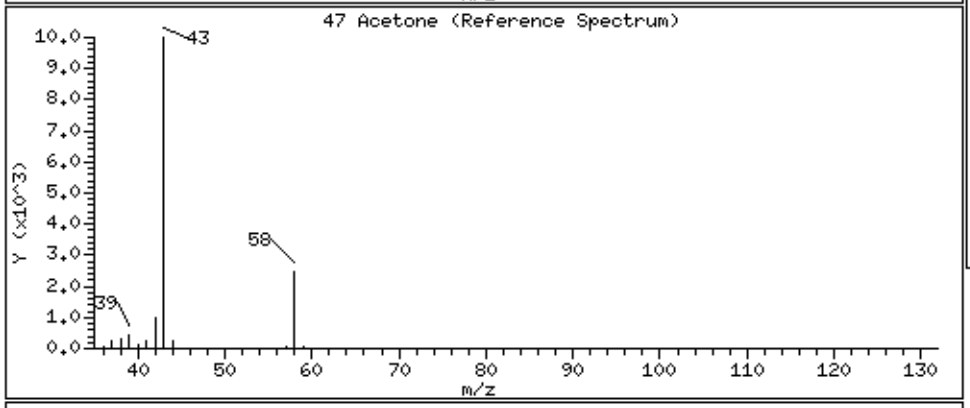
Concentration: 29.021 PPBV

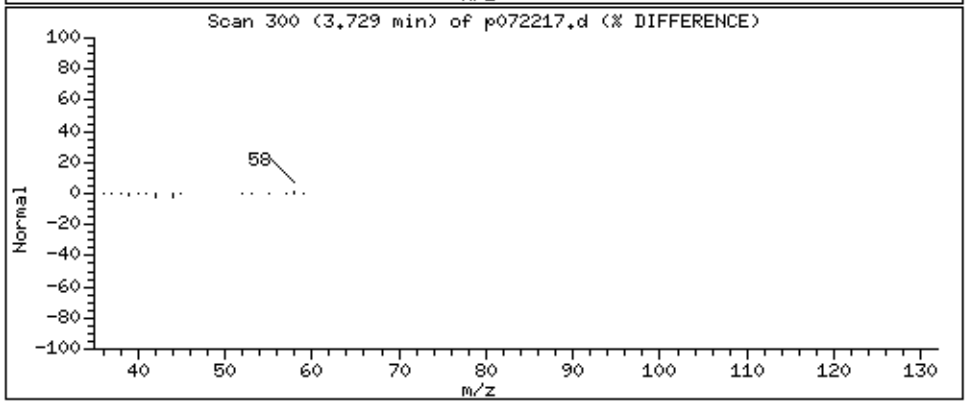












Data File: /chem/msdp.i/22JUL21.b/p072217.d

Date : 22-JUL-2021 19:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL B2201

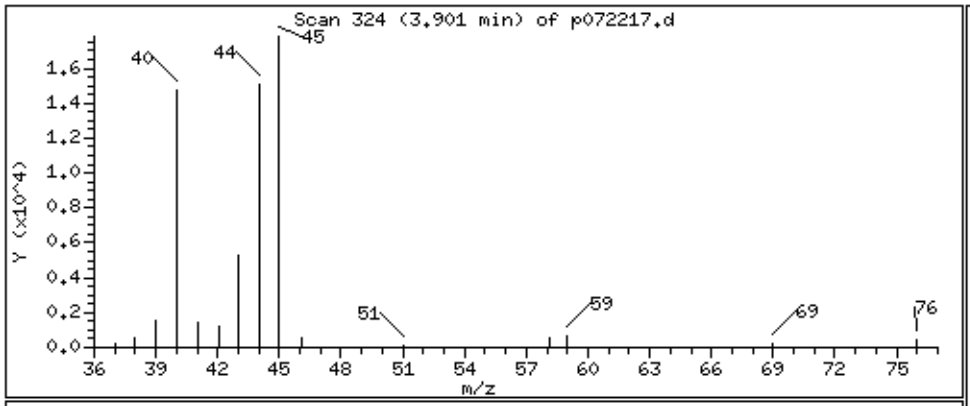
Operator: LD

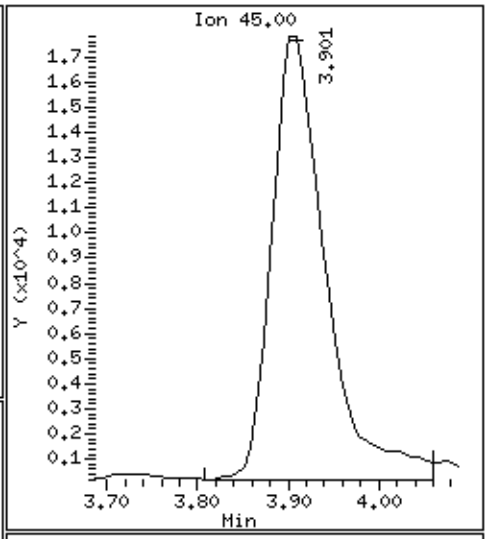
Column phase: RTX-624

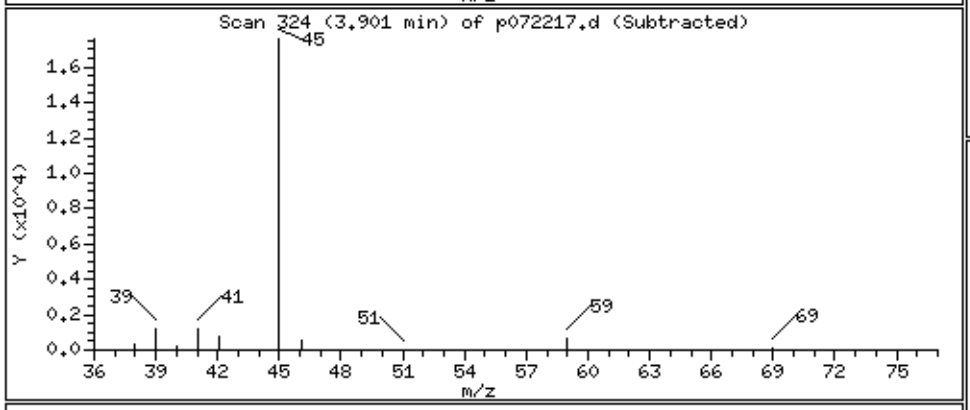
Column diameter: 0.25

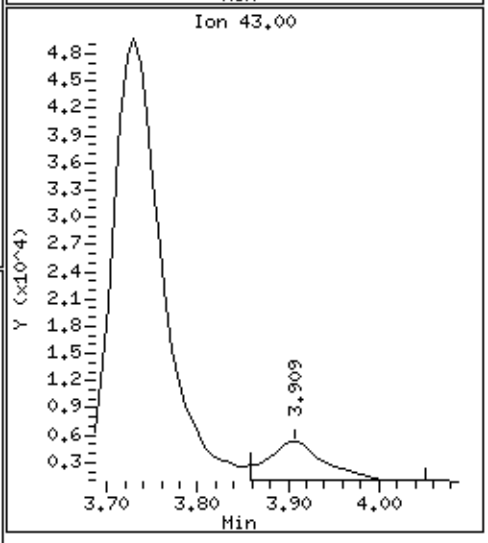
52 2-Propanol

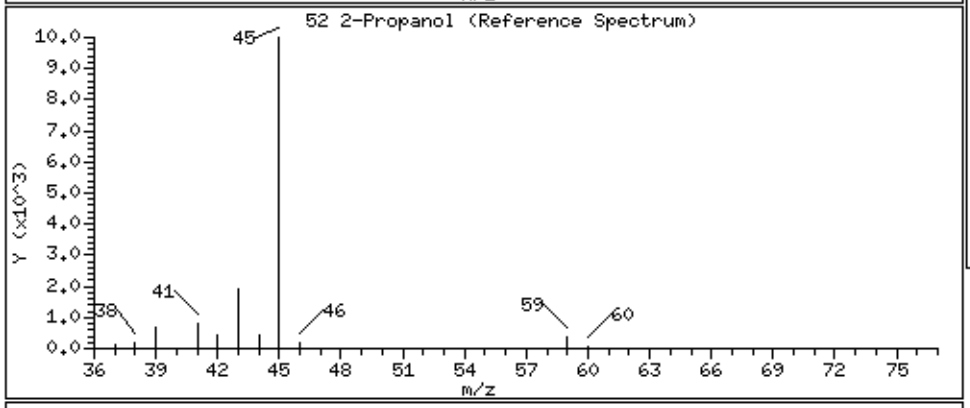
Concentration: 10.169 PPBV

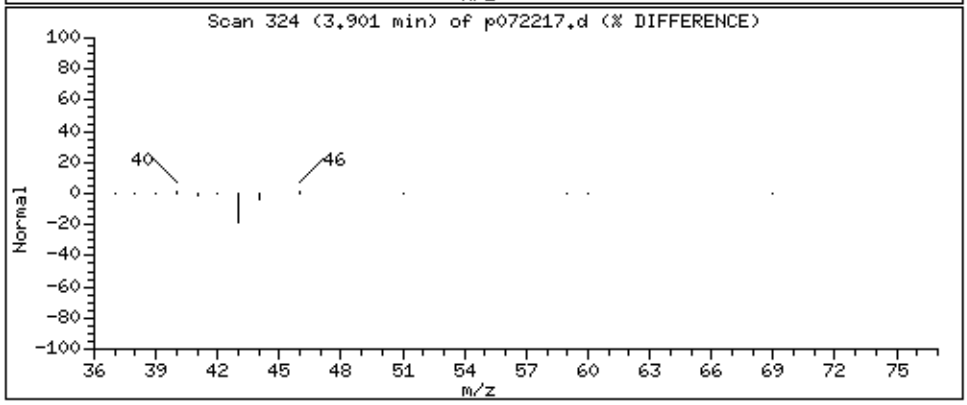












Data File: /chem/msdp.i/22JUL21.b/p072217.d

Page 5

Date : 22-JUL-2021 19:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL B2201

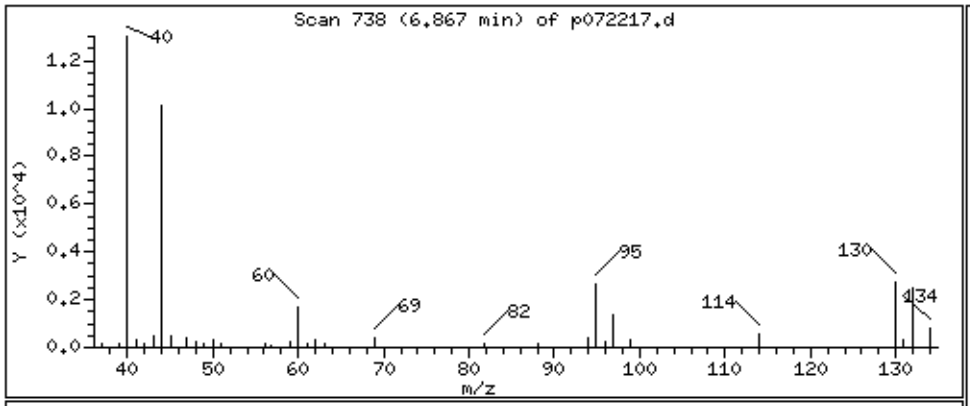
Operator: LD

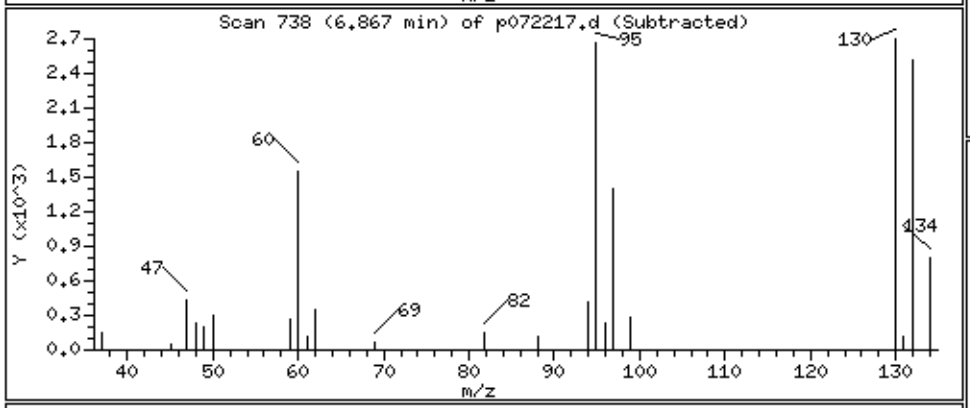
Column phase: RTX-624

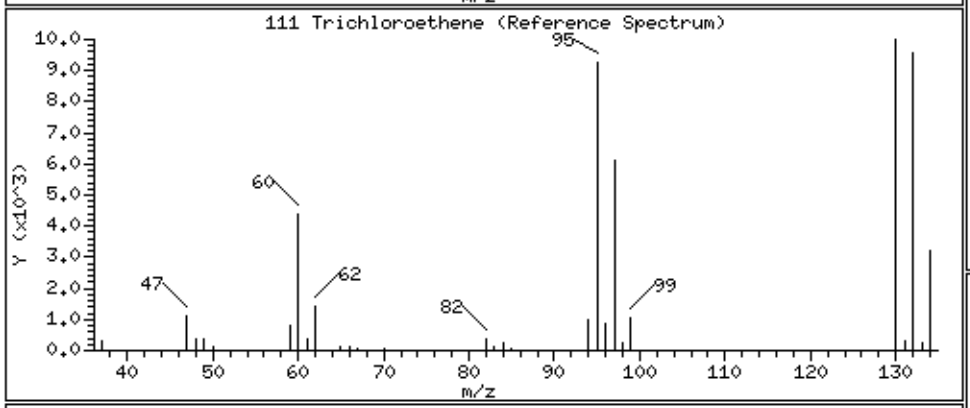
Column diameter: 0.25

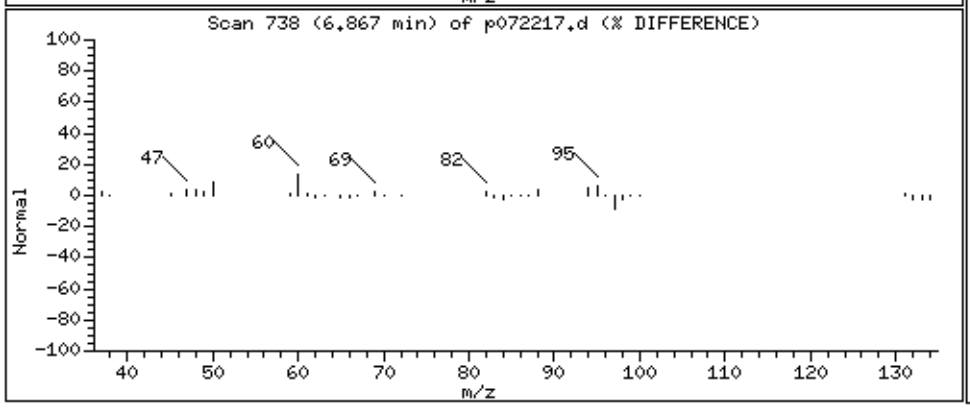
111 Trichloroethene

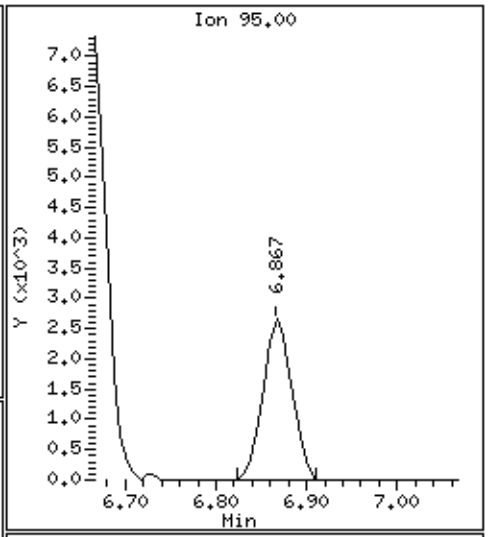
Concentration: 1.458 PPBV

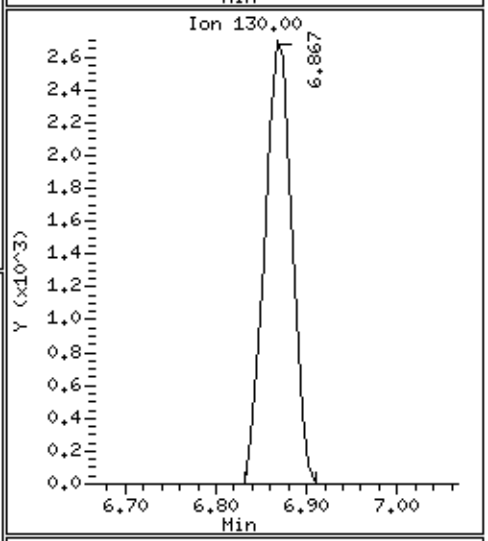


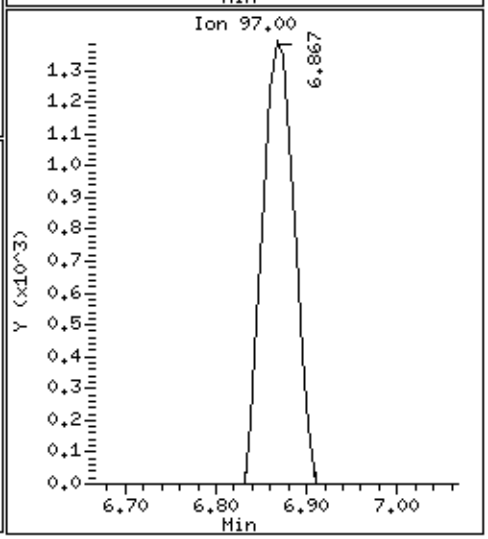












Data File: /chem/msdp.i/22JUL21.b/p072217.d

Date : 22-JUL-2021 19:15

Client ID:

Instrument: msdp.i

Sample Info: 200mL B2201

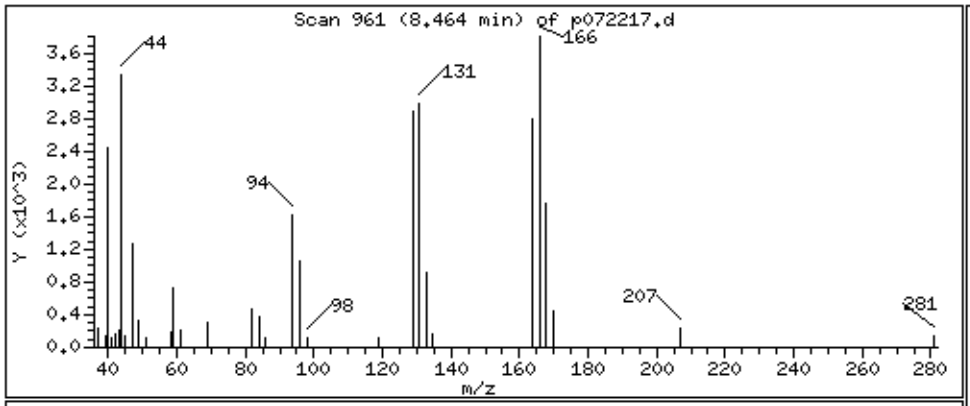
Operator: LD

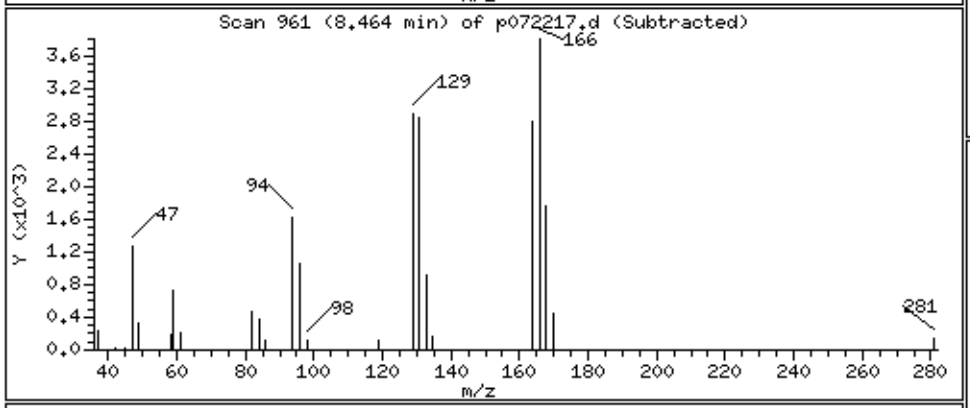
Column phase: RTX-624

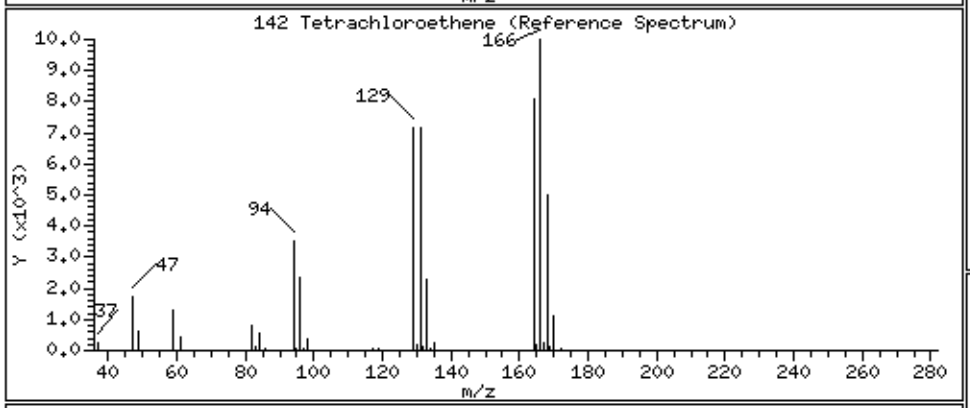
Column diameter: 0.25

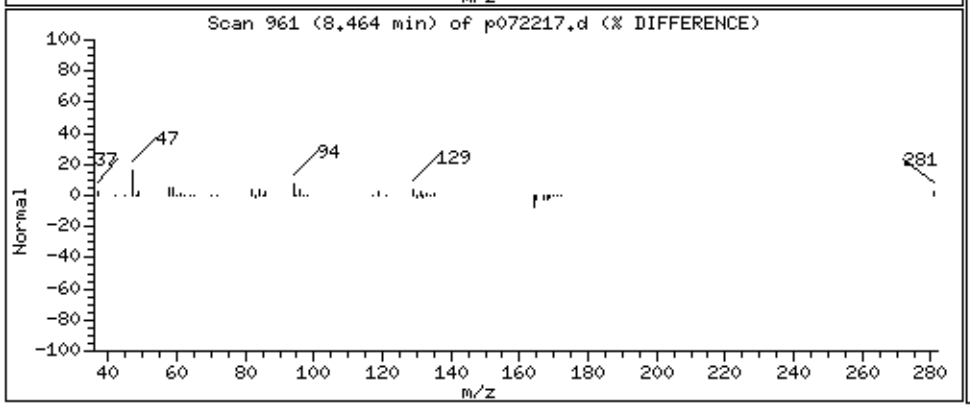
142 Tetrachloroethene

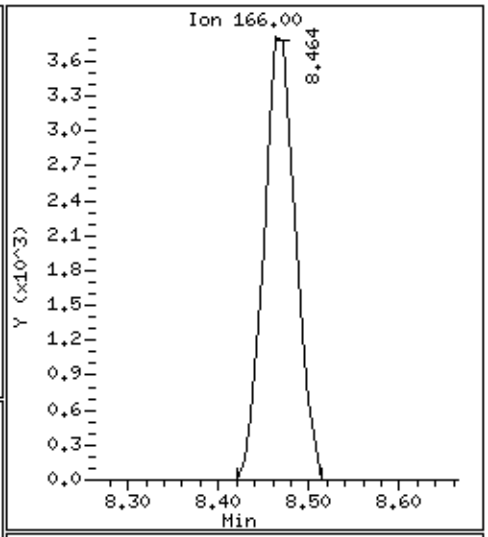
Concentration: 1.583 PPBV

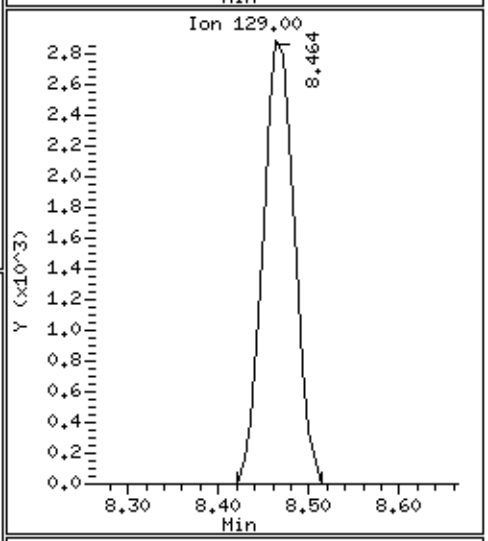


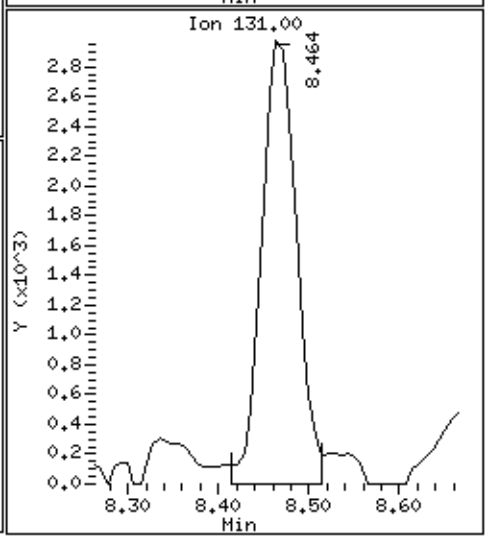












eurofins | Air Toxics

Client Sample ID: SG-VW45B-02

Lab ID#: 2107241A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072214**	**Date of Collection:**	**7/8/21 2:38:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**7/22/21 05:26 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.7	Not Detected
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	11	Not Detected	24	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	11	13	22	25
Freon 113	1.1	Not Detected	8.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	17	27	40
2-Propanol	4.6	6.1	11	15
Carbon Disulfide	4.6	Not Detected	14	Not Detected
3-Chloropropene	4.6	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
Methyl tert-butyl ether	4.6	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Chloroform	1.1	2.7	5.6	13
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.7	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	1.3	4.3	4.9
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	1.4	7.8	9.2
2-Hexanone	4.6	Not Detected	19	Not Detected

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Client Sample ID: SG-VW45B-02

Lab ID#: 2107241A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072214**	**Date of Collection:**	**7/8/21 2:38:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**7/22/21 05:26 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.8	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.3	Not Detected
Ethyl Benzene	1.1	Not Detected	5.0	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.9	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.9	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	470	Not Detected
Freon 134a	4.6	Not Detected	19	Not Detected
Acrolein	4.6	Not Detected	10	Not Detected
Acrylonitrile	4.6	Not Detected	9.9	Not Detected
tert-Amyl methyl ether	4.6	Not Detected	19	Not Detected
tert-Butyl alcohol	4.6	6.3	14	19
1,2-Dibromo-3-chloropropane	4.6	Not Detected	44	Not Detected
Dibromomethane	4.6	Not Detected	32	Not Detected
1,1-Difluoroethane	4.6	Not Detected	12	Not Detected
Isopropyl ether	4.6	Not Detected	19	Not Detected
Ethyl Acetate	4.6	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.6	Not Detected	19	Not Detected
Hexachloroethane	4.6	Not Detected	44	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Propylene	4.6	Not Detected	7.9	Not Detected
1,1,1,2-Tetrachloroethane	4.6	Not Detected	31	Not Detected
1,2,3-Trichloropropane	4.6	Not Detected	28	Not Detected
Vinyl Acetate	4.6	Not Detected	16	Not Detected
Vinyl Bromide	4.6	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW45B-02

Lab ID#: 2107241A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072214**	**Date of Collection:**	**7/8/21 2:38:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**7/22/21 05:26 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072214.d
Lab Smp Id: 2107241A-04A
Inj Date : 22-JUL-2021 17:26
Operator : LD Inst ID: msd3.i
Smp Info : 200mL N3130
Misc Info : 8 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 1
Dil Factor: 2.29000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	273075	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	214109				48.46- 108.46	78.41
5.284	5.284 (1.000)	49	387150				120.39- 180.39	141.77
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	930209	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	139279				0.00- 45.52	14.97
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	815118	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	439321				25.46- 85.46	53.90
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	373820	24.8756	24.876		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	181768				21.66- 81.66	48.62
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	919565	24.0009	24.001		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	102604				0.00- 41.47	11.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	606015			36.47- 96.47	65.90
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	526788	24.4333	24.433	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	597409			93.06- 153.06	113.41
9.601	9.601 (1.114)	176	490003			62.87- 122.87	93.02
39 Ethanol					CAS #: 64-17-5		
2.794	2.766 (0.529)	46	9473	5.81795	13.323	80.00- 120.00	100.00
2.780	2.766 (0.526)	45	28038			523.01- 583.01	295.98
47 Acetone					CAS #: 67-64-1		
3.242	3.213 (0.613)	58	34059	7.43827	17.034	80.00- 120.00	100.00
3.242	3.213 (0.613)	43	116967			299.66- 359.66	343.42
52 2-Propanol					CAS #: 67-63-0		
3.438	3.409 (0.650)	45	43672	2.65203	6.073	80.00- 120.00	100.00
3.438	3.409 (0.650)	43	10377			0.00- 48.61	23.76
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.871	3.857 (0.733)	59	56602	2.73844	6.271	80.00- 120.00	100.00
3.871	3.857 (0.733)	41	12104			0.00- 51.05	21.39
3.871	3.857 (0.733)	57	6844			0.00- 41.68	12.09
92 Chloroform					CAS #: 67-66-3		
5.340	5.354 (1.011)	83	19891	1.16178	2.660	80.00- 120.00	100.00
5.340	5.354 (1.011)	85	12972			34.71- 94.71	65.22
137 Toluene					CAS #: 108-88-3		
7.437	7.444 (1.203)	91	16220	0.56947	1.304	80.00- 120.00	100.00
7.445	7.444 (1.205)	92	8765			28.30- 88.30	54.04
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.914)	166	7567	0.59257	1.357	80.00- 120.00	100.00
7.882	7.881 (0.914)	129	5554			48.71- 108.71	73.39
7.874	7.881 (0.914)	131	5402			46.55- 106.55	71.38

Report Date: 23-Jul-2021 09:52

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072214.d
Lab Smp Id: 2107241A-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 8 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	273075	13.50
108 1,4-Difluorobenze	805743	483446	1128040	930209	15.45
153 Chlorobenzene-d5	719477	431686	1007268	815118	13.29

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 09:52

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-04A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 8 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.876	99.50	70-130
$ 134 Toluene-d8	25.000	24.001	96.00	70-130
$ 170 4-Bromofluorobenz	25.000	24.433	97.73	70-130

Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

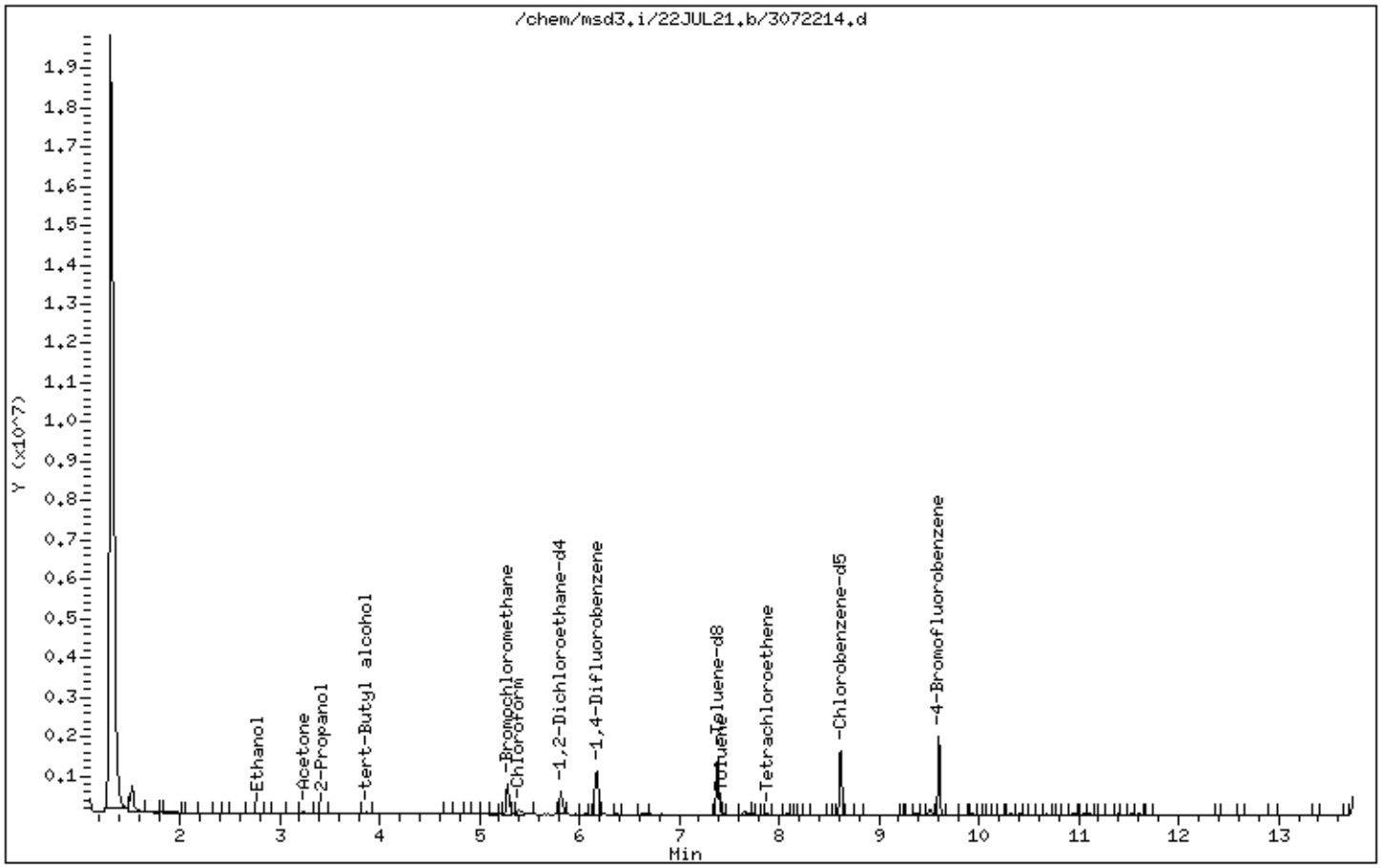
Instrument: msd3.i

Sample Info: 200mL N3130

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

Instrument: msd3.i

Sample Info: 200mL N3130

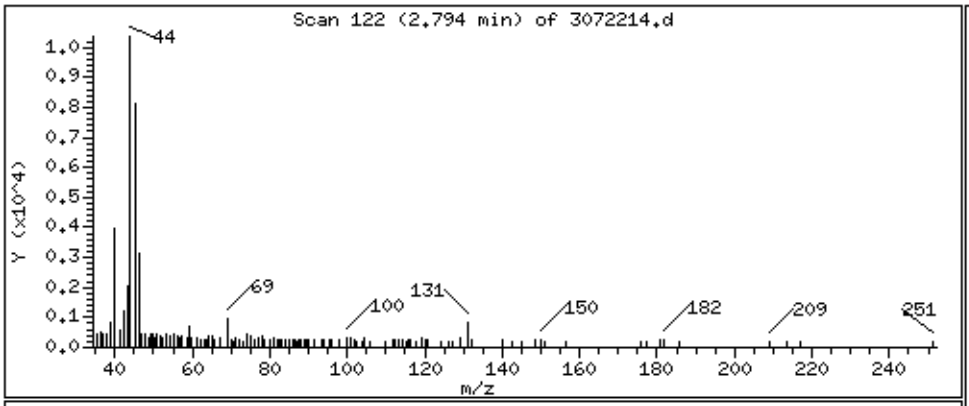
Operator: LD

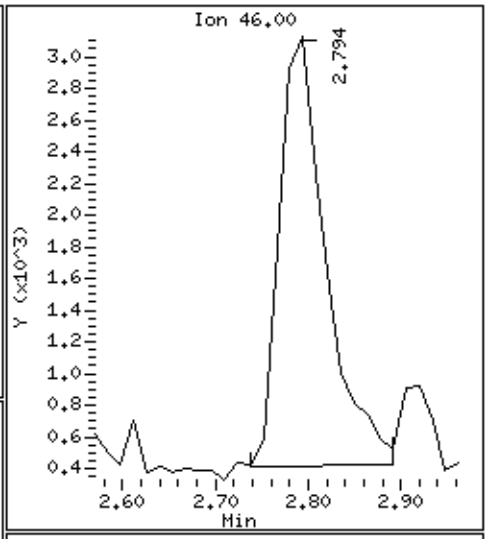
Column phase: RTX-624

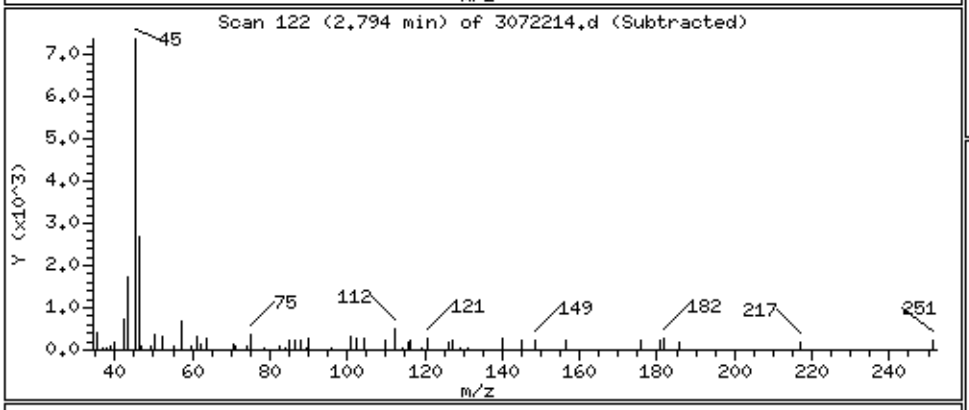
Column diameter: 0.25

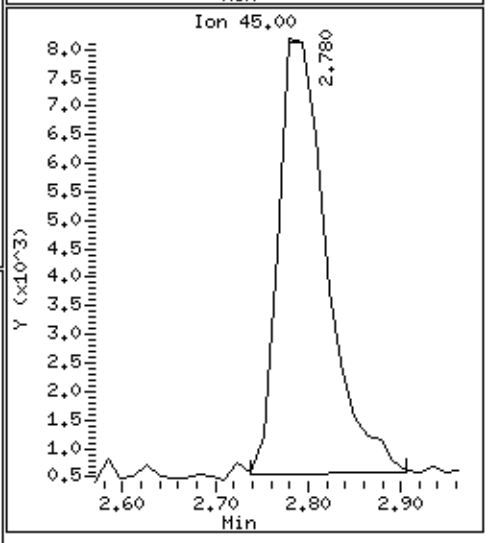
39 Ethanol

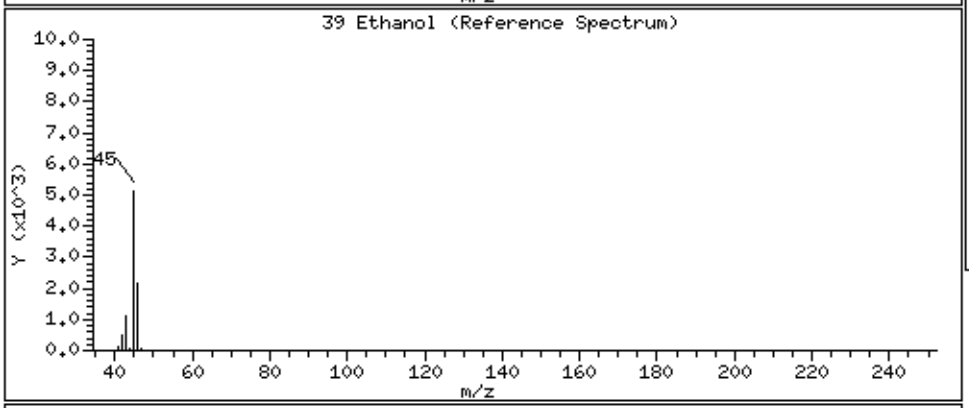
Concentration: 13.323 PPBV

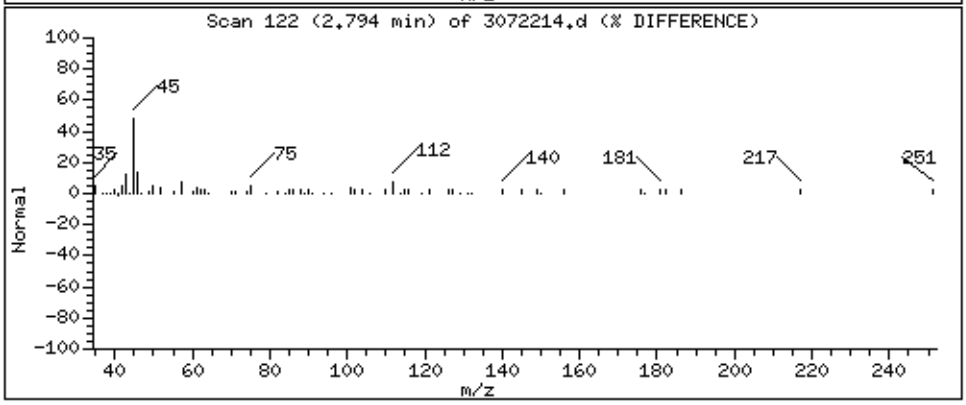












Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

Instrument: msd3.i

Sample Info: 200mL N3130

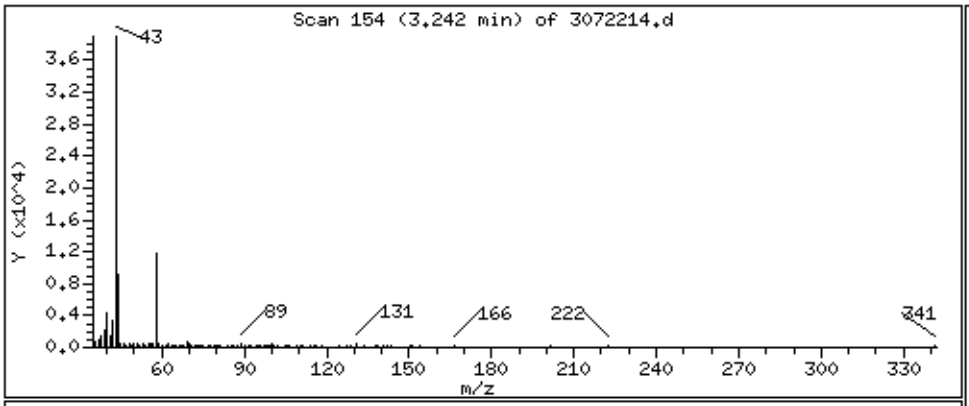
Operator: LD

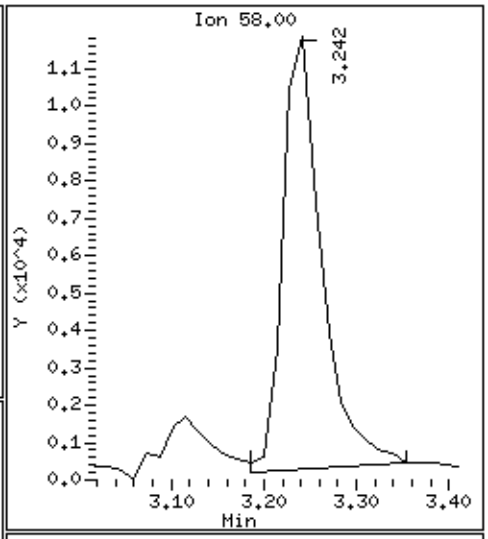
Column phase: RTX-624

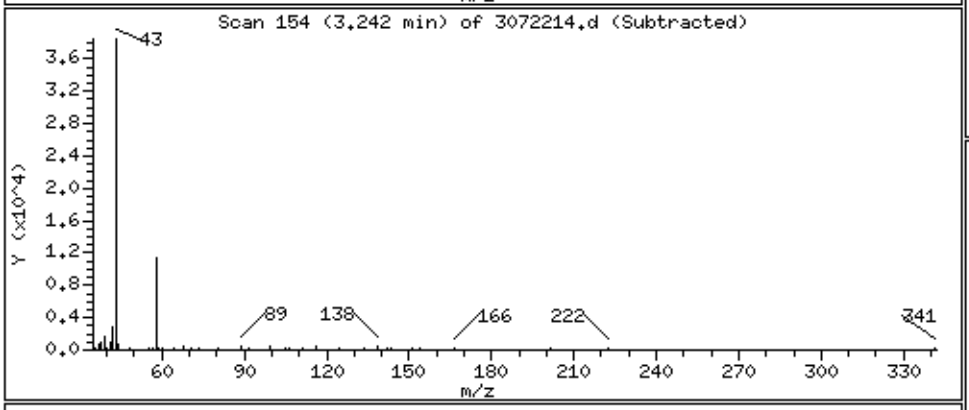
Column diameter: 0.25

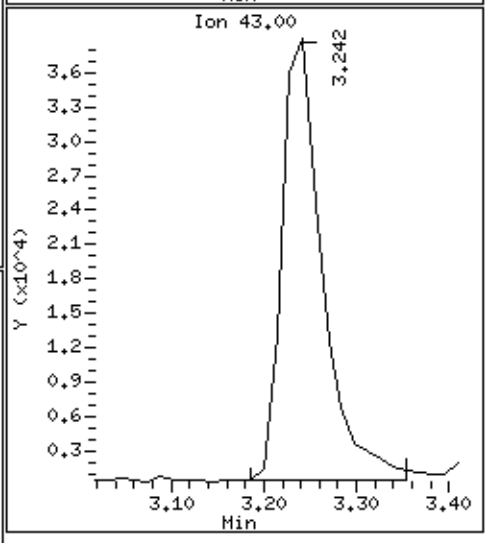
47 Acetone

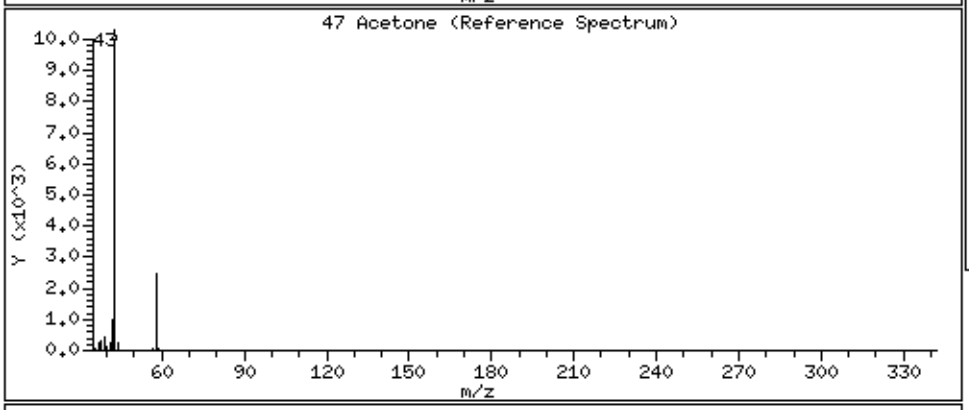
Concentration: 17.034 PPBV

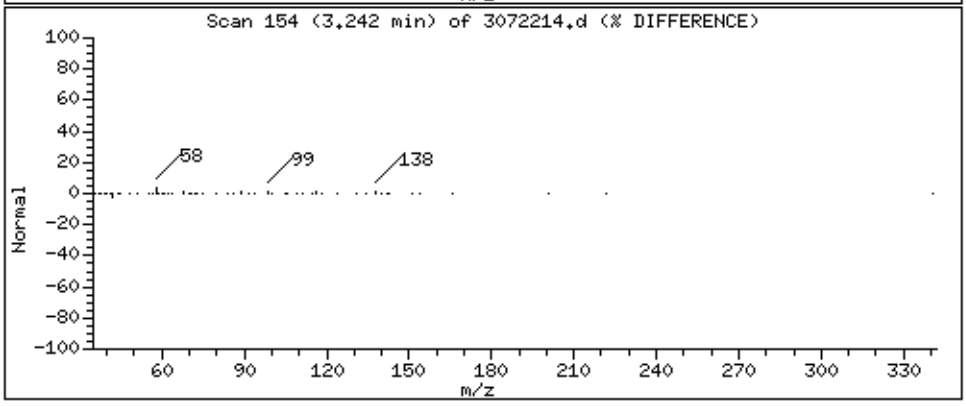












Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

Instrument: msd3.i

Sample Info: 200mL N3130

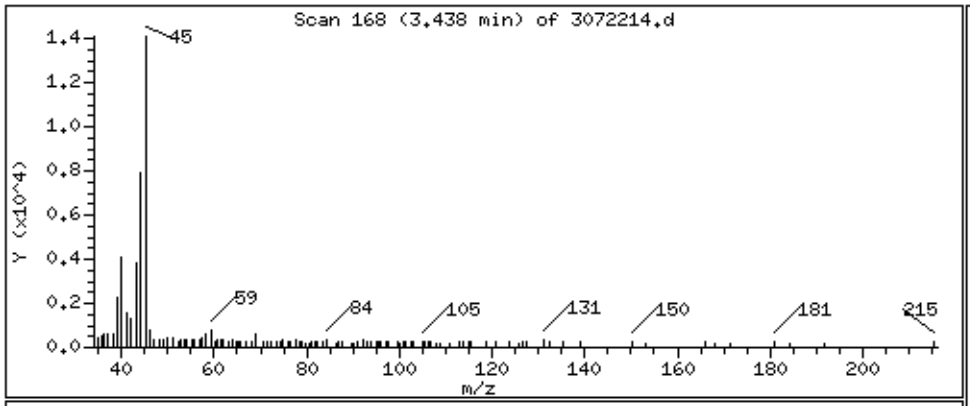
Operator: LD

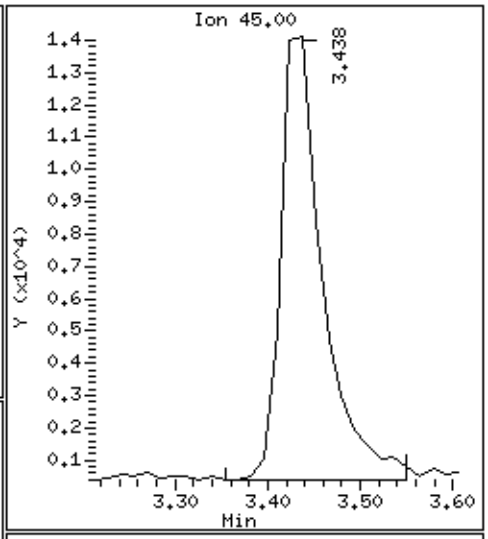
Column phase: RTX-624

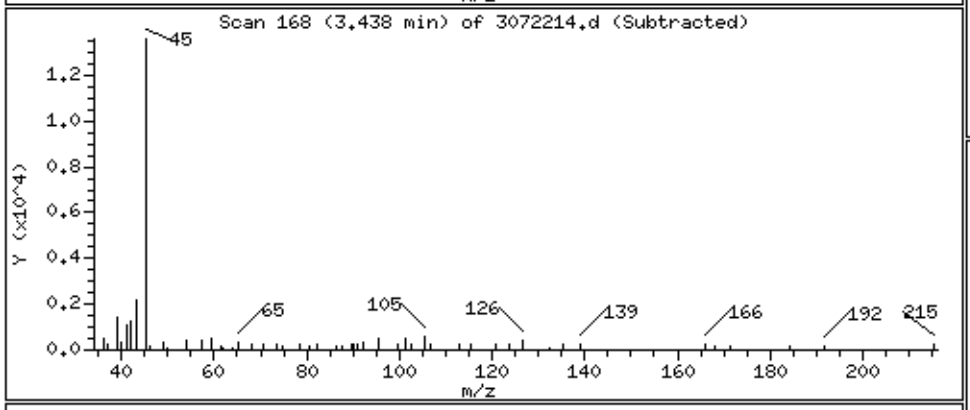
Column diameter: 0.25

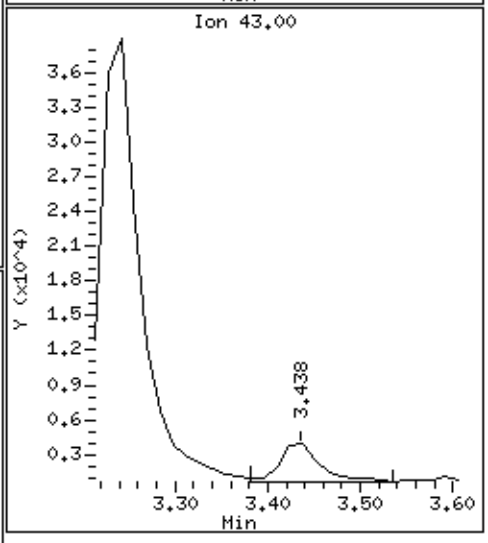
52 2-Propanol

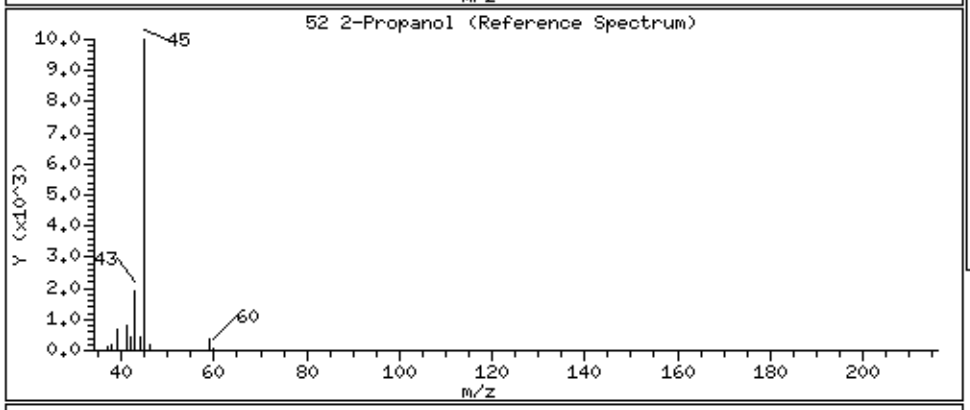
Concentration: 6.073 PPBV

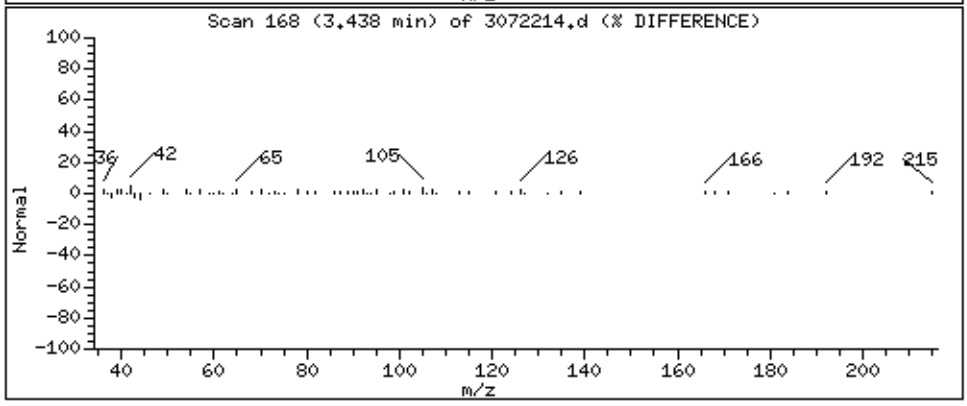












Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

Instrument: msd3.i

Sample Info: 200mL N3130

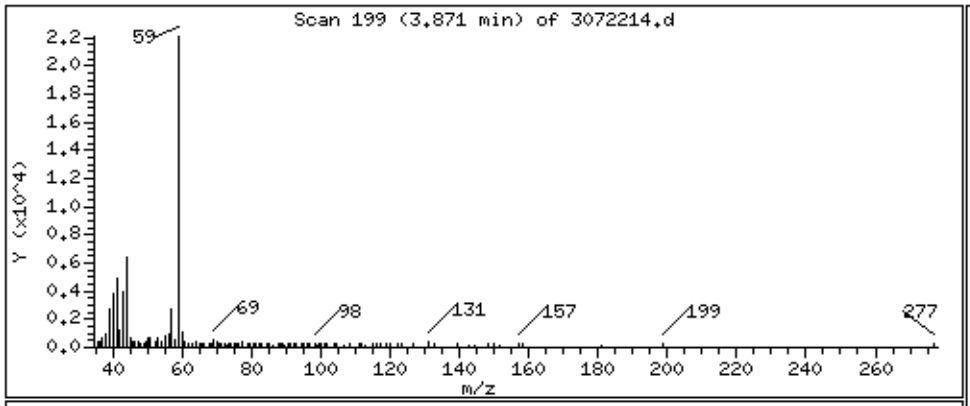
Operator: LD

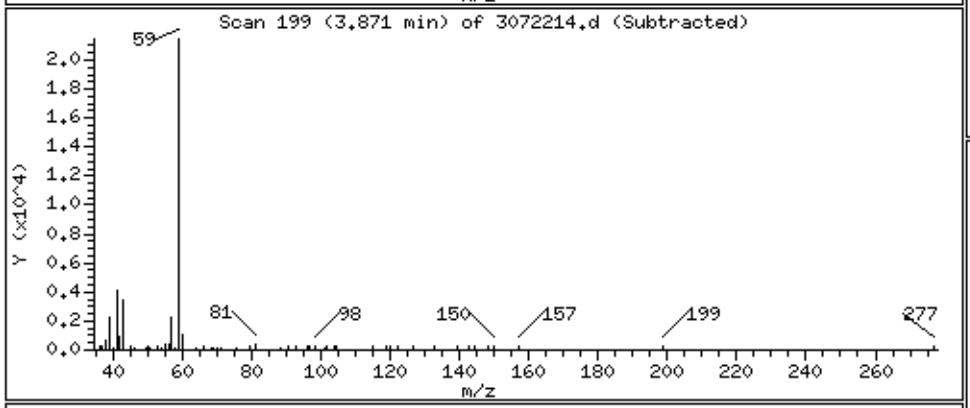
Column phase: RTX-624

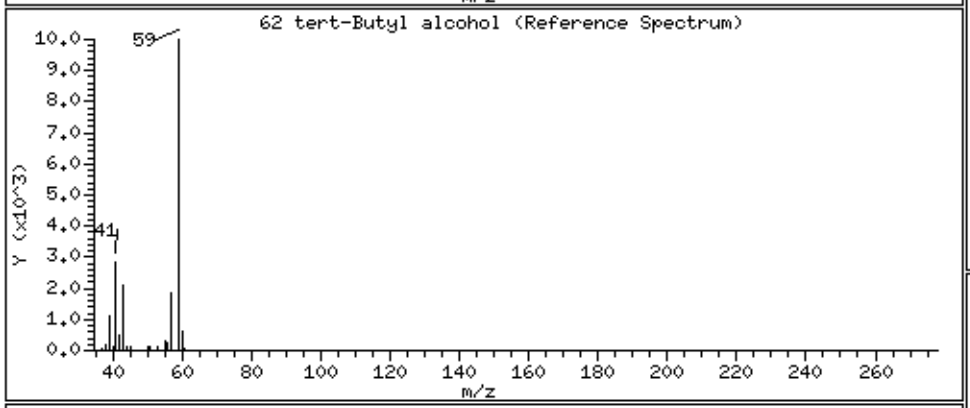
Column diameter: 0.25

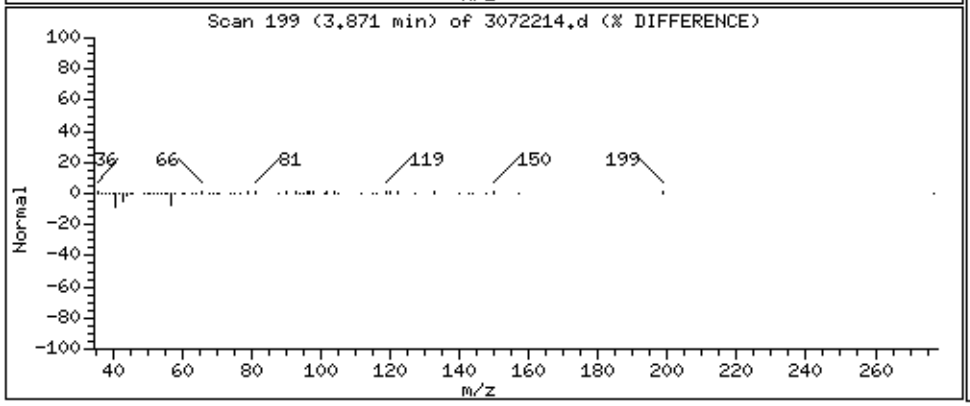
62 tert-Butyl alcohol

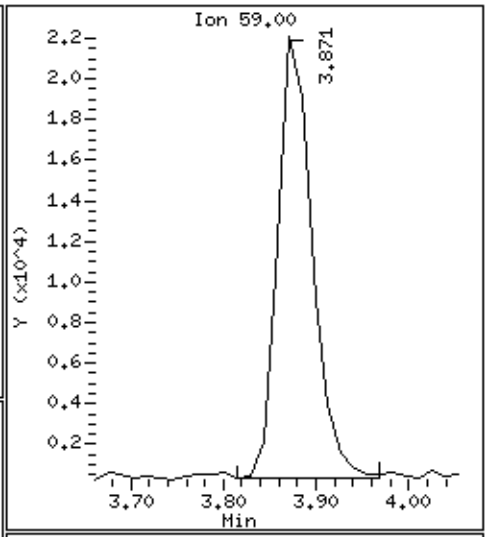
Concentration: 6.271 PPBV

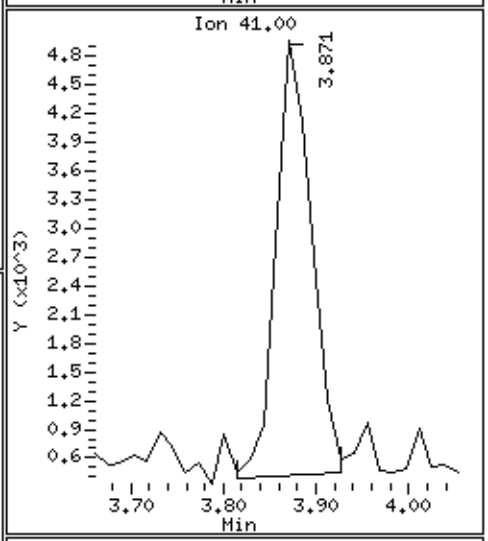


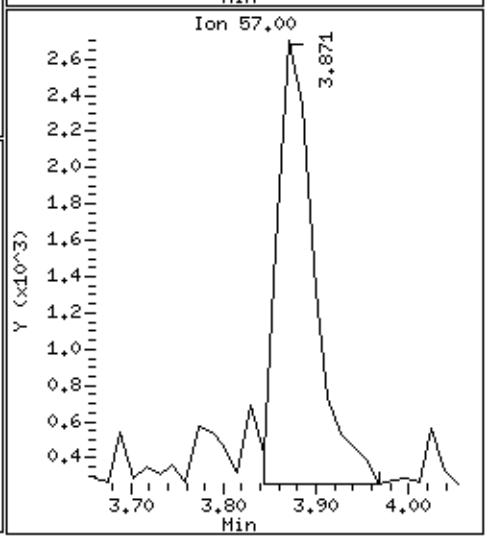












Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

Instrument: msd3.i

Sample Info: 200mL N3130

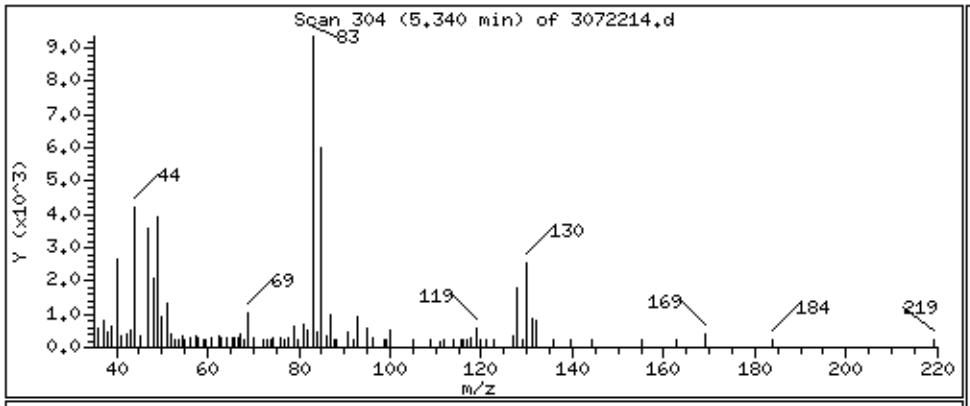
Operator: LD

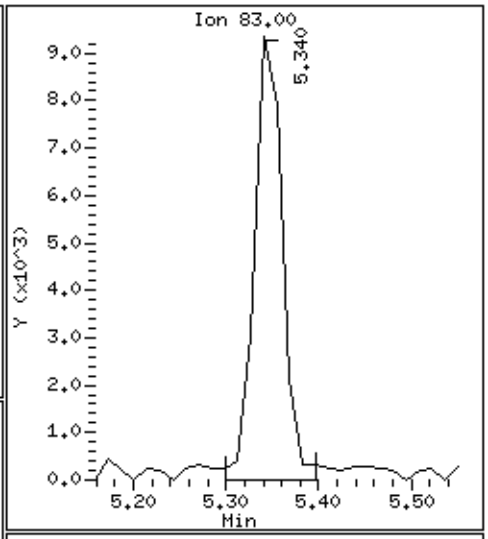
Column phase: RTX-624

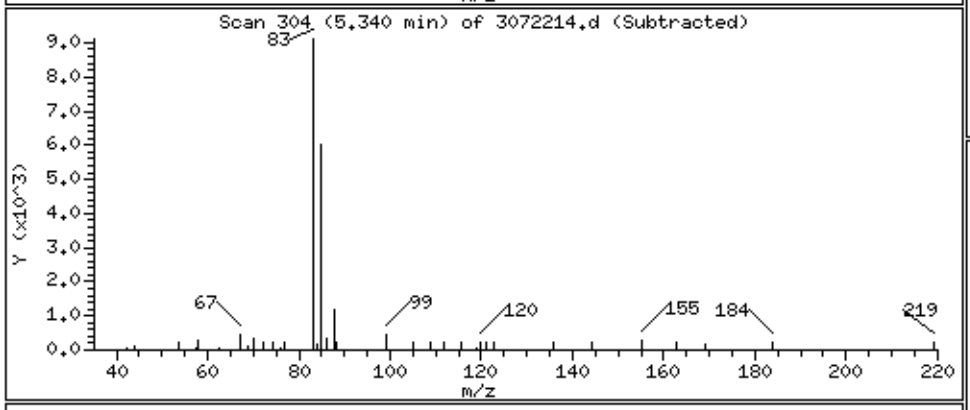
Column diameter: 0.25

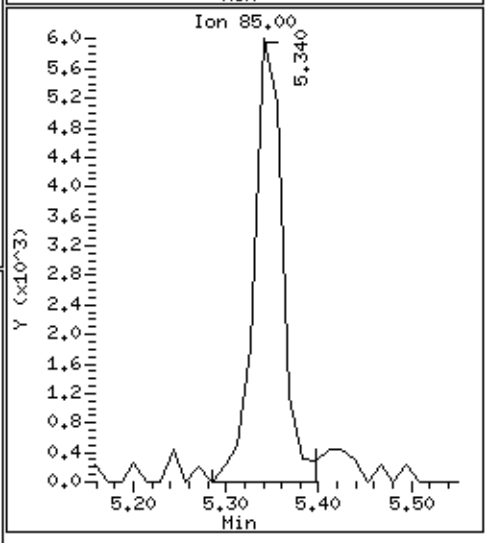
92 Chloroform

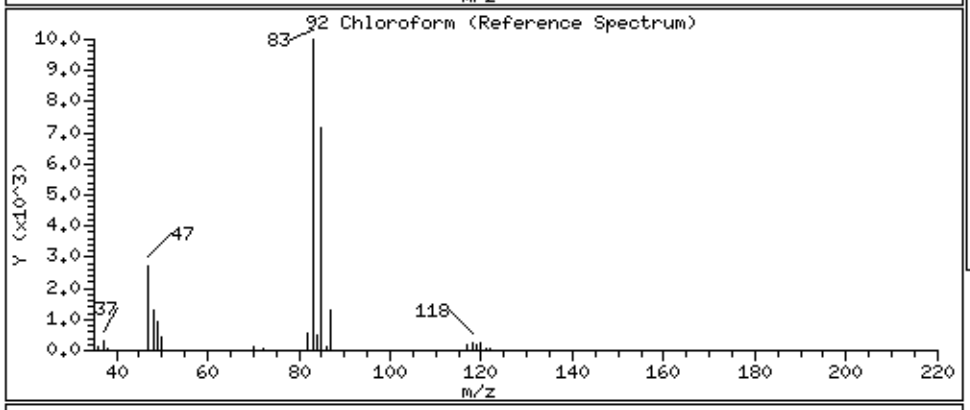
Concentration: 2.660 PPBV

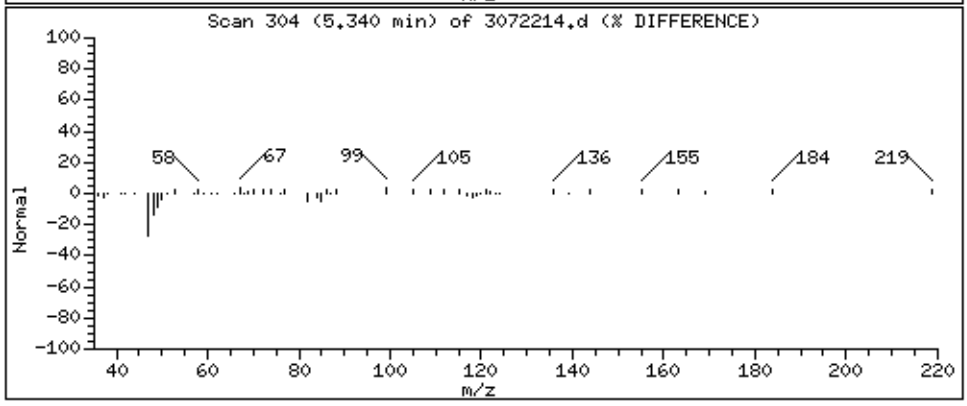












Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

Instrument: msd3.i

Sample Info: 200mL N3130

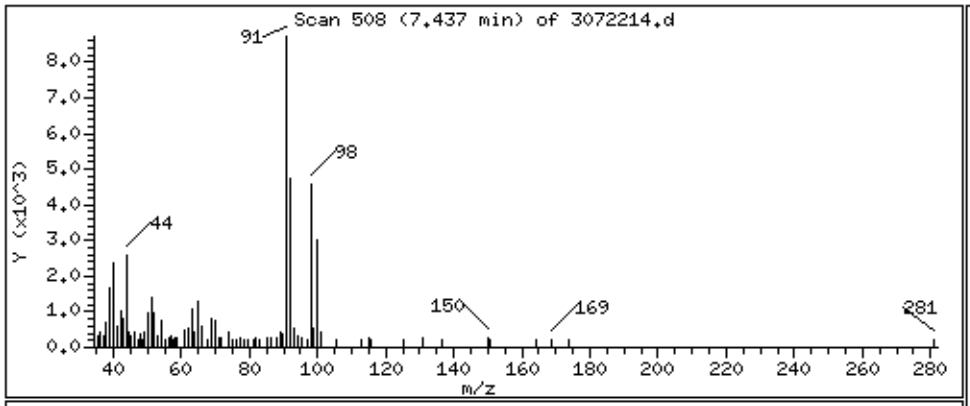
Operator: LD

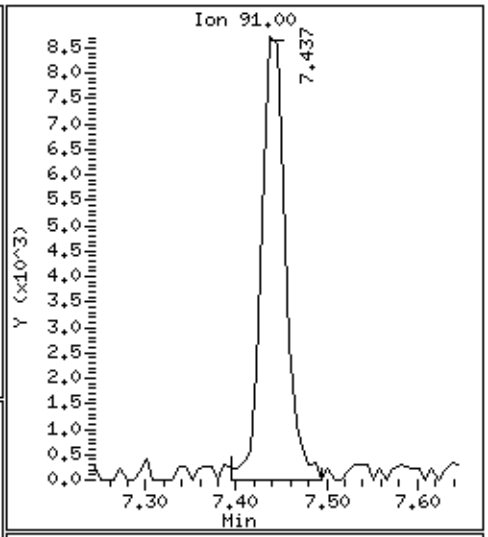
Column phase: RTX-624

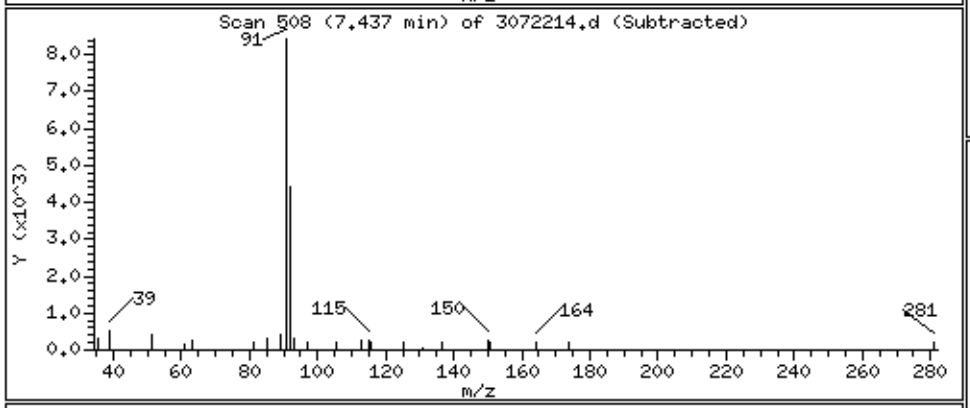
Column diameter: 0.25

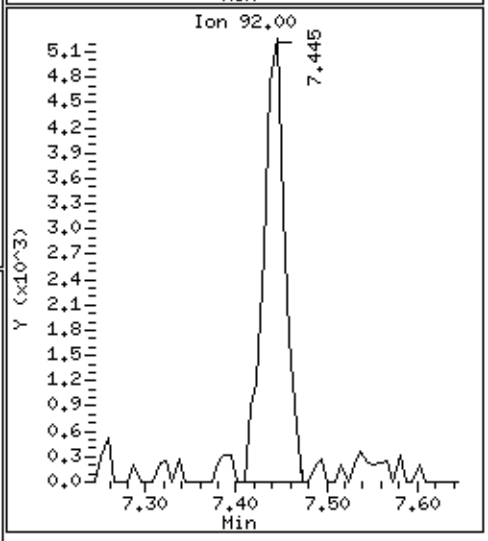
137 Toluene

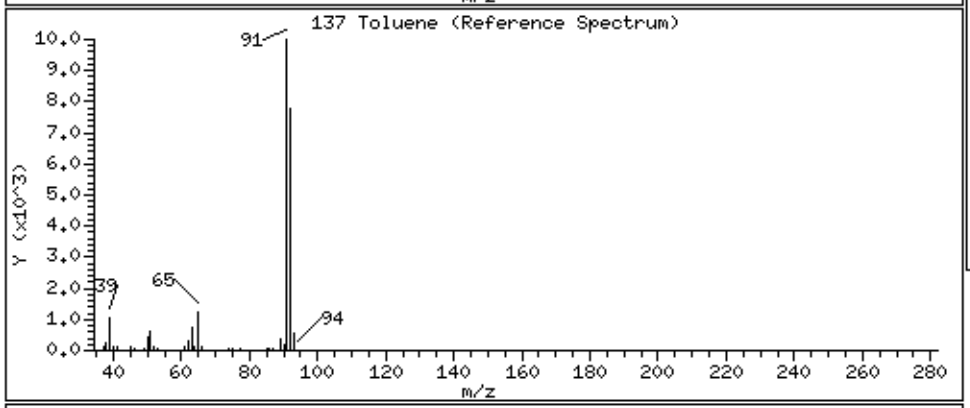
Concentration: 1.304 PPBV

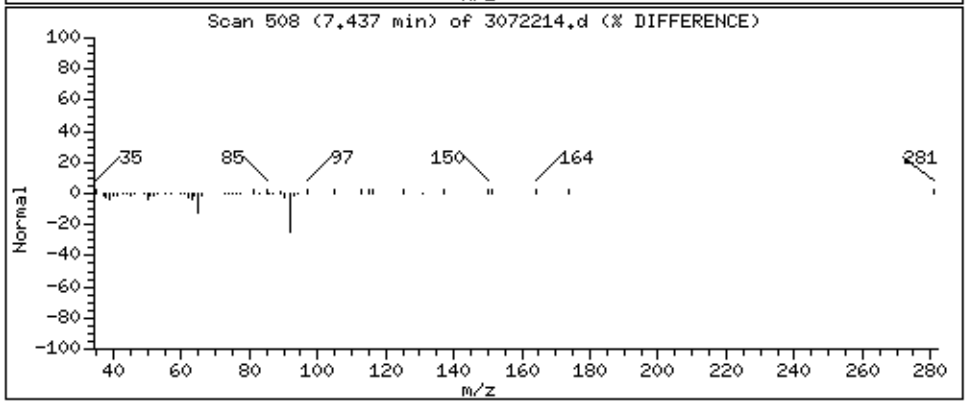












Data File: /chem/msd3.i/22JUL21.b/3072214.d

Date : 22-JUL-2021 17:26

Client ID:

Instrument: msd3.i

Sample Info: 200mL N3130

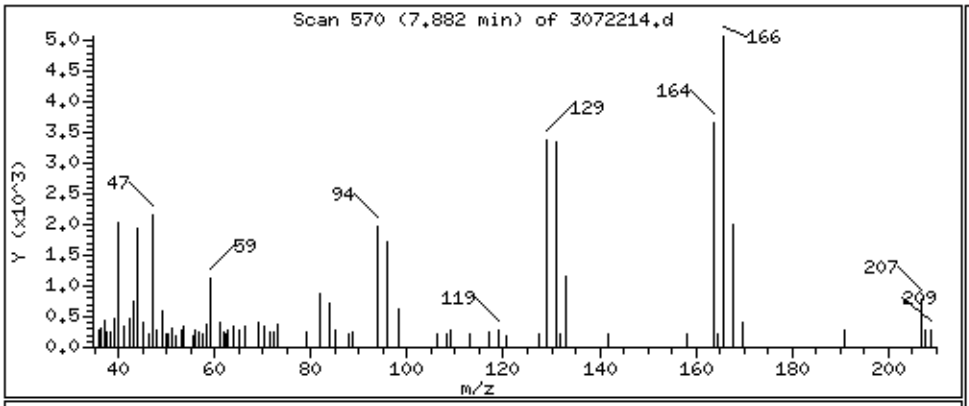
Operator: LD

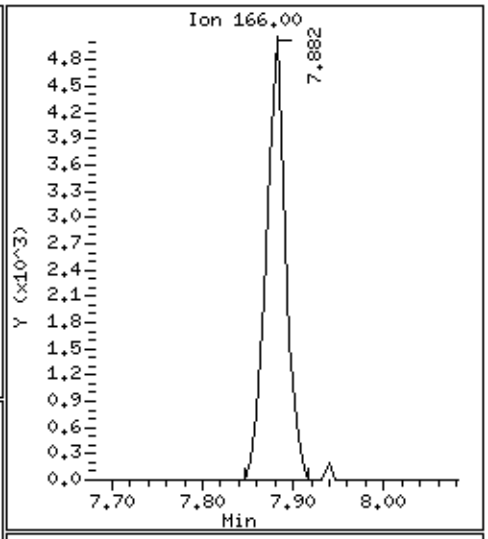
Column phase: RTX-624

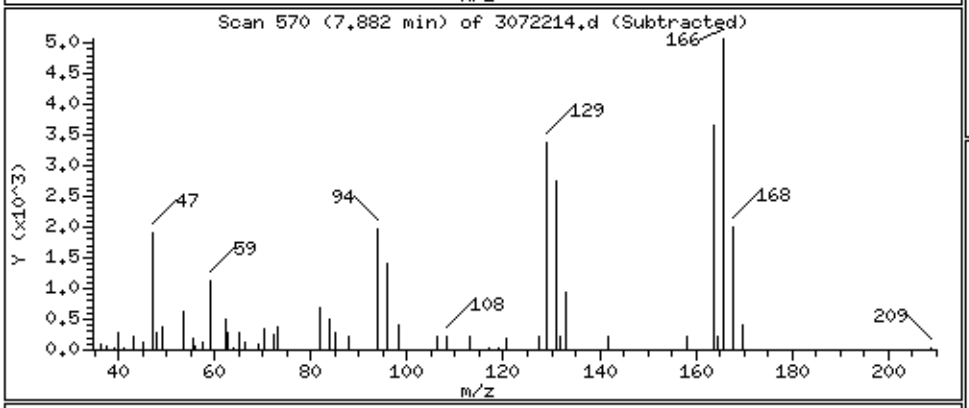
Column diameter: 0.25

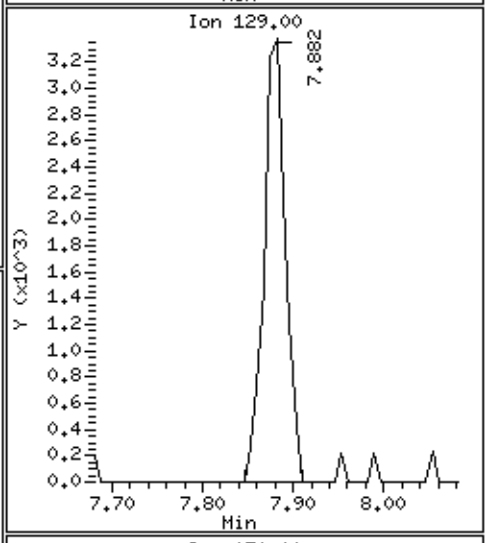
142 Tetrachloroethene

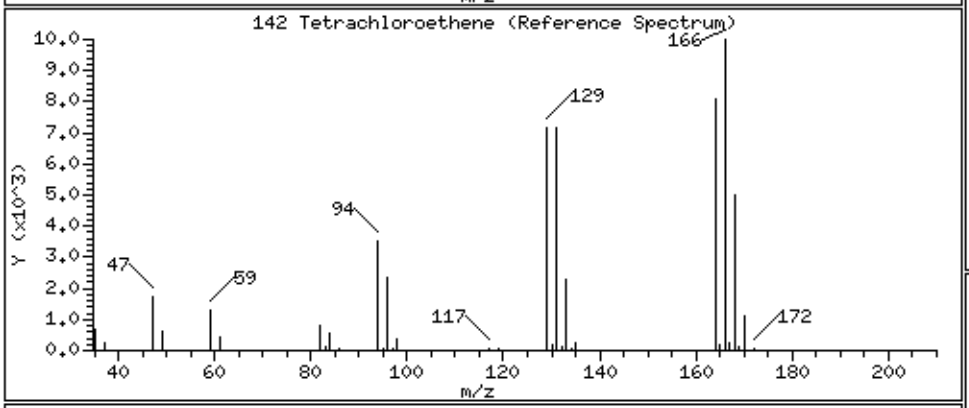
Concentration: 1.357 PPBV

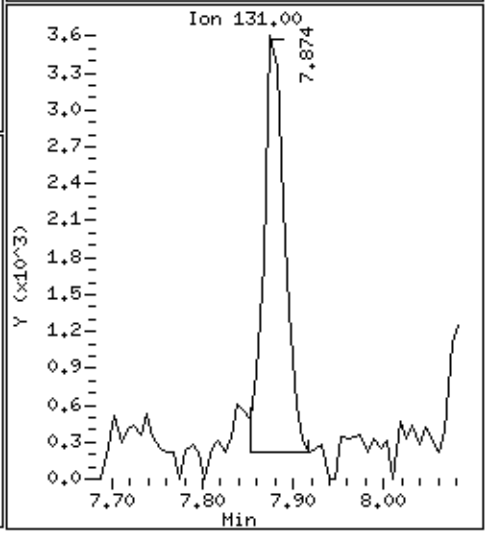


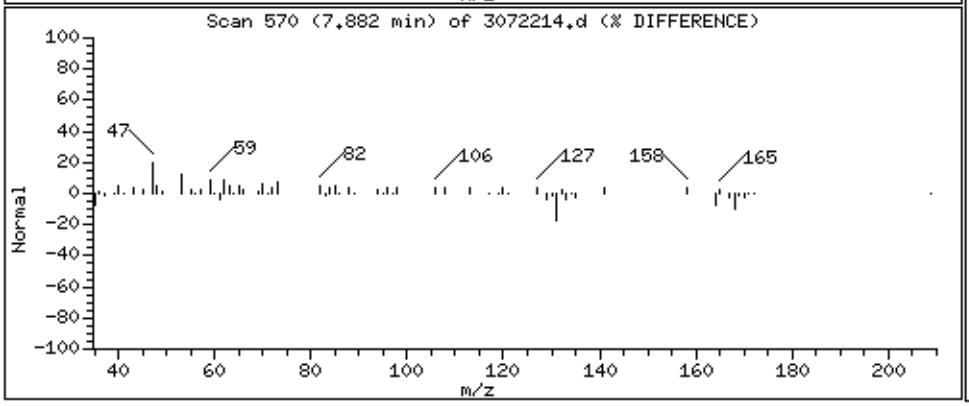












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Client Sample ID: SG-VW46A-02

Lab ID#: 2107241A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072215**	**Date of Collection:**	**7/8/21 3:38:00 PM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/22/21 05:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.7	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	22	26	52
2-Propanol	4.4	5.6	11	14
Carbon Disulfide	4.4	Not Detected	14	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	Not Detected	5.4	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.4	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	2.9	7.5	20
2-Hexanone	4.4	Not Detected	18	Not Detected

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Client Sample ID: SG-VW46A-02

Lab ID#: 2107241A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072215**	**Date of Collection:**	**7/8/21 3:38:00 PM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/22/21 05:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.6	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	33	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected
Naphthalene	2.2	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Hexachloroethane	4.4	Not Detected	43	Not Detected
Iodomethane	11	Not Detected	64	Not Detected
Propylene	4.4	Not Detected	7.6	Not Detected
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW46A-02

Lab ID#: 2107241A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072215**	**Date of Collection:**	**7/8/21 3:38:00 PM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/22/21 05:55 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072215.d
Lab Smp Id: 2107241A-05A
Inj Date : 22-JUL-2021 17:55
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 1L3929
Misc Info : 7.1 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2
Dil Factor: 2.20000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	261629	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	201524				48.46- 108.46	77.03
5.270	5.284 (1.000)	49	368973				120.39- 180.39	141.03
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.180 (1.000)	114	854118	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	124463				0.00- 45.52	14.57
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	793524	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	416138				25.46- 85.46	52.44
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	341345	23.7083	23.708		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	164710				21.66- 81.66	48.25
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	874404	24.8554	24.855		80.00- 120.00	100.00
7.387	7.387 (1.198)	70	97608				0.00- 41.47	11.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	580585			36.47- 96.47	66.40
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.600	9.601 (1.114)	174	494381	23.5542	23.554	80.00- 120.00	100.00
9.600	9.601 (1.114)	95	565075			93.06- 153.06	114.30
9.600	9.601 (1.114)	176	460025			62.87- 122.87	93.05
47 Acetone					CAS #: 67-64-1		
3.241	3.213 (0.613)	58	43323	9.87540	21.726	80.00- 120.00	100.00
3.241	3.213 (0.613)	43	128025			299.66- 359.66	295.51
52 2-Propanol					CAS #: 67-63-0		
3.465	3.409 (0.656)	45	39812	2.52340	5.551	80.00- 120.00	100.00
3.465	3.409 (0.656)	43	9605			0.00- 48.61	24.13
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	16577	1.33347	2.934	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	12916			48.71- 108.71	77.92
7.881	7.881 (0.914)	131	12551			46.55- 106.55	75.71

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072215.d
Lab Smp Id: 2107241A-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 7.1 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	261629	8.74
108 1,4-Difluorobenze	805743	483446	1128040	854118	6.00
153 Chlorobenzene-d5	719477	431686	1007268	793524	10.29

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.23
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 09:52

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-05A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 7.1 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.708	94.83	70-130
$ 134 Toluene-d8	25.000	24.855	99.42	70-130
$ 170 4-Bromofluorobenz	25.000	23.554	94.22	70-130

Data File: /chem/msd3.i/22JUL21.b/3072215.d

Date : 22-JUL-2021 17:55

Client ID:

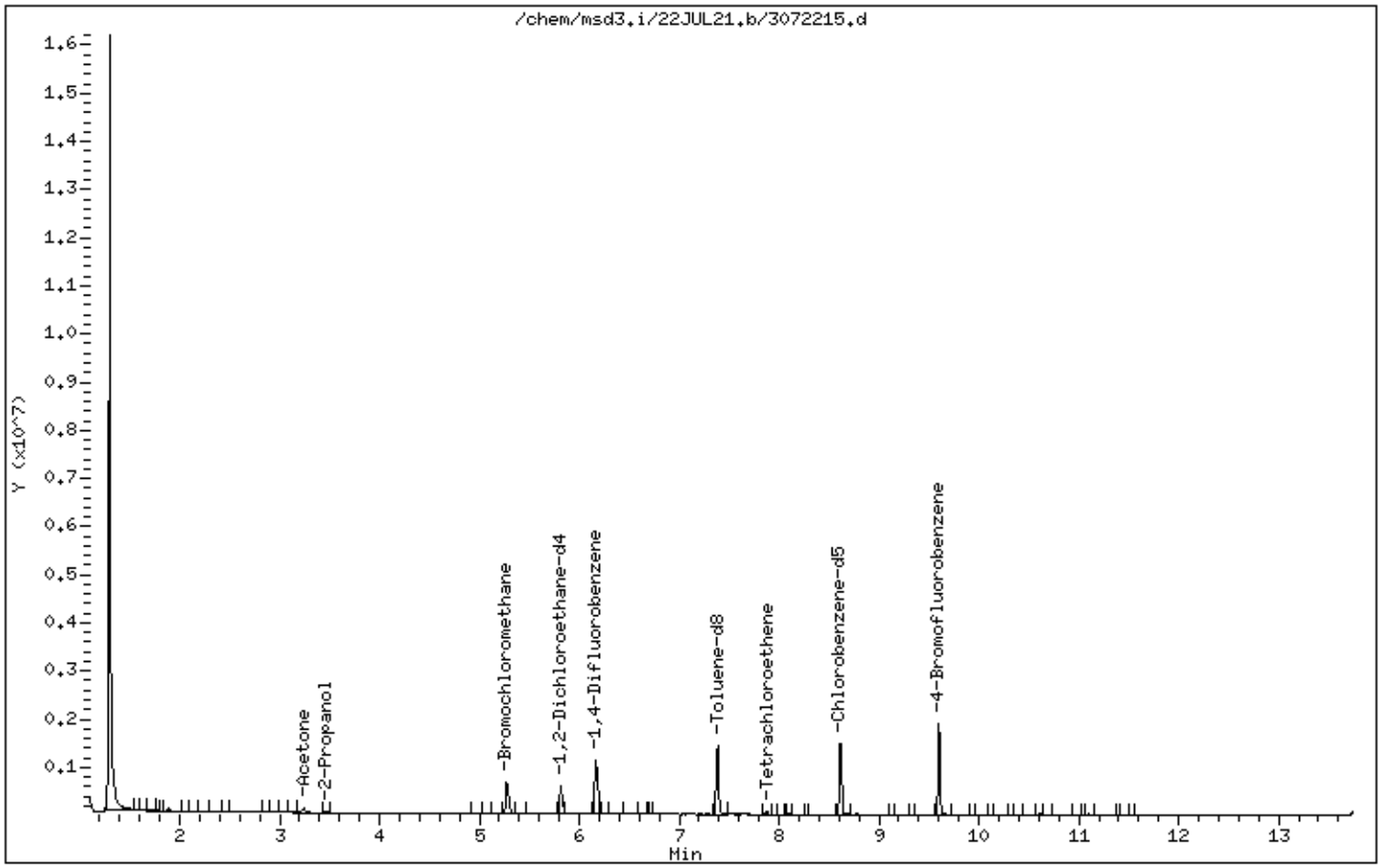
Instrument: msd3.i

Sample Info: 200mL 1L3929

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072215.d

Date : 22-JUL-2021 17:55

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3929

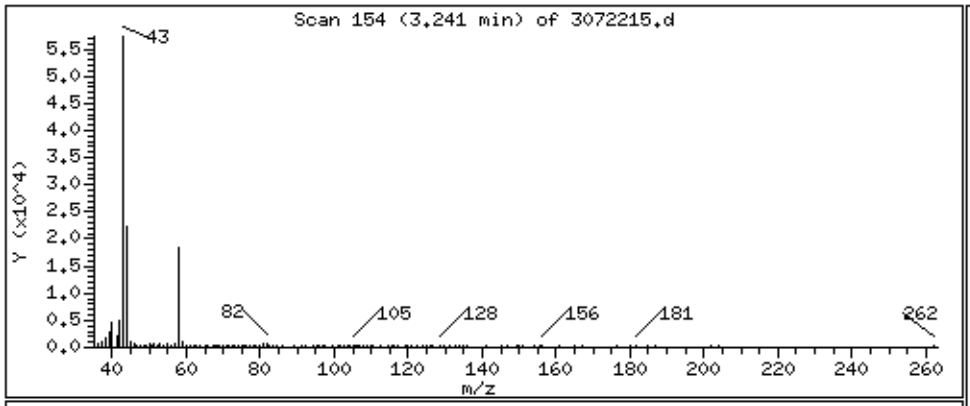
Operator: LD

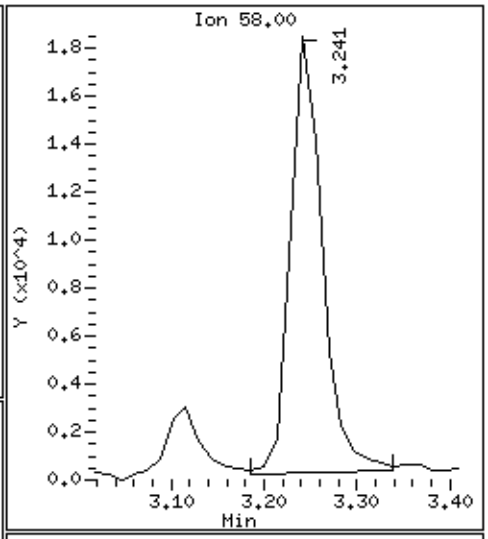
Column phase: RTX-624

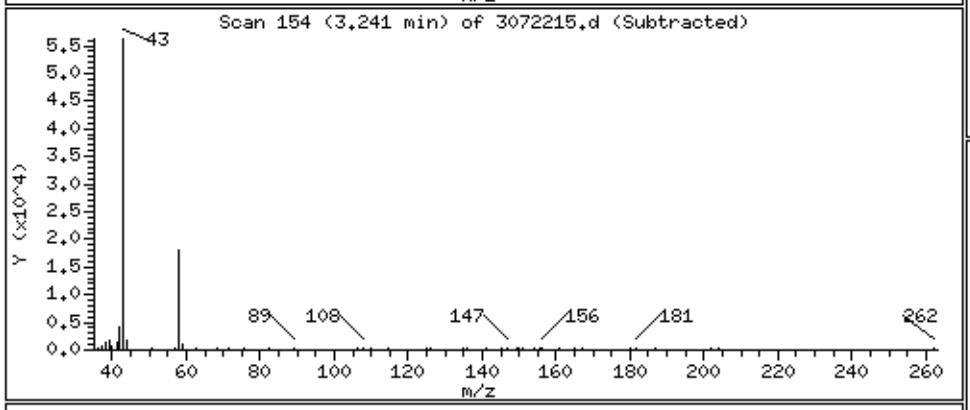
Column diameter: 0.25

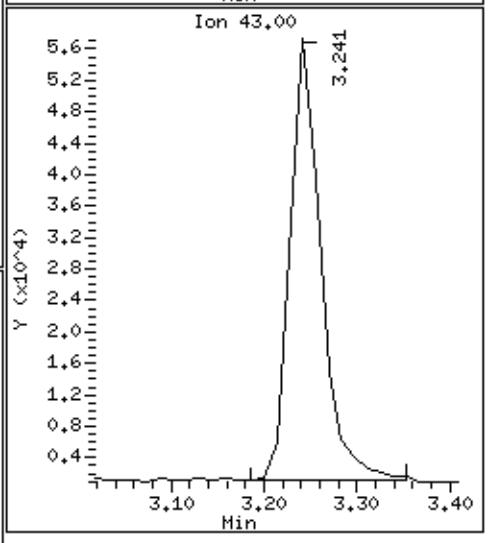
47 Acetone

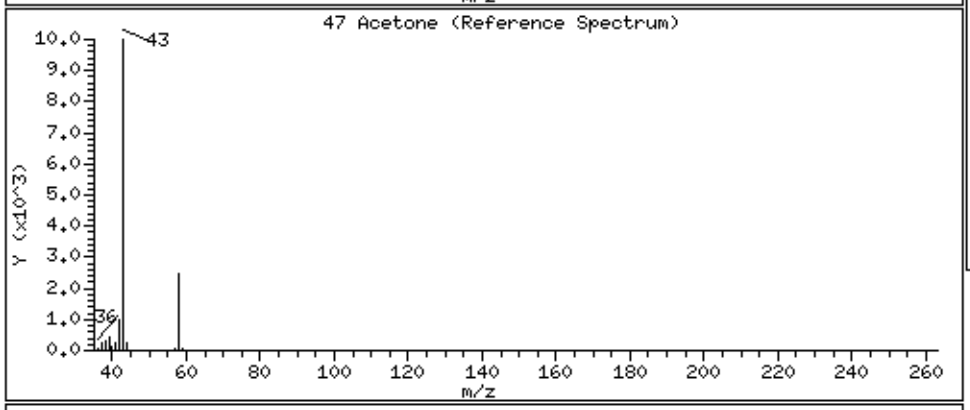
Concentration: 21.726 PPBV

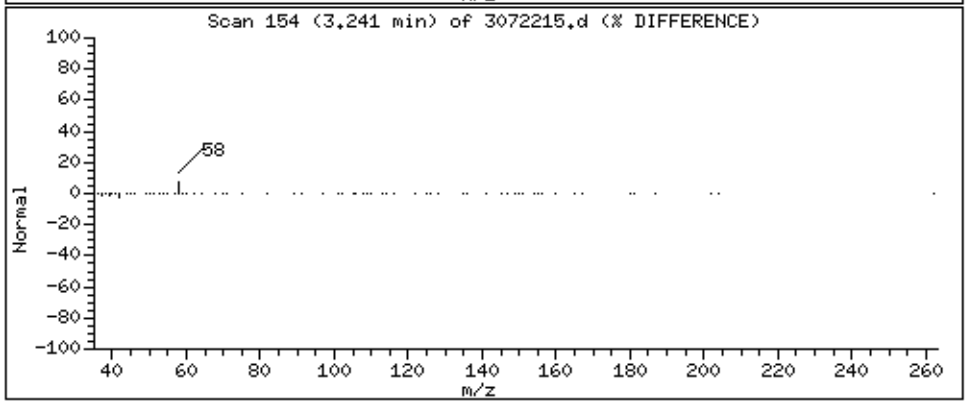












Data File: /chem/msd3.i/22JUL21.b/3072215.d

Date : 22-JUL-2021 17:55

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3929

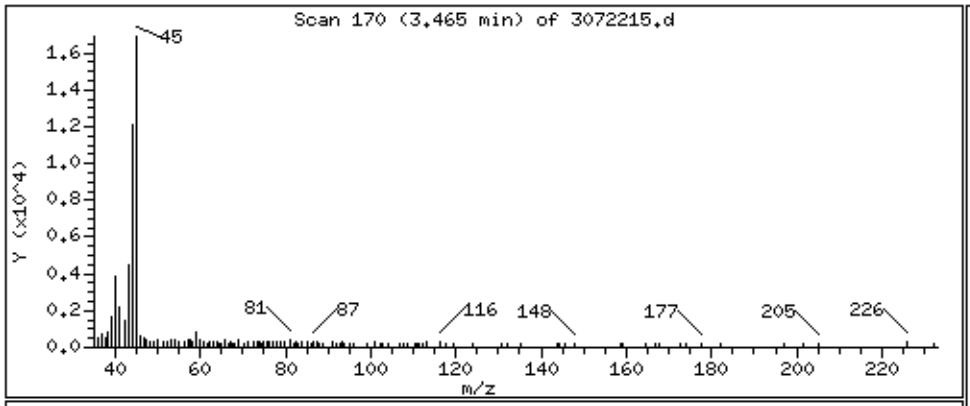
Operator: LD

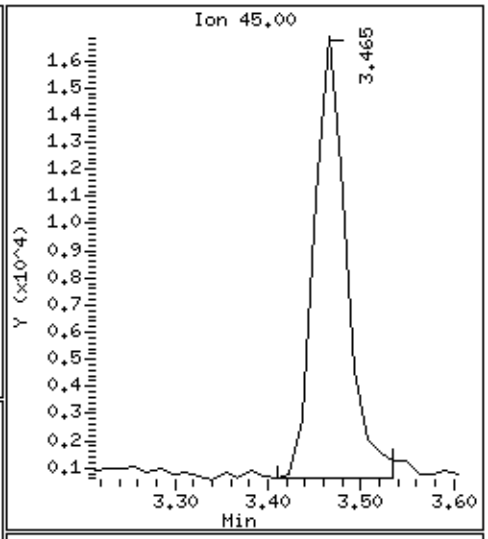
Column phase: RTX-624

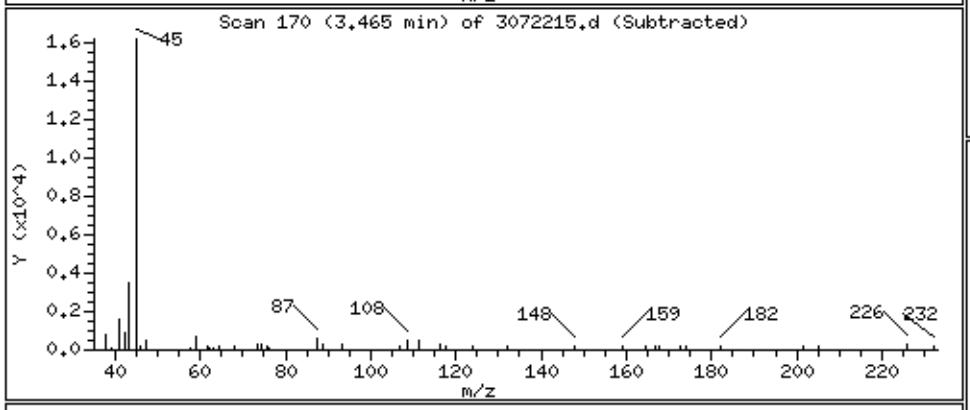
Column diameter: 0.25

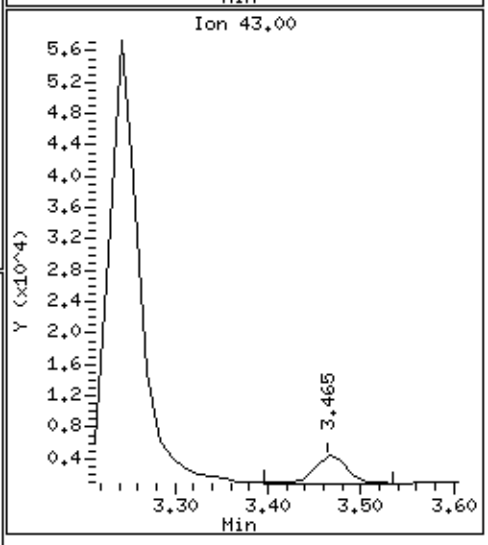
52 2-Propanol

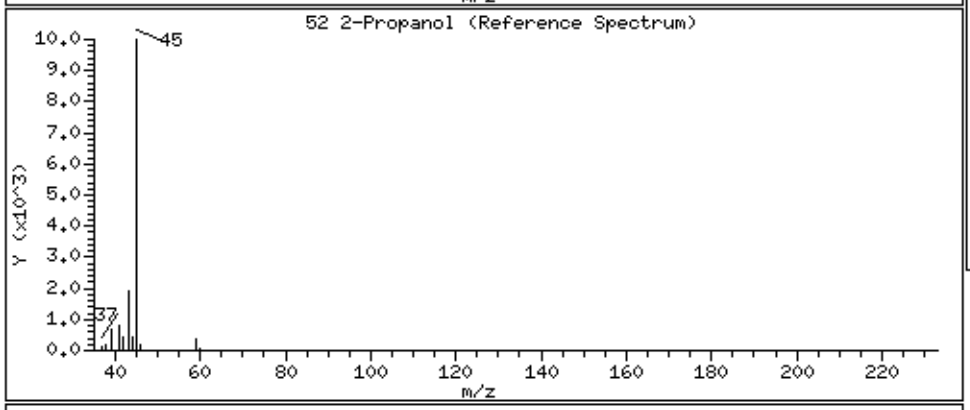
Concentration: 5.551 PPBV

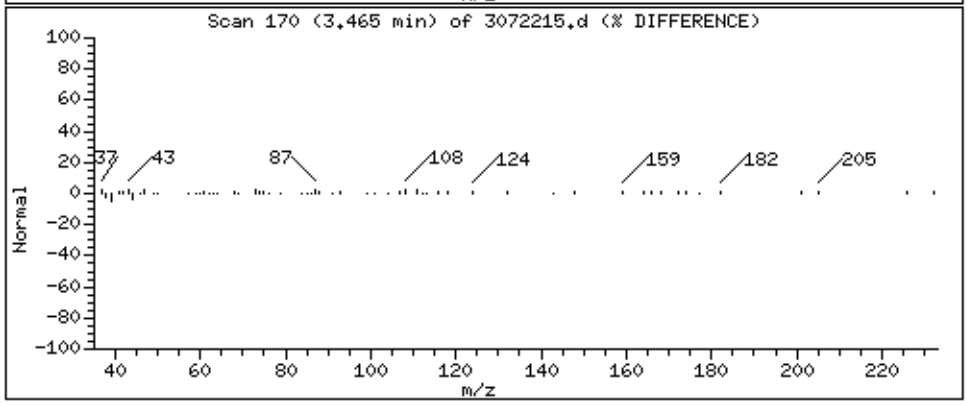












Data File: /chem/msd3.i/22JUL21.b/3072215.d

Date : 22-JUL-2021 17:55

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3929

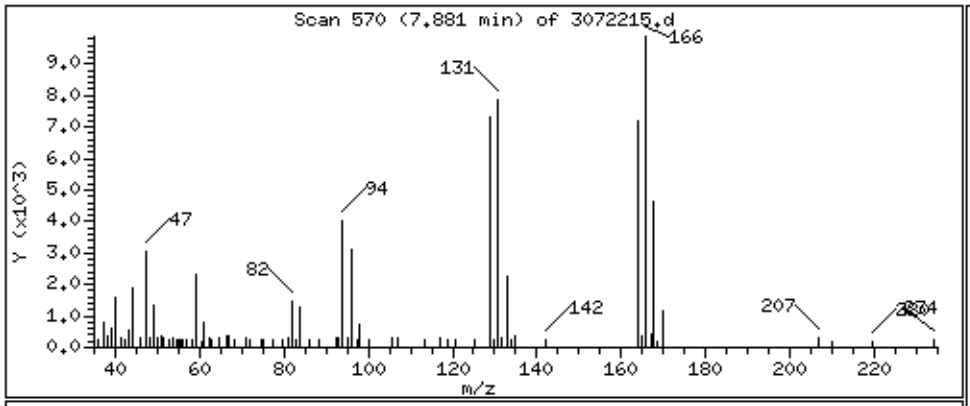
Operator: LD

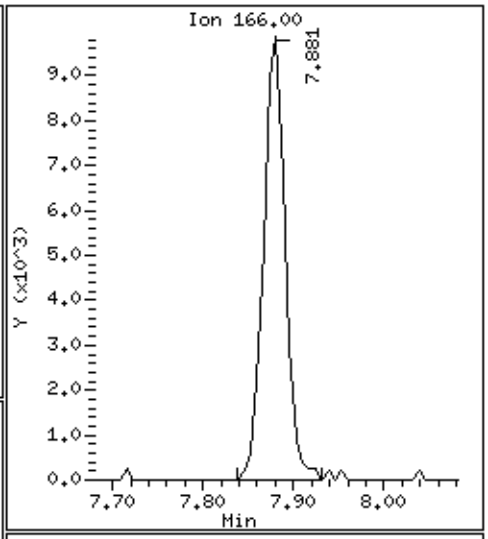
Column phase: RTX-624

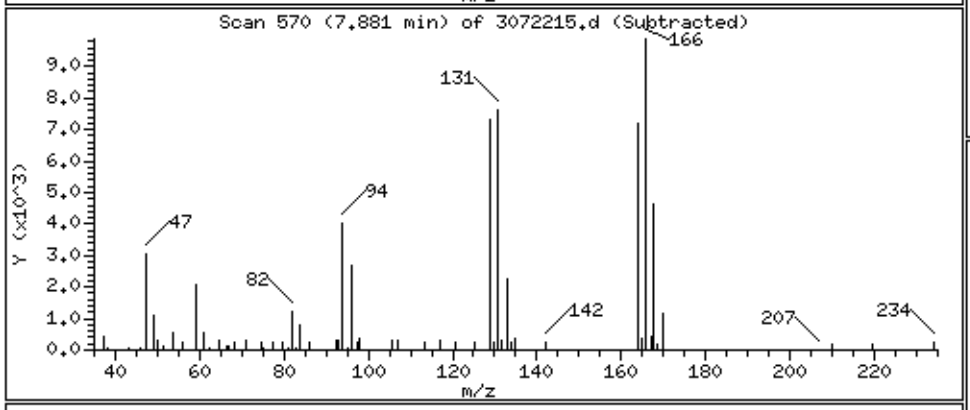
Column diameter: 0.25

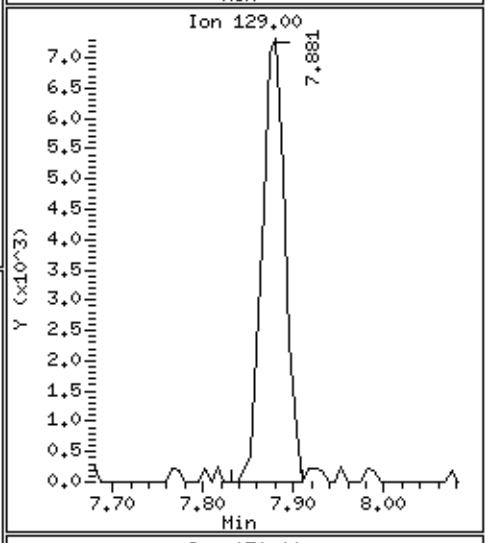
142 Tetrachloroethene

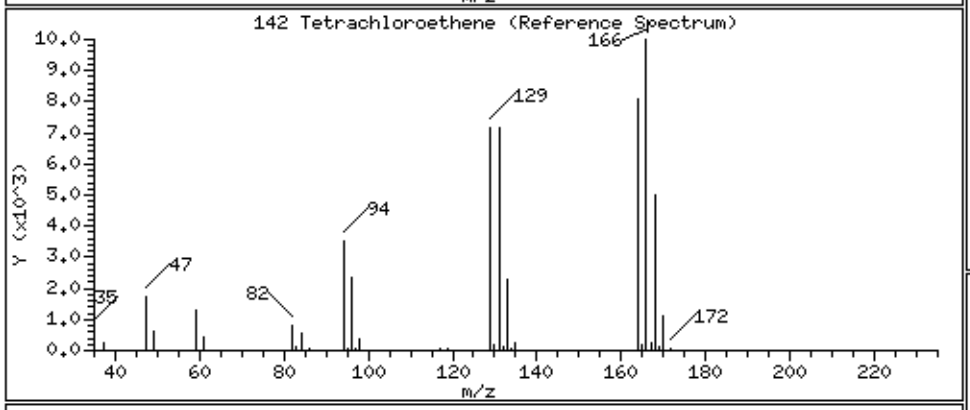
Concentration: 2.934 PPBV

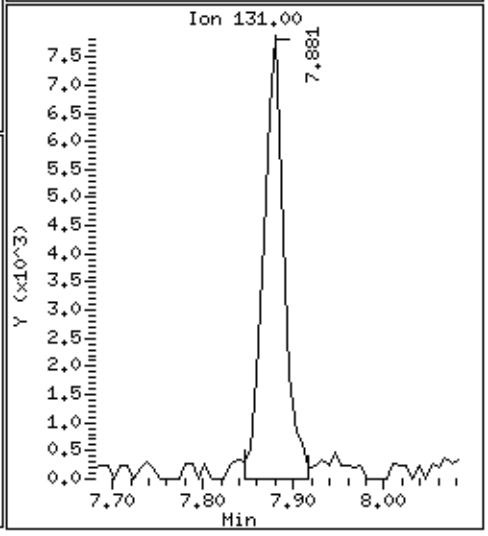


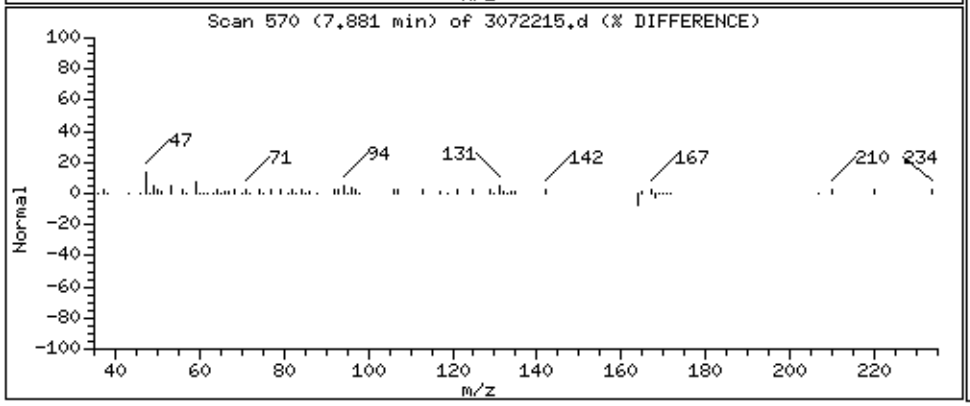












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Client Sample ID: SG-VW46B-02

Lab ID#: 2107241A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072216**	**Date of Collection:**	**7/8/21 4:08:00 PM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/22/21 06:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.3	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Freon 113	1.1	Not Detected	8.2	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Acetone	11	Not Detected	25	Not Detected
2-Propanol	4.3	Not Detected	10	Not Detected
Carbon Disulfide	4.3	48	13	150
3-Chloropropene	4.3	Not Detected	13	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Methyl tert-butyl ether	4.3	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Chloroform	1.1	1.6	5.2	7.9
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Cyclohexane	1.1	Not Detected	3.7	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.0	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,4-Dioxane	4.3	22	15	80
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Tetrachloroethene	1.1	1.5	7.2	10
2-Hexanone	4.3	Not Detected	17	Not Detected

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Client Sample ID: SG-VW46B-02

Lab ID#: 2107241A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072216**	**Date of Collection:**	**7/8/21 4:08:00 PM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/22/21 06:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.2	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
Propylbenzene	1.1	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
Hexachlorobutadiene	4.3	Not Detected	45	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Acrolein	4.3	Not Detected	9.8	Not Detected
Acrylonitrile	4.3	Not Detected	9.2	Not Detected
tert-Amyl methyl ether	4.3	Not Detected	18	Not Detected
tert-Butyl alcohol	4.3	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.3	Not Detected	41	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
1,1-Difluoroethane	4.3	Not Detected	12	Not Detected
Isopropyl ether	4.3	Not Detected	18	Not Detected
Ethyl Acetate	4.3	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.3	Not Detected	18	Not Detected
Hexachloroethane	4.3	Not Detected	41	Not Detected
Iodomethane	11	Not Detected	62	Not Detected
Propylene	4.3	Not Detected	7.3	Not Detected
1,1,1,2-Tetrachloroethane	4.3	Not Detected	29	Not Detected
1,2,3-Trichloropropane	4.3	Not Detected	26	Not Detected
Vinyl Acetate	4.3	Not Detected	15	Not Detected
Vinyl Bromide	4.3	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW46B-02

Lab ID#: 2107241A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072216**	**Date of Collection:**	**7/8/21 4:08:00 PM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/22/21 06:24 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	96	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072216.d
Lab Smp Id: 2107241A-06A
Inj Date : 22-JUL-2021 18:24
Operator : LD Inst ID: msd3.i
Smp Info : 200mL N1941
Misc Info : 6.3 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 3
Dil Factor: 2.13000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	259785	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	200985				48.46- 108.46	77.37
5.284	5.284 (1.000)	49	363988				120.39- 180.39	140.11
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	866351	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	130830				0.00- 45.52	15.10
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	774677	25.0000			80.00- 120.00	100.00
8.619	8.619 (1.000)	82	403050				25.46- 85.46	52.03
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	353811	24.7485	24.748		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173007				21.66- 81.66	48.90
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	856804	24.0112	24.011		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	94292				0.00- 41.47	11.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	562376			36.47- 96.47	65.64
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	494047	24.1109	24.111	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	562678			93.06- 153.06	113.89
9.601	9.601 (1.114)	176	459026			62.87- 122.87	92.91
48 Carbon Disulfide					CAS #: 75-15-0		
3.312	3.297 (0.627)	76	438565	22.3580	47.622	80.00- 120.00	100.00
92 Chloroform					CAS #: 67-66-3		
5.354	5.354 (1.013)	83	12344	0.75787	1.614	80.00- 120.00	100.00
5.340	5.354 (1.011)	85	8625			34.71- 94.71	69.88
117 1,4-Dioxane					CAS #: 123-91-1		
6.707	6.699 (1.085)	88	52300	10.4431	22.244	80.00- 120.00	100.00
6.707	6.699 (1.085)	58	41618			55.80- 115.80	79.58
6.707	6.699 (1.085)	57	14401			8.68- 68.68	27.54
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	8454	0.69659	1.484	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	7229			48.71- 108.71	85.51
7.881	7.881 (0.914)	131	7376			46.55- 106.55	87.25

Report Date: 23-Jul-2021 09:52

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072216.d
Lab Smp Id: 2107241A-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	259785	7.98
108 1,4-Difluorobenze	805743	483446	1128040	866351	7.52
153 Chlorobenzene-d5	719477	431686	1007268	774677	7.67

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 09:52

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-06A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.748	98.99	70-130
$ 134 Toluene-d8	25.000	24.011	96.04	70-130
$ 170 4-Bromofluorobenz	25.000	24.111	96.44	70-130

Data File: /chem/msd3.i/22JUL21.b/3072216.d

Date : 22-JUL-2021 18:24

Client ID:

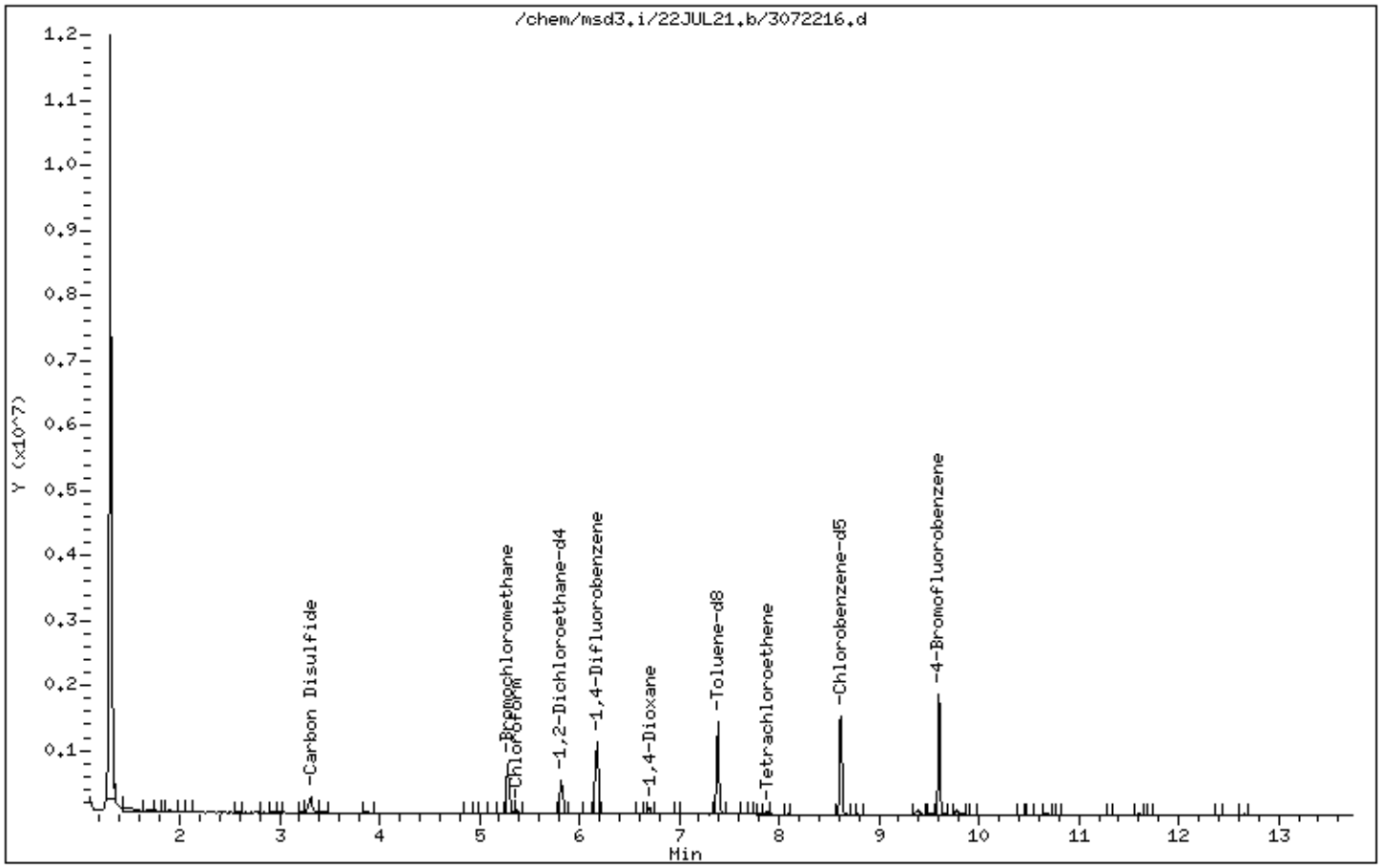
Instrument: msd3.i

Sample Info: 200mL N1941

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072216.d

Date : 22-JUL-2021 18:24

Client ID:

Instrument: msd3.i

Sample Info: 200mL N1941

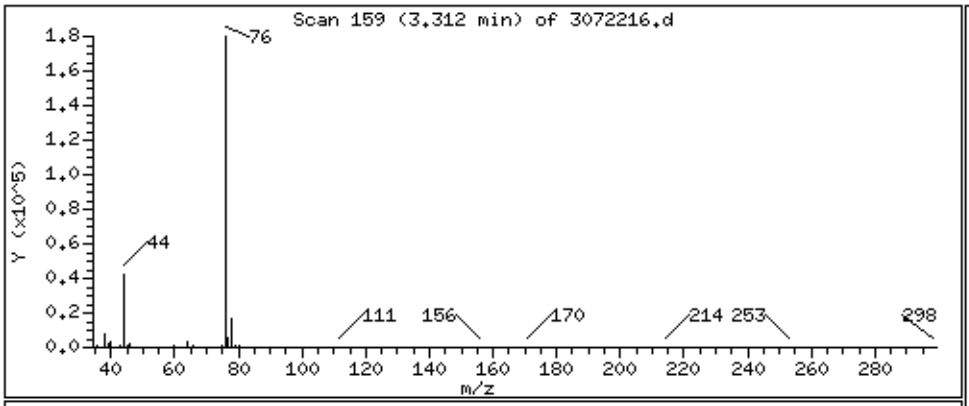
Operator: LD

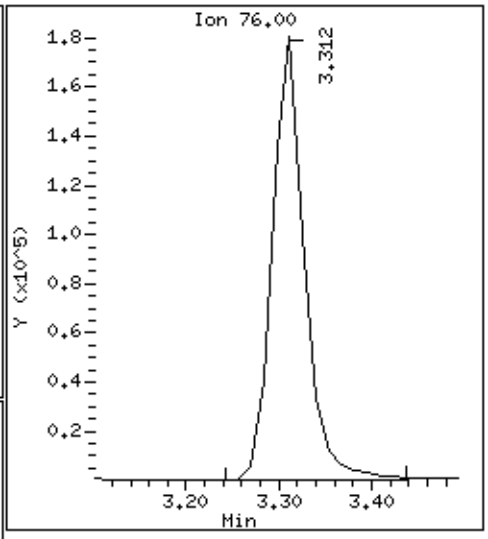
Column phase: RTX-624

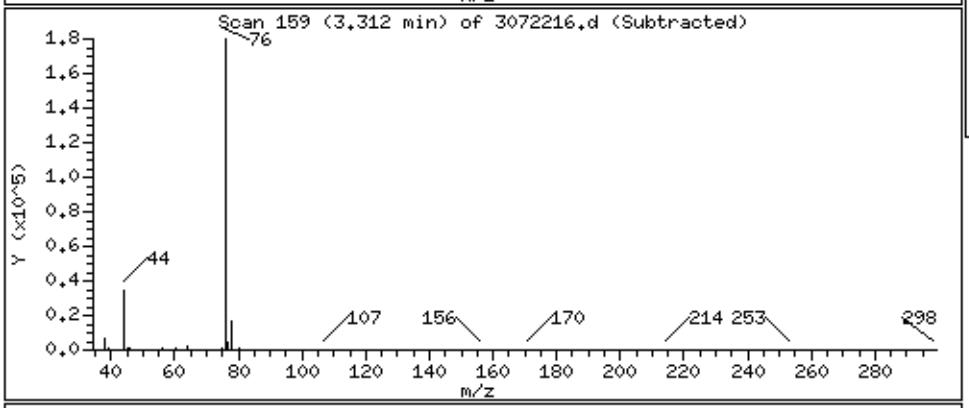
Column diameter: 0.25

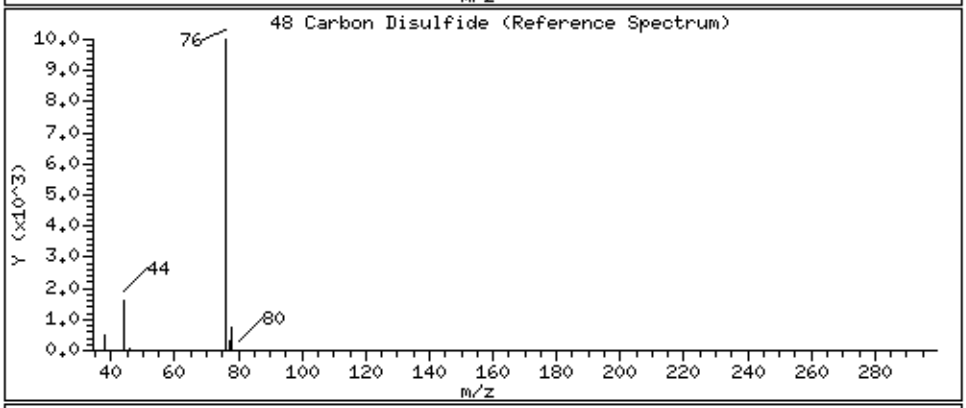
48 Carbon Disulfide

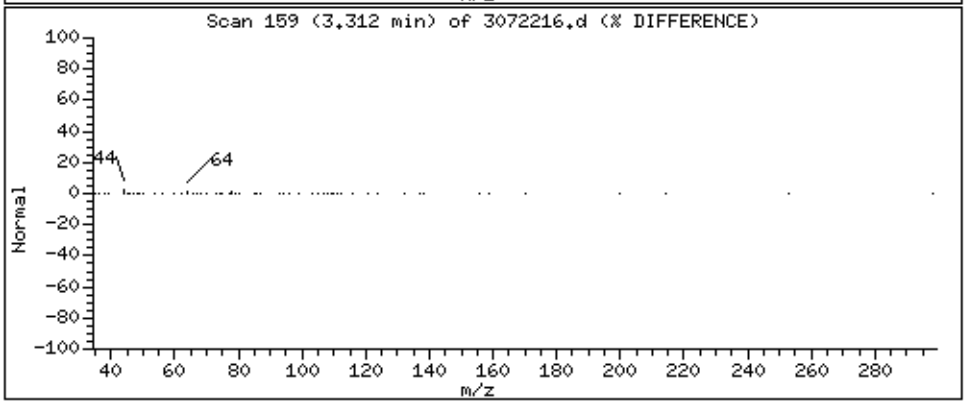
Concentration: 47.622 PPBV











Data File: /chem/msd3.i/22JUL21.b/3072216.d

Date : 22-JUL-2021 18:24

Client ID:

Instrument: msd3.i

Sample Info: 200mL N1941

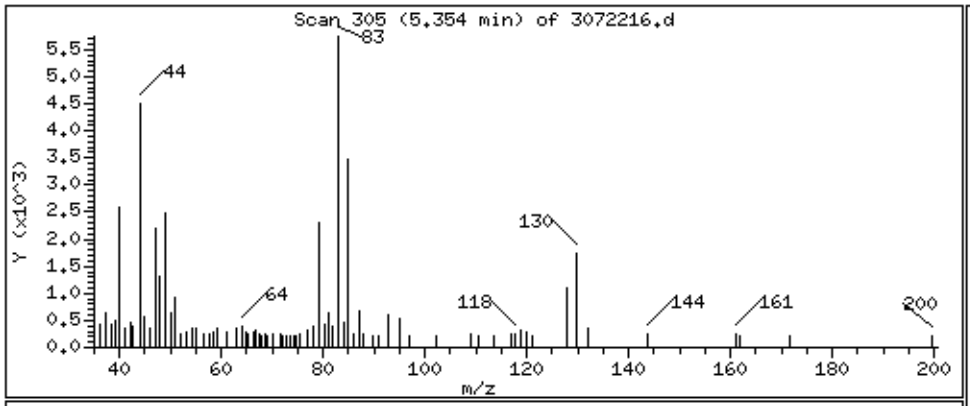
Operator: LD

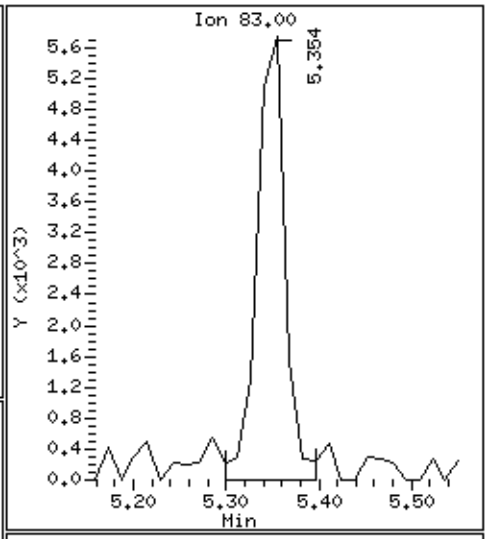
Column phase: RTX-624

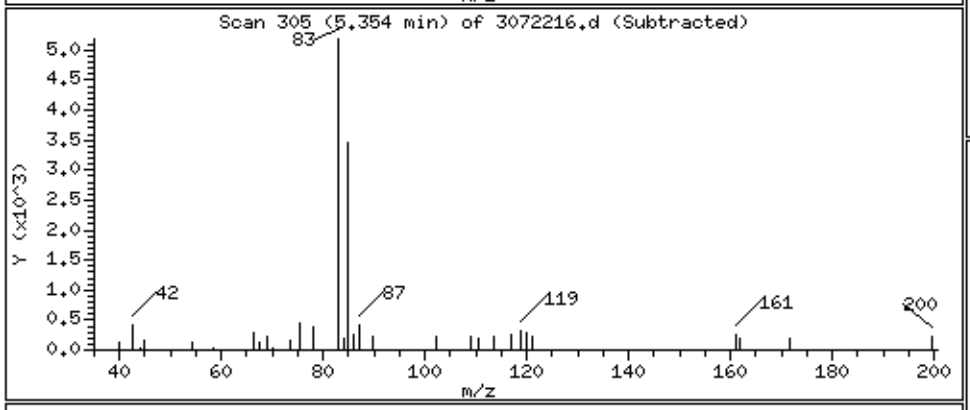
Column diameter: 0.25

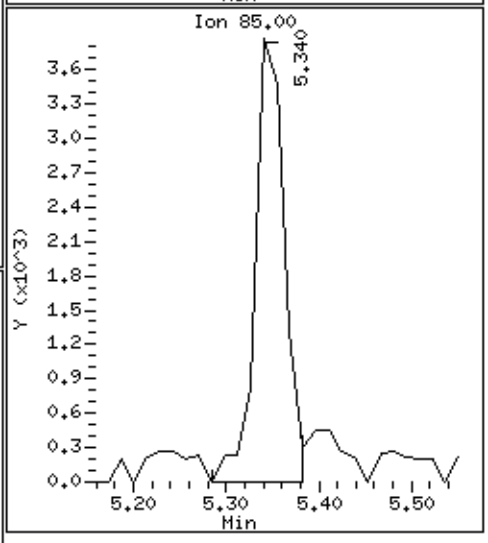
92 Chloroform

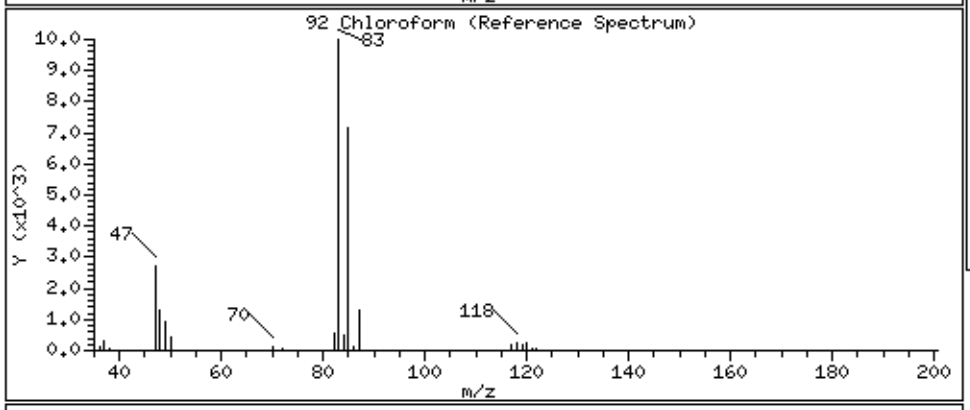
Concentration: 1.614 PPBV

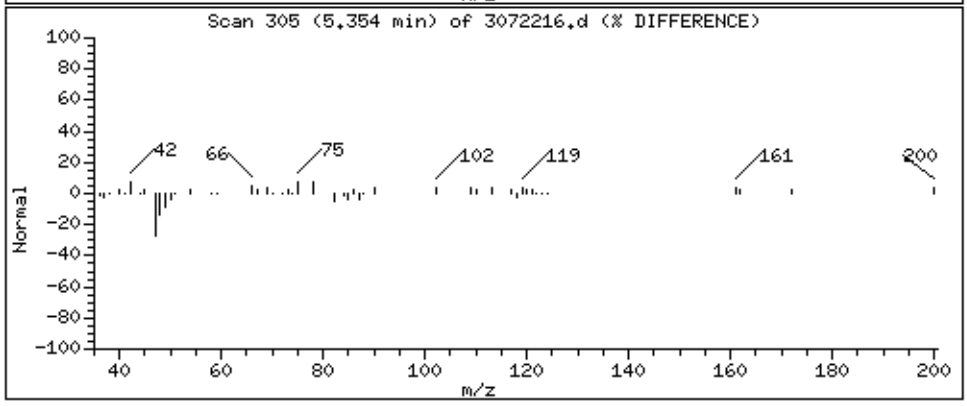












Data File: /chem/msd3.i/22JUL21.b/3072216.d

Date : 22-JUL-2021 18:24

Client ID:

Instrument: msd3.i

Sample Info: 200mL N1941

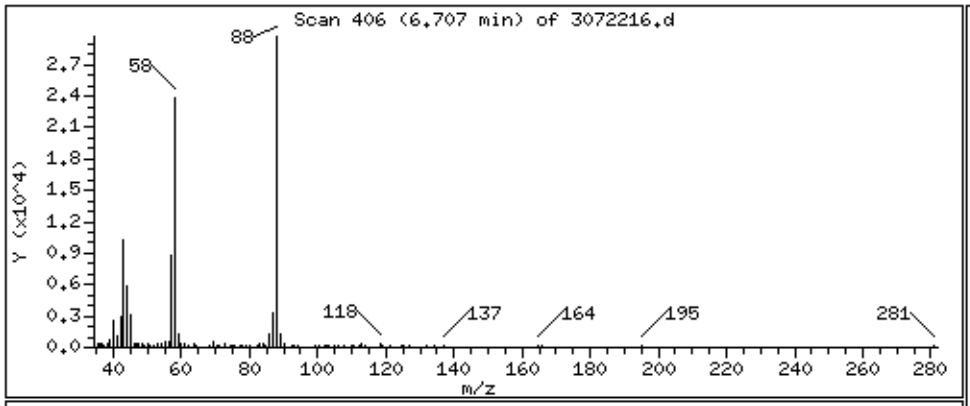
Operator: LD

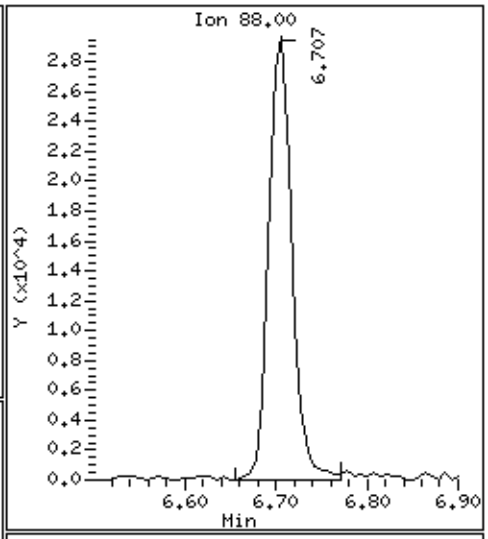
Column phase: RTX-624

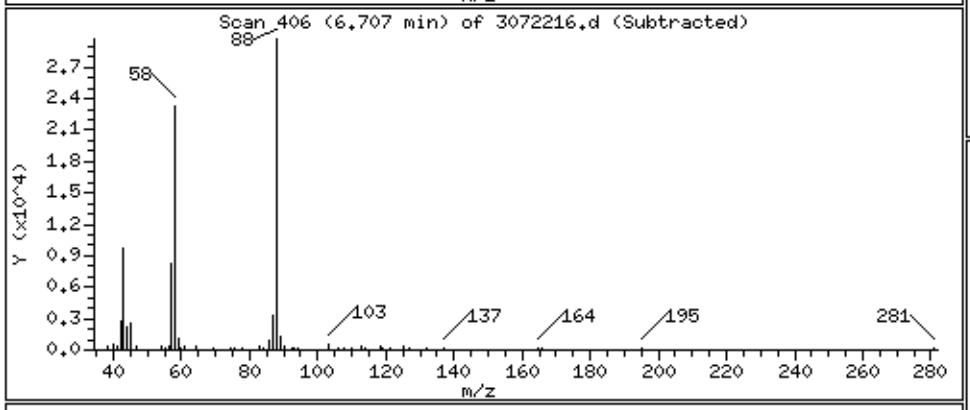
Column diameter: 0.25

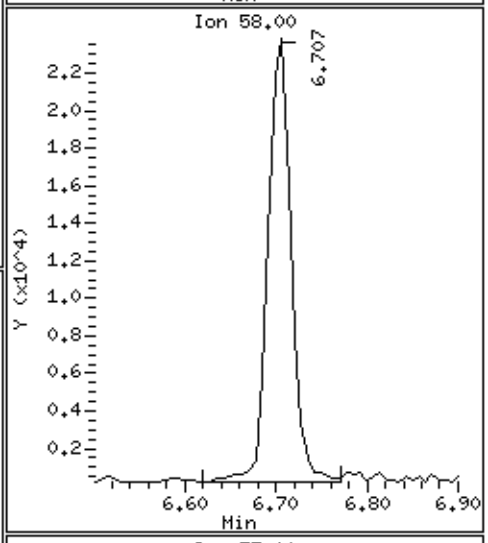
117 1,4-Dioxane

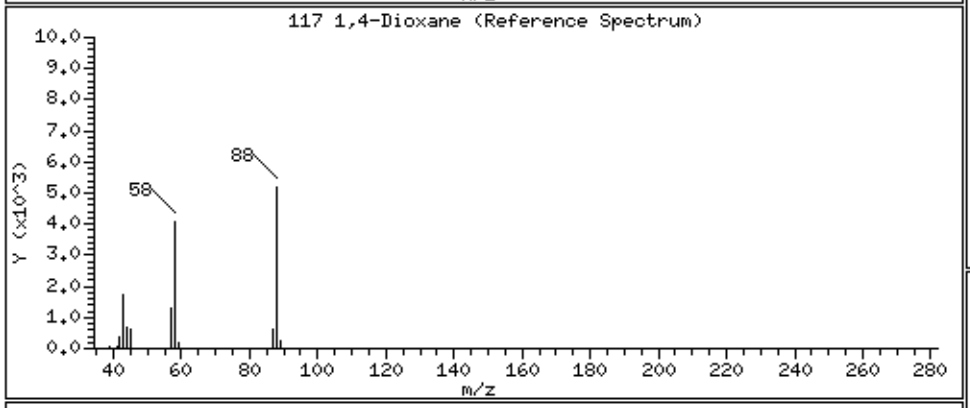
Concentration: 22.244 PPBV

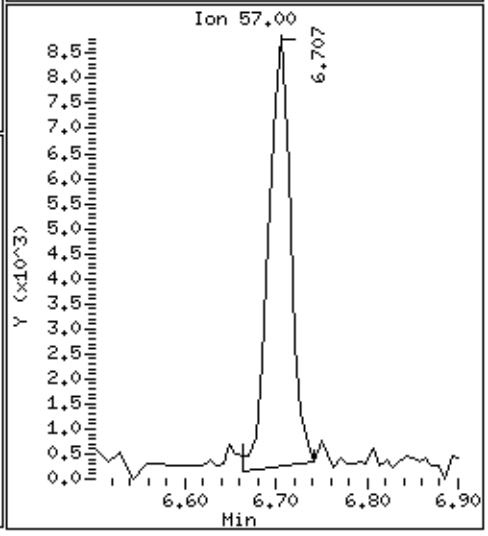


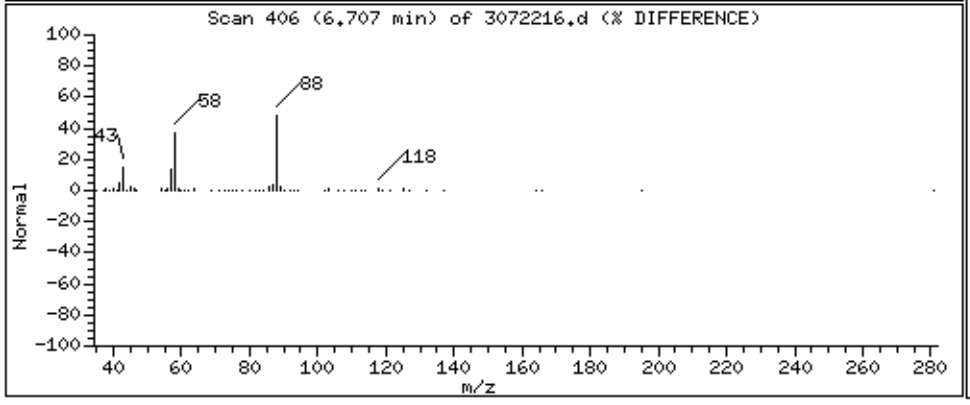












Data File: /chem/msd3.i/22JUL21.b/3072216.d

Date : 22-JUL-2021 18:24

Client ID:

Instrument: msd3.i

Sample Info: 200mL N1941

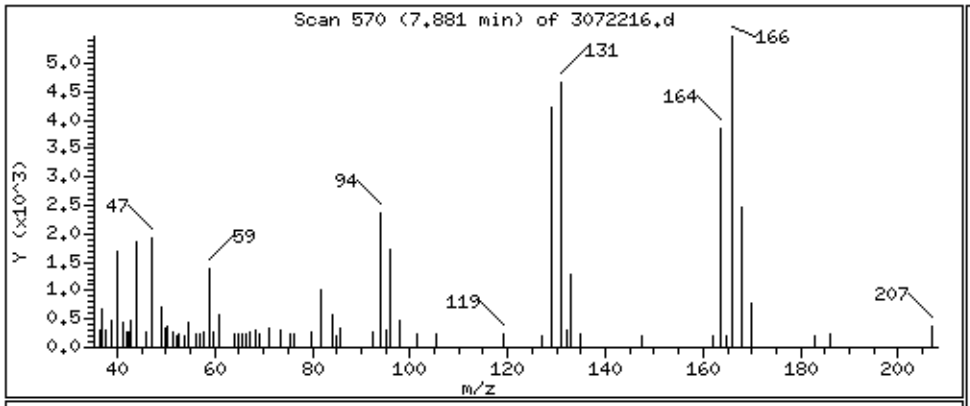
Operator: LD

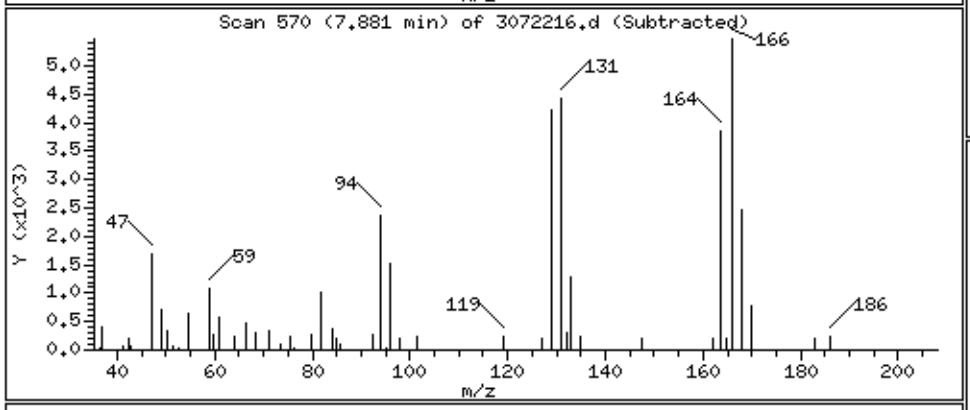
Column phase: RTX-624

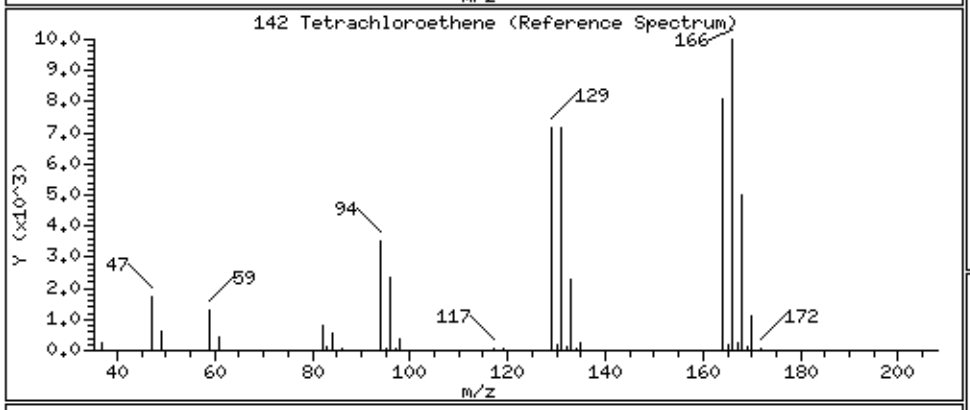
Column diameter: 0.25

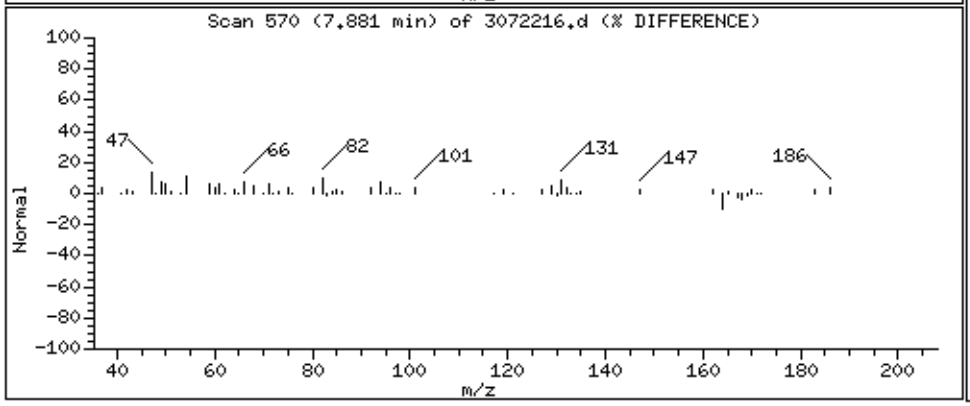
142 Tetrachloroethene

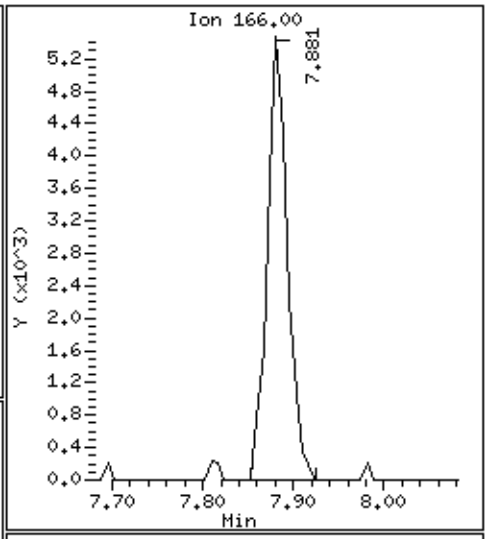
Concentration: 1.484 PPBV

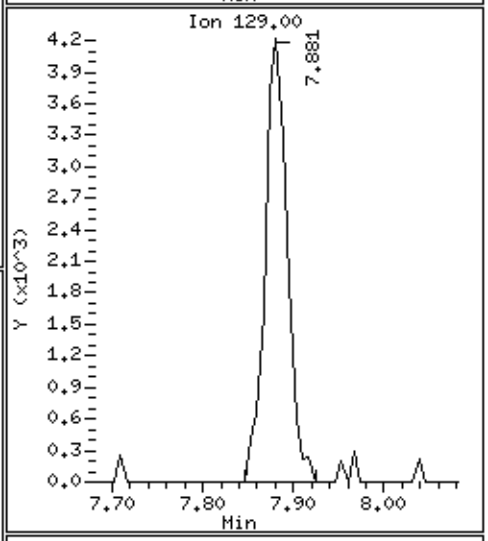


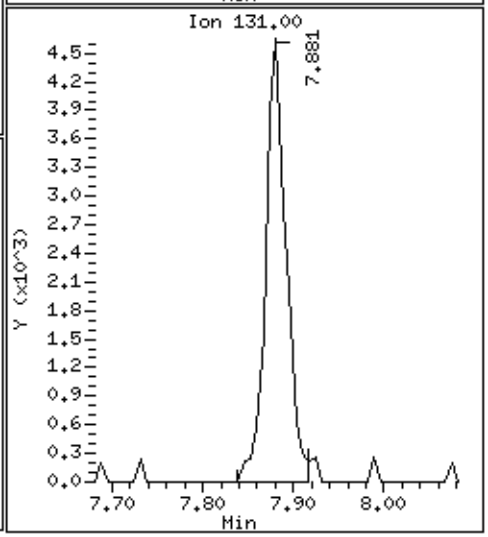












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Client Sample ID: SG-VW44A-02

Lab ID#: 2107241A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072217**	**Date of Collection:**	**7/8/21 5:19:00 PM**
Dil. Factor:	**2.27**	**Date of Analysis:**	**7/22/21 06:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.6	Not Detected
Freon 114	1.1	Not Detected	7.9	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Chloroethane	4.5	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Freon 113	1.1	Not Detected	8.7	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	31	27	74
2-Propanol	4.5	14	11	33
Carbon Disulfide	4.5	4.9	14	15
3-Chloropropene	4.5	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
Methyl tert-butyl ether	4.5	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.5	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Chloroform	1.1	6.3	5.5	30
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.1	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.2	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.6	Not Detected
Toluene	1.1	2.2	4.3	8.2
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	2.0	7.7	14
2-Hexanone	4.5	Not Detected	18	Not Detected

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Client Sample ID: SG-VW44A-02

Lab ID#: 2107241A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072217**	**Date of Collection:**	**7/8/21 5:19:00 PM**
Dil. Factor:	**2.27**	**Date of Analysis:**	**7/22/21 06:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.7	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.7	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	2.4	4.9	11
o-Xylene	1.1	Not Detected	4.9	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	1.4	5.6	7.2
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2,4-Trichlorobenzene	4.5	Not Detected	34	Not Detected
Hexachlorobutadiene	4.5	Not Detected	48	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	340	460	1400
Freon 134a	4.5	Not Detected	19	Not Detected
Acrolein	4.5	Not Detected	10	Not Detected
Acrylonitrile	4.5	Not Detected	9.8	Not Detected
tert-Amyl methyl ether	4.5	Not Detected	19	Not Detected
tert-Butyl alcohol	4.5	Not Detected	14	Not Detected
1,2-Dibromo-3-chloropropane	4.5	Not Detected	44	Not Detected
Dibromomethane	4.5	Not Detected	32	Not Detected
1,1-Difluoroethane	4.5	92	12	250
Isopropyl ether	4.5	Not Detected	19	Not Detected
Ethyl Acetate	4.5	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.5	Not Detected	19	Not Detected
Hexachloroethane	4.5	Not Detected	44	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Propylene	4.5	Not Detected	7.8	Not Detected
1,1,1,2-Tetrachloroethane	4.5	Not Detected	31	Not Detected
1,2,3-Trichloropropane	4.5	Not Detected	27	Not Detected
Vinyl Acetate	4.5	Not Detected	16	Not Detected
Vinyl Bromide	4.5	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW44A-02

Lab ID#: 2107241A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072217**	**Date of Collection:**	**7/8/21 5:19:00 PM**
Dil. Factor:	**2.27**	**Date of Analysis:**	**7/22/21 06:54 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072217.d
Lab Smp Id: 2107241A-07A
Inj Date : 22-JUL-2021 18:54
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 1L1600
Misc Info : 7.8 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 4
Dil Factor: 2.27000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	260475	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	202273				48.46- 108.46	77.66
5.270	5.284 (1.000)	49	371976				120.39- 180.39	142.81
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.180 (1.000)	114	858891	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	125500				0.00- 45.52	14.61
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	790833	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	419677				25.46- 85.46	53.07
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	339423	23.6792	23.679		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	166420				21.66- 81.66	49.03
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	883676	24.9794	24.979		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	97297				0.00- 41.47	11.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	580512			36.47- 96.47	65.69
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	492965	23.5667	23.567	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	585041			93.06- 153.06	118.68
9.601	9.601 (1.115)	176	466193			62.87- 122.87	94.57
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	165398	40.3284	91.546	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	5719881			321.86- 381.86	3458.25
1.437	1.451 (0.272)	47	45324			45.34- 105.34	27.40
47 Acetone					CAS #: 67-64-1		
3.242	3.213 (0.613)	58	59704	13.6697	31.030	80.00- 120.00	100.00
3.242	3.213 (0.613)	43	173264			299.66- 359.66	290.21
48 Carbon Disulfide					CAS #: 75-15-0		
3.284	3.297 (0.621)	76	42383	2.15495	4.892	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.466	3.409 (0.656)	45	94286	6.00259	13.626	80.00- 120.00	100.00
3.466	3.409 (0.656)	43	20824			0.00- 48.61	22.09
92 Chloroform					CAS #: 67-66-3		
5.340	5.354 (1.011)	83	45073	2.75995	6.265	80.00- 120.00	100.00
5.340	5.354 (1.011)	85	30526			34.71- 94.71	67.73
137 Toluene					CAS #: 108-88-3		
7.437	7.444 (1.206)	91	25245	0.95993	2.179	80.00- 120.00	100.00
7.437	7.444 (1.206)	92	14575			28.30- 88.30	57.73
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.881 (0.914)	166	10941	0.88310	2.005	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	9024			48.71- 108.71	82.48
7.874	7.881 (0.914)	131	8711			46.55- 106.55	79.62
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	14542	1.08151	2.455	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	26427			171.36- 231.36	181.73
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	21671	0.64104	1.455	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	10069			16.58- 76.58	46.46

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072217.d
Lab Smp Id: 2107241A-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 7.8 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	260475	8.26
108 1,4-Difluorobenze	805743	483446	1128040	858891	6.60
153 Chlorobenzene-d5	719477	431686	1007268	790833	9.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 11:30

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-07A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 7.8 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.679	94.72	70-130
$ 134 Toluene-d8	25.000	24.979	99.92	70-130
$ 170 4-Bromofluorobenz	25.000	23.567	94.27	70-130

Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

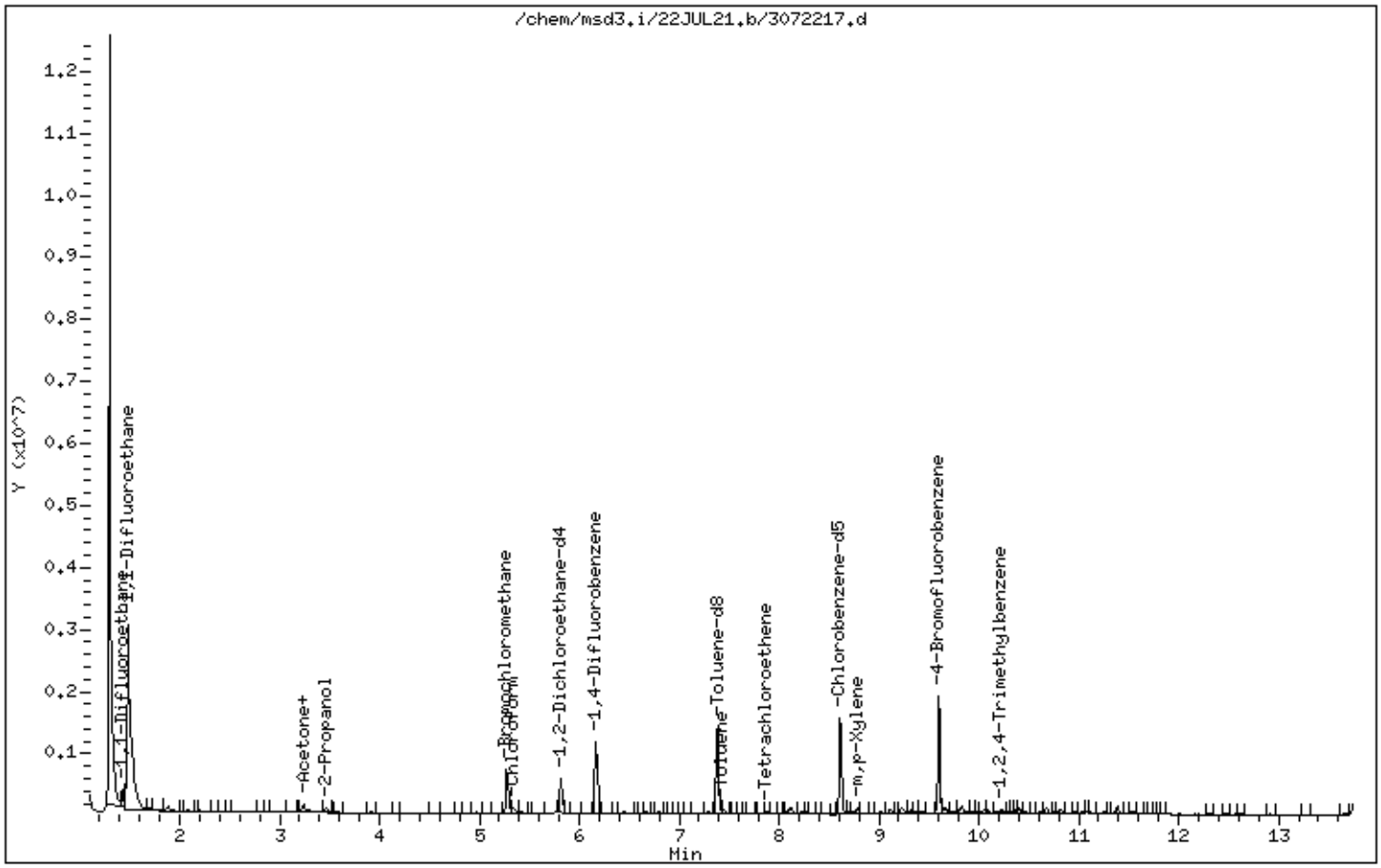
Instrument: msd3.i

Sample Info: 200mL 1L1600

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

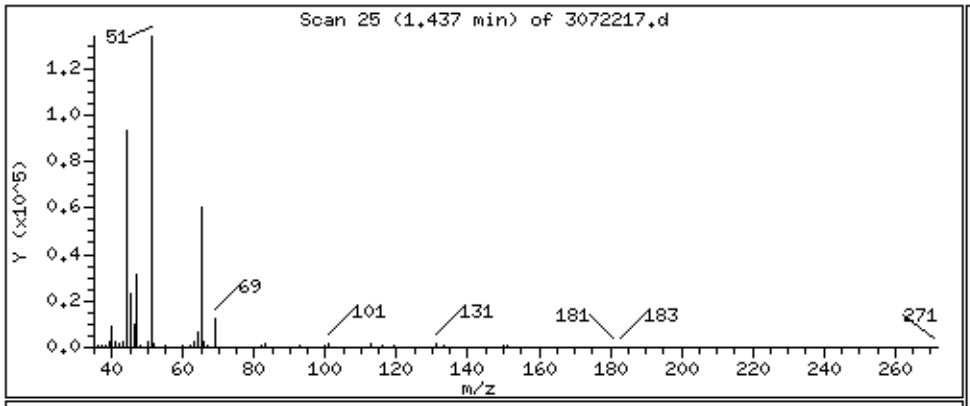
Operator: LD

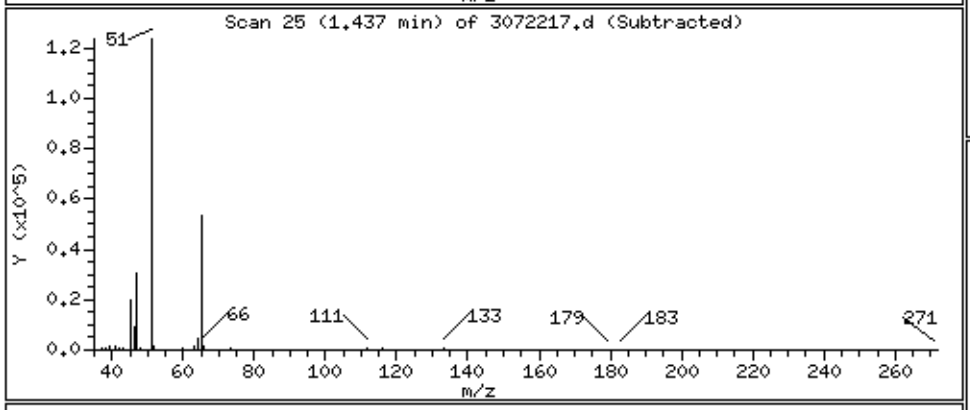
Column phase: RTX-624

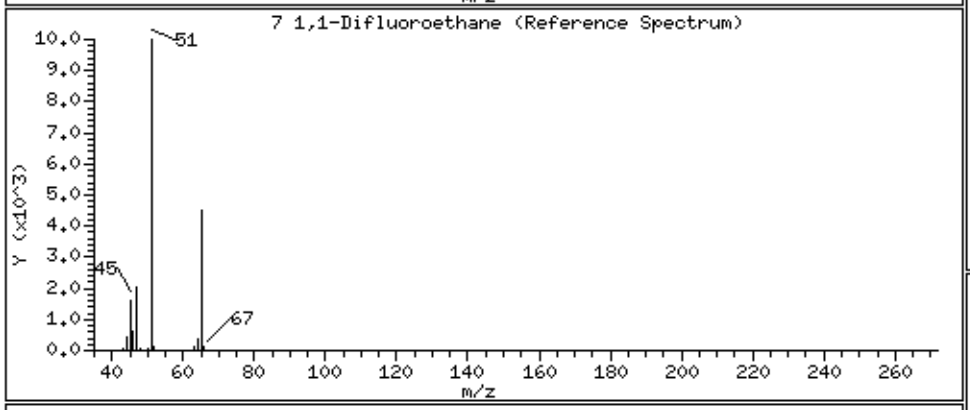
Column diameter: 0.25

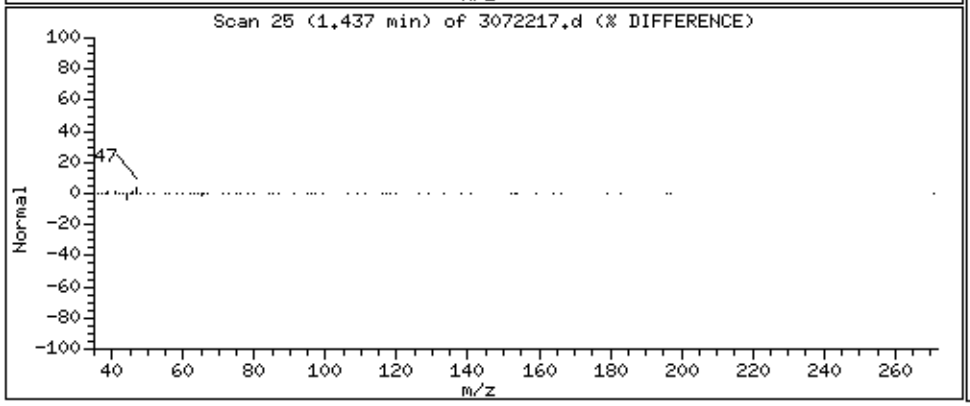
7 1,1-Difluoroethane

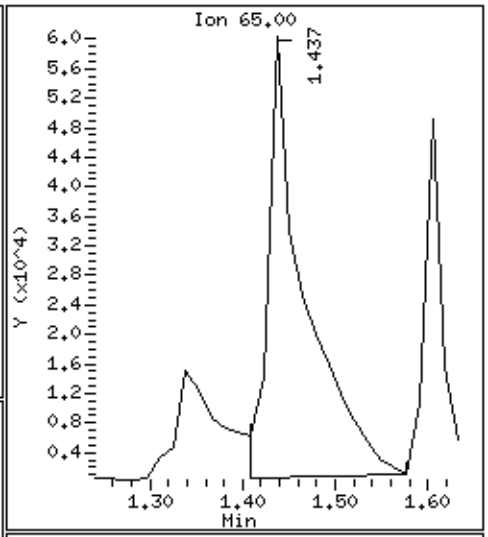
Concentration: 91.546 PPBV

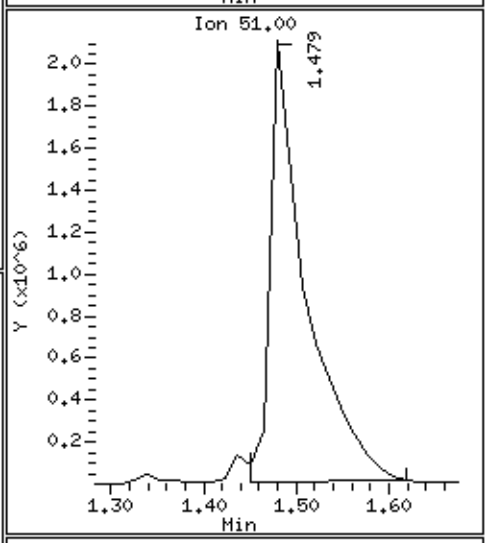


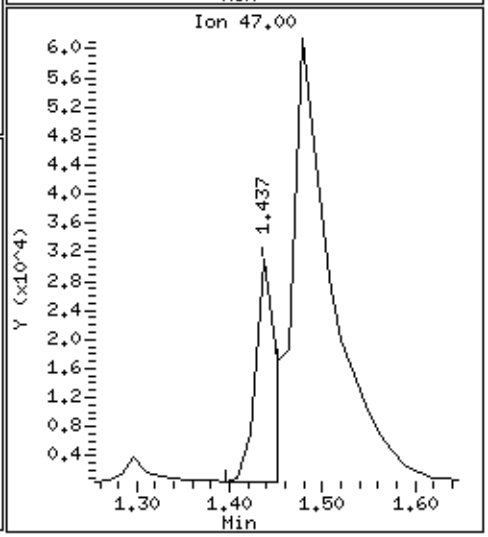












Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

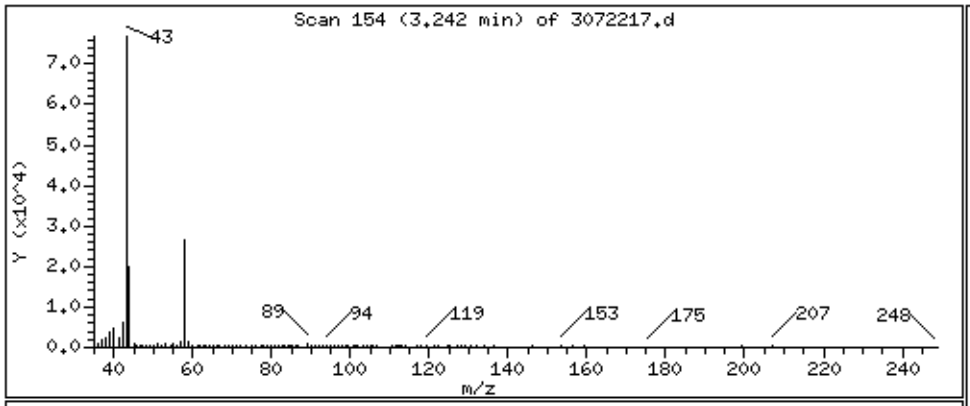
Operator: LD

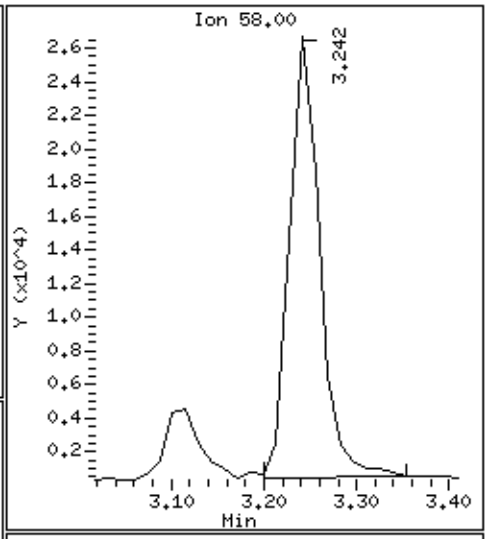
Column phase: RTX-624

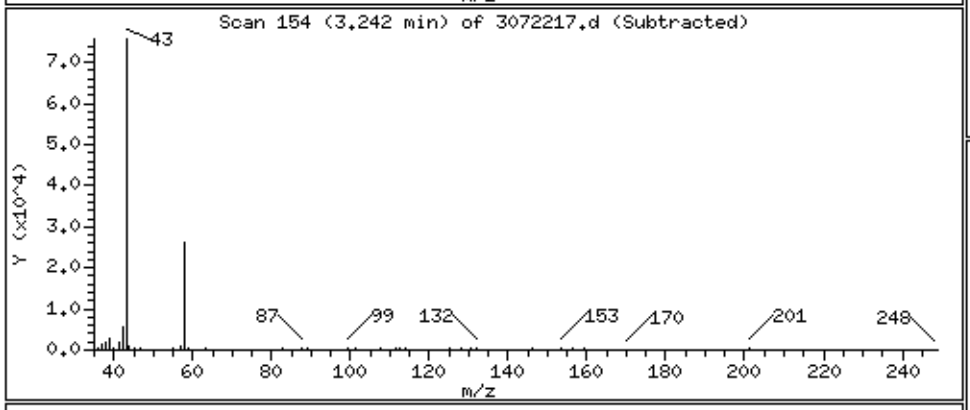
Column diameter: 0.25

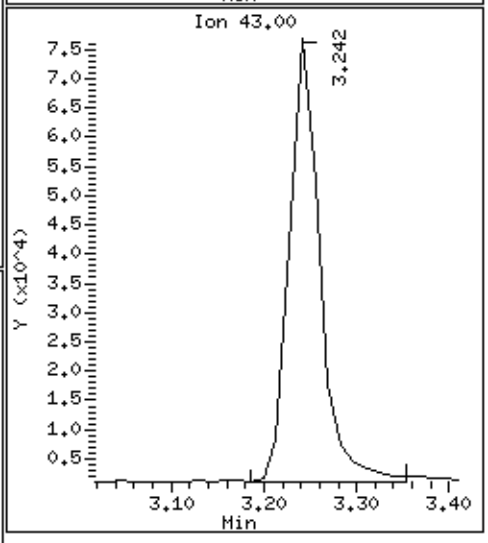
47 Acetone

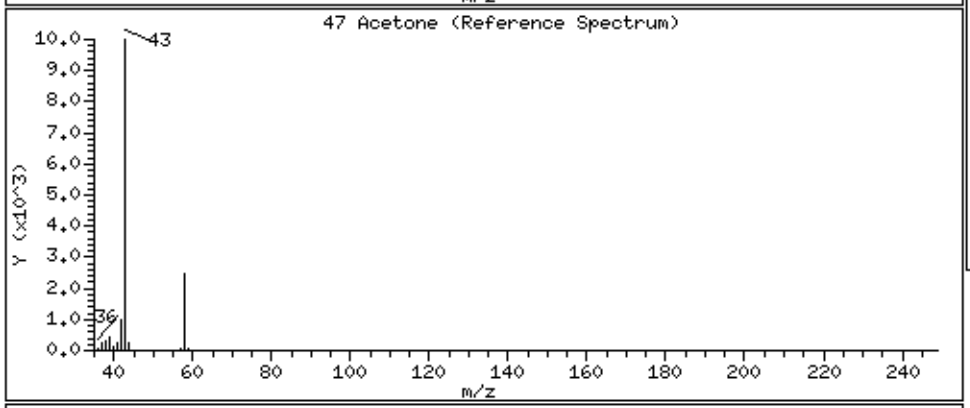
Concentration: 31.030 PPBV

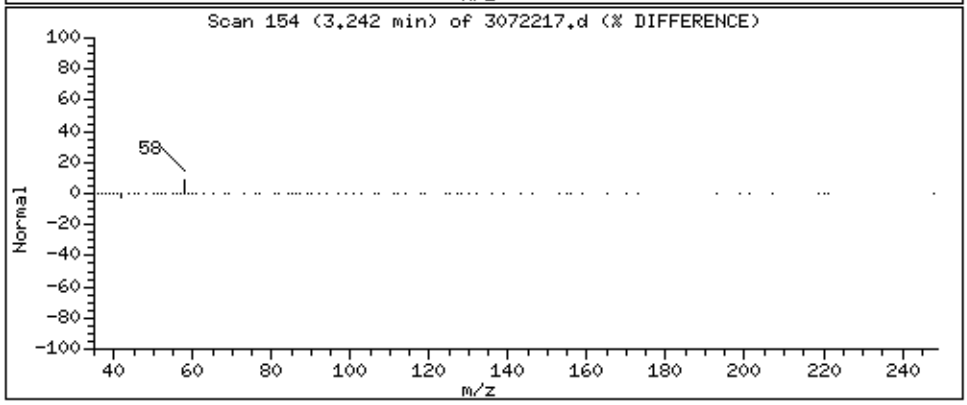












Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

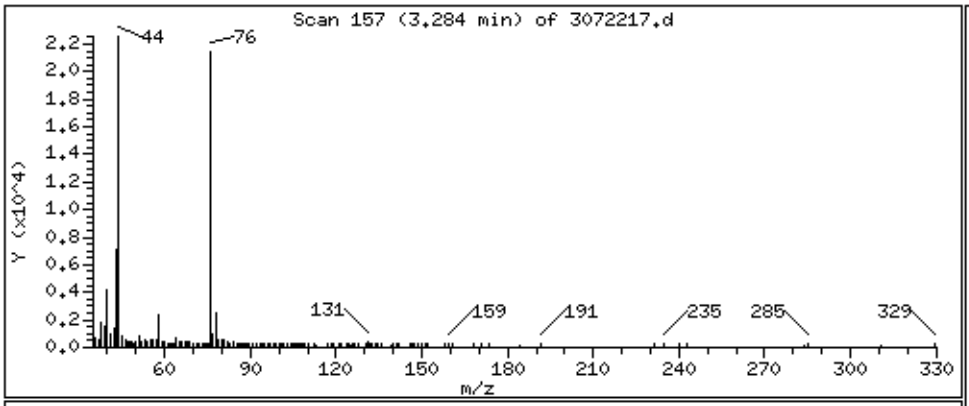
Operator: LD

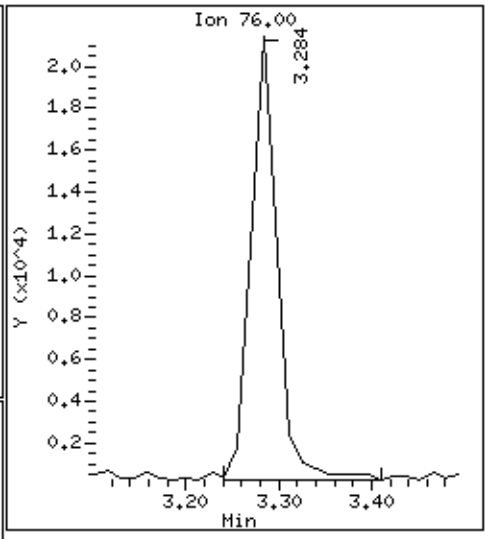
Column phase: RTX-624

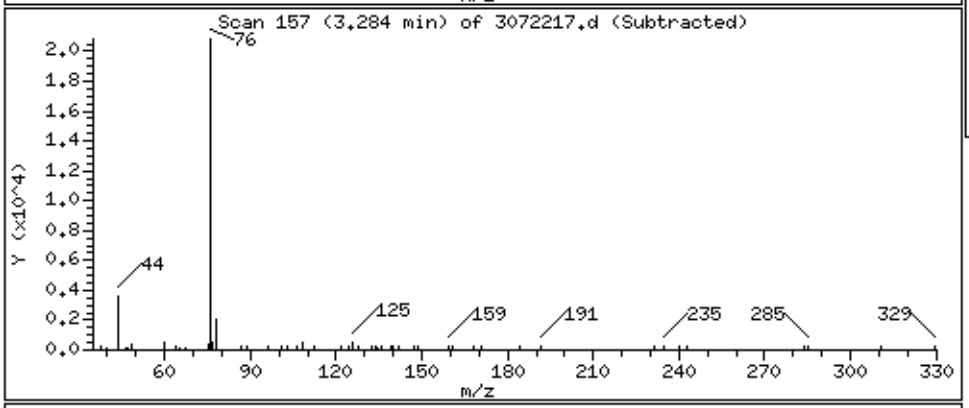
Column diameter: 0.25

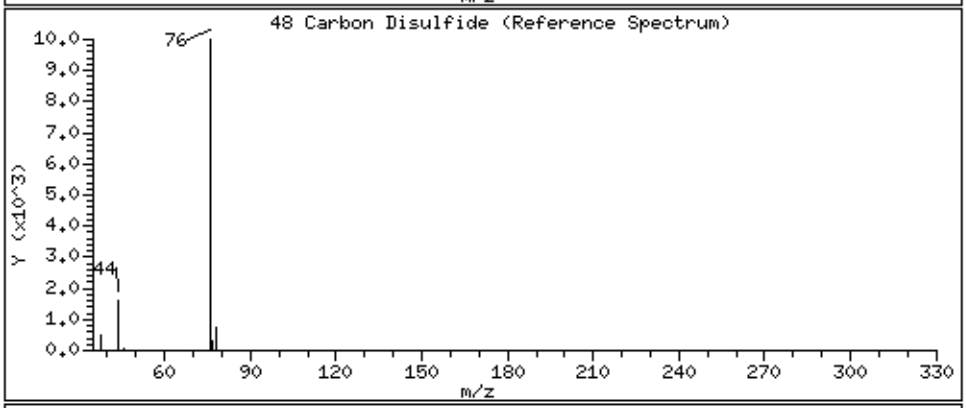
48 Carbon Disulfide

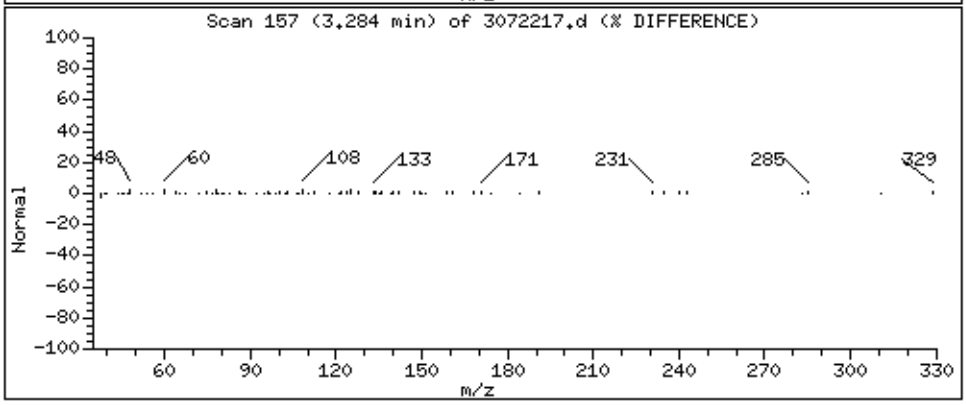
Concentration: 4.892 PPBV











Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

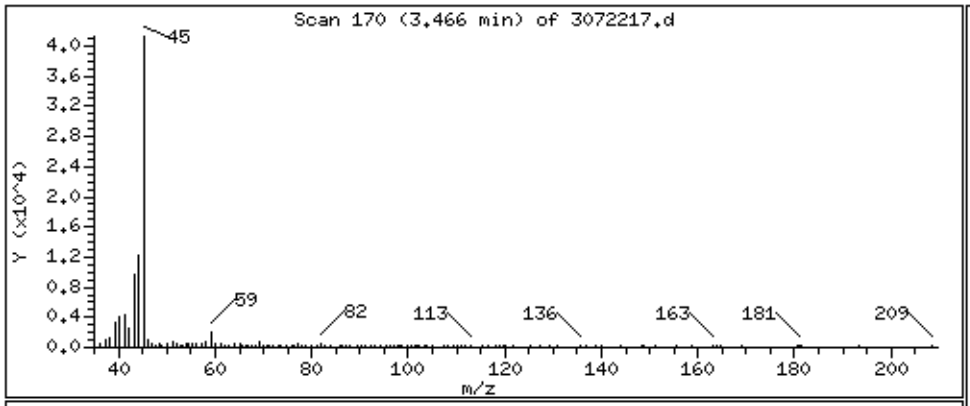
Operator: LD

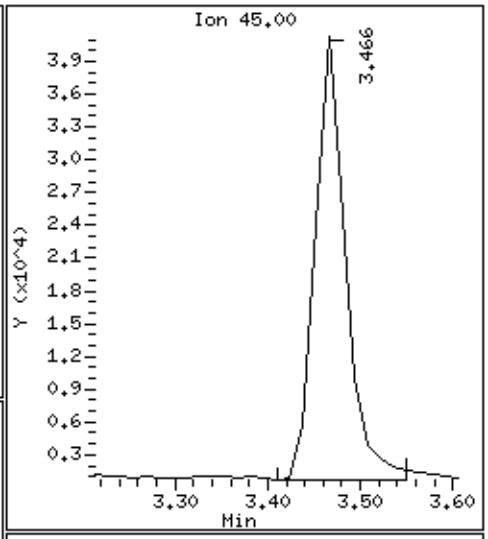
Column phase: RTX-624

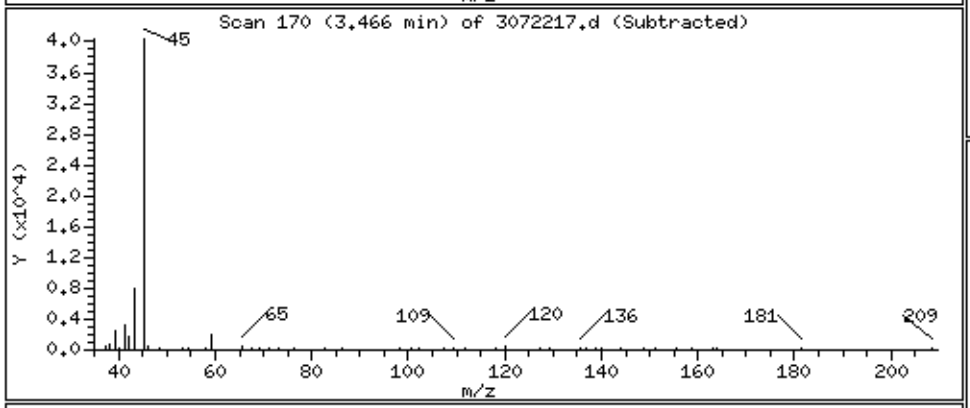
Column diameter: 0.25

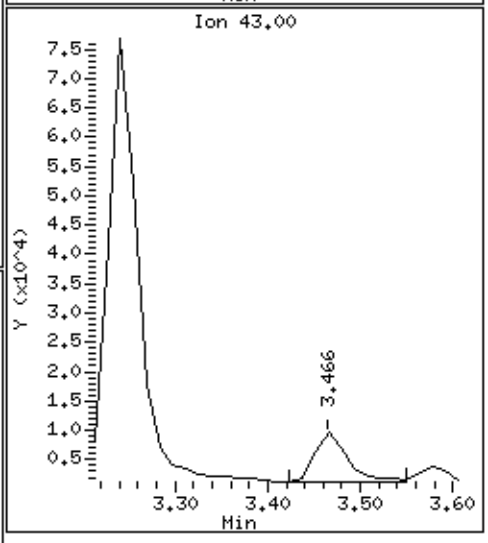
52 2-Propanol

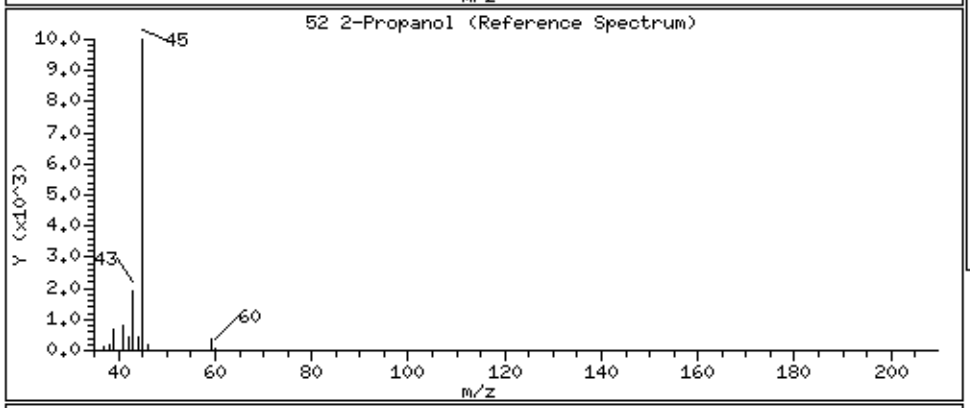
Concentration: 13.626 PPBV

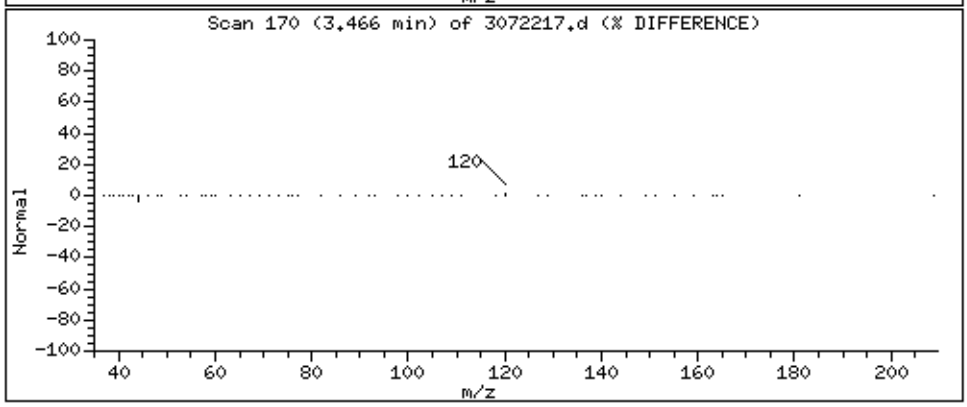












Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

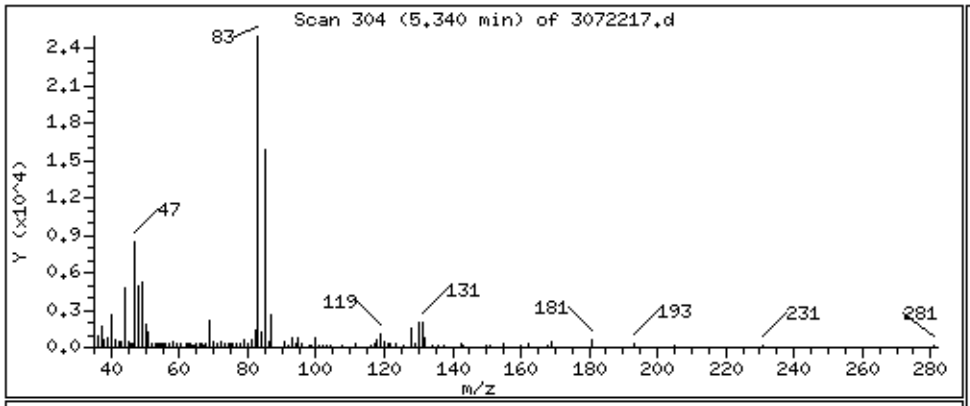
Operator: LD

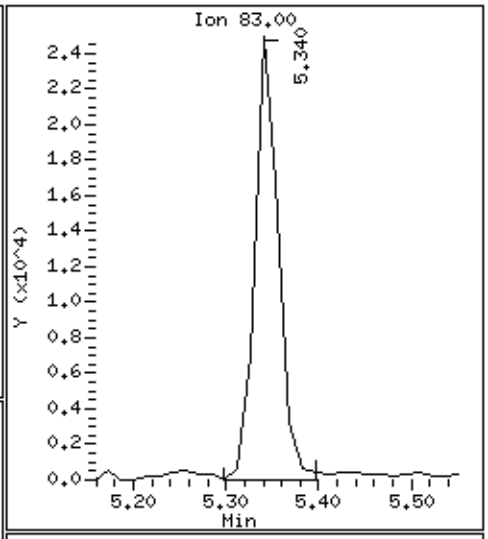
Column phase: RTX-624

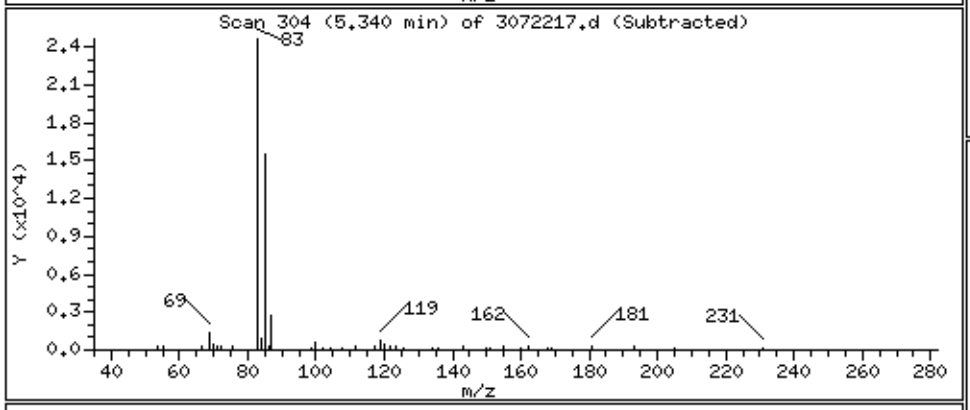
Column diameter: 0.25

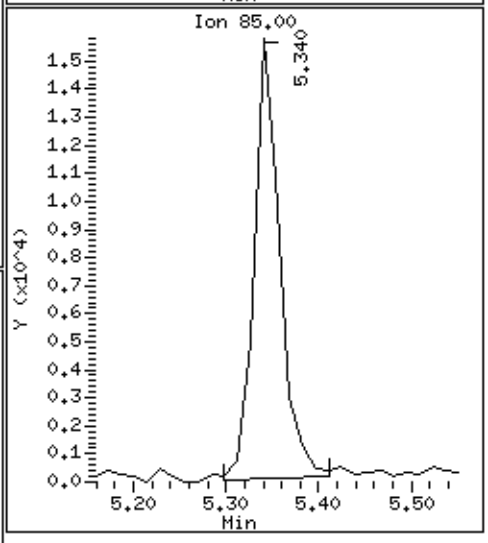
92 Chloroform

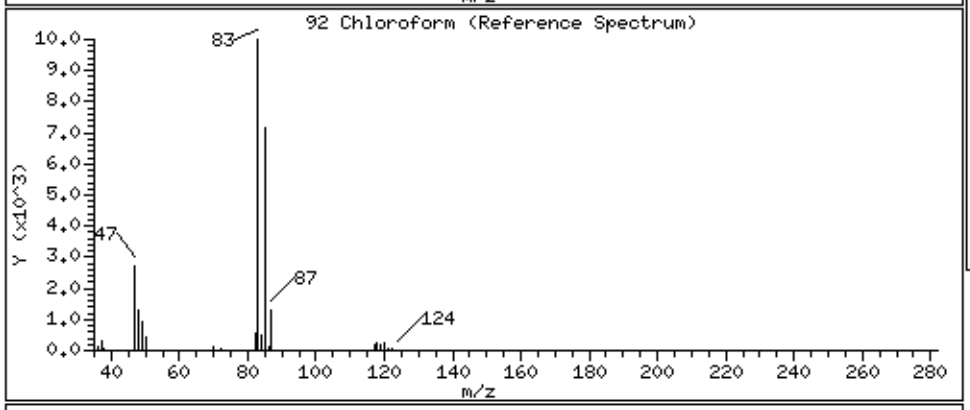
Concentration: 6.265 PPBV

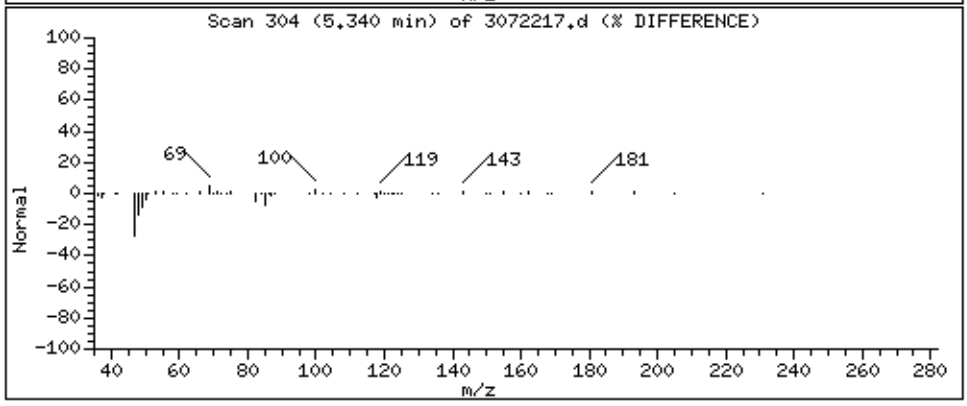












Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

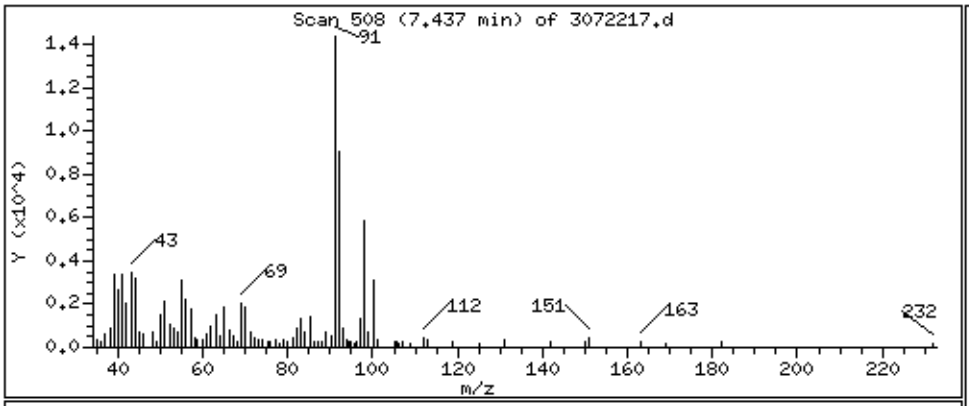
Operator: LD

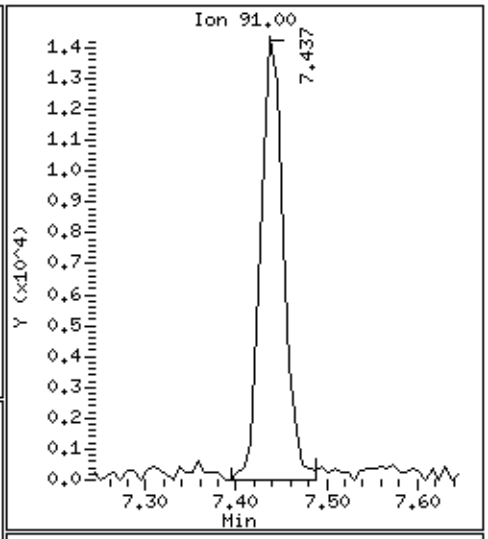
Column phase: RTX-624

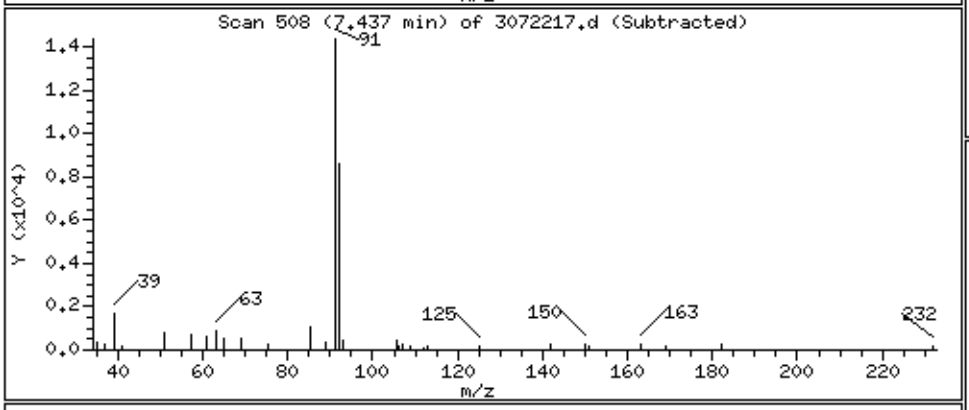
Column diameter: 0.25

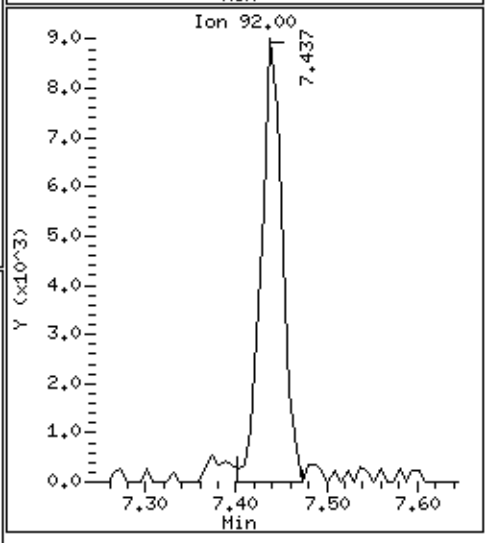
137 Toluene

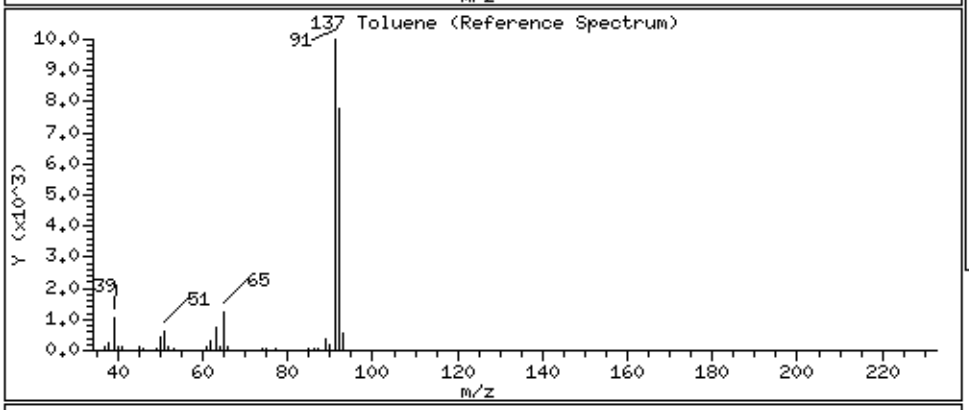
Concentration: 2.179 PPBV

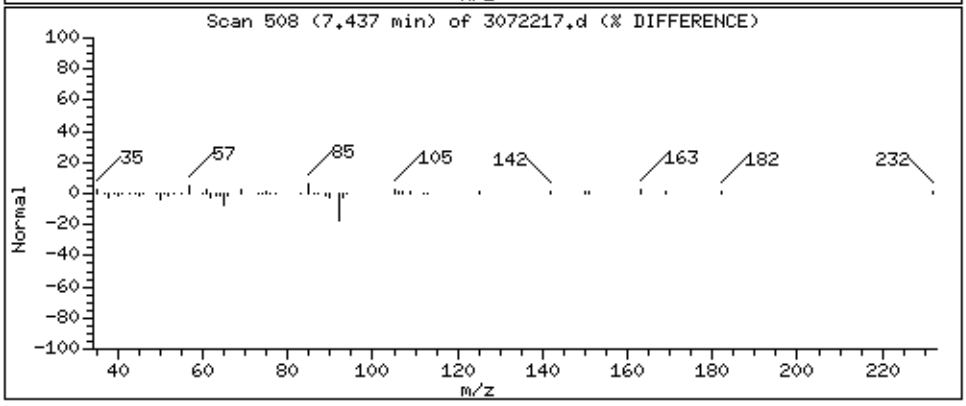












Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

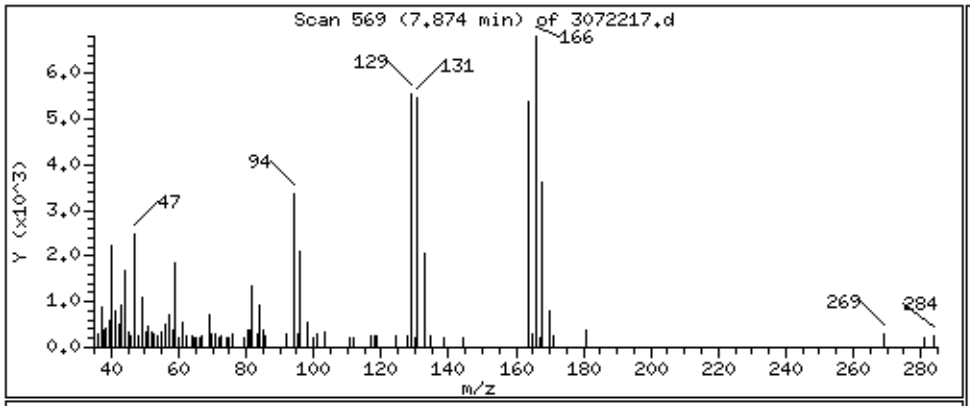
Operator: LD

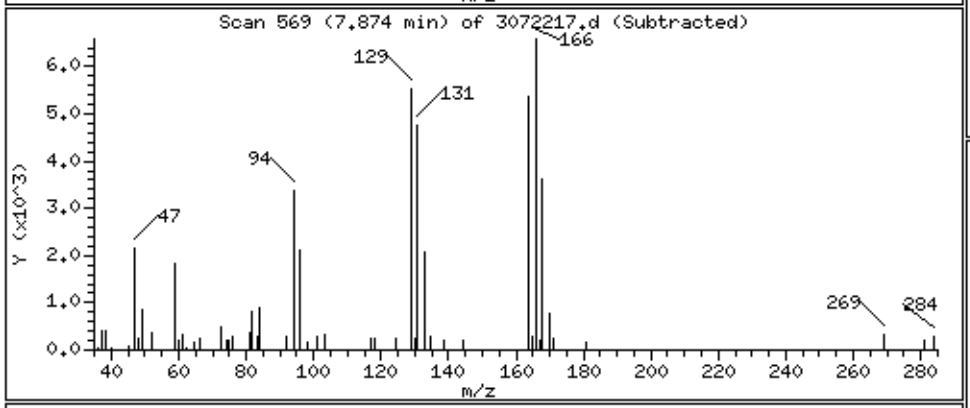
Column phase: RTX-624

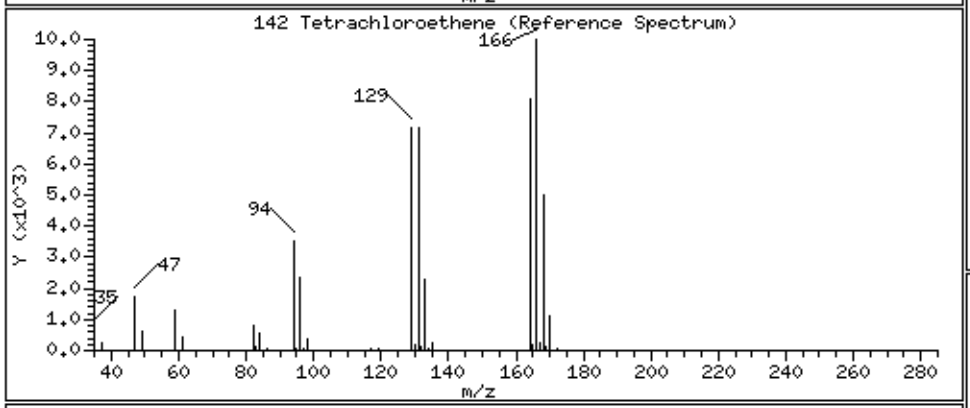
Column diameter: 0.25

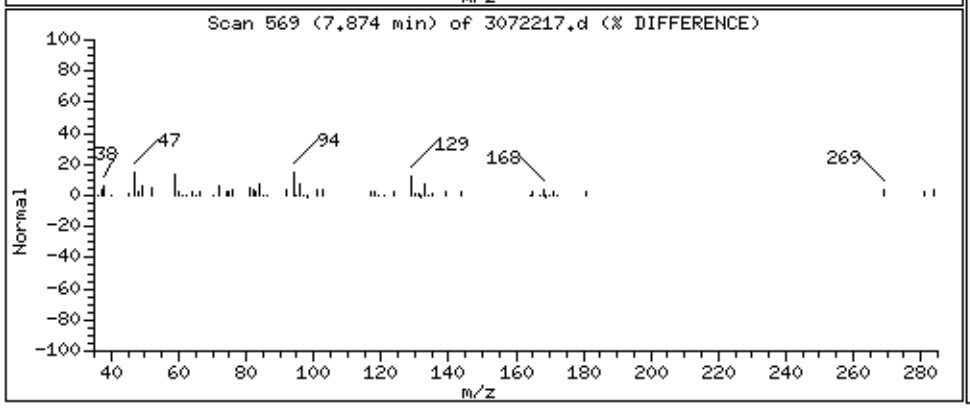
142 Tetrachloroethene

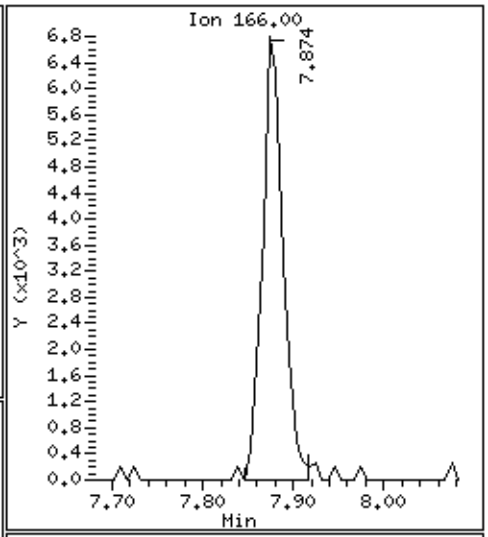
Concentration: 2.005 PPBV

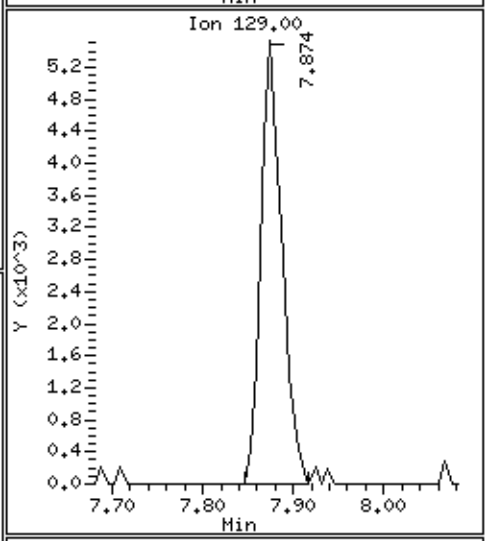


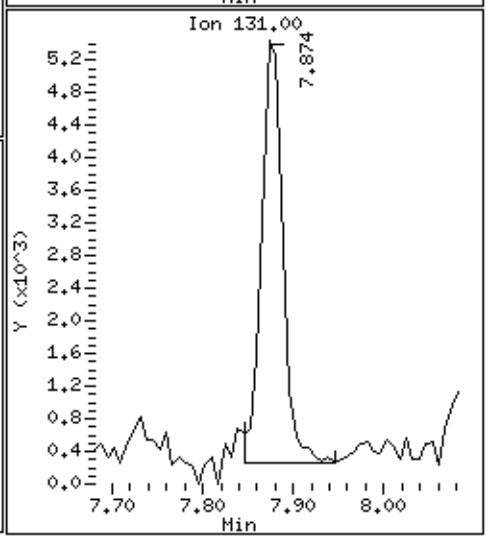












Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

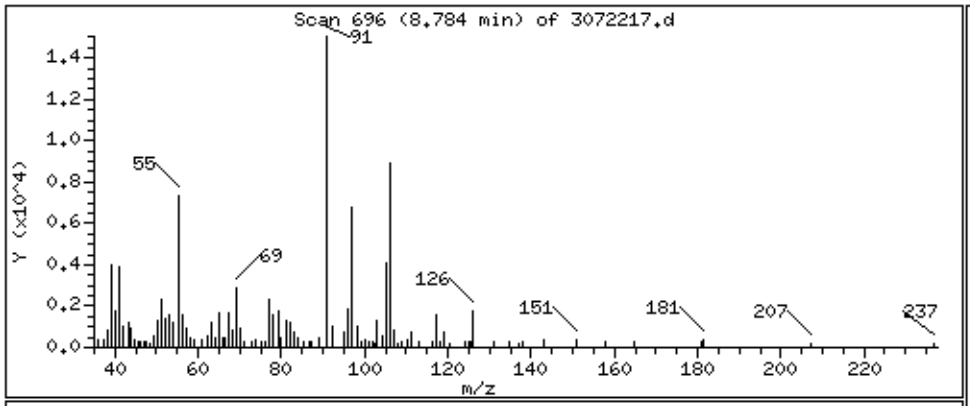
Operator: LD

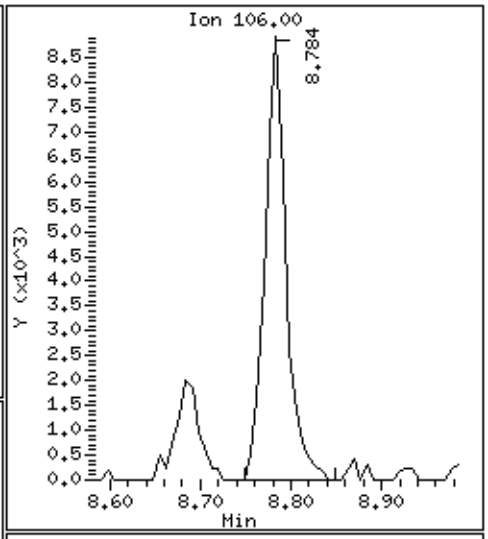
Column phase: RTX-624

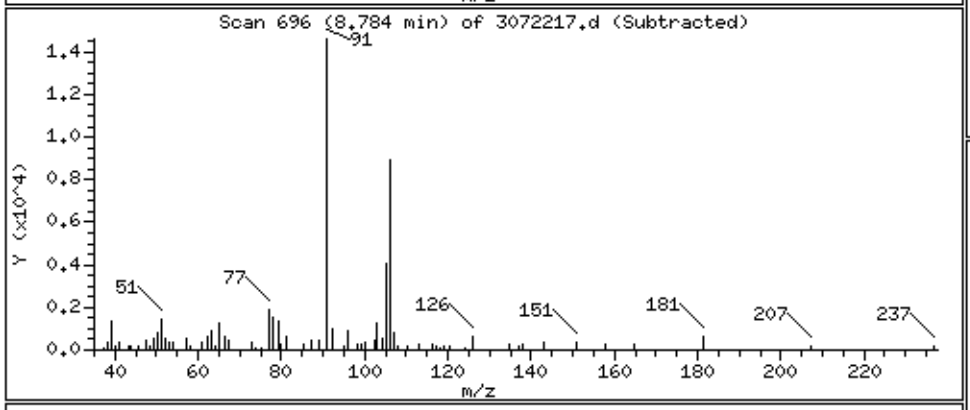
Column diameter: 0.25

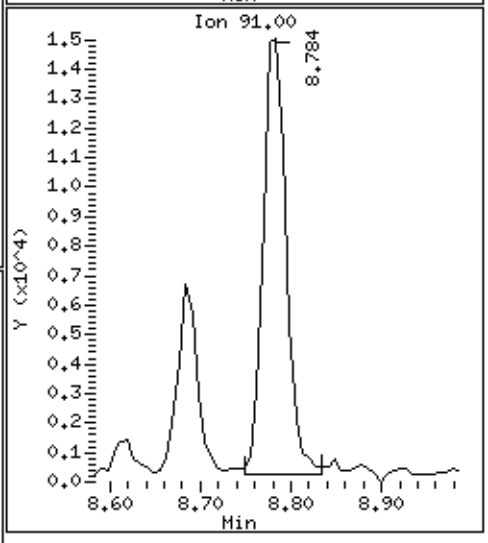
158 m,p-Xylene

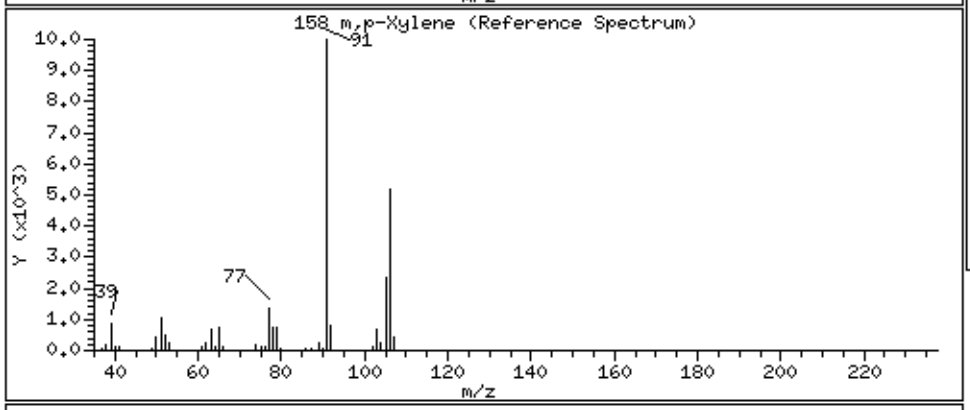
Concentration: 2.455 PPBV

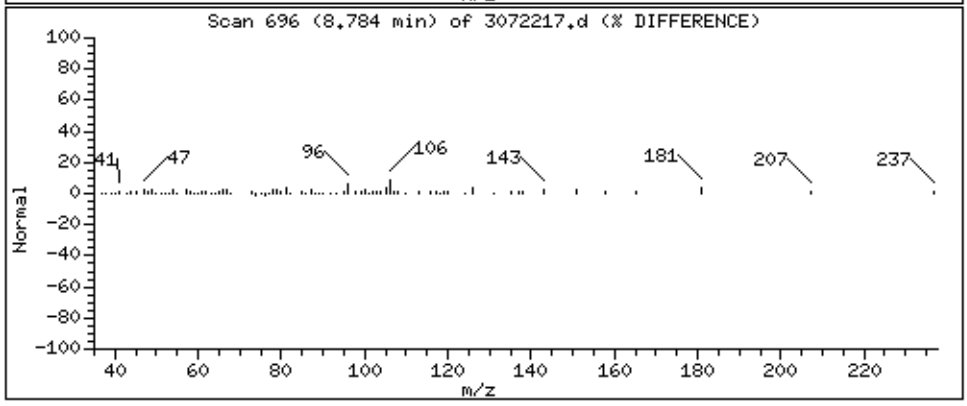












Data File: /chem/msd3.i/22JUL21.b/3072217.d

Date : 22-JUL-2021 18:54

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1600

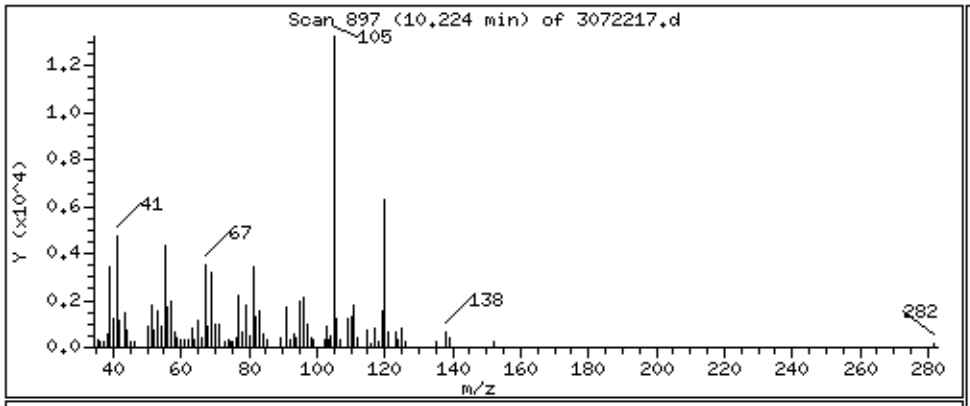
Operator: LD

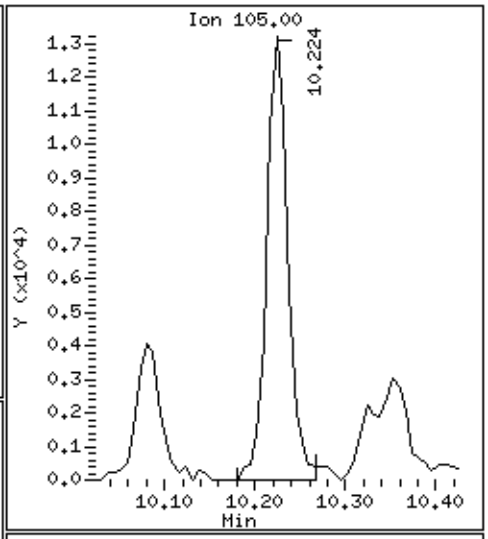
Column phase: RTX-624

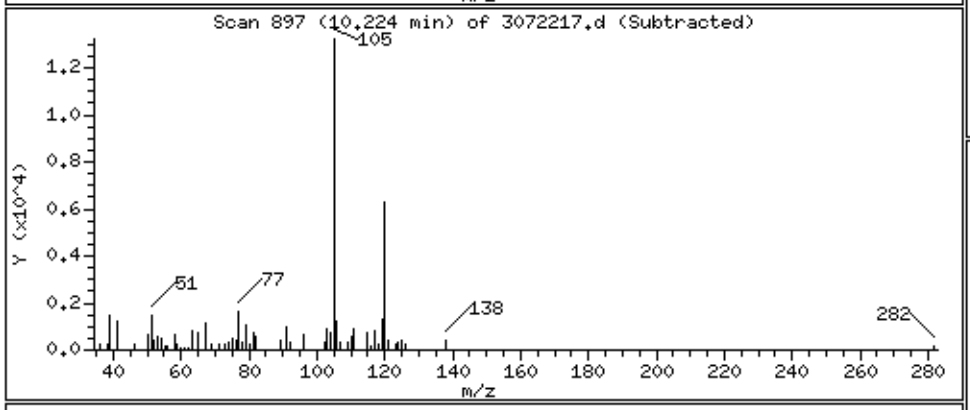
Column diameter: 0.25

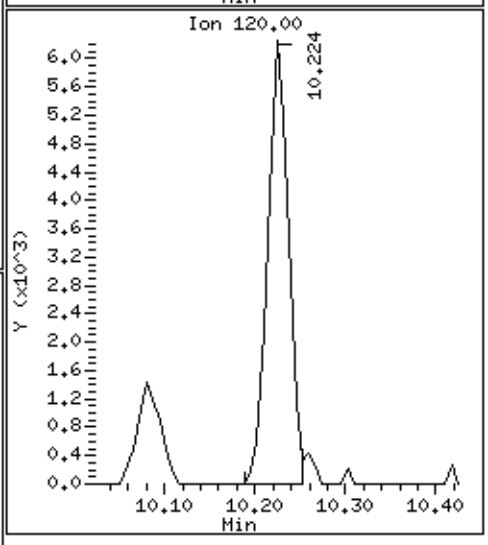
190 1,2,4-Trimethylbenzene

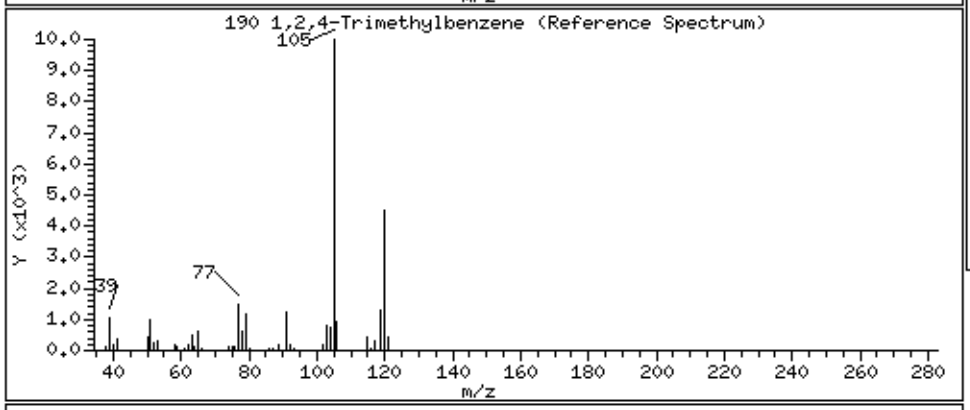
Concentration: 1.455 PPBV

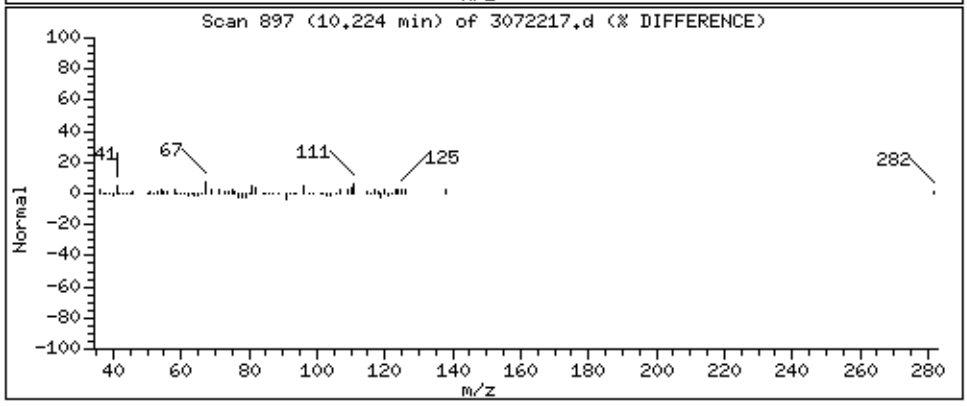












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Client Sample ID: SG-VW44B-02

Lab ID#: 2107241A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072218**	**Date of Collection:**	**7/8/21 5:46:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**7/22/21 07:23 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.7	Not Detected
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	11	Not Detected	24	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	11	Not Detected	22	Not Detected
Freon 113	1.1	Not Detected	8.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	25	27	58
2-Propanol	4.6	13	11	33
Carbon Disulfide	4.6	Not Detected	14	Not Detected
3-Chloropropene	4.6	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
Methyl tert-butyl ether	4.6	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Chloroform	1.1	9.7	5.6	47
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	1.2	6.2	6.4
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.7	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	2.6	7.8	17
2-Hexanone	4.6	Not Detected	19	Not Detected

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Client Sample ID: SG-VW44B-02

Lab ID#: 2107241A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072218**	**Date of Collection:**	**7/8/21 5:46:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**7/22/21 07:23 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.8	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.3	Not Detected
Ethyl Benzene	1.1	Not Detected	5.0	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.9	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.9	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	470	Not Detected
Freon 134a	4.6	Not Detected	19	Not Detected
Acrolein	4.6	Not Detected	10	Not Detected
Acrylonitrile	4.6	Not Detected	9.9	Not Detected
tert-Amyl methyl ether	4.6	Not Detected	19	Not Detected
tert-Butyl alcohol	4.6	Not Detected	14	Not Detected
1,2-Dibromo-3-chloropropane	4.6	Not Detected	44	Not Detected
Dibromomethane	4.6	Not Detected	32	Not Detected
1,1-Difluoroethane	4.6	Not Detected	12	Not Detected
Isopropyl ether	4.6	Not Detected	19	Not Detected
Ethyl Acetate	4.6	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.6	Not Detected	19	Not Detected
Hexachloroethane	4.6	Not Detected	44	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Propylene	4.6	Not Detected	7.9	Not Detected
1,1,1,2-Tetrachloroethane	4.6	Not Detected	31	Not Detected
1,2,3-Trichloropropane	4.6	Not Detected	28	Not Detected
Vinyl Acetate	4.6	Not Detected	16	Not Detected
Vinyl Bromide	4.6	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW44B-02

Lab ID#: 2107241A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072218**	**Date of Collection: 7/8/21 5:46:00 PM**	
Dil. Factor:	**2.29**	**Date of Analysis: 7/22/21 07:23 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072218.d
Lab Smp Id: 2107241A-08A
Inj Date : 22-JUL-2021 19:23
Operator : LD Inst ID: msd3.i
Smp Info : 200mL O1021
Misc Info : 8 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 5
Dil Factor: 2.29000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.284	5.284 (1.000)	130	271712	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	213313				48.46- 108.46	78.51
5.270	5.284 (1.000)	49	376830				120.39- 180.39	138.69
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.166	6.180 (1.000)	114	899983	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	131807				0.00- 45.52	14.65
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	814050	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	434108				25.46- 85.46	53.33
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	359676	24.0544		24.054	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173120				21.66- 81.66	48.13
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.198)	98	909559	24.5371		24.537	80.00- 120.00	100.00
7.387	7.387 (1.198)	70	99027				0.00- 41.47	10.89

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	604514			36.47- 96.47	66.46
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	515423	23.9375	23.938	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	576660			93.06- 153.06	111.88
9.601	9.601 (1.115)	176	479690			62.87- 122.87	93.07
47 Acetone					CAS #: 67-64-1		
3.242	3.213 (0.613)	58	49077	10.7719	24.668	80.00- 120.00	100.00
3.242	3.213 (0.613)	43	168753			299.66- 359.66	343.85
52 2-Propanol					CAS #: 67-63-0		
3.466	3.409 (0.656)	45	94927	5.79347	13.267	80.00- 120.00	100.00
3.466	3.409 (0.656)	43	18576			0.00- 48.61	19.57
92 Chloroform					CAS #: 67-66-3		
5.340	5.354 (1.011)	83	72287	4.24329	9.717	80.00- 120.00	100.00
5.340	5.354 (1.011)	85	50040			34.71- 94.71	69.22
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.376 (1.032)	95	5329	0.51722	1.184	80.00- 120.00	100.00
6.362	6.376 (1.032)	130	4210			74.96- 134.96	78.99
6.362	6.376 (1.032)	97	3212			34.80- 94.80	60.27
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.915)	166	14339	1.12436	2.575	80.00- 120.00	100.00
7.882	7.881 (0.915)	129	11205			48.71- 108.71	78.14
7.874	7.881 (0.914)	131	10503			46.55- 106.55	73.25

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072218.d
Lab Smp Id: 2107241A-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 8 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	271712	12.93
108 1,4-Difluorobenze	805743	483446	1128040	899983	11.70
153 Chlorobenzene-d5	719477	431686	1007268	814050	13.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 10:03

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-08A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 8 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.054	96.22	70-130
$ 134 Toluene-d8	25.000	24.537	98.15	70-130
$ 170 4-Bromofluorobenz	25.000	23.938	95.75	70-130

Data File: /chem/msd3.i/22JUL21.b/3072218.d

Date : 22-JUL-2021 19:23

Client ID:

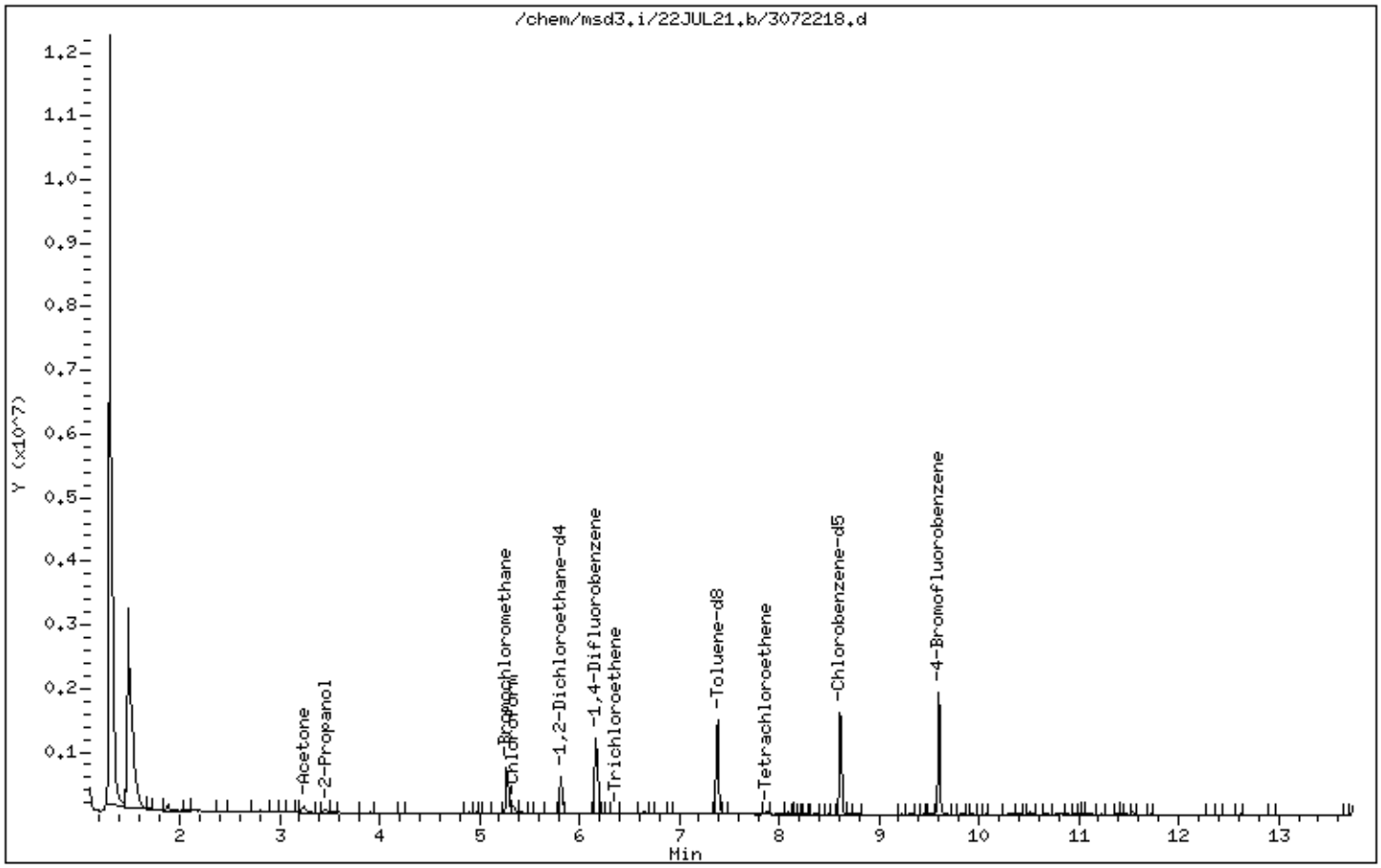
Instrument: msd3.i

Sample Info: 200mL 01021

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072218.d

Date : 22-JUL-2021 19:23

Client ID:

Instrument: msd3.i

Sample Info: 200mL 01021

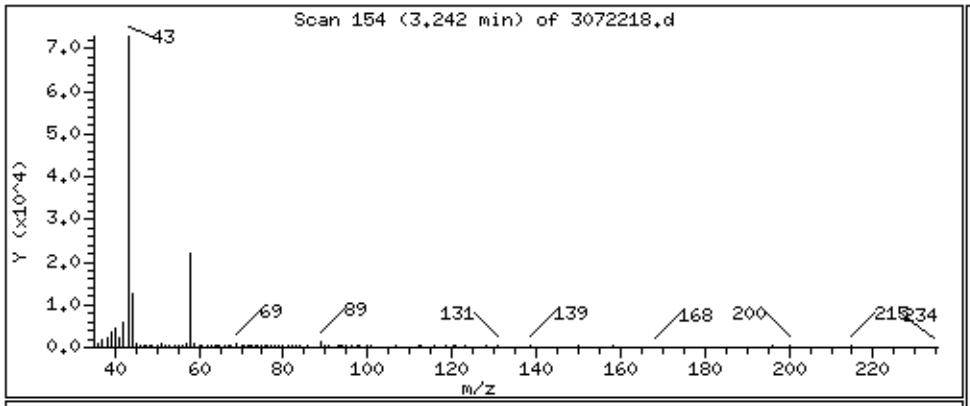
Operator: LD

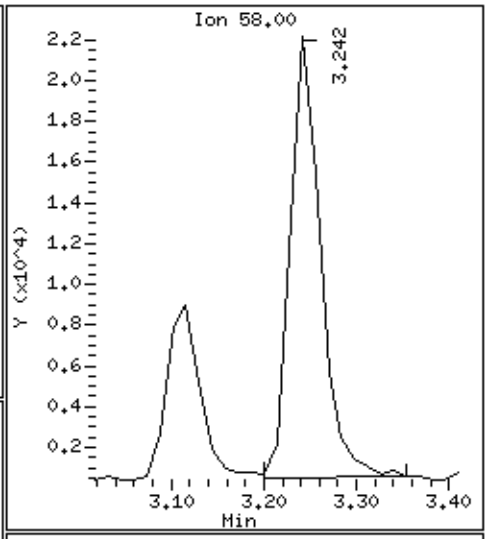
Column phase: RTX-624

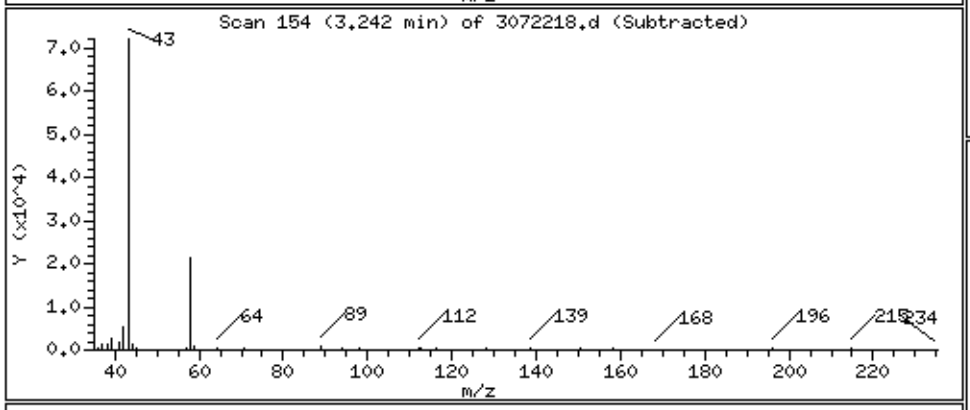
Column diameter: 0.25

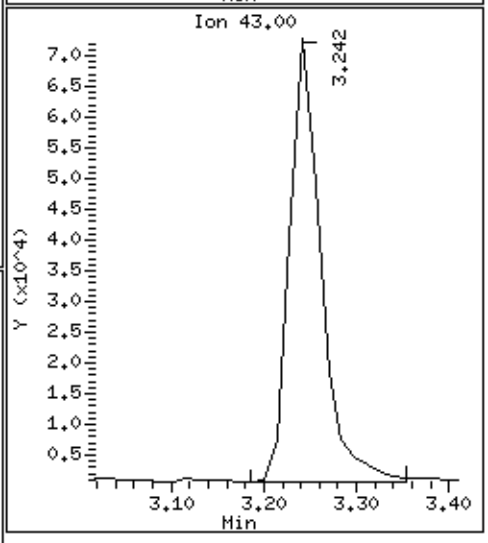
47 Acetone

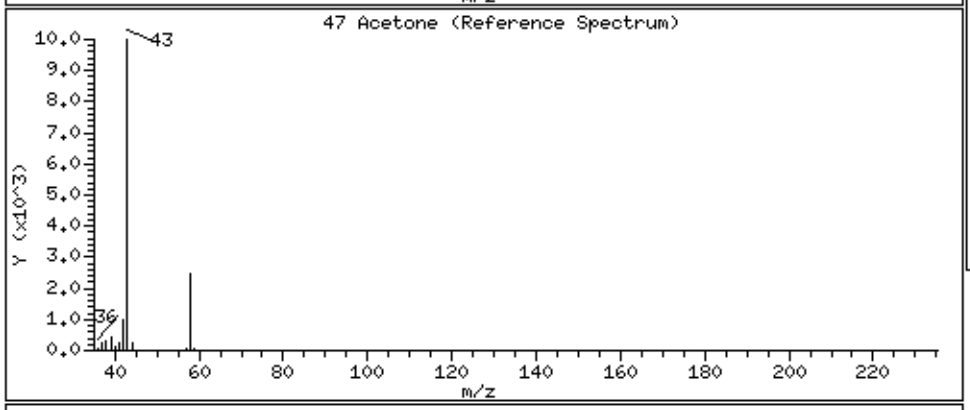
Concentration: 24.668 PPBV

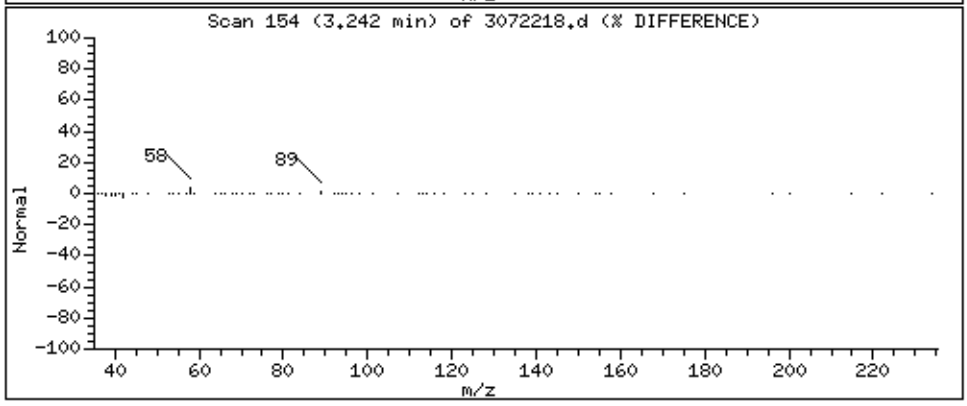












Data File: /chem/msd3.i/22JUL21.b/3072218.d

Date : 22-JUL-2021 19:23

Client ID:

Instrument: msd3.i

Sample Info: 200mL 01021

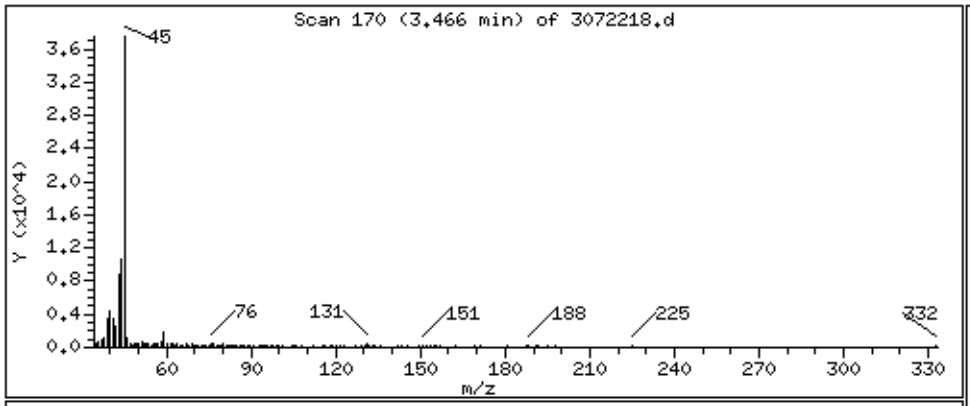
Operator: LD

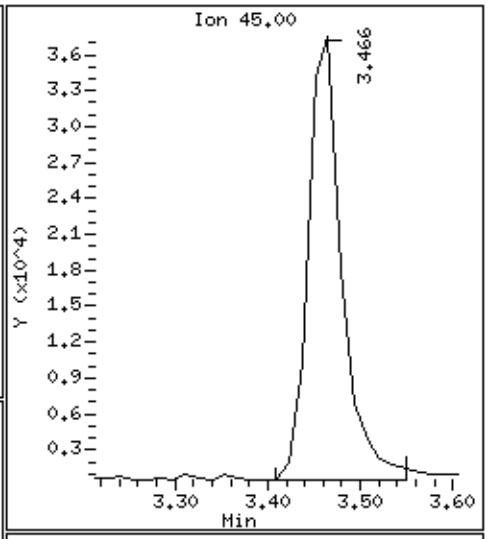
Column phase: RTX-624

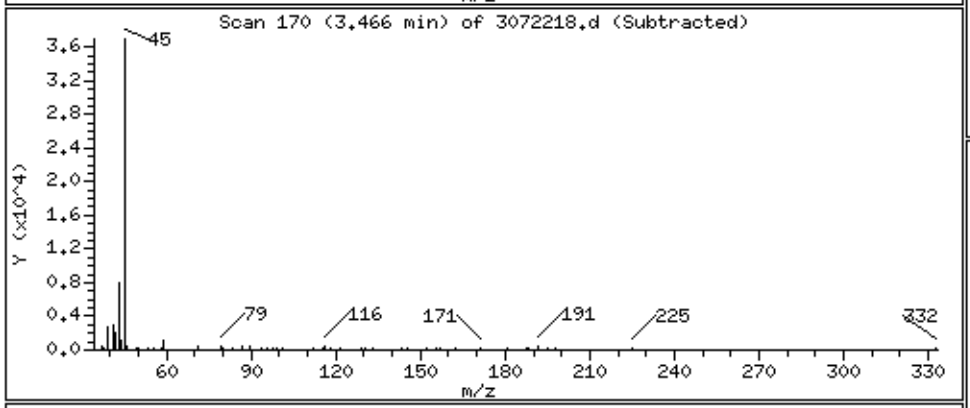
Column diameter: 0.25

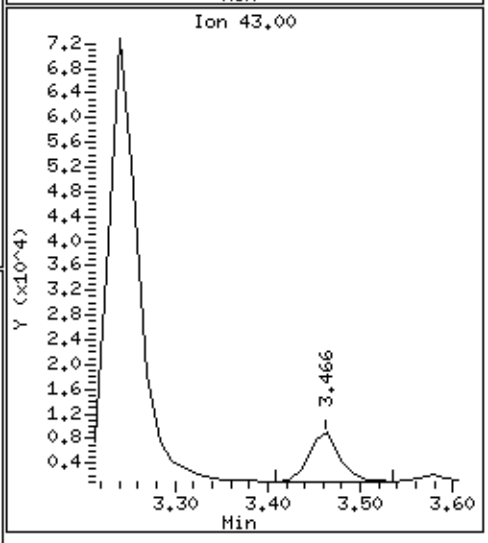
52 2-Propanol

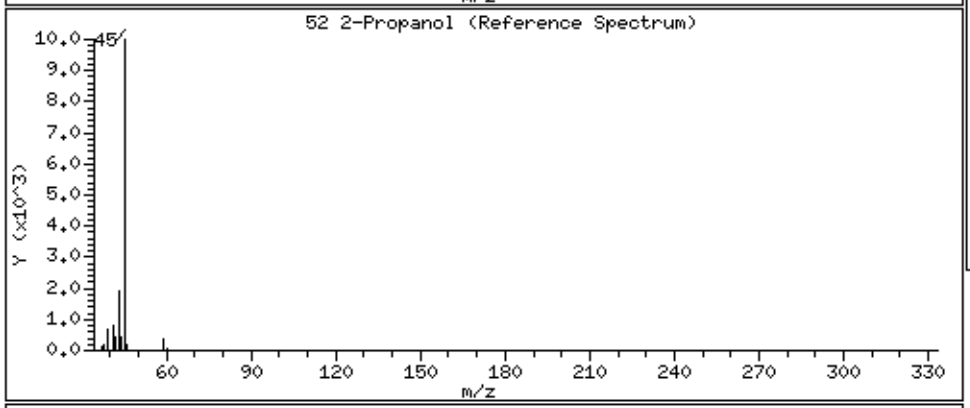
Concentration: 13.267 PPBV

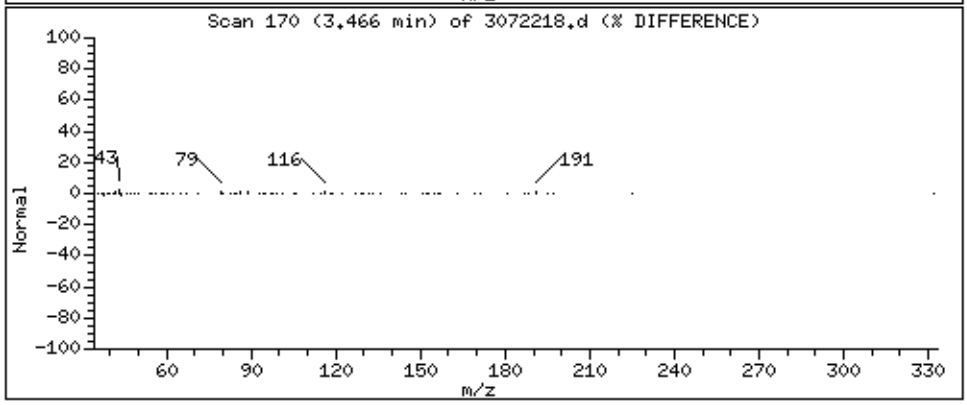












Data File: /chem/msd3.i/22JUL21.b/3072218.d

Date : 22-JUL-2021 19:23

Client ID:

Instrument: msd3.i

Sample Info: 200mL 01021

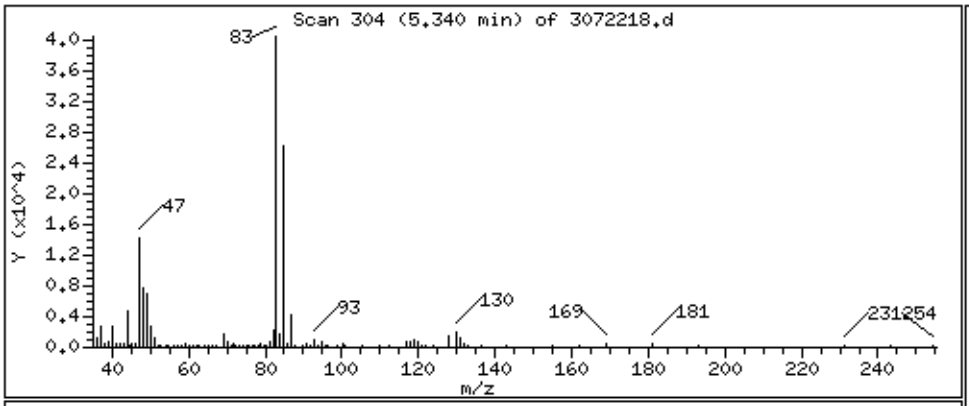
Operator: LD

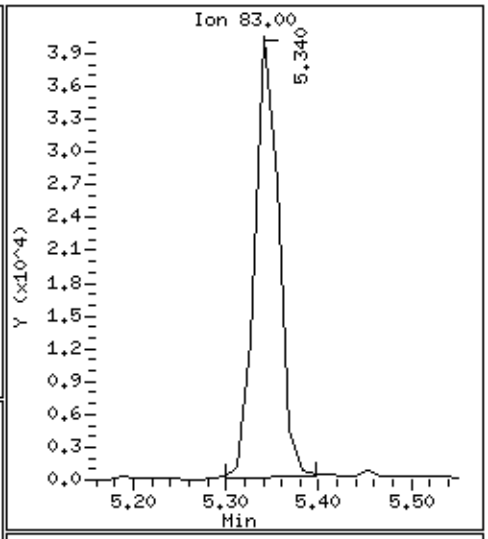
Column phase: RTX-624

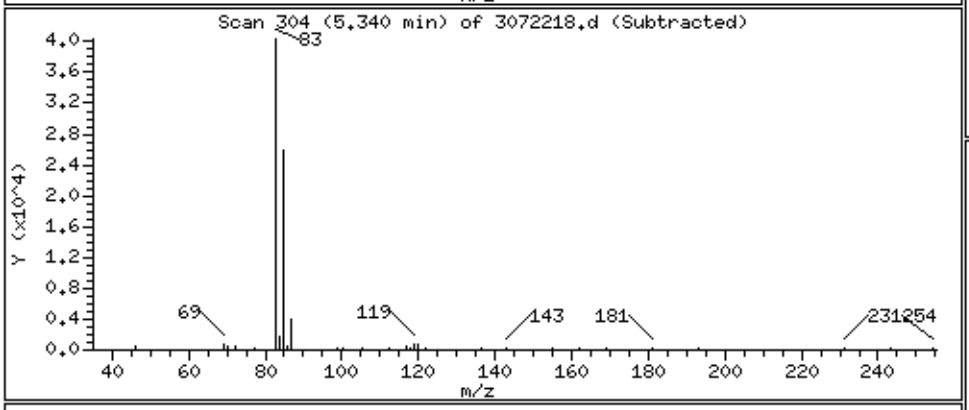
Column diameter: 0.25

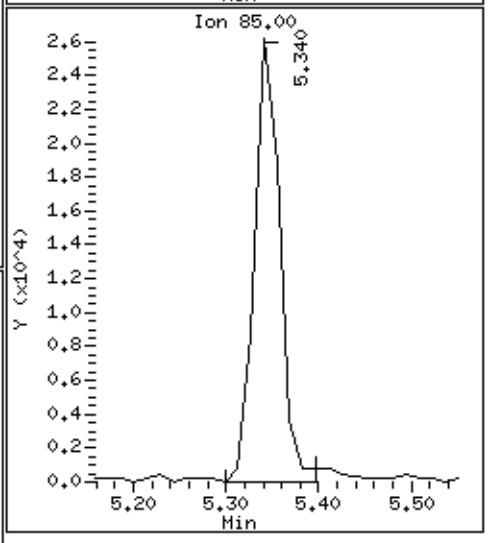
92 Chloroform

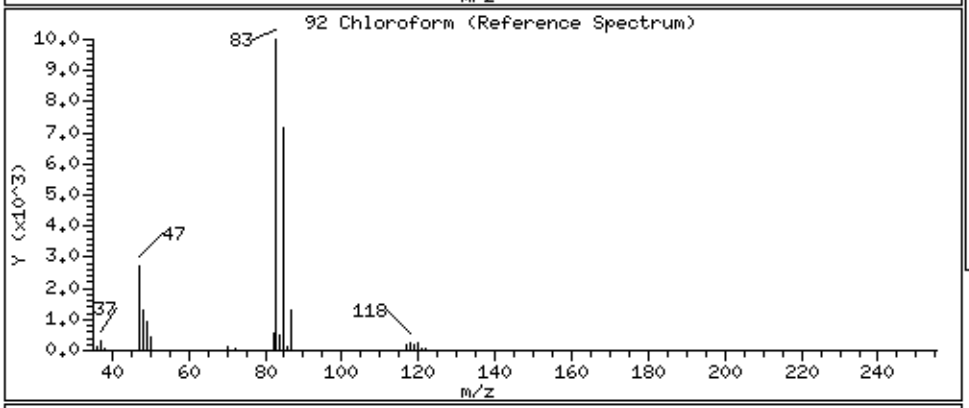
Concentration: 9.717 PPBV

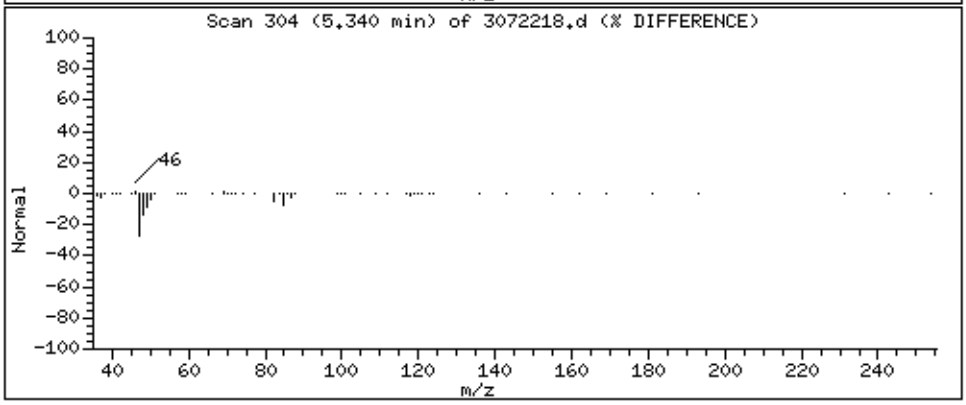












Data File: /chem/msd3.i/22JUL21.b/3072218.d

Date : 22-JUL-2021 19:23

Client ID:

Instrument: msd3.i

Sample Info: 200mL 01021

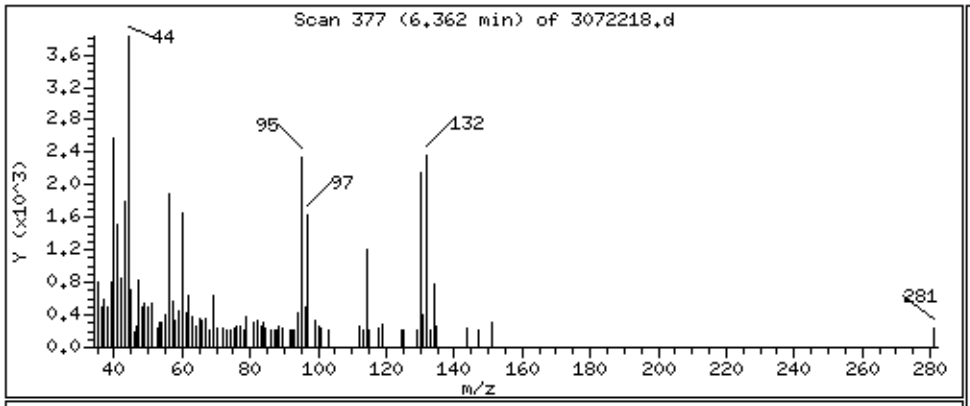
Operator: LD

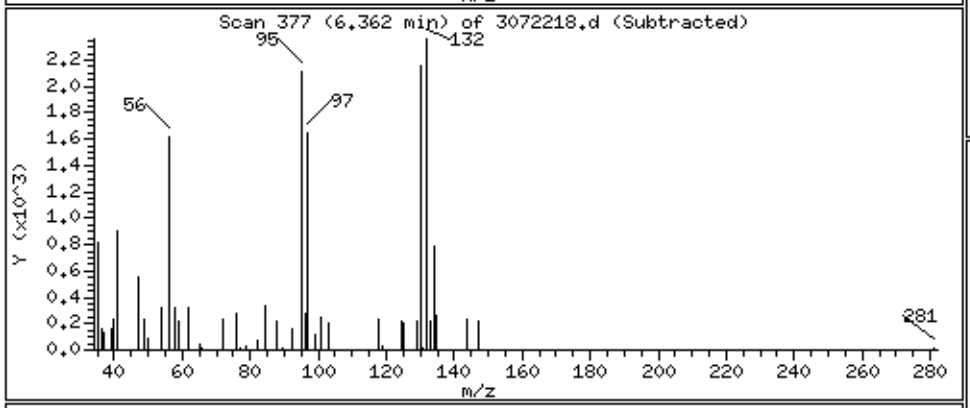
Column phase: RTX-624

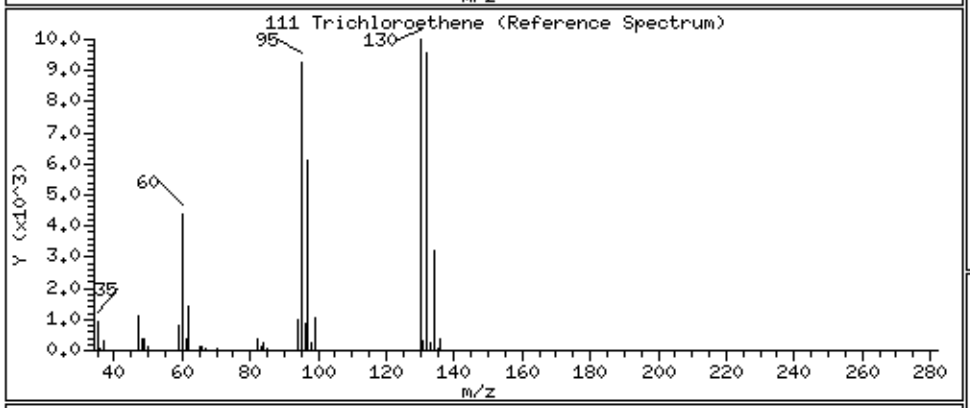
Column diameter: 0.25

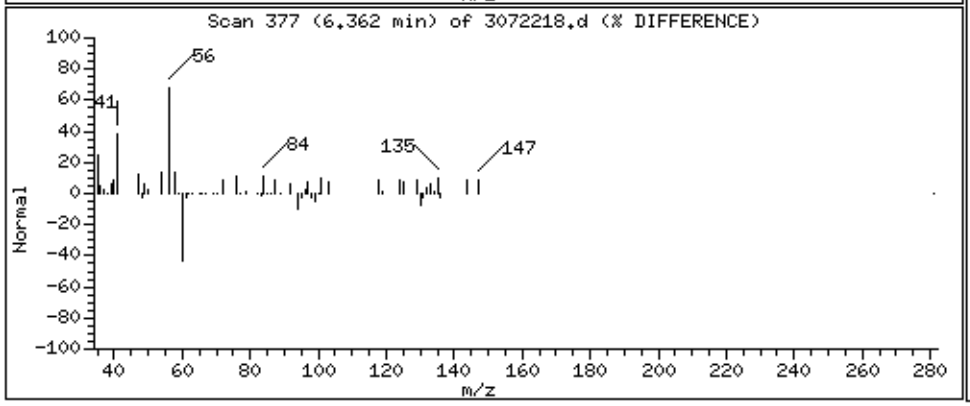
111 Trichloroethene

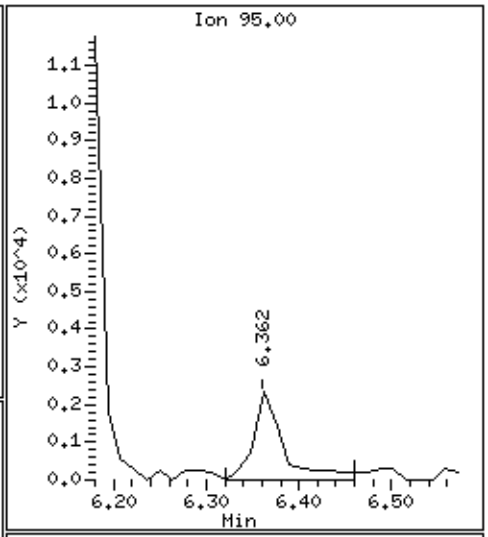
Concentration: 1.184 PPBV

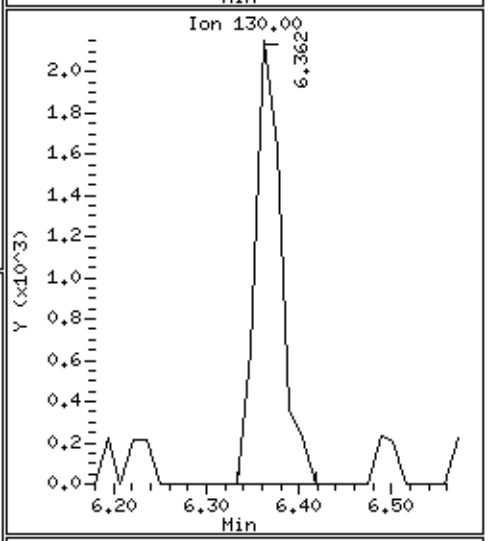


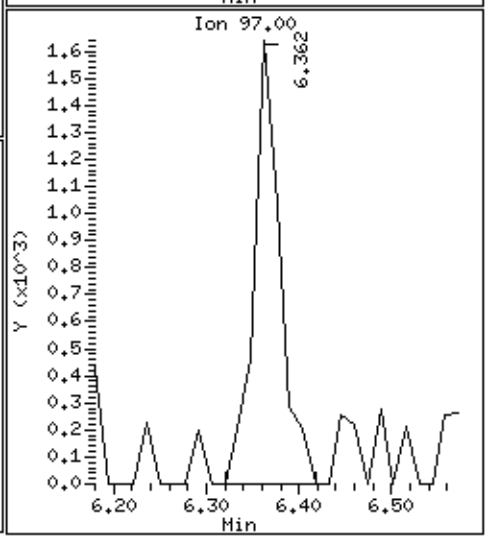












Data File: /chem/msd3.i/22JUL21.b/3072218.d

Date : 22-JUL-2021 19:23

Client ID:

Instrument: msd3.i

Sample Info: 200mL 01021

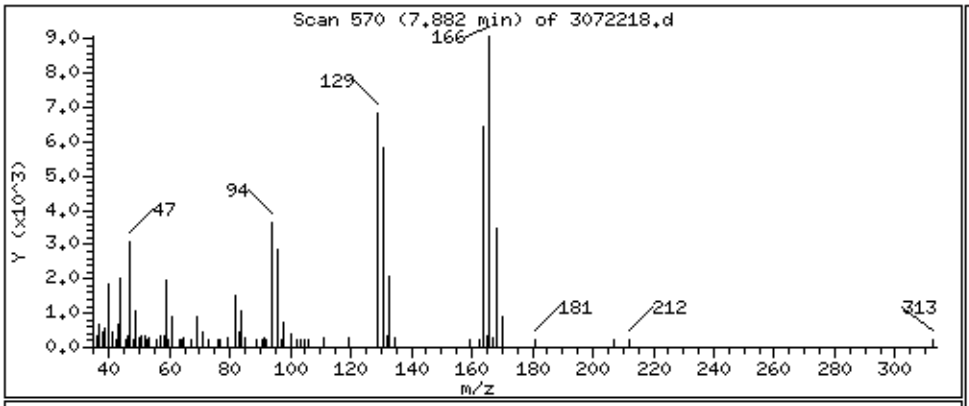
Operator: LD

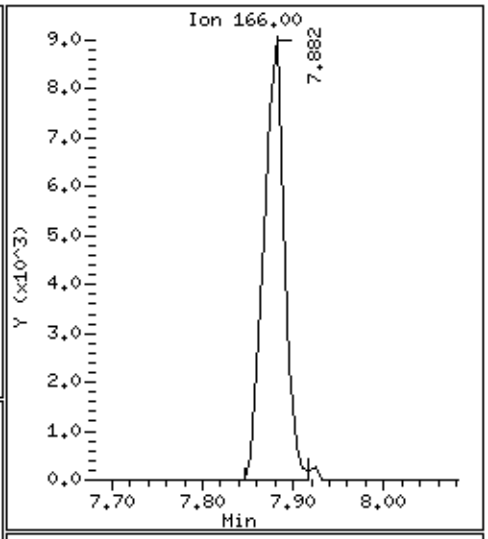
Column phase: RTX-624

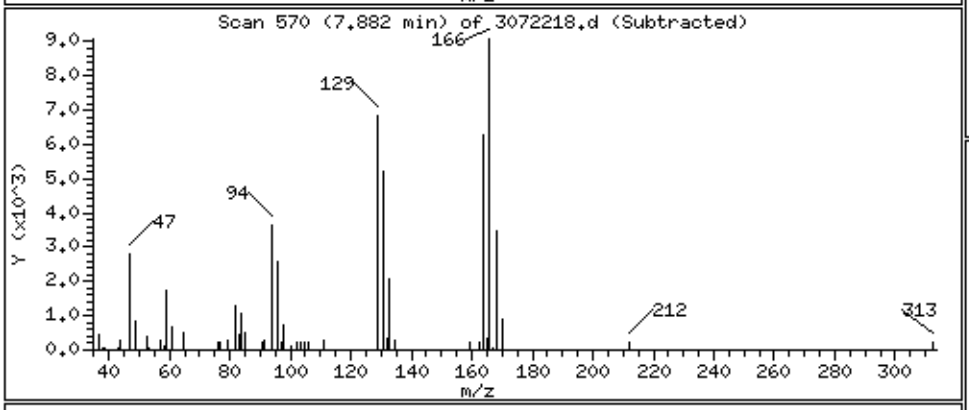
Column diameter: 0.25

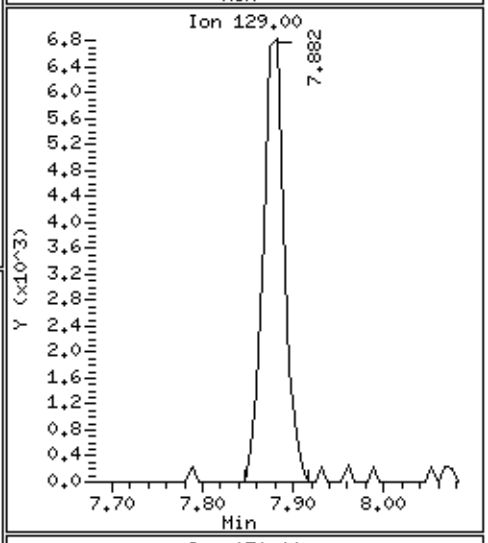
142 Tetrachloroethene

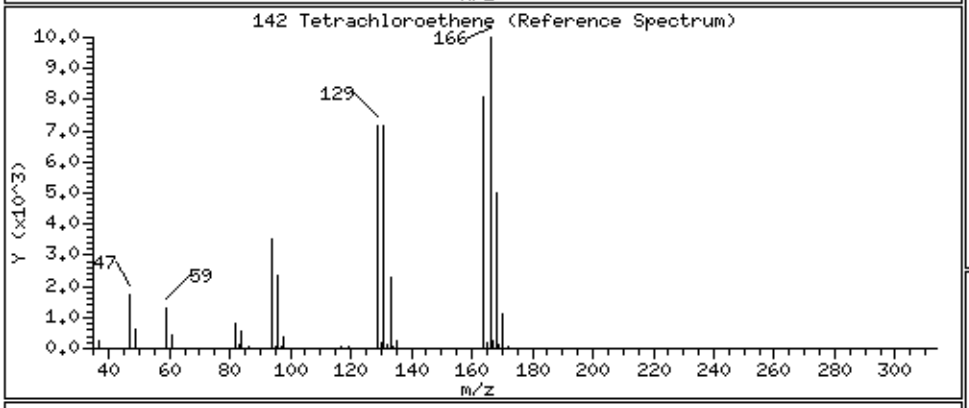
Concentration: 2.575 PPBV

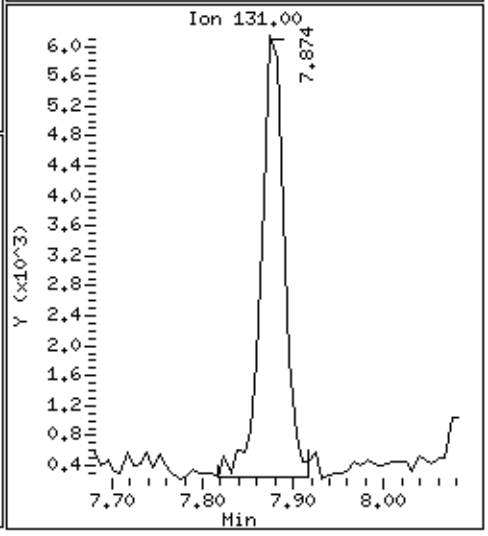


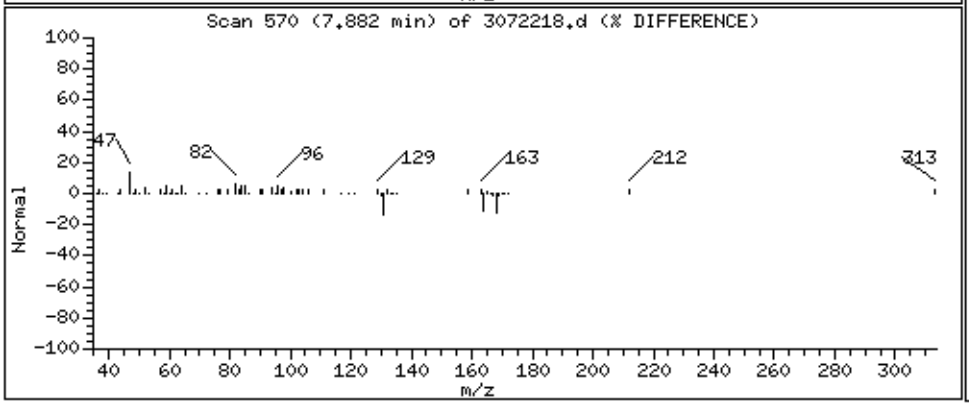












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Client Sample ID: SG-VW47A-02

Lab ID#: 2107241A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072219**	**Date of Collection:**	**7/8/21 6:54:00 PM**
Dil. Factor:	**2.18**	**Date of Analysis:**	**7/22/21 07:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Acetone	11	19	26	46
2-Propanol	4.4	11	11	27
Carbon Disulfide	4.4	Not Detected	14	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Tetrachloroethene	1.1	4.0	7.4	27
2-Hexanone	4.4	Not Detected	18	Not Detected

eurofins | Air Toxics

Client Sample ID: SG-VW47A-02

Lab ID#: 2107241A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072219**	**Date of Collection:**	**7/8/21 6:54:00 PM**
Dil. Factor:	**2.18**	**Date of Analysis:**	**7/22/21 07:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.3	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
m,p-Xylene	1.1	1.4	4.7	6.2
o-Xylene	1.1	Not Detected	4.7	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.5	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	32	Not Detected
Hexachlorobutadiene	4.4	Not Detected	46	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	12	13	38
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Hexachloroethane	4.4	Not Detected	42	Not Detected
Iodomethane	11	Not Detected	63	Not Detected
Propylene	4.4	Not Detected	7.5	Not Detected
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-VW47A-02

Lab ID#: 2107241A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072219**	**Date of Collection: 7/8/21 6:54:00 PM**	
Dil. Factor:	**2.18**	**Date of Analysis: 7/22/21 07:52 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072219.d
Lab Smp Id: 2107241A-09A
Inj Date : 22-JUL-2021 19:52
Operator : LD Inst ID: msd3.i
Smp Info : 200mL S1081
Misc Info : 6.9 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 6
Dil Factor: 2.18000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.270	5.284 (1.000)	130	276702	25.0000			80.00- 120.00	100.00
5.270	5.284 (1.000)	128	216746				48.46- 108.46	78.33
5.270	5.284 (1.000)	49	395864				120.39- 180.39	143.07
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.180 (1.000)	114	916535	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	137084				0.00- 45.52	14.96
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	844400	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	437828				25.46- 85.46	51.85
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.104)	65	363615	23.8793	23.879		80.00- 120.00	100.00
5.816	5.816 (1.104)	67	174994				21.66- 81.66	48.13
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	928363	24.5921	24.592		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	104718				0.00- 41.47	11.28

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	612773			36.47- 96.47	66.01
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	526001	23.5508	23.551	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	604847			93.06- 153.06	114.99
9.601	9.601 (1.115)	176	486215			62.87- 122.87	92.44
47 Acetone					CAS #: 67-64-1		
3.241	3.213 (0.615)	58	41226	8.88548	19.370	80.00- 120.00	100.00
3.241	3.213 (0.615)	43	126928			299.66- 359.66	307.88
52 2-Propanol					CAS #: 67-63-0		
3.465	3.409 (0.658)	45	84598	5.06997	11.052	80.00- 120.00	100.00
3.465	3.409 (0.658)	43	18361			0.00- 48.61	21.70
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.913	3.857 (0.742)	59	119878	5.72374	12.478	80.00- 120.00	100.00
3.913	3.857 (0.742)	41	27321			0.00- 51.05	22.79
3.913	3.857 (0.742)	57	13180			0.00- 41.68	10.99
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.915)	166	24167	1.82689	3.983	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	18772			48.71- 108.71	77.68
7.874	7.881 (0.914)	131	17880			46.55- 106.55	73.99
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	9475	0.65996	1.439	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	18361			171.36- 231.36	193.78

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072219.d
Lab Smp Id: 2107241A-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	276702	15.01
108 1,4-Difluorobenze	805743	483446	1128040	916535	13.75
153 Chlorobenzene-d5	719477	431686	1007268	844400	17.36

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.26
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.23
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 11:32

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-09A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.879	95.52	70-130
$ 134 Toluene-d8	25.000	24.592	98.37	70-130
$ 170 4-Bromofluorobenz	25.000	23.551	94.20	70-130

Data File: /chem/msd3.i/22JUL21.b/3072219.d

Date : 22-JUL-2021 19:52

Client ID:

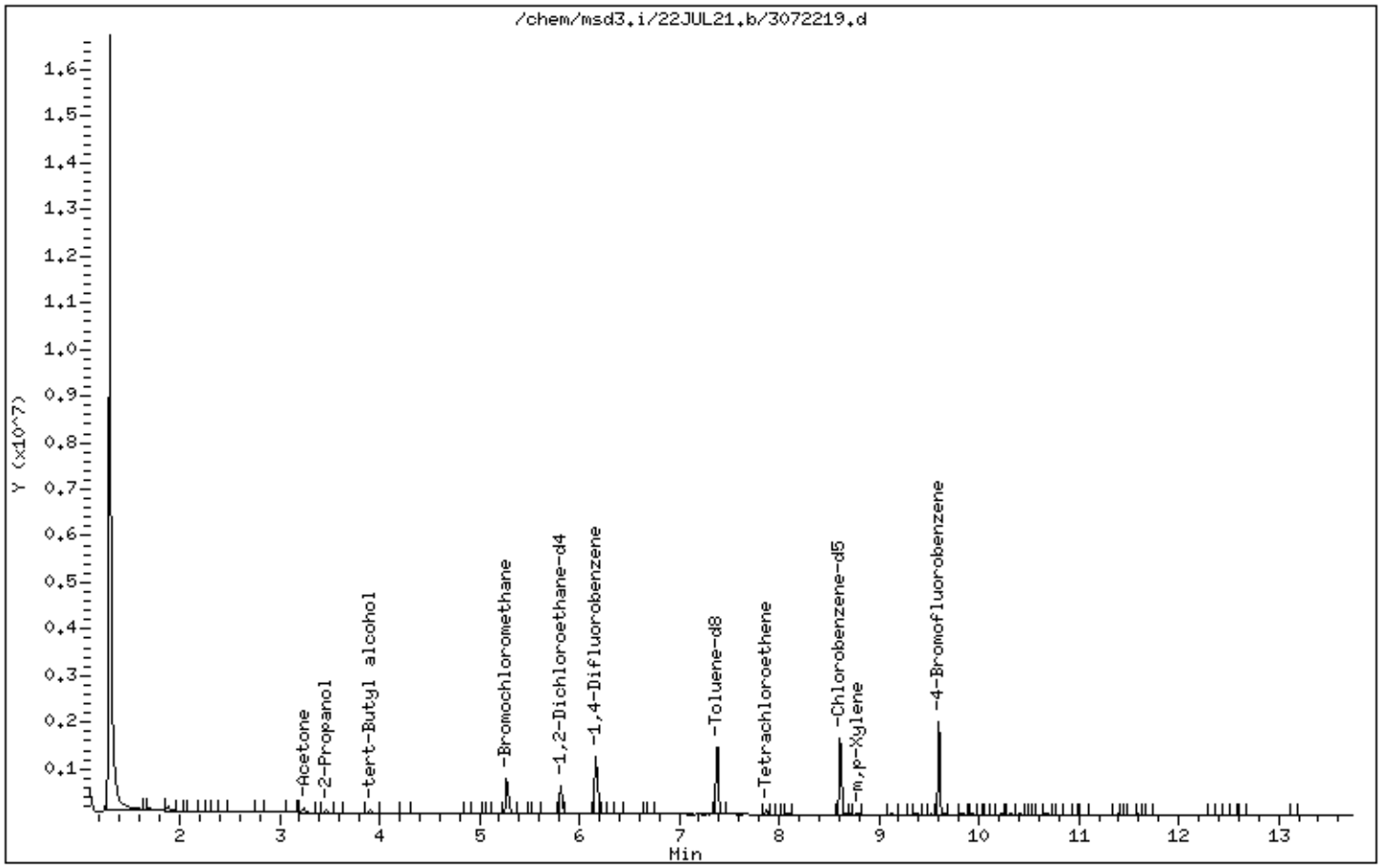
Instrument: msd3.i

Sample Info: 200mL S1081

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072219.d

Date : 22-JUL-2021 19:52

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1081

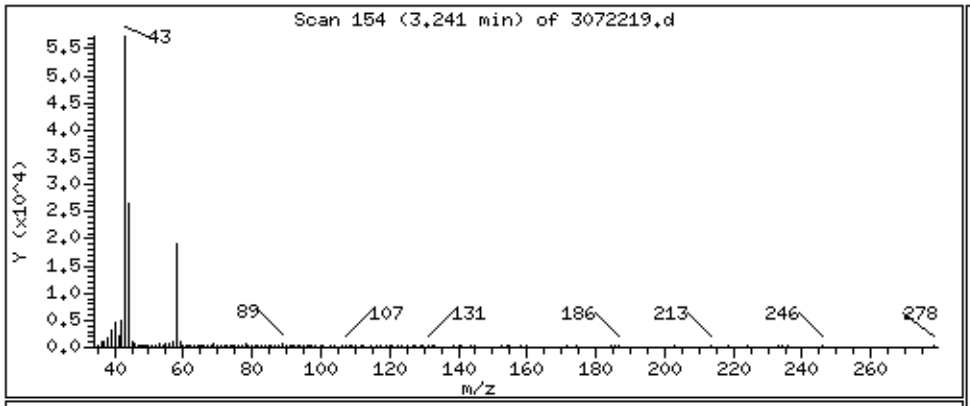
Operator: LD

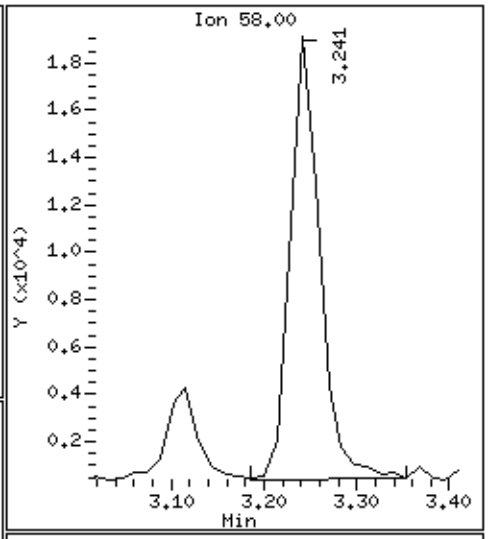
Column phase: RTX-624

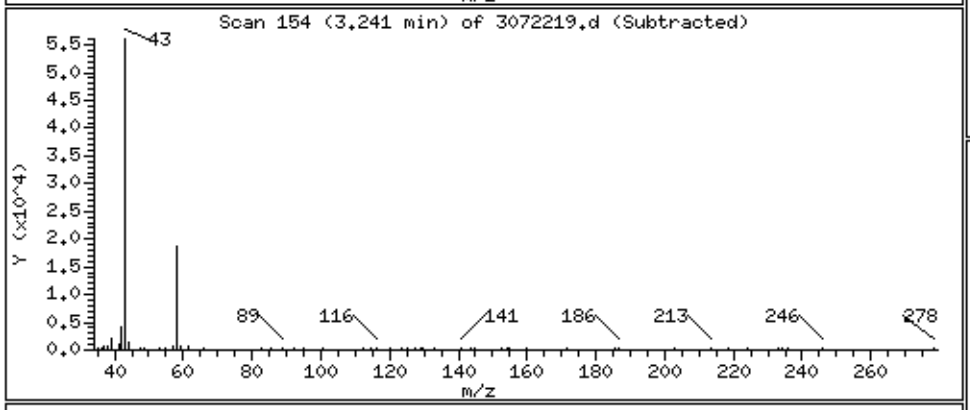
Column diameter: 0.25

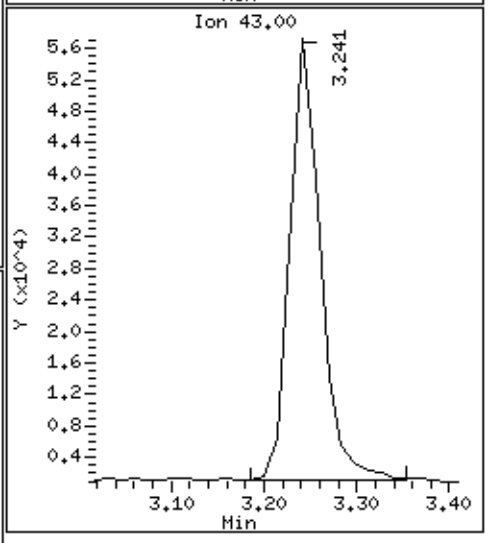
47 Acetone

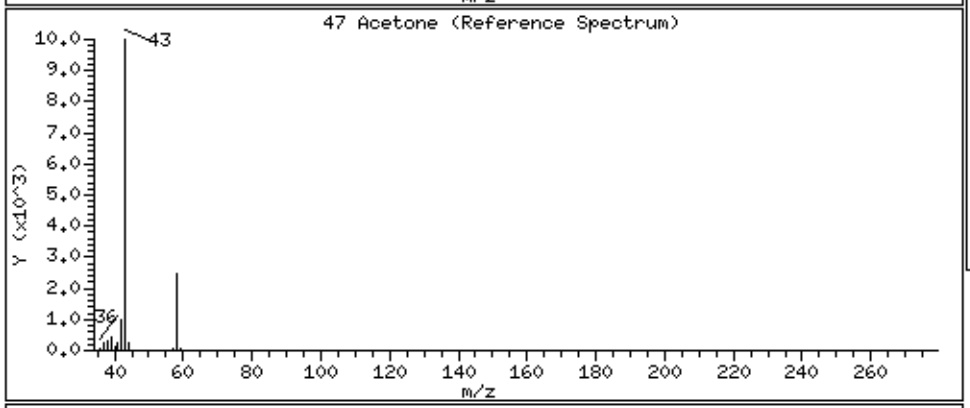
Concentration: 19.370 PPBV

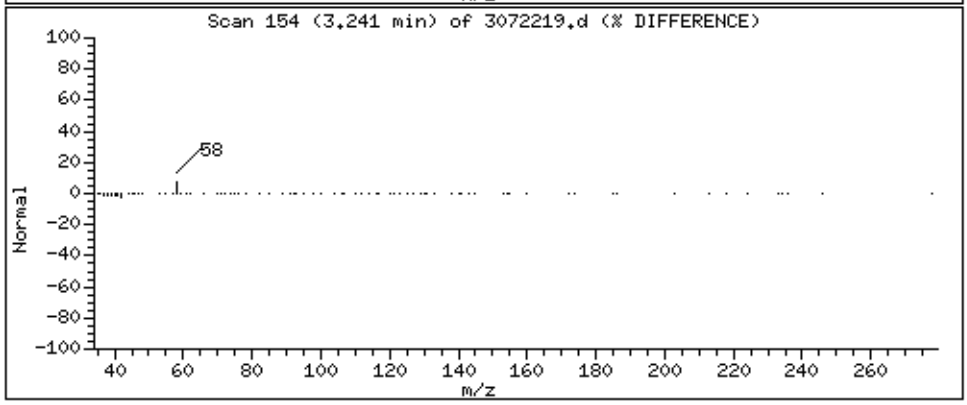












Data File: /chem/msd3.i/22JUL21.b/3072219.d

Date : 22-JUL-2021 19:52

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1081

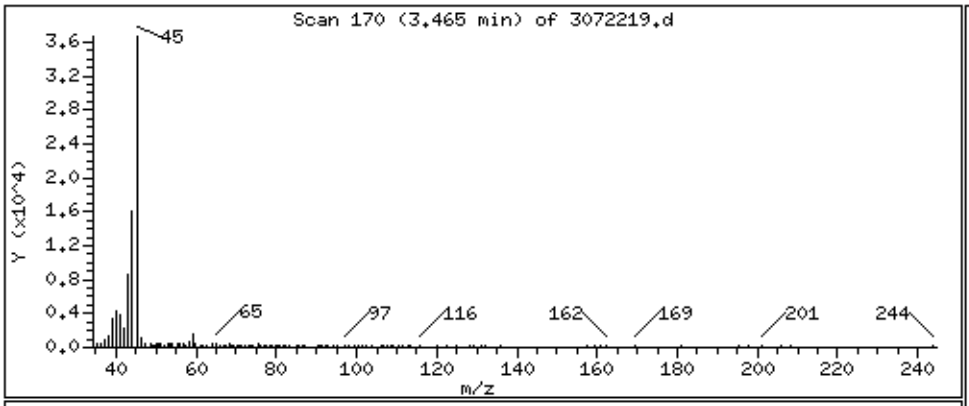
Operator: LD

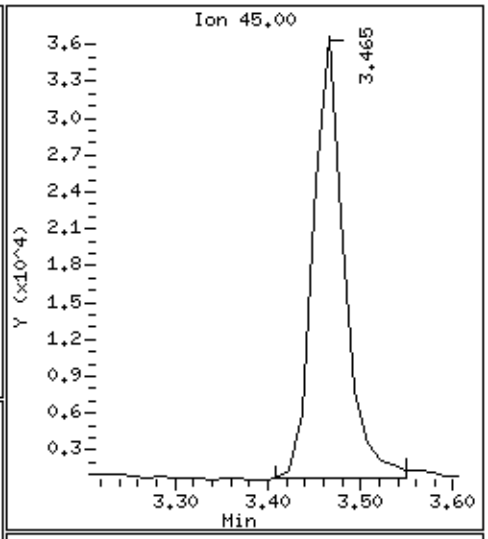
Column phase: RTX-624

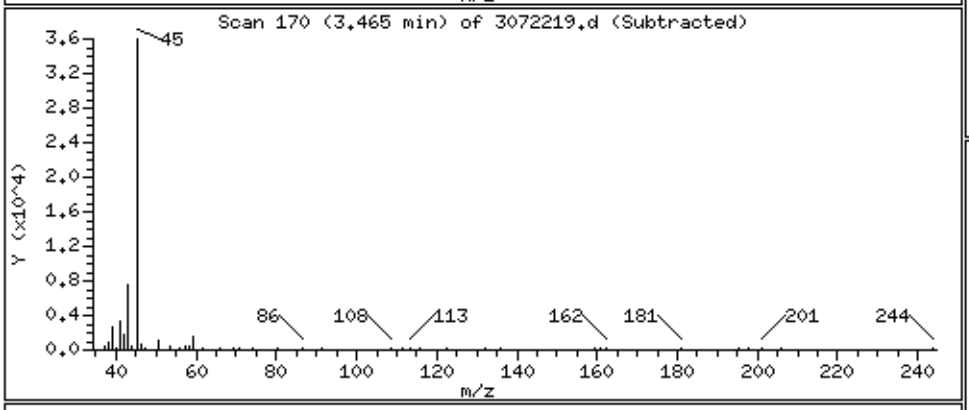
Column diameter: 0.25

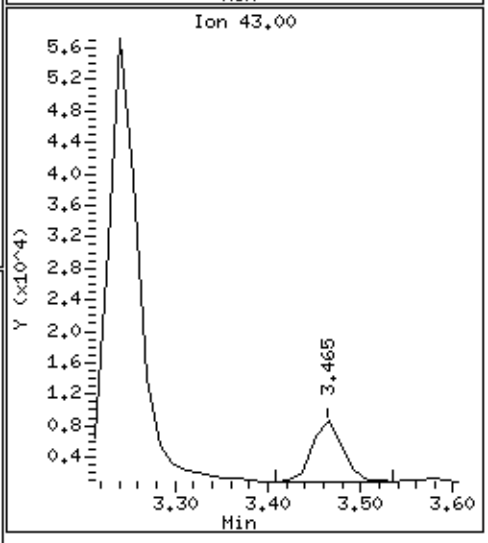
52 2-Propanol

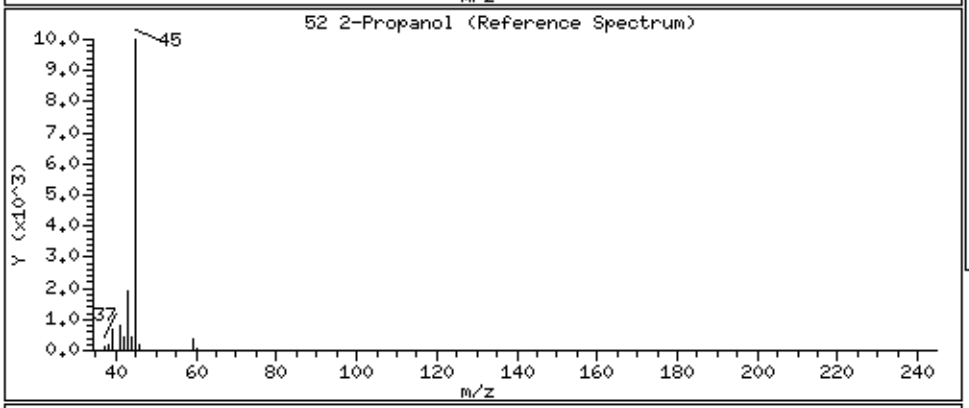
Concentration: 11.052 PPBV

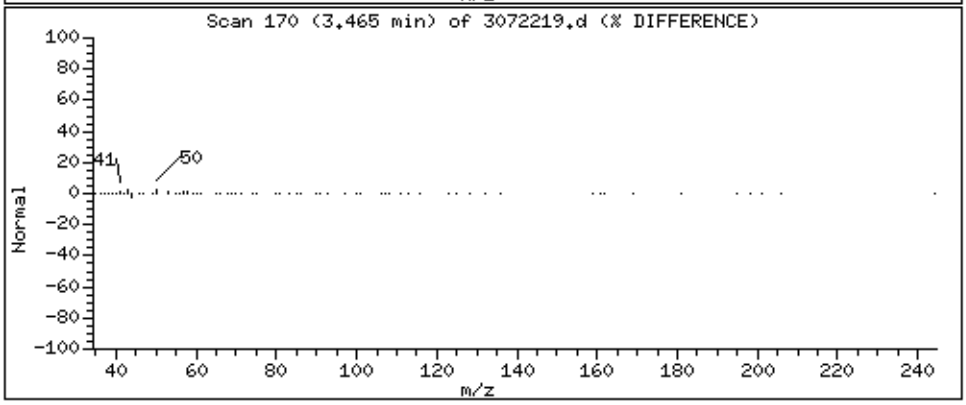












Data File: /chem/msd3.i/22JUL21.b/3072219.d

Date : 22-JUL-2021 19:52

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1081

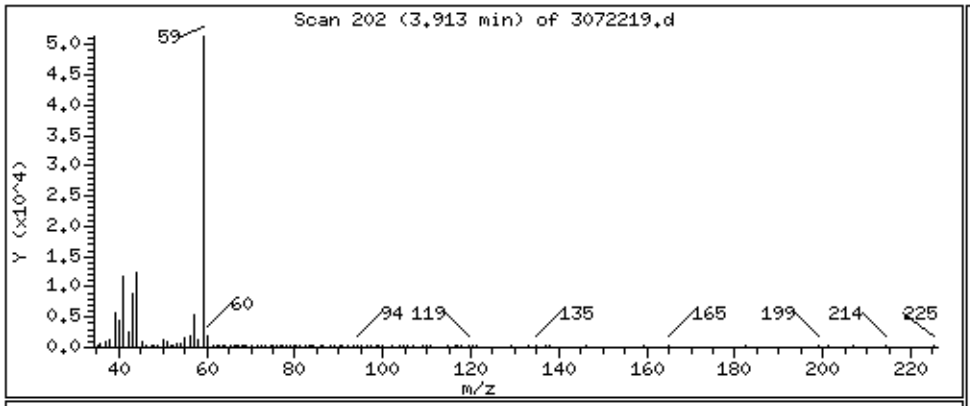
Operator: LD

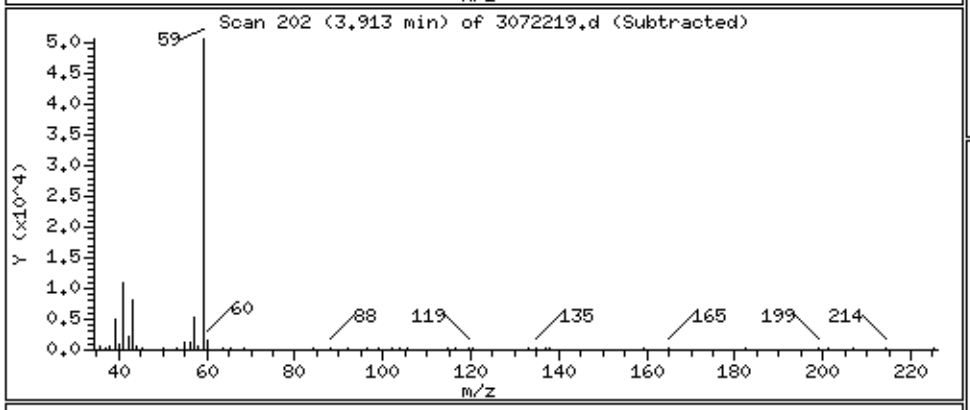
Column phase: RTX-624

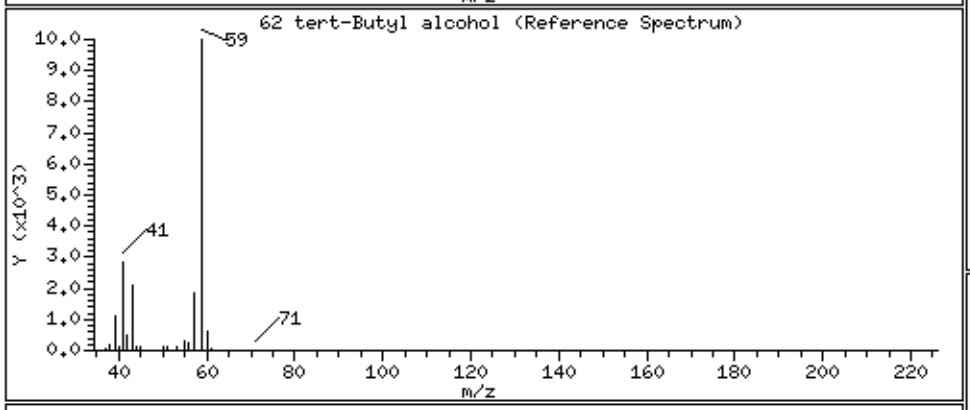
Column diameter: 0.25

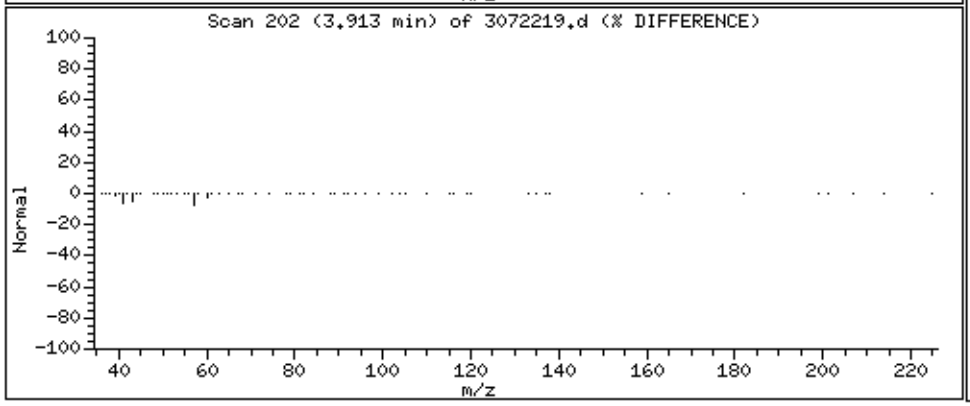
62 tert-Butyl alcohol

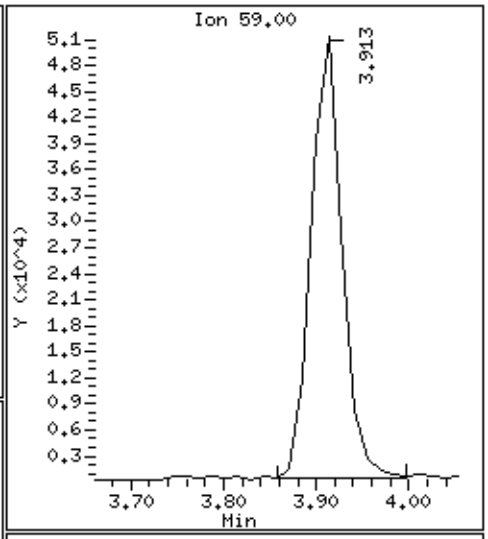
Concentration: 12.478 PPBV

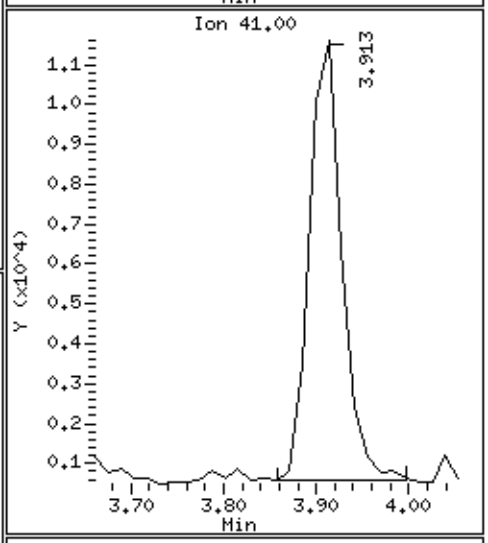


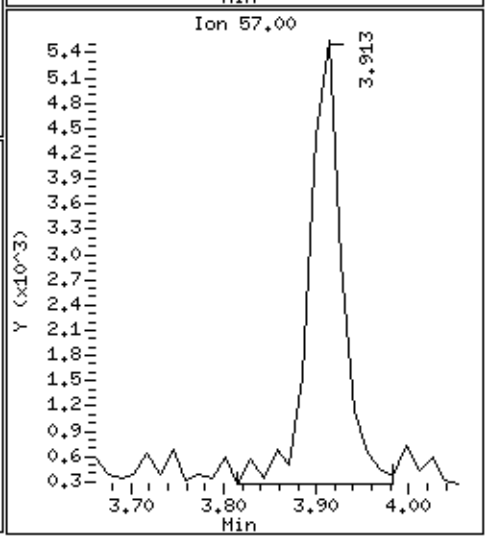












Data File: /chem/msd3.i/22JUL21.b/3072219.d

Date : 22-JUL-2021 19:52

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1081

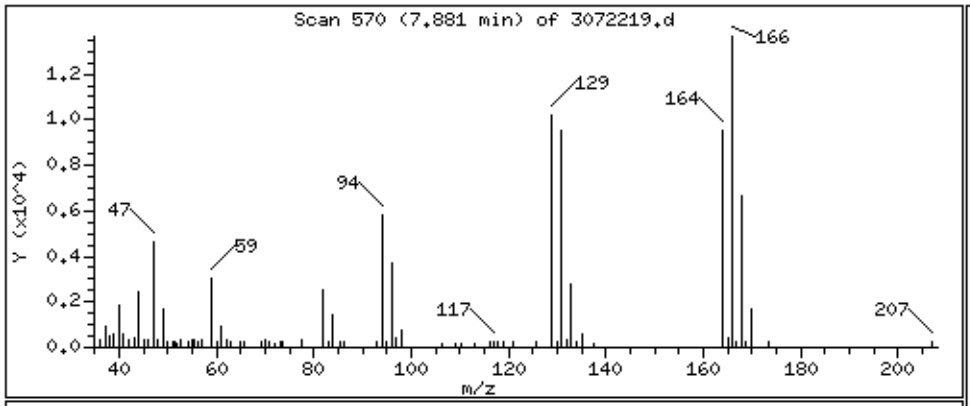
Operator: LD

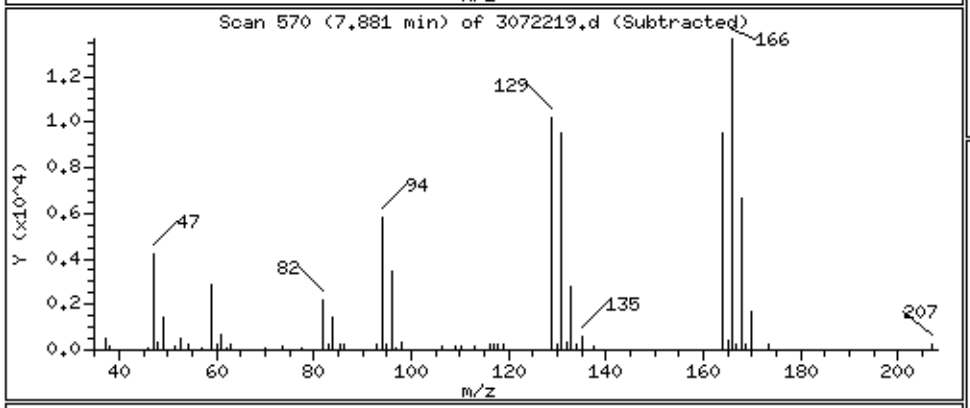
Column phase: RTX-624

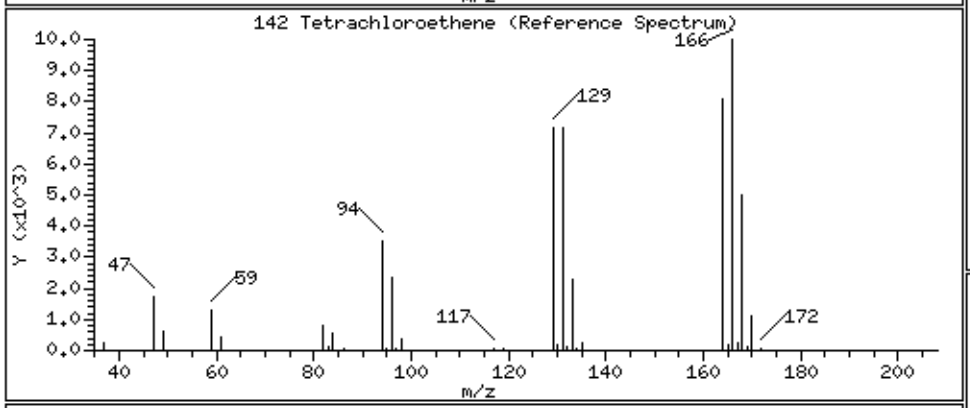
Column diameter: 0.25

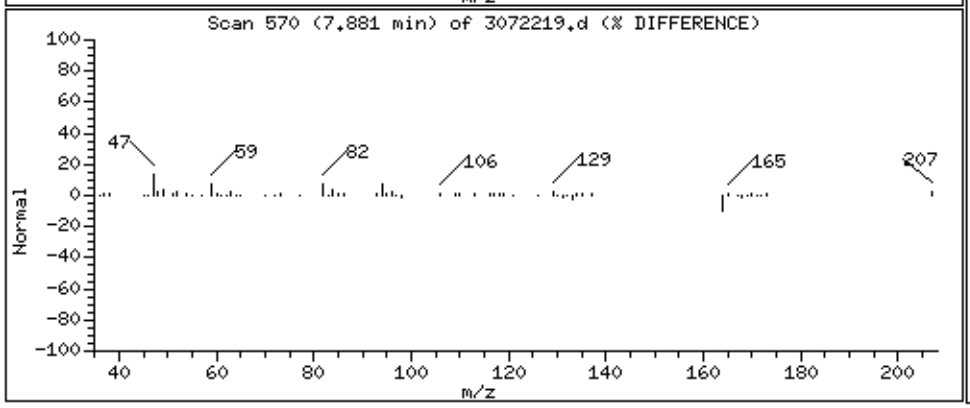
142 Tetrachloroethene

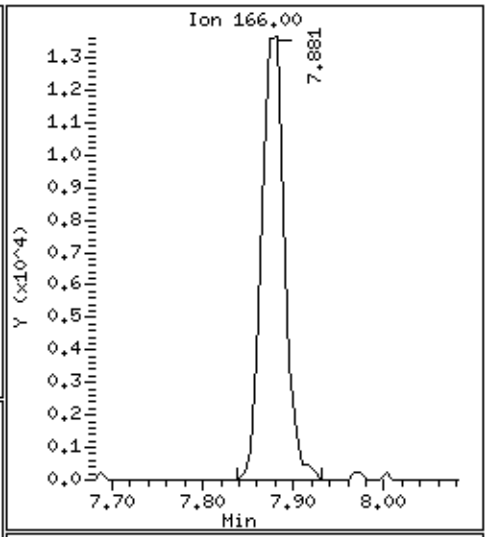
Concentration: 3.983 PPBV

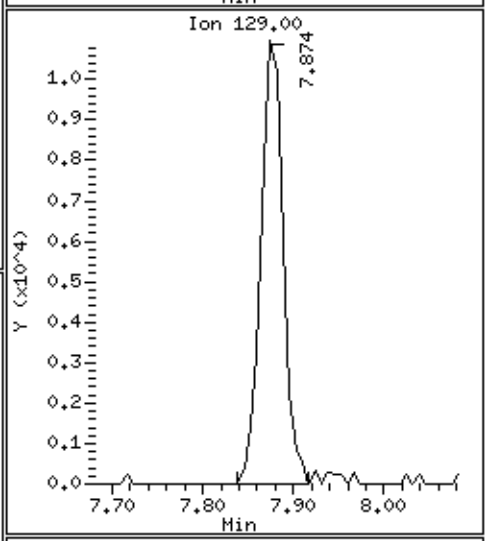


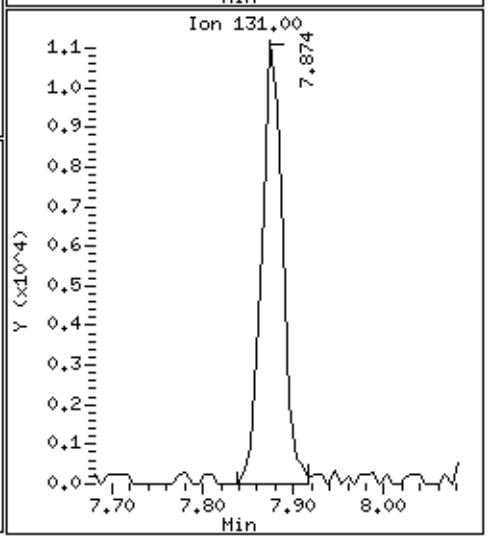












Data File: /chem/msd3.i/22JUL21.b/3072219.d

Page 6

Date : 22-JUL-2021 19:52

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1081

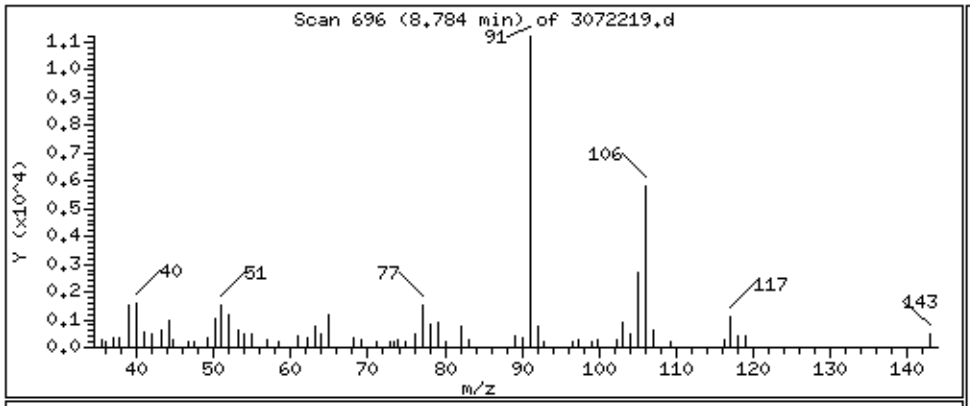
Operator: LD

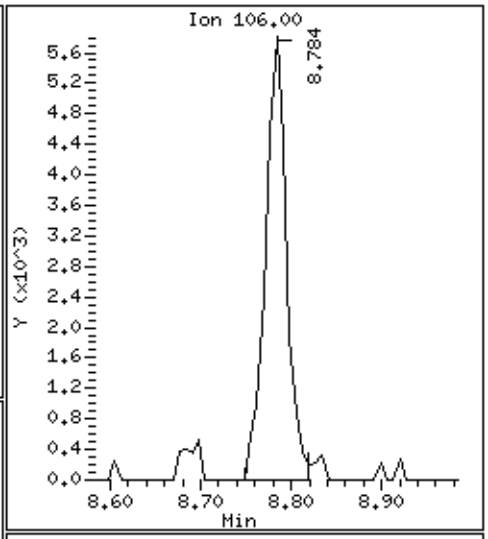
Column phase: RTX-624

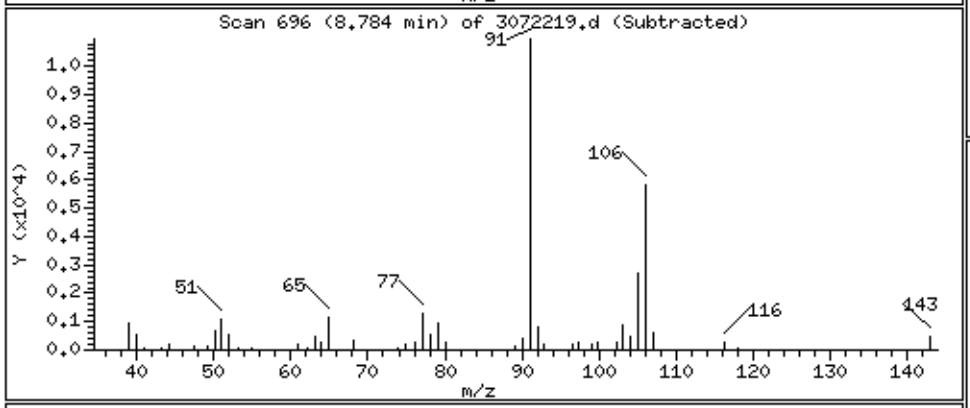
Column diameter: 0.25

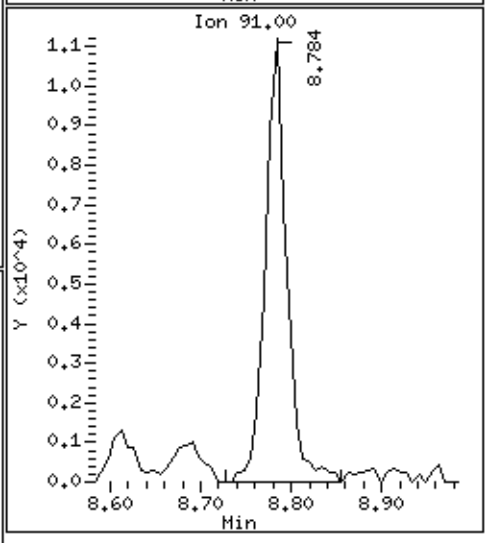
158 m,p-Xylene

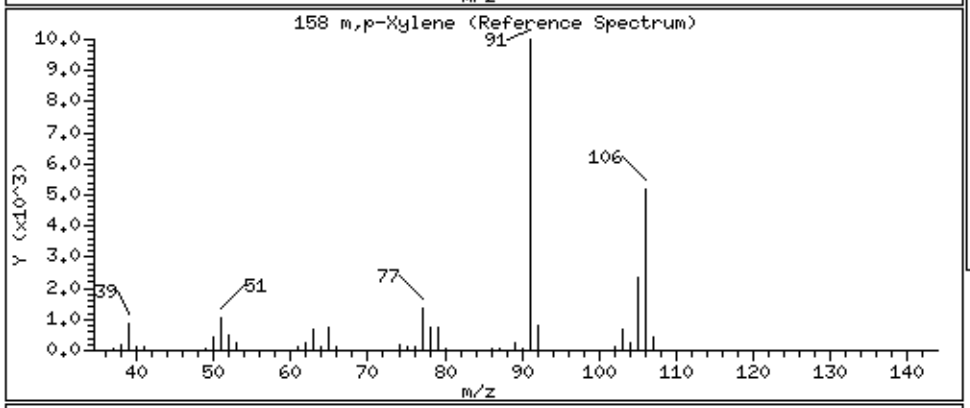
Concentration: 1.439 PPBV

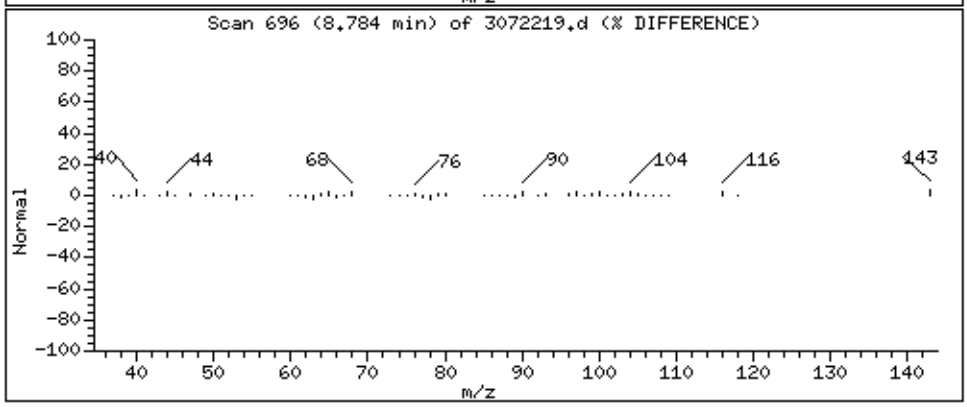












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Client Sample ID: SG-VW47A-03

Lab ID#: 2107241A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072221**	**Date of Collection: 7/8/21 6:54:00 PM**	
Dil. Factor:	**2.17**	**Date of Analysis: 7/22/21 10:31 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Freon 113	1.1	Not Detected	8.3	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Acetone	11	15	26	35
2-Propanol	4.3	Not Detected	11	Not Detected
Carbon Disulfide	4.3	Not Detected	14	Not Detected
3-Chloropropene	4.3	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.3	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Cyclohexane	1.1	Not Detected	3.7	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Tetrachloroethene	1.1	3.9	7.4	27
2-Hexanone	4.3	Not Detected	18	Not Detected

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Client Sample ID: SG-VW47A-03

Lab ID#: 2107241A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072221**	**Date of Collection:**	**7/8/21 6:54:00 PM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/22/21 10:31 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.2	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.3	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.3	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.4	Not Detected
Propylbenzene	1.1	Not Detected	5.3	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.3	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Acrolein	4.3	Not Detected	10	Not Detected
Acrylonitrile	4.3	Not Detected	9.4	Not Detected
tert-Amyl methyl ether	4.3	Not Detected	18	Not Detected
tert-Butyl alcohol	4.3	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.3	Not Detected	42	Not Detected
Dibromomethane	4.3	Not Detected	31	Not Detected
1,1-Difluoroethane	4.3	Not Detected	12	Not Detected
Isopropyl ether	4.3	Not Detected	18	Not Detected
Ethyl Acetate	4.3	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.3	Not Detected	18	Not Detected
Hexachloroethane	4.3	Not Detected	42	Not Detected
Iodomethane	11	Not Detected	63	Not Detected
Propylene	4.3	Not Detected	7.5	Not Detected
1,1,1,2-Tetrachloroethane	4.3	Not Detected	30	Not Detected
1,2,3-Trichloropropane	4.3	Not Detected	26	Not Detected
Vinyl Acetate	4.3	Not Detected	15	Not Detected
Vinyl Bromide	4.3	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW47A-03

Lab ID#: 2107241A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072221**	**Date of Collection:**	**7/8/21 6:54:00 PM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/22/21 10:31 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072221.d
Lab Smp Id: 2107241A-10A
Inj Date : 22-JUL-2021 22:31
Operator : mb Inst ID: msd3.i
Smp Info : 200mL N1944
Misc Info : 6.9 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 1
Dil Factor: 2.17000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	=======	==========	=====
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	300706	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	233404				48.46- 108.46	77.62
5.284	5.284 (1.000)	49	433643				120.39- 180.39	144.21
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	976719	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	145189				0.00- 45.52	14.87
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	917525	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	483856				25.46- 85.46	52.73
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	400959	24.2298	24.230		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	194697				21.66- 81.66	48.56
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	1041182	25.8811	25.881		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	116659				0.00- 41.47	11.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	664812			36.47- 96.47	63.85
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	572276	23.5806	23.580	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	652805			93.06- 153.06	114.07
9.601	9.601 (1.115)	176	537845			62.87- 122.87	93.98
47 Acetone					CAS #: 67-64-1		
3.256	3.213 (0.616)	58	34568	6.85574	14.877	80.00- 120.00	100.00
3.256	3.213 (0.616)	43	105148			299.66- 359.66	304.17
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.881 (0.914)	166	26122	1.81730	3.944	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	19508			48.71- 108.71	74.68
7.874	7.881 (0.914)	131	18317			46.55- 106.55	70.12

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072221.d
Lab Smp Id: 2107241A-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->9.9 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	300706	24.98
108 1,4-Difluorobenze	805743	483446	1128040	976719	21.22
153 Chlorobenzene-d5	719477	431686	1007268	917525	27.53

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 11:34

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-10A
Level: LOW Operator: mb
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.230	96.92	70-130
$ 134 Toluene-d8	25.000	25.881	103.52	70-130
$ 170 4-Bromofluorobenz	25.000	23.580	94.32	70-130

Data File: /chem/msd3.i/22JUL21.b/3072221.d

Date : 22-JUL-2021 22:31

Client ID:

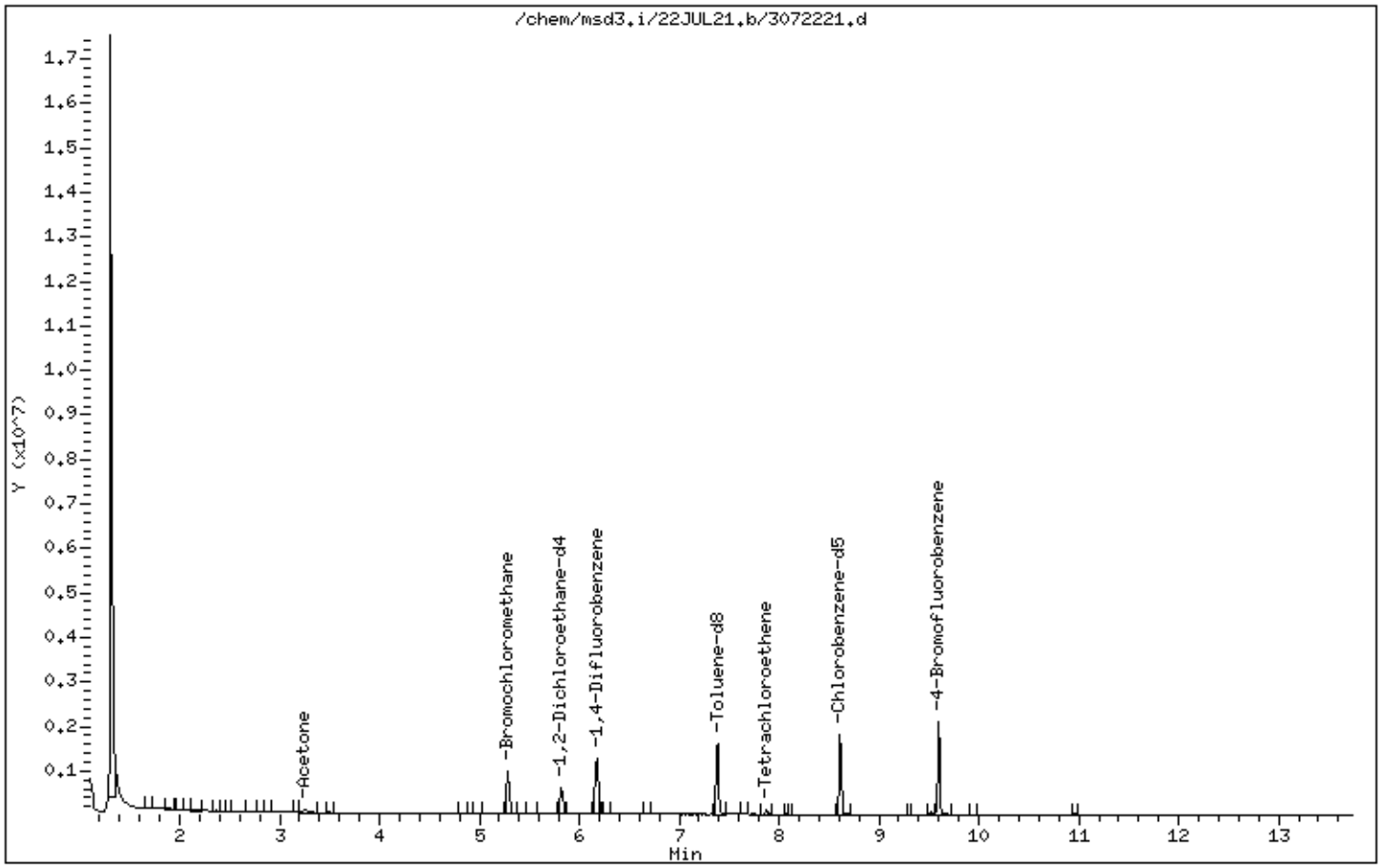
Instrument: msd3.i

Sample Info: 200mL N1944

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072221.d

Date : 22-JUL-2021 22:31

Client ID:

Instrument: msd3.i

Sample Info: 200mL N1944

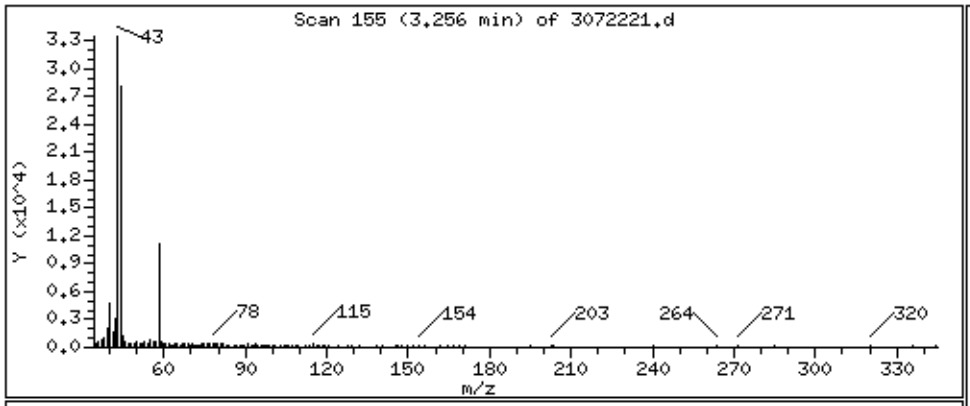
Operator: mb

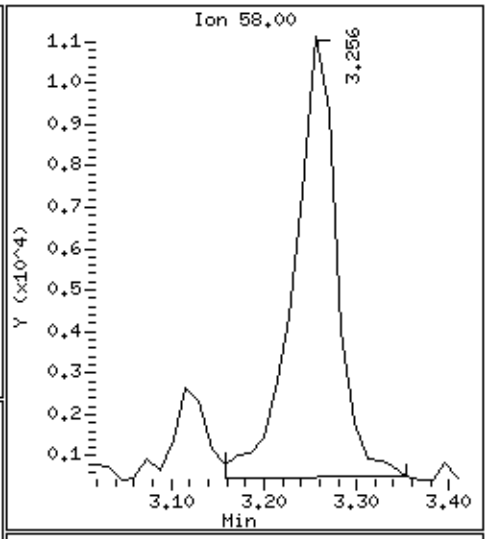
Column phase: RTX-624

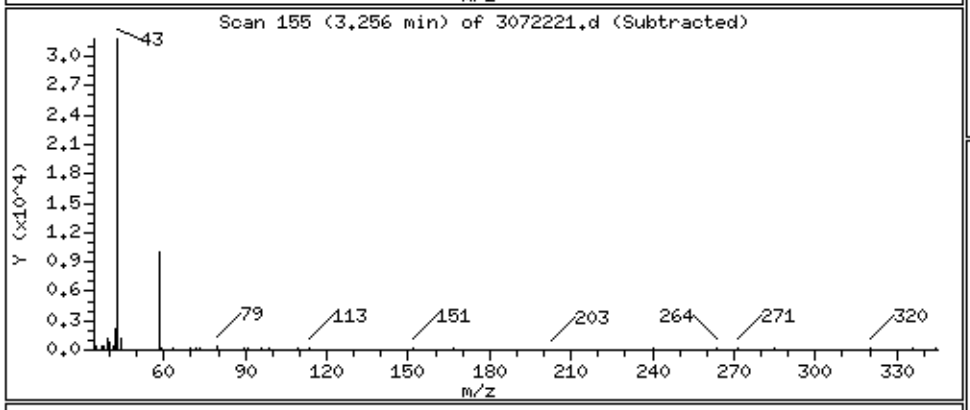
Column diameter: 0.25

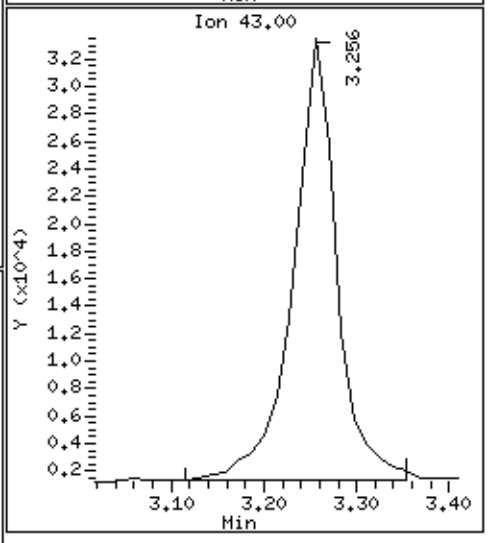
47 Acetone

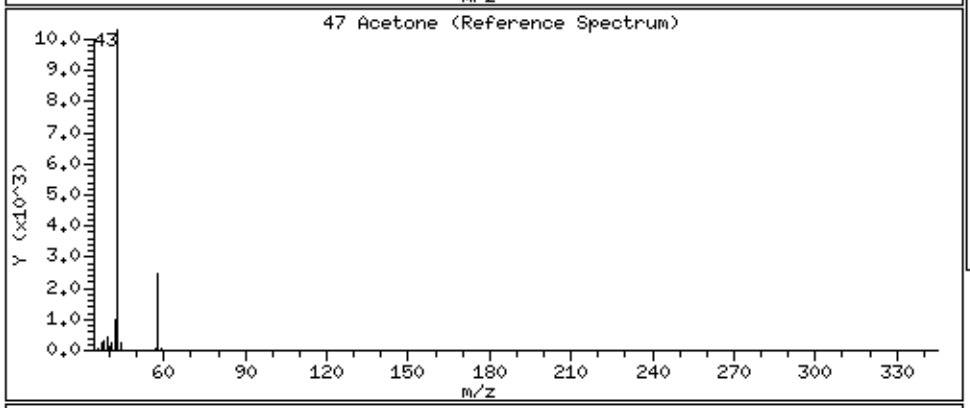
Concentration: 14.877 PPBV

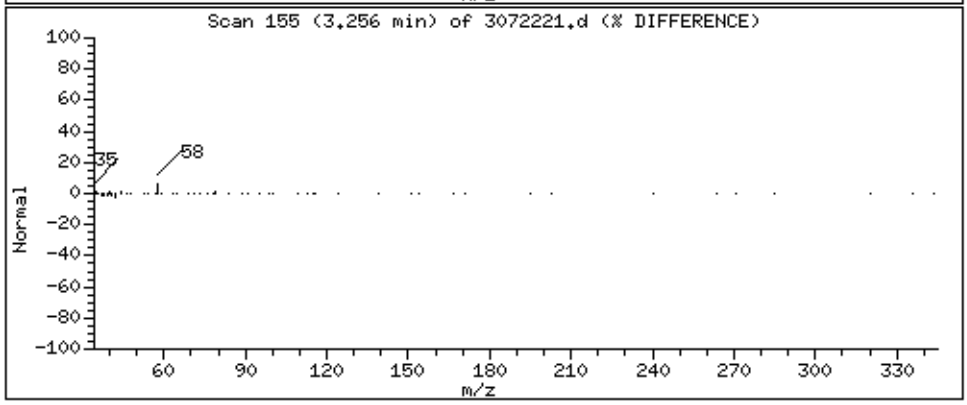












Data File: /chem/msd3.i/22JUL21.b/3072221.d

Date : 22-JUL-2021 22:31

Client ID:

Instrument: msd3.i

Sample Info: 200mL N1944

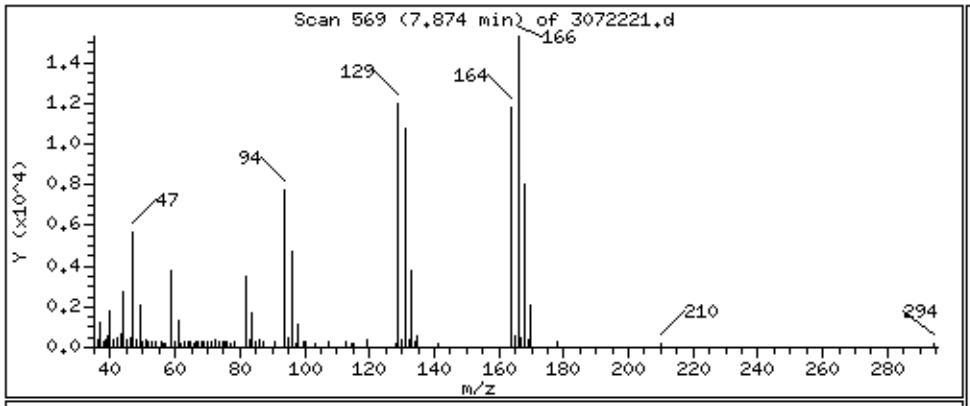
Operator: mb

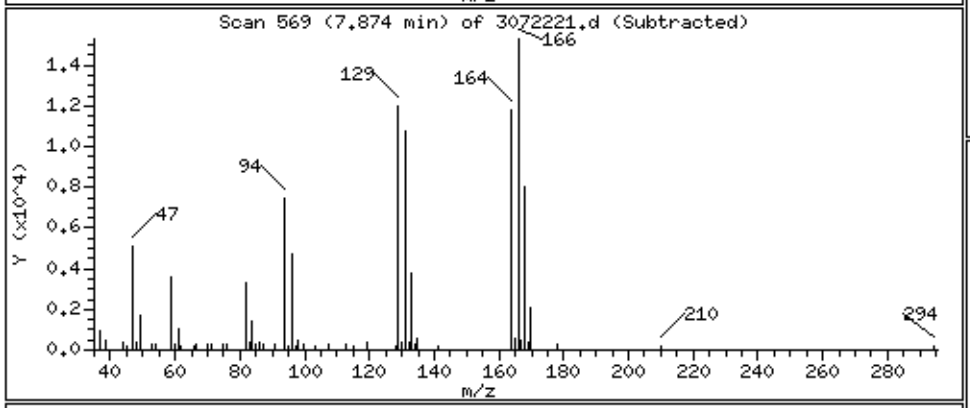
Column phase: RTX-624

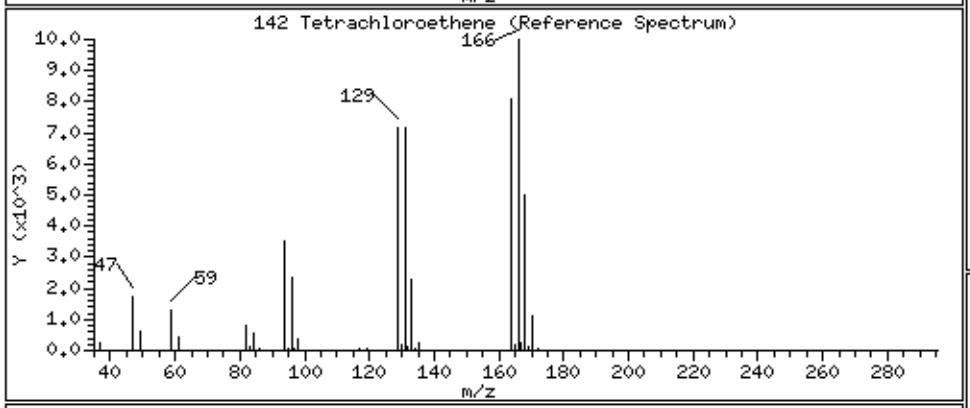
Column diameter: 0.25

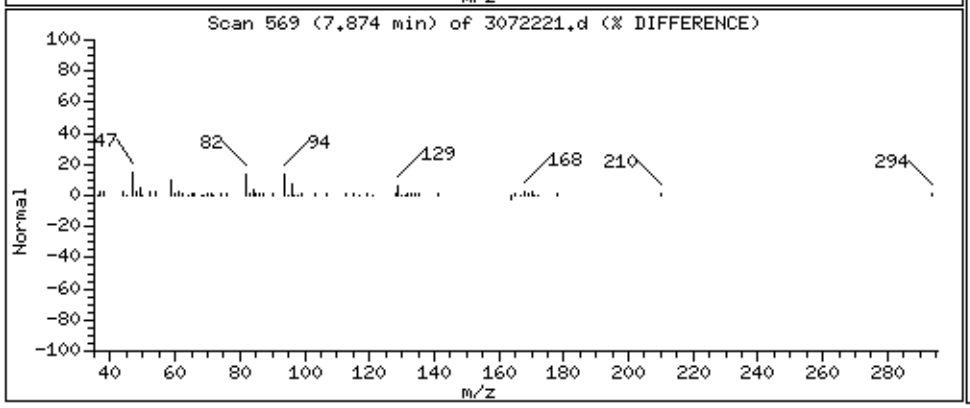
142 Tetrachloroethene

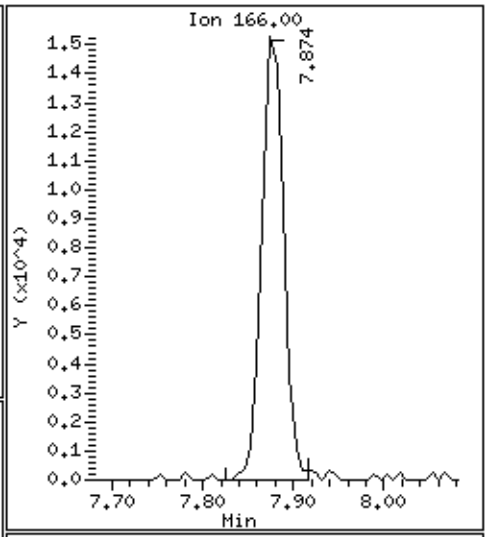
Concentration: 3.944 PPBV

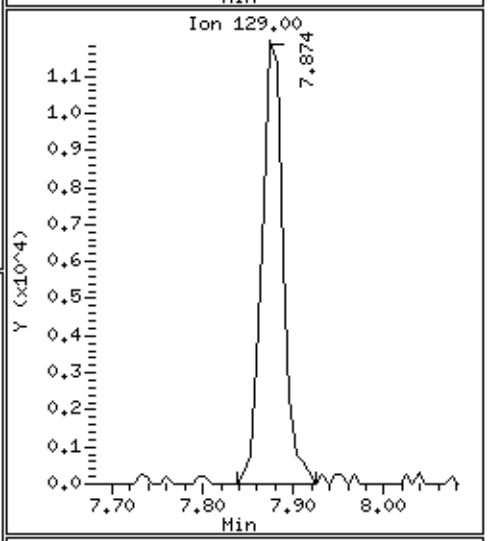


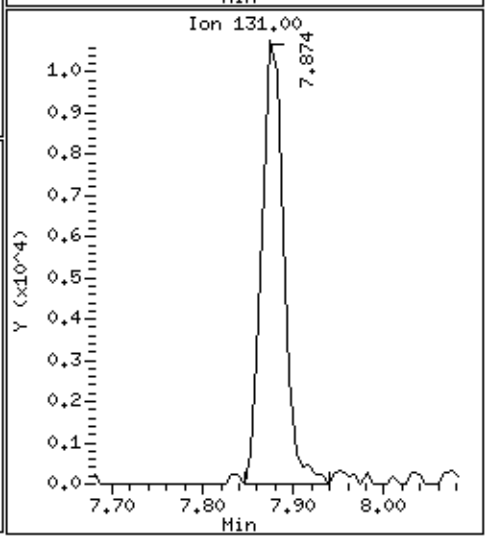












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Client Sample ID: SG-VW47B-02

Lab ID#: 2107241A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072222**	**Date of Collection: 7/8/21 7:27:00 PM**	
Dil. Factor:	**2.18**	**Date of Analysis: 7/22/21 11:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Acetone	11	12	26	29
2-Propanol	4.4	7.2	11	18
Carbon Disulfide	4.4	Not Detected	14	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	72	5.3	350
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
Tetrachloroethene	1.1	1.4	7.4	9.6
2-Hexanone	4.4	Not Detected	18	Not Detected

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Client Sample ID: SG-VW47B-02

Lab ID#: 2107241A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072222**	**Date of Collection: 7/8/21 7:27:00 PM**	
Dil. Factor:	**2.18**	**Date of Analysis: 7/22/21 11:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.3	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	73	5.0	340
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.5	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	32	Not Detected
Hexachlorobutadiene	4.4	Not Detected	46	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
1,1-Difluoroethane	4.4	54	12	150
Isopropyl ether	4.4	Not Detected	18	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Hexachloroethane	4.4	Not Detected	42	Not Detected
Iodomethane	11	Not Detected	63	Not Detected
Propylene	4.4	Not Detected	7.5	Not Detected
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW47B-02

Lab ID#: 2107241A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072222**	**Date of Collection:**	**7/8/21 7:27:00 PM**
Dil. Factor:	**2.18**	**Date of Analysis:**	**7/22/21 11:00 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072222.d
Lab Smp Id: 2107241A-11A
Inj Date : 22-JUL-2021 23:00
Operator : mb Inst ID: msd3.i
Smp Info : 200mL S1315
Misc Info : 7.1 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2
Dil Factor: 2.18000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	240668	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	186149				48.46- 108.46	77.35
5.284	5.284 (1.000)	49	326923				120.39- 180.39	135.84
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	781263	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	114153				0.00- 45.52	14.61
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	700808	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	368942				25.46- 85.46	52.65
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	319909	24.1546	24.155		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	156374				21.66- 81.66	48.88
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	778249	24.1851	24.185		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	86524				0.00- 41.47	11.12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	507887			36.47- 96.47	65.26
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	451121	24.3366	24.337	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	511968			93.06- 153.06	113.49
9.601	9.601 (1.114)	176	411990			62.87- 122.87	91.33
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	94003	24.8068	54.079	80.00- 120.00	100.00
1.451	1.479 (0.275)	51	211049			321.86- 381.86	224.51
1.451	1.451 (0.275)	47	48954			45.34- 105.34	52.08
47 Acetone					CAS #: 67-64-1		
3.242	3.213 (0.613)	58	22929	5.68184	12.386	80.00- 120.00	100.00
3.242	3.213 (0.613)	43	79242			299.66- 359.66	345.59
52 2-Propanol					CAS #: 67-63-0		
3.437	3.409 (0.650)	45	47920	3.30184	7.198	80.00- 120.00	100.00
3.437	3.409 (0.650)	43	10114			0.00- 48.61	21.11
92 Chloroform					CAS #: 67-66-3		
5.340	5.354 (1.011)	83	501912	33.2629	72.513	80.00- 120.00	100.00
5.340	5.354 (1.011)	85	328242			34.71- 94.71	65.40
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	7150	0.65125	1.420	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	5528			48.71- 108.71	77.32
7.881	7.881 (0.914)	131	5690			46.55- 106.55	79.58
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	640176	33.4229	72.862	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	205058			2.13- 62.13	32.03
8.641	8.641 (1.002)	77	340248			26.35- 86.35	53.15

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072222.d
Lab Smp Id: 2107241A-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 7.1 Hg->9.8 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	240668	0.03
108 1,4-Difluorobenze	805743	483446	1128040	781263	-3.04
153 Chlorobenzene-d5	719477	431686	1007268	700808	-2.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 17:03

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-11A
Level: LOW Operator: mb
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 7.1 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.155	96.62	70-130
$ 134 Toluene-d8	25.000	24.185	96.74	70-130
$ 170 4-Bromofluorobenz	25.000	24.337	97.35	70-130

Data File: /chem/msd3.i/22JUL21.b/3072222.d

Date : 22-JUL-2021 23:00

Client ID:

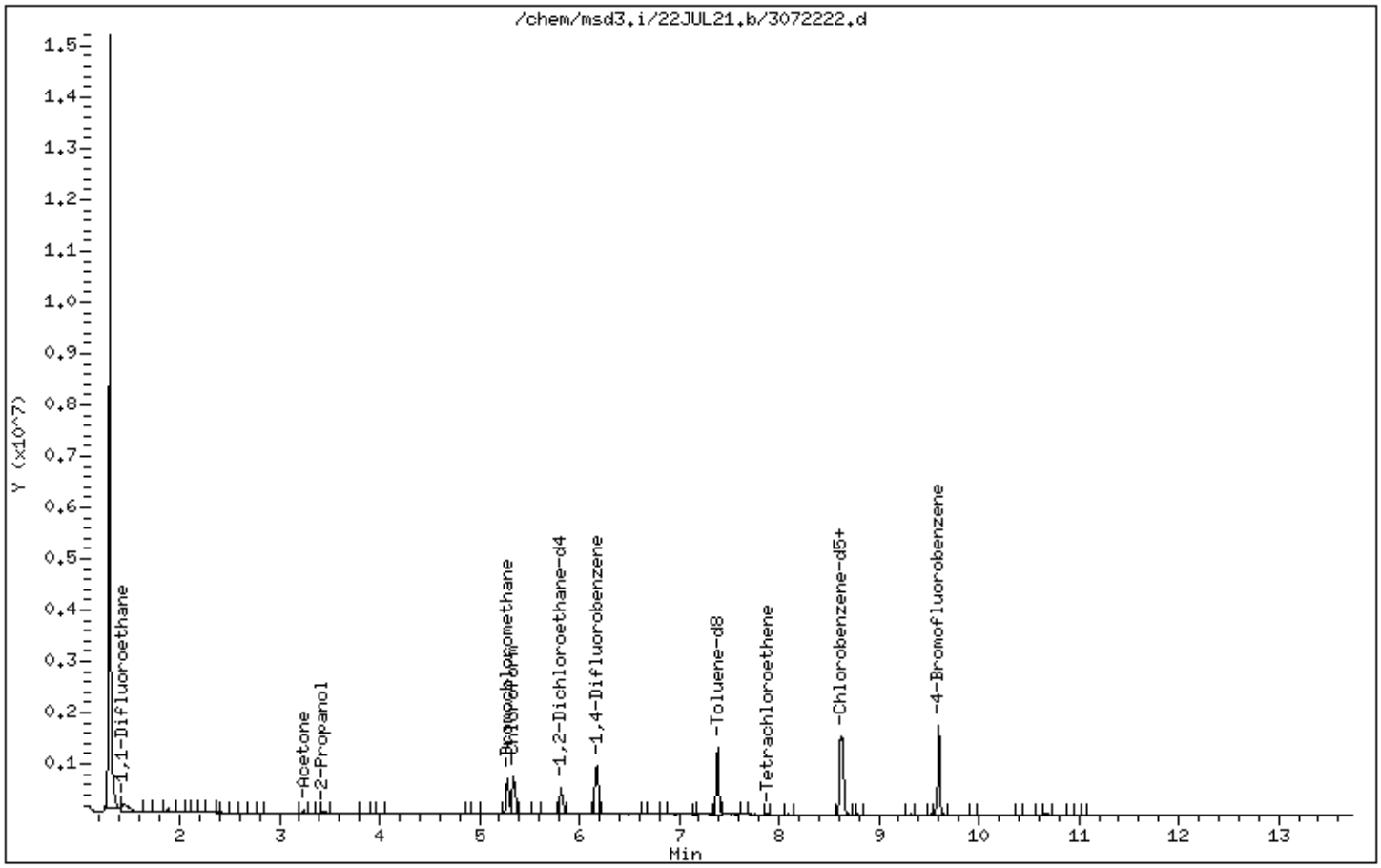
Instrument: msd3.i

Sample Info: 200mL S1315

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072222.d

Date : 22-JUL-2021 23:00

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1315

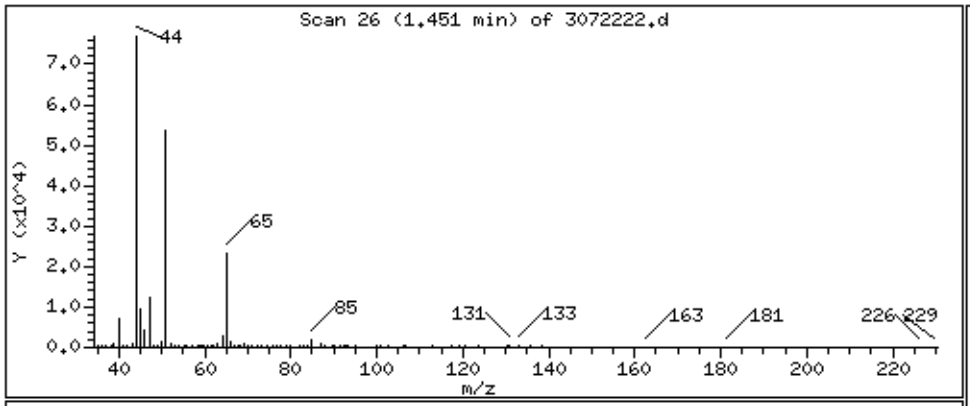
Operator: mb

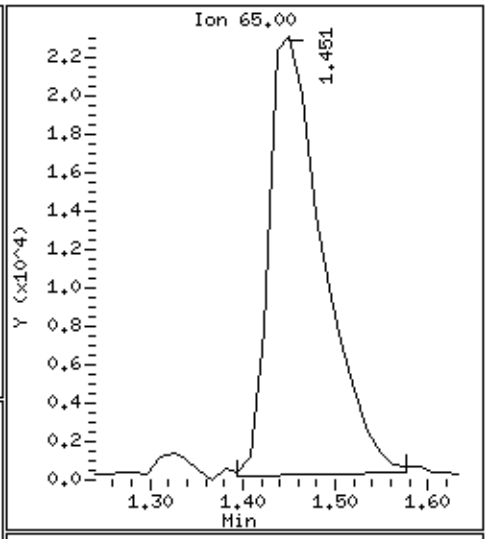
Column phase: RTX-624

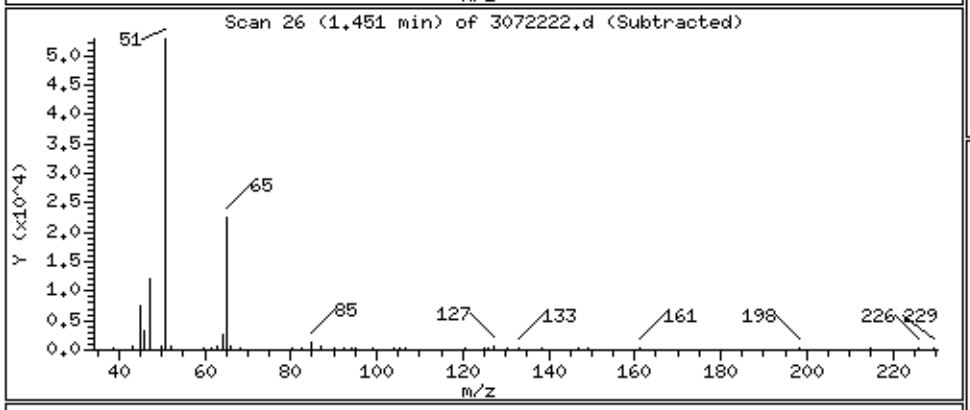
Column diameter: 0.25

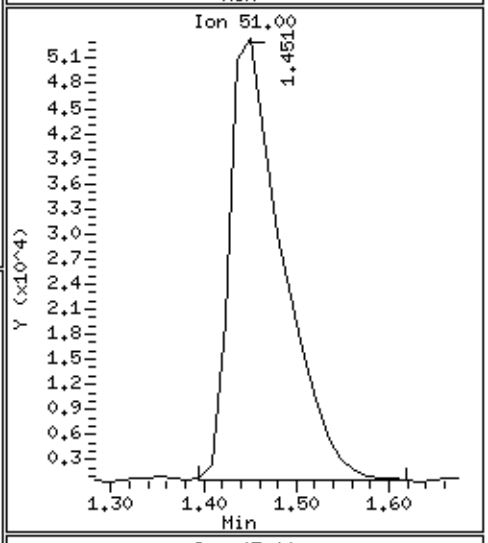
7 1,1-Difluoroethane

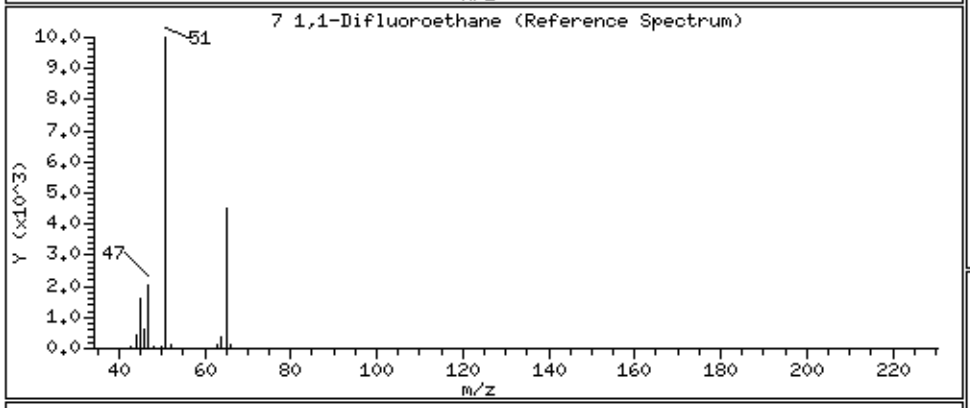
Concentration: 54.079 PPBV

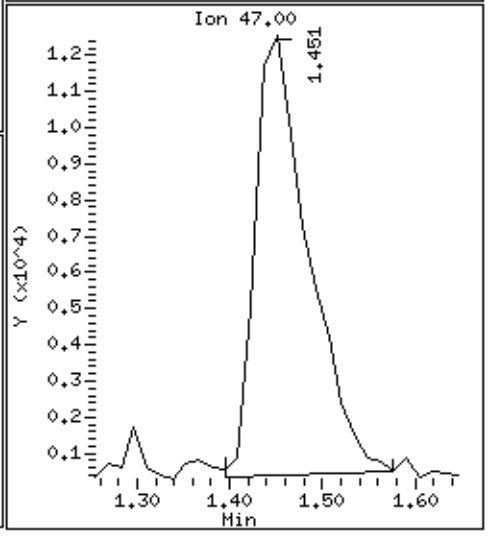


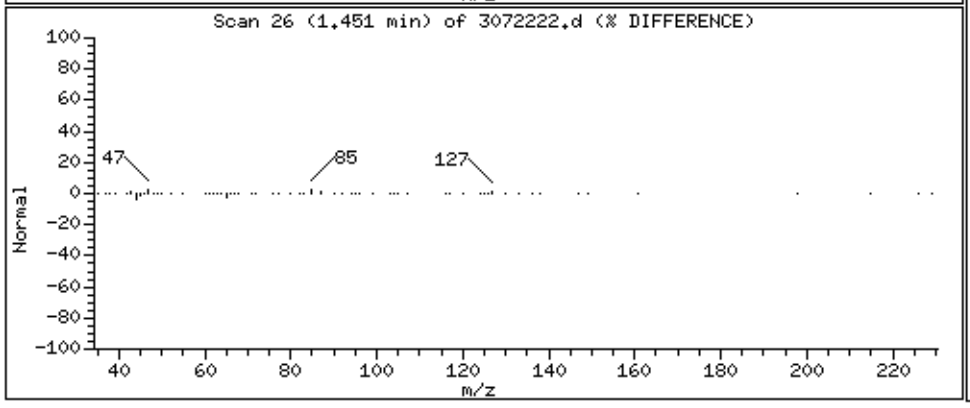












Data File: /chem/msd3.i/22JUL21.b/3072222.d

Date : 22-JUL-2021 23:00

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1315

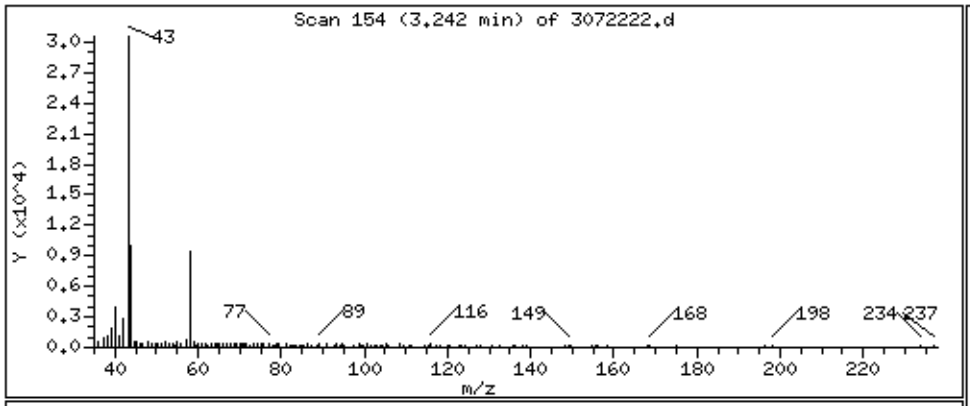
Operator: mb

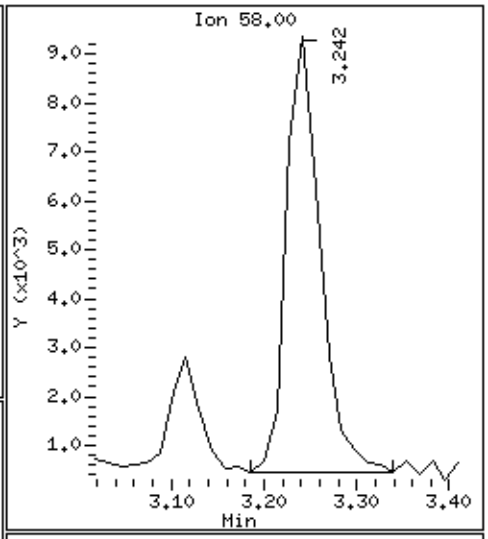
Column phase: RTX-624

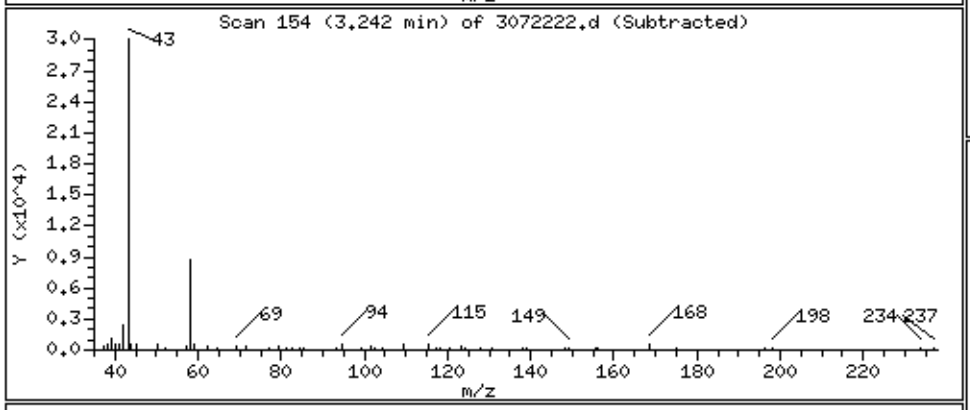
Column diameter: 0.25

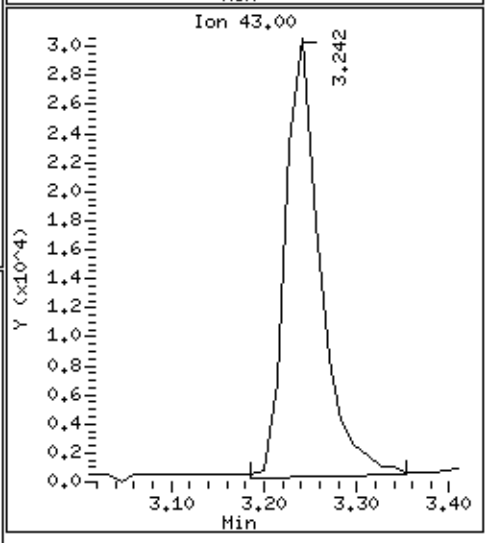
47 Acetone

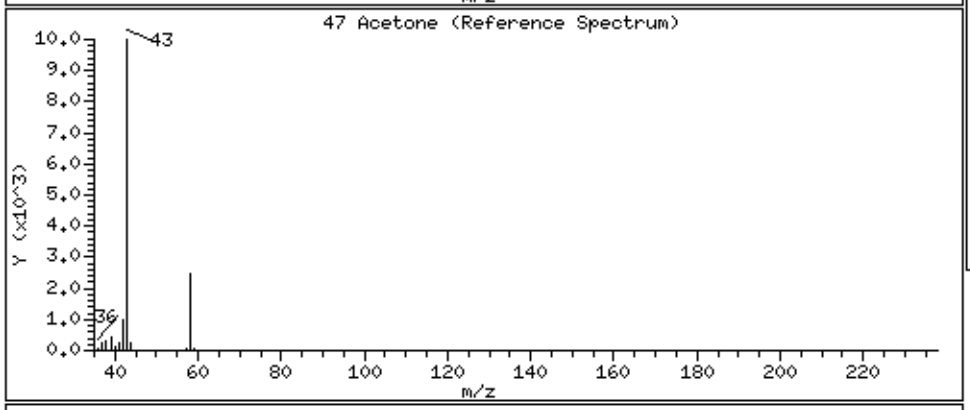
Concentration: 12.386 PPBV

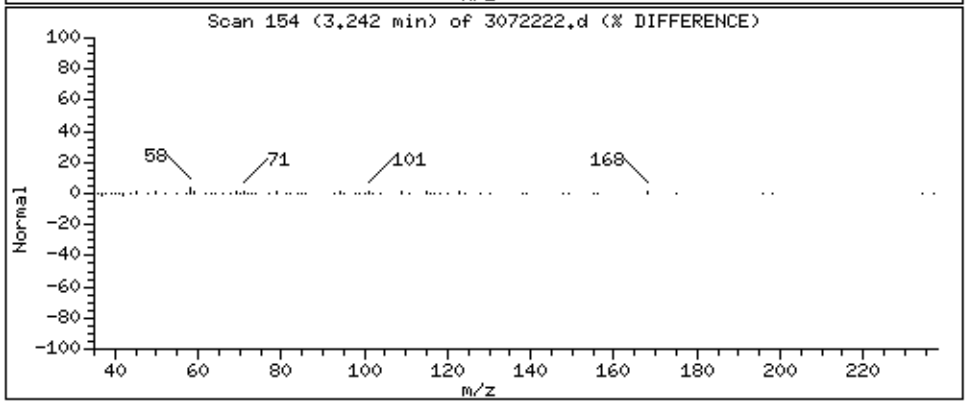












Data File: /chem/msd3.i/22JUL21.b/3072222.d

Date : 22-JUL-2021 23:00

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1315

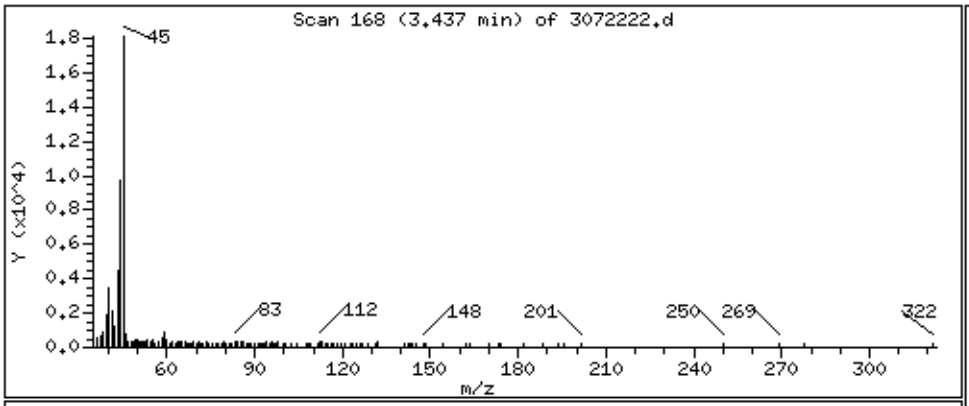
Operator: mb

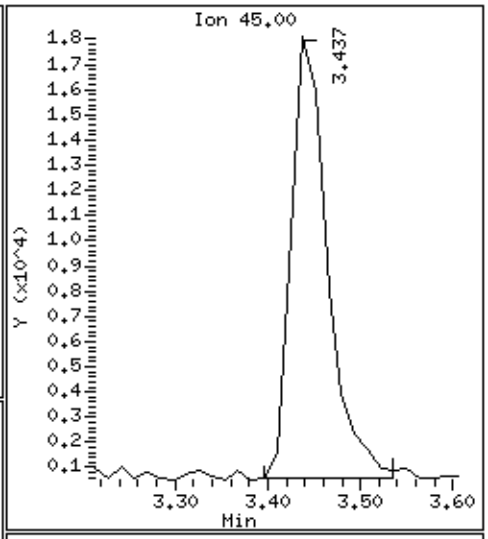
Column phase: RTX-624

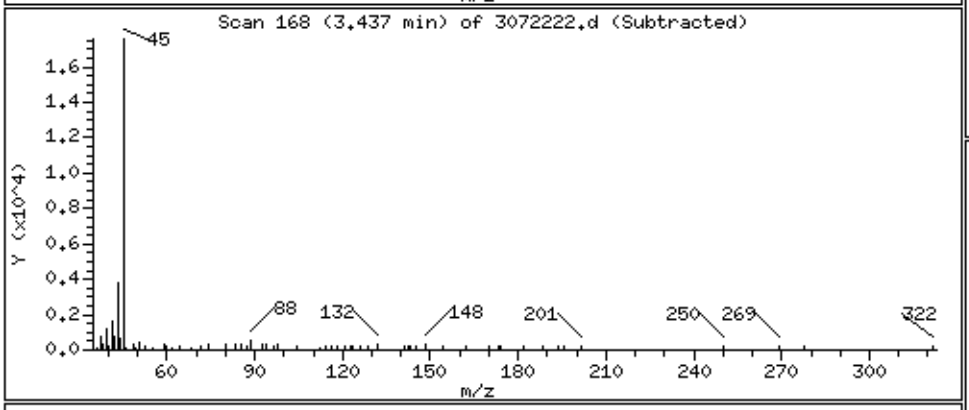
Column diameter: 0.25

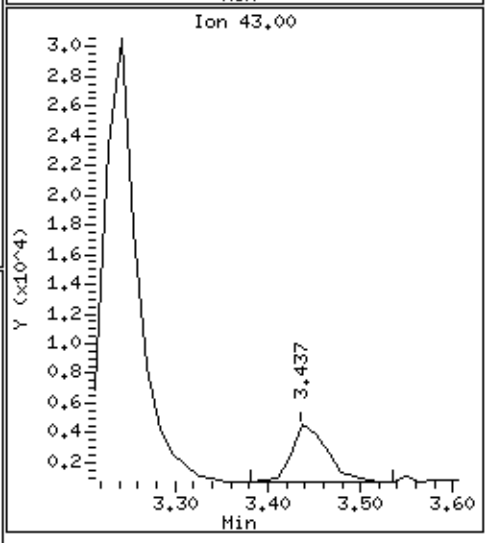
52 2-Propanol

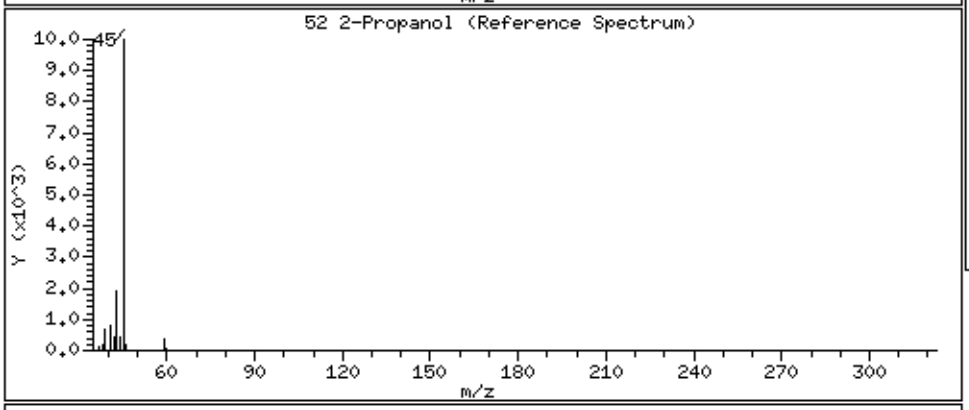
Concentration: 7.198 PPBV

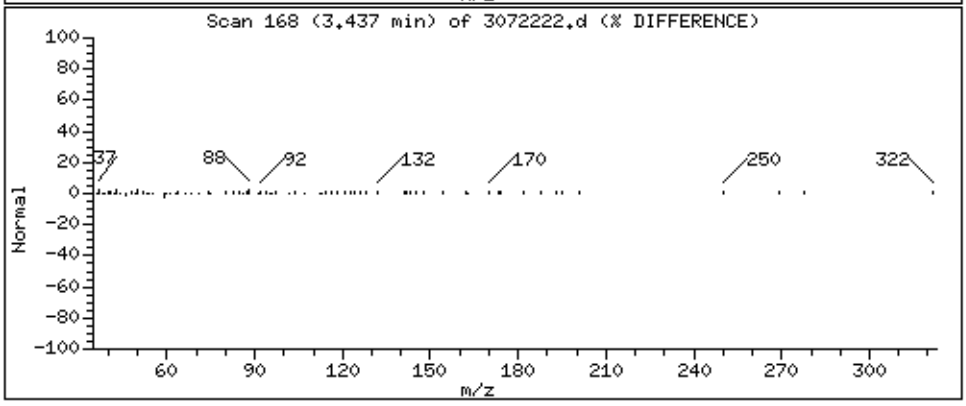












Data File: /chem/msd3.i/22JUL21.b/3072222.d

Date : 22-JUL-2021 23:00

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1315

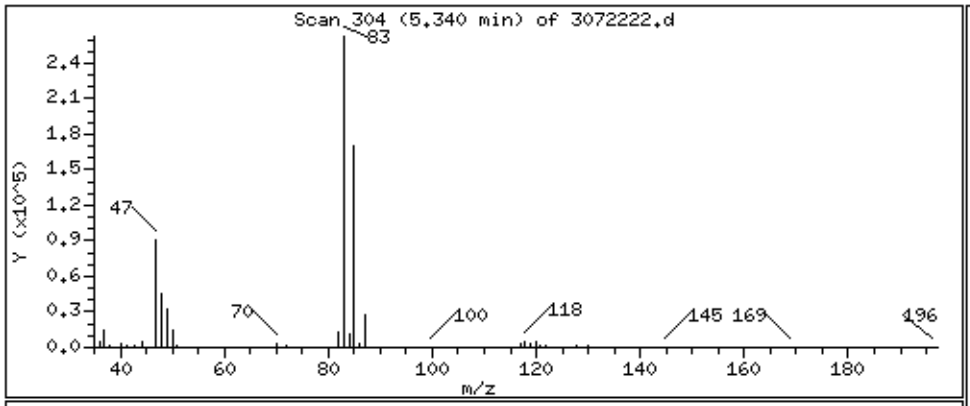
Operator: mb

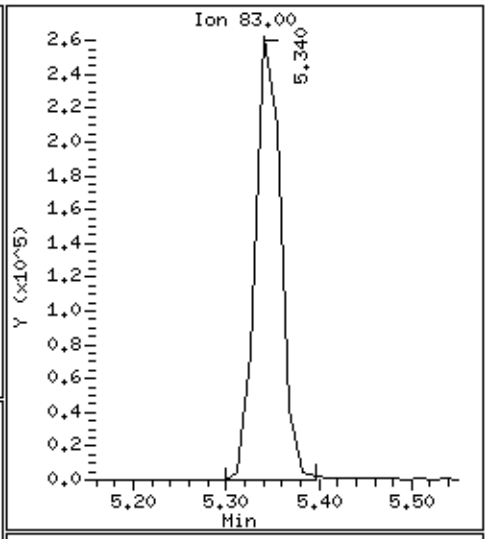
Column phase: RTX-624

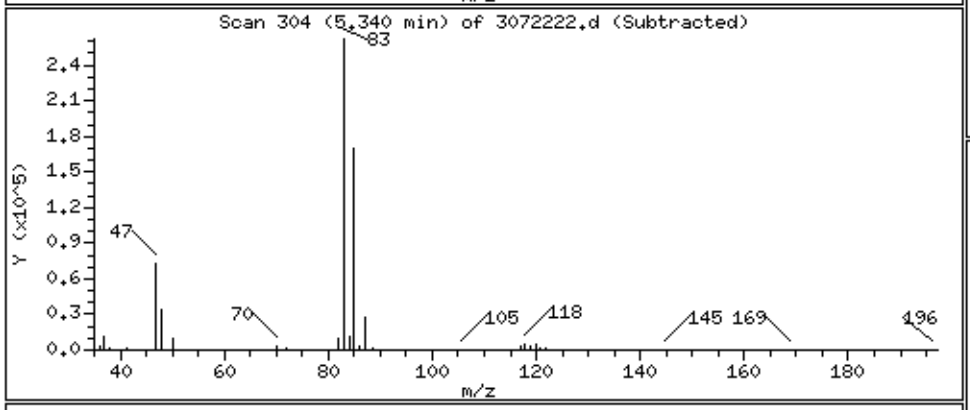
Column diameter: 0.25

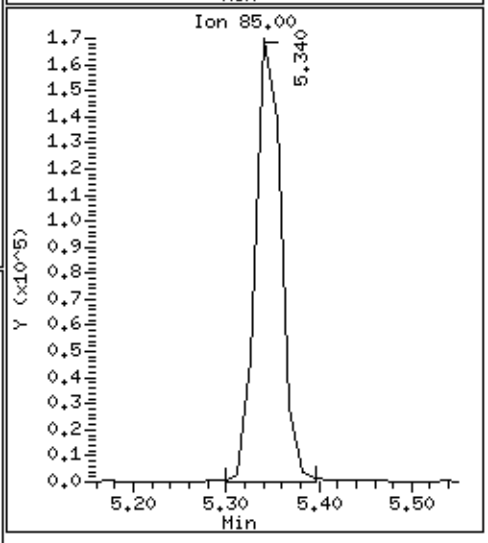
92 Chloroform

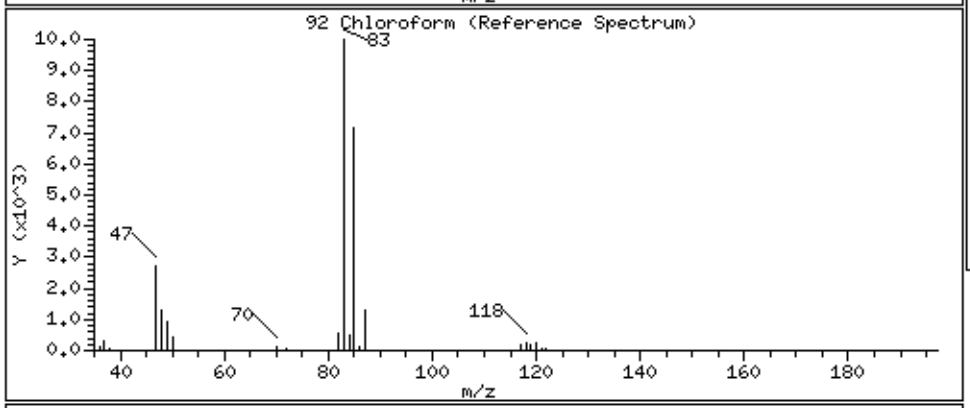
Concentration: 72.513 PPBV

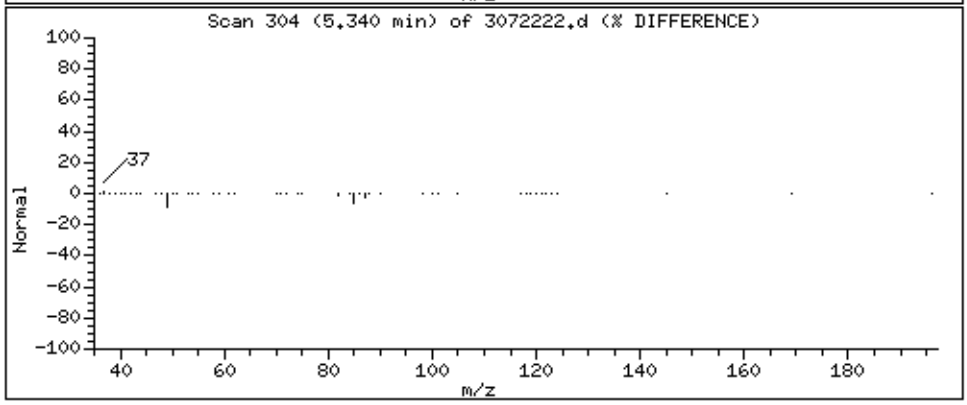












Data File: /chem/msd3.i/22JUL21.b/3072222.d

Date : 22-JUL-2021 23:00

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1315

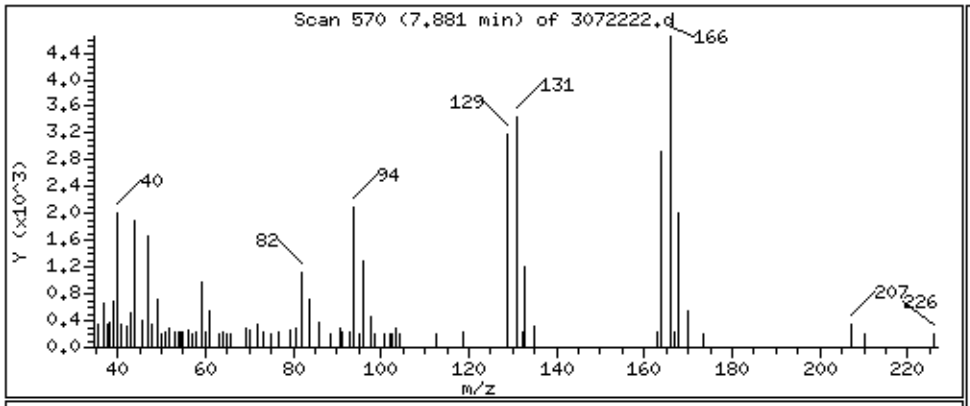
Operator: mb

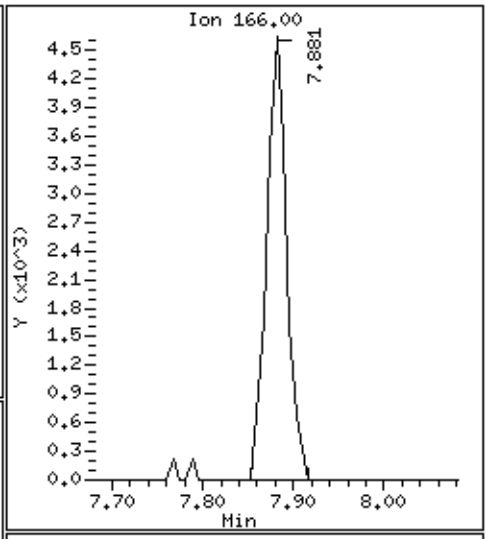
Column phase: RTX-624

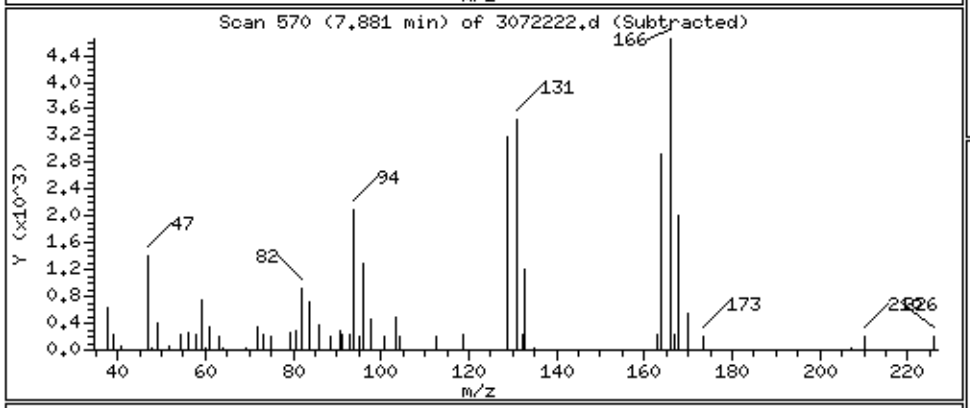
Column diameter: 0.25

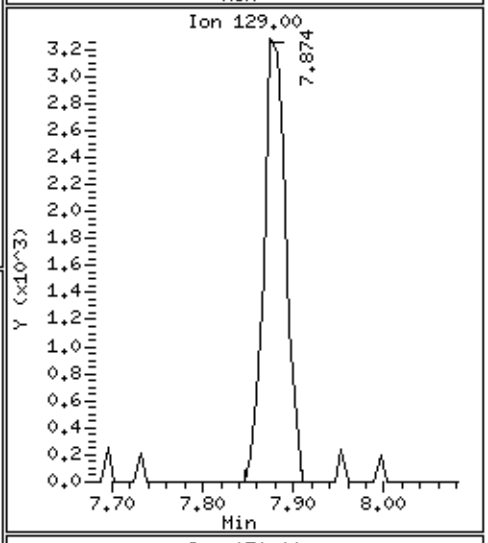
142 Tetrachloroethene

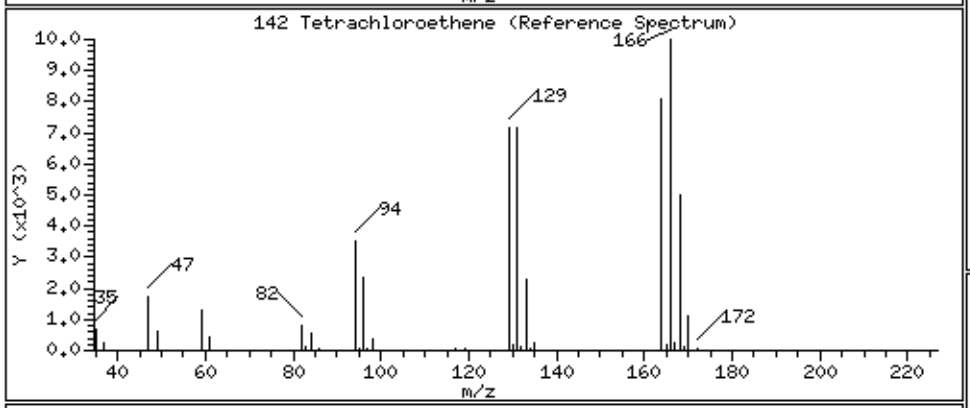
Concentration: 1.420 PPBV

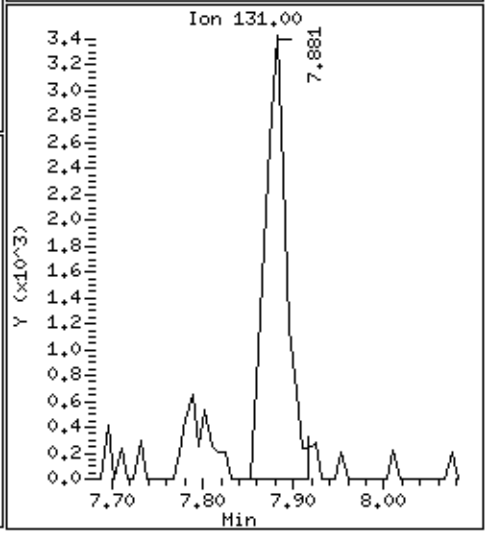


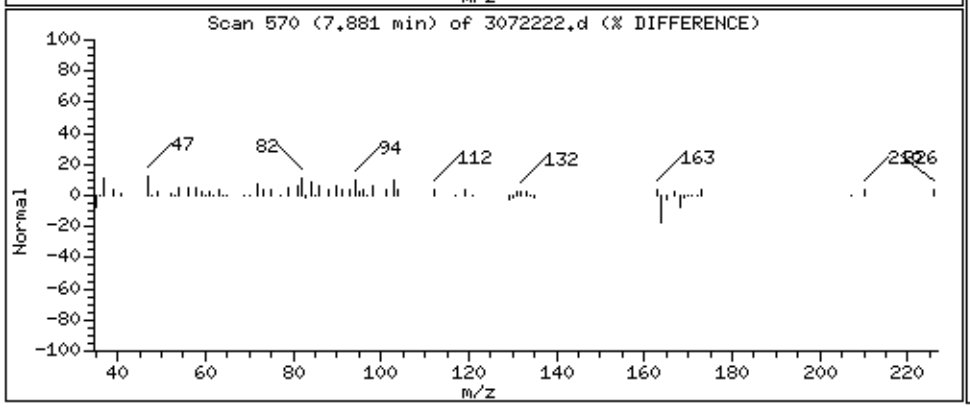












Data File: /chem/msd3.i/22JUL21.b/3072222.d

Page 7

Date : 22-JUL-2021 23:00

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1315

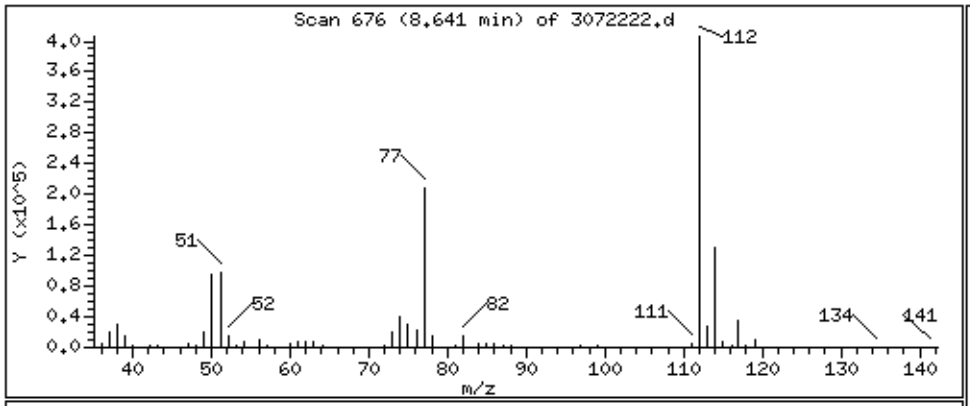
Operator: mb

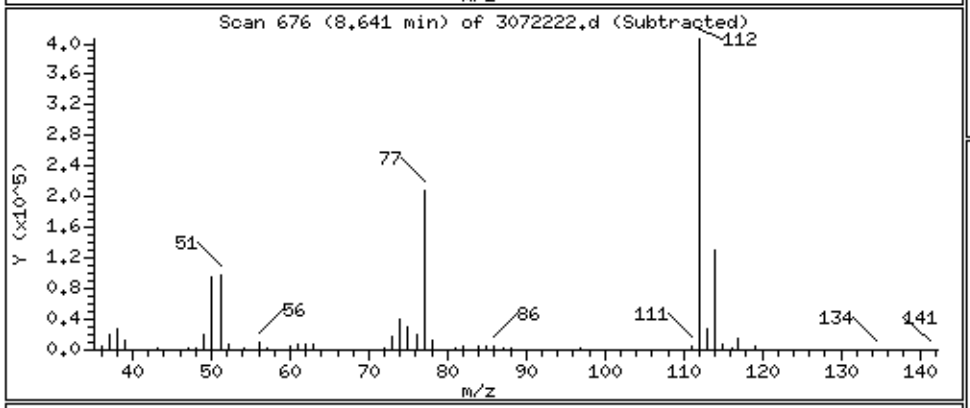
Column phase: RTX-624

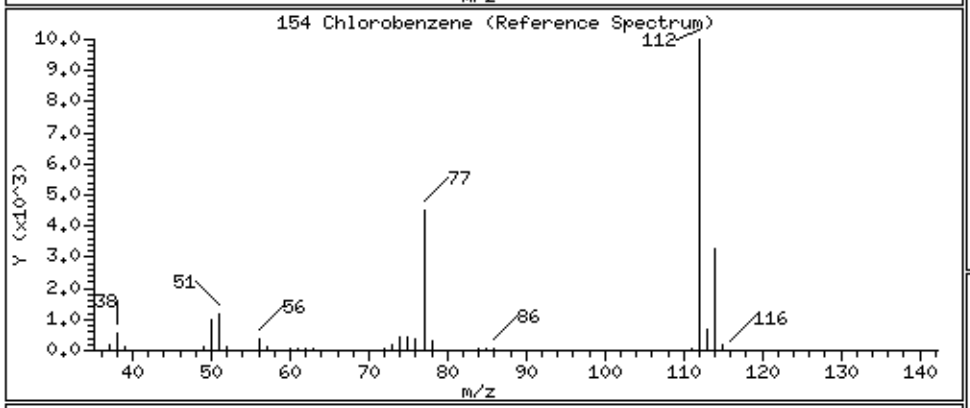
Column diameter: 0.25

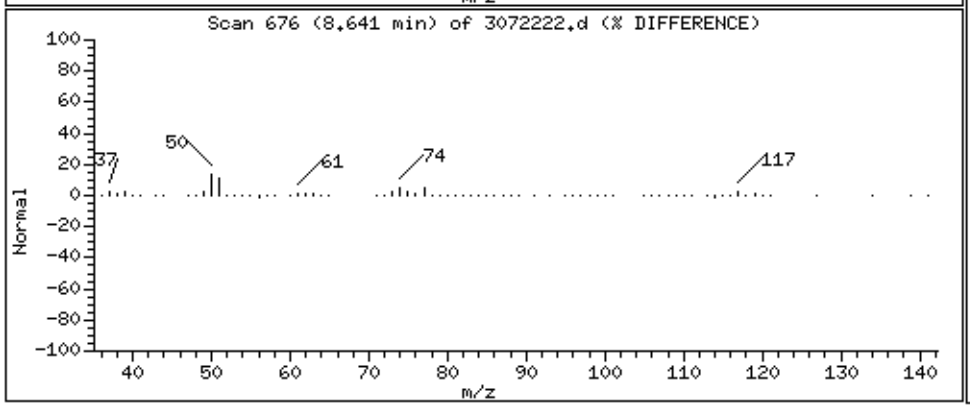
154 Chlorobenzene

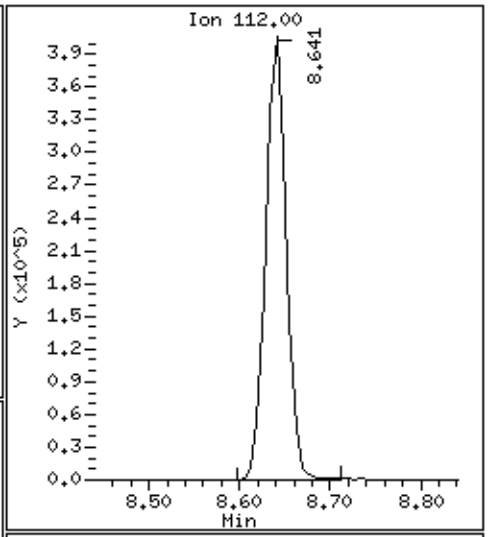
Concentration: 72.862 PPBV

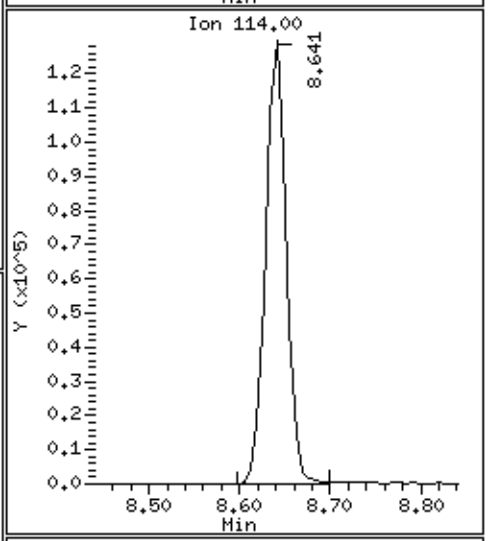


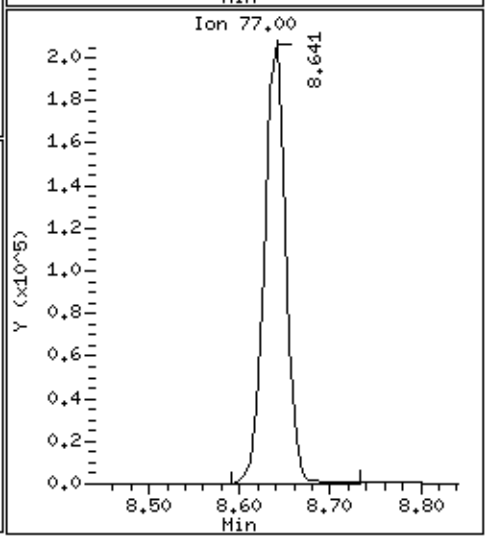












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Client Sample ID: SG-VW48A-03

Lab ID#: 2107241A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072223**	**Date of Collection:**	**7/9/21 7:19:00 AM**
Dil. Factor:	**2.09**	**Date of Analysis:**	**7/22/21 11:29 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.2	Not Detected
Freon 114	1.0	Not Detected	7.3	Not Detected
Chloromethane	10	Not Detected	22	Not Detected
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.9	Not Detected
Ethanol	10	Not Detected	20	Not Detected
Freon 113	1.0	Not Detected	8.0	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	10	27	25	64
2-Propanol	4.2	23	10	57
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Chloroform	1.0	1.4	5.1	6.8
1,1,1-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.6	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.9	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	7.0	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Tetrachloroethene	1.0	14	7.1	95
2-Hexanone	4.2	Not Detected	17	Not Detected

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Client Sample ID: SG-VW48A-03

Lab ID#: 2107241A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072223**	**Date of Collection:**	**7/9/21 7:19:00 AM**
Dil. Factor:	**2.09**	**Date of Analysis:**	**7/22/21 11:29 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.9	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.0	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.2	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	44	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	430	Not Detected
Freon 134a	4.2	Not Detected	17	Not Detected
Acrolein	4.2	Not Detected	9.6	Not Detected
Acrylonitrile	4.2	Not Detected	9.1	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	17	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	40	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
1,1-Difluoroethane	4.2	Not Detected	11	Not Detected
Isopropyl ether	4.2	Not Detected	17	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	17	Not Detected
Hexachloroethane	4.2	Not Detected	40	Not Detected
Iodomethane	10	Not Detected	61	Not Detected
Propylene	4.2	Not Detected	7.2	Not Detected
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	25	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW48A-03

Lab ID#: 2107241A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072223**	**Date of Collection:**	**7/9/21 7:19:00 AM**
Dil. Factor:	**2.09**	**Date of Analysis:**	**7/22/21 11:29 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072223.d
Lab Smp Id: 2107241A-12A
Inj Date : 22-JUL-2021 23:29
Operator : mb Inst ID: msd3.i
Smp Info : 200mL F1914
Misc Info : 6.1 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 3
Dil Factor: 2.09000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	222073	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	172431				48.46- 108.46	77.65
5.284	5.284 (1.000)	49	317602				120.39- 180.39	143.02
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	727365	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	110933				0.00- 45.52	15.25
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	657675	25.0000			80.00- 120.00	100.00
8.619	8.619 (1.000)	82	345834				25.46- 85.46	52.58
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	302254	24.7325	24.732		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	145233				21.66- 81.66	48.05
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	729626	24.3542	24.354		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	81366				0.00- 41.47	11.15

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	477788			36.47- 96.47	65.48
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.608	9.601 (1.115)	174	412928	23.7372	23.737	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	467198			93.06- 153.06	113.14
9.608	9.601 (1.115)	176	386284			62.87- 122.87	93.55
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	47860	12.8528	26.862	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	177367			299.66- 359.66	370.59
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	149885	11.1923	23.392	80.00- 120.00	100.00
3.409	3.409 (0.645)	43	34916			0.00- 48.61	23.30
92 Chloroform					CAS #: 67-66-3		
5.354	5.354 (1.013)	83	9347	0.67132	1.403	80.00- 120.00	100.00
5.354	5.354 (1.013)	85	5874			34.71- 94.71	62.85
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	69267	6.72284	14.051	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	54514			48.71- 108.71	78.70
7.881	7.881 (0.914)	131	53356			46.55- 106.55	77.03

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072223.d
Lab Smp Id: 2107241A-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.1 Hg->9.8 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	222073	-7.70
108 1,4-Difluorobenze	805743	483446	1128040	727365	-9.73
153 Chlorobenzene-d5	719477	431686	1007268	657675	-8.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 11:34

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-12A
Level: LOW Operator: mb
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.1 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.732	98.93	70-130
$ 134 Toluene-d8	25.000	24.354	97.42	70-130
$ 170 4-Bromofluorobenz	25.000	23.737	94.95	70-130

Data File: /chem/msd3.i/22JUL21.b/3072223.d

Date : 22-JUL-2021 23:29

Client ID:

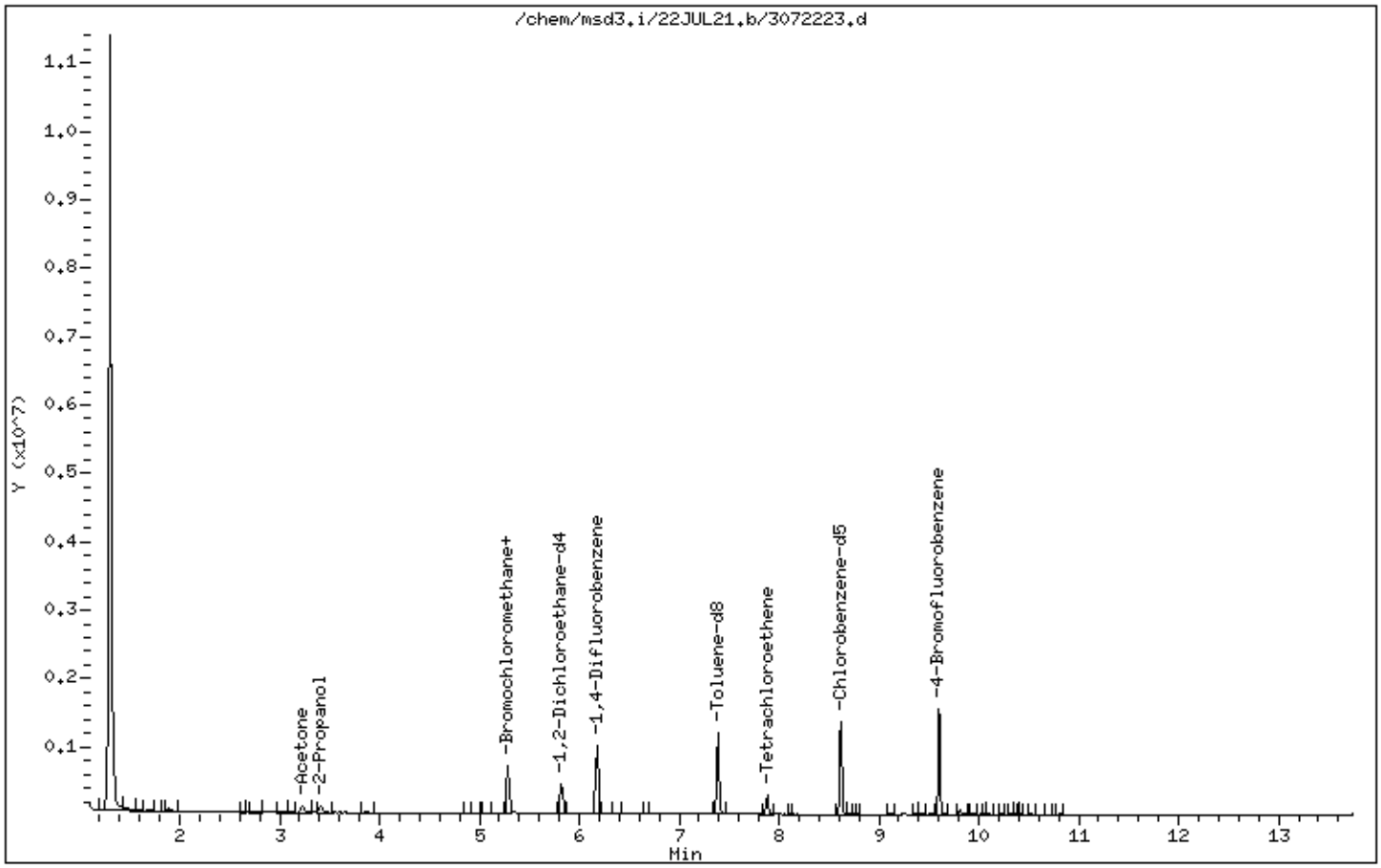
Instrument: msd3.i

Sample Info: 200mL F1914

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072223.d

Date : 22-JUL-2021 23:29

Client ID:

Instrument: msd3.i

Sample Info: 200mL F1914

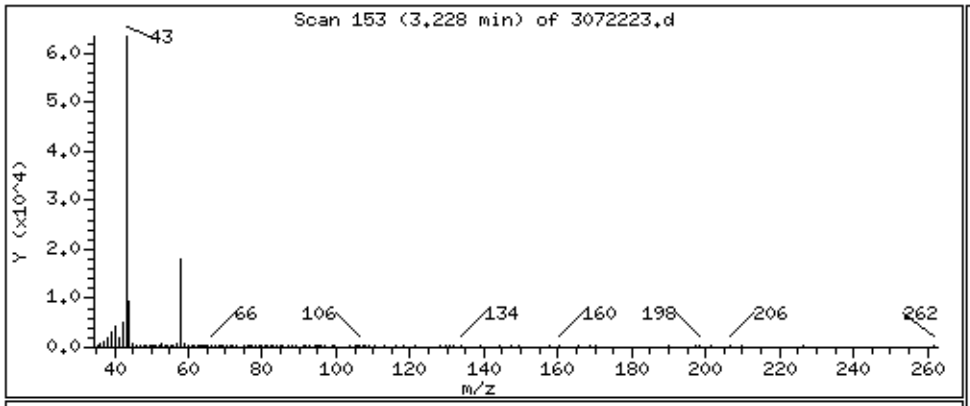
Operator: mb

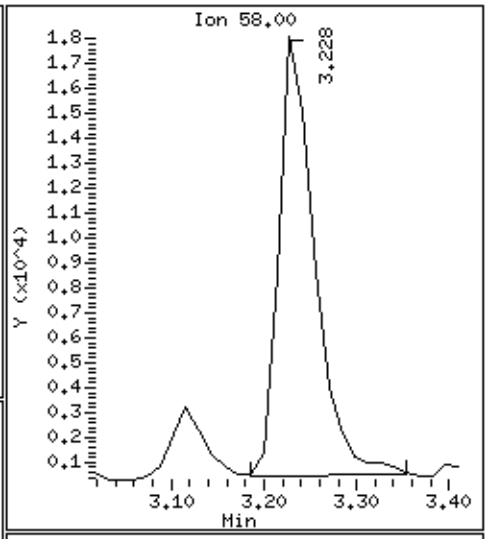
Column phase: RTX-624

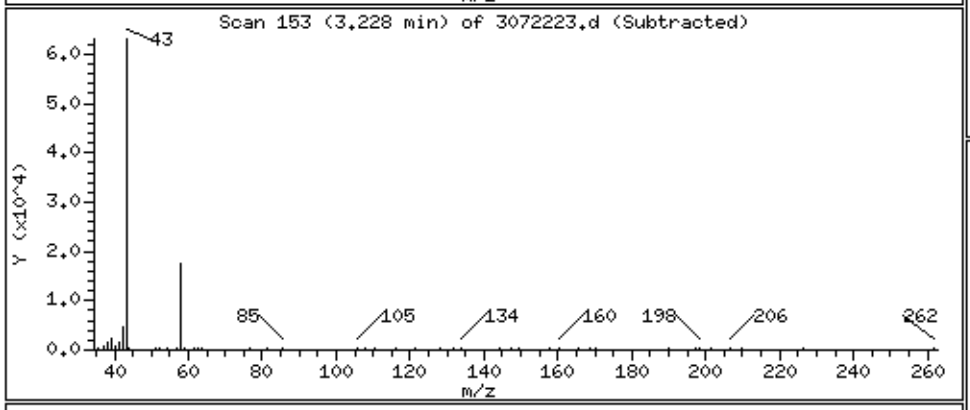
Column diameter: 0.25

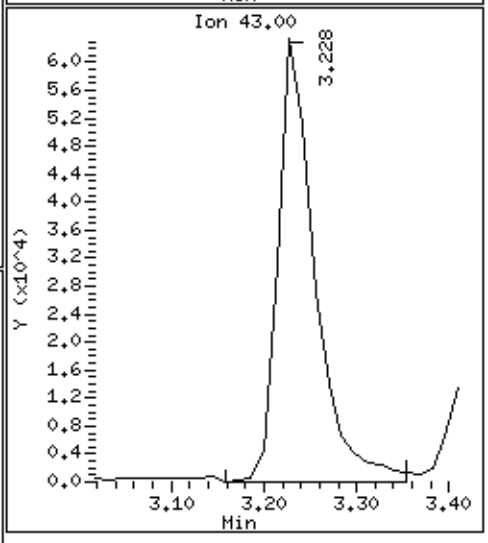
47 Acetone

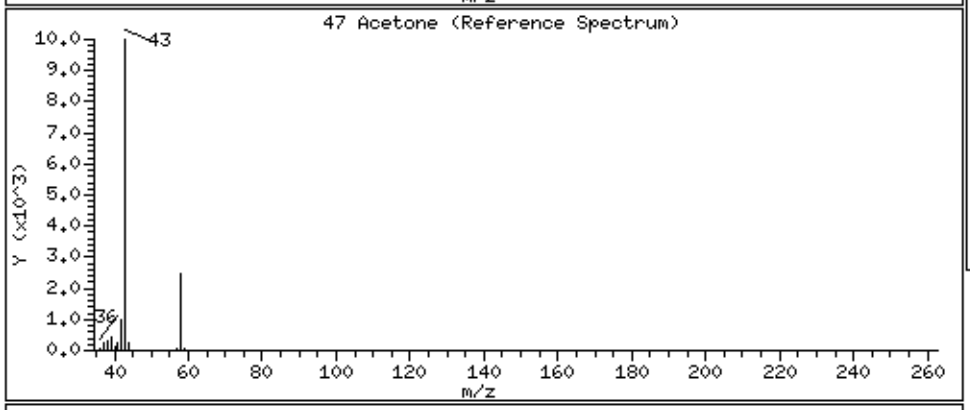
Concentration: 26.862 PPBV

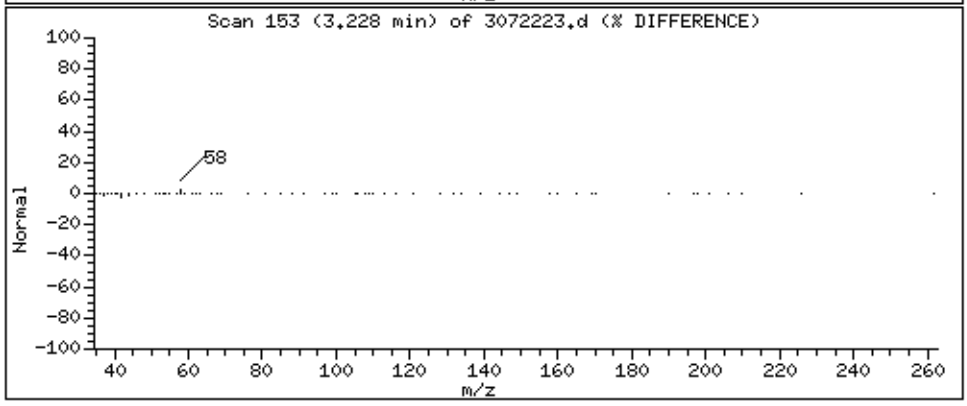












Data File: /chem/msd3.i/22JUL21.b/3072223.d

Date : 22-JUL-2021 23:29

Client ID:

Instrument: msd3.i

Sample Info: 200mL F1914

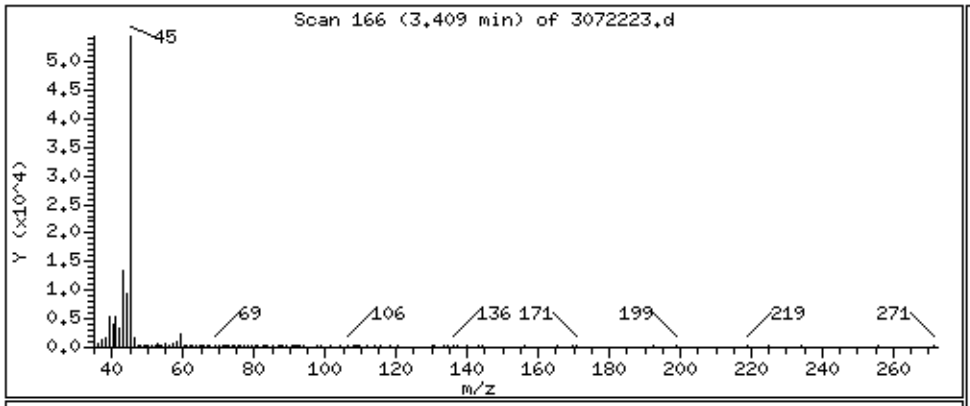
Operator: mb

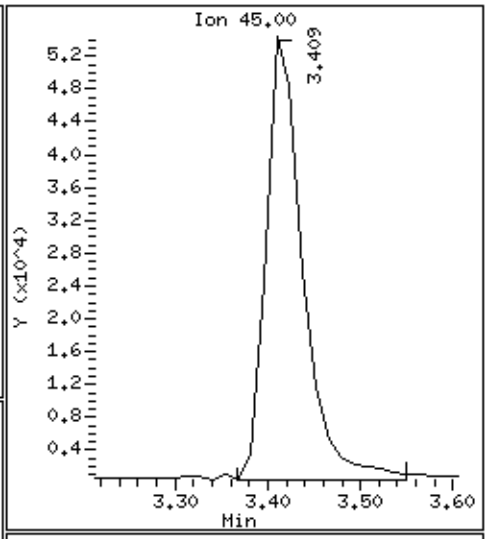
Column phase: RTX-624

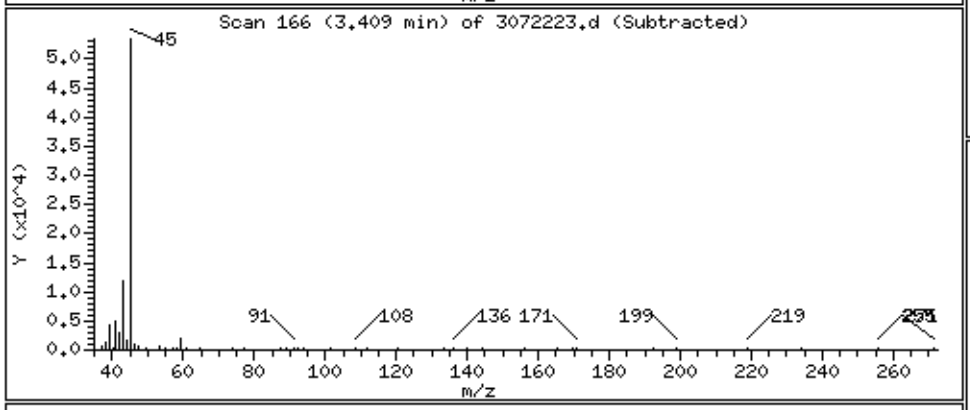
Column diameter: 0.25

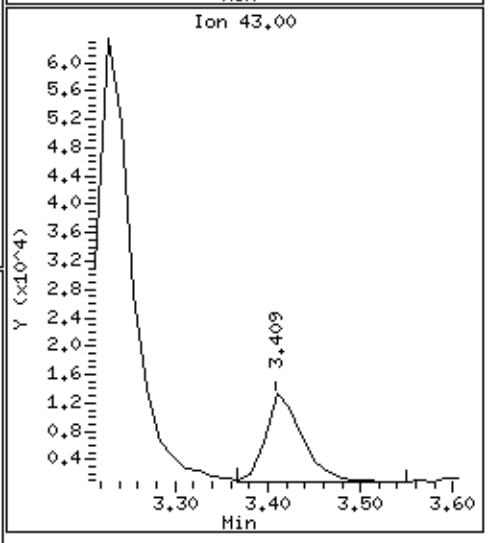
52 2-Propanol

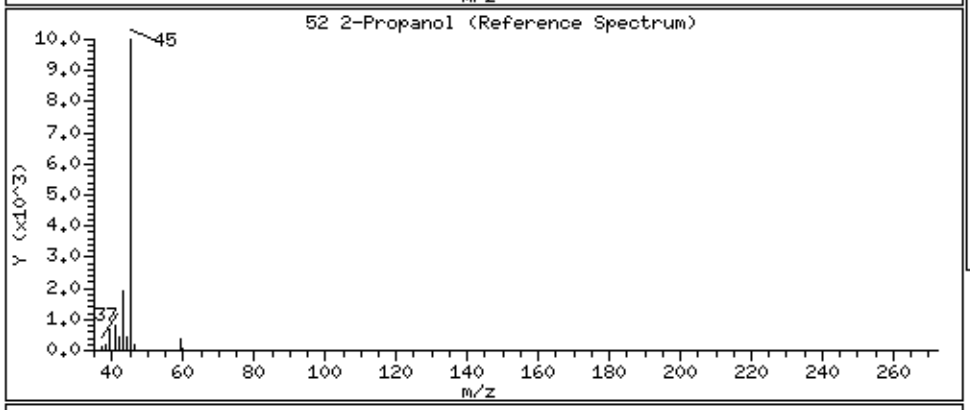
Concentration: 23.392 PPBV

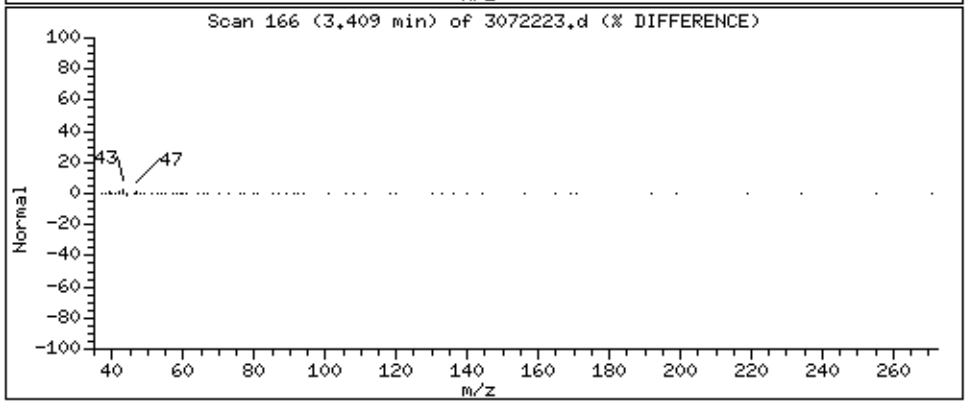












Data File: /chem/msd3.i/22JUL21.b/3072223.d

Date : 22-JUL-2021 23:29

Client ID:

Instrument: msd3.i

Sample Info: 200mL F1914

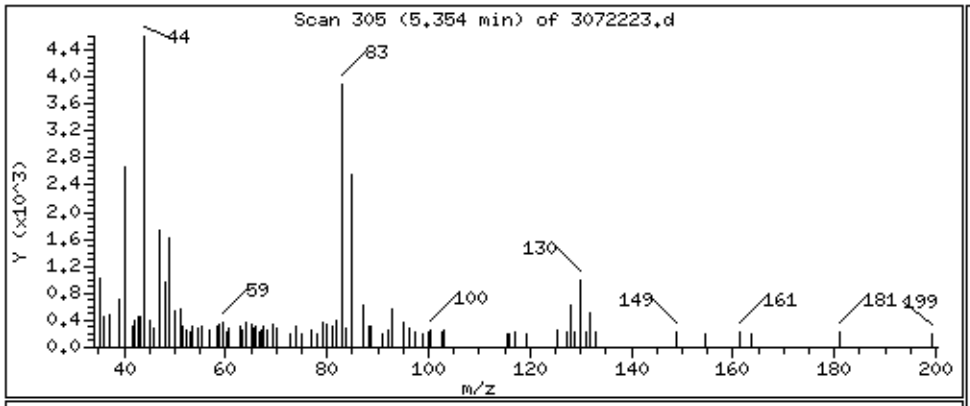
Operator: mb

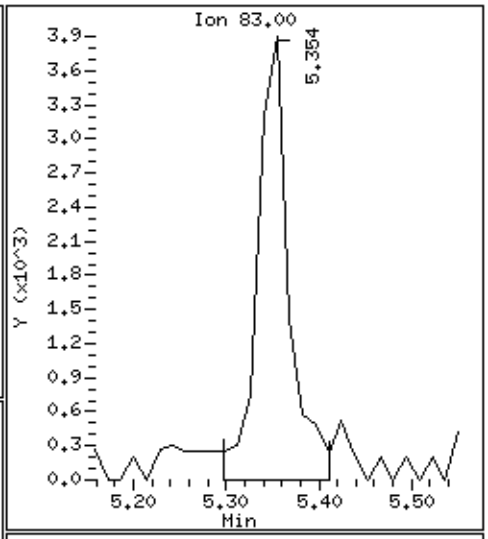
Column phase: RTX-624

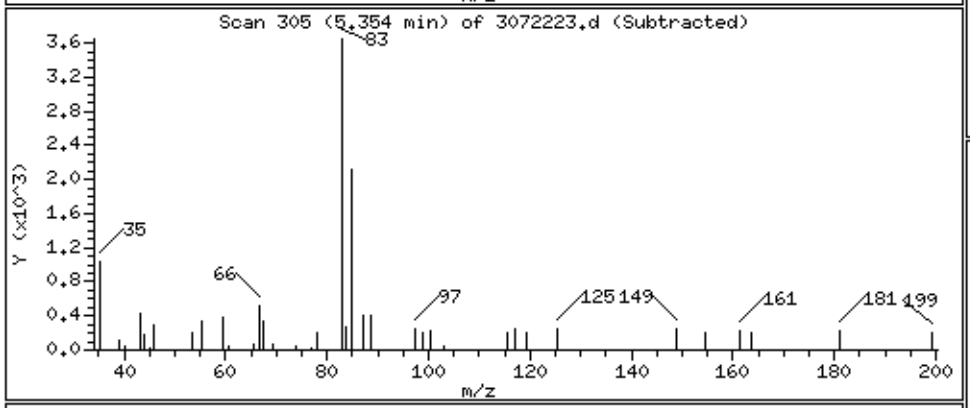
Column diameter: 0.25

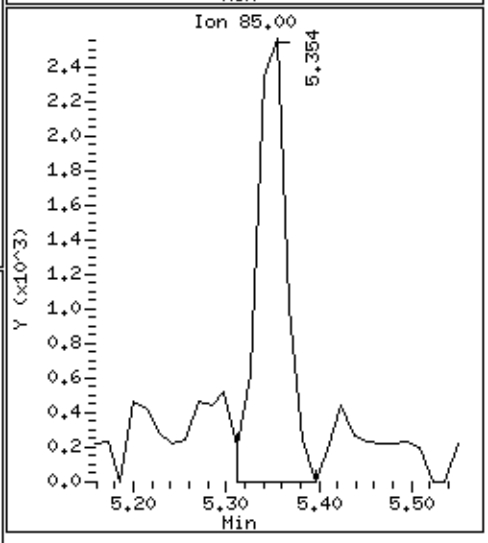
92 Chloroform

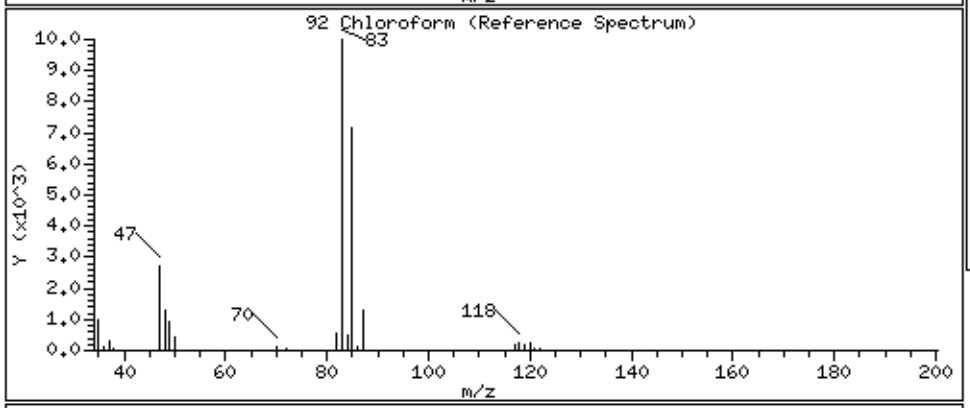
Concentration: 1.403 PPBV

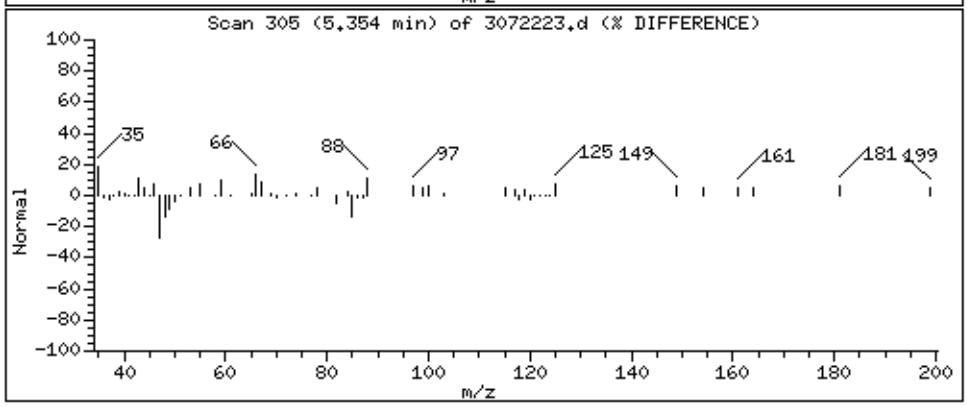












Data File: /chem/msd3.i/22JUL21.b/3072223.d

Date : 22-JUL-2021 23:29

Client ID:

Instrument: msd3.i

Sample Info: 200mL F1914

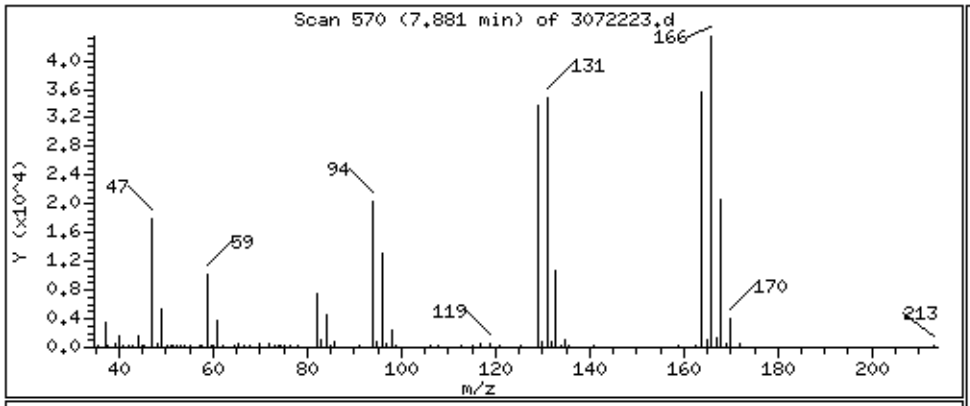
Operator: mb

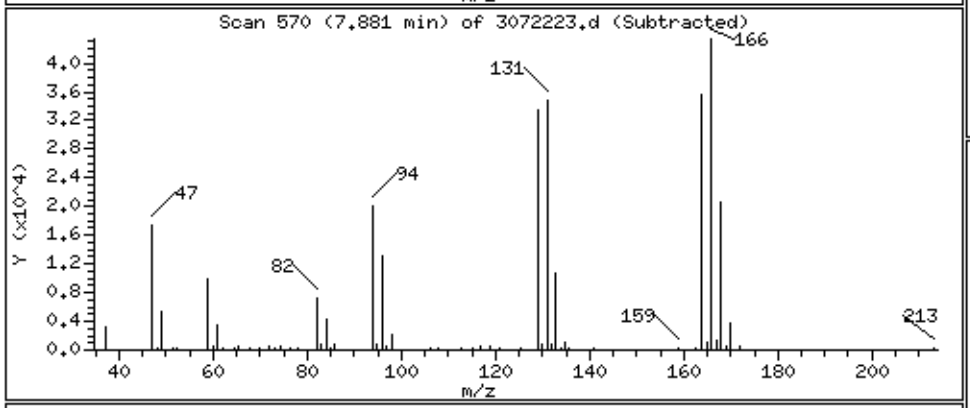
Column phase: RTX-624

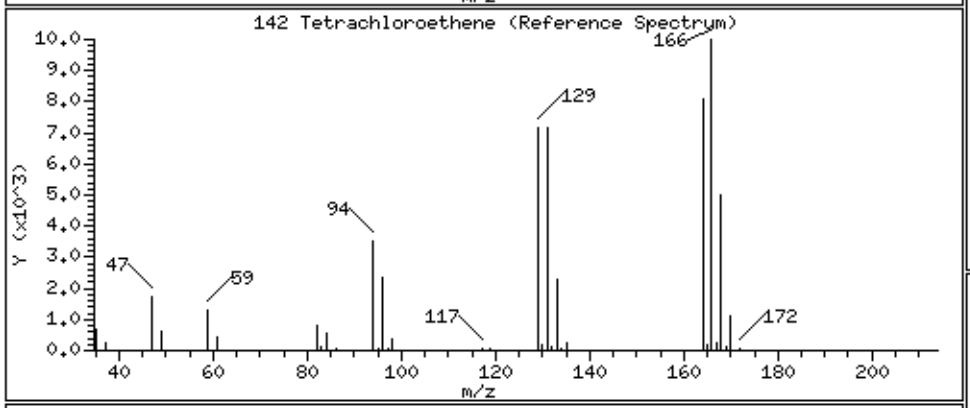
Column diameter: 0.25

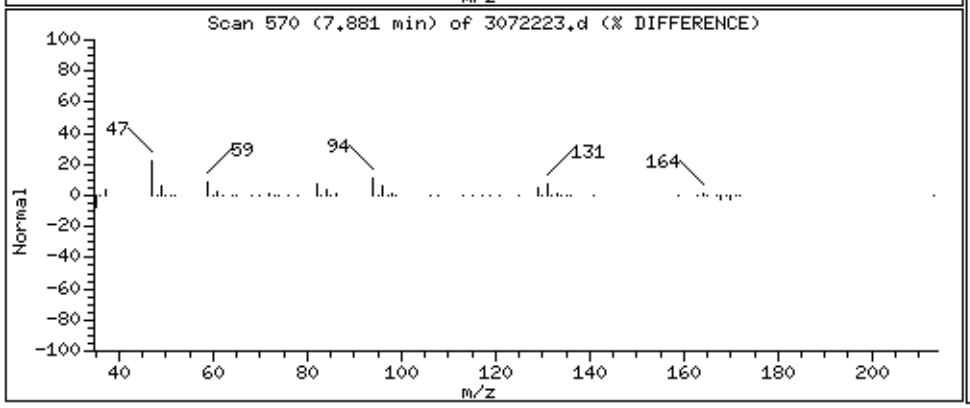
142 Tetrachloroethene

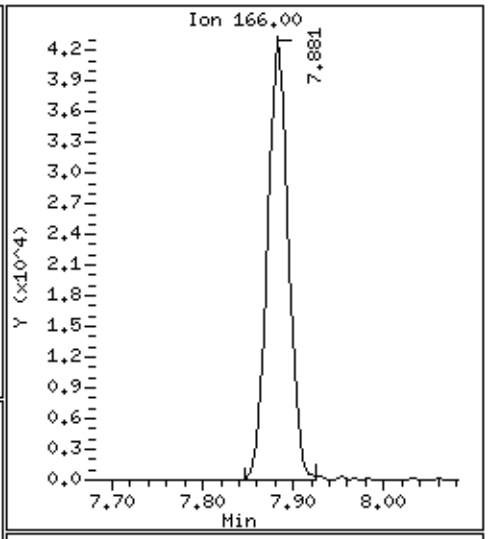
Concentration: 14.051 PPBV

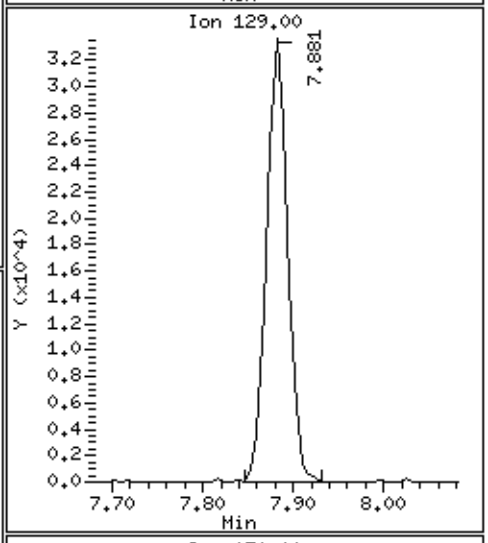


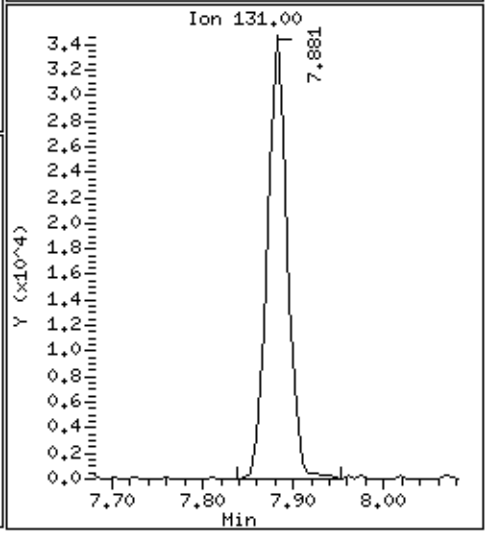












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Client Sample ID: SG-VW48B-02

Lab ID#: 2107241A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072224**	**Date of Collection:**	**7/9/21 7:45:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/22/21 11:59 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.3	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Freon 113	1.1	Not Detected	8.2	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Acetone	11	110	25	260
2-Propanol	4.3	25	10	62
Carbon Disulfide	4.3	Not Detected	13	Not Detected
3-Chloropropene	4.3	Not Detected	13	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Methyl tert-butyl ether	4.3	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Chloroform	1.1	29	5.2	140
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Cyclohexane	1.1	Not Detected	3.7	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.0	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,4-Dioxane	4.3	Not Detected	15	Not Detected
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Tetrachloroethene	1.1	5.4	7.2	37
2-Hexanone	4.3	Not Detected	17	Not Detected

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Client Sample ID: SG-VW48B-02

Lab ID#: 2107241A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072224**	**Date of Collection:**	**7/9/21 7:45:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/22/21 11:59 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.2	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
Propylbenzene	1.1	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
Hexachlorobutadiene	4.3	Not Detected	45	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Acrolein	4.3	Not Detected	9.8	Not Detected
Acrylonitrile	4.3	Not Detected	9.2	Not Detected
tert-Amyl methyl ether	4.3	Not Detected	18	Not Detected
tert-Butyl alcohol	4.3	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.3	Not Detected	41	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
1,1-Difluoroethane	4.3	8.9	12	24
Isopropyl ether	4.3	Not Detected	18	Not Detected
Ethyl Acetate	4.3	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.3	Not Detected	18	Not Detected
Hexachloroethane	4.3	Not Detected	41	Not Detected
Iodomethane	11	Not Detected	62	Not Detected
Propylene	4.3	40	7.3	69
1,1,1,2-Tetrachloroethane	4.3	Not Detected	29	Not Detected
1,2,3-Trichloropropane	4.3	Not Detected	26	Not Detected
Vinyl Acetate	4.3	Not Detected	15	Not Detected
Vinyl Bromide	4.3	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW48B-02

Lab ID#: 2107241A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072224**	**Date of Collection:**	**7/9/21 7:45:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/22/21 11:59 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072224.d
Lab Smp Id: 2107241A-13A
Inj Date : 22-JUL-2021 23:59
Operator : mb Inst ID: msd3.i
Smp Info : 200mL N2662
Misc Info : 6.5 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 4
Dil Factor: 2.13000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	236910	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	178708				48.46- 108.46	75.43
5.284	5.284 (1.000)	49	328076				120.39- 180.39	138.48
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	758202	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	112260				0.00- 45.52	14.81
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	683029	25.0000			80.00- 120.00	100.00
8.619	8.619 (1.000)	82	360128				25.46- 85.46	52.73
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	324618	24.8990	24.899		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	156680				21.66- 81.66	48.27
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	746977	23.9193	23.919		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	85040				0.00- 41.47	11.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	493693			36.47- 96.47	66.09
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	427023	23.6363	23.636	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	485705			93.06- 153.06	113.74
9.601	9.601 (1.114)	176	398976			62.87- 122.87	93.43
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	108298	18.9250	40.310	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	71441			35.61- 95.61	65.97
1.437	1.423 (0.272)	39	80195			42.66- 102.66	74.05
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	15553	4.16944	8.881	80.00- 120.00	100.00
1.451	1.479 (0.275)	51	36200			321.86- 381.86	232.75
1.451	1.451 (0.275)	47	7716			45.34- 105.34	49.61
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	204473	51.4724	109.64	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	697356			299.66- 359.66	341.05
52 2-Propanol					CAS #: 67-63-0		
3.423	3.409 (0.648)	45	169156	11.8403	25.220	80.00- 120.00	100.00
3.409	3.409 (0.645)	43	40410			0.00- 48.61	23.89
92 Chloroform					CAS #: 67-66-3		
5.354	5.354 (1.013)	83	200244	13.4812	28.715	80.00- 120.00	100.00
5.354	5.354 (1.013)	85	132308			34.71- 94.71	66.07
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	27179	2.53999	5.410	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	22062			48.71- 108.71	81.17
7.881	7.881 (0.914)	131	21382			46.55- 106.55	78.67

Report Date: 23-Jul-2021 11:36

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072224.d
Lab Smp Id: 2107241A-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.5 Hg->9.8 psi

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	236910	-1.53
108 1,4-Difluorobenze	805743	483446	1128040	758202	-5.90
153 Chlorobenzene-d5	719477	431686	1007268	683029	-5.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-13A
Level: LOW Operator: mb
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 6.5 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.899	99.60	70-130
$ 134 Toluene-d8	25.000	23.919	95.68	70-130
$ 170 4-Bromofluorobenz	25.000	23.636	94.55	70-130

Data File: /chem/msd3.i/22JUL21.b/3072224.d

Page 1

Date : 22-JUL-2021 23:59

Client ID:

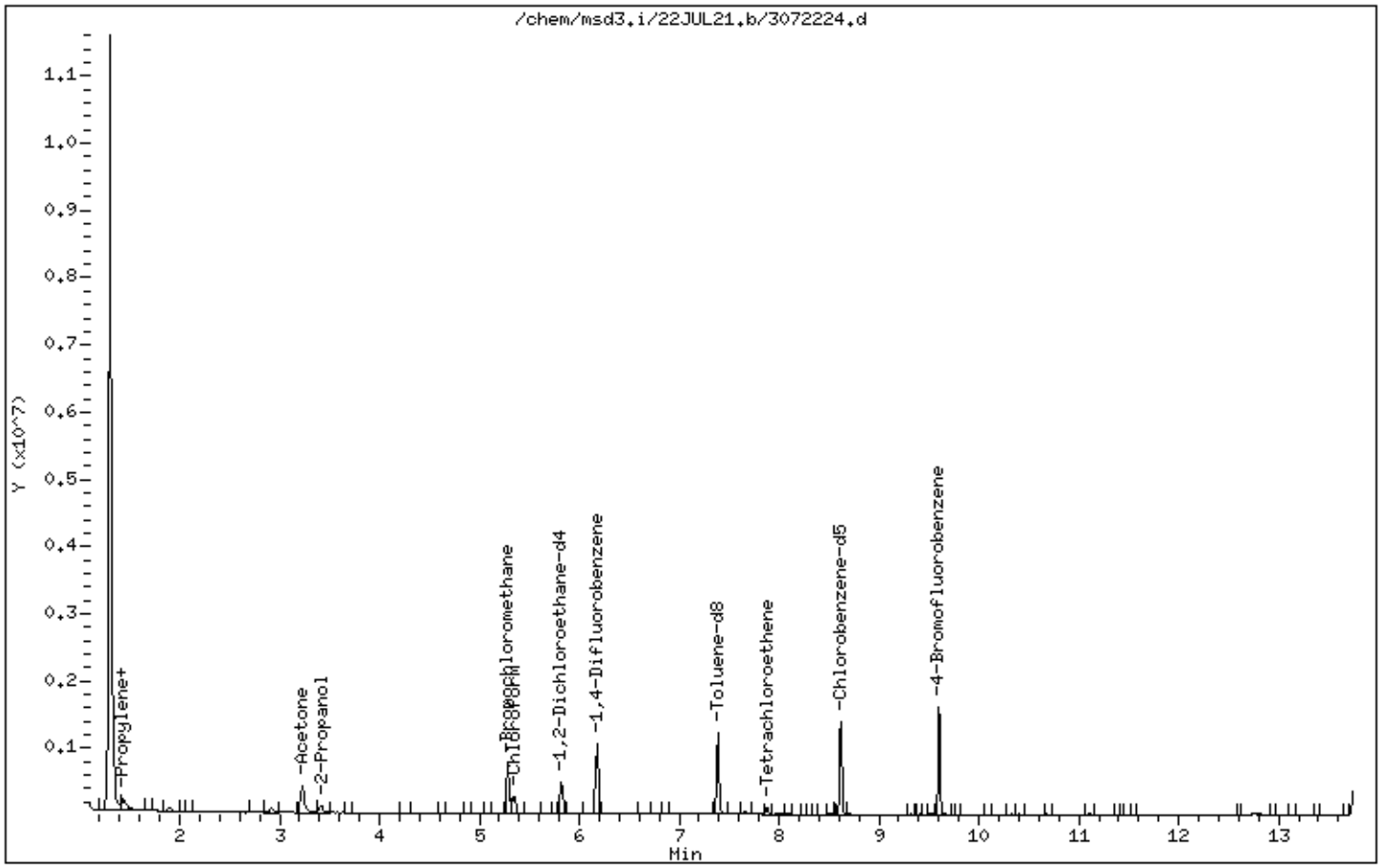
Instrument: msd3.i

Sample Info: 200mL N2662

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/22JUL21.b/3072224.d

Date : 22-JUL-2021 23:59

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2662

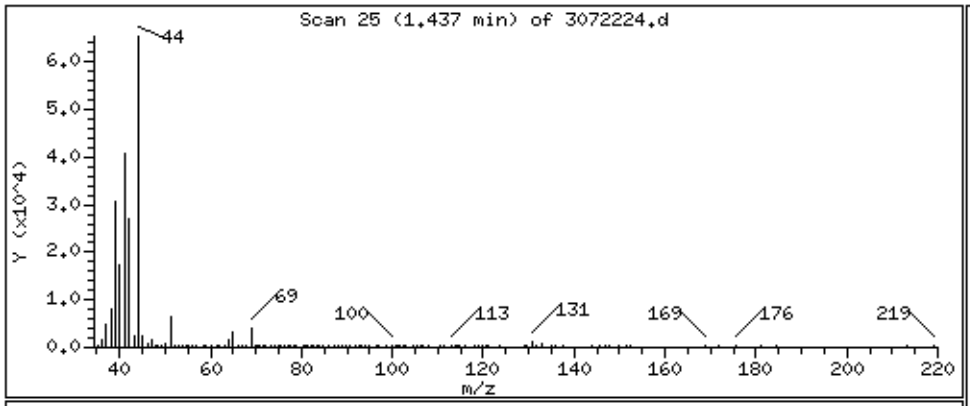
Operator: mb

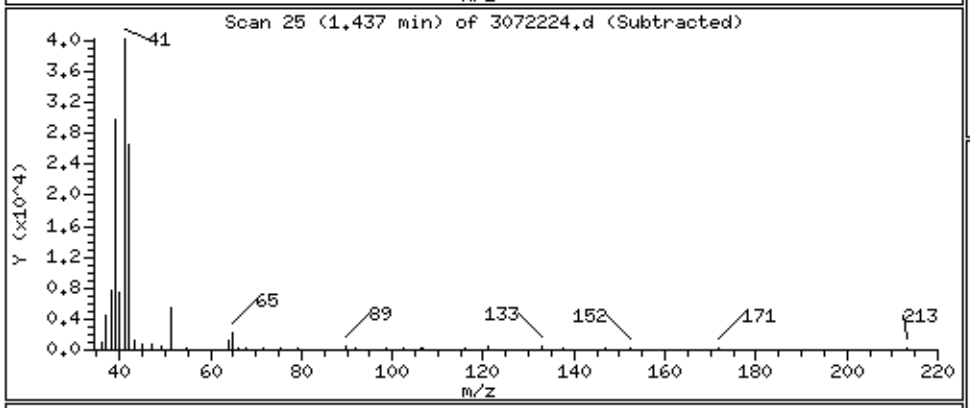
Column phase: RTX-624

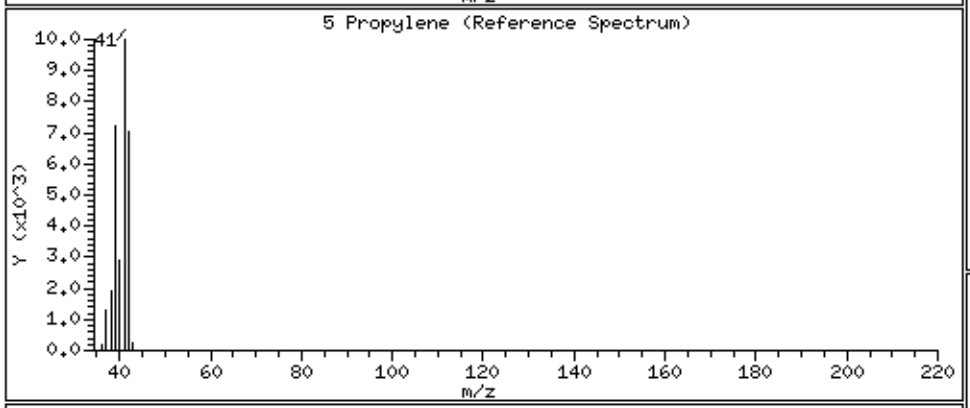
Column diameter: 0.25

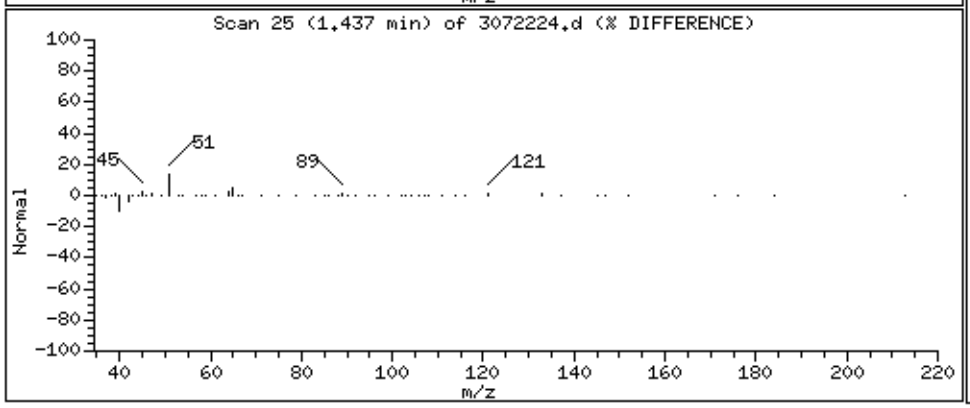
5 Propylene

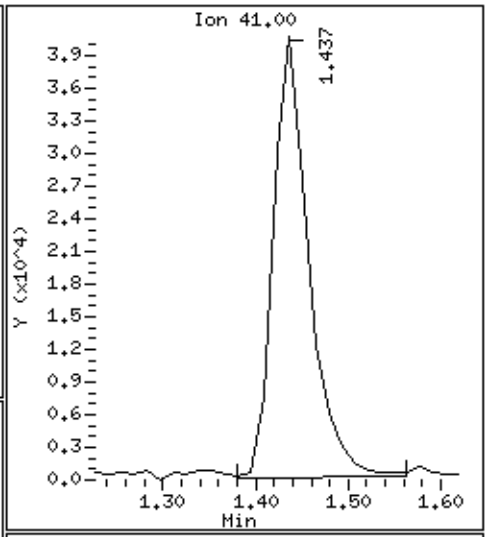
Concentration: 40.310 PPBV

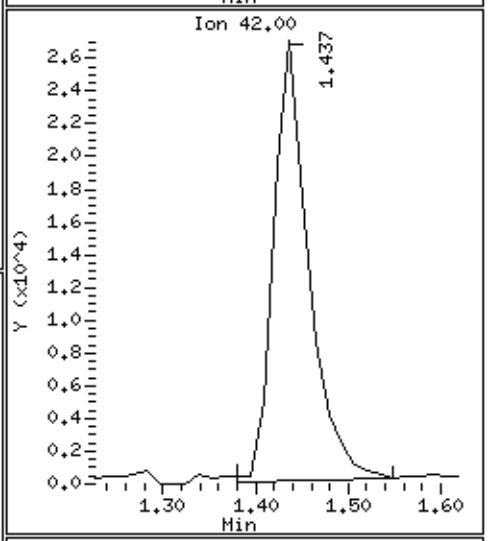


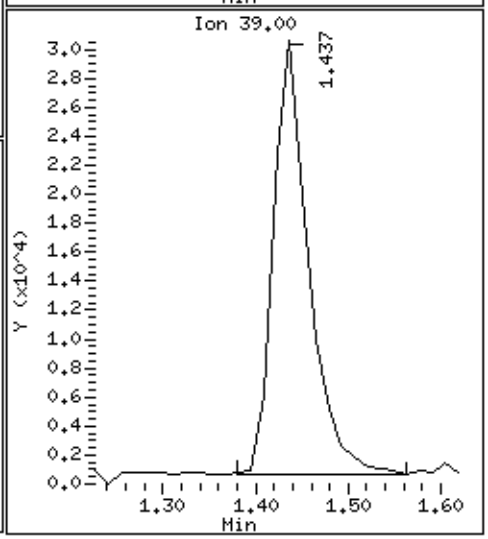












Data File: /chem/msd3.i/22JUL21.b/3072224.d

Date : 22-JUL-2021 23:59

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2662

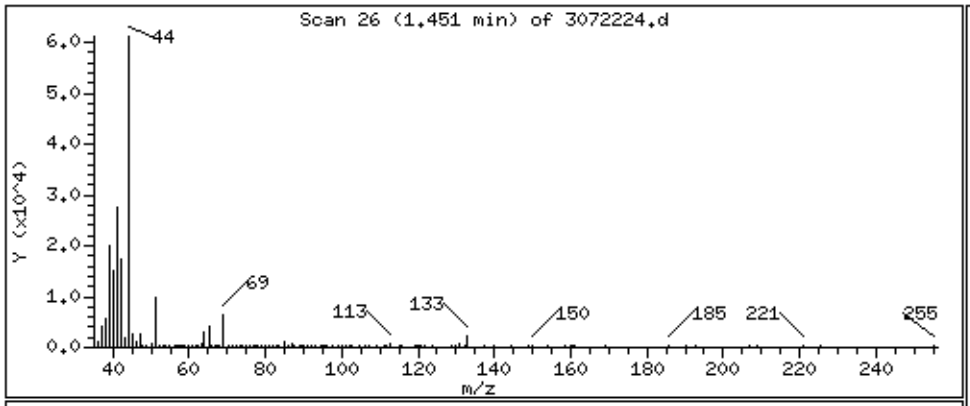
Operator: mb

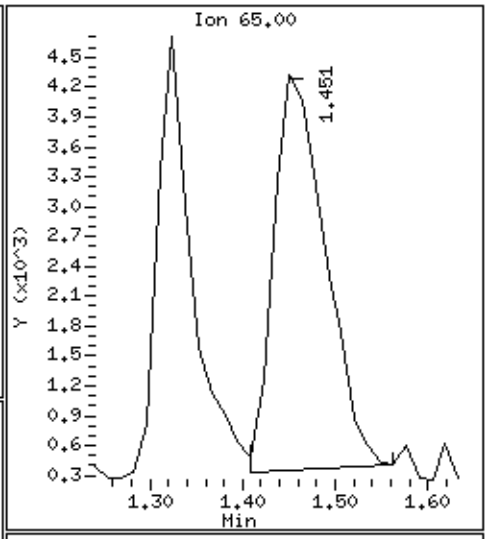
Column phase: RTX-624

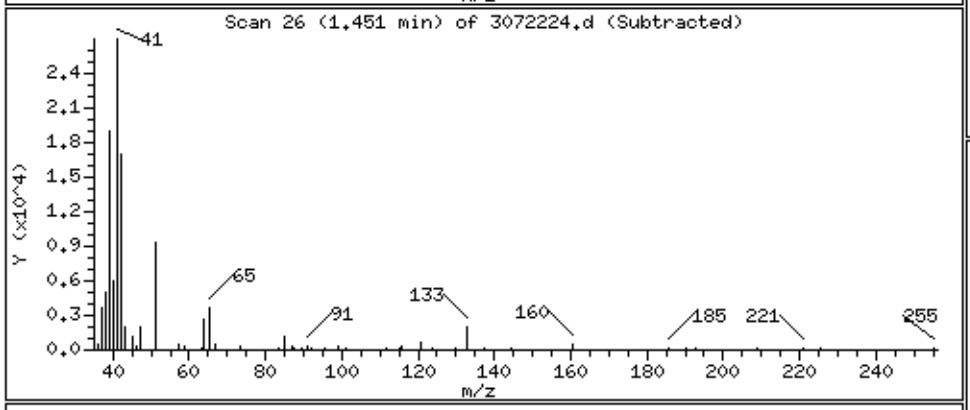
Column diameter: 0.25

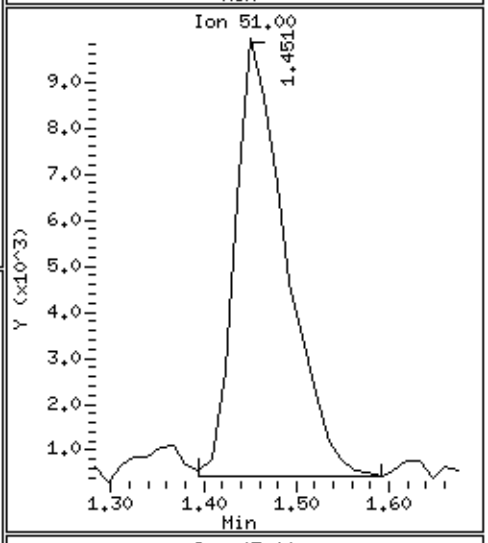
7 1,1-Difluoroethane

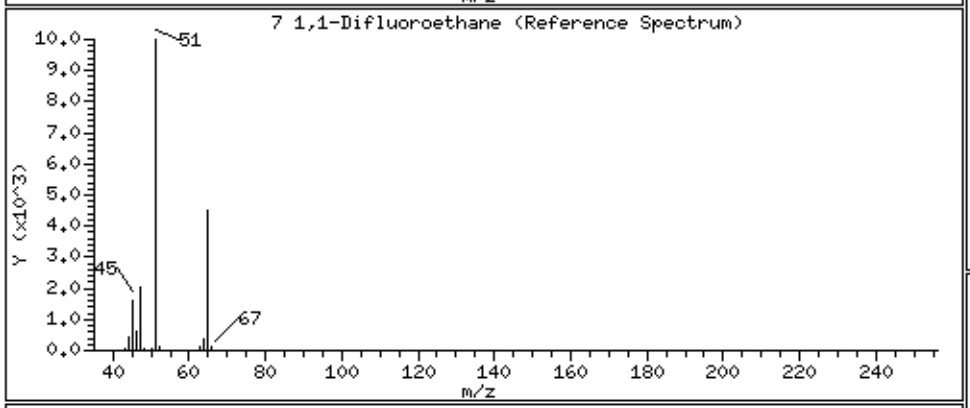
Concentration: 8.881 PPBV

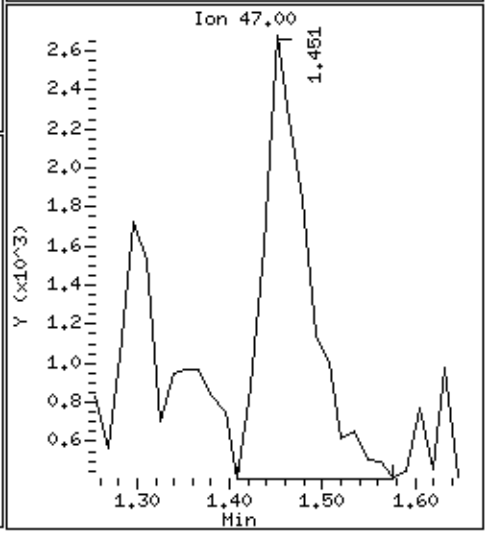


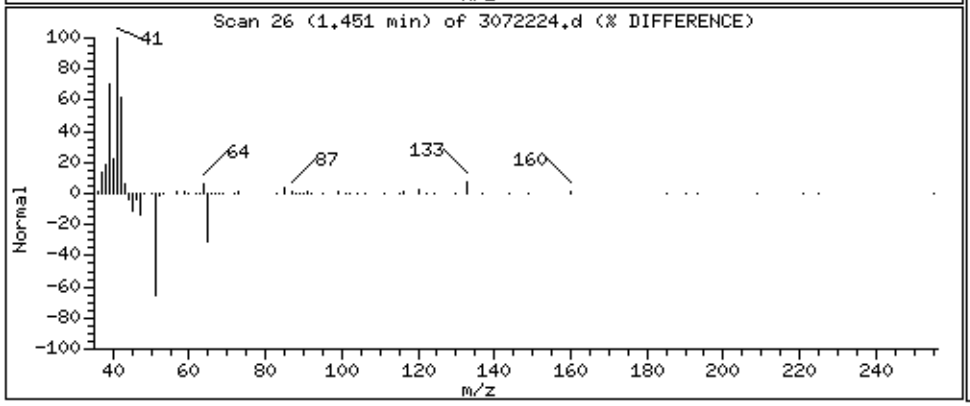












Data File: /chem/msd3.i/22JUL21.b/3072224.d

Date : 22-JUL-2021 23:59

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2662

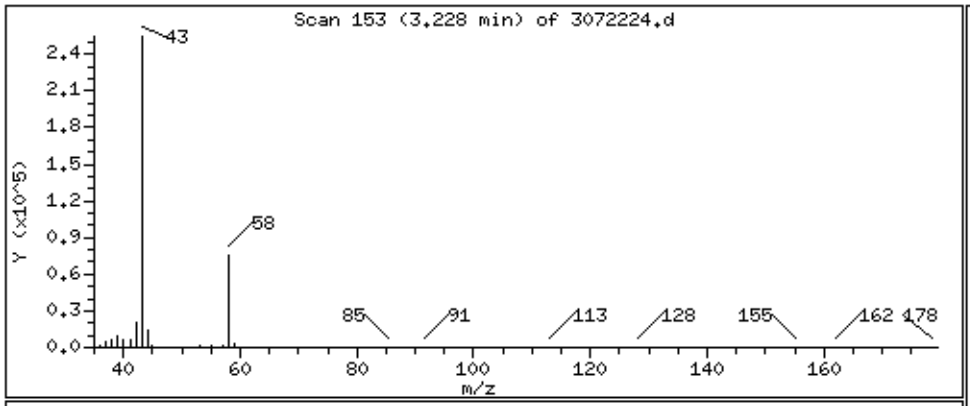
Operator: mb

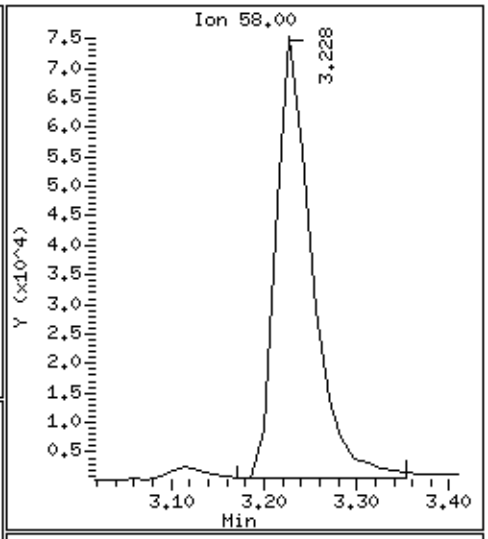
Column phase: RTX-624

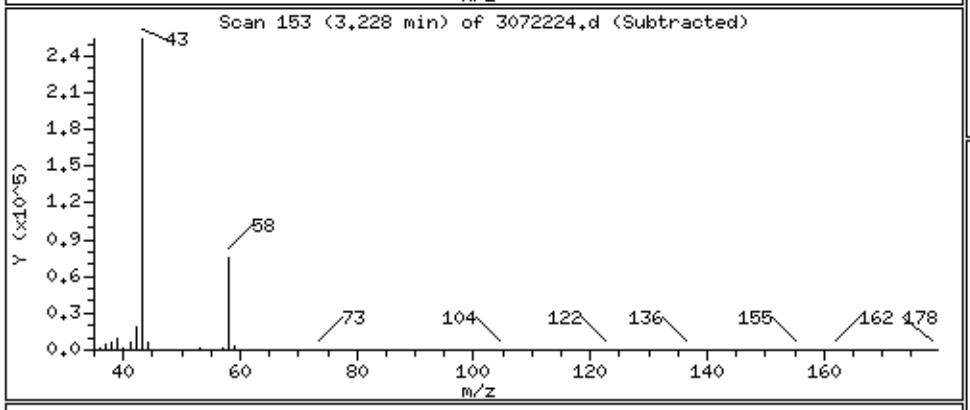
Column diameter: 0.25

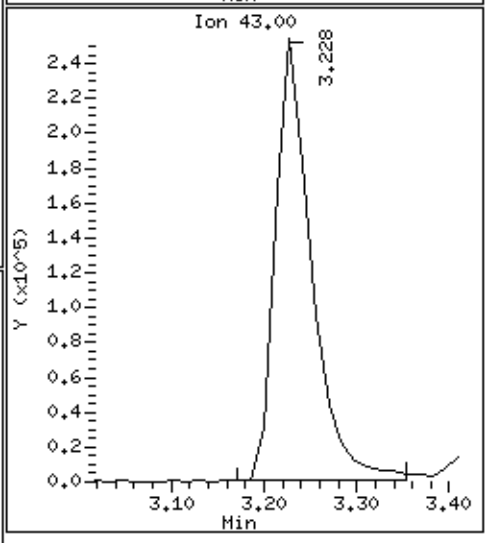
47 Acetone

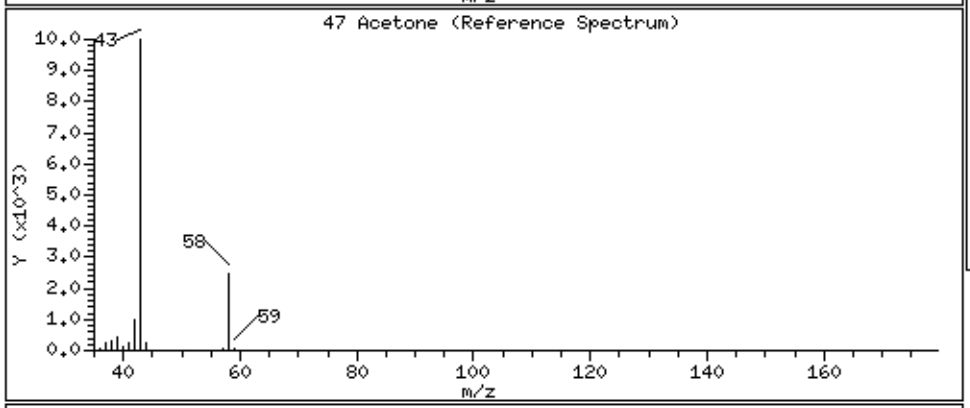
Concentration: 109.64 PPBV

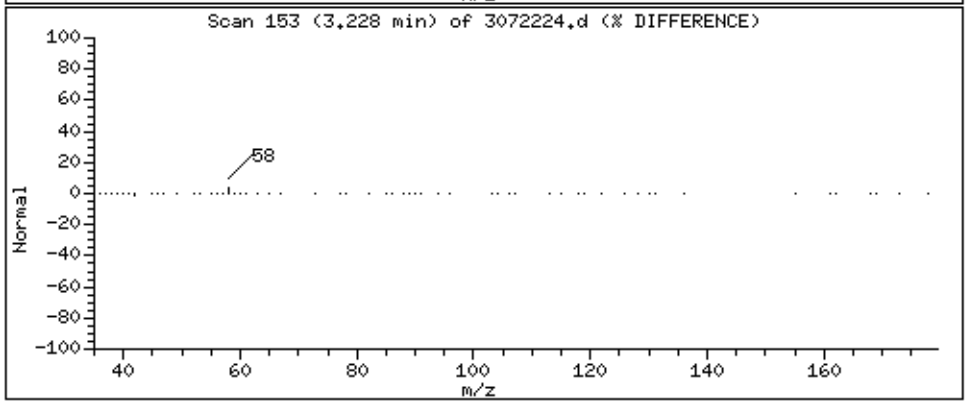












Data File: /chem/msd3.i/22JUL21.b/3072224.d

Date : 22-JUL-2021 23:59

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2662

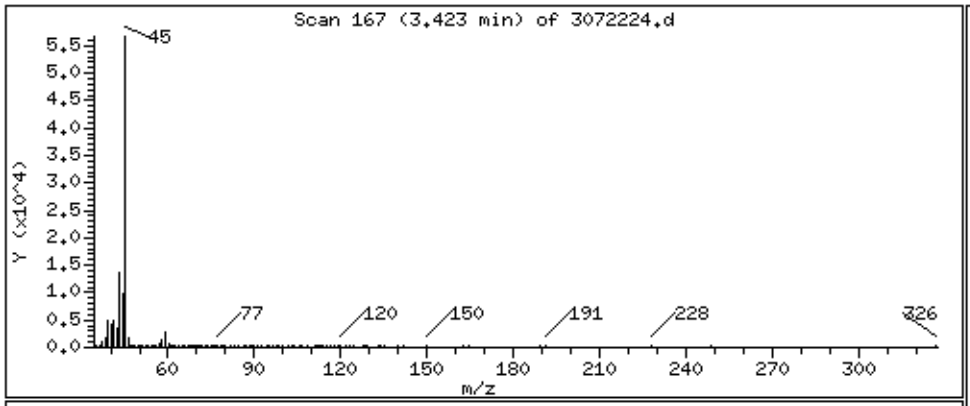
Operator: mb

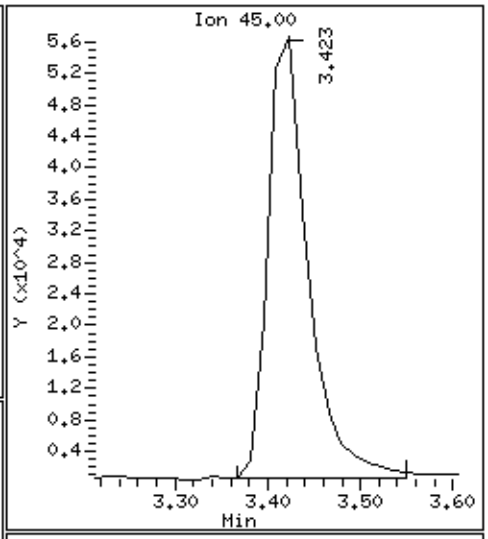
Column phase: RTX-624

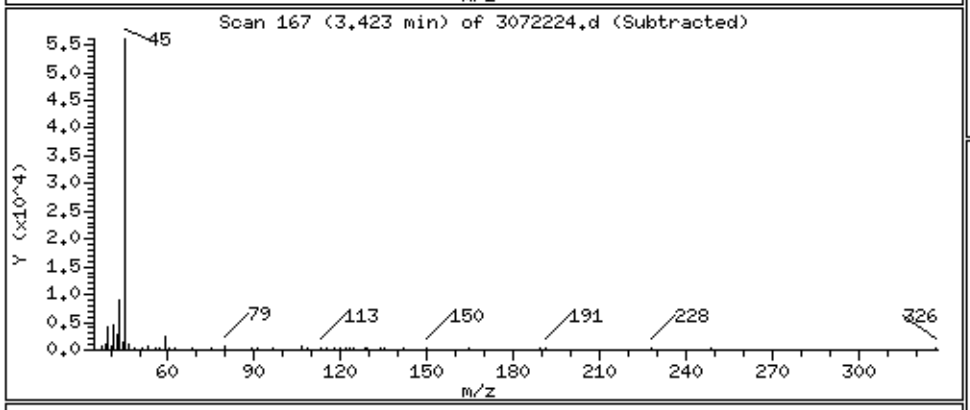
Column diameter: 0.25

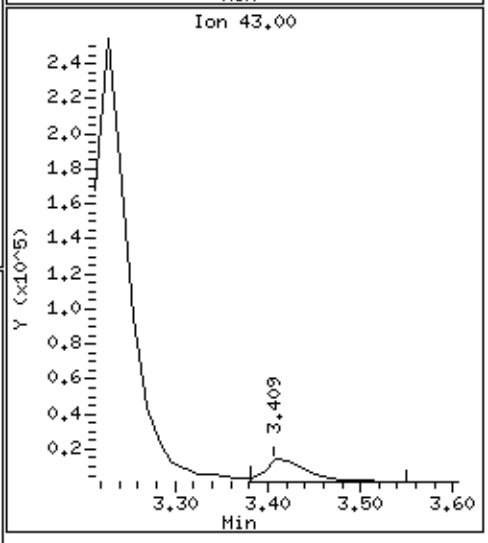
52 2-Propanol

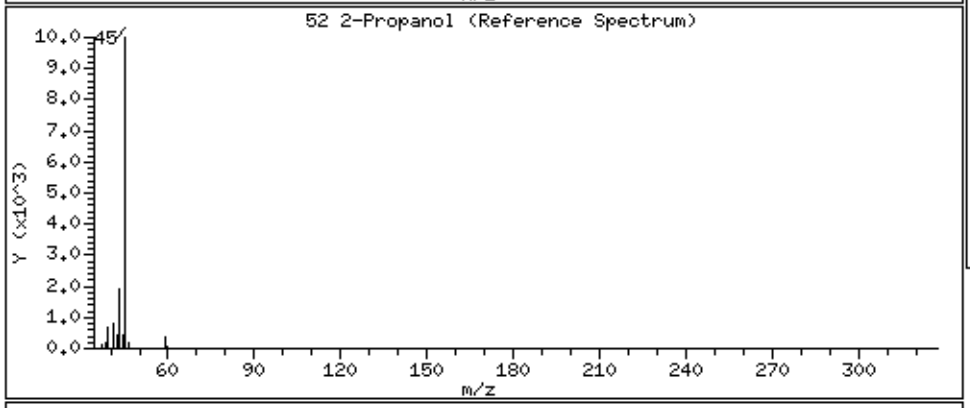
Concentration: 25.220 PPBV

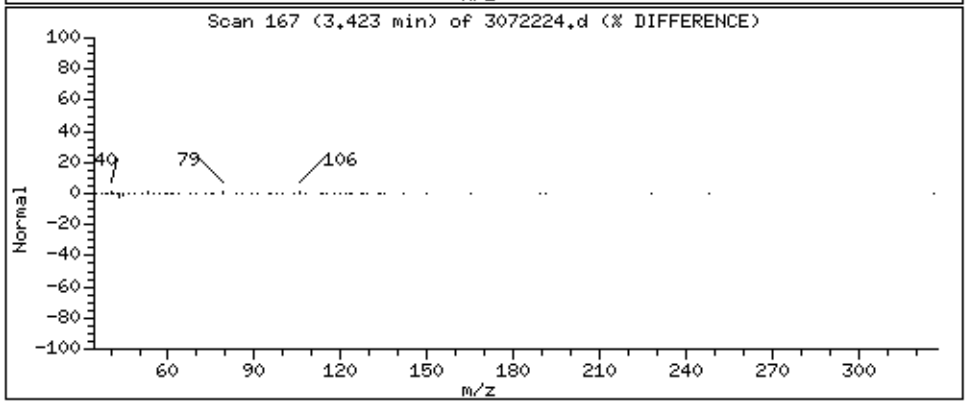












Data File: /chem/msd3.i/22JUL21.b/3072224.d

Date : 22-JUL-2021 23:59

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2662

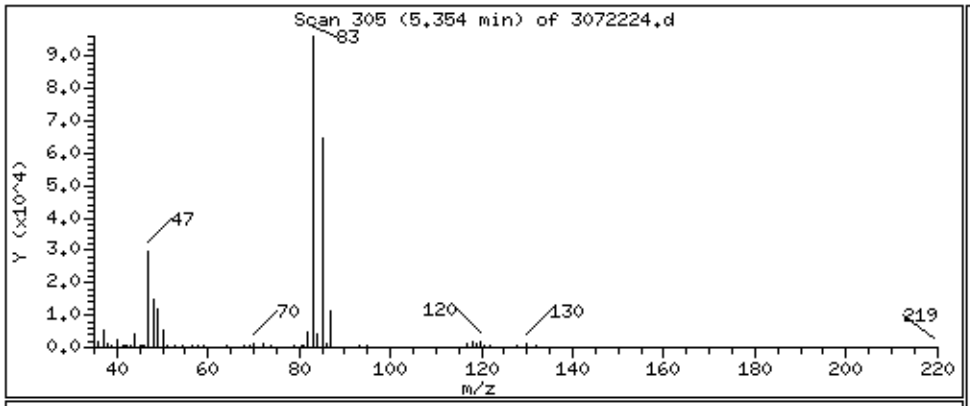
Operator: mb

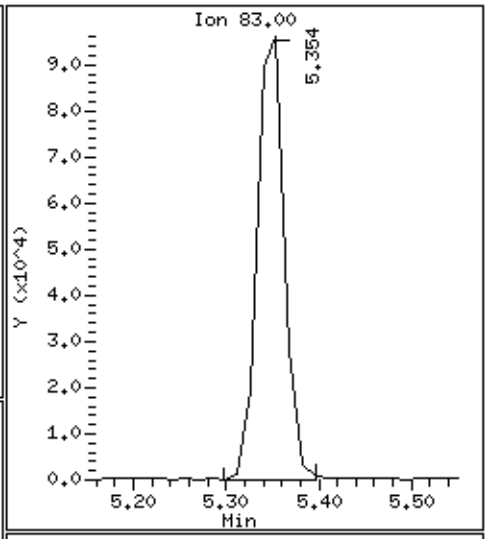
Column phase: RTX-624

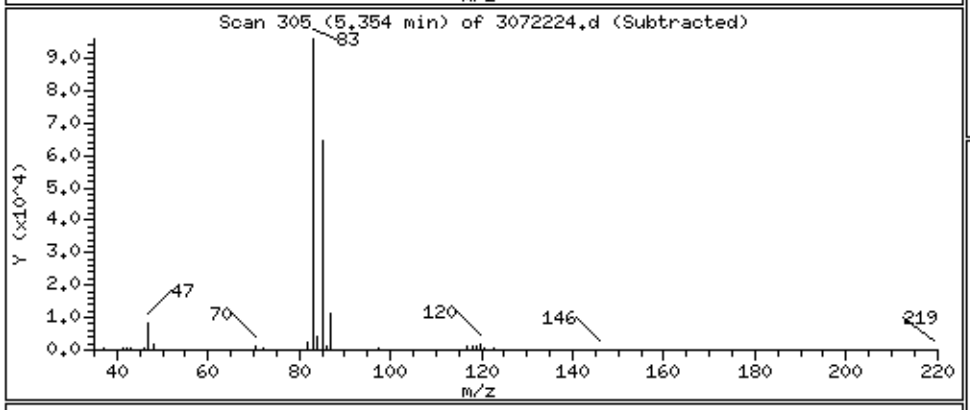
Column diameter: 0.25

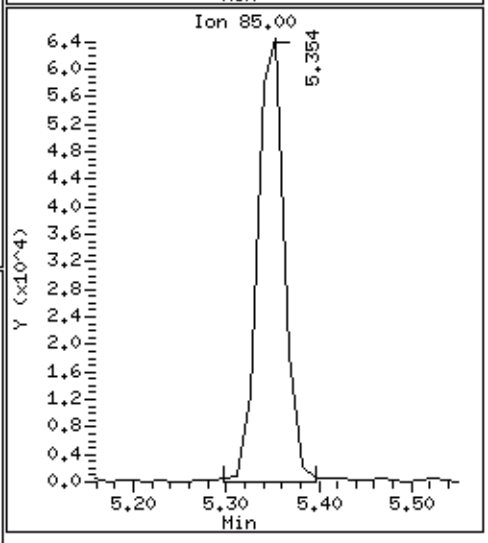
92 Chloroform

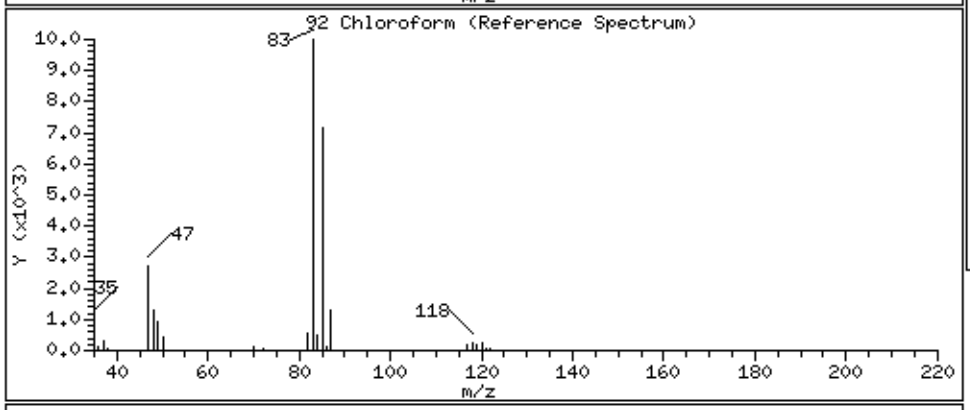
Concentration: 28.715 PPBV

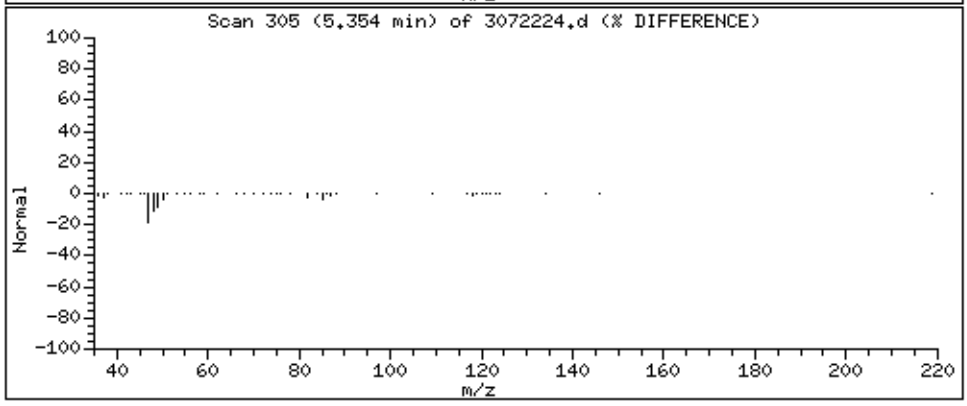












Data File: /chem/msd3.i/22JUL21.b/3072224.d

Date : 22-JUL-2021 23:59

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2662

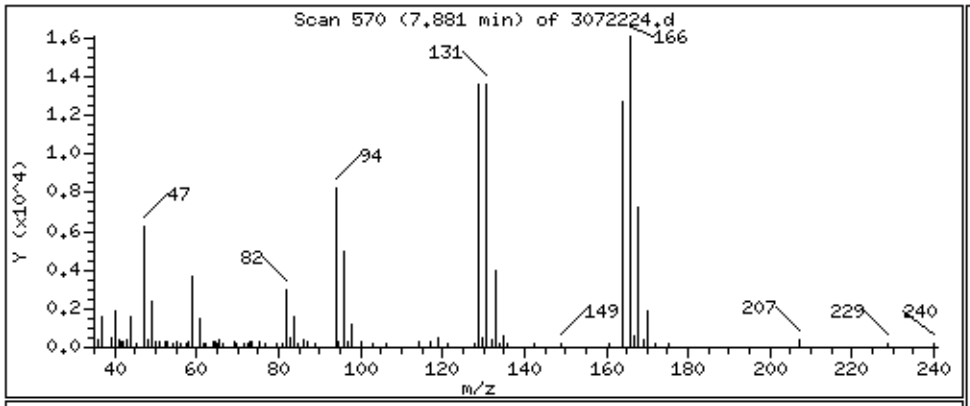
Operator: mb

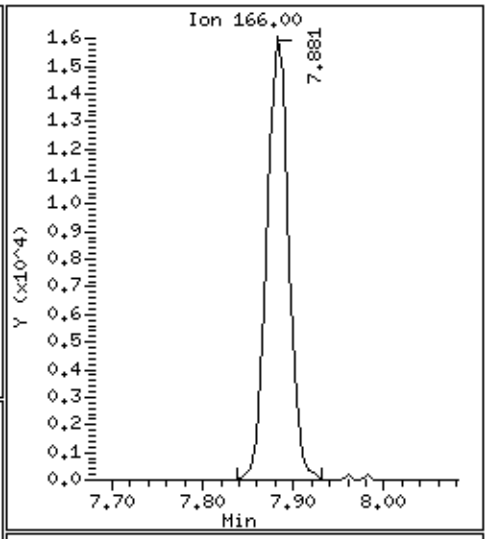
Column phase: RTX-624

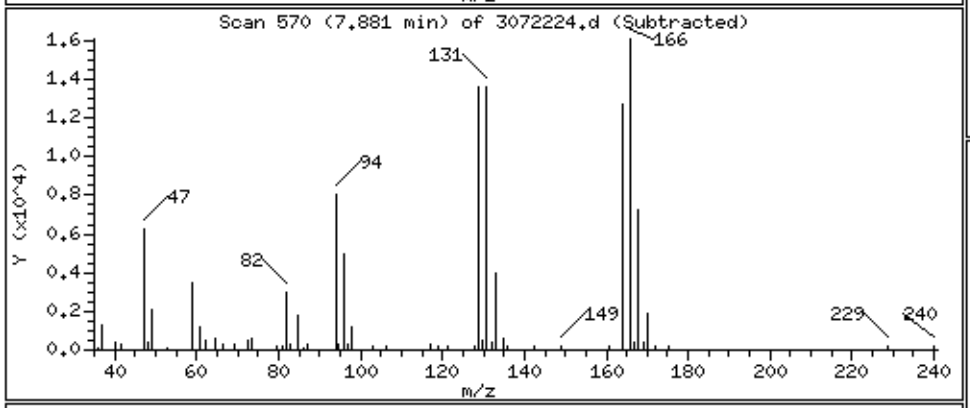
Column diameter: 0.25

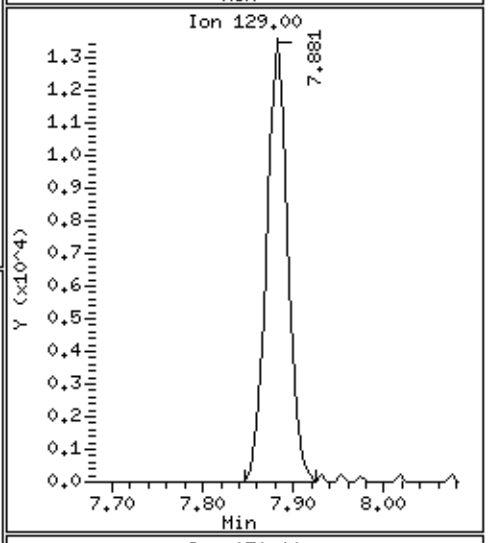
142 Tetrachloroethene

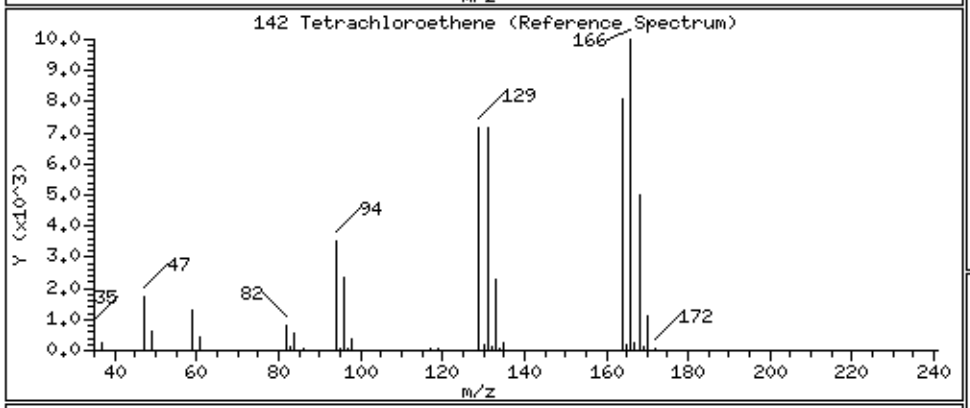
Concentration: 5.410 PPBV

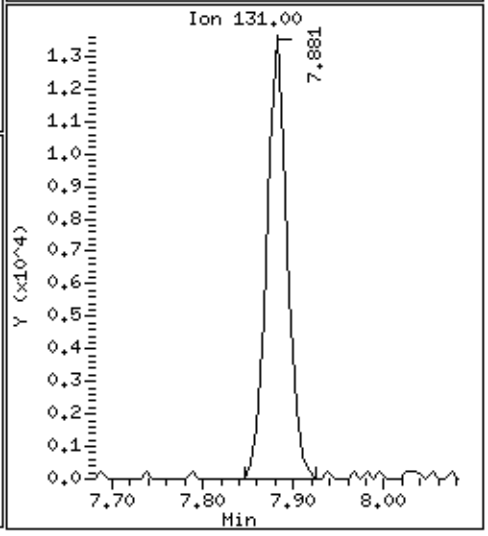


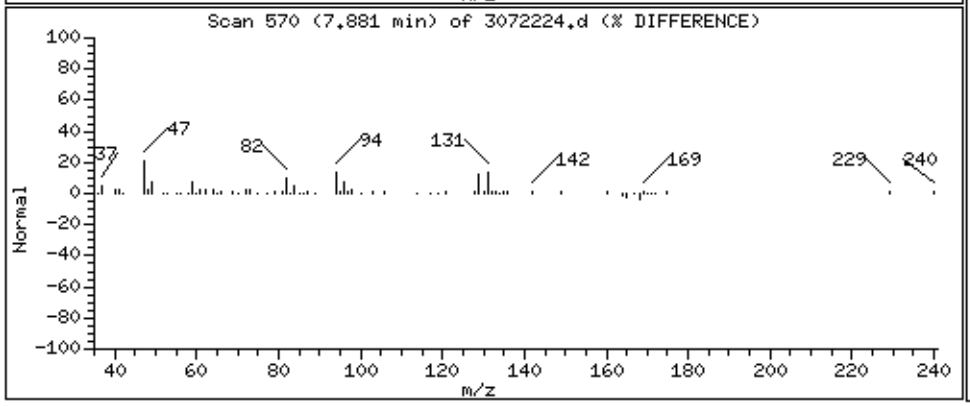












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Client Sample ID: SG-VW49A-03

Lab ID#: 2107241A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072218**	**Date of Collection:**	**7/9/21 8:43:00 AM**
Dil. Factor:	**2.03**	**Date of Analysis:**	**7/22/21 10:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.0	Not Detected
Freon 114	1.0	Not Detected	7.1	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.7	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Freon 113	1.0	Not Detected	7.8	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Acetone	10	22	24	54
2-Propanol	4.1	9.1	10	22
Carbon Disulfide	4.1	Not Detected	13	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	1.3	5.0	6.3
1,1,1-Trichloroethane	1.0	Not Detected	5.5	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.4	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.7	Not Detected
Benzene	1.0	Not Detected	3.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.4	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.7	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	6.8	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
Tetrachloroethene	1.0	21	6.9	140
2-Hexanone	4.1	Not Detected	17	Not Detected

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Client Sample ID: SG-VW49A-03

Lab ID#: 2107241A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072218**	**Date of Collection:**	**7/9/21 8:43:00 AM**
Dil. Factor:	**2.03**	**Date of Analysis:**	**7/22/21 10:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.8	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Cumene	1.0	1.1	5.0	5.5
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.0	Not Detected
Propylbenzene	1.0	Not Detected	5.0	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
Hexachlorobutadiene	4.1	Not Detected	43	Not Detected
Naphthalene	2.0	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	420	Not Detected
Freon 134a	4.1	Not Detected	17	Not Detected
Acrolein	4.1	Not Detected	9.3	Not Detected
Acrylonitrile	4.1	Not Detected	8.8	Not Detected
tert-Amyl methyl ether	4.1	Not Detected	17	Not Detected
tert-Butyl alcohol	4.1	Not Detected	12	Not Detected
1,2-Dibromo-3-chloropropane	4.1	Not Detected	39	Not Detected
Dibromomethane	4.1	Not Detected	29	Not Detected
1,1-Difluoroethane	4.1	Not Detected	11	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
Ethyl Acetate	4.1	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.1	Not Detected	17	Not Detected
Hexachloroethane	4.1	Not Detected	39	Not Detected
Iodomethane	10	Not Detected	59	Not Detected
Propylene	4.1	Not Detected	7.0	Not Detected
1,1,1,2-Tetrachloroethane	4.1	Not Detected	28	Not Detected
1,2,3-Trichloropropane	4.1	Not Detected	24	Not Detected
Vinyl Acetate	4.1	Not Detected	14	Not Detected
Vinyl Bromide	4.1	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW49A-03

Lab ID#: 2107241A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072218**	**Date of Collection: 7/9/21 8:43:00 AM**	
Dil. Factor:	**2.03**	**Date of Analysis: 7/22/21 10:39 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072218.d
Lab Smp Id: 2107241A-14A
Inj Date : 22-JUL-2021 22:39
Operator : DF Inst ID: msdp.i
Smp Info : 200mL O0251
Misc Info : 5.3 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 1
Dil Factor: 2.03000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	148904	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	115772				48.23- 108.23	77.75
5.785	5.778 (1.000)	49	316701				150.57- 210.57	212.69
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.666 (1.000)	114	537462	25.0000			80.00- 120.00	100.00
6.659	6.666 (1.000)	88	77527				0.00- 45.71	14.42
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	543083	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	281807				23.78- 83.78	51.89
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.308	6.308 (1.090)	65	207528	25.2541	25.254		80.00- 120.00	100.00
6.308	6.308 (1.090)	67	104735				27.21- 87.21	50.47
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	586181	25.1162	25.116		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62421				0.00- 40.44	10.65

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	378071			34.95- 94.95	64.50
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	336306	24.1153	24.115	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	410273			95.92- 155.92	121.99
10.921	10.921 (1.154)	176	324058			66.89- 126.89	96.36
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	43417	11.1221	22.578	80.00- 120.00	100.00
3.722	3.715 (0.643)	43	169687			302.95- 362.95	390.83
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	70825	4.50167	9.138	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	20270			0.00- 47.19	28.62
92 Chloroform					CAS #: 67-66-3		
5.835	5.843 (1.009)	83	8216	0.63416	1.287	80.00- 120.00	100.00
5.835	5.843 (1.009)	85	5919			34.70- 94.70	72.04
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	126912	10.2536	20.815	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	99873			47.84- 107.84	78.69
8.464	8.464 (0.895)	131	98118			45.29- 105.29	77.31
168 Cumene					CAS #: 98-82-8		
10.649	10.656 (1.126)	105	23435	0.55133	1.119	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	7044			0.00- 58.52	30.06
10.649	10.656 (1.126)	51	3772			0.00- 43.00	16.10

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072218.d
Lab Smp Id: 2107241A-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 5.3 Hg->9.9 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	148904	-6.50
108 1,4-Difluorobenze	573285	343971	802599	537462	-6.25
153 Chlorobenzene-d5	571549	342929	800169	543083	-4.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.66	-0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:41

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-14A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 5.3 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.254	101.02	70-130
$ 134 Toluene-d8	25.000	25.116	100.46	70-130
$ 170 4-Bromofluorobenz	25.000	24.115	96.46	70-130

Data File: /chem/msdp.i/22JUL21.b/p072218.d

Date : 22-JUL-2021 22:39

Client ID:

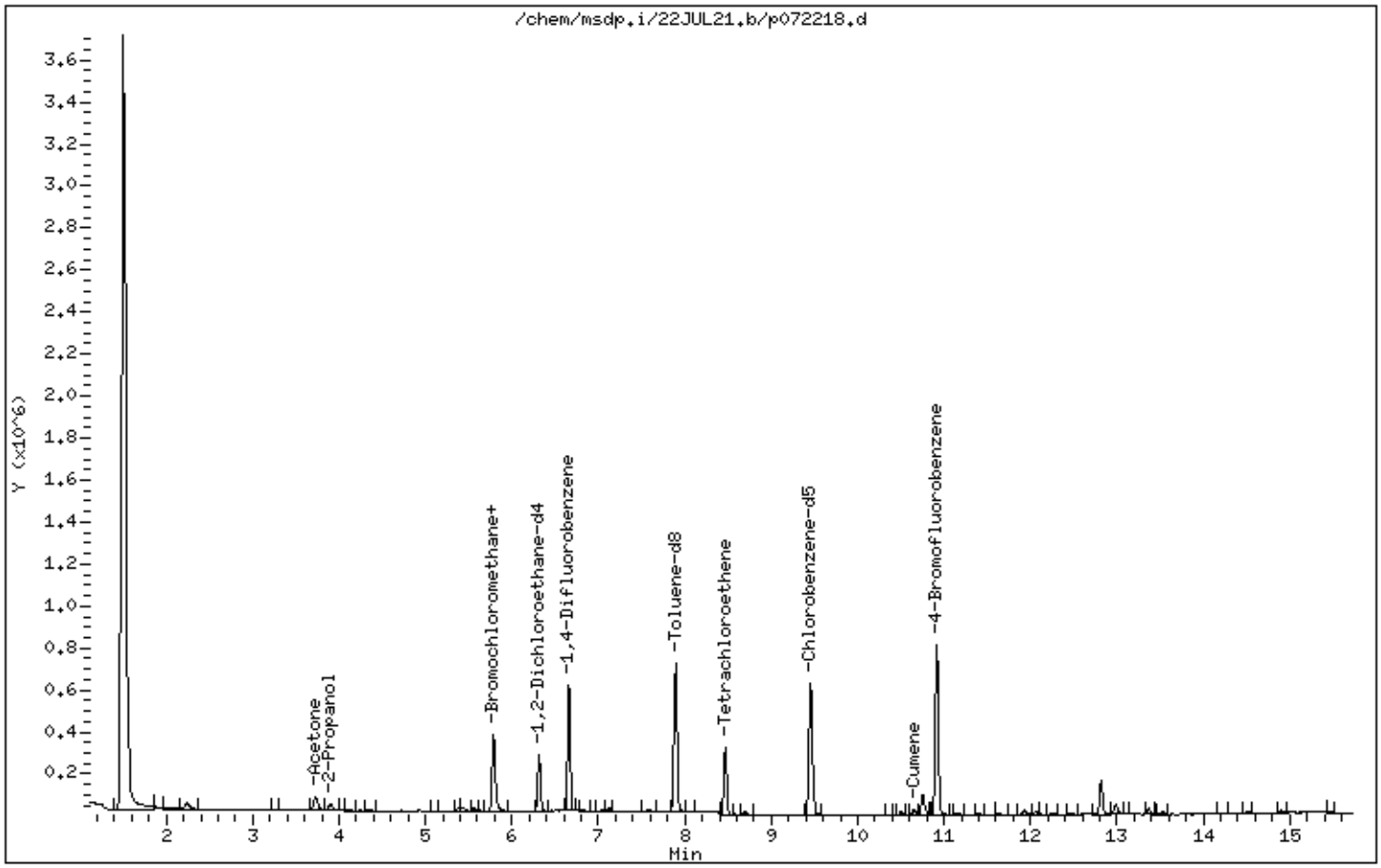
Instrument: msdp.i

Sample Info: 200mL 00251

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072218.d

Date : 22-JUL-2021 22:39

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00251

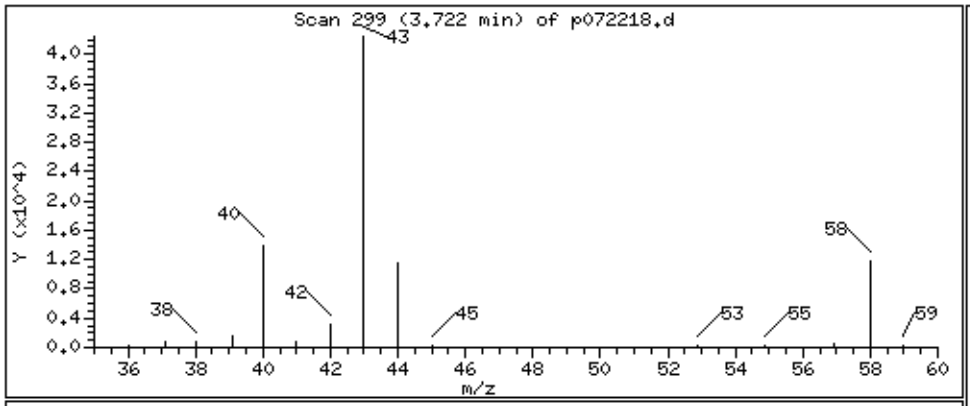
Operator: DF

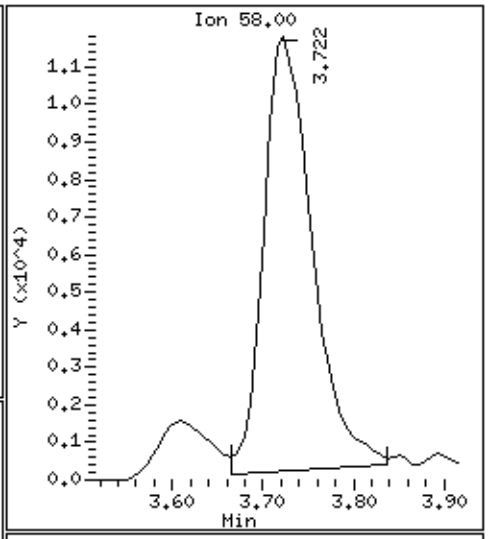
Column phase: RTX-624

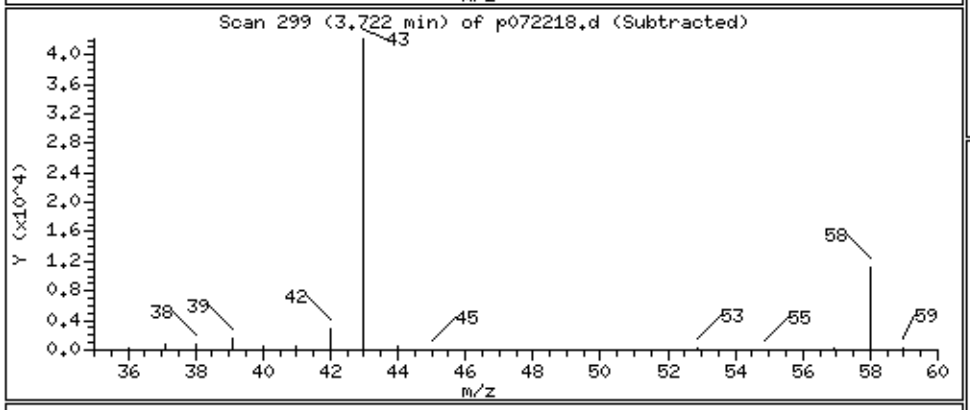
Column diameter: 0.25

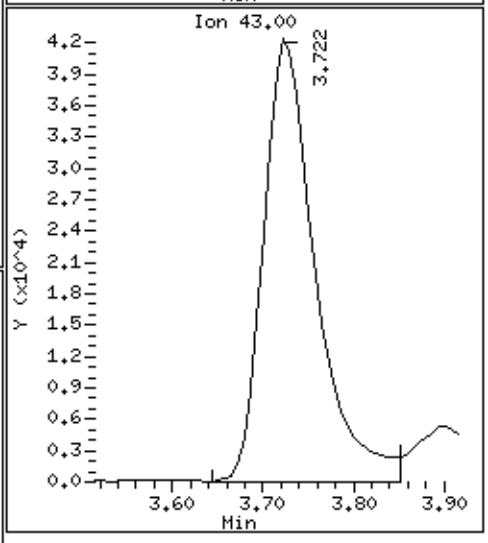
47 Acetone

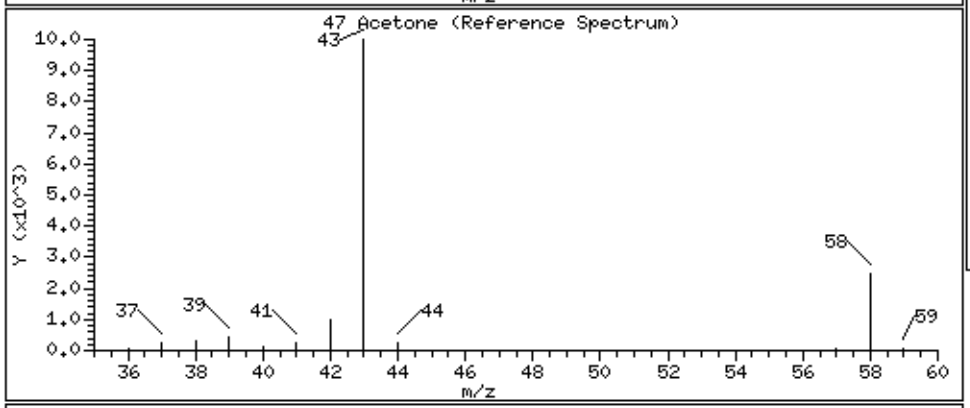
Concentration: 22.578 PPBV

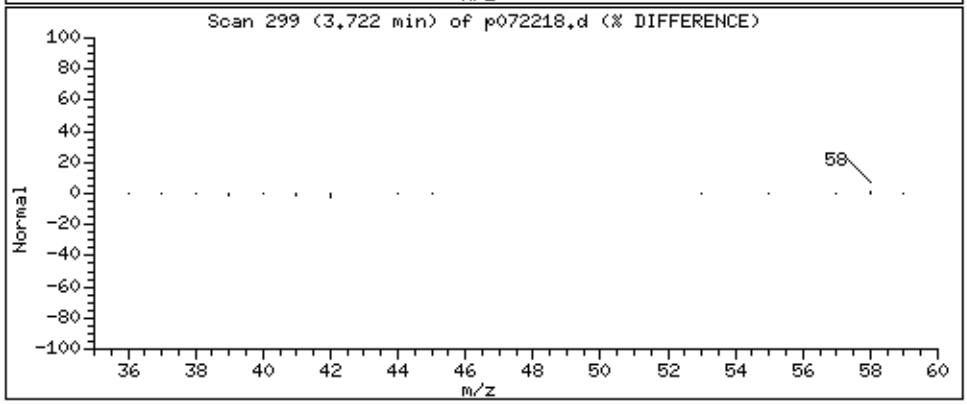












Data File: /chem/msdp.i/22JUL21.b/p072218.d

Date : 22-JUL-2021 22:39

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00251

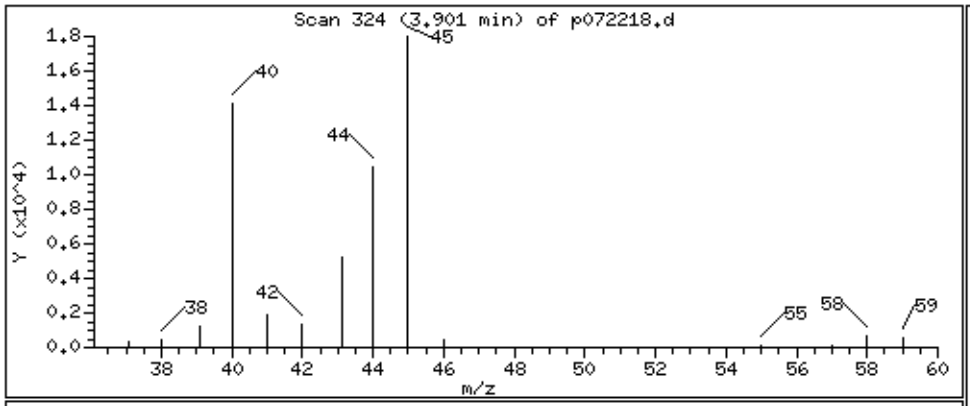
Operator: DF

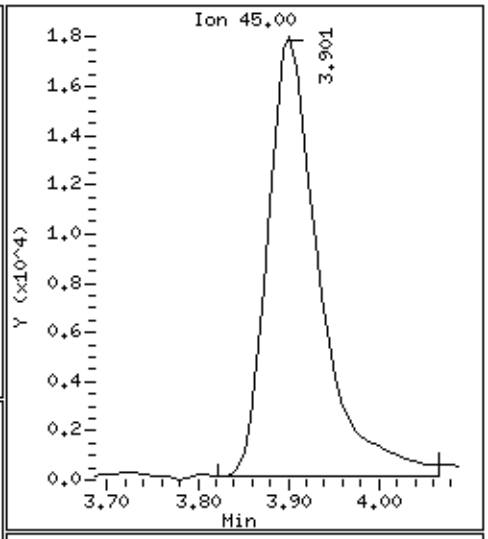
Column phase: RTX-624

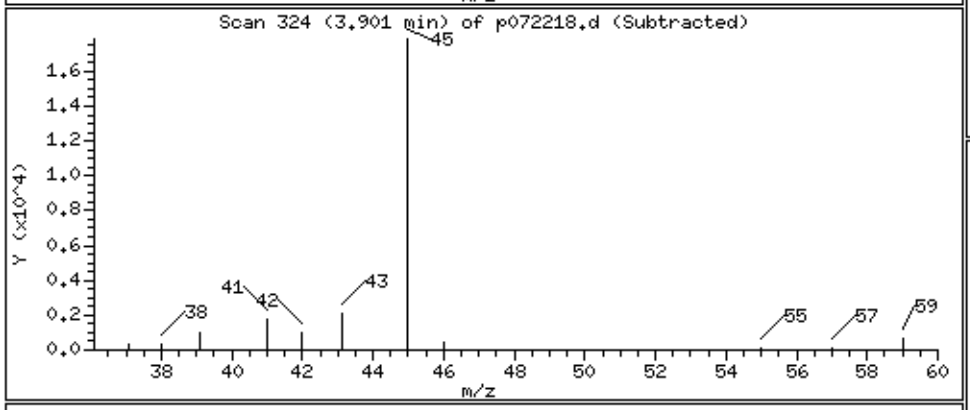
Column diameter: 0.25

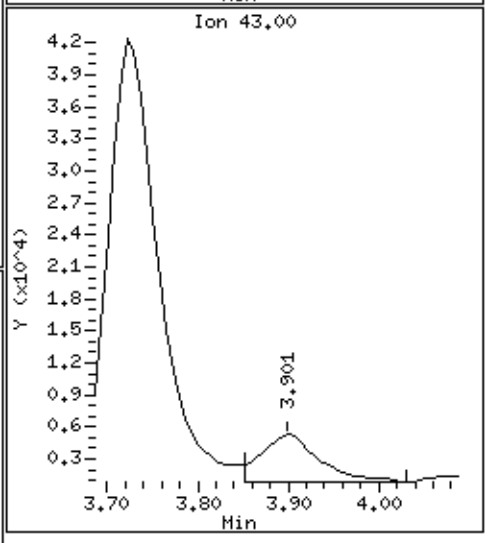
52 2-Propanol

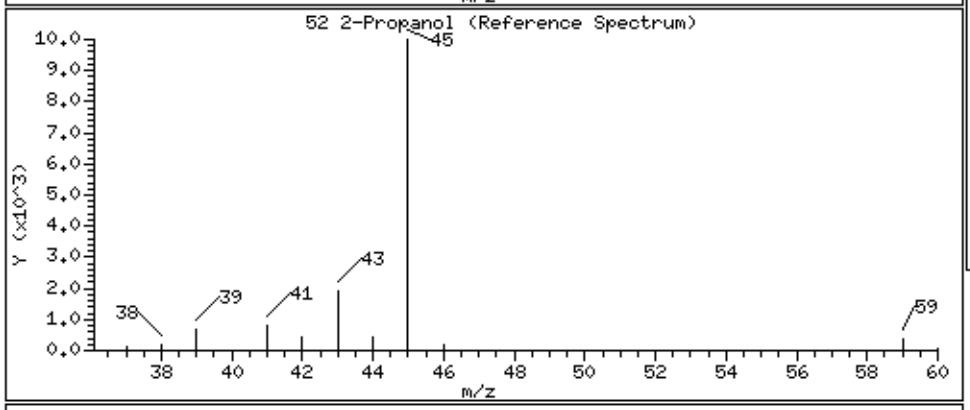
Concentration: 9.138 PPBV

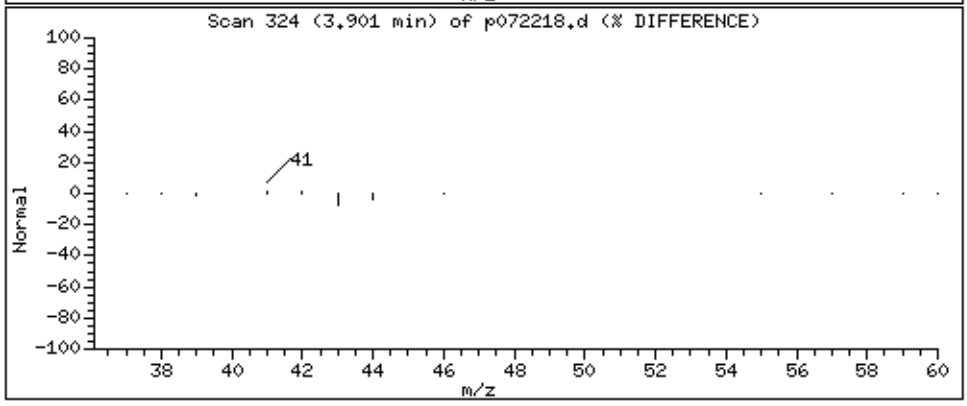












Data File: /chem/msdp.i/22JUL21.b/p072218.d

Date : 22-JUL-2021 22:39

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00251

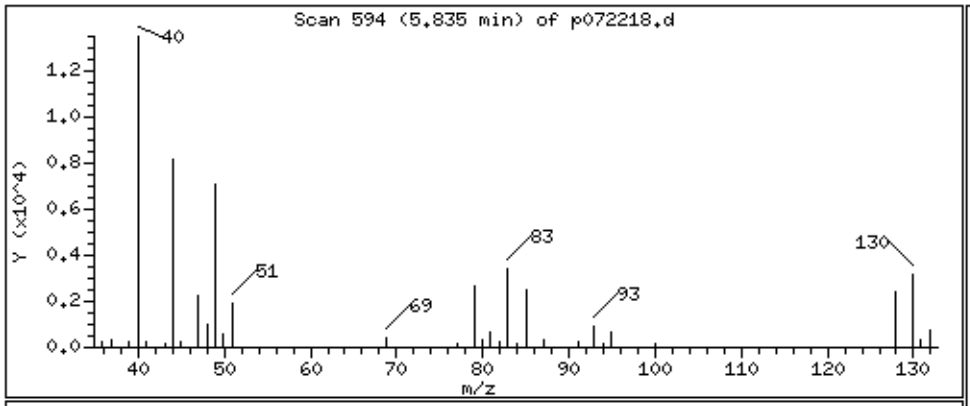
Operator: DF

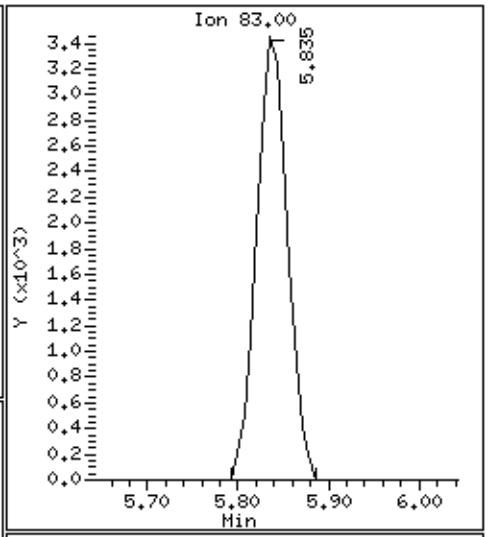
Column phase: RTX-624

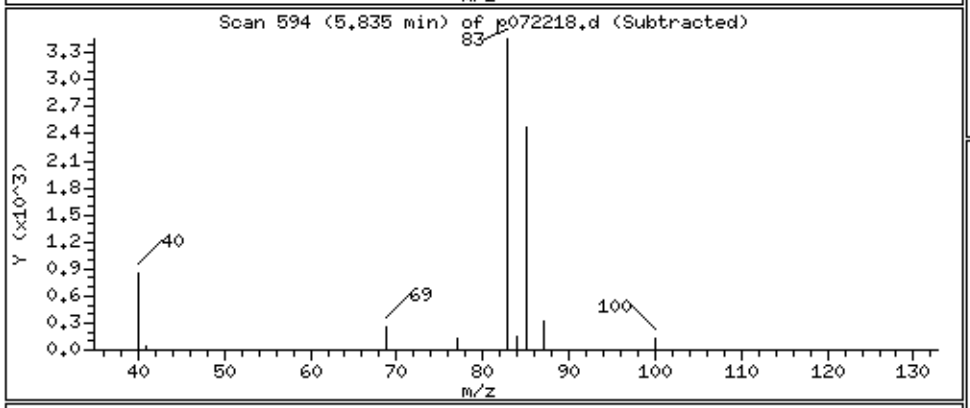
Column diameter: 0.25

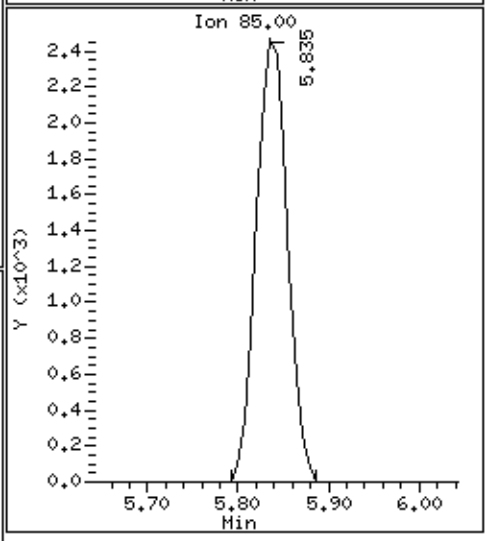
92 Chloroform

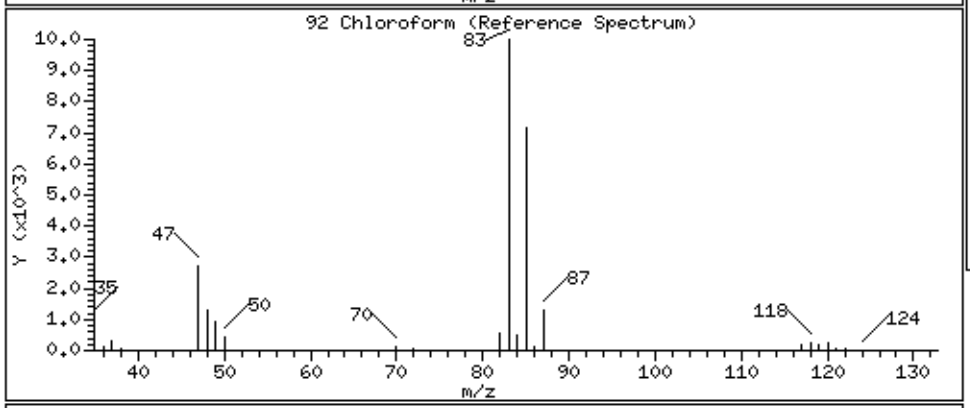
Concentration: 1.287 PPBV

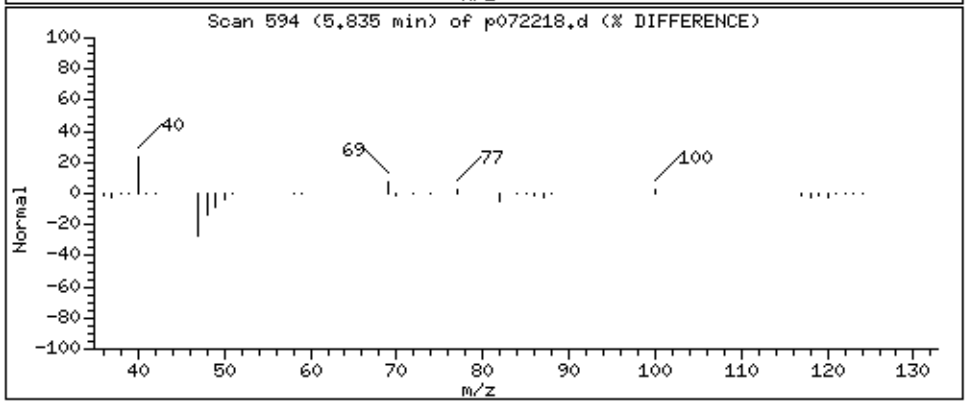












Data File: /chem/msdp.i/22JUL21.b/p072218.d

Page 5

Date : 22-JUL-2021 22:39

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00251

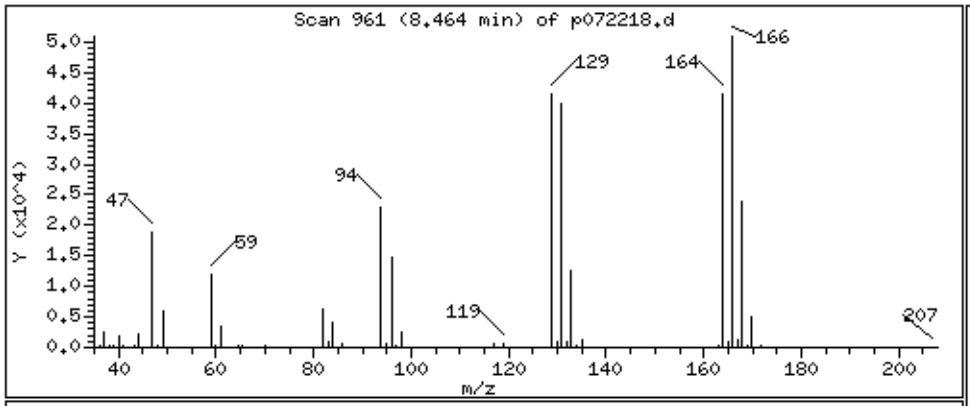
Operator: DF

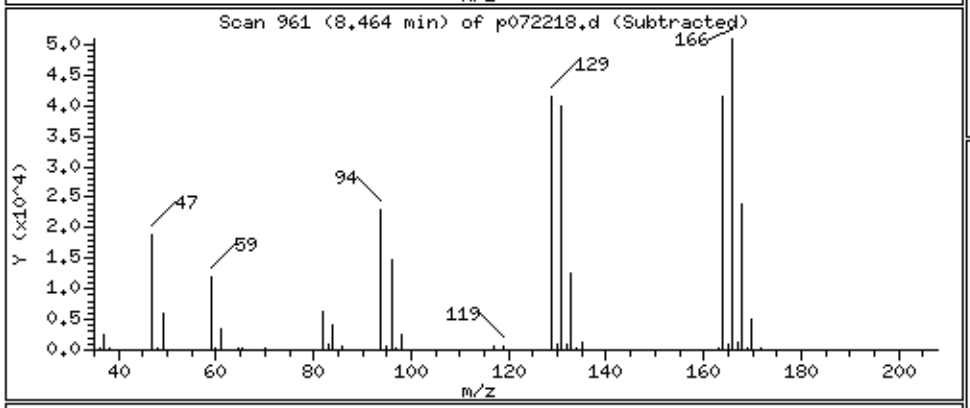
Column phase: RTX-624

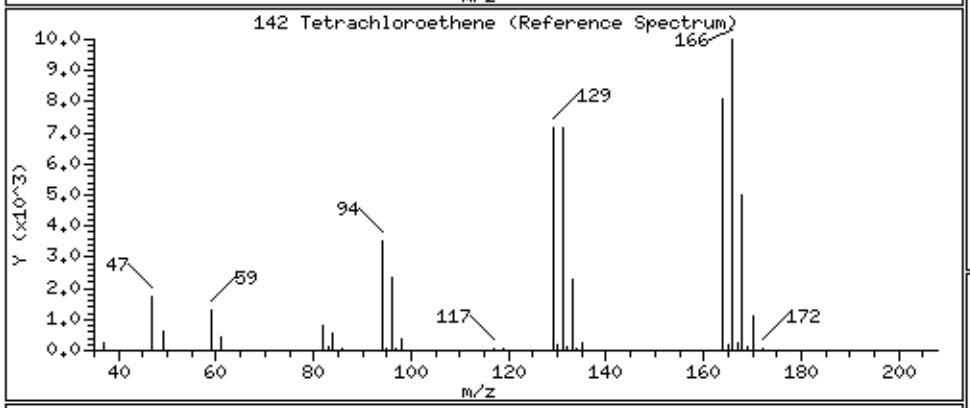
Column diameter: 0.25

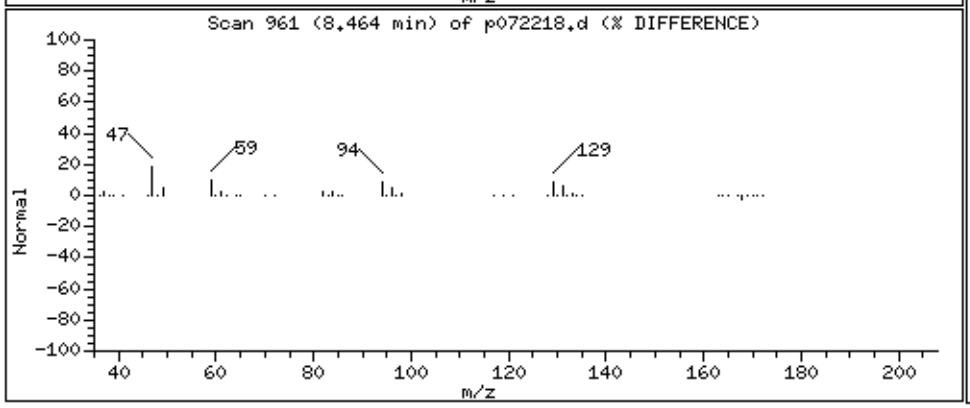
142 Tetrachloroethene

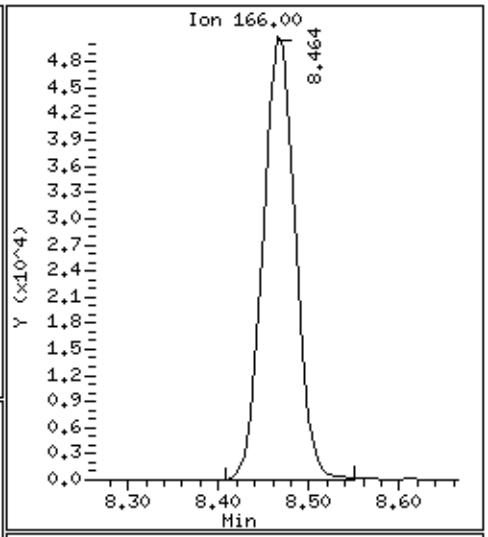
Concentration: 20.815 PPBV

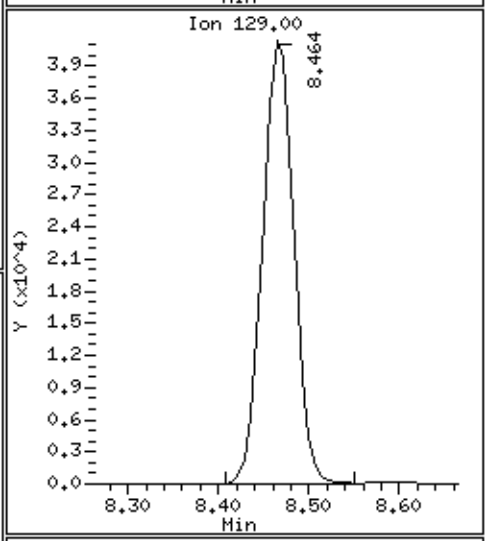


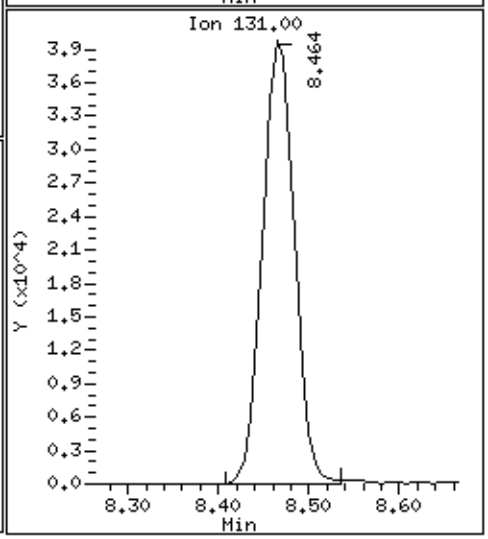












Data File: /chem/msdp.i/22JUL21.b/p072218.d

Date : 22-JUL-2021 22:39

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00251

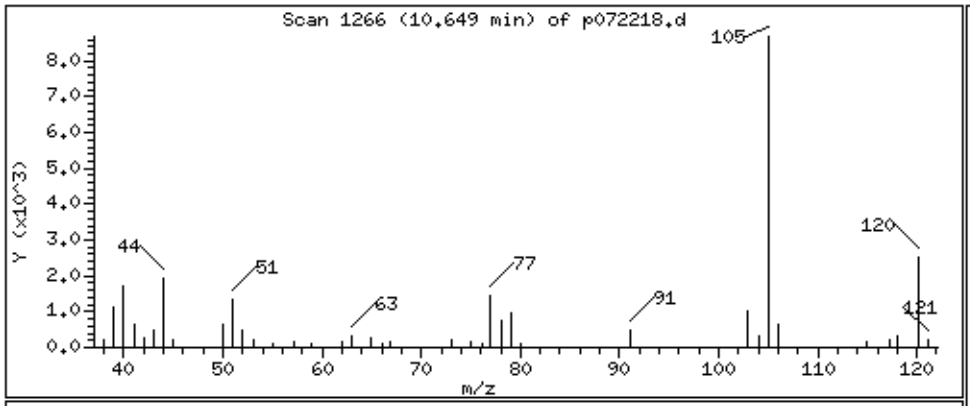
Operator: DF

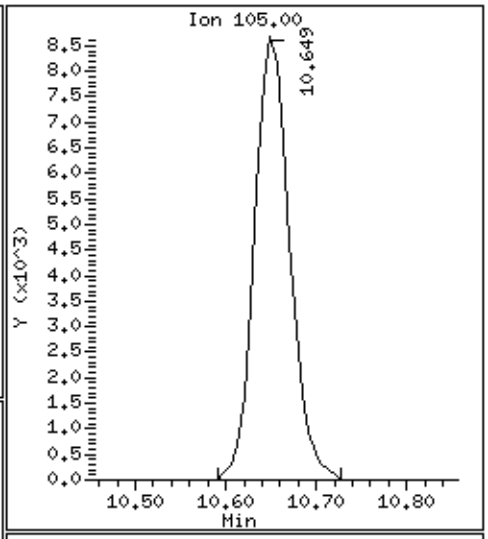
Column phase: RTX-624

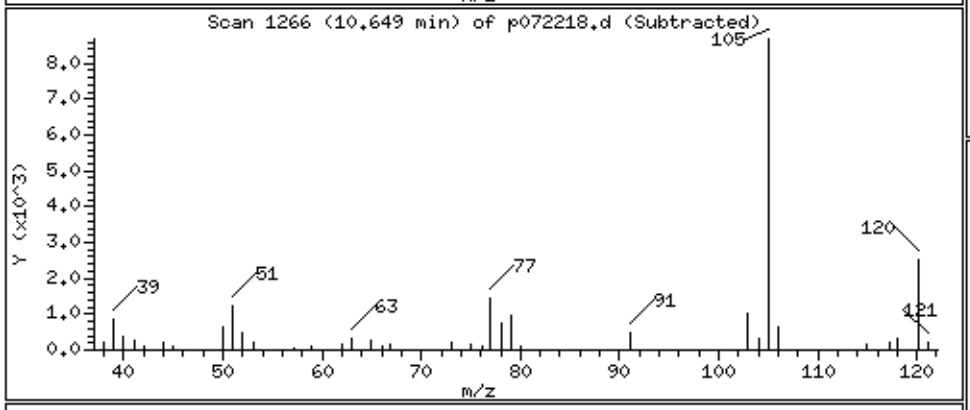
Column diameter: 0.25

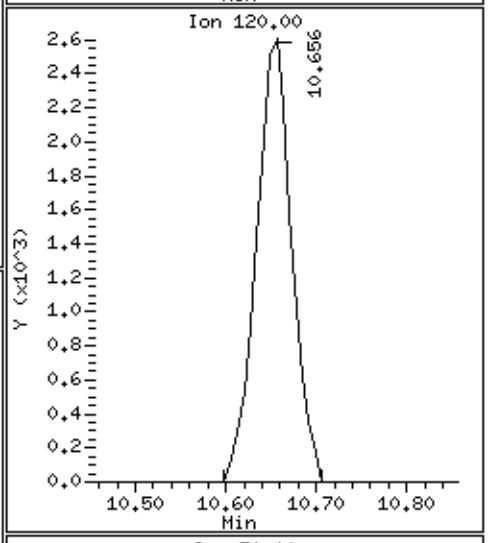
168 Cumene

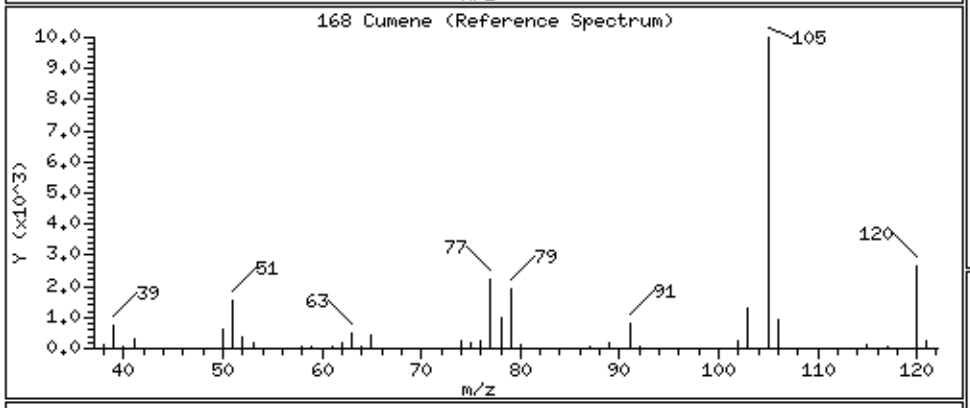
Concentration: 1.119 PPBV

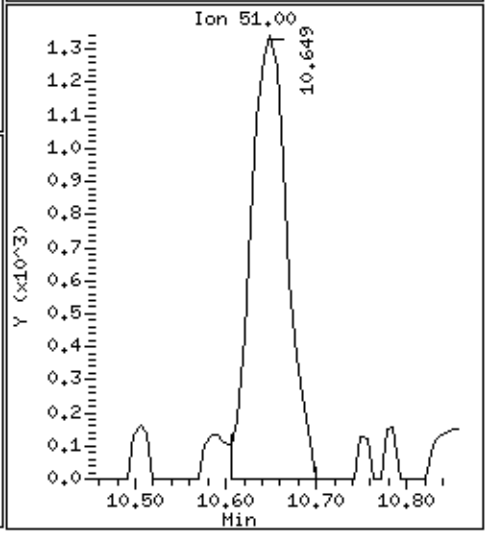


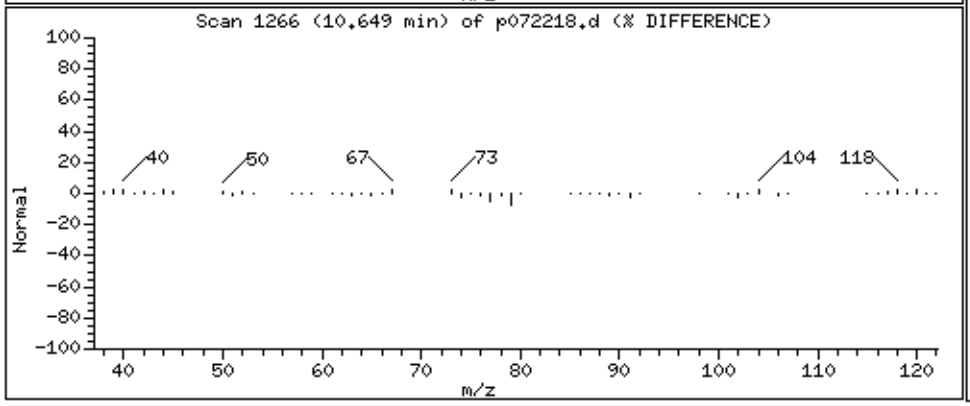












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Client Sample ID: SG-VW49B-02

Lab ID#: 2107241A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072219**	**Date of Collection:**	**7/9/21 9:09:00 AM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/22/21 11:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.7	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	11	11	21	21
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	17	26	40
2-Propanol	4.4	9.1	11	22
Carbon Disulfide	4.4	Not Detected	14	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	6.5	5.4	32
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	1.4	3.5	4.5
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.4	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	14	7.5	93
2-Hexanone	4.4	Not Detected	18	Not Detected

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Client Sample ID: SG-VW49B-02

Lab ID#: 2107241A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072219**	**Date of Collection:**	**7/9/21 9:09:00 AM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/22/21 11:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	2.9	5.4	14
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.6	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	33	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected
Naphthalene	2.2	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	7.0	13	21
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Hexachloroethane	4.4	Not Detected	43	Not Detected
Iodomethane	11	Not Detected	64	Not Detected
Propylene	4.4	Not Detected	7.6	Not Detected
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW49B-02

Lab ID#: 2107241A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072219**	**Date of Collection:**	**7/9/21 9:09:00 AM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/22/21 11:08 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072219.d
Lab Smp Id: 2107241A-15A
Inj Date : 22-JUL-2021 23:08
Operator : DF Inst ID: msdp.i
Smp Info : 200mL N3844
Misc Info : 7.1 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
Dil Factor: 2.20000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.778	5.778 (1.000)	130	147404	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	113347				48.23- 108.23	76.90
5.778	5.778 (1.000)	49	317653				150.57- 210.57	215.50
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.666 (1.000)	114	529546	25.0000			80.00- 120.00	100.00
6.659	6.666 (1.000)	88	78017				0.00- 45.71	14.73
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	538607	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	282768				23.78- 83.78	52.50
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	211199	25.9623	25.962		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	104085				27.21- 87.21	49.28
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	584665	25.4258	25.426		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62317				0.00- 40.44	10.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	379349			34.95- 94.95	64.88
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	330255	23.8782	23.878	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	401670			95.92- 155.92	121.62
10.921	10.921 (1.154)	176	312688			66.89- 126.89	94.68
39 Ethanol					CAS #: 64-17-5		
3.235	3.242 (0.560)	46	7277	4.97812	10.952	80.00- 120.00	100.00(a)
3.242	3.242 (0.561)	45	19522			511.19- 571.19	268.27
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	29954	7.75135	17.053	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	116673			302.95- 362.95	389.50
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.674)	45	64346	4.13148	9.089	80.00- 120.00	100.00
3.894	3.887 (0.674)	43	15113			0.00- 47.19	23.49
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	57638	3.17348	6.982	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	16355			0.00- 51.11	28.38
4.338	4.338 (0.751)	57	6427			0.00- 40.49	11.15
92 Chloroform					CAS #: 67-66-3		
5.835	5.843 (1.010)	83	37861	2.95206	6.494	80.00- 120.00	100.00
5.835	5.843 (1.010)	85	23843			34.70- 94.70	62.98
102 Benzene					CAS #: 71-43-2		
6.294	6.301 (0.945)	78	11297	0.64647	1.422	80.00- 120.00	100.00
6.294	6.301 (0.945)	77	3109			0.00- 52.90	27.53
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	76824	6.25842	13.768	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	59151			47.84- 107.84	76.99
8.464	8.464 (0.895)	131	55657			45.29- 105.29	72.45
168 Cumene					CAS #: 98-82-8		
10.649	10.656 (1.126)	105	55502	1.31657	2.896	80.00- 120.00	100.00
10.649	10.656 (1.126)	120	15054			0.00- 58.52	27.12
10.649	10.656 (1.126)	51	9645			0.00- 43.00	17.38

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072219.d
Lab Smp Id: 2107241A-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	147404	-7.44
108 1,4-Difluorobenze	573285	343971	802599	529546	-7.63
153 Chlorobenzene-d5	571549	342929	800169	538607	-5.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.66	-0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:41

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-15A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.962	103.85	70-130
$ 134 Toluene-d8	25.000	25.426	101.70	70-130
$ 170 4-Bromofluorobenz	25.000	23.878	95.51	70-130

Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

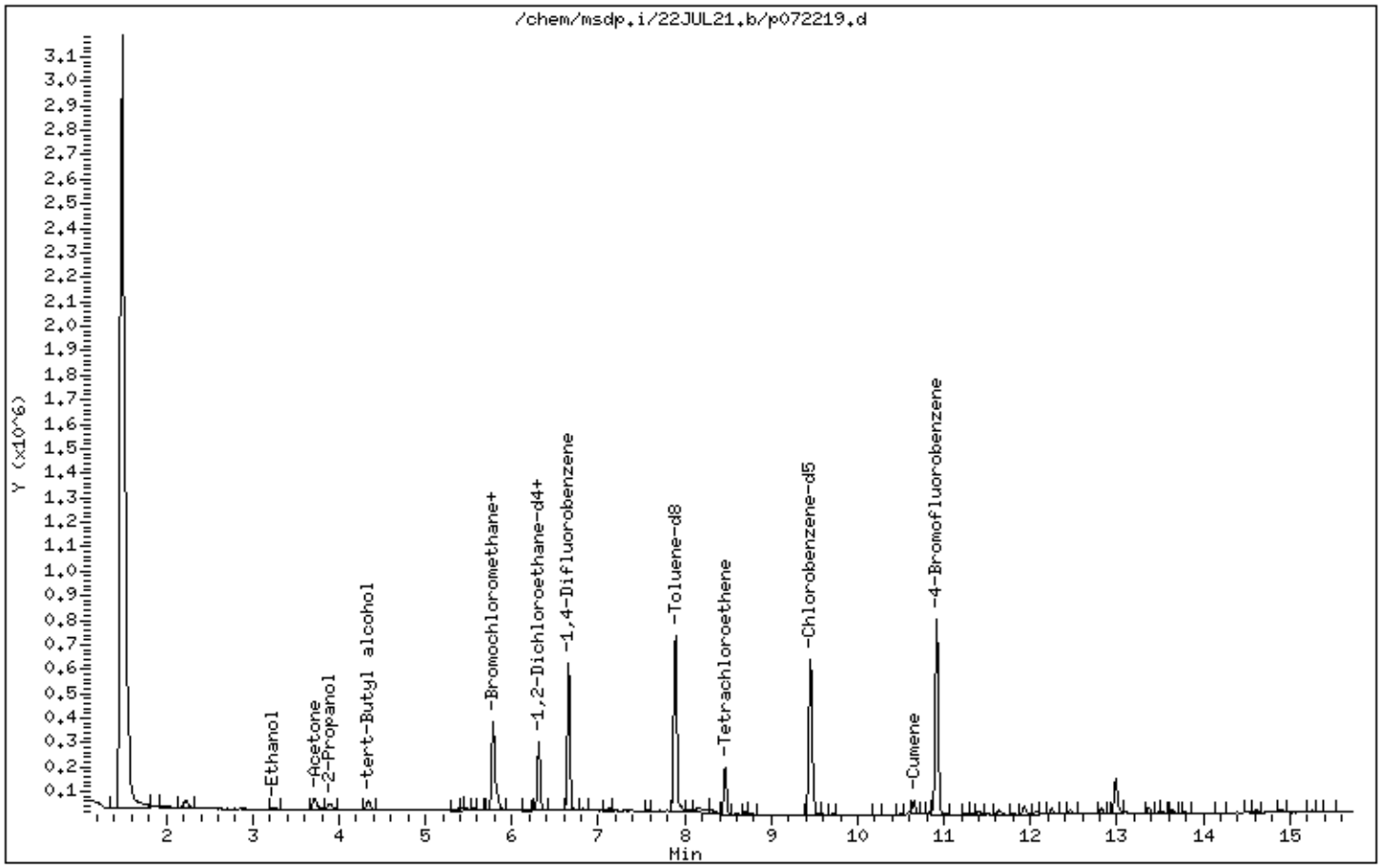
Instrument: msdp.i

Sample Info: 200mL N3844

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

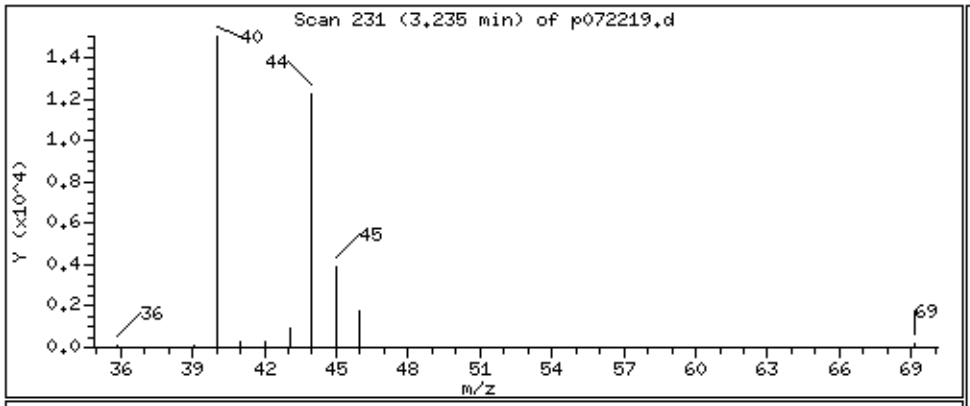
Operator: DF

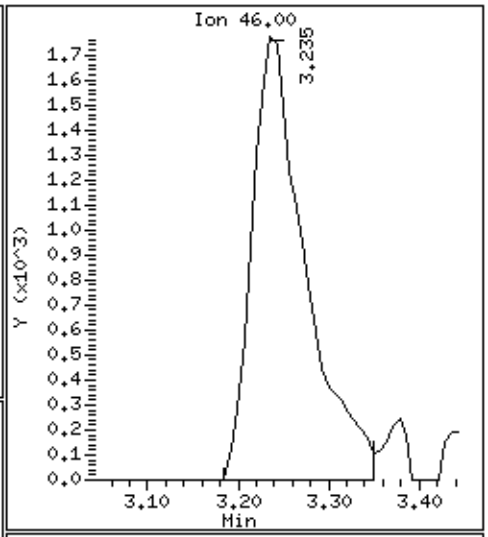
Column phase: RTX-624

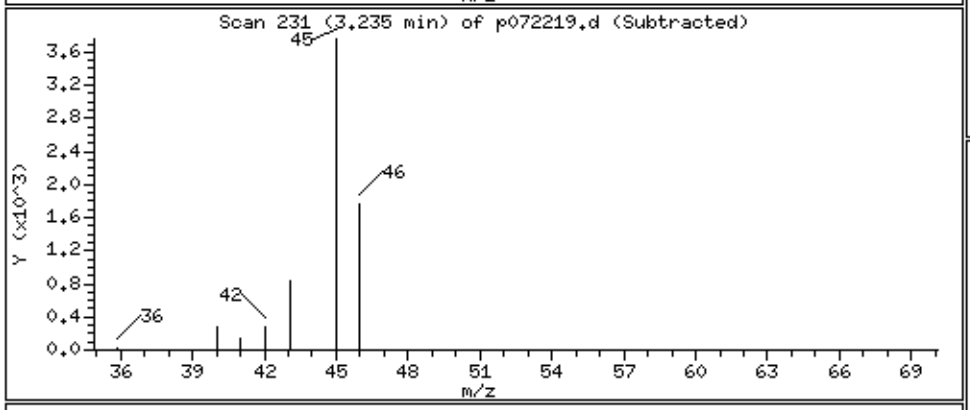
Column diameter: 0.25

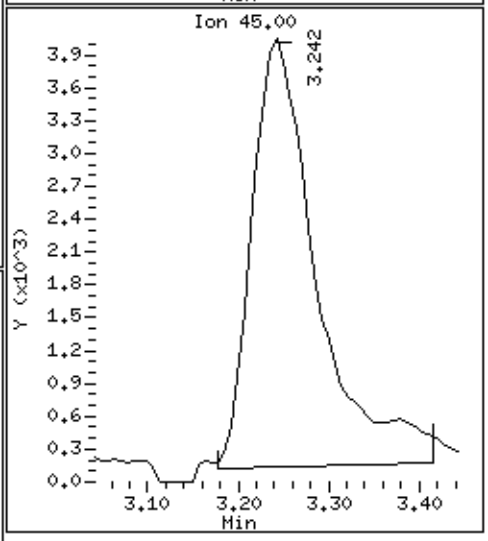
39 Ethanol

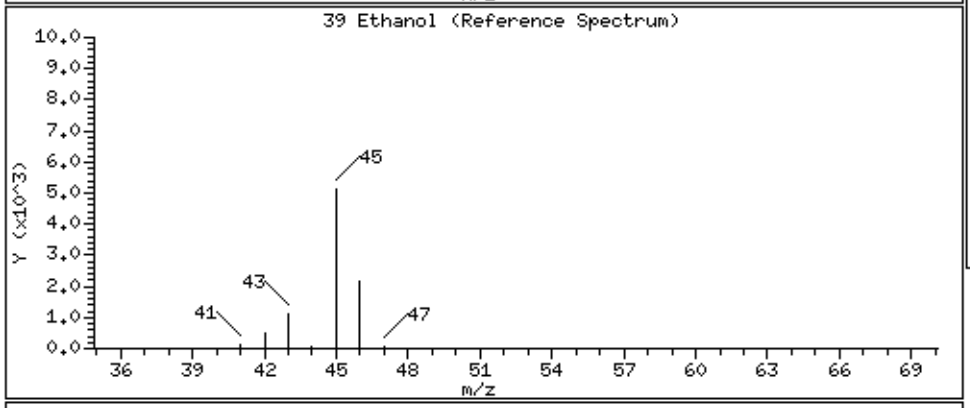
Concentration: 10.952 PPBV

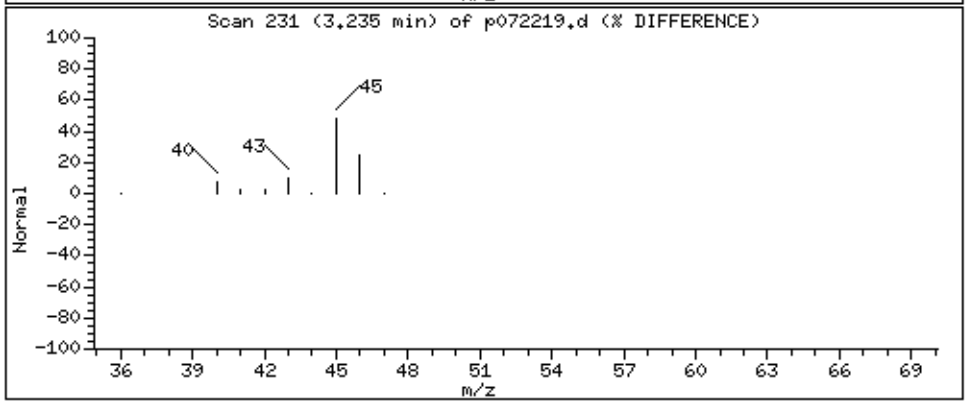












Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

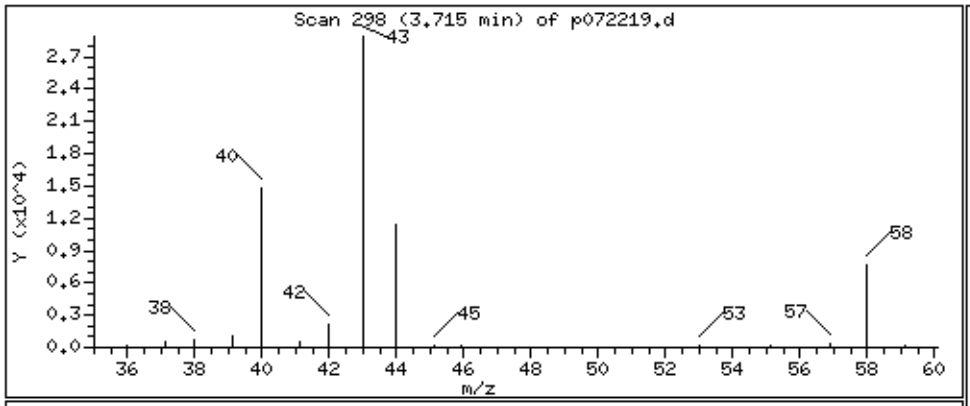
Operator: DF

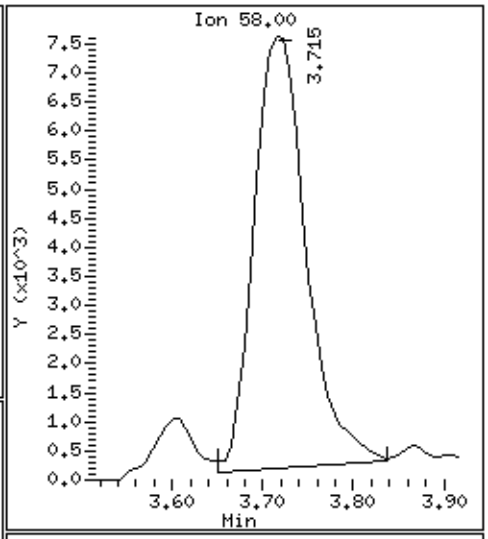
Column phase: RTX-624

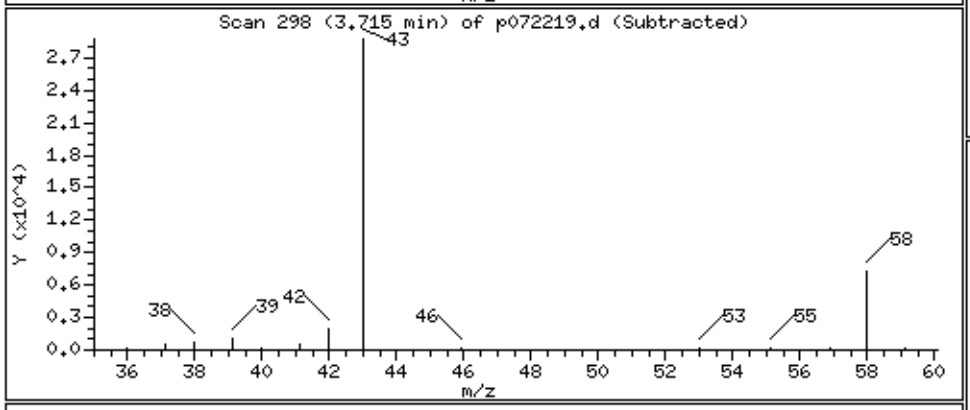
Column diameter: 0.25

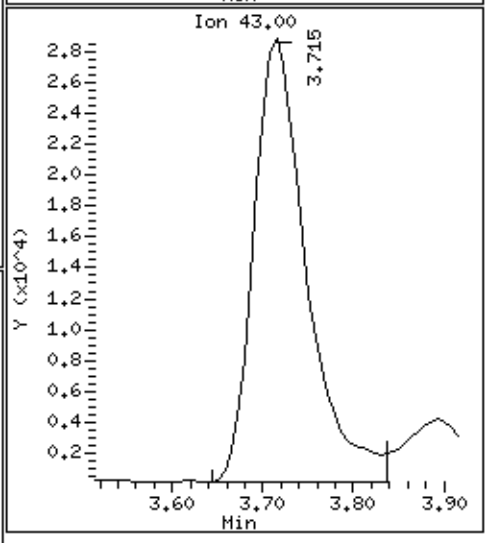
47 Acetone

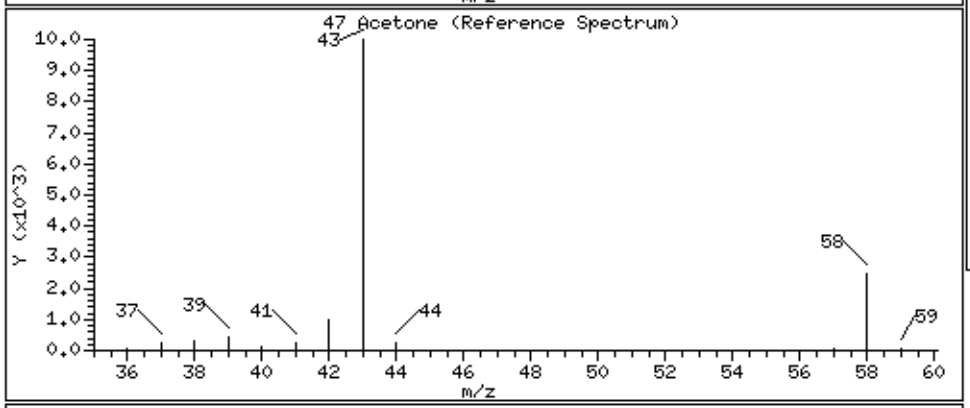
Concentration: 17.053 PPBV

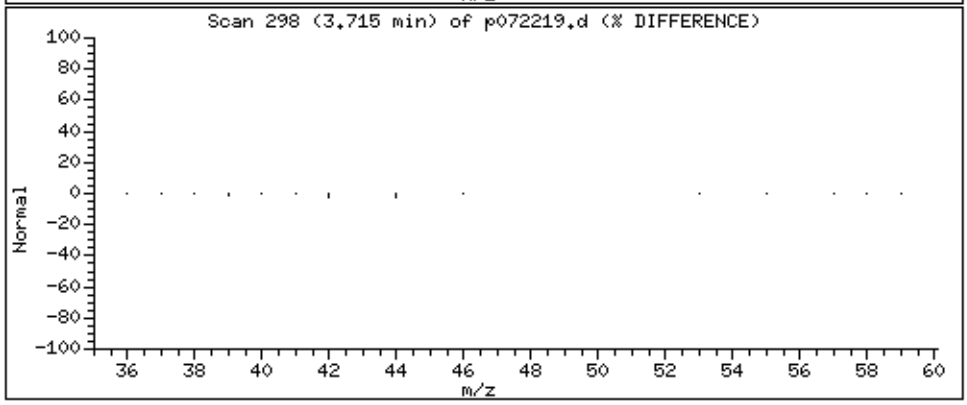












Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

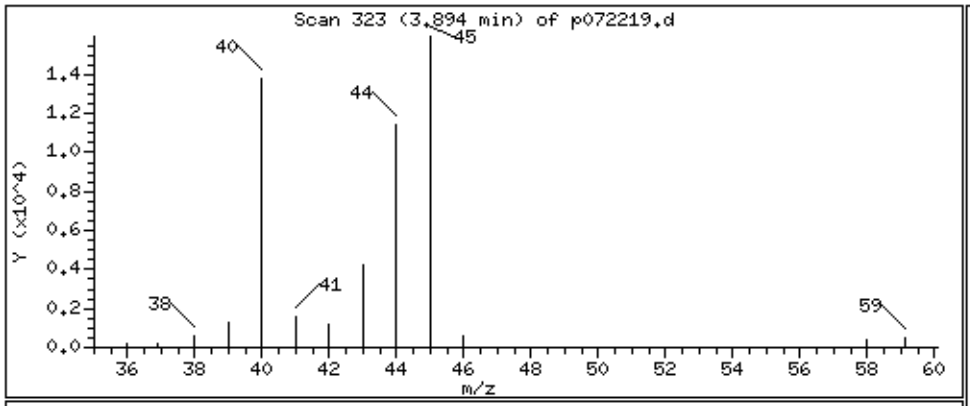
Operator: DF

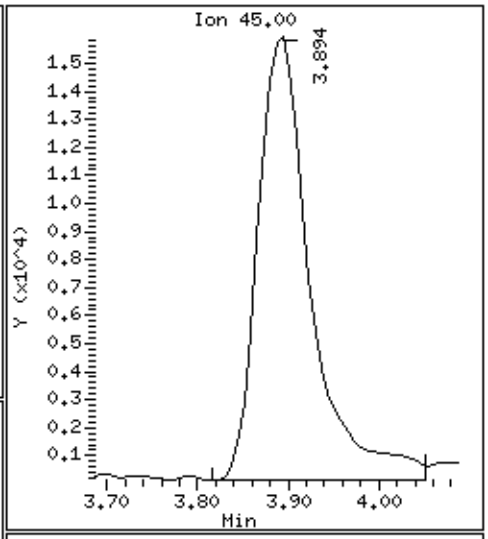
Column phase: RTX-624

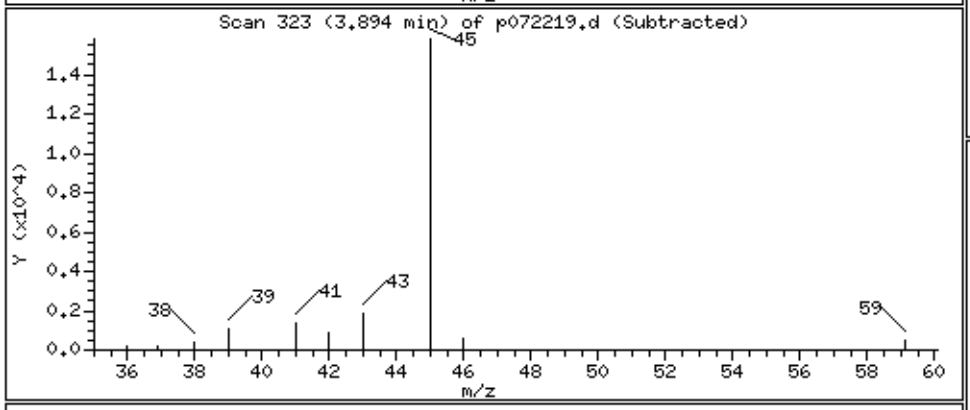
Column diameter: 0.25

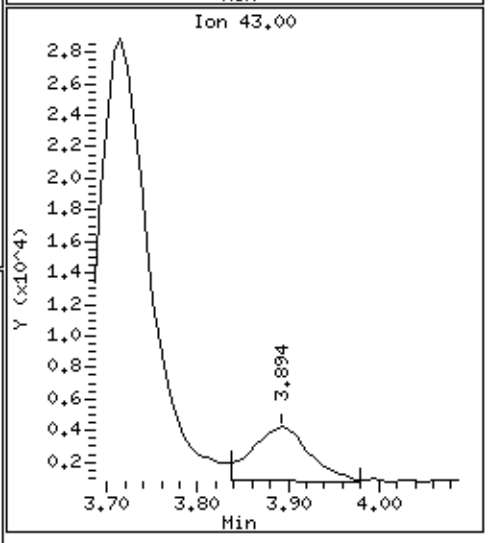
52 2-Propanol

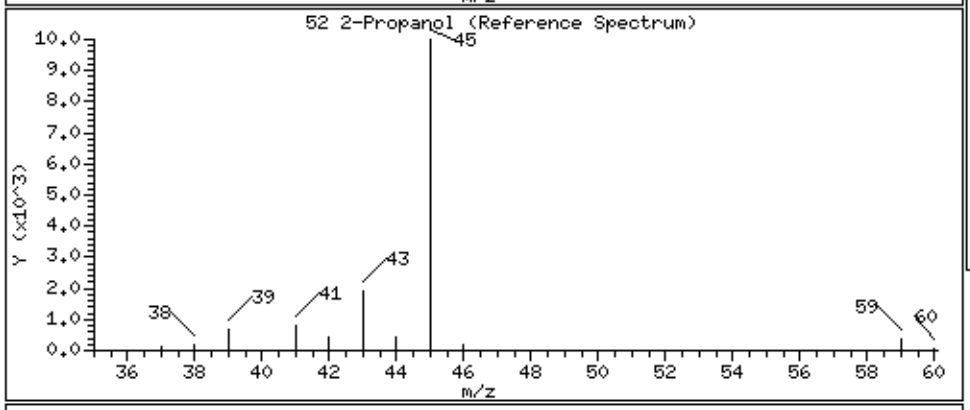
Concentration: 9.089 PPBV

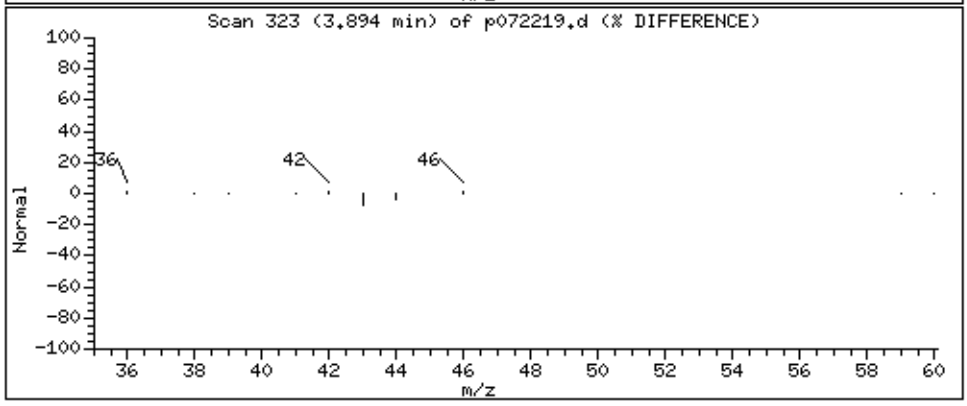












Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

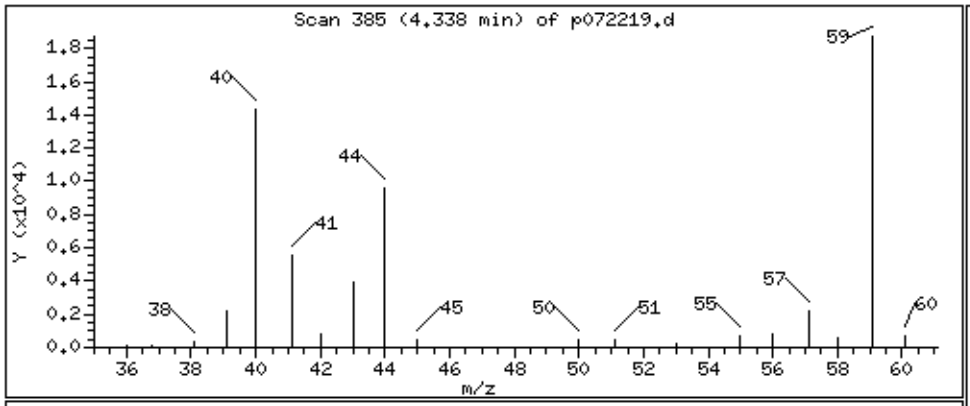
Operator: DF

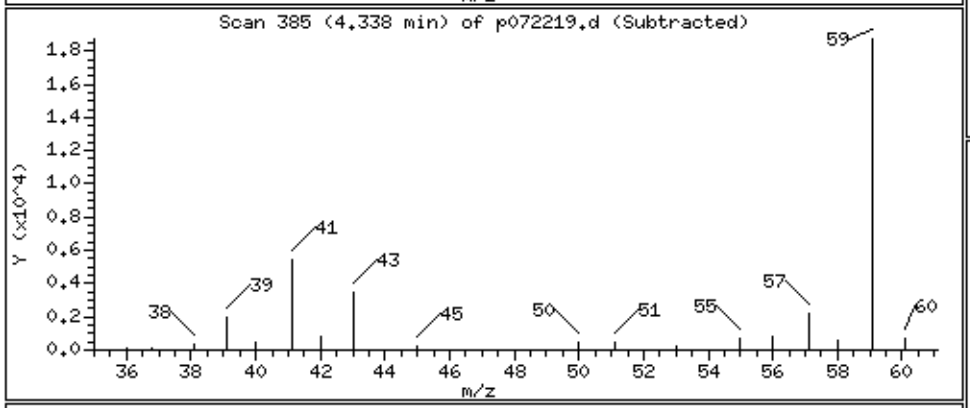
Column phase: RTX-624

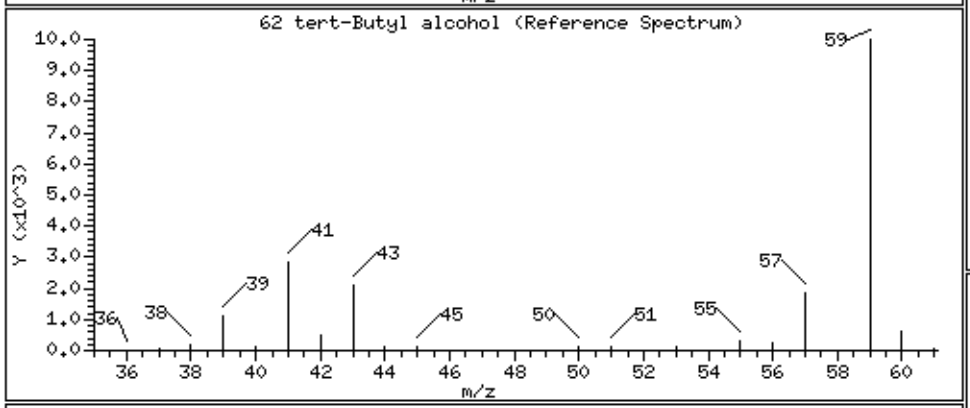
Column diameter: 0.25

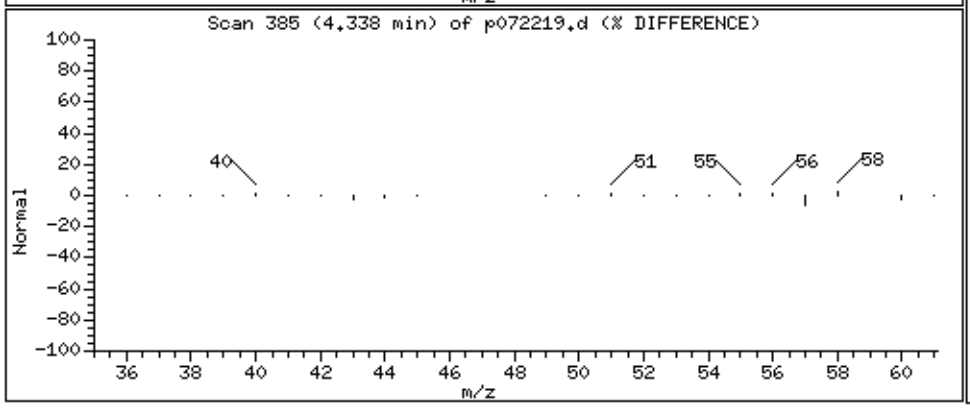
62 tert-Butyl alcohol

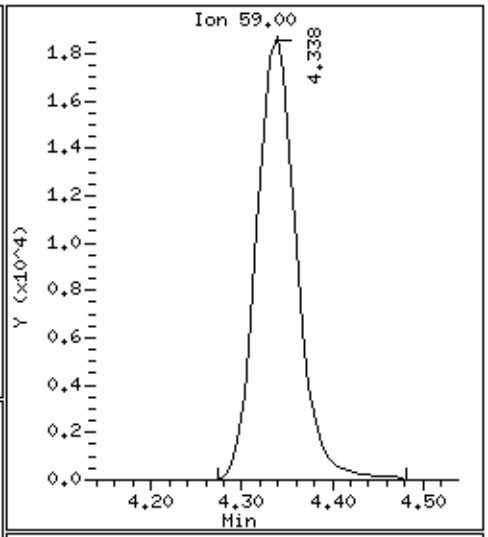
Concentration: 6.982 PPBV

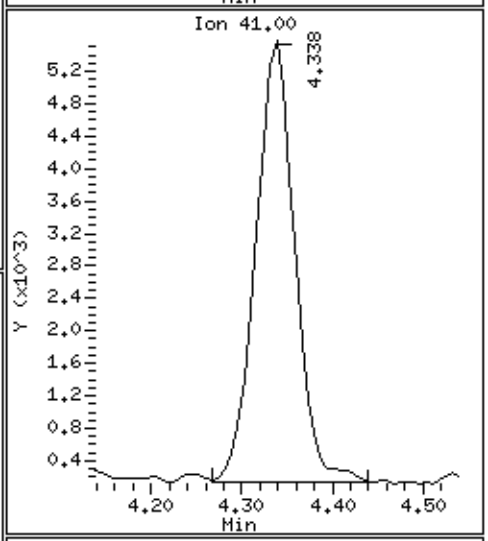


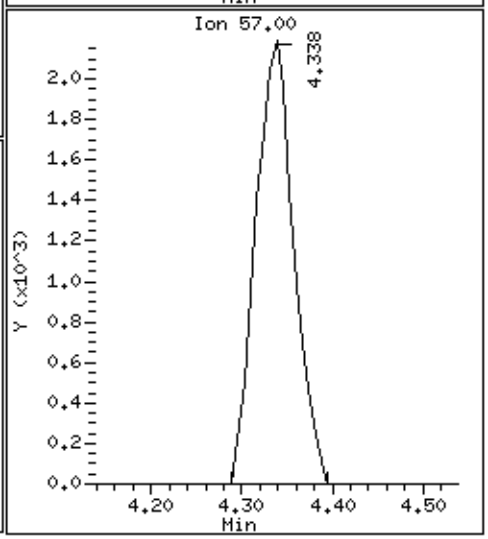












Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

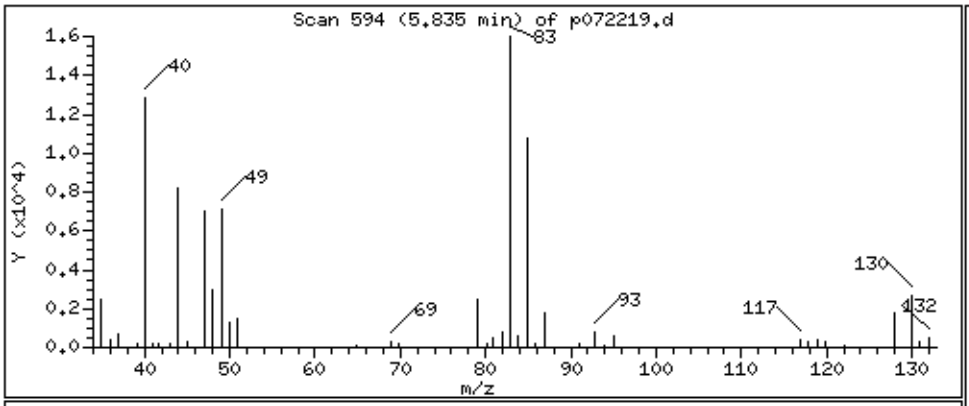
Operator: DF

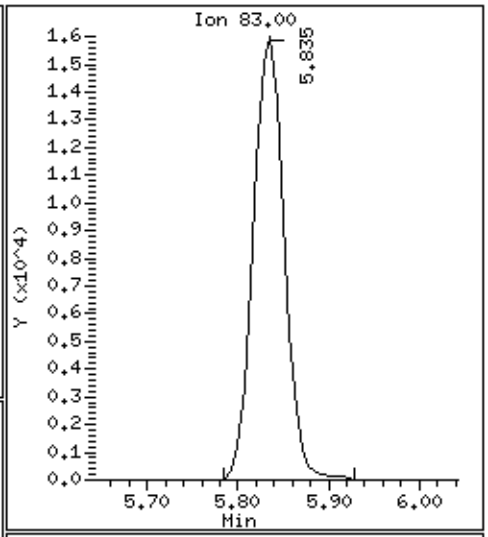
Column phase: RTX-624

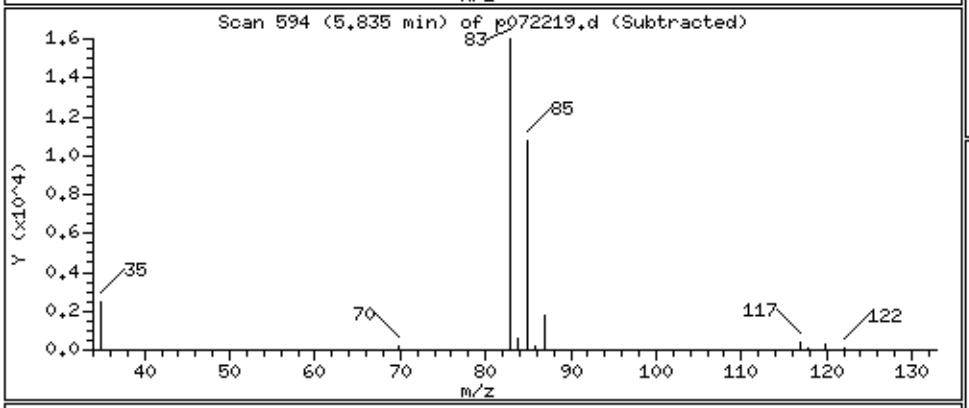
Column diameter: 0.25

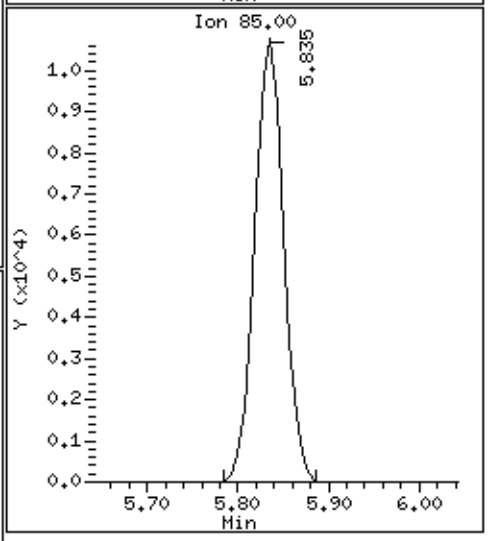
92 Chloroform

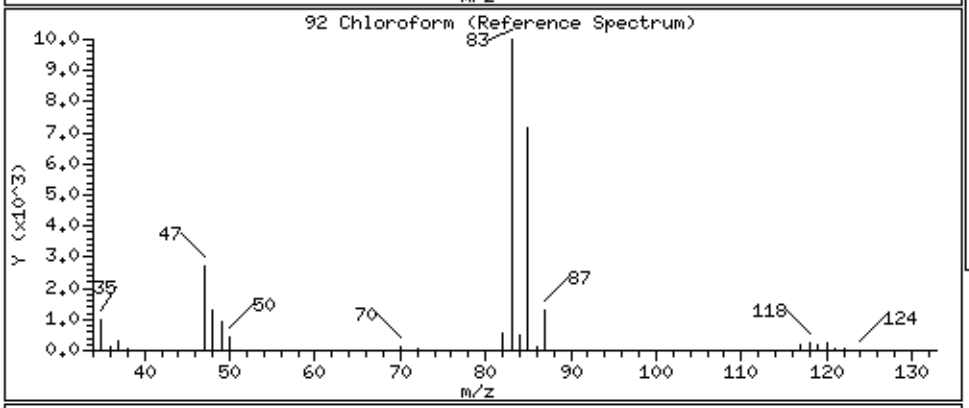
Concentration: 6.494 PPBV

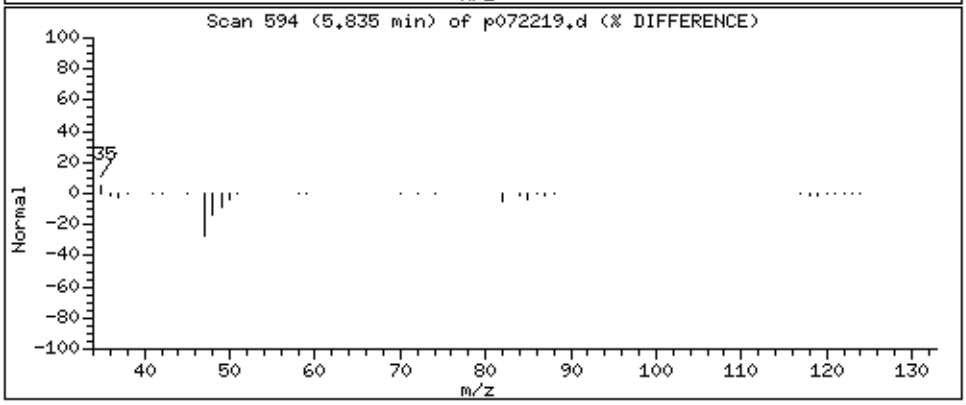












Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

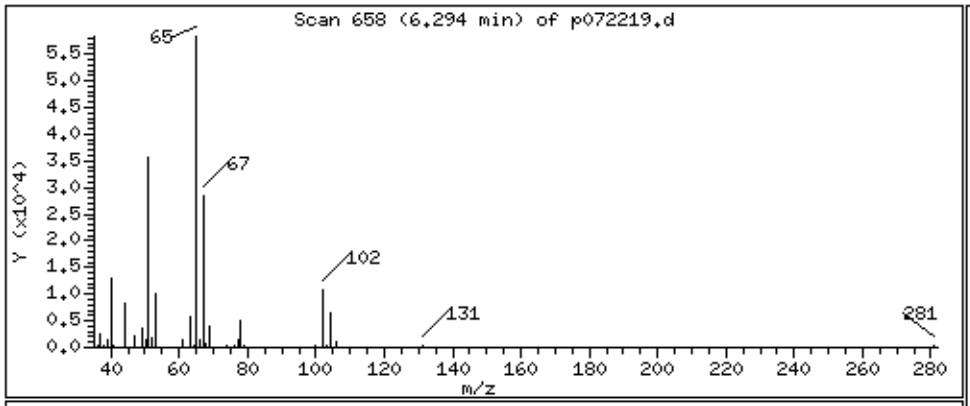
Operator: DF

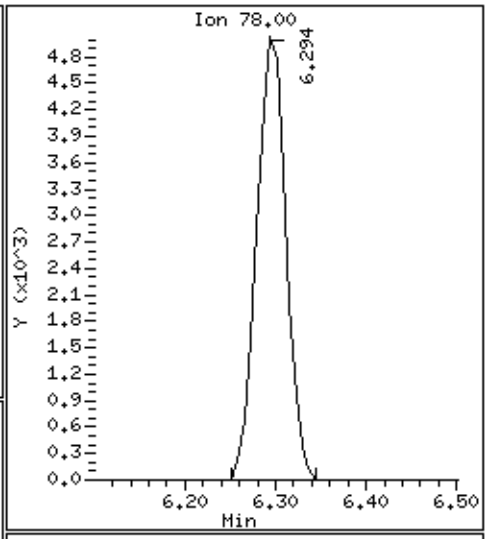
Column phase: RTX-624

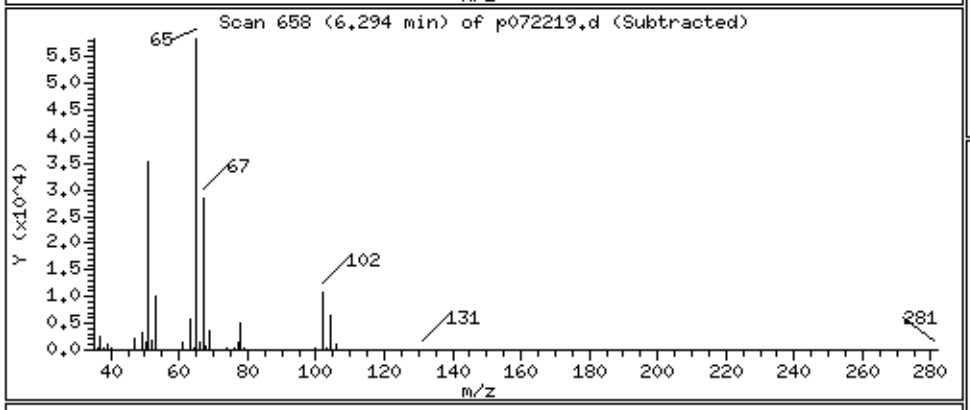
Column diameter: 0.25

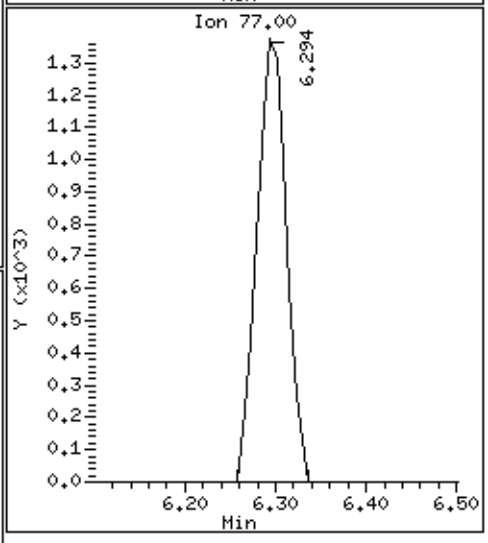
102 Benzene

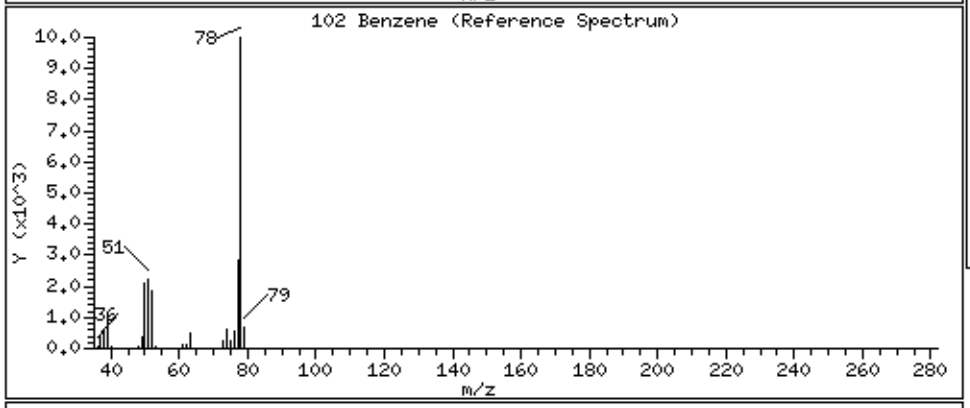
Concentration: 1.422 PPBV

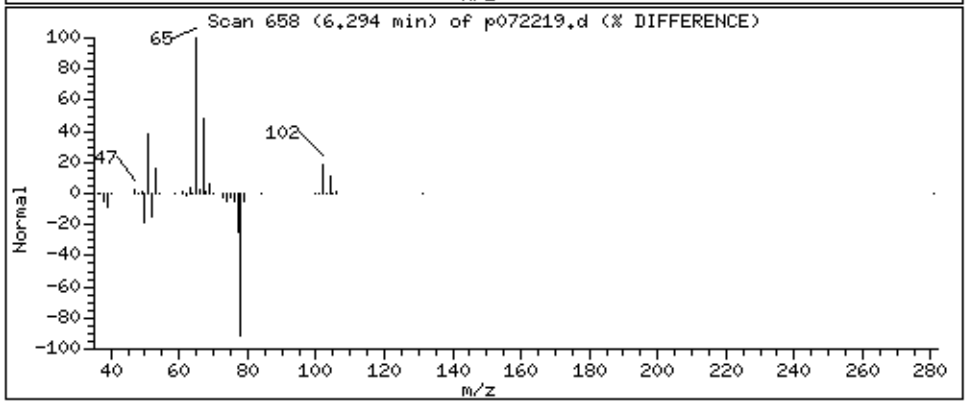












Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

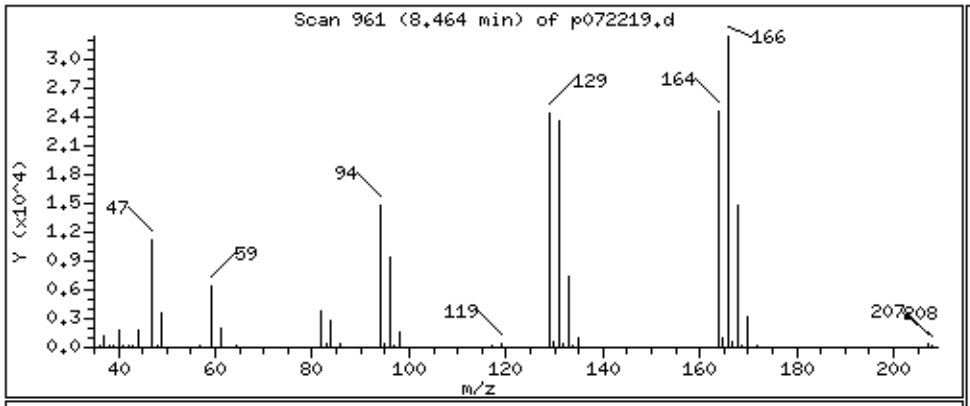
Operator: DF

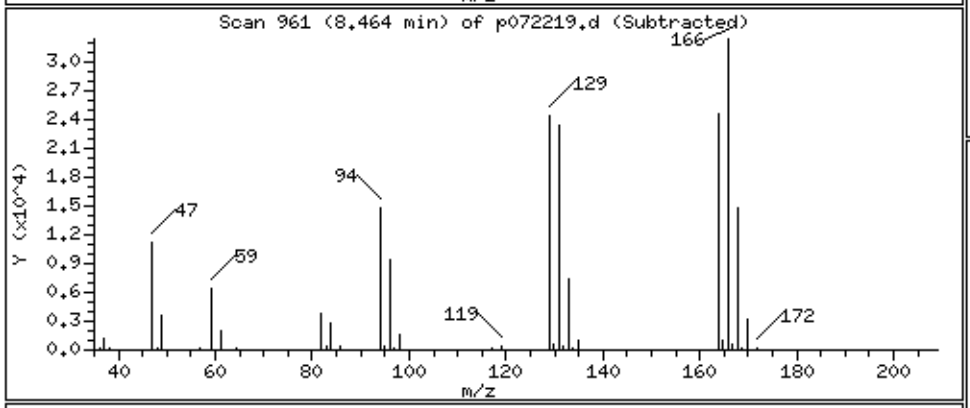
Column phase: RTX-624

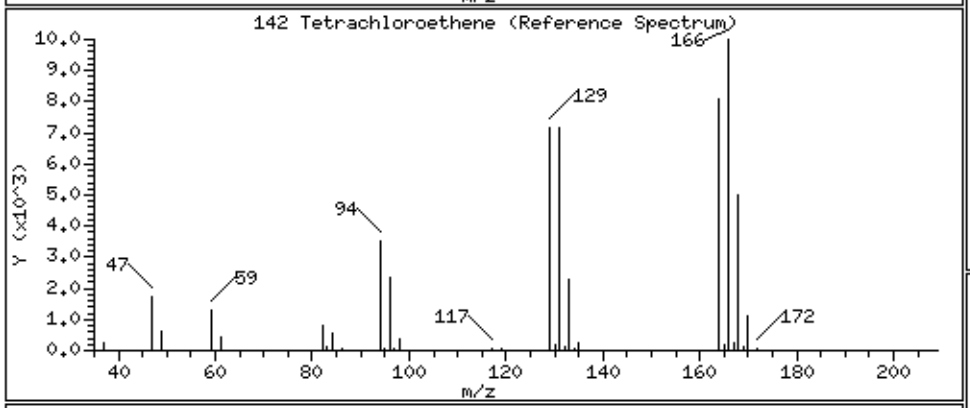
Column diameter: 0.25

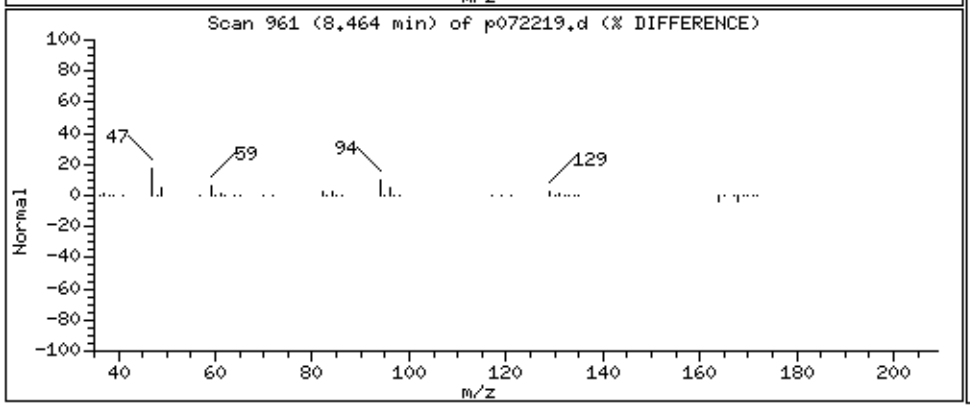
142 Tetrachloroethene

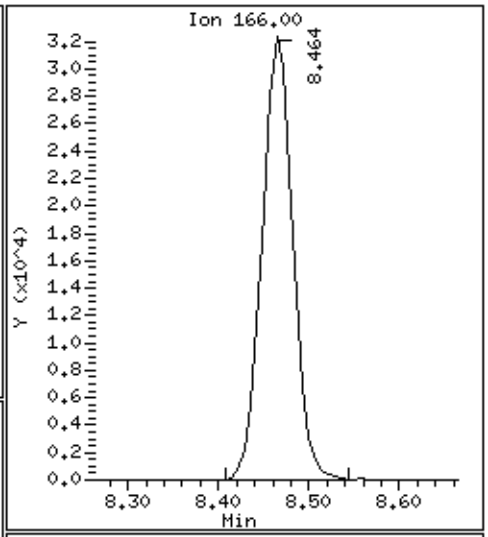
Concentration: 13.768 PPBV

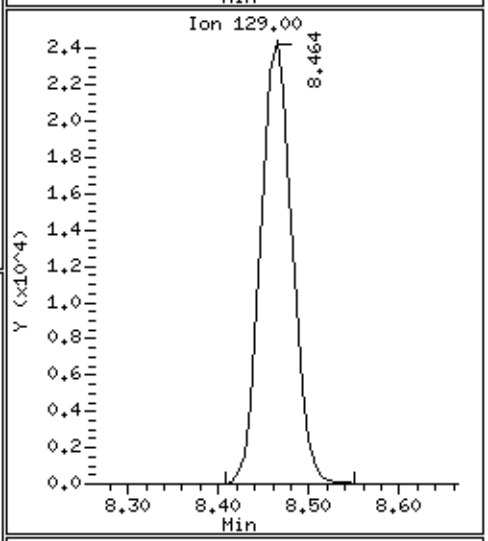


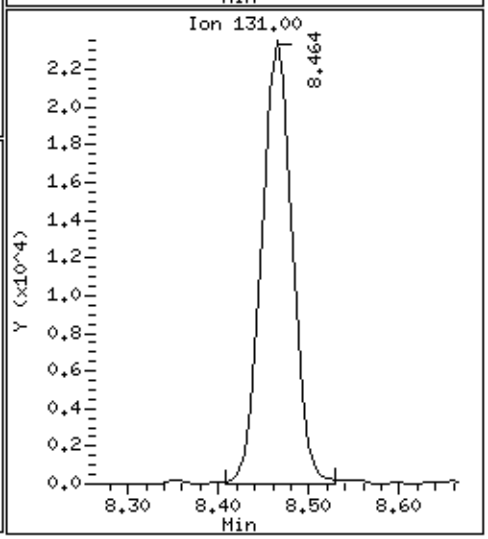












Data File: /chem/msdp.i/22JUL21.b/p072219.d

Date : 22-JUL-2021 23:08

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3844

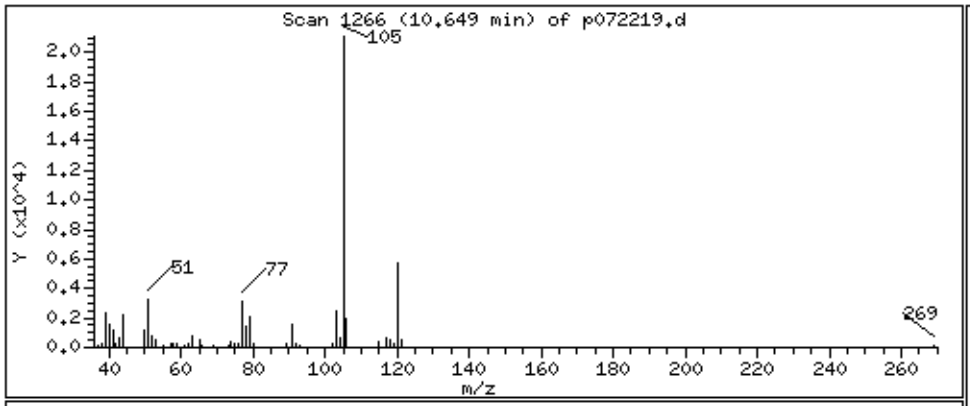
Operator: DF

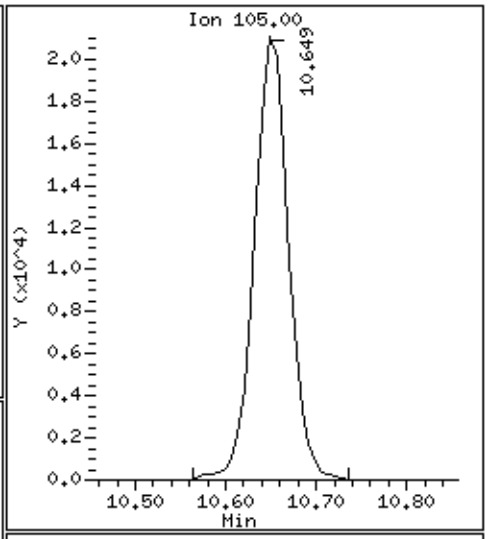
Column phase: RTX-624

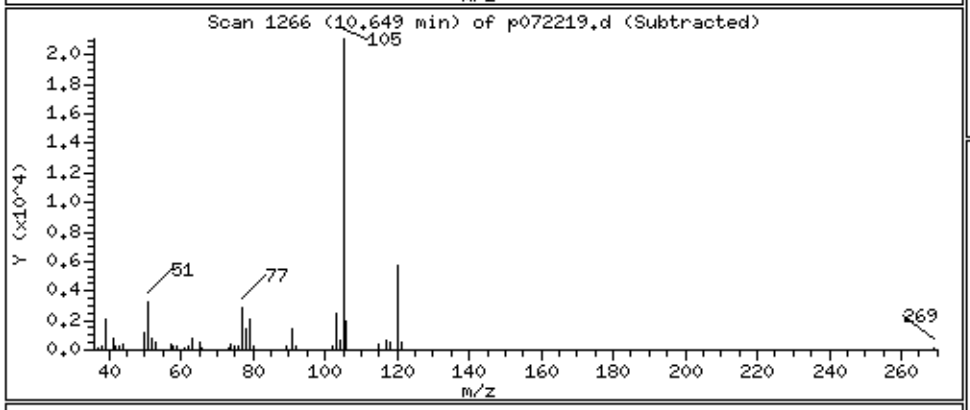
Column diameter: 0.25

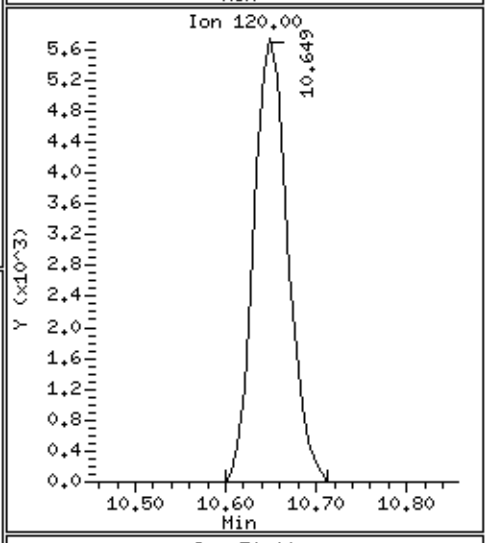
168 Cumene

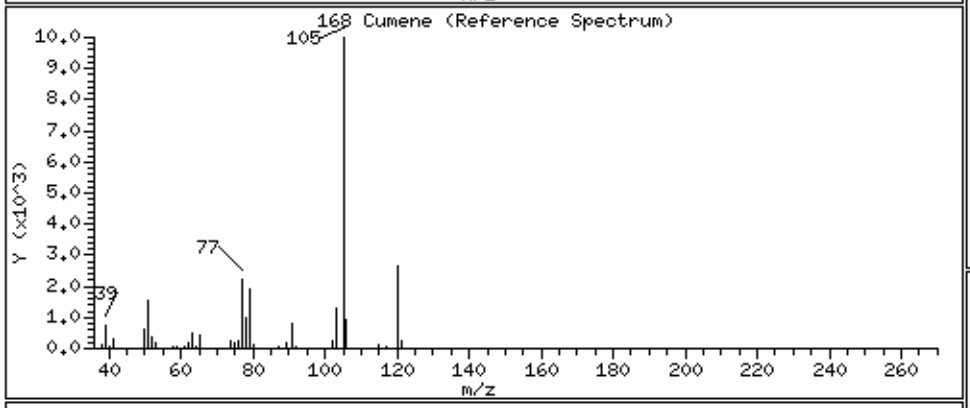
Concentration: 2.896 PPBV

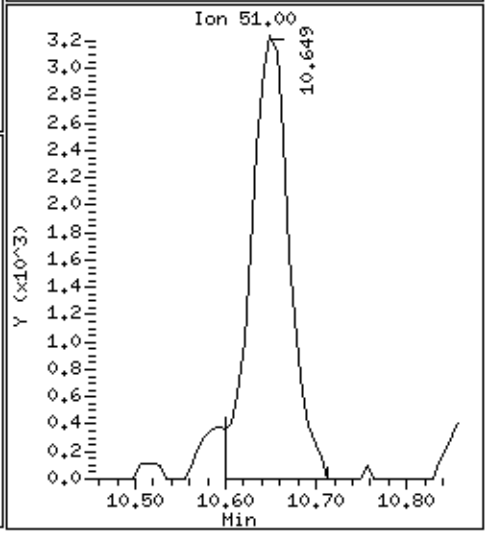


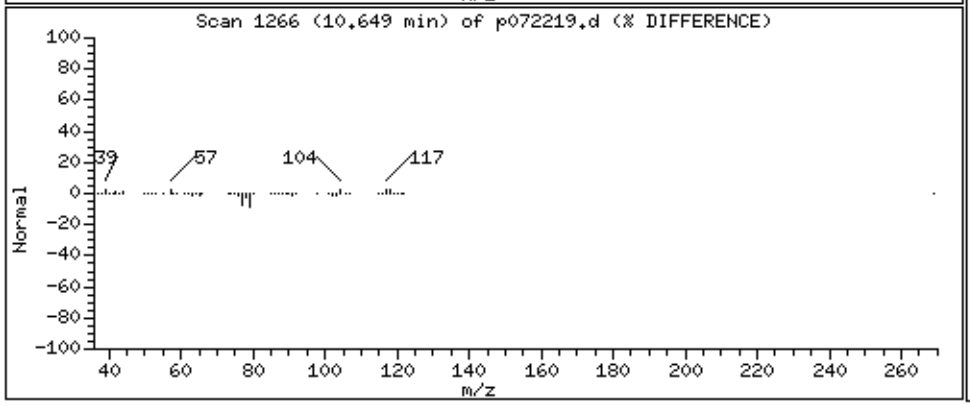












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Client Sample ID: SG-VW50A-03

Lab ID#: 2107241A-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072220**	**Date of Collection:**	**7/9/21 10:19:00 AM**
Dil. Factor:	**2.11**	**Date of Analysis:**	**7/22/21 11:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.2	Not Detected
Freon 114	1.0	Not Detected	7.4	Not Detected
Chloromethane	10	Not Detected	22	Not Detected
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	41	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.9	Not Detected
Ethanol	10	Not Detected	20	Not Detected
Freon 113	1.0	Not Detected	8.1	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Acetone	10	Not Detected	25	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	37	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Chloroform	1.0	Not Detected	5.2	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.8	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.6	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.9	Not Detected
Benzene	1.0	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.3	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Trichloroethene	1.0	Not Detected	5.7	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.9	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	7.1	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Toluene	1.0	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.8	Not Detected
Tetrachloroethene	1.0	46	7.2	310
2-Hexanone	4.2	Not Detected	17	Not Detected

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Client Sample ID: SG-VW50A-03

Lab ID#: 2107241A-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072220**	**Date of Collection:**	**7/9/21 10:19:00 AM**
Dil. Factor:	**2.11**	**Date of Analysis:**	**7/22/21 11:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	9.0	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.1	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.6	Not Detected
m,p-Xylene	1.0	Not Detected	4.6	Not Detected
o-Xylene	1.0	Not Detected	4.6	Not Detected
Styrene	1.0	Not Detected	4.5	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.2	Not Detected
Propylbenzene	1.0	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	430	Not Detected
Freon 134a	4.2	Not Detected	18	Not Detected
Acrolein	4.2	Not Detected	9.7	Not Detected
Acrylonitrile	4.2	Not Detected	9.2	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	18	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	41	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
1,1-Difluoroethane	4.2	Not Detected	11	Not Detected
Isopropyl ether	4.2	Not Detected	18	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	18	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Iodomethane	10	Not Detected	61	Not Detected
Propylene	4.2	Not Detected	7.3	Not Detected
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	25	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW50A-03

Lab ID#: 2107241A-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072220**	**Date of Collection:**	**7/9/21 10:19:00 AM**
Dil. Factor:	**2.11**	**Date of Analysis:**	**7/22/21 11:37 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072220.d
Lab Smp Id: 2107241A-16A
Inj Date : 22-JUL-2021 23:37
Operator : DF Inst ID: msdp.i
Smp Info : 200mL N5507
Misc Info : 6.1 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 3
Dil Factor: 2.11000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	149373	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	113796				48.23- 108.23	76.18
5.785	5.778 (1.000)	49	316861				150.57- 210.57	212.13
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	531005	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	77551				0.00- 45.71	14.60
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	541344	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	287722				23.78- 83.78	53.15
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	210863	25.5793	25.579		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	105377				27.21- 87.21	49.97
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	579921	25.1502	25.150		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	60264				0.00- 40.44	10.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	377925			34.95- 94.95	65.17
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	337565	24.2833	24.283	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	408499			95.92- 155.92	121.01
10.921	10.921 (1.154)	176	318053			66.89- 126.89	94.22
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	267726	21.6999	45.787	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	204611			47.84- 107.84	76.43
8.464	8.464 (0.895)	131	199659			45.29- 105.29	74.58

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072220.d
Lab Smp Id: 2107241A-16A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 6.1 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	149373	-6.20
108 1,4-Difluorobenze	573285	343971	802599	531005	-7.38
153 Chlorobenzene-d5	571549	342929	800169	541344	-5.28

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:41

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-16A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 6.1 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.579	102.32	70-130
$ 134 Toluene-d8	25.000	25.150	100.60	70-130
$ 170 4-Bromofluorobenz	25.000	24.283	97.13	70-130

Data File: /chem/msdp.i/22JUL21.b/p072220.d

Date : 22-JUL-2021 23:37

Client ID:

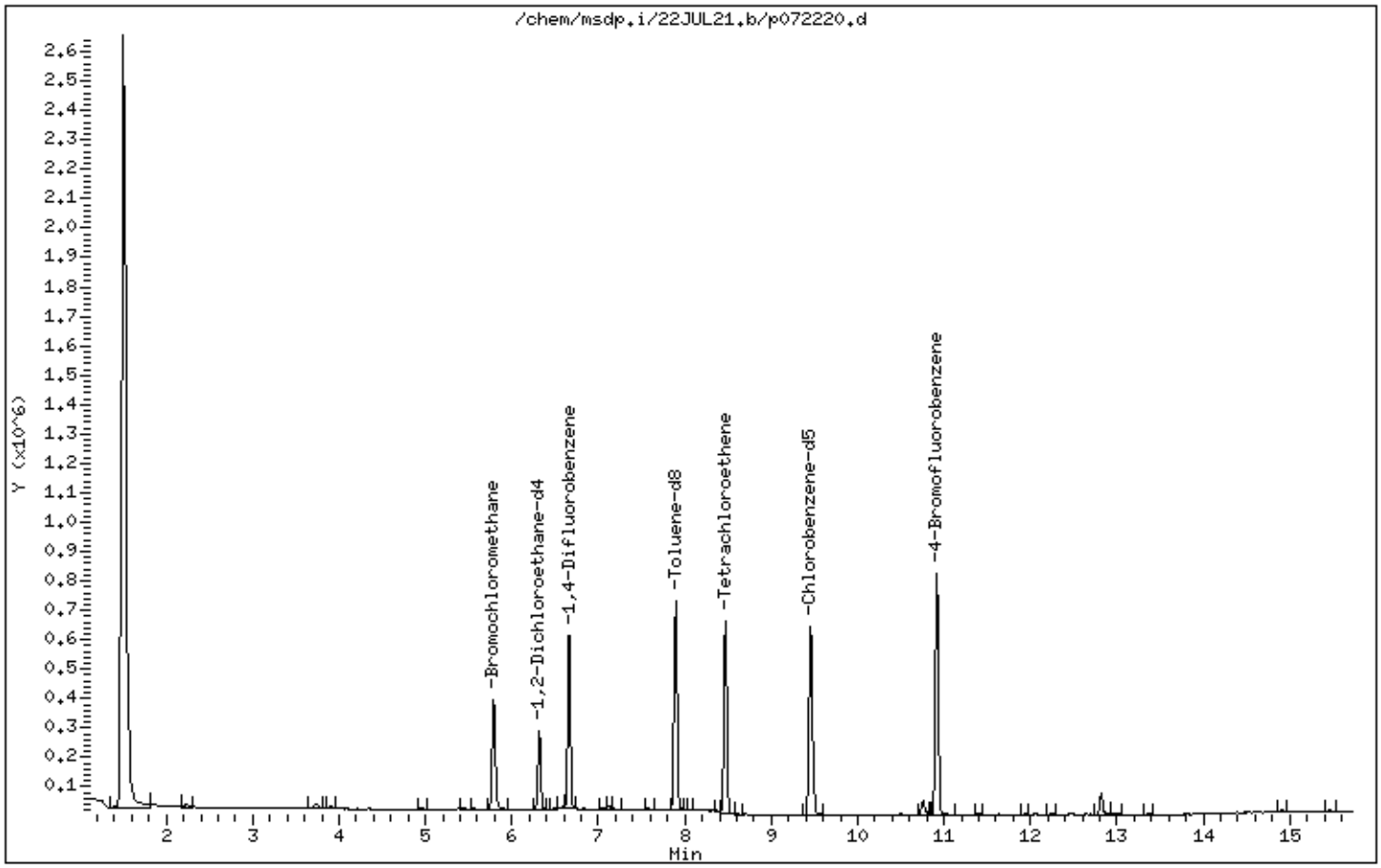
Instrument: msdp.i

Sample Info: 200mL N5507

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072220.d

Date : 22-JUL-2021 23:37

Client ID:

Instrument: msdp.i

Sample Info: 200mL N5507

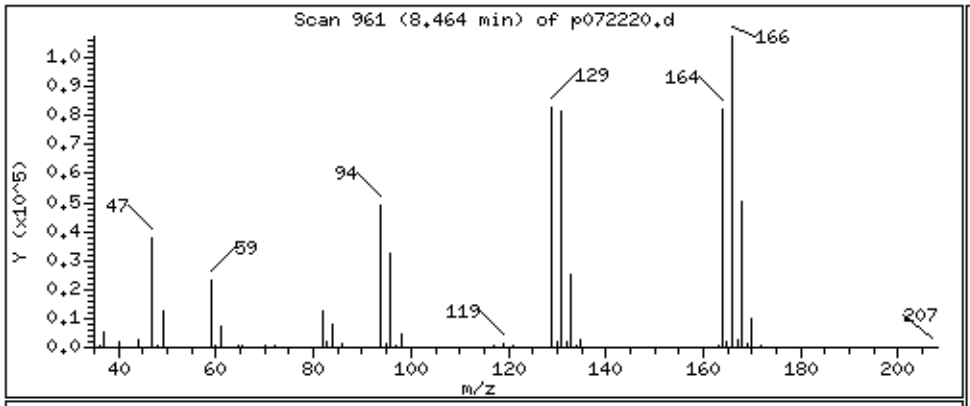
Operator: DF

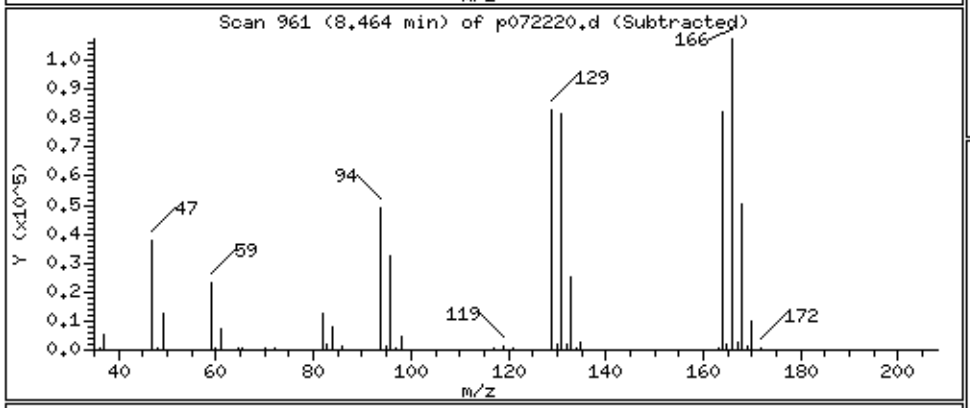
Column phase: RTX-624

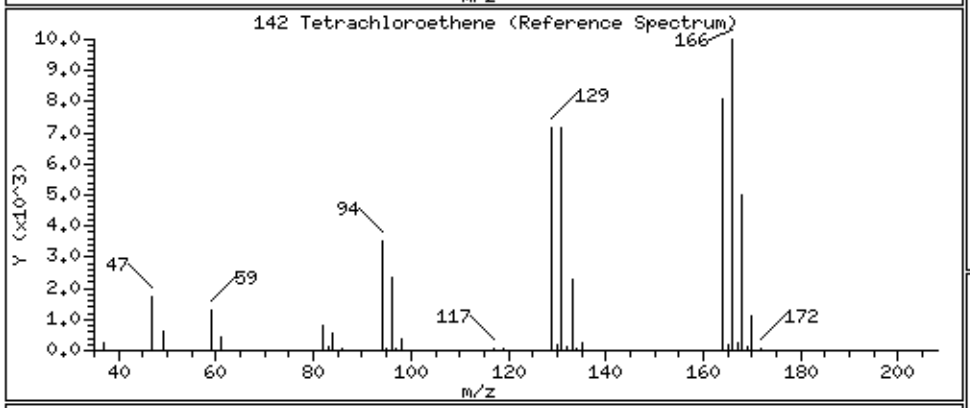
Column diameter: 0.25

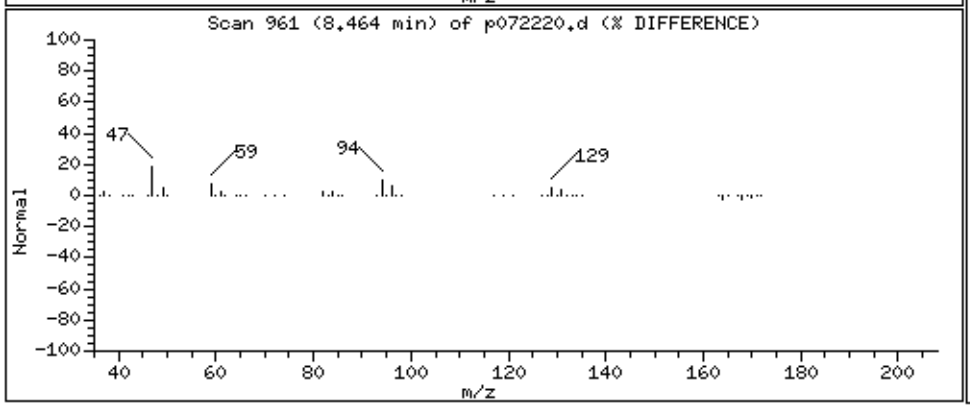
142 Tetrachloroethene

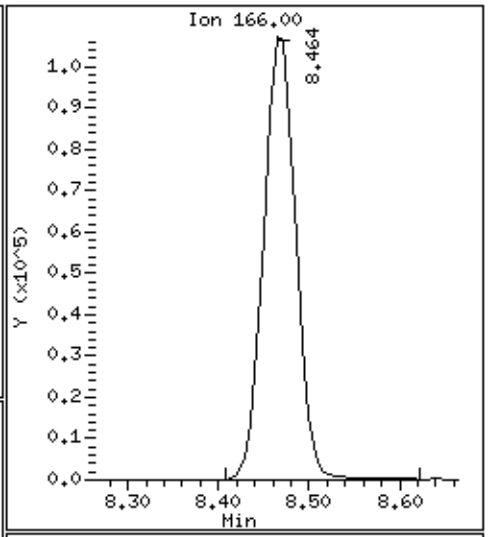
Concentration: 45.787 PPBV

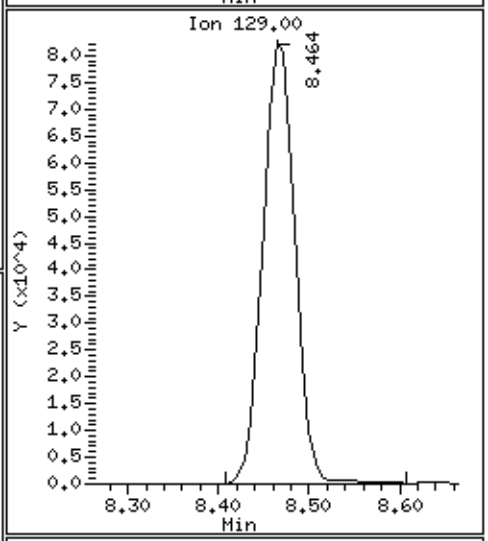


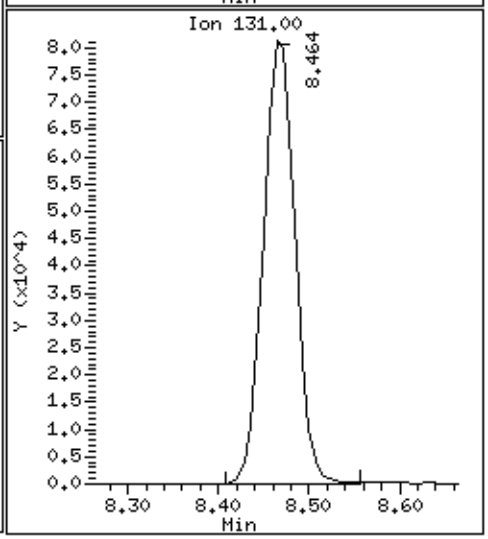












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Client Sample ID: SG-VW50B-02

Lab ID#: 2107241A-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072228**	**Date of Collection:**	**7/9/21 10:47:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/23/21 07:26 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.2	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
1,3-Butadiene	1.1	Not Detected	2.3	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Freon 113	1.1	Not Detected	8.1	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Acetone	11	Not Detected	25	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Hexane	1.1	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Chloroform	1.1	3.6	5.2	18
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Cyclohexane	1.1	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.0	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
Heptane	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.3	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Tetrachloroethene	1.1	35	7.2	240
2-Hexanone	4.2	Not Detected	17	Not Detected

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Client Sample ID: SG-VW50B-02

Lab ID#: 2107241A-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072228**	**Date of Collection:**	**7/9/21 10:47:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/23/21 07:26 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.0	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.1	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
Propylbenzene	1.1	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	430	Not Detected
Freon 134a	4.2	Not Detected	18	Not Detected
Acrolein	4.2	Not Detected	9.7	Not Detected
Acrylonitrile	4.2	Not Detected	9.2	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	18	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	41	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
1,1-Difluoroethane	4.2	200	11	530
Isopropyl ether	4.2	Not Detected	18	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	18	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Iodomethane	11	Not Detected	62	Not Detected
Propylene	4.2	Not Detected	7.3	Not Detected
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	26	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW50B-02

Lab ID#: 2107241A-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072228**	**Date of Collection:**	**7/9/21 10:47:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/23/21 07:26 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072228.d
Lab Smp Id: 2107241A-17A
Inj Date : 23-JUL-2021 07:26
Operator : mjs Inst ID: msdp.i
Smp Info : 200mL S0633
Misc Info : 6.3 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 4
Dil Factor: 2.12000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	145247	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	114978				48.23- 108.23	79.16
5.785	5.778 (1.000)	49	314850				150.57- 210.57	216.77
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.666 (1.000)	114	515142	25.0000			80.00- 120.00	100.00
6.659	6.666 (1.000)	88	78271				0.00- 45.71	15.19
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	526492	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	280979				23.78- 83.78	53.37
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.090)	65	211031	26.3269	26.327		80.00- 120.00	100.00
6.308	6.308 (1.090)	67	103915				27.21- 87.21	49.24
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	576598	25.7761	25.776		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62412				0.00- 40.44	10.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	369748			34.95- 94.95	64.13
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	321329	23.7674	23.767	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	395194			95.92- 155.92	122.99
10.921	10.921 (1.154)	176	303355			66.89- 126.89	94.41
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	307279	93.3328	197.86	80.00- 120.00	100.00
1.703	1.745 (0.294)	51	917219			597.63- 657.63	298.50
1.703	1.703 (0.294)	47	164325			33.72- 93.72	53.48
92 Chloroform					CAS #: 67-66-3		
5.835	5.843 (1.009)	83	21521	1.70293	3.610	80.00- 120.00	100.00
5.835	5.843 (1.009)	85	13876			34.70- 94.70	64.48
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	200086	16.6750	35.351	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	151311			47.84- 107.84	75.62
8.464	8.464 (0.895)	131	150086			45.29- 105.29	75.01

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072228.d
Lab Smp Id: 2107241A-17A
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.9 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	145247	-8.79
108 1,4-Difluorobenze	573285	343971	802599	515142	-10.14
153 Chlorobenzene-d5	571549	342929	800169	526492	-7.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.66	-0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:44

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-17A
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.327	105.31	70-130
$ 134 Toluene-d8	25.000	25.776	103.10	70-130
$ 170 4-Bromofluorobenz	25.000	23.767	95.07	70-130

Data File: /chem/msdp.i/22JUL21.b/p072228.d

Date : 23-JUL-2021 07:26

Client ID:

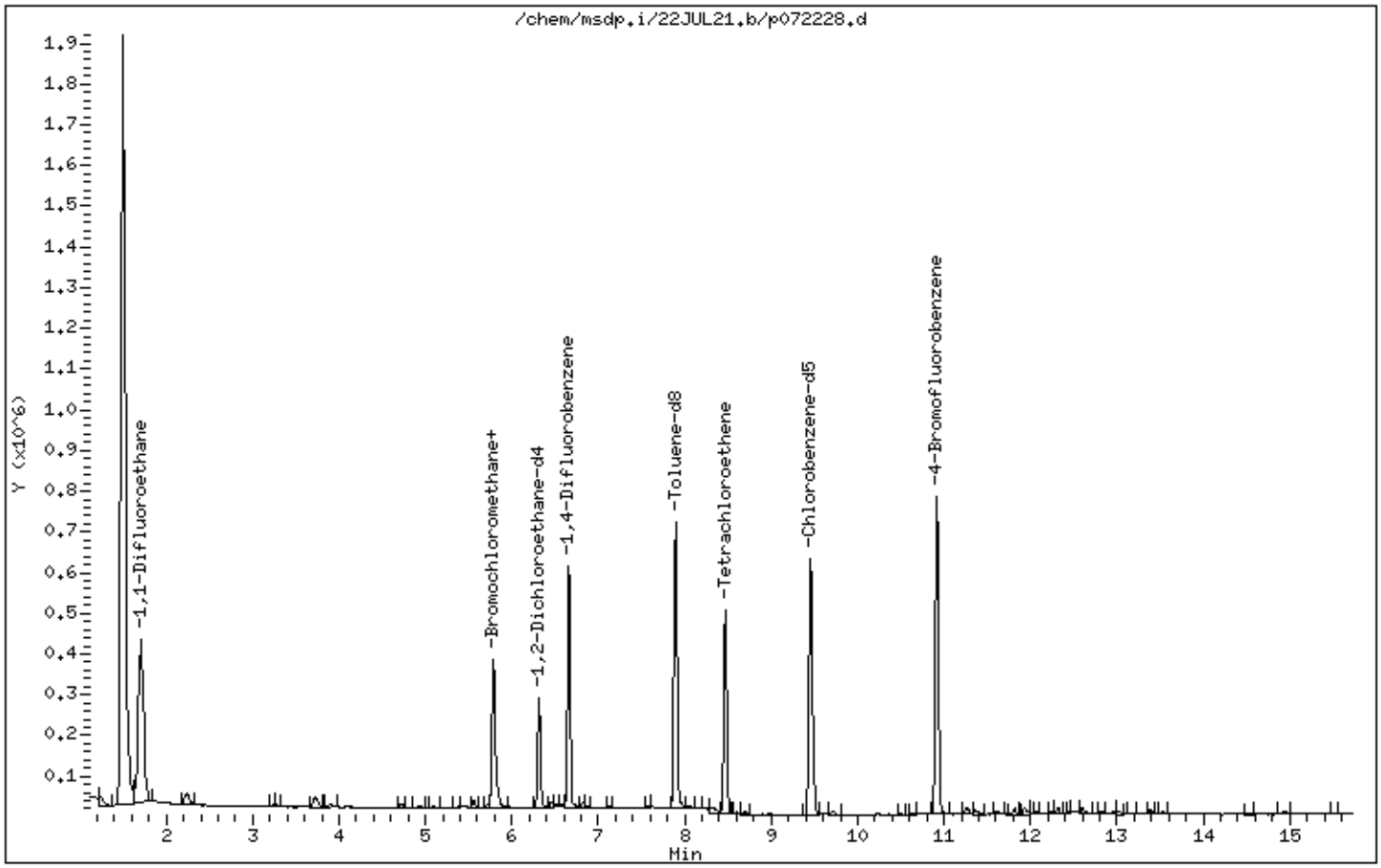
Instrument: msdp.i

Sample Info: 200mL S0633

Operator: mjs

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072228.d

Date : 23-JUL-2021 07:26

Client ID:

Instrument: msdp.i

Sample Info: 200mL S0633

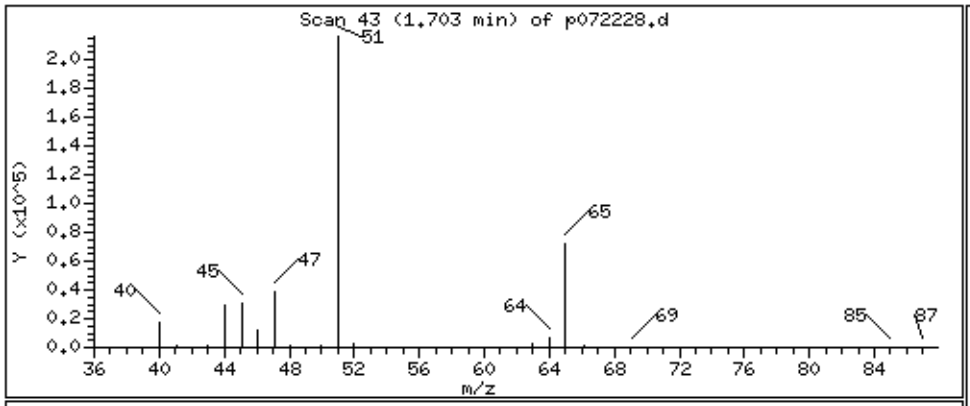
Operator: mjs

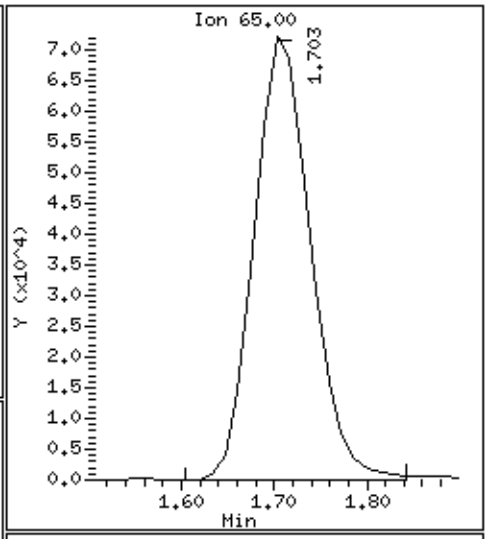
Column phase: RTX-624

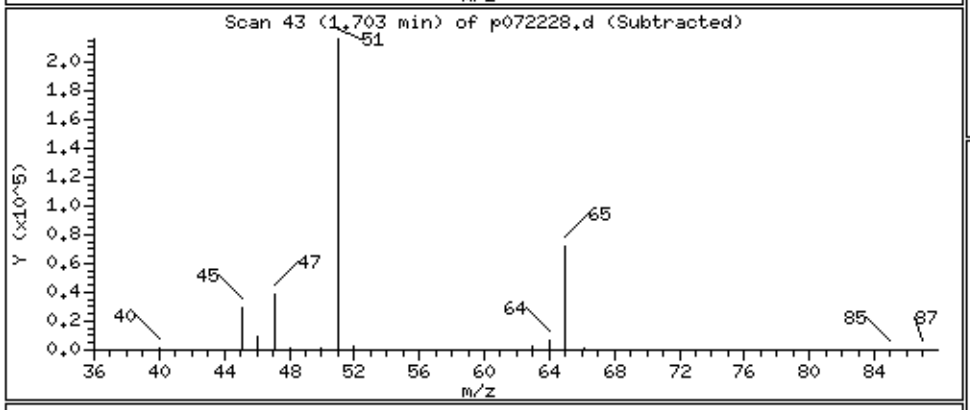
Column diameter: 0.25

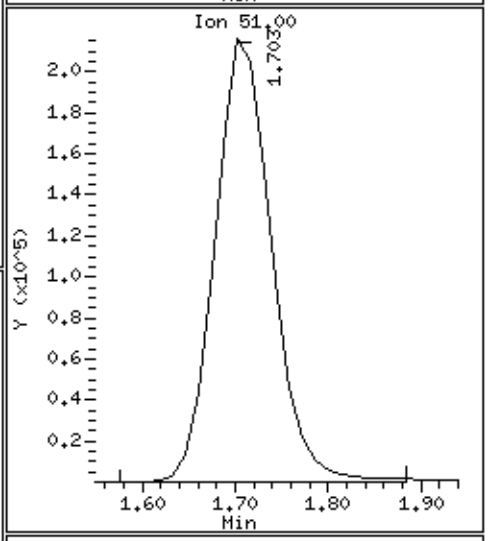
7 1,1-Difluoroethane

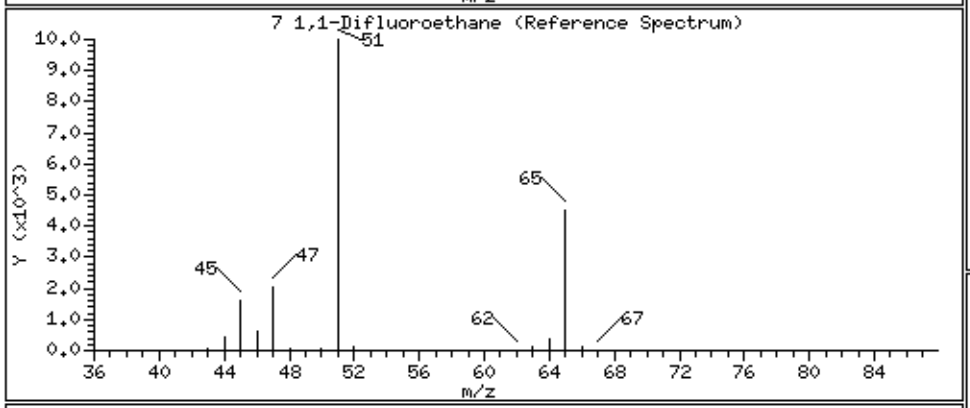
Concentration: 197.86 PPBV

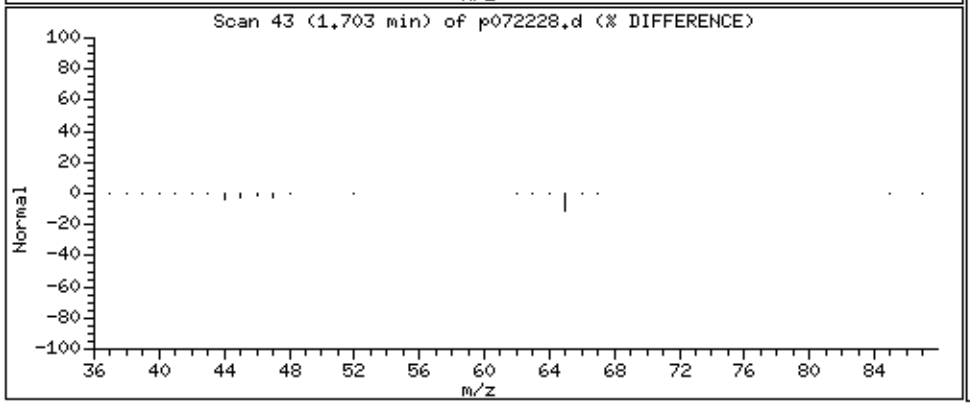


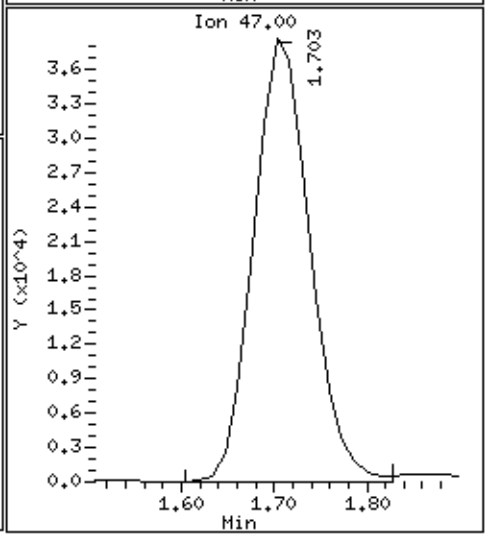












Data File: /chem/msdp.i/22JUL21.b/p072228.d

Page 3

Date : 23-JUL-2021 07:26

Client ID:

Instrument: msdp.i

Sample Info: 200mL S0633

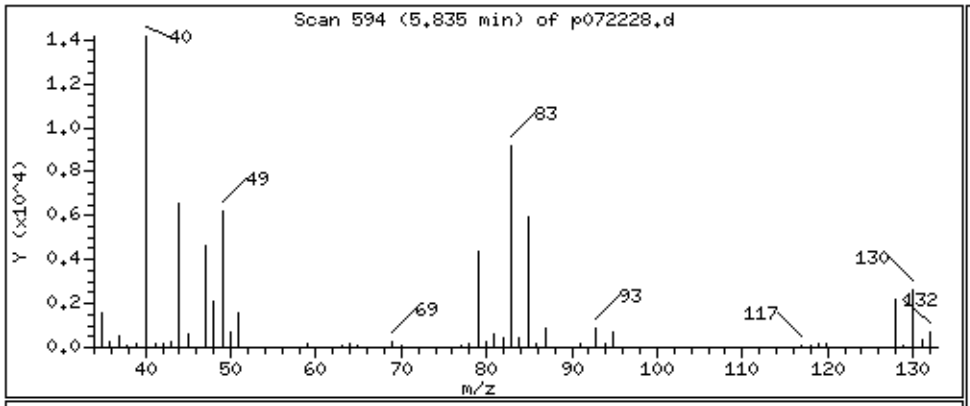
Operator: mjs

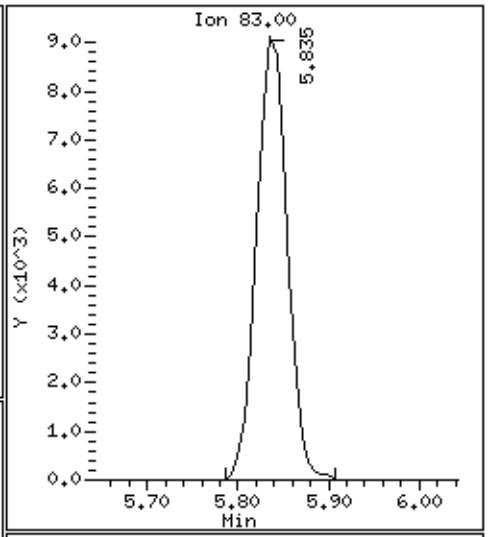
Column phase: RTX-624

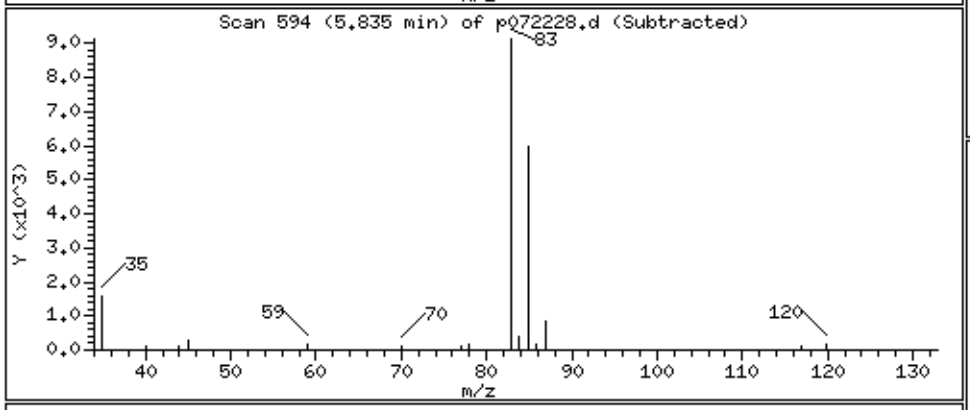
Column diameter: 0.25

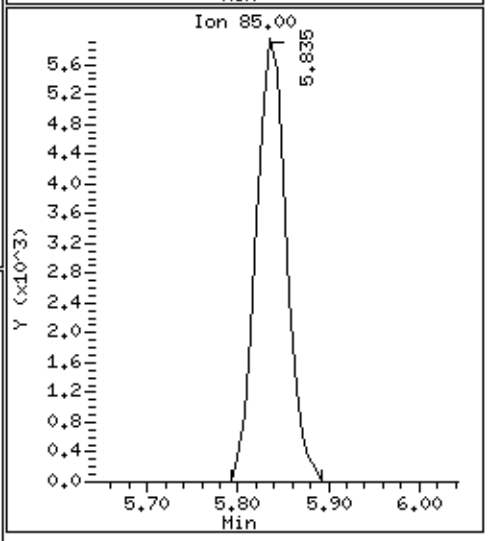
92 Chloroform

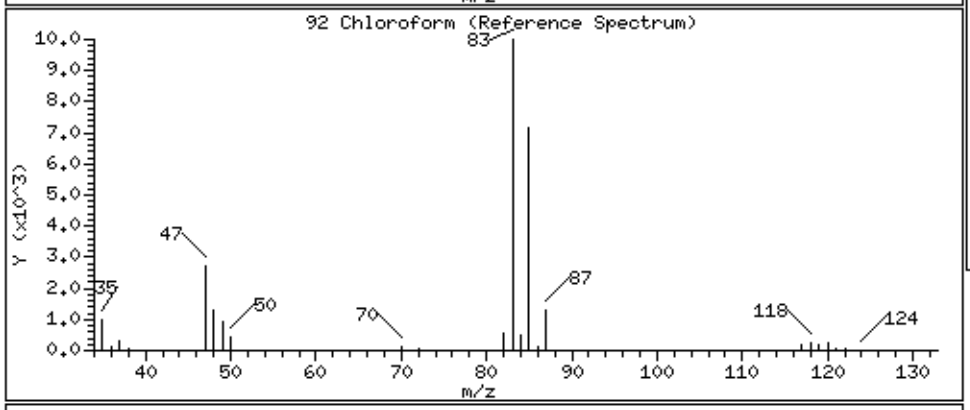
Concentration: 3.610 PPBV

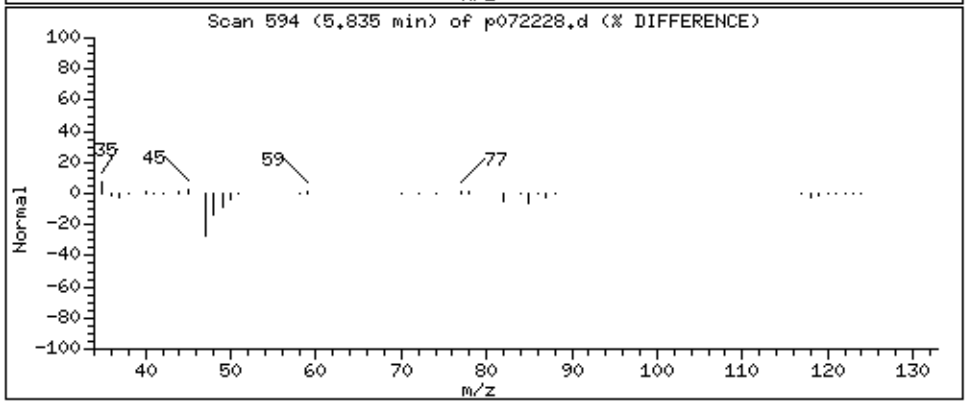












Data File: /chem/msdp.i/22JUL21.b/p072228.d

Date : 23-JUL-2021 07:26

Client ID:

Instrument: msdp.i

Sample Info: 200mL S0633

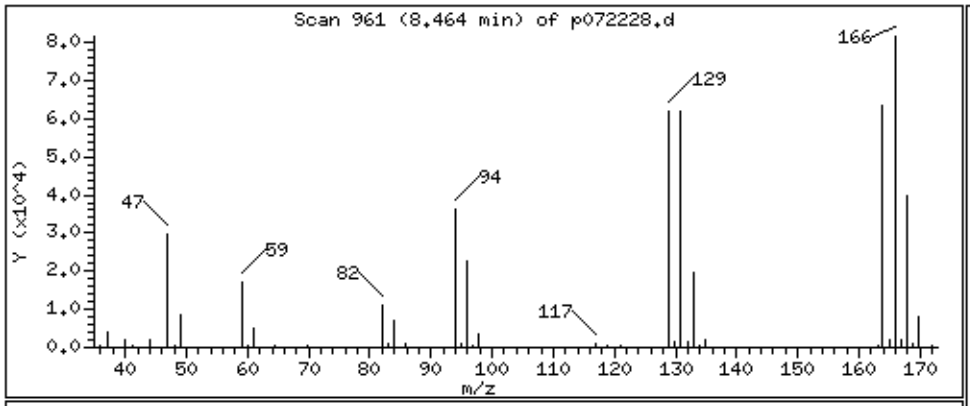
Operator: mjs

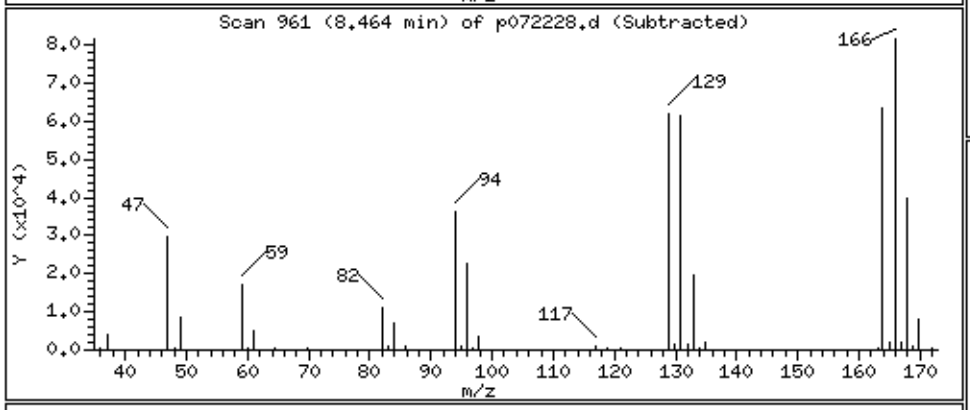
Column phase: RTX-624

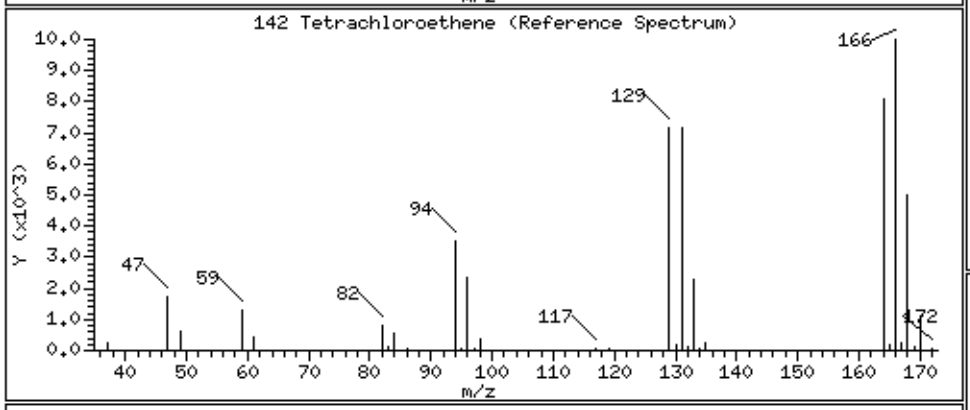
Column diameter: 0.25

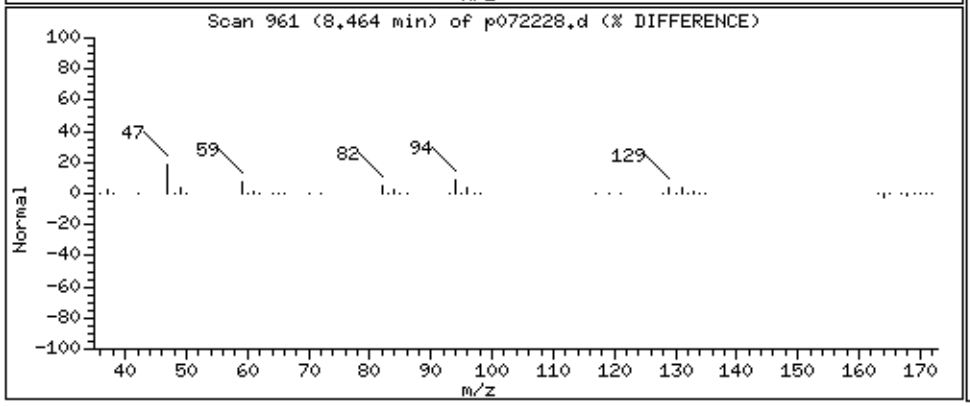
142 Tetrachloroethene

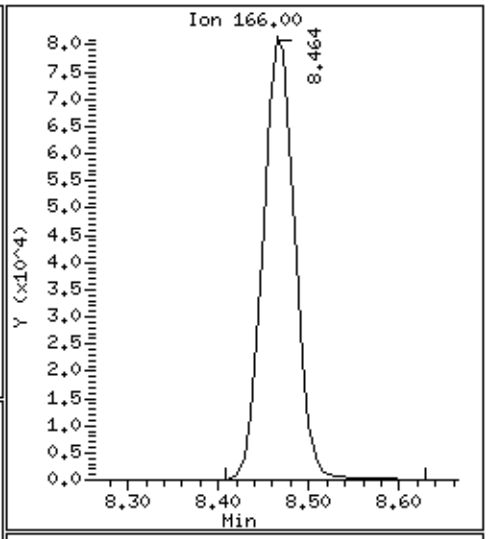
Concentration: 35.351 PPBV

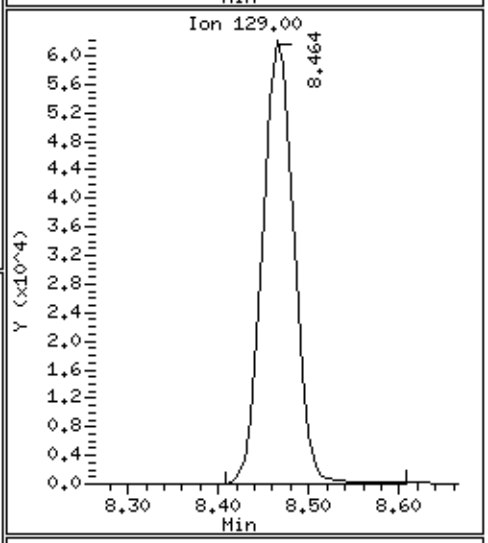


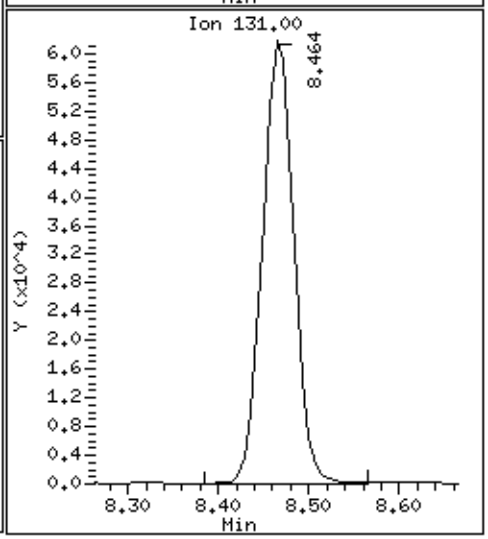












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Client Sample ID: SG-VW31A-02

Lab ID#: 2107241A-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072222**	**Date of Collection:**	**7/9/21 1:34:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**7/23/21 12:36 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Acetone	11	15	26	36
2-Propanol	4.4	Not Detected	11	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	26	7.4	170
2-Hexanone	4.4	Not Detected	18	Not Detected

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Client Sample ID: SG-VW31A-02

Lab ID#: 2107241A-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072222**	**Date of Collection:**	**7/9/21 1:34:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**7/23/21 12:36 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.3	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.5	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	32	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Hexachloroethane	4.4	Not Detected	42	Not Detected
Iodomethane	11	Not Detected	64	Not Detected
Propylene	4.4	Not Detected	7.5	Not Detected
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW31A-02

Lab ID#: 2107241A-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072222**	**Date of Collection:**	**7/9/21 1:34:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**7/23/21 12:36 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072222.d
Lab Smp Id: 2107241A-18A
Inj Date : 23-JUL-2021 00:36
Operator : DF Inst ID: msdp.i
Smp Info : 200mL N3815
Misc Info : 7.1 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 5
Dil Factor: 2.19000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	156413	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	118524				48.23- 108.23	75.78
5.785	5.778 (1.000)	49	322904				150.57- 210.57	206.44
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	541803	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	80919				0.00- 45.71	14.94
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	571594	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	301344				23.78- 83.78	52.72
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	217103	25.1509	25.151		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	105759				27.21- 87.21	48.71
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.898	7.891 (1.185)	98	604775	25.7053	25.705		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	62498				0.00- 40.44	10.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	395313			34.95- 94.95	65.37
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	356488	24.2874	24.287	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	433211			95.92- 155.92	121.52
10.921	10.921 (1.154)	176	333434			66.89- 126.89	93.53
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	28189	6.87446	15.055	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	104145			302.95- 362.95	369.45
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	152620	11.7156	25.657	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	118987			47.84- 107.84	77.96
8.471	8.464 (0.895)	131	114078			45.29- 105.29	74.75

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072222.d
Lab Smp Id: 2107241A-18A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.9 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	156413	-1.78
108 1,4-Difluorobenze	573285	343971	802599	541803	-5.49
153 Chlorobenzene-d5	571549	342929	800169	571594	0.01

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:41

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-18A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.151	100.60	70-130
$ 134 Toluene-d8	25.000	25.705	102.82	70-130
$ 170 4-Bromofluorobenz	25.000	24.287	97.15	70-130

Data File: /chem/msdp.i/22JUL21.b/p072222.d

Date : 23-JUL-2021 00:36

Client ID:

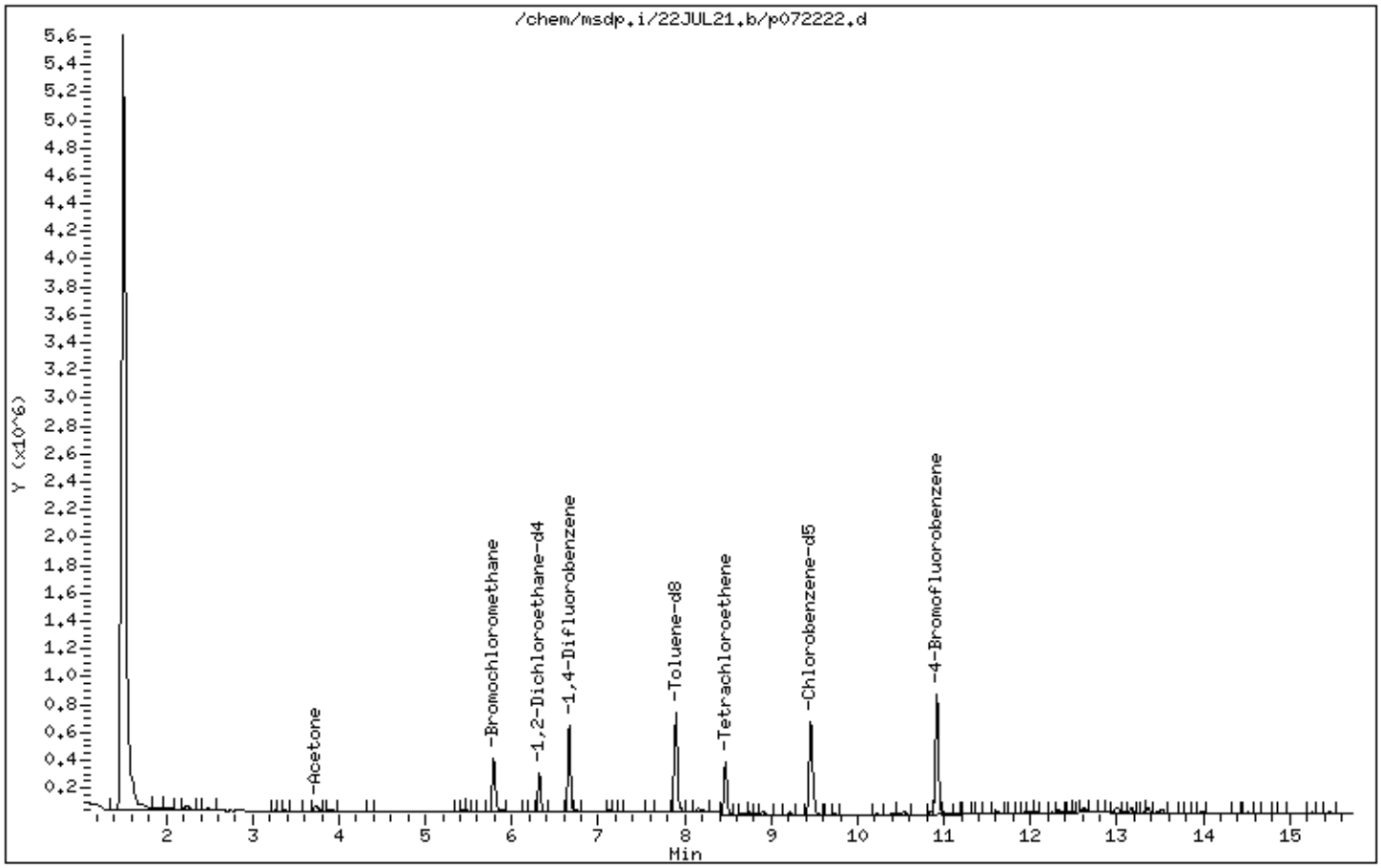
Instrument: msdp.i

Sample Info: 200mL N3815

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072222.d

Date : 23-JUL-2021 00:36

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3815

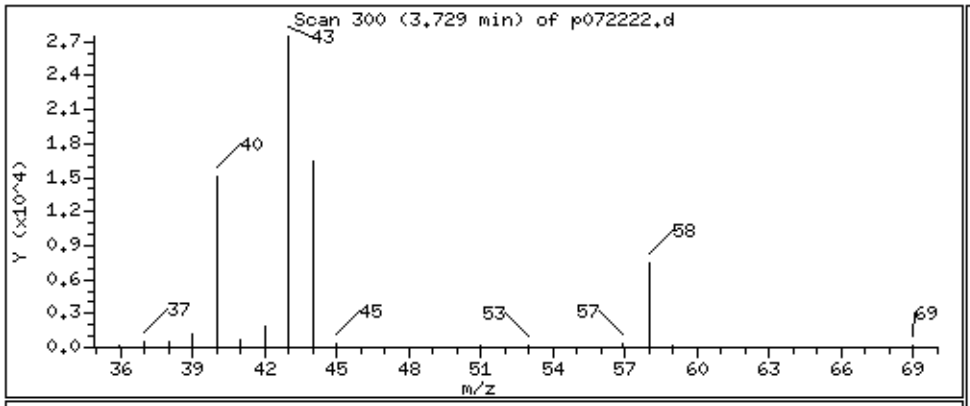
Operator: DF

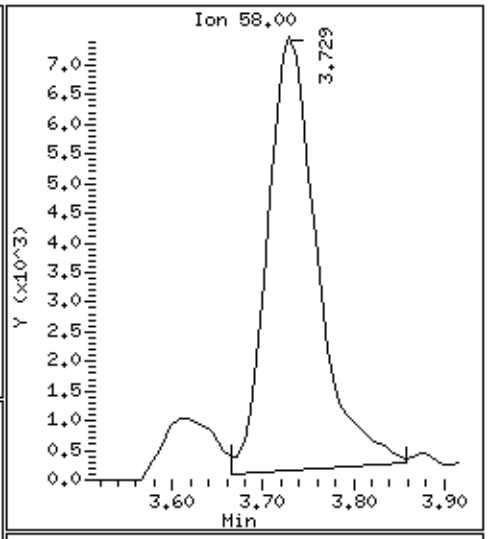
Column phase: RTX-624

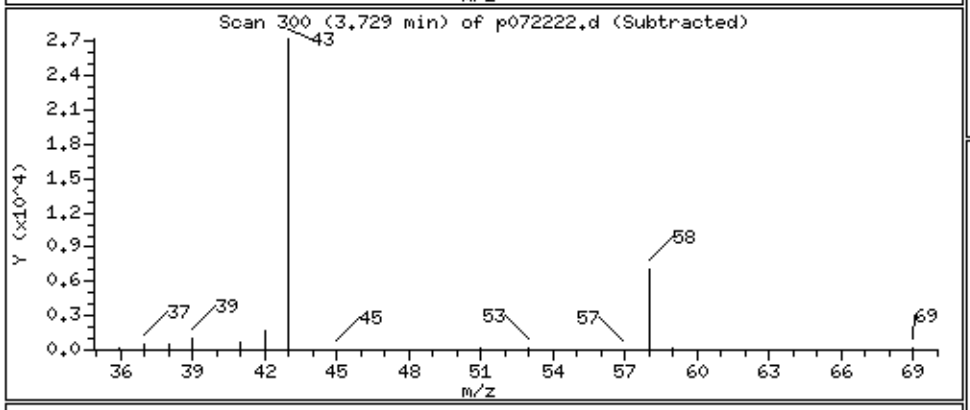
Column diameter: 0.25

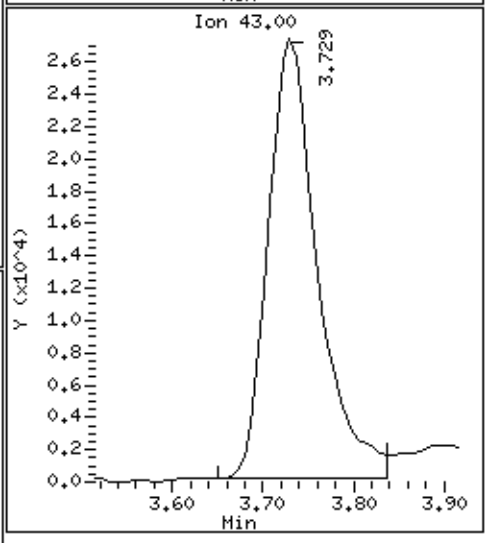
47 Acetone

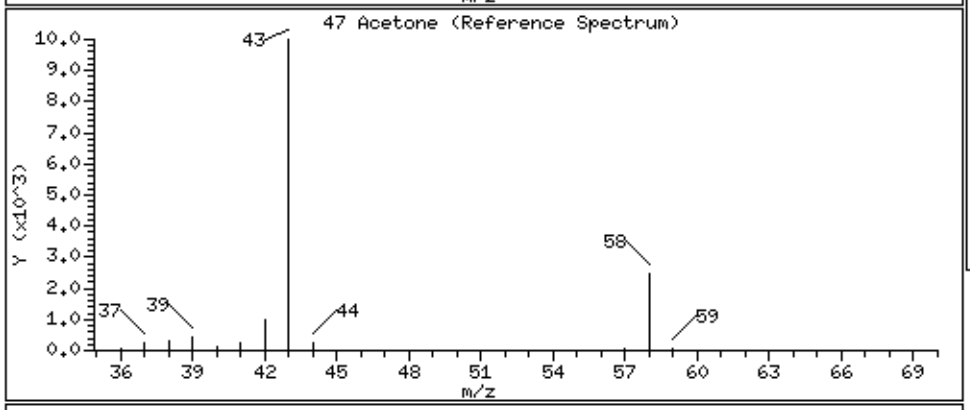
Concentration: 15.055 PPBV

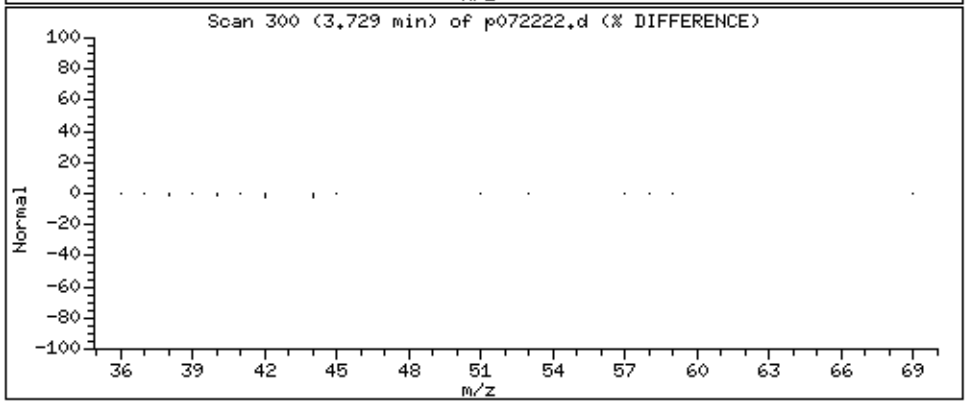












Data File: /chem/msdp.i/22JUL21.b/p072222.d

Date : 23-JUL-2021 00:36

Client ID:

Instrument: msdp.i

Sample Info: 200mL N3815

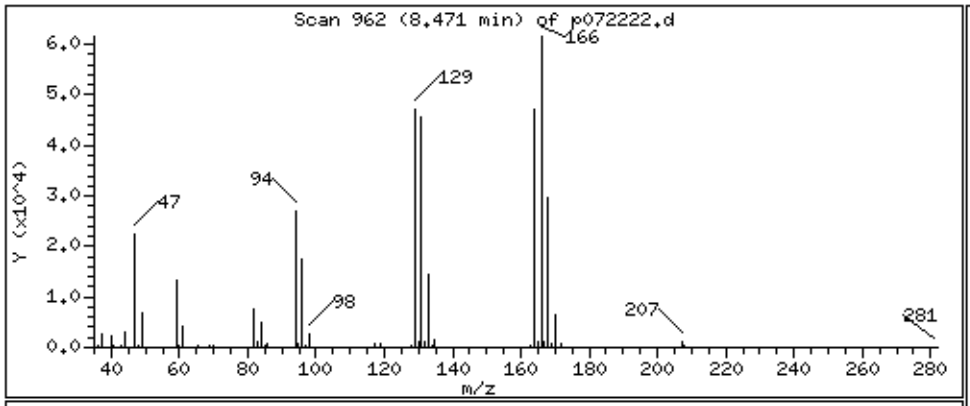
Operator: DF

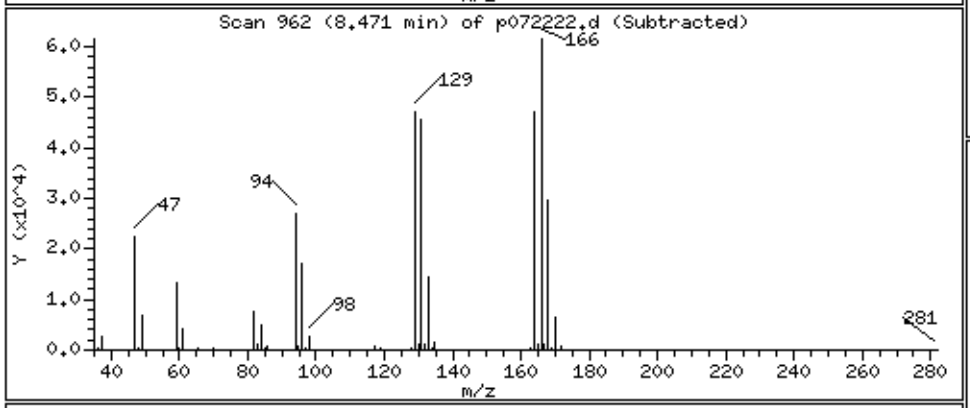
Column phase: RTX-624

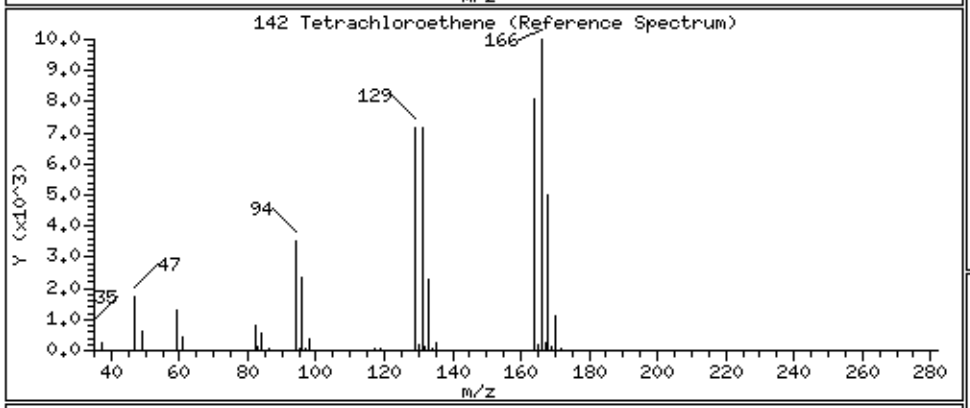
Column diameter: 0.25

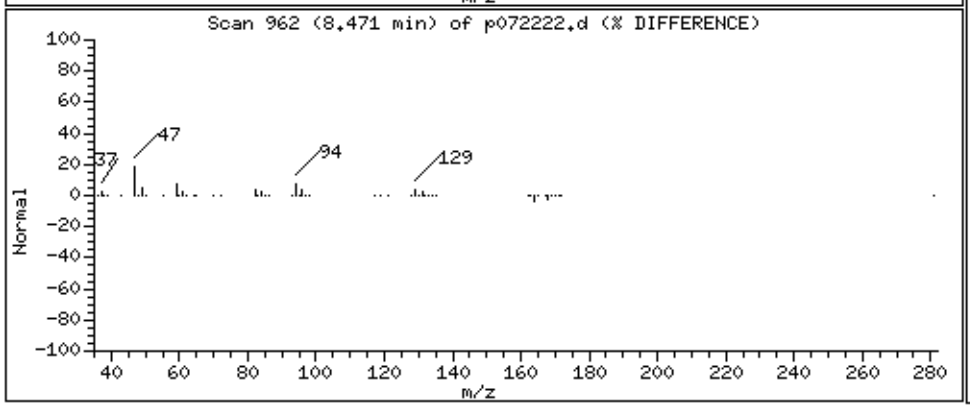
142 Tetrachloroethene

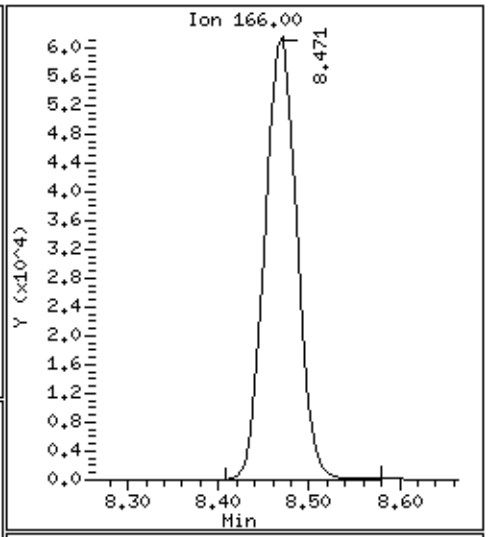
Concentration: 25.657 PPBV

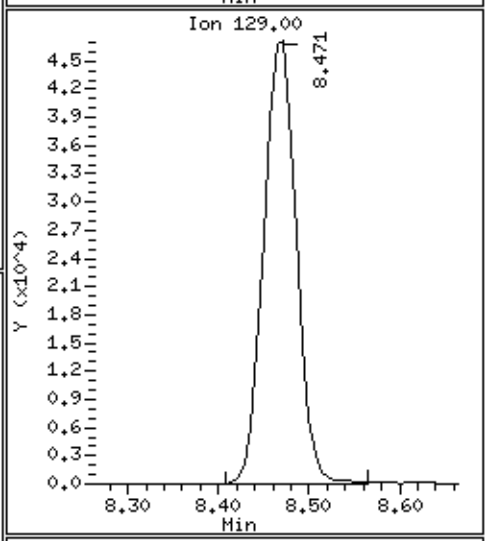


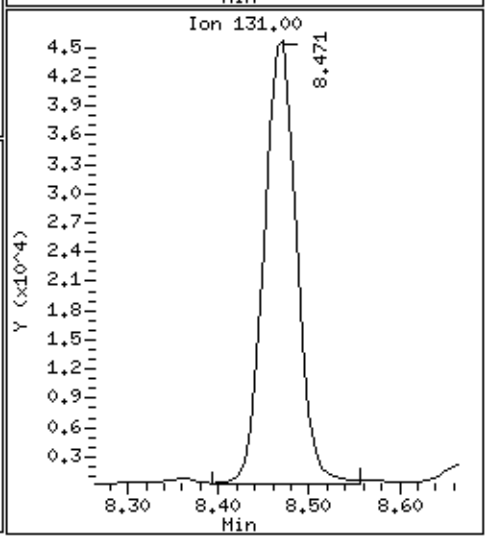












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Client Sample ID: SG-VW31B-02

Lab ID#: 2107241A-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072223**	**Date of Collection:**	**7/9/21 2:06:00 PM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**7/23/21 01:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.6	Not Detected
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	11	Not Detected	24	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Freon 113	1.1	Not Detected	8.7	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	58	27	140
2-Propanol	4.6	12	11	29
Carbon Disulfide	4.6	6.6	14	20
3-Chloropropene	4.6	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
Methyl tert-butyl ether	4.6	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	5.6	4.3	21
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	12	7.7	81
2-Hexanone	4.6	Not Detected	19	Not Detected

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Client Sample ID: SG-VW31B-02

Lab ID#: 2107241A-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072223**	**Date of Collection:**	**7/9/21 2:06:00 PM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**7/23/21 01:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.7	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	470	Not Detected
Freon 134a	4.6	Not Detected	19	Not Detected
Acrolein	4.6	Not Detected	10	Not Detected
Acrylonitrile	4.6	Not Detected	9.9	Not Detected
tert-Amyl methyl ether	4.6	Not Detected	19	Not Detected
tert-Butyl alcohol	4.6	Not Detected	14	Not Detected
1,2-Dibromo-3-chloropropane	4.6	Not Detected	44	Not Detected
Dibromomethane	4.6	Not Detected	32	Not Detected
1,1-Difluoroethane	4.6	33	12	88
Isopropyl ether	4.6	Not Detected	19	Not Detected
Ethyl Acetate	4.6	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.6	Not Detected	19	Not Detected
Hexachloroethane	4.6	Not Detected	44	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Propylene	4.6	Not Detected	7.8	Not Detected
1,1,1,2-Tetrachloroethane	4.6	Not Detected	31	Not Detected
1,2,3-Trichloropropane	4.6	Not Detected	27	Not Detected
Vinyl Acetate	4.6	Not Detected	16	Not Detected
Vinyl Bromide	4.6	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-VW31B-02

Lab ID#: 2107241A-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072223**	**Date of Collection: 7/9/21 2:06:00 PM**	
Dil. Factor:	**2.28**	**Date of Analysis: 7/23/21 01:05 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072223.d
Lab Smp Id: 2107241A-19A
Inj Date : 23-JUL-2021 01:05
Operator : DF Inst ID: msdp.i
Smp Info : 200mL O0876
Misc Info : 8.2 Hg->9.7 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 6
Dil Factor: 2.28000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	156946	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	119905				48.23- 108.23	76.40
5.785	5.778 (1.000)	49	329933				150.57- 210.57	210.22
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	559552	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	79221				0.00- 45.71	14.16
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	580141	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	300002				23.78- 83.78	51.71
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	222126	25.6454	25.645		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	111130				27.21- 87.21	50.03
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	616522	25.3734	25.373		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	64648				0.00- 40.44	10.49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	395448			34.95- 94.95	64.14
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	360763	24.2166	24.216	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	443924			95.92- 155.92	123.05
10.921	10.921 (1.154)	176	344090			66.89- 126.89	95.38
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	51067	14.3548	32.729	80.00- 120.00	100.00
1.716	1.745 (0.297)	51	153155			597.63- 657.63	299.91
1.716	1.703 (0.297)	47	27256			33.72- 93.72	53.37
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	104740	25.4562	58.040	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	408695			302.95- 362.95	390.20
48 Carbon Disulfide					CAS #: 75-15-0		
3.837	3.823 (0.663)	76	50451	2.88434	6.576	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.909	3.887 (0.676)	45	85810	5.17465	11.798	80.00- 120.00	100.00
3.909	3.887 (0.676)	43	24807			0.00- 47.19	28.91
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	62880	2.46826	5.628	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	37811			28.38- 88.38	60.13
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	69008	5.21922	11.900	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	53772			47.84- 107.84	77.92
8.471	8.464 (0.895)	131	54407			45.29- 105.29	78.84

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072223.d
Lab Smp Id: 2107241A-19A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 8.2 Hg->9.7 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	156946	-1.45
108 1,4-Difluorobenze	573285	343971	802599	559552	-2.40
153 Chlorobenzene-d5	571549	342929	800169	580141	1.50

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:42

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-19A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 8.2 Hg->9.7 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.645	102.58	70-130
$ 134 Toluene-d8	25.000	25.373	101.49	70-130
$ 170 4-Bromofluorobenz	25.000	24.216	96.87	70-130

Data File: /chem/msdp.i/22JUL21.b/p072223.d

Date : 23-JUL-2021 01:05

Client ID:

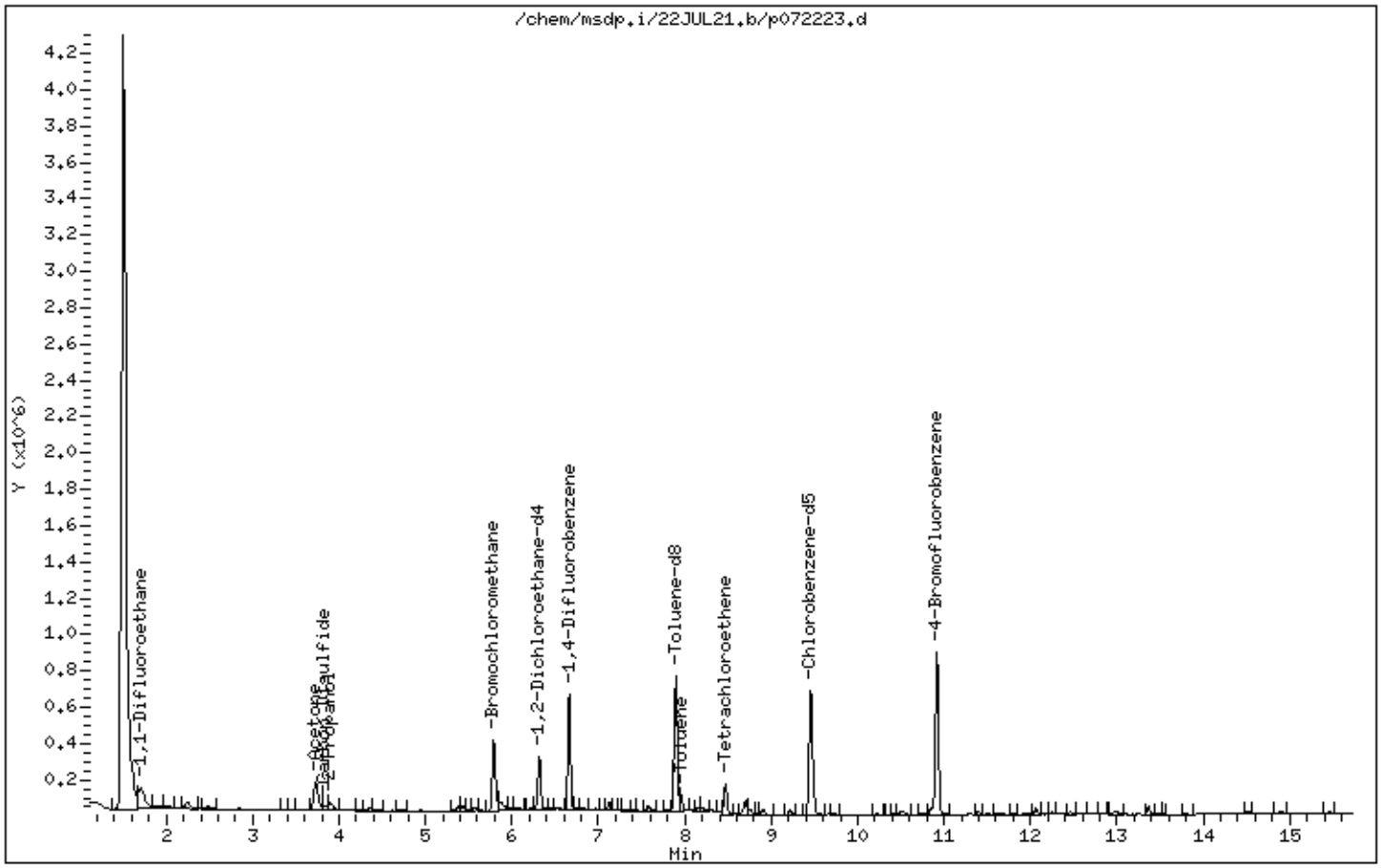
Instrument: msdp.i

Sample Info: 200mL 00876

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072223.d

Date : 23-JUL-2021 01:05

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00876

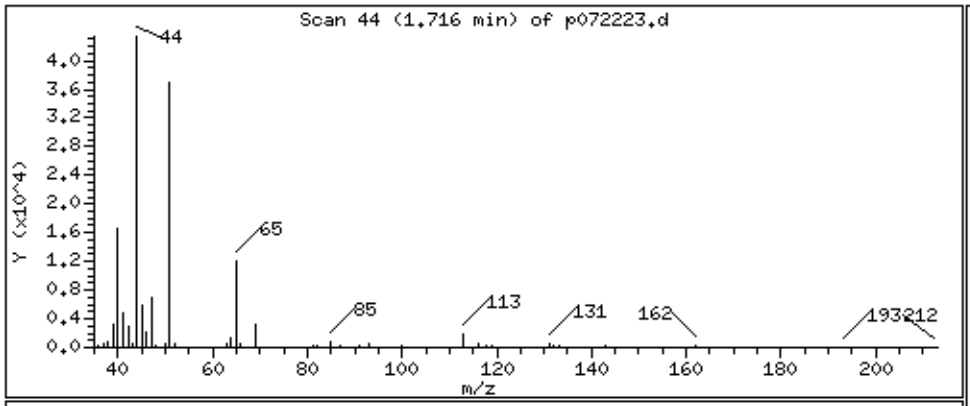
Operator: DF

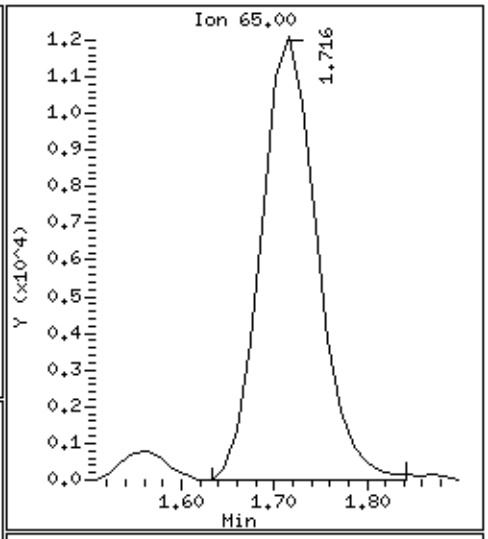
Column phase: RTX-624

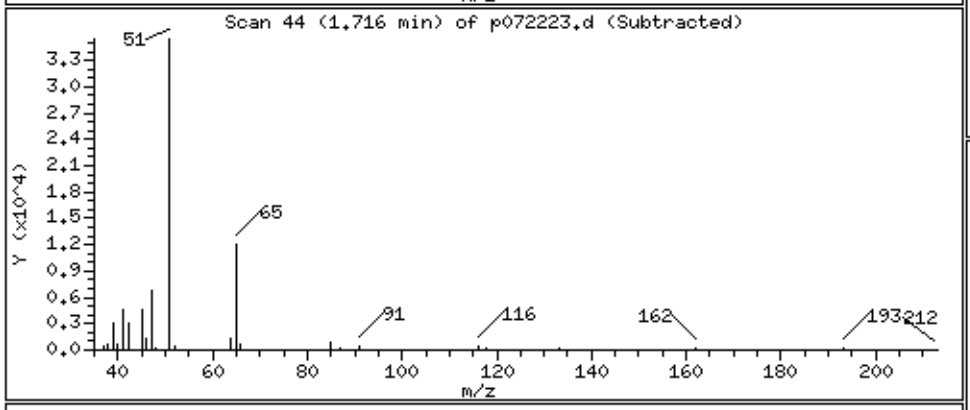
Column diameter: 0.25

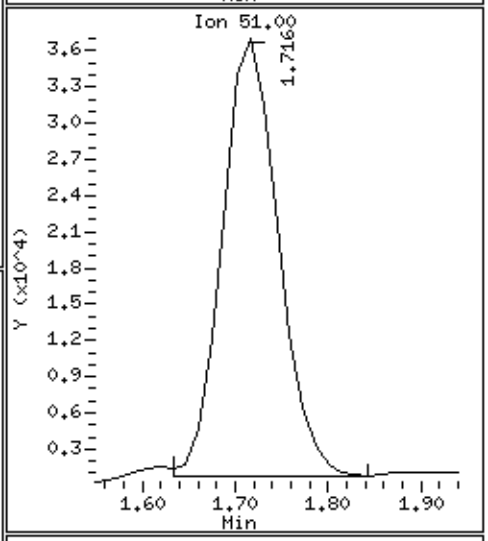
7 1,1-Difluoroethane

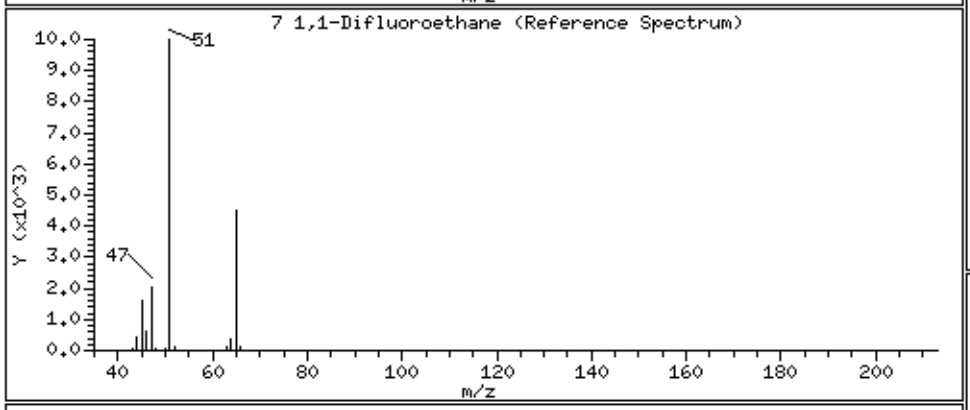
Concentration: 32.729 PPBV

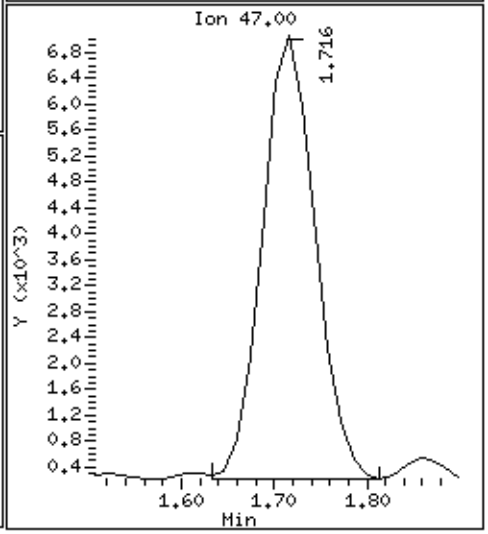


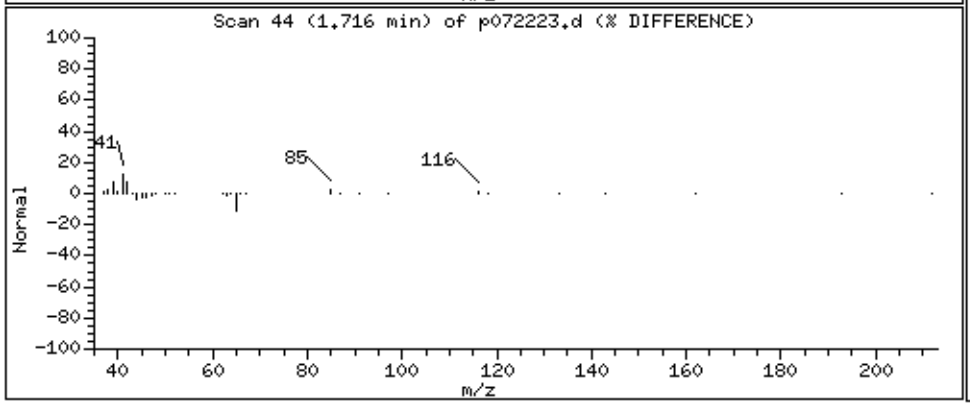












Data File: /chem/msdp.i/22JUL21.b/p072223.d

Date : 23-JUL-2021 01:05

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00876

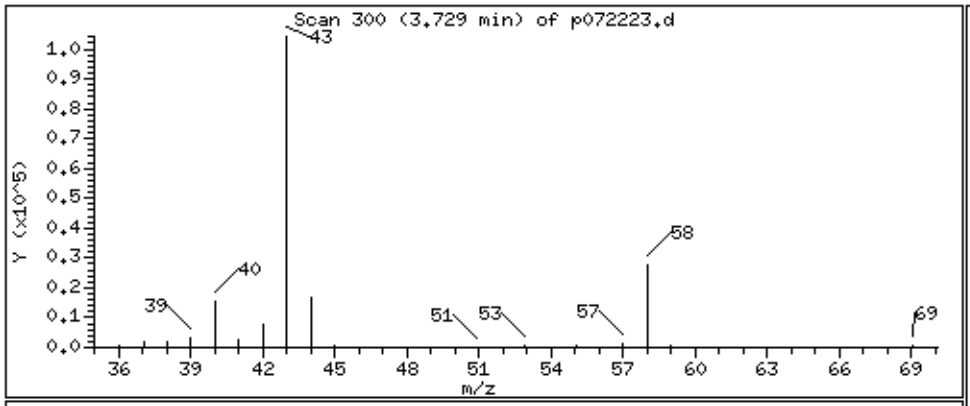
Operator: DF

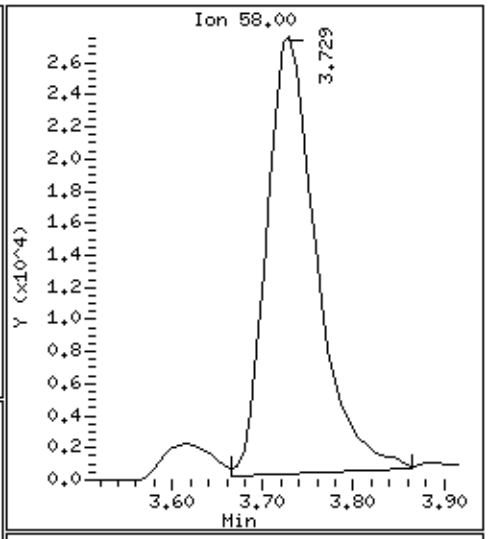
Column phase: RTX-624

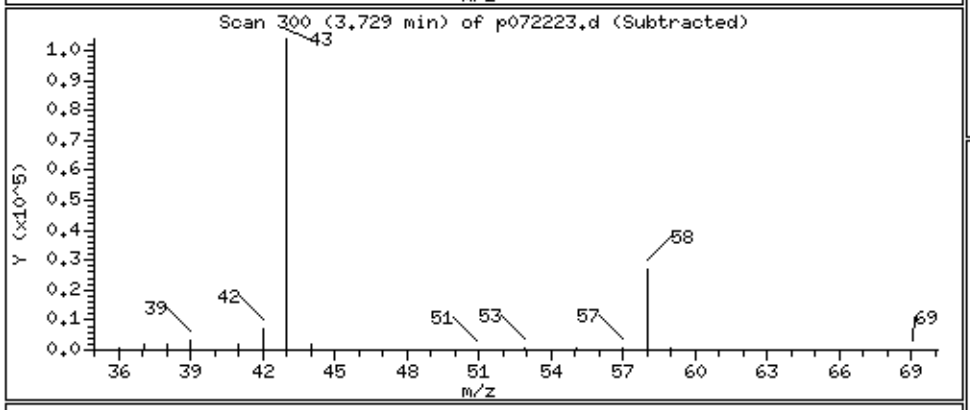
Column diameter: 0.25

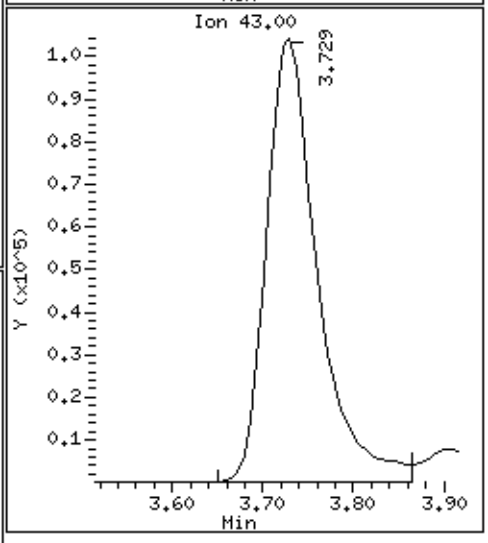
47 Acetone

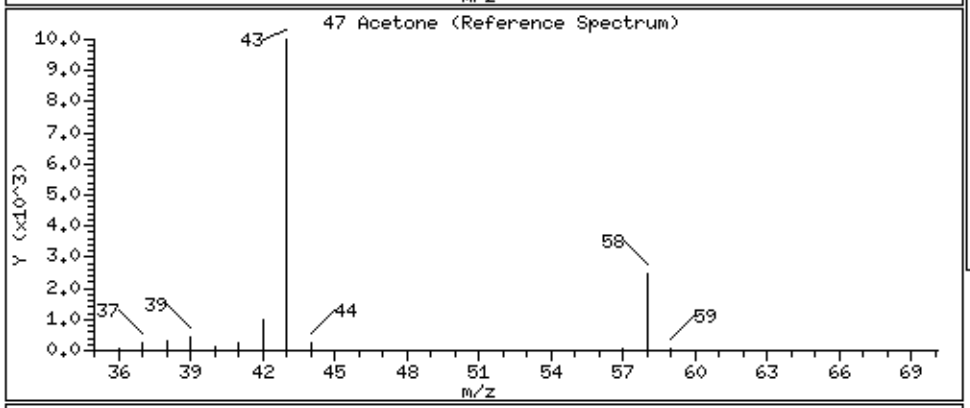
Concentration: 58.040 PPBV

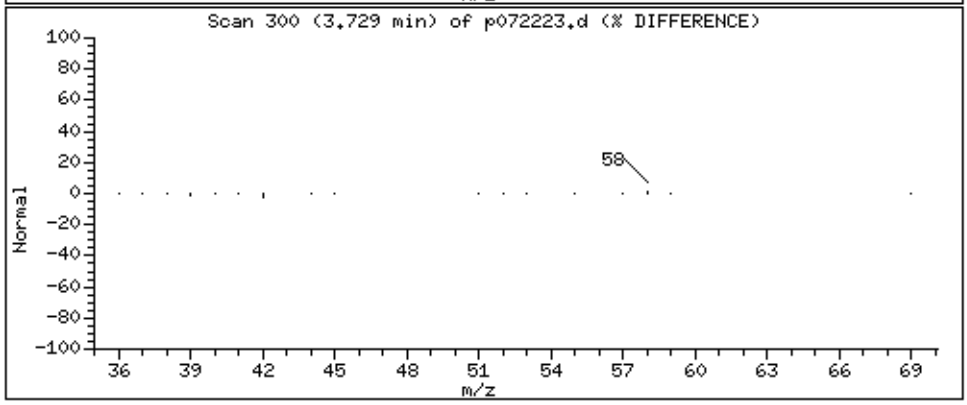












Data File: /chem/msdp.i/22JUL21.b/p072223.d

Date : 23-JUL-2021 01:05

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00876

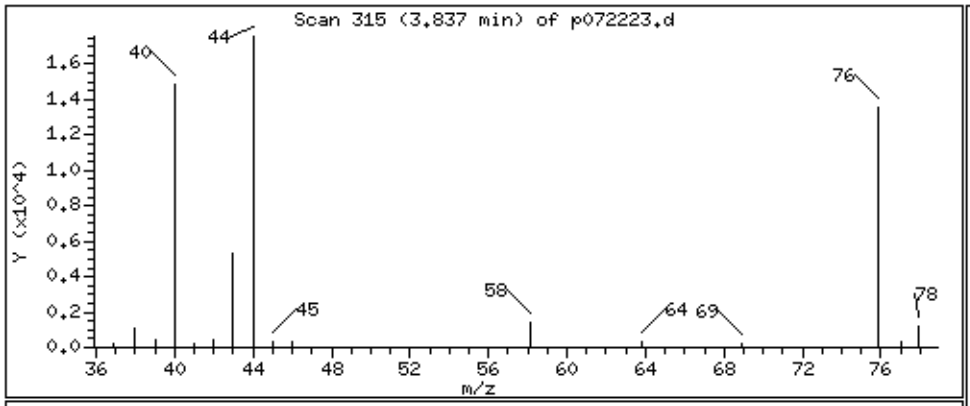
Operator: DF

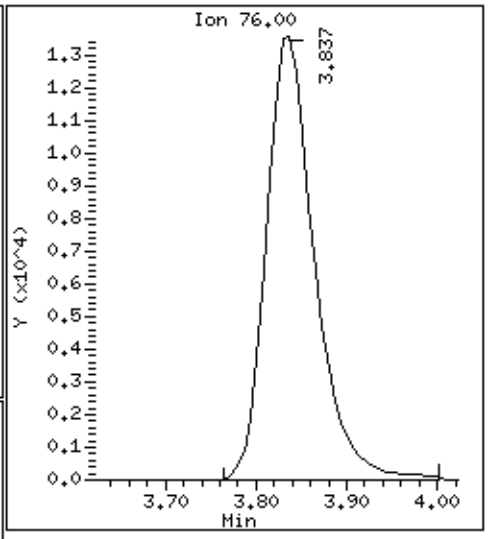
Column phase: RTX-624

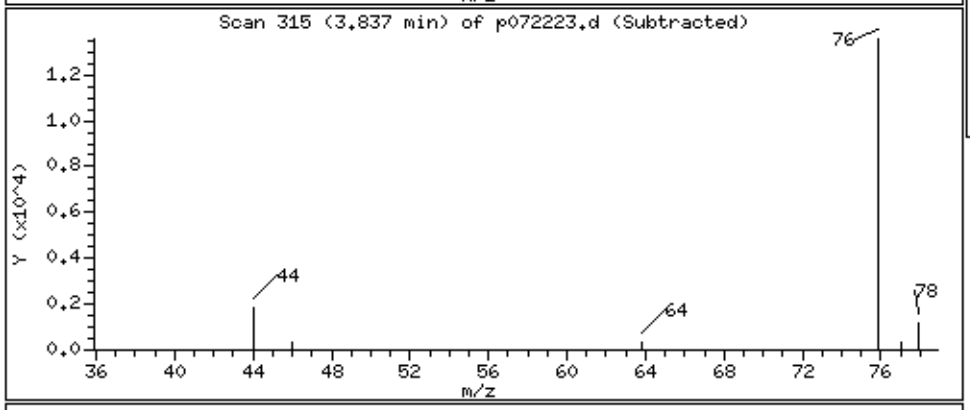
Column diameter: 0.25

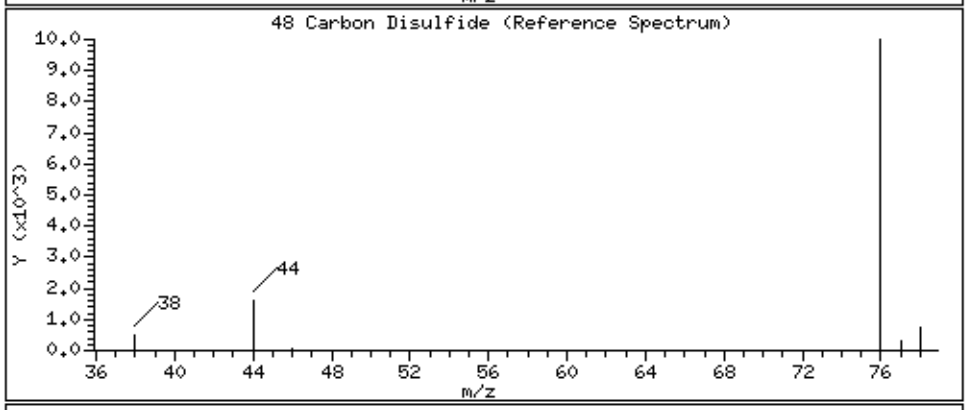
48 Carbon Disulfide

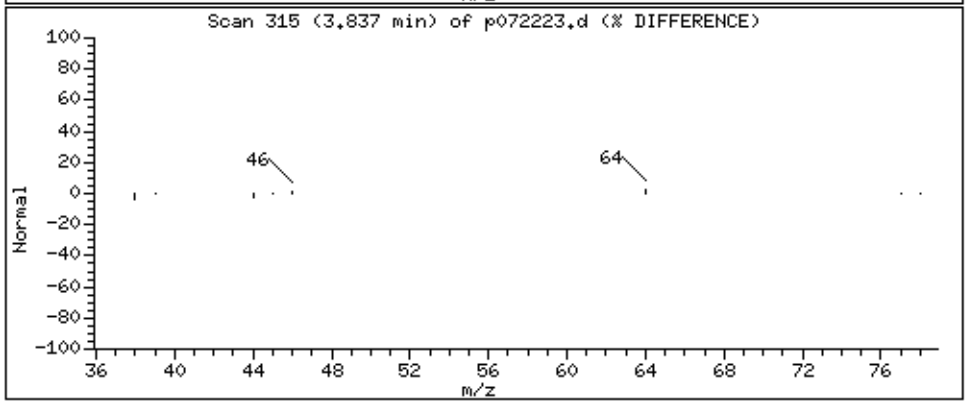
Concentration: 6.576 PPBV











Data File: /chem/msdp.i/22JUL21.b/p072223.d

Page 5

Date : 23-JUL-2021 01:05

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00876

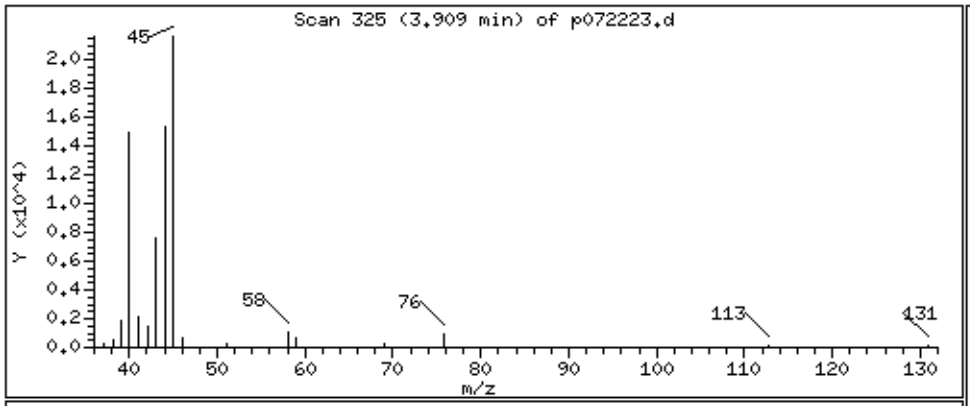
Operator: DF

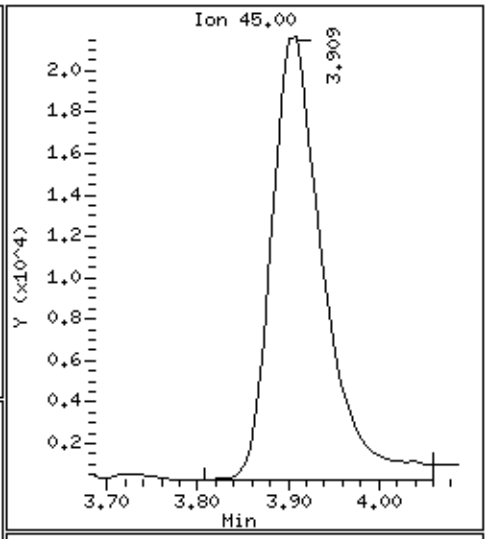
Column phase: RTX-624

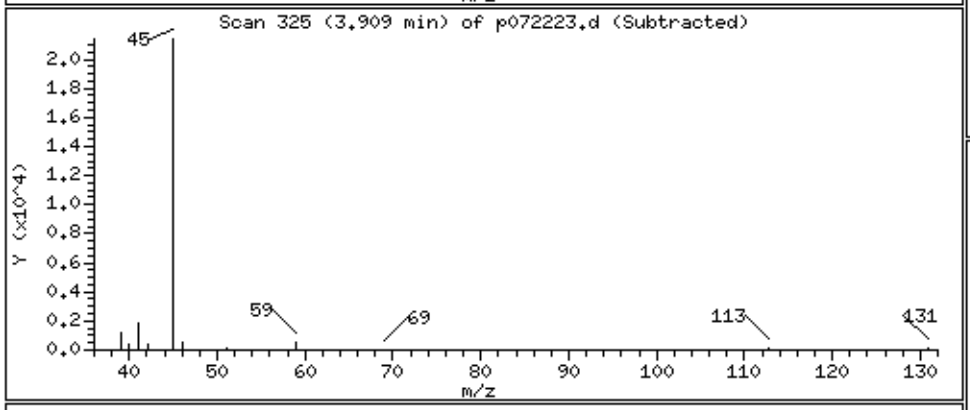
Column diameter: 0.25

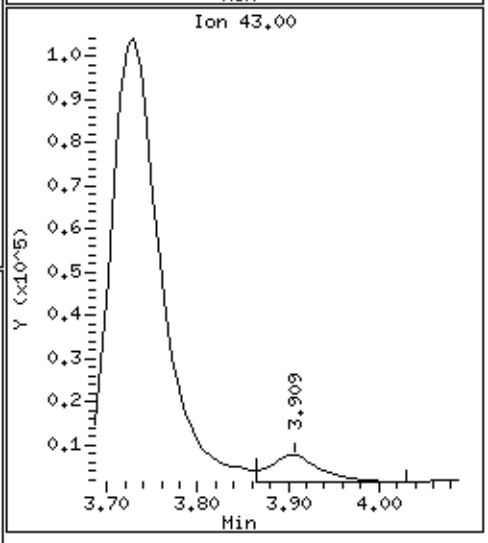
52 2-Propanol

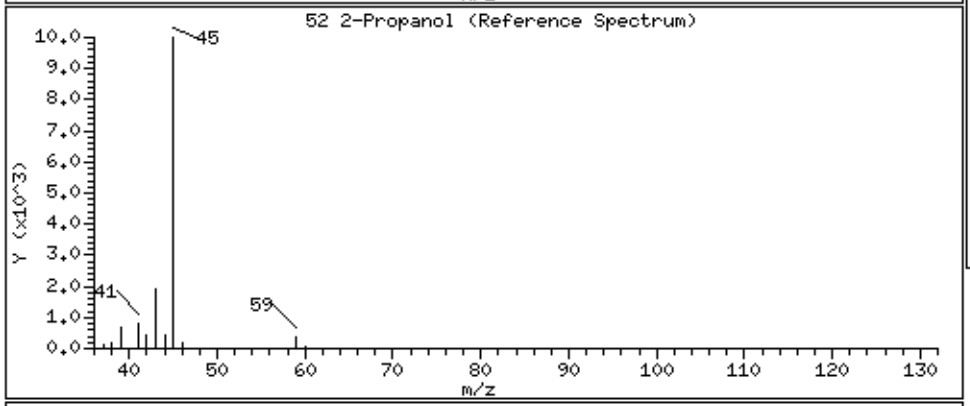
Concentration: 11.798 PPBV

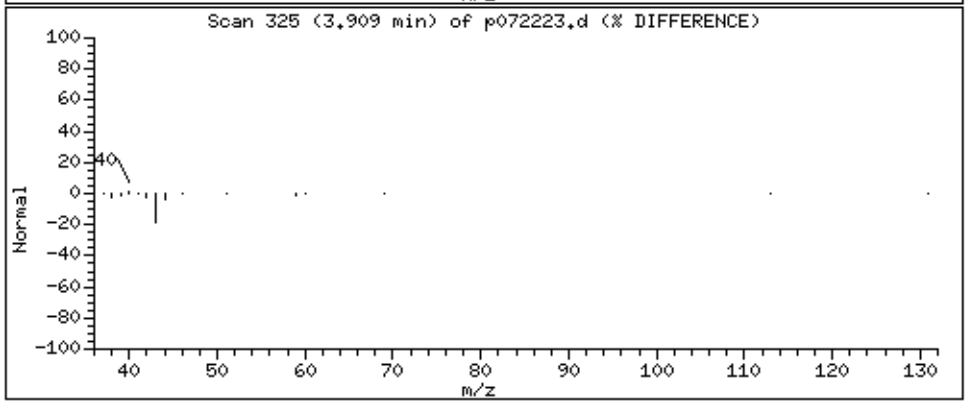












Data File: /chem/msdp.i/22JUL21.b/p072223.d

Date : 23-JUL-2021 01:05

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00876

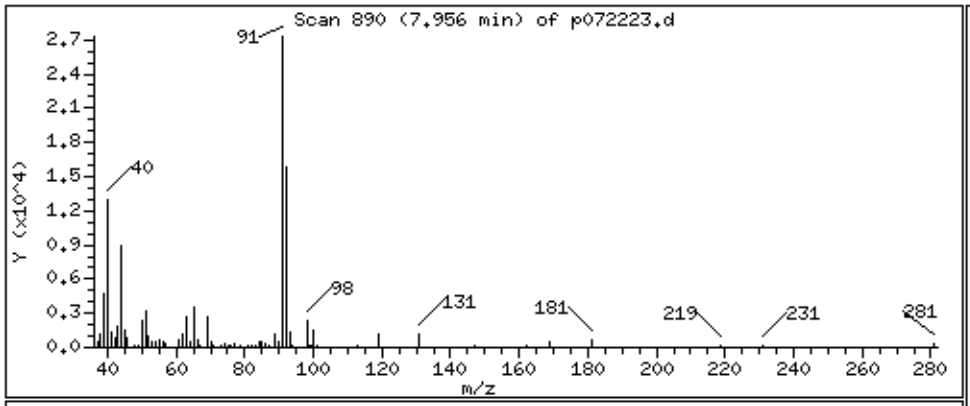
Operator: DF

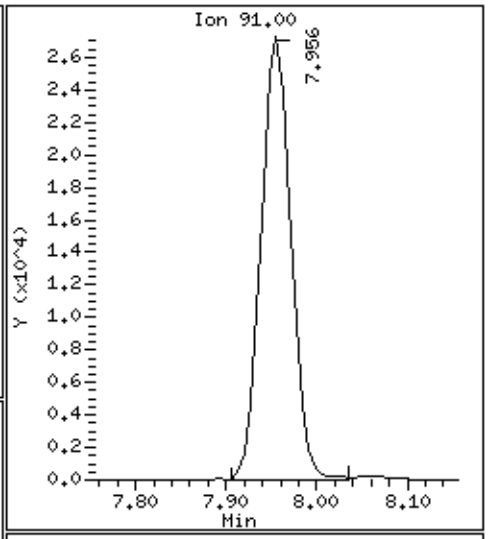
Column phase: RTX-624

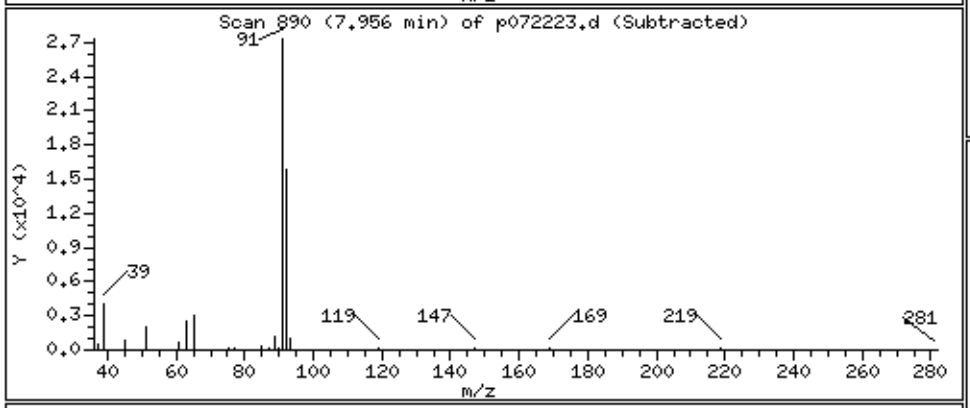
Column diameter: 0.25

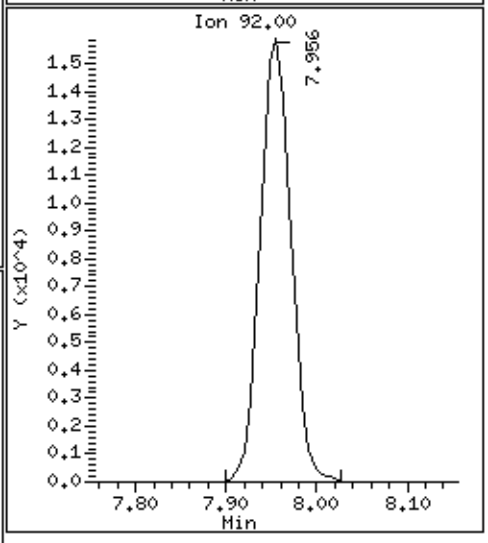
137 Toluene

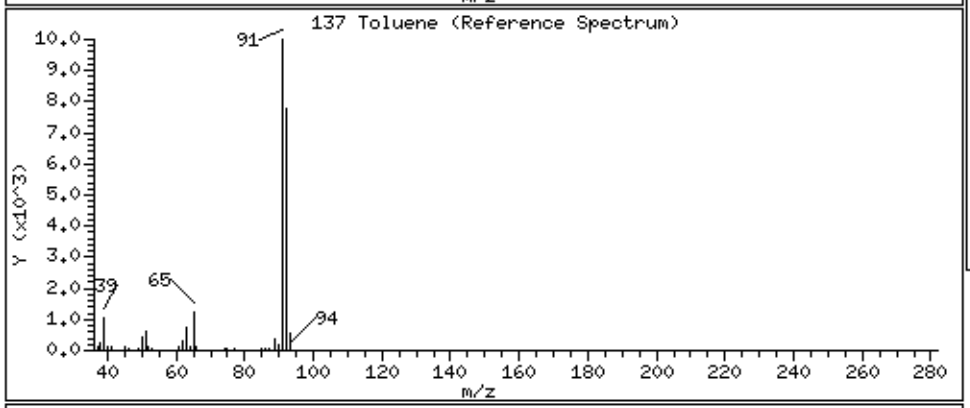
Concentration: 5.628 PPBV

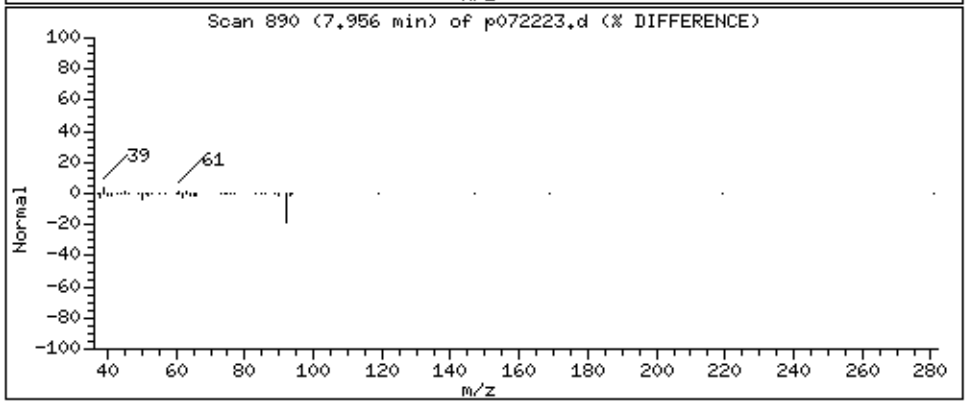












Data File: /chem/msdp.i/22JUL21.b/p072223.d

Date : 23-JUL-2021 01:05

Client ID:

Instrument: msdp.i

Sample Info: 200mL 00876

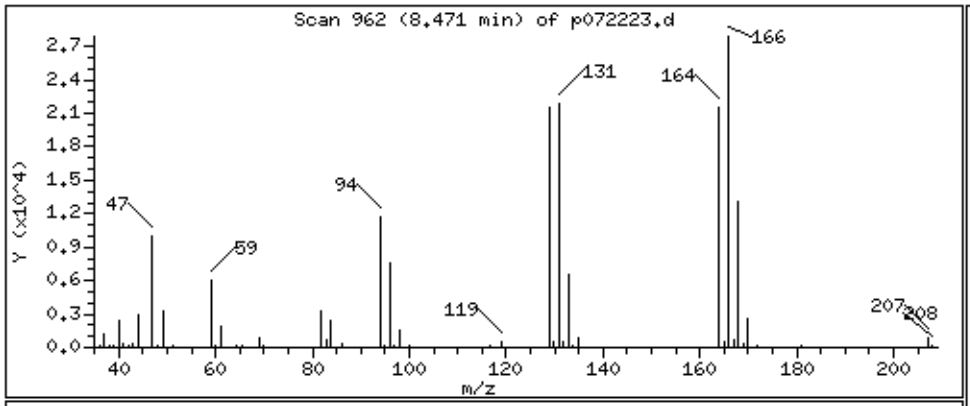
Operator: DF

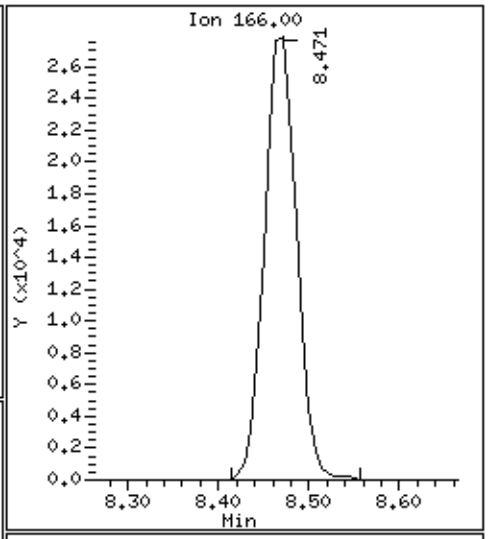
Column phase: RTX-624

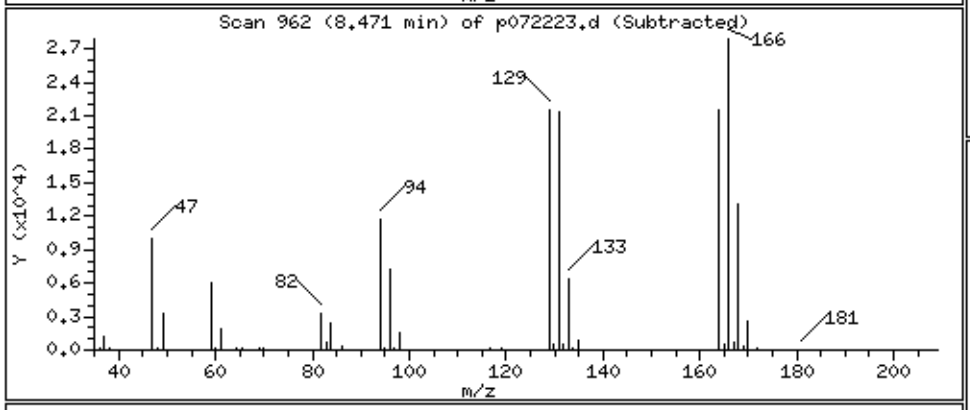
Column diameter: 0.25

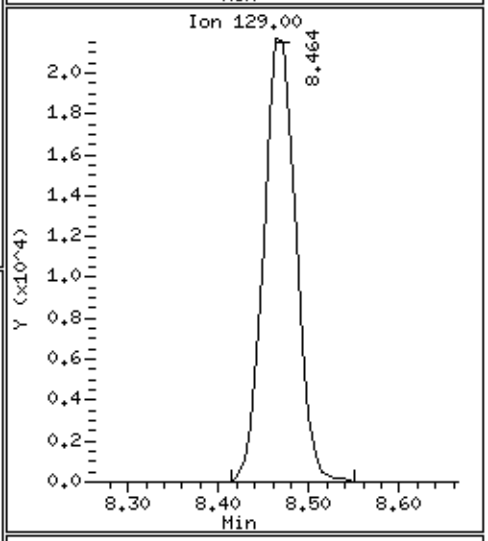
142 Tetrachloroethene

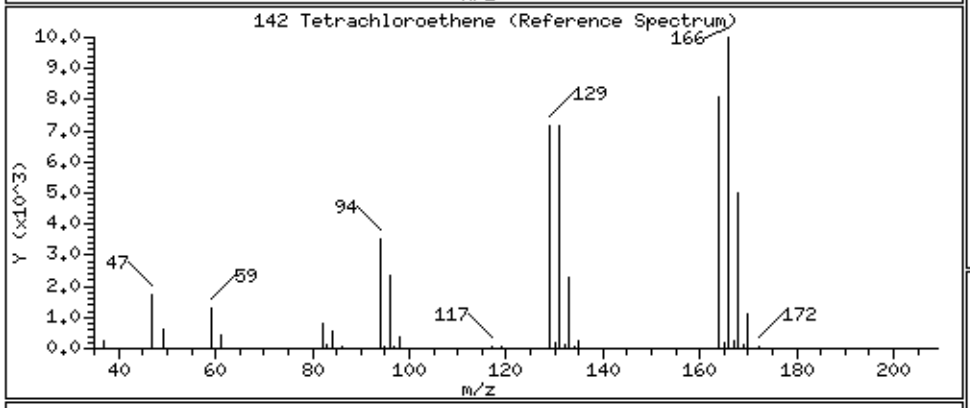
Concentration: 11.900 PPBV

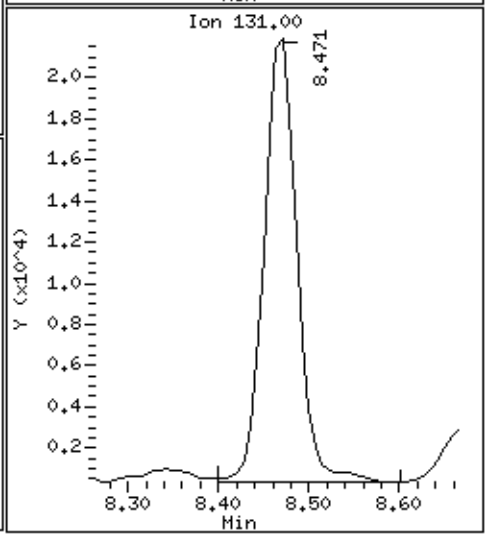


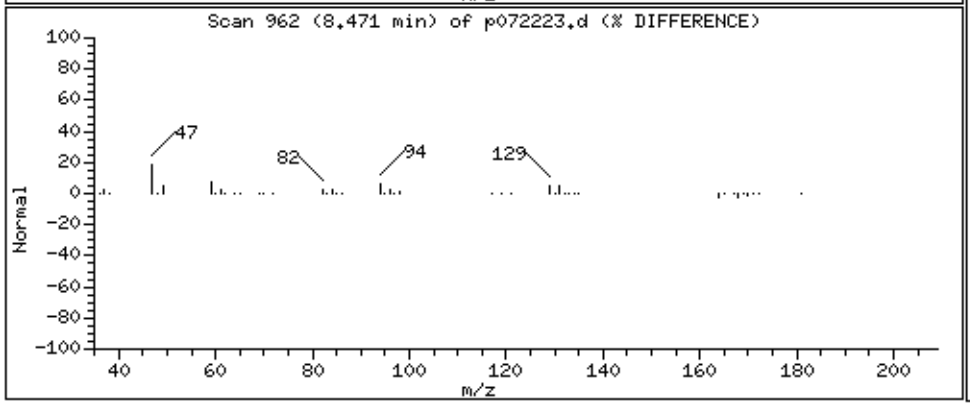












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Client Sample ID: SG-VW31B-03

Lab ID#: 2107241A-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072224**	**Date of Collection: 7/9/21 2:06:00 PM**	
Dil. Factor:	**2.25**	**Date of Analysis: 7/23/21 01:34 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.6	Not Detected
Freon 114	1.1	Not Detected	7.9	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Chloroethane	4.5	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.3	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Freon 113	1.1	Not Detected	8.6	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	30	27	72
2-Propanol	4.5	19	11	46
Carbon Disulfide	4.5	Not Detected	14	Not Detected
3-Chloropropene	4.5	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
Methyl tert-butyl ether	4.5	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.5	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Chloroform	1.1	Not Detected	5.5	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.1	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.2	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.2	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.5	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.6	Not Detected
Toluene	1.1	4.7	4.2	18
trans-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Tetrachloroethene	1.1	12	7.6	80
2-Hexanone	4.5	Not Detected	18	Not Detected

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Client Sample ID: SG-VW31B-03

Lab ID#: 2107241A-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072224**	**Date of Collection:**	**7/9/21 2:06:00 PM**
Dil. Factor:	**2.25**	**Date of Analysis:**	**7/23/21 01:34 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.6	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.6	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.5	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.7	Not Detected
Propylbenzene	1.1	Not Detected	5.5	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.5	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.8	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2,4-Trichlorobenzene	4.5	Not Detected	33	Not Detected
Hexachlorobutadiene	4.5	Not Detected	48	Not Detected
Naphthalene	2.2	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	460	Not Detected
Freon 134a	4.5	Not Detected	19	Not Detected
Acrolein	4.5	Not Detected	10	Not Detected
Acrylonitrile	4.5	Not Detected	9.8	Not Detected
tert-Amyl methyl ether	4.5	Not Detected	19	Not Detected
tert-Butyl alcohol	4.5	Not Detected	14	Not Detected
1,2-Dibromo-3-chloropropane	4.5	Not Detected	43	Not Detected
Dibromomethane	4.5	Not Detected	32	Not Detected
1,1-Difluoroethane	4.5	Not Detected	12	Not Detected
Isopropyl ether	4.5	Not Detected	19	Not Detected
Ethyl Acetate	4.5	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.5	Not Detected	19	Not Detected
Hexachloroethane	4.5	Not Detected	44	Not Detected
Iodomethane	11	Not Detected	65	Not Detected
Propylene	4.5	Not Detected	7.7	Not Detected
1,1,1,2-Tetrachloroethane	4.5	Not Detected	31	Not Detected
1,2,3-Trichloropropane	4.5	Not Detected	27	Not Detected
Vinyl Acetate	4.5	Not Detected	16	Not Detected
Vinyl Bromide	4.5	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW31B-03

Lab ID#: 2107241A-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072224**	**Date of Collection:**	**7/9/21 2:06:00 PM**
Dil. Factor:	**2.25**	**Date of Analysis:**	**7/23/21 01:34 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072224.d
Lab Smp Id: 2107241A-20A
Inj Date : 23-JUL-2021 01:34
Operator : DF Inst ID: msdp.i
Smp Info : 200mL LC405
Misc Info : 7.6 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 7
Dil Factor: 2.25000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.785	5.778 (1.000)	130	153355	25.0000		80.00- 120.00	100.00
5.785	5.778 (1.000)	128	118862			48.23- 108.23	77.51
5.785	5.778 (1.000)	49	329720			150.57- 210.57	215.00
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	545575	25.0000		80.00- 120.00	100.00
6.666	6.666 (1.000)	88	80797			0.00- 45.71	14.81
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	567049	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	290955			23.78- 83.78	51.31
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	224183	26.4890	26.489	80.00- 120.00	100.00
6.315	6.308 (1.092)	67	107901			27.21- 87.21	48.13
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	602094	25.4144	25.414	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65394			0.00- 40.44	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	384006			34.95- 94.95	63.78
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	352505	24.2086	24.208	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	434692			95.92- 155.92	123.32
10.921	10.921 (1.154)	176	336763			66.89- 126.89	95.53
47 Acetone					CAS #: 67-64-1		
3.730	3.715 (0.645)	58	54070	13.4490	30.260	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	209452			302.95- 362.95	387.37
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	134178	8.28089	18.632	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	32543			0.00- 47.19	24.25
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	51881	2.08868	4.700	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	30402			28.38- 88.38	58.60
142 Tetrachloroethene					CAS #: 127-18-4		
8.472	8.464 (0.895)	166	68025	5.26366	11.843	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	53531			47.84- 107.84	78.69
8.472	8.464 (0.895)	131	54136			45.29- 105.29	79.58

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072224.d
Lab Smp Id: 2107241A-20A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.6 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	153355	-3.70
108 1,4-Difluorobenze	573285	343971	802599	545575	-4.83
153 Chlorobenzene-d5	571549	342929	800169	567049	-0.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:42

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-20A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.6 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.489	105.96	70-130
$ 134 Toluene-d8	25.000	25.414	101.66	70-130
$ 170 4-Bromofluorobenz	25.000	24.208	96.83	70-130

Data File: /chem/msdp.i/22JUL21.b/p072224.d

Date : 23-JUL-2021 01:34

Client ID:

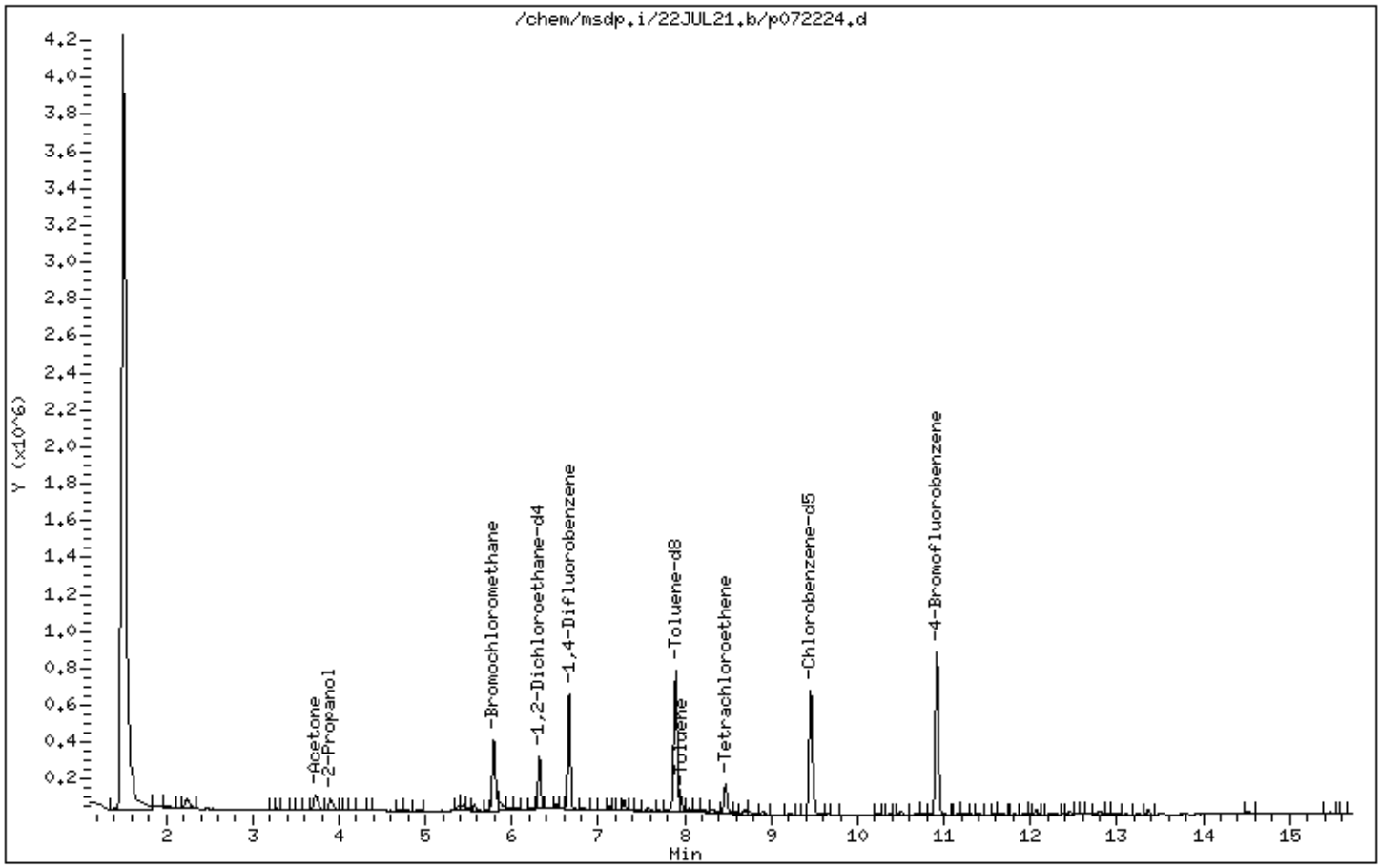
Instrument: msdp.i

Sample Info: 200mL LC405

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072224.d

Date : 23-JUL-2021 01:34

Client ID:

Instrument: msdp.i

Sample Info: 200mL LC405

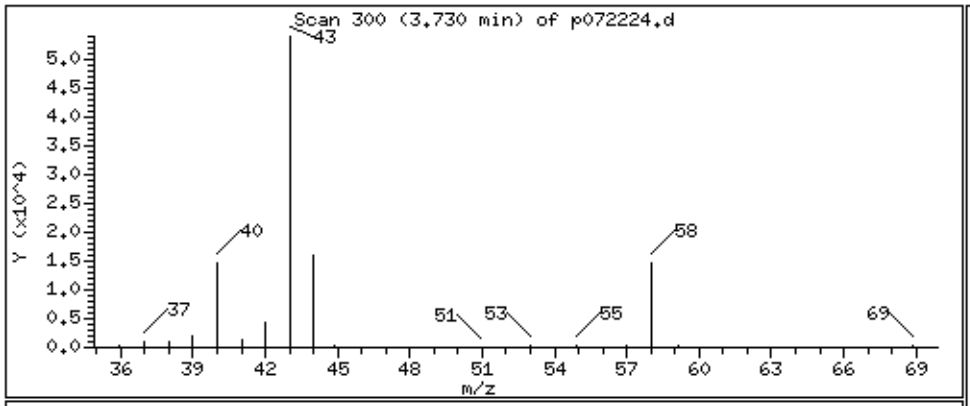
Operator: DF

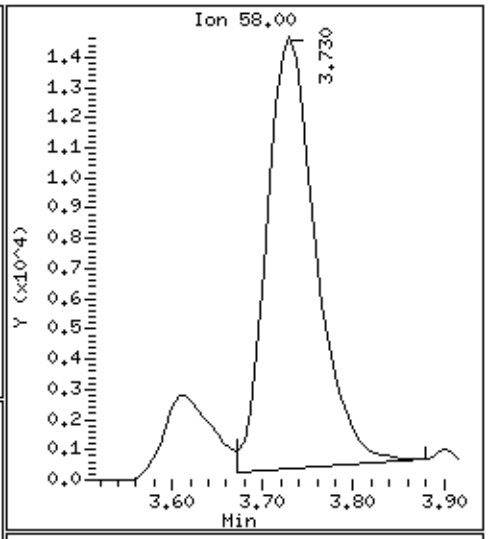
Column phase: RTX-624

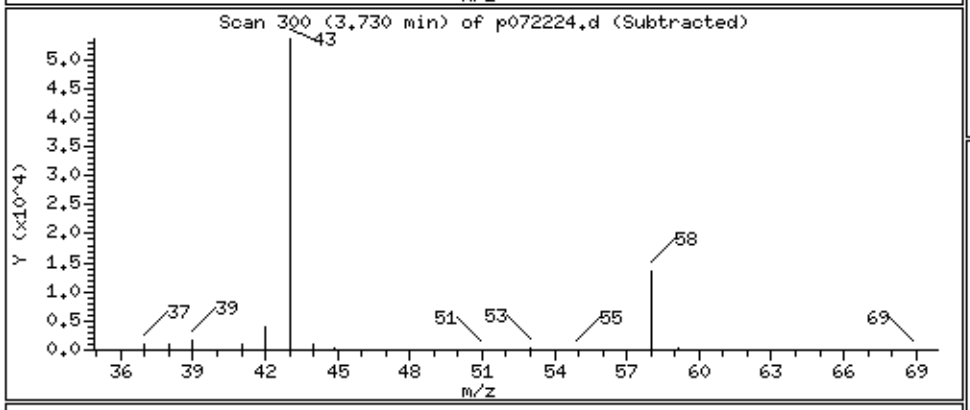
Column diameter: 0.25

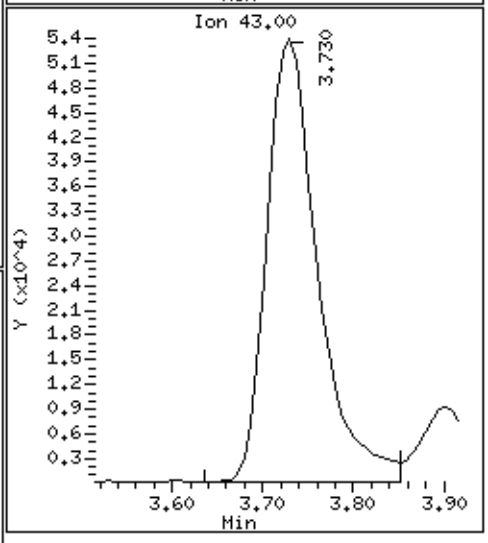
47 Acetone

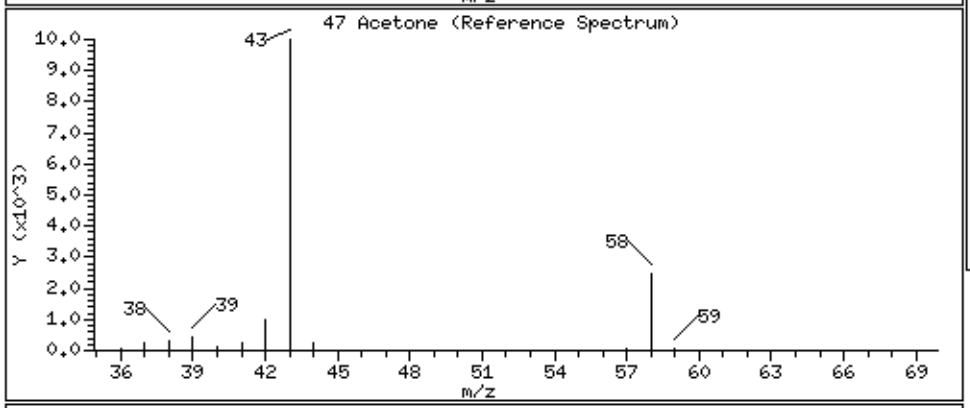
Concentration: 30.260 PPBV

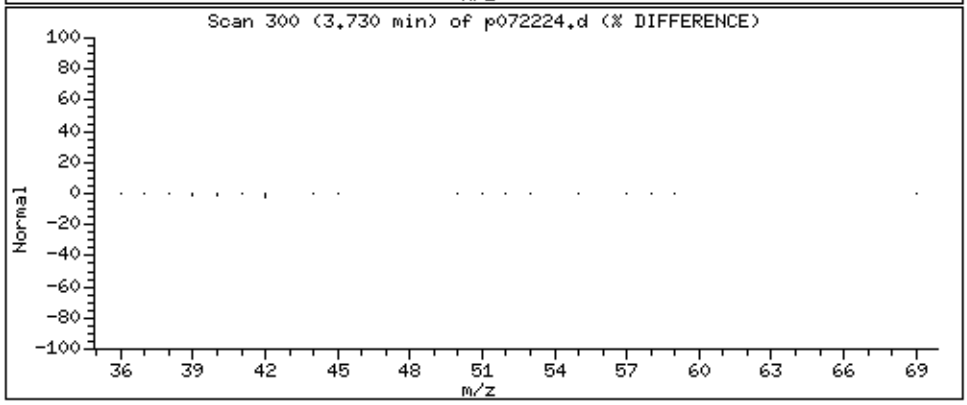












Data File: /chem/msdp.i/22JUL21.b/p072224.d

Date : 23-JUL-2021 01:34

Client ID:

Instrument: msdp.i

Sample Info: 200mL LC405

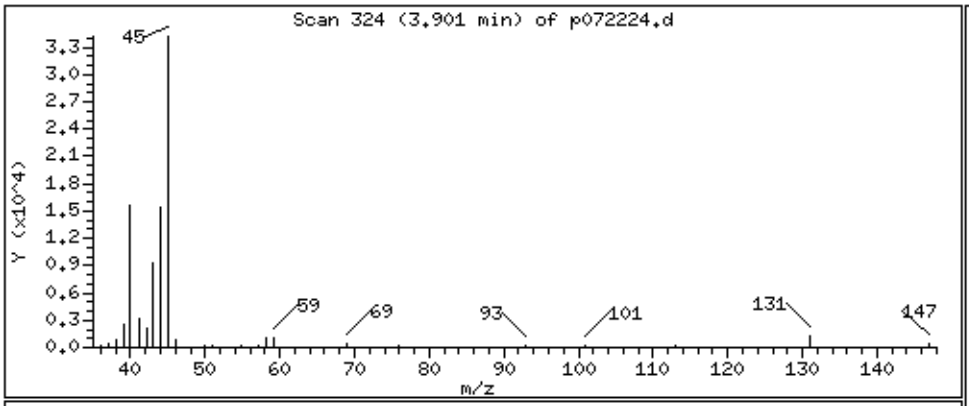
Operator: DF

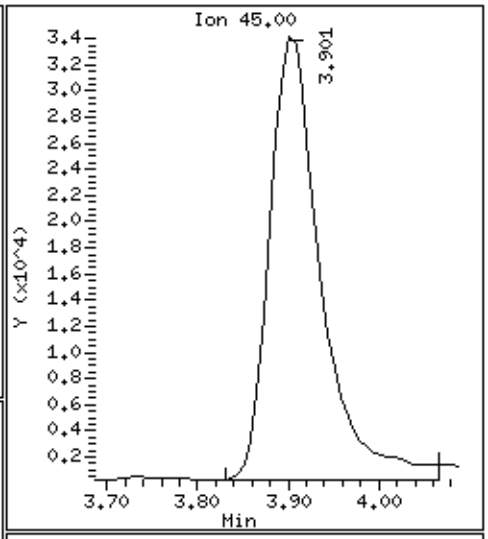
Column phase: RTX-624

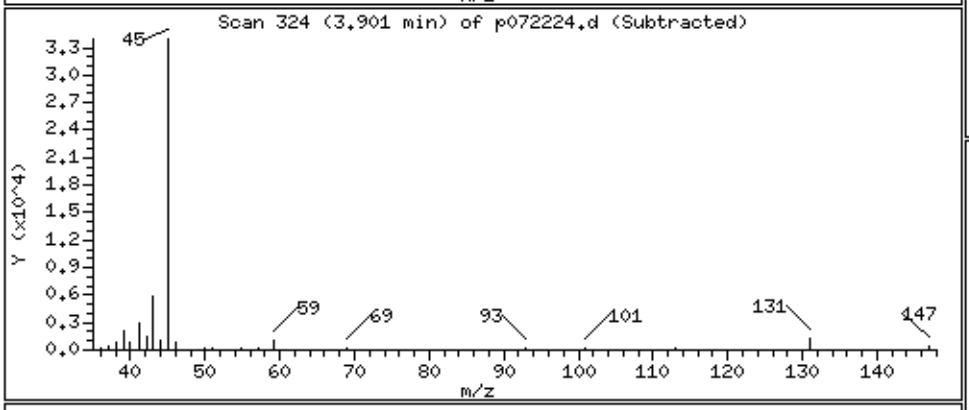
Column diameter: 0.25

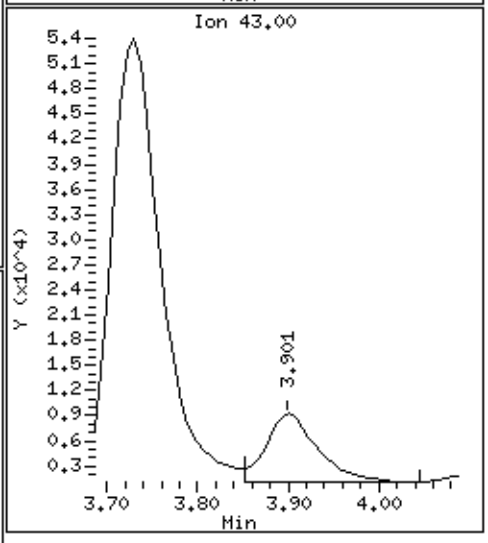
52 2-Propanol

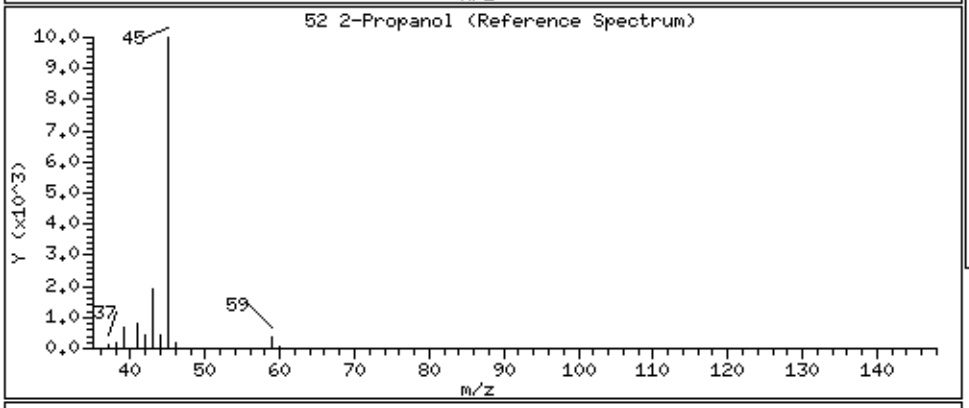
Concentration: 18.632 PPBV

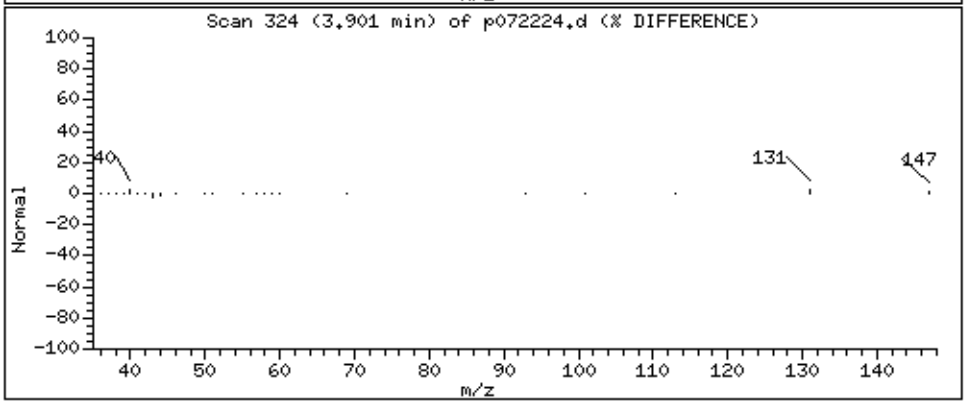












Data File: /chem/msdp.i/22JUL21.b/p072224.d

Date : 23-JUL-2021 01:34

Client ID:

Instrument: msdp.i

Sample Info: 200mL LC405

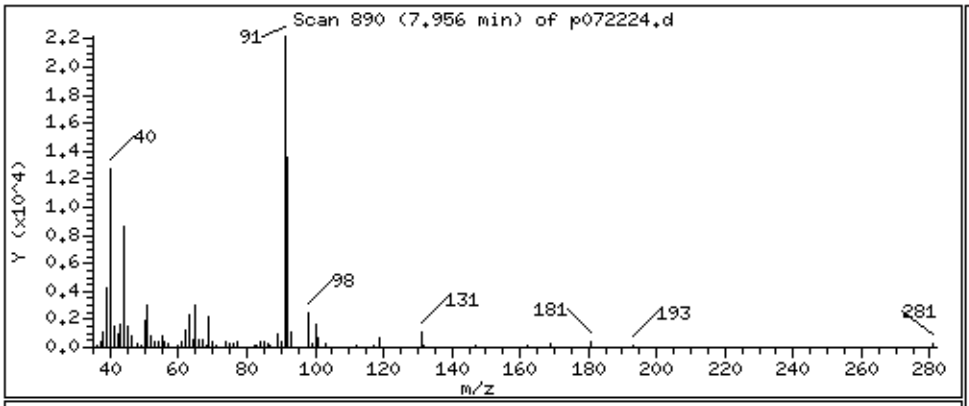
Operator: DF

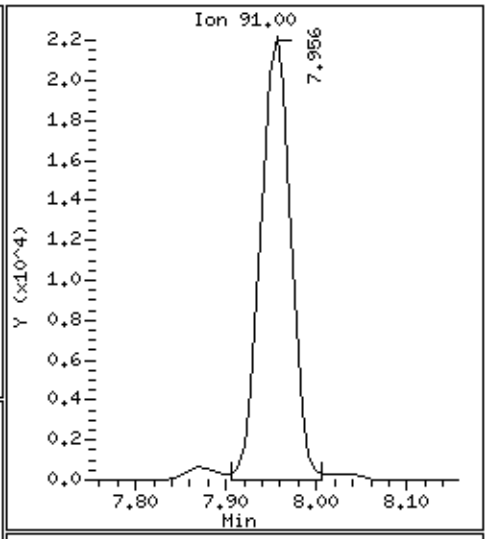
Column phase: RTX-624

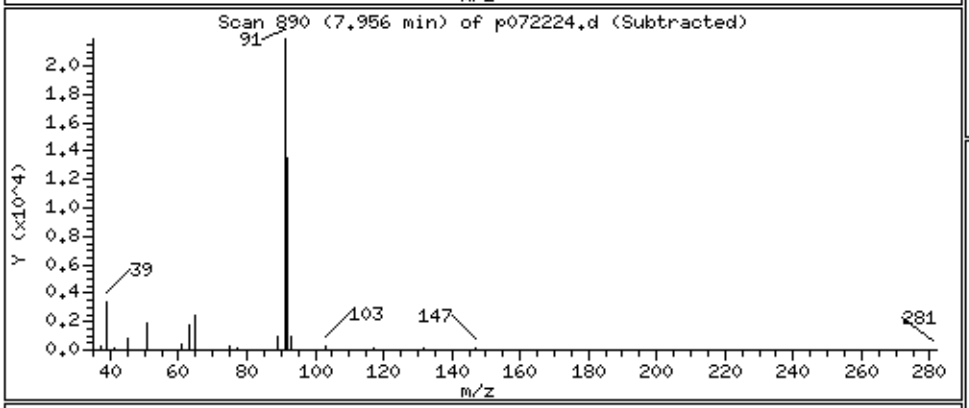
Column diameter: 0.25

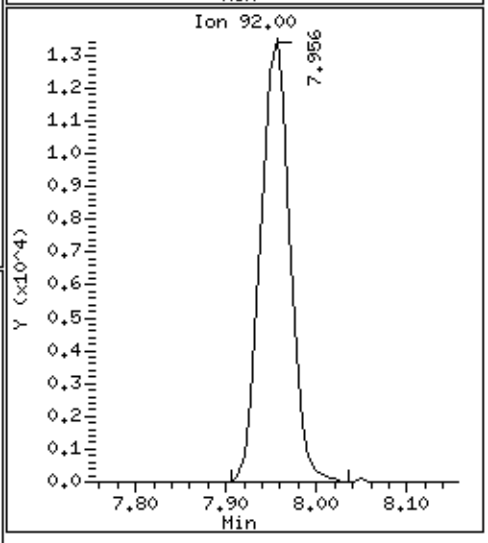
137 Toluene

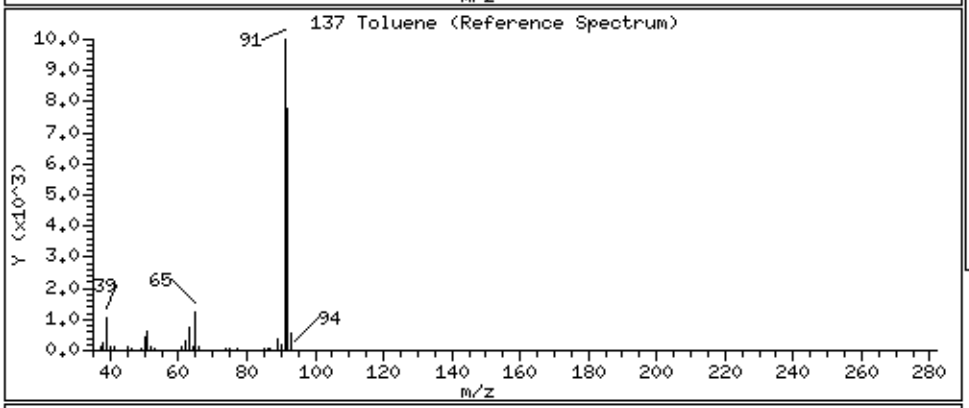
Concentration: 4.700 PPBV

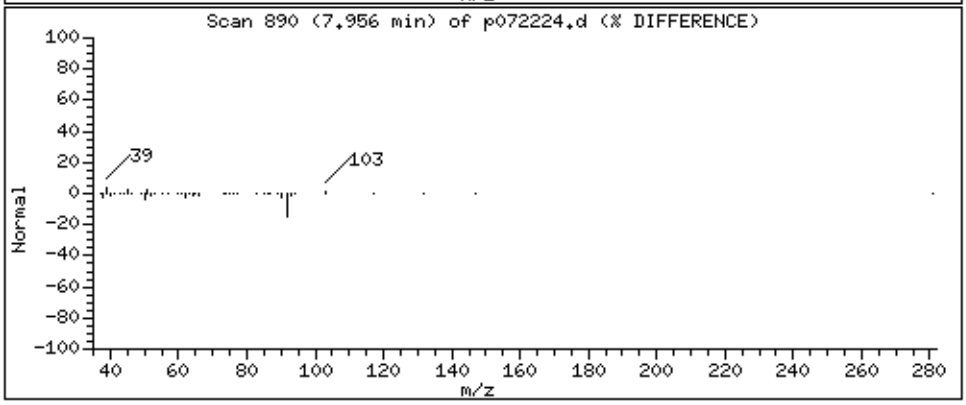












Data File: /chem/msdp.i/22JUL21.b/p072224.d

Date : 23-JUL-2021 01:34

Client ID:

Instrument: msdp.i

Sample Info: 200mL LC405

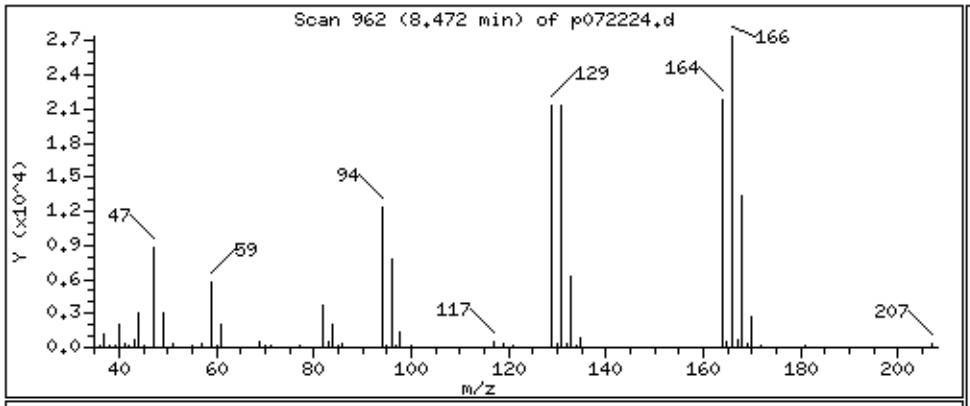
Operator: DF

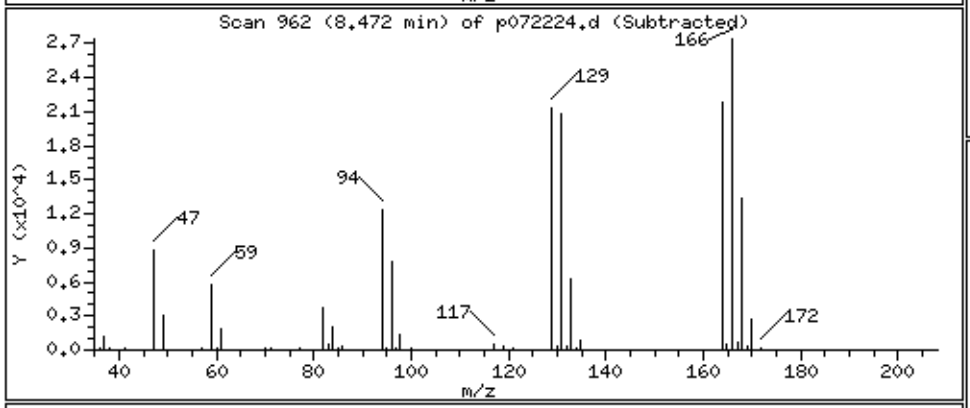
Column phase: RTX-624

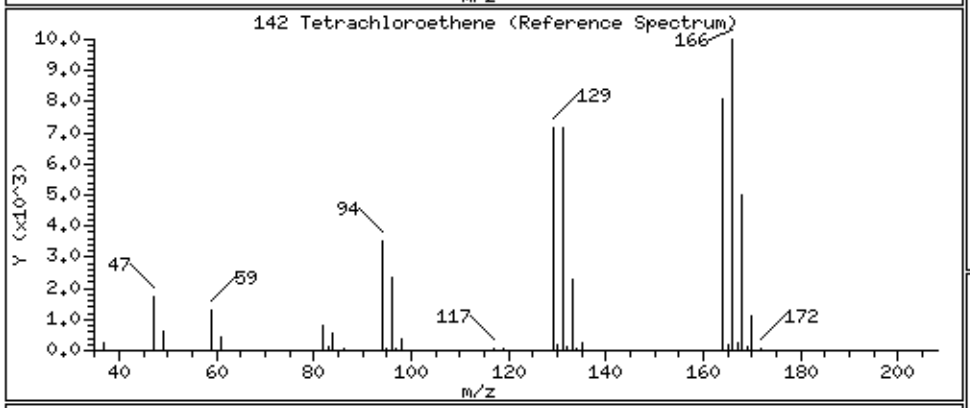
Column diameter: 0.25

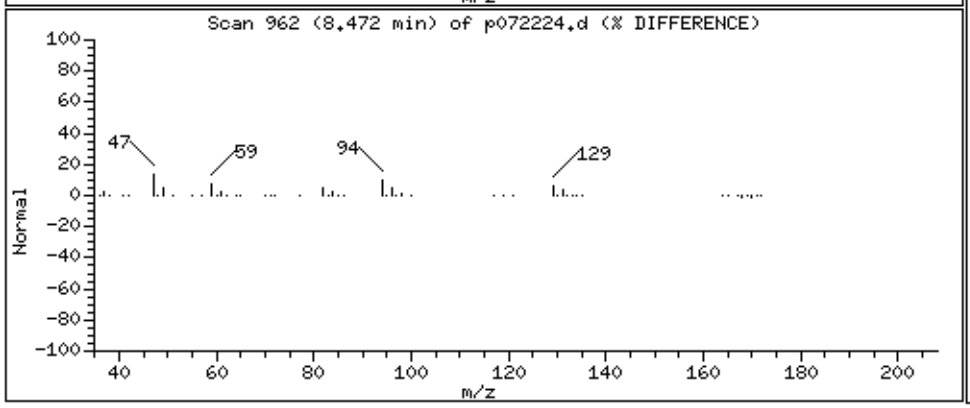
142 Tetrachloroethene

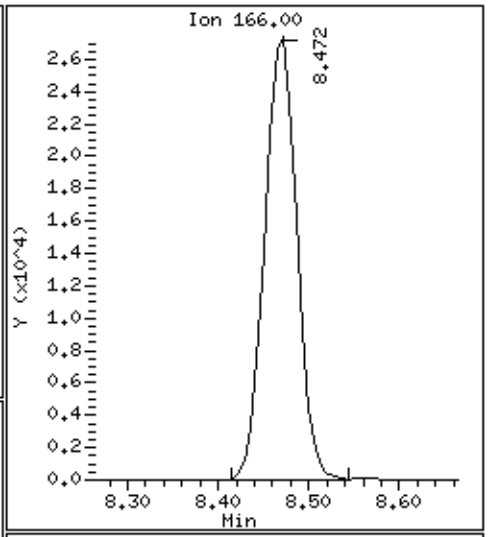
Concentration: 11.843 PPBV

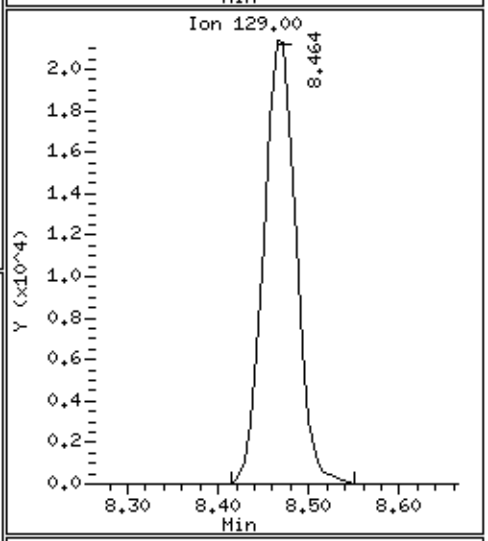


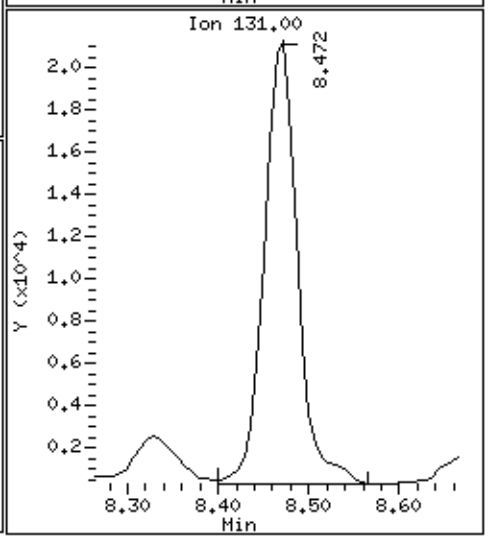












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Client Sample ID: SG-VW26A-02

Lab ID#: 2107241A-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072225**	**Date of Collection:**	**7/9/21 3:03:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/23/21 02:04 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.2	Not Detected
Freon 114	1.0	Not Detected	7.3	Not Detected
Chloromethane	10	Not Detected	22	Not Detected
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	41	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.9	Not Detected
Ethanol	10	Not Detected	20	Not Detected
Freon 113	1.0	Not Detected	8.0	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Acetone	10	Not Detected	25	Not Detected
2-Propanol	4.2	5.0	10	12
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Chloroform	1.0	Not Detected	5.1	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.6	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.9	Not Detected
Benzene	1.0	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	7.0	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Toluene	1.0	4.1	4.0	15
trans-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Tetrachloroethene	1.0	8.2	7.1	55
2-Hexanone	4.2	Not Detected	17	Not Detected

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Client Sample ID: SG-VW26A-02

Lab ID#: 2107241A-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072225**	**Date of Collection:**	**7/9/21 3:03:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/23/21 02:04 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.9	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.1	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.6	Not Detected
m,p-Xylene	1.0	1.9	4.6	8.2
o-Xylene	1.0	1.4	4.6	5.9
Styrene	1.0	Not Detected	4.5	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.2	Not Detected
Propylbenzene	1.0	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.0	1.2	5.2	5.7
1,3,5-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	430	Not Detected
Freon 134a	4.2	Not Detected	18	Not Detected
Acrolein	4.2	Not Detected	9.6	Not Detected
Acrylonitrile	4.2	Not Detected	9.1	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	18	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	40	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
1,1-Difluoroethane	4.2	7.7	11	21
Isopropyl ether	4.2	Not Detected	18	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	18	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Iodomethane	10	Not Detected	61	Not Detected
Propylene	4.2	Not Detected	7.2	Not Detected
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	25	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW26A-02

Lab ID#: 2107241A-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072225**	**Date of Collection: 7/9/21 3:03:00 PM**	
Dil. Factor:	**2.10**	**Date of Analysis: 7/23/21 02:04 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072225.d
Lab Smp Id: 2107241A-21A
Inj Date : 23-JUL-2021 02:04
Operator : DF Inst ID: msdp.i
Smp Info : 200mL 1L1537
Misc Info : 5.9 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 8
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	153191	25.0000			80.00- 120.00	100.00
5.792	5.778 (1.000)	128	121067				48.23- 108.23	79.03
5.785	5.778 (1.000)	49	326432				150.57- 210.57	213.09
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	545188	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	78409				0.00- 45.71	14.38
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	561222	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	292286				23.78- 83.78	52.08
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	214840	25.4122	25.412		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	109692				27.21- 87.21	51.06
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	595625	25.1592	25.159		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	63319				0.00- 40.44	10.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	385416			34.95- 94.95	64.71
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	352334	24.4480	24.448	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	430916			95.92- 155.92	122.30
10.921	10.921 (1.154)	176	331641			66.89- 126.89	94.13
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	12725	3.66465	7.696	80.00- 120.00	100.00
1.758	1.745 (0.304)	51	84996			597.63- 657.63	667.92
1.716	1.703 (0.297)	47	8387			33.72- 93.72	65.91
52 2-Propanol					CAS #: 67-63-0		
3.908	3.887 (0.676)	45	38430	2.37427	4.986	80.00- 120.00	100.00
3.916	3.887 (0.677)	43	10222			0.00- 47.19	26.60
137 Toluene					CAS #: 108-88-3		
7.955	7.956 (1.193)	91	48145	1.93965	4.073	80.00- 120.00	100.00
7.955	7.956 (1.193)	92	28816			28.38- 88.38	59.85
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	49670	3.88329	8.155	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	39910			47.84- 107.84	80.35
8.471	8.464 (0.895)	131	41011			45.29- 105.29	82.57
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	13155	0.90136	1.893	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	25083			163.73- 223.73	190.68
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	9042	0.64663	1.358	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	18586			177.45- 237.45	205.54
183 4-Ethyltoluene					CAS #: 622-96-8		
11.258	11.287 (1.190)	120	7792	0.55011	1.155	80.00- 120.00	100.00
11.258	11.287 (1.190)	105	20826			284.55- 344.55	267.26

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072225.d
Lab Smp Id: 2107241A-21A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->10.1 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	153191	-3.81
108 1,4-Difluorobenze	573285	343971	802599	545188	-4.90
153 Chlorobenzene-d5	571549	342929	800169	561222	-1.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:42

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-21A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.412	101.65	70-130
$ 134 Toluene-d8	25.000	25.159	100.64	70-130
$ 170 4-Bromofluorobenz	25.000	24.448	97.79	70-130

Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

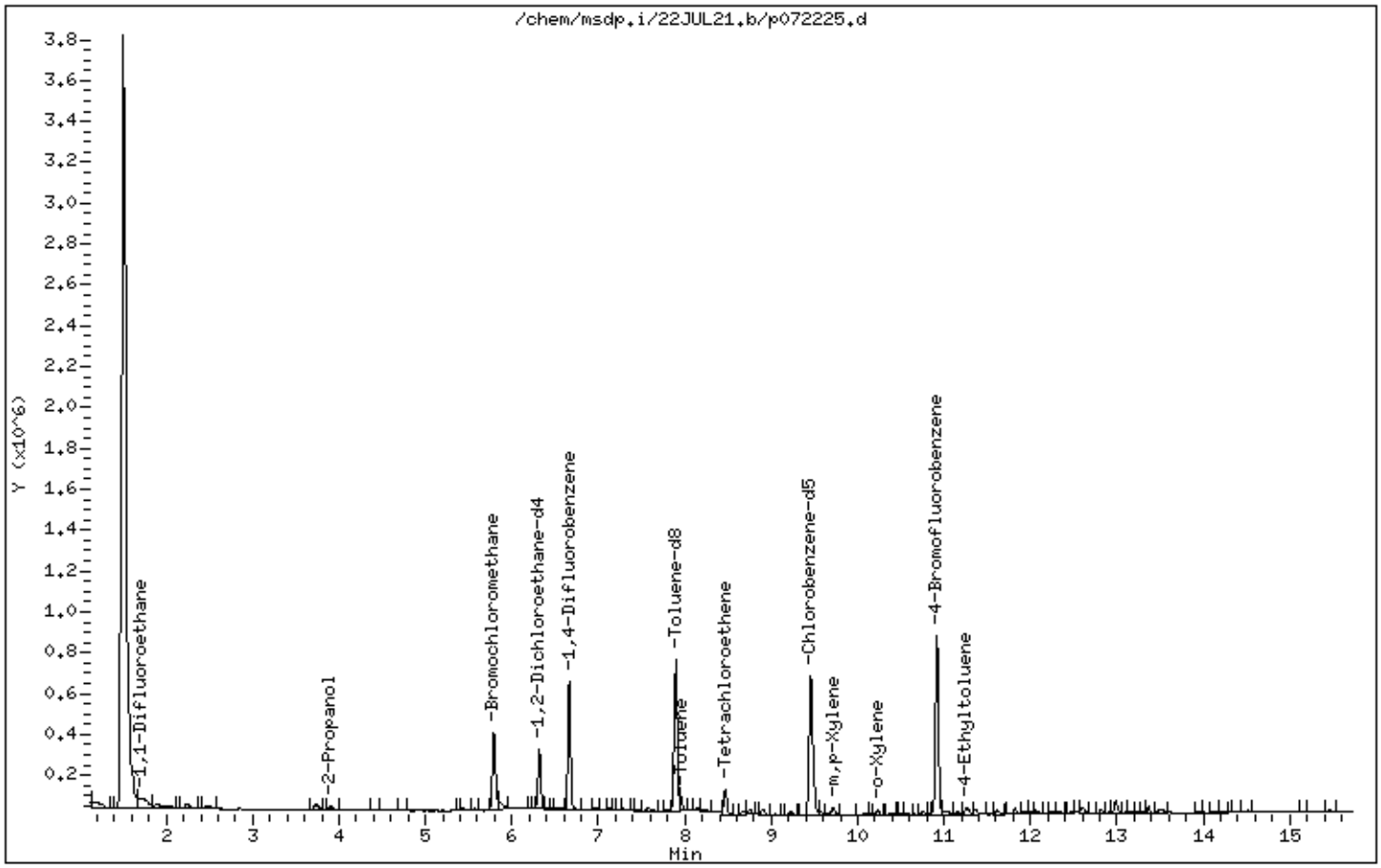
Instrument: msdp.i

Sample Info: 200mL 1L1537

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1537

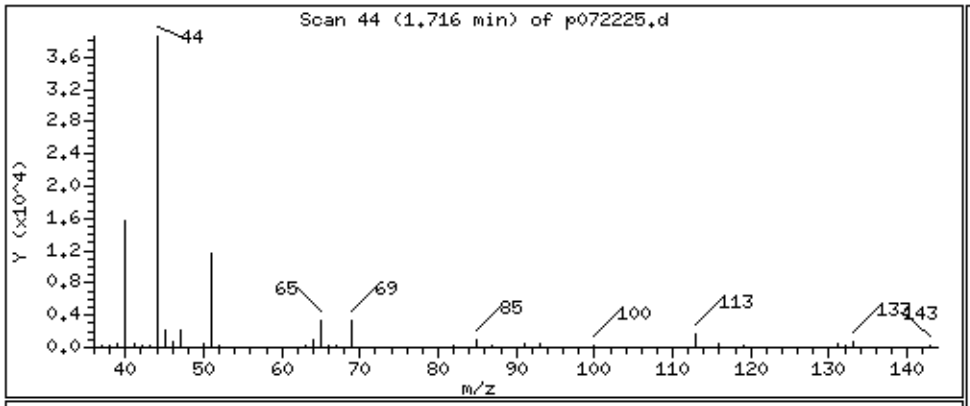
Operator: DF

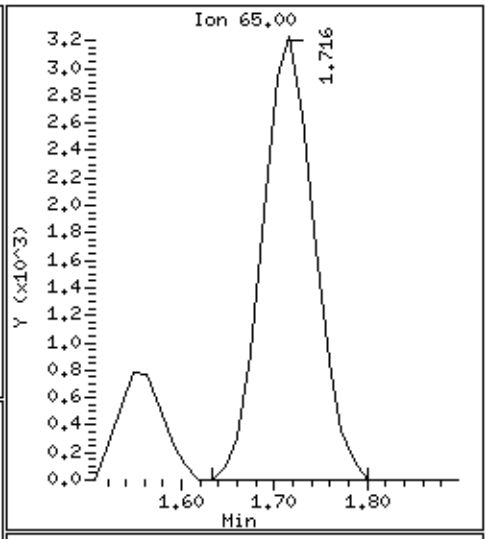
Column phase: RTX-624

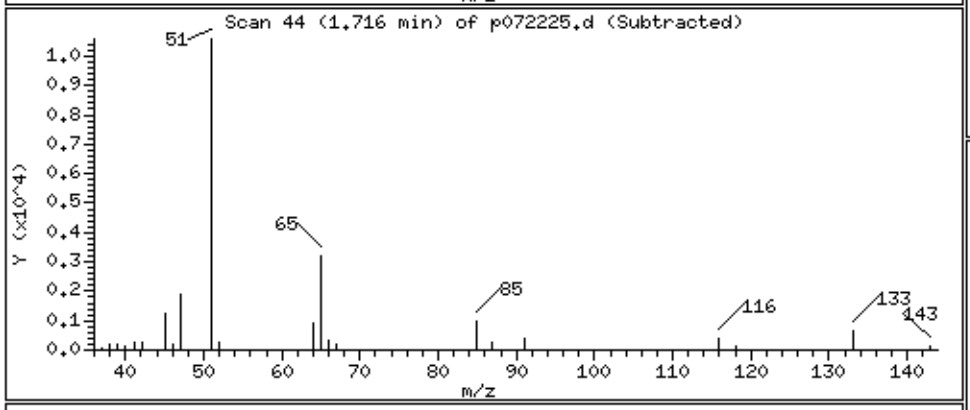
Column diameter: 0.25

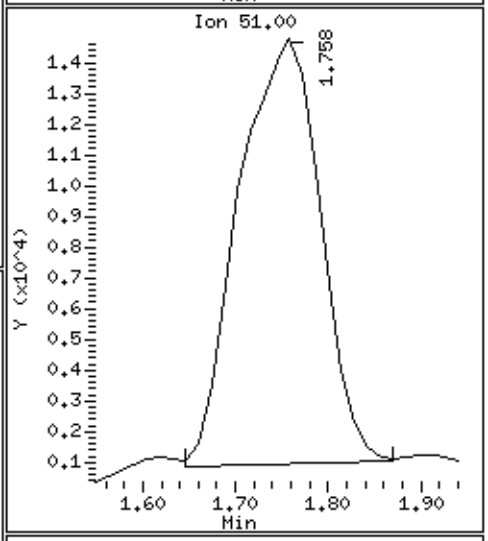
7 1,1-Difluoroethane

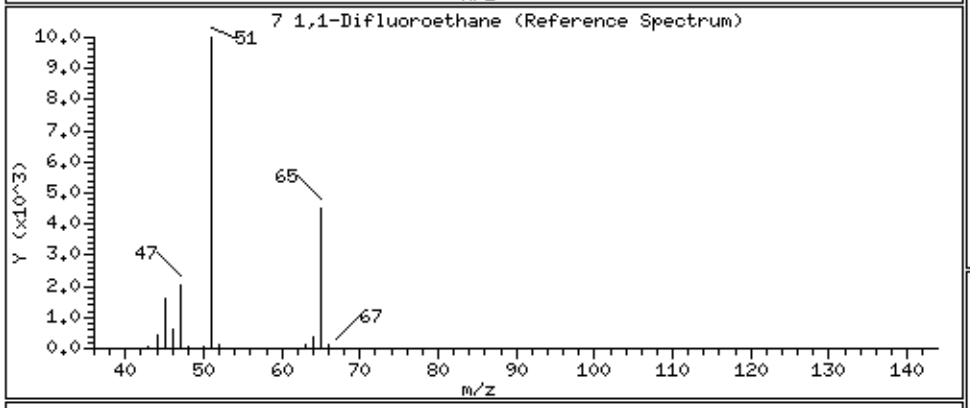
Concentration: 7.696 PPBV

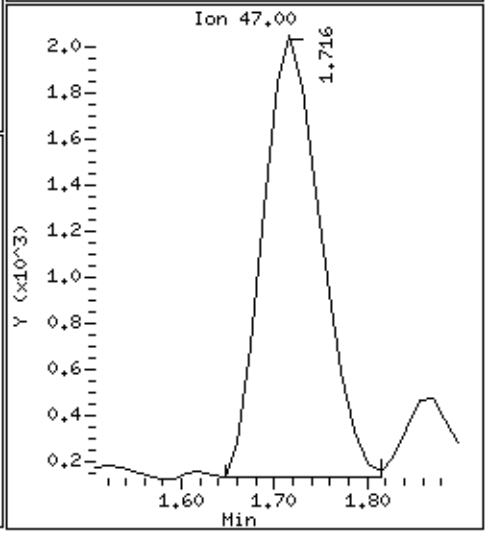


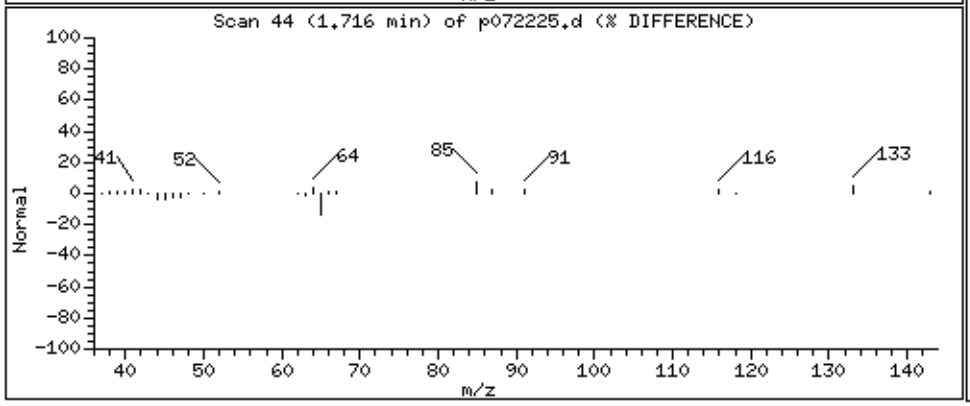












Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1537

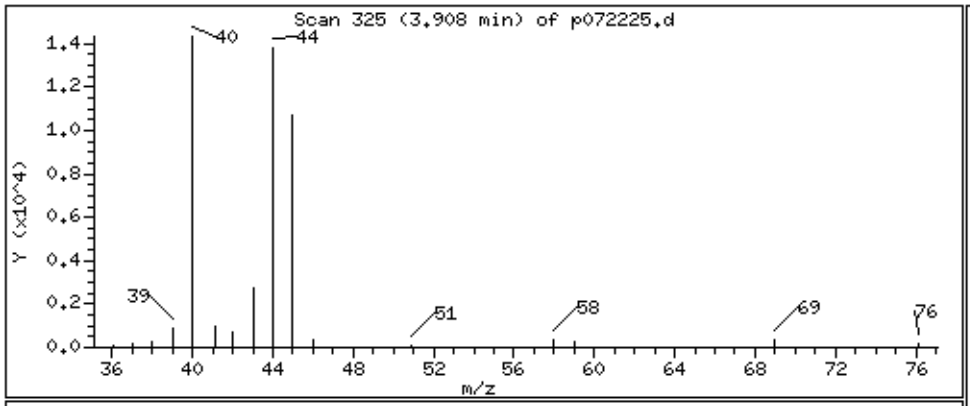
Operator: DF

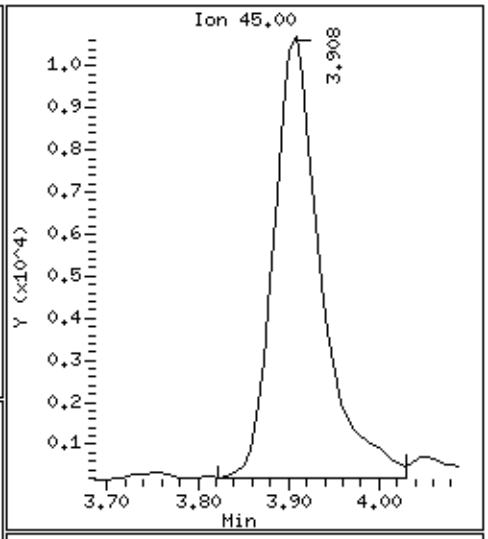
Column phase: RTX-624

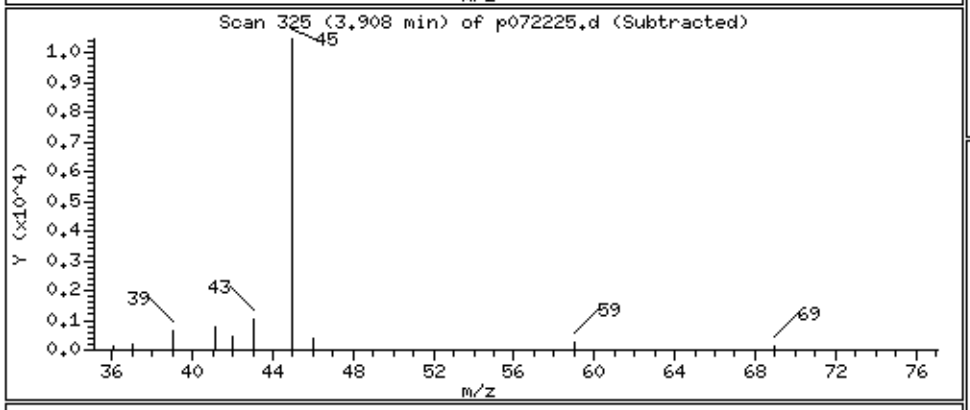
Column diameter: 0.25

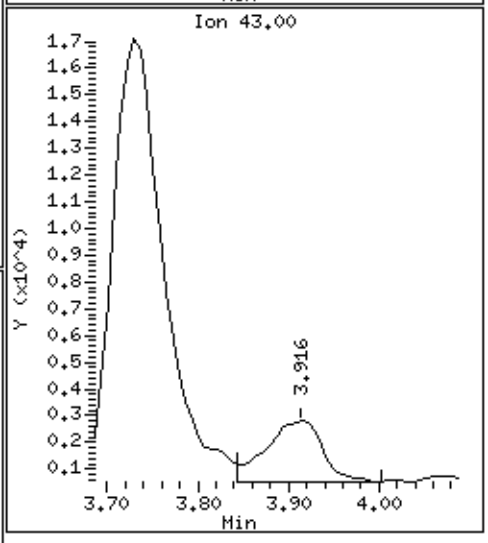
52 2-Propanol

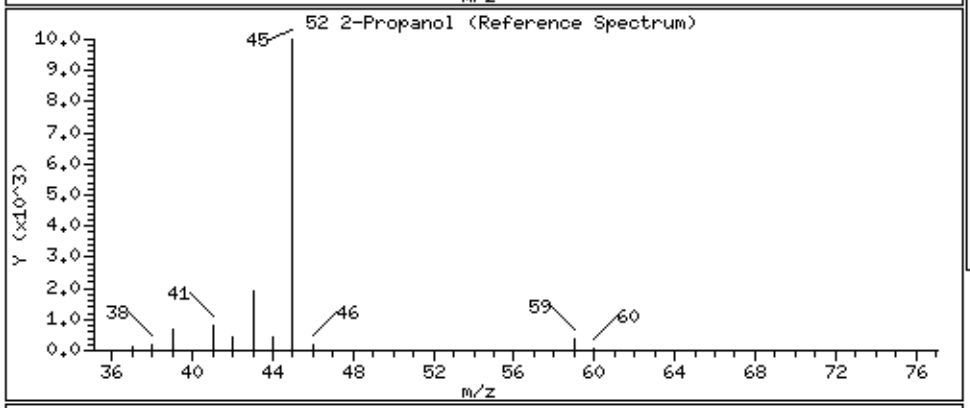
Concentration: 4.986 PPBV

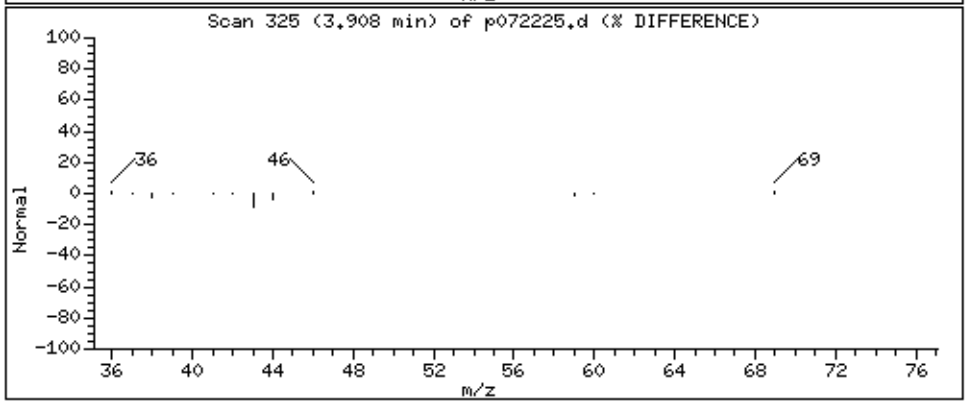












Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1537

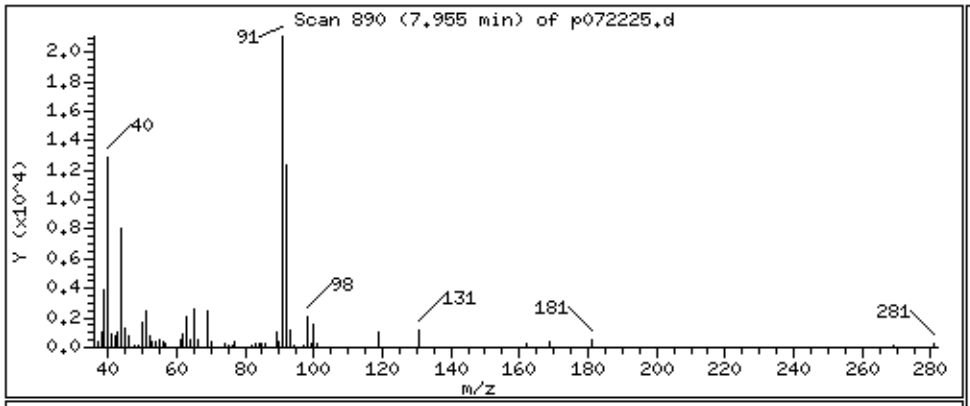
Operator: DF

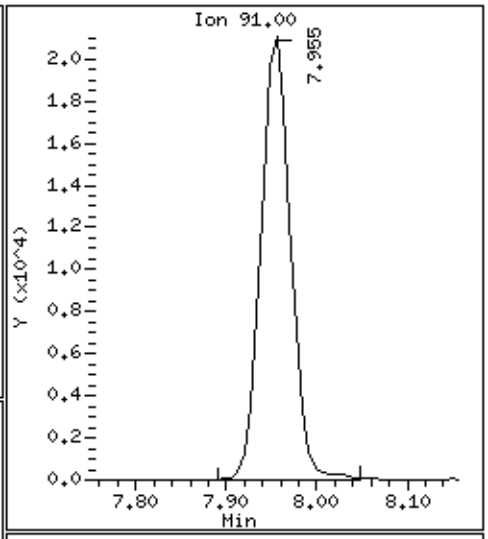
Column phase: RTX-624

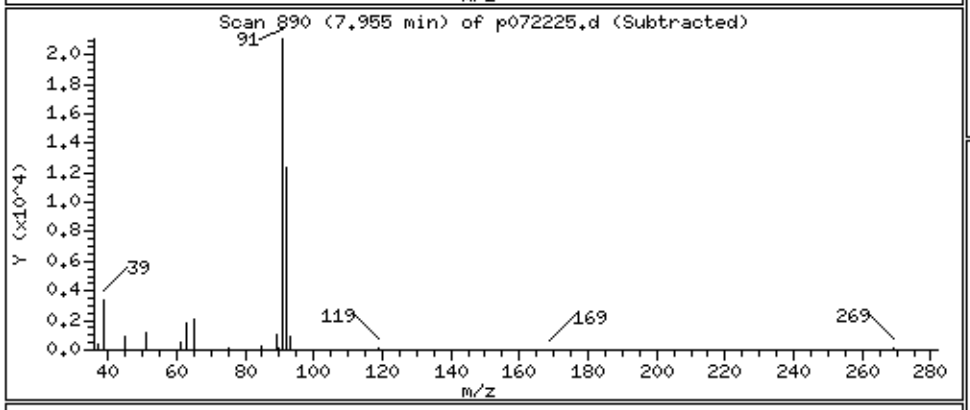
Column diameter: 0.25

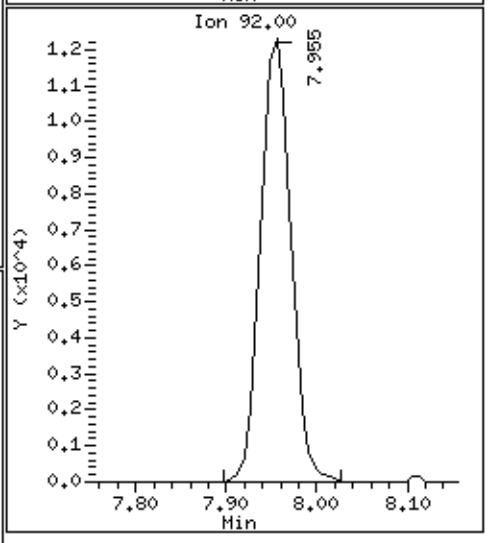
137 Toluene

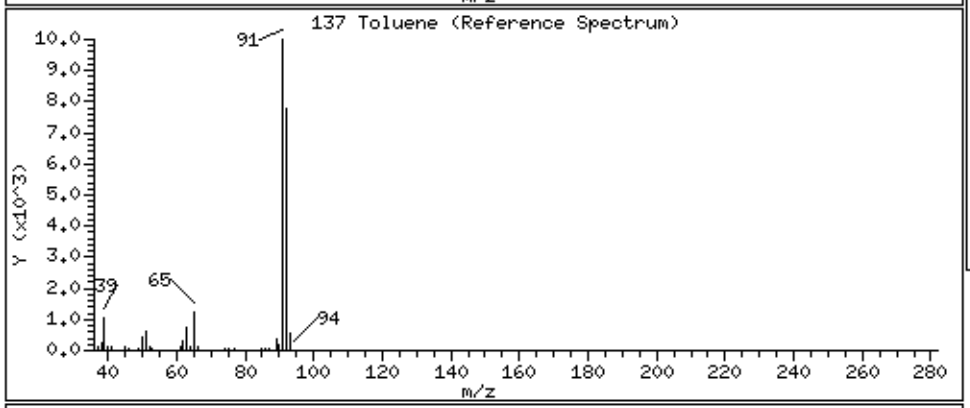
Concentration: 4.073 PPBV

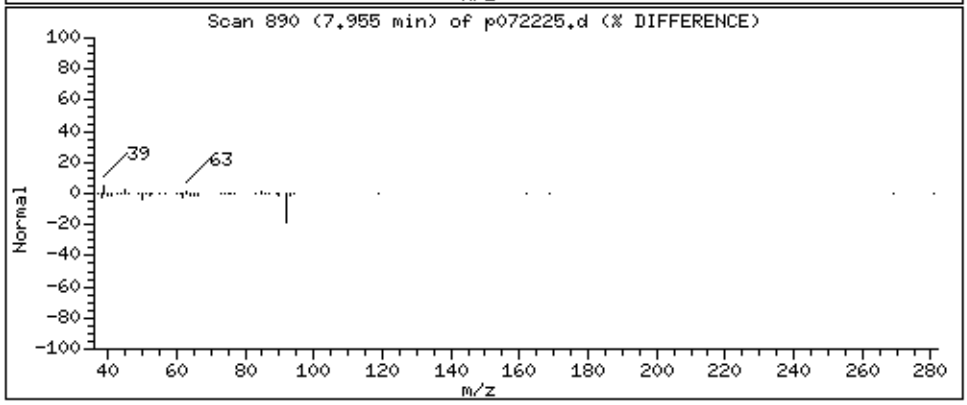












Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1537

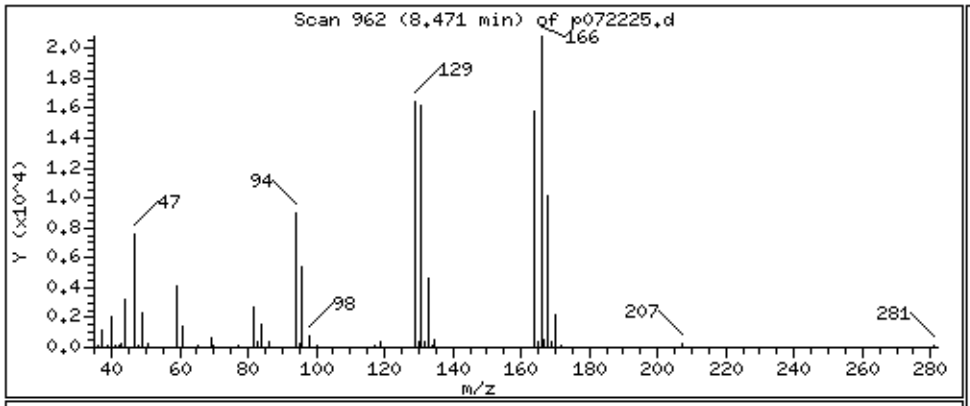
Operator: DF

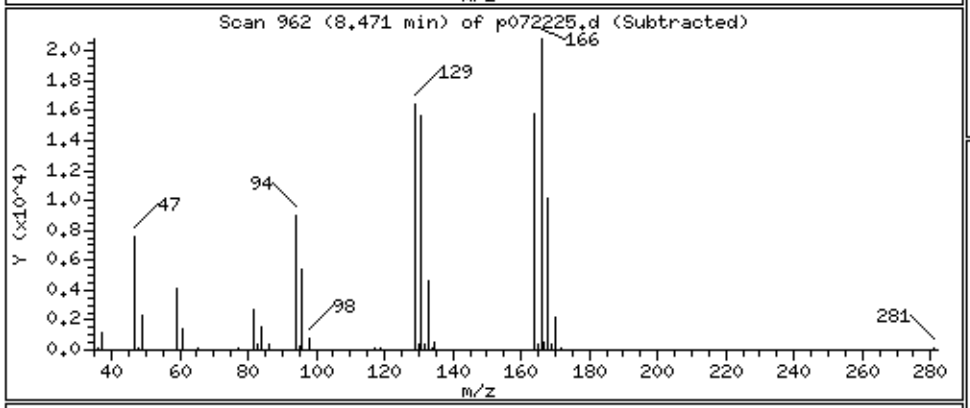
Column phase: RTX-624

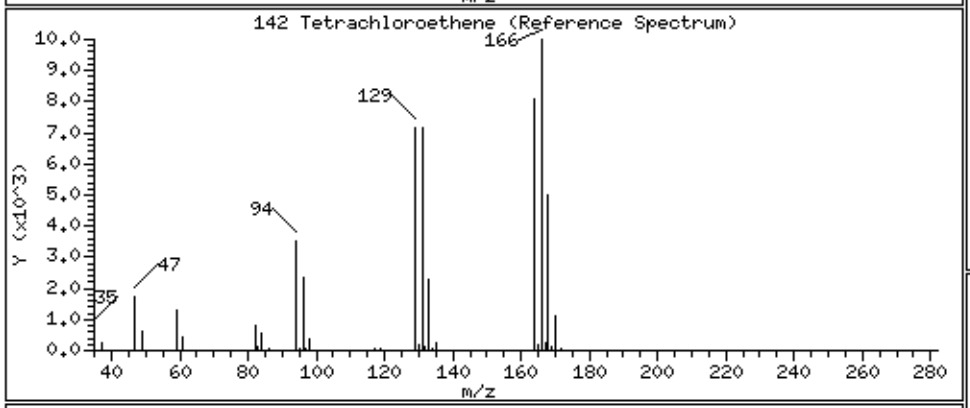
Column diameter: 0.25

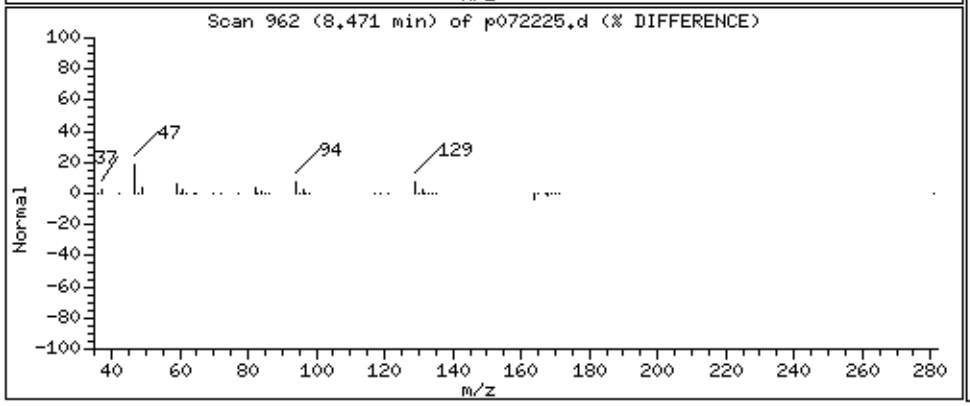
142 Tetrachloroethene

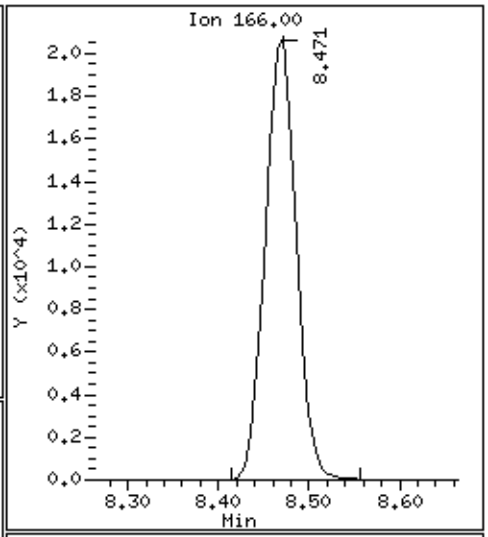
Concentration: 8.155 PPBV

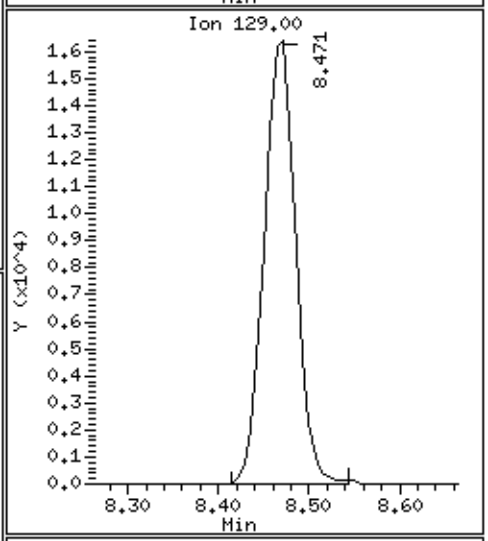


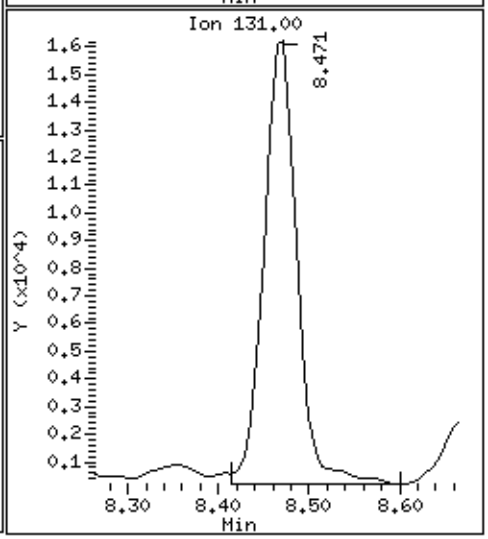












Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1537

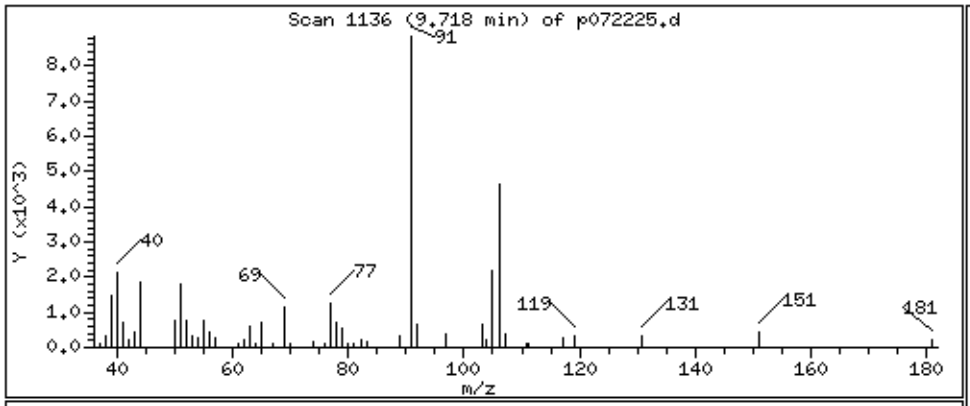
Operator: DF

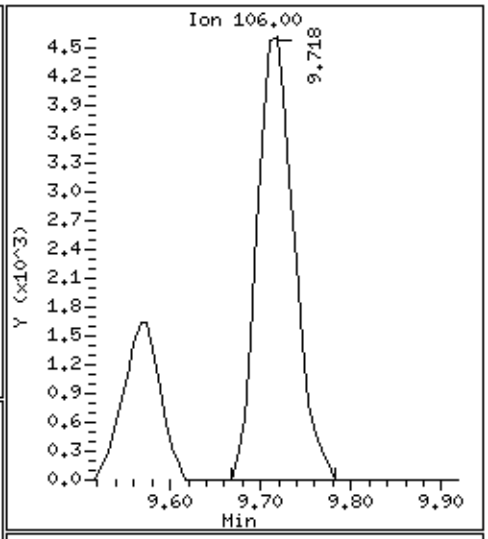
Column phase: RTX-624

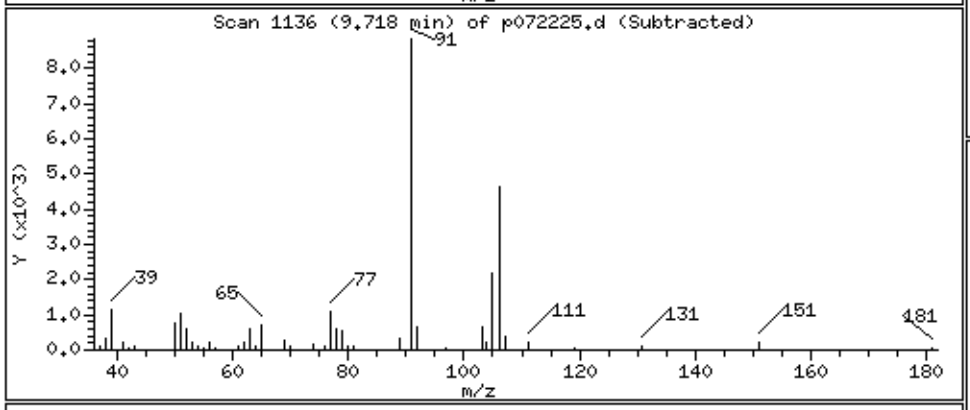
Column diameter: 0.25

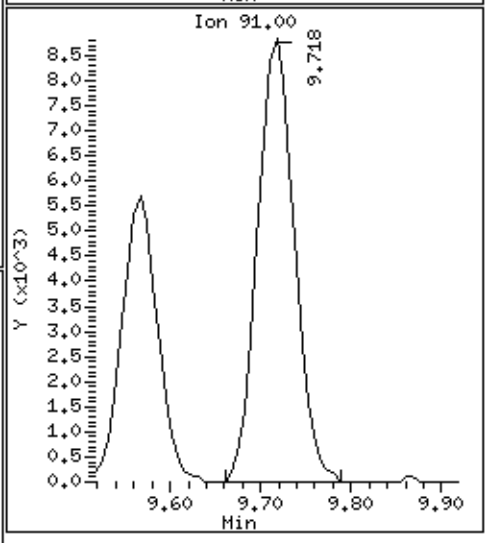
158 m,p-Xylene

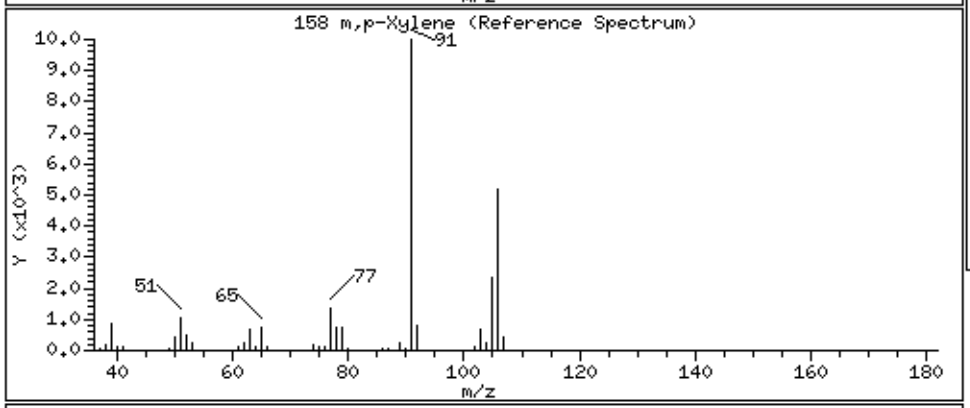
Concentration: 1.893 PPBV

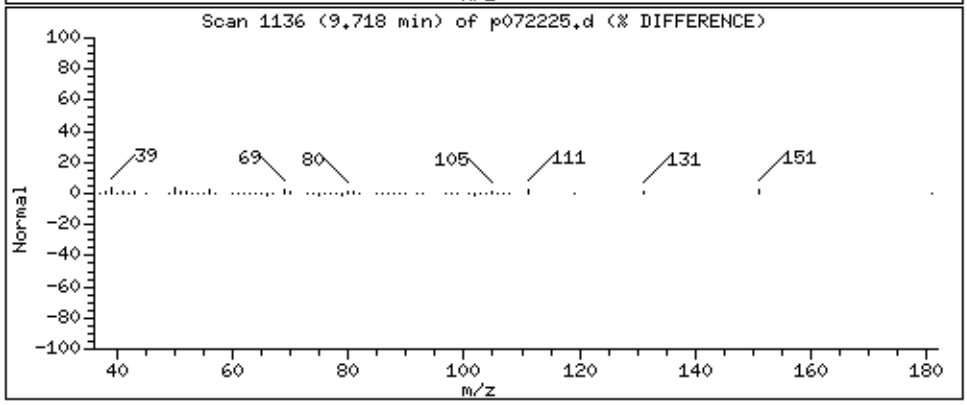












Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1537

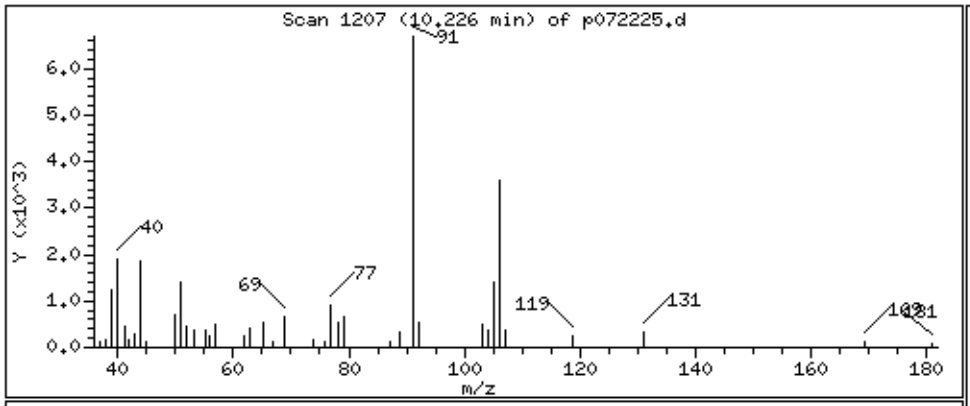
Operator: DF

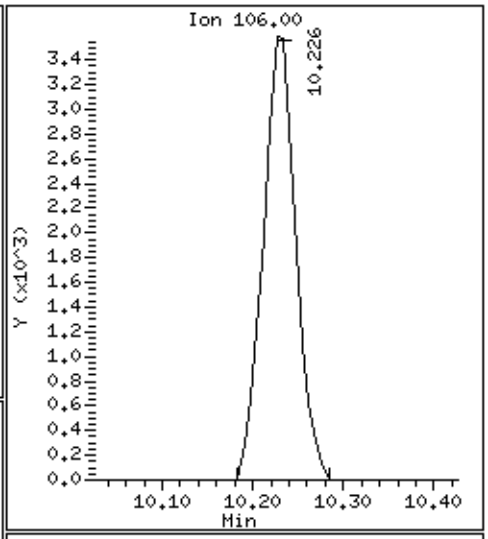
Column phase: RTX-624

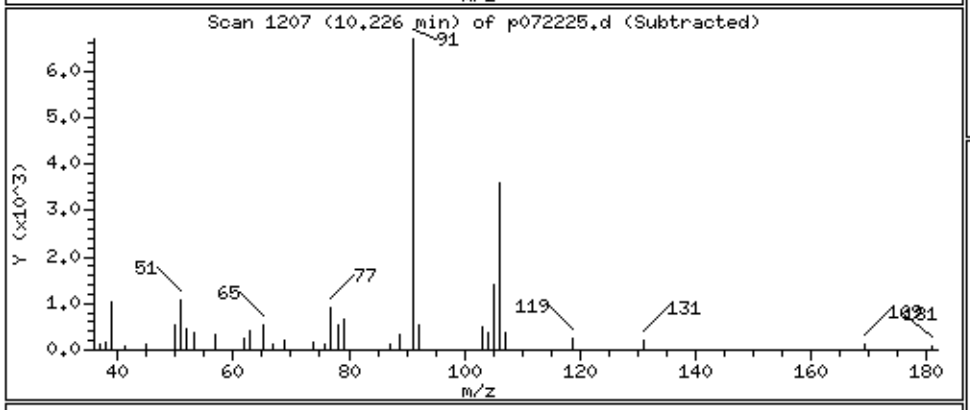
Column diameter: 0.25

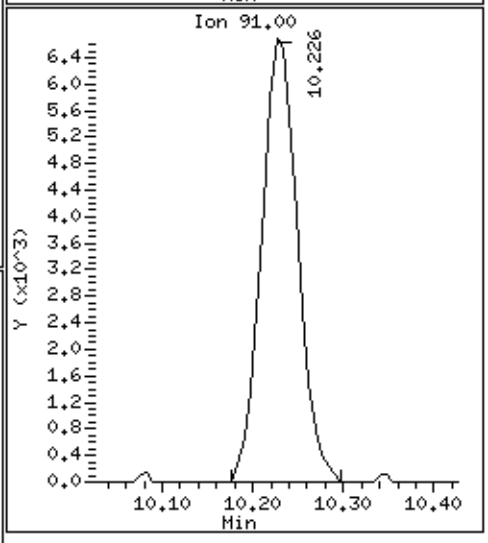
164 o-Xylene

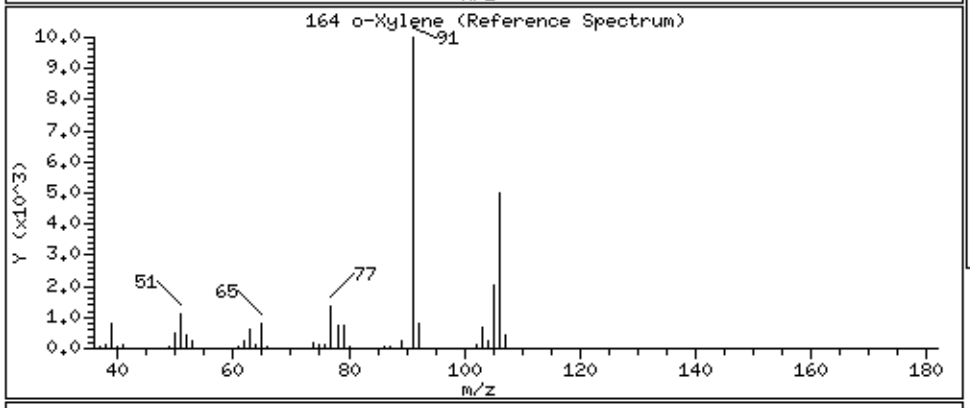
Concentration: 1.358 PPBV

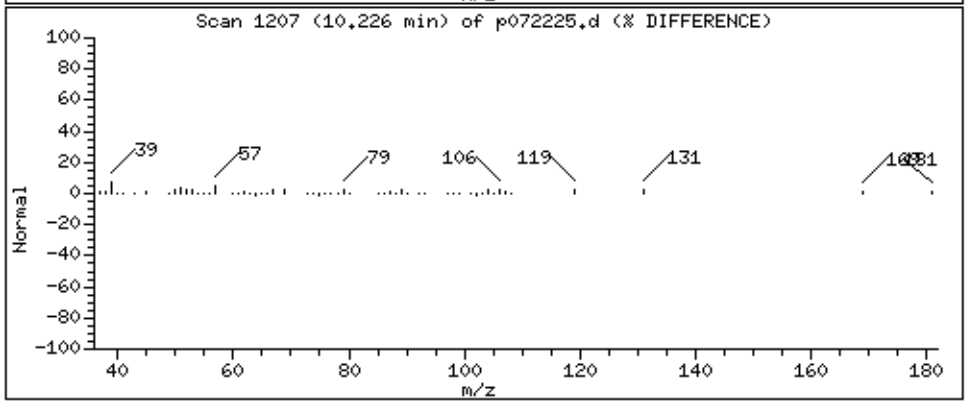












Data File: /chem/msdp.i/22JUL21.b/p072225.d

Date : 23-JUL-2021 02:04

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1537

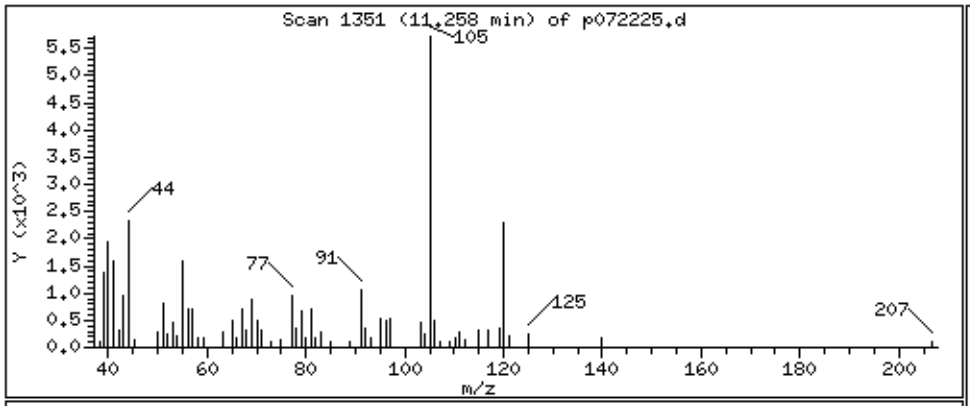
Operator: DF

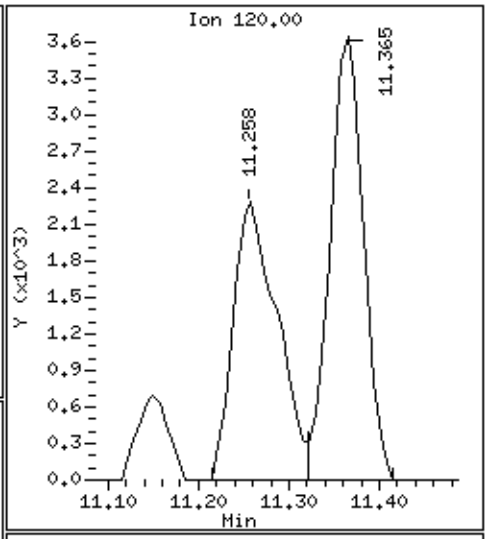
Column phase: RTX-624

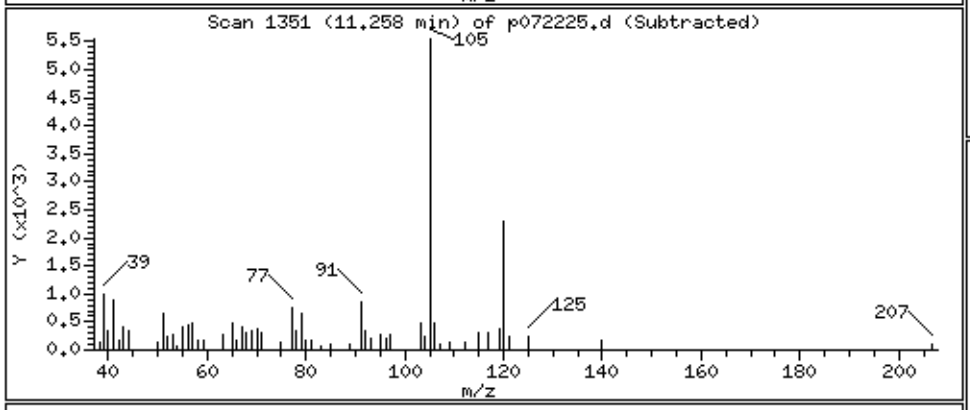
Column diameter: 0.25

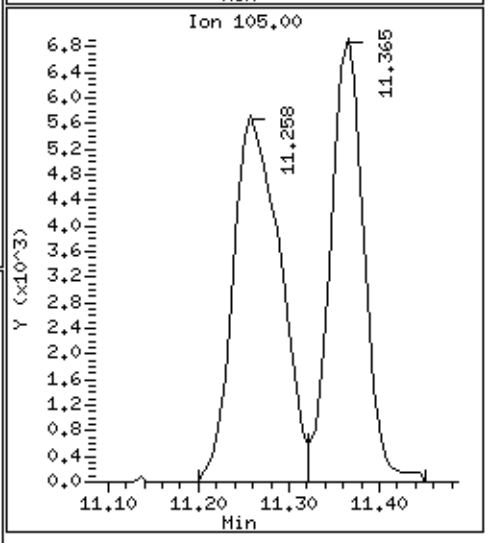
183 4-Ethyltoluene

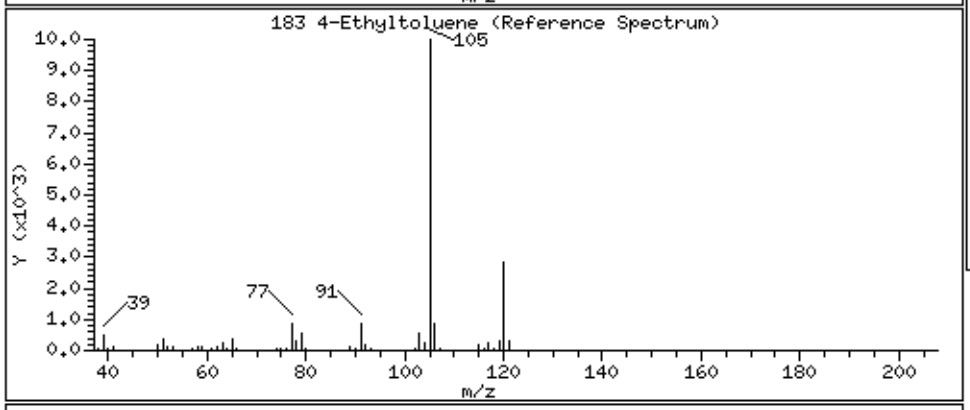
Concentration: 1.155 PPBV

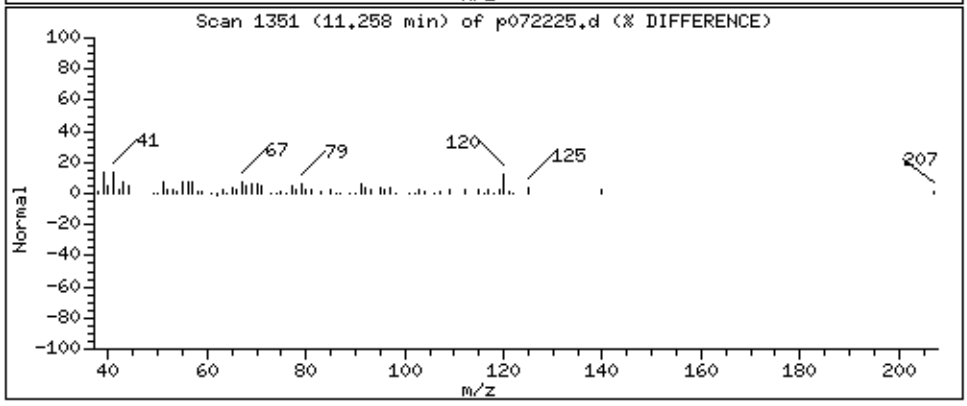












eurofins | Air Toxics

Client Sample ID: SG-VW35A-02

Lab ID#: 2107241A-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072226**	**Date of Collection:**	**7/9/21 11:47:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/23/21 02:33 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.2	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
1,3-Butadiene	1.1	Not Detected	2.3	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Ethanol	11	12	20	22
Freon 113	1.1	Not Detected	8.1	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Acetone	11	15	25	37
2-Propanol	4.2	6.3	10	15
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Hexane	1.1	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Chloroform	1.1	Not Detected	5.2	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Cyclohexane	1.1	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.0	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
Heptane	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.3	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Tetrachloroethene	1.1	70	7.2	470
2-Hexanone	4.2	Not Detected	17	Not Detected

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Client Sample ID: SG-VW35A-02

Lab ID#: 2107241A-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072226**	**Date of Collection:**	**7/9/21 11:47:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/23/21 02:33 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.0	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.1	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
Propylbenzene	1.1	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	430	Not Detected
Freon 134a	4.2	Not Detected	18	Not Detected
Acrolein	4.2	Not Detected	9.7	Not Detected
Acrylonitrile	4.2	Not Detected	9.2	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	18	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	41	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
1,1-Difluoroethane	4.2	180	11	470
Isopropyl ether	4.2	Not Detected	18	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	18	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Iodomethane	11	Not Detected	62	Not Detected
Propylene	4.2	Not Detected	7.3	Not Detected
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	26	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW35A-02

Lab ID#: 2107241A-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072226**	**Date of Collection:**	**7/9/21 11:47:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/23/21 02:33 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072226.d
Lab Smp Id: 2107241A-22A
Inj Date : 23-JUL-2021 02:33
Operator : DF Inst ID: msdp.i
Smp Info : 200mL 37431
Misc Info : 6.3 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 9
Dil Factor: 2.12000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	153561	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	114262				48.23- 108.23	74.41
5.785	5.778 (1.000)	49	322296				150.57- 210.57	209.88
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	538441	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	76609				0.00- 45.71	14.23
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	552408	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	289568				23.78- 83.78	52.42
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	218226	25.7505	25.750		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	106697				27.21- 87.21	48.89
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	602797	25.7812	25.781		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65735				0.00- 40.44	10.90

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	386785			34.95- 94.95	64.17
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	350813	24.7309	24.731	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	418588			95.92- 155.92	119.32
10.921	10.921 (1.154)	176	329873			66.89- 126.89	94.03
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.717	1.703 (0.297)	65	287324	82.5467	175.00	80.00- 120.00	100.00
1.717	1.745 (0.297)	51	838307			597.63- 657.63	291.76
1.717	1.703 (0.297)	47	154101			33.72- 93.72	53.63
39 Ethanol					CAS #: 64-17-5		
3.257	3.242 (0.563)	46	8372	5.49757	11.655	80.00- 120.00	100.00
3.264	3.242 (0.564)	45	22141			511.19- 571.19	264.46
47 Acetone					CAS #: 67-64-1		
3.737	3.715 (0.646)	58	29336	7.28705	15.448	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	116026			302.95- 362.95	395.49
52 2-Propanol					CAS #: 67-63-0		
3.909	3.887 (0.676)	45	48114	2.96540	6.287	80.00- 120.00	100.00
3.909	3.887 (0.676)	43	13594			0.00- 47.19	28.25
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	413396	32.8357	69.612	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	313589			47.84- 107.84	75.86
8.471	8.464 (0.895)	131	303439			45.29- 105.29	73.40

Report Date: 23-Jul-2021 14:40

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072226.d
Lab Smp Id: 2107241A-22A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.9 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	153561	-3.57
108 1,4-Difluorobenze	573285	343971	802599	538441	-6.08
153 Chlorobenzene-d5	571549	342929	800169	552408	-3.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:40

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-22A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.750	103.00	70-130
$ 134 Toluene-d8	25.000	25.781	103.12	70-130
$ 170 4-Bromofluorobenz	25.000	24.731	98.92	70-130

Data File: /chem/msdp.i/22JUL21.b/p072226.d

Date : 23-JUL-2021 02:33

Client ID:

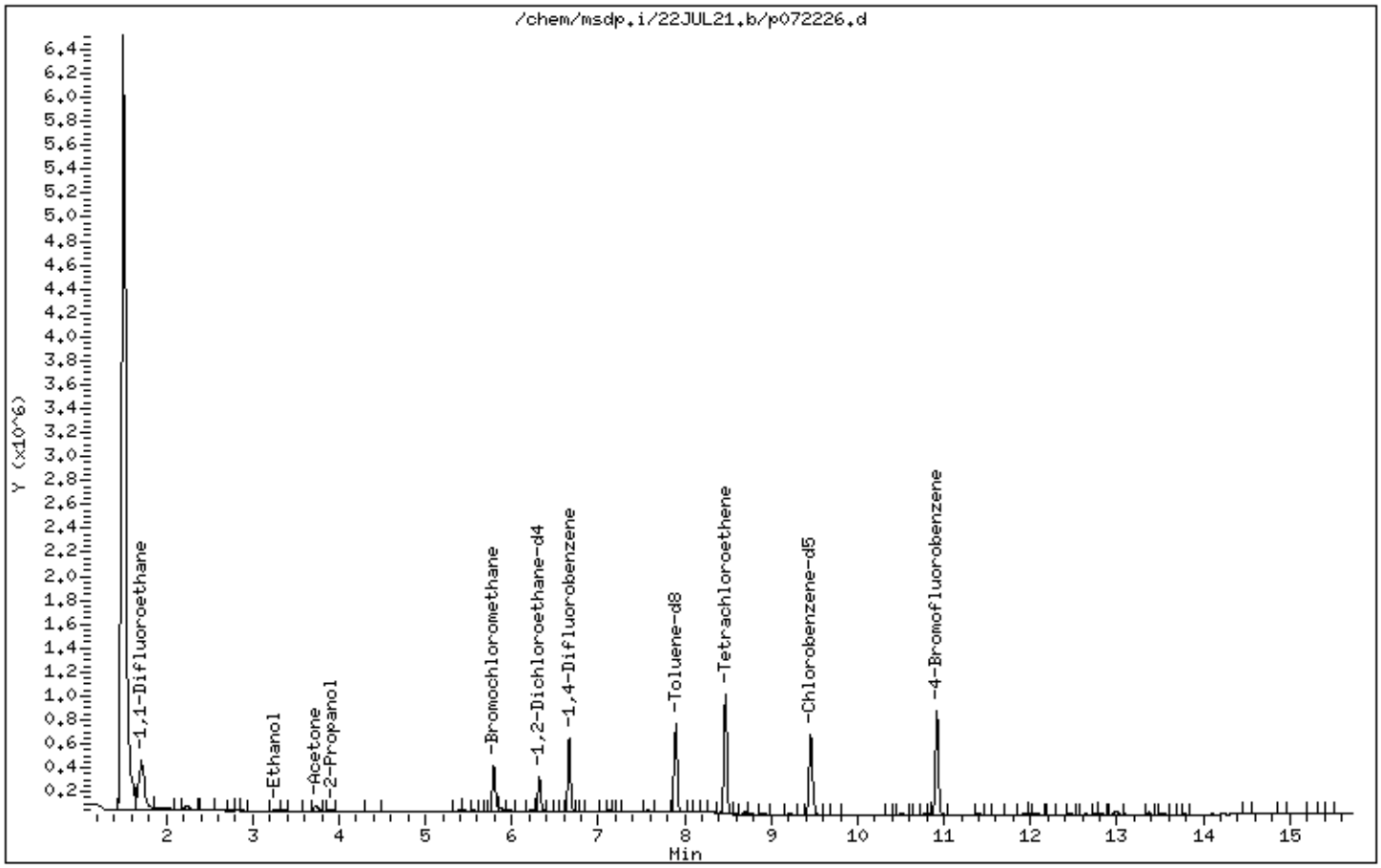
Instrument: msdp.i

Sample Info: 200mL 37431

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072226.d

Date : 23-JUL-2021 02:33

Client ID:

Instrument: msdp.i

Sample Info: 200mL 37431

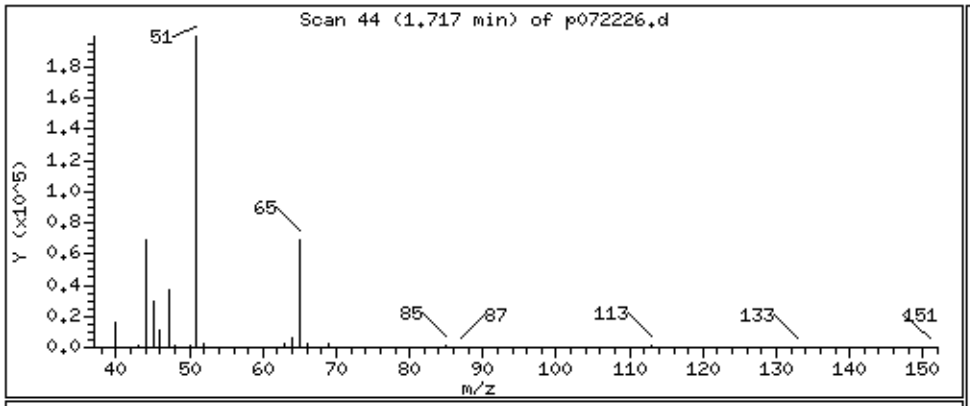
Operator: DF

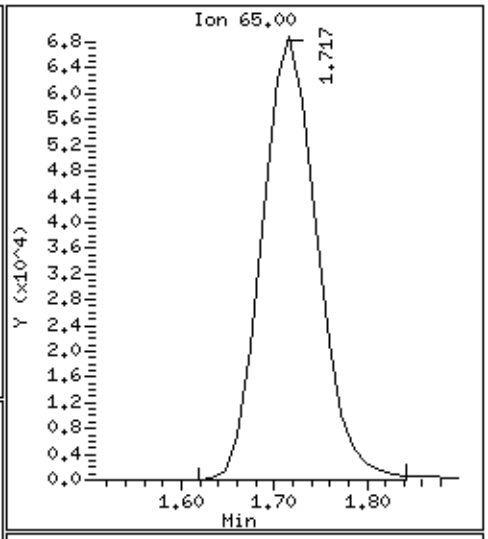
Column phase: RTX-624

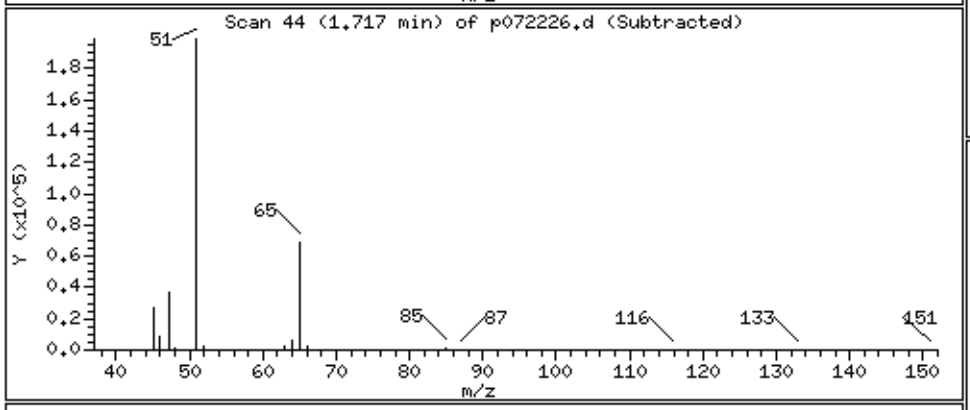
Column diameter: 0.25

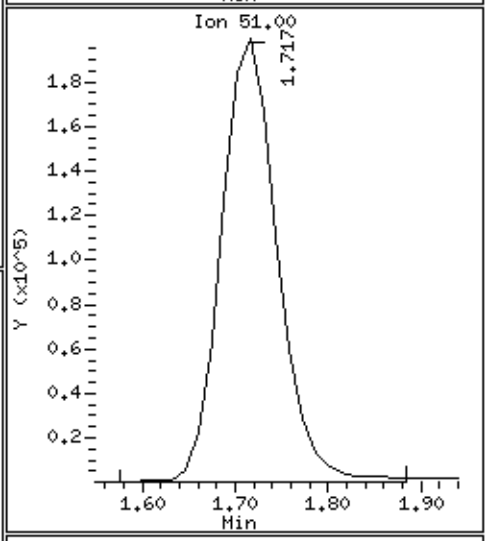
7 1,1-Difluoroethane

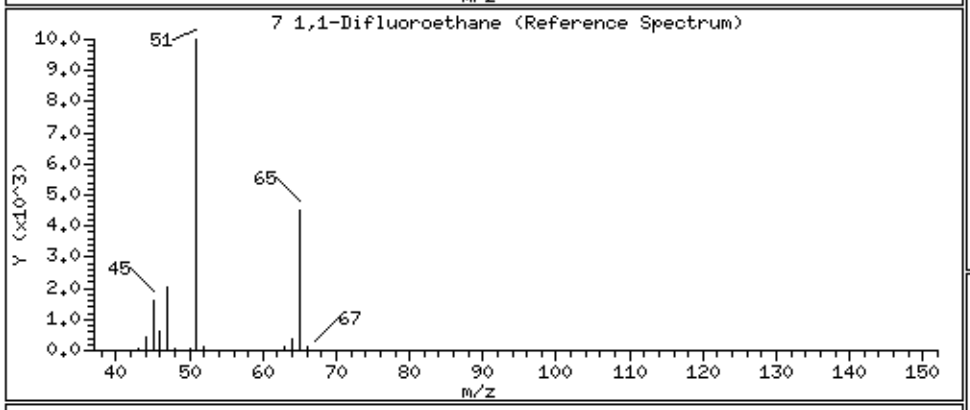
Concentration: 175.00 PPBV

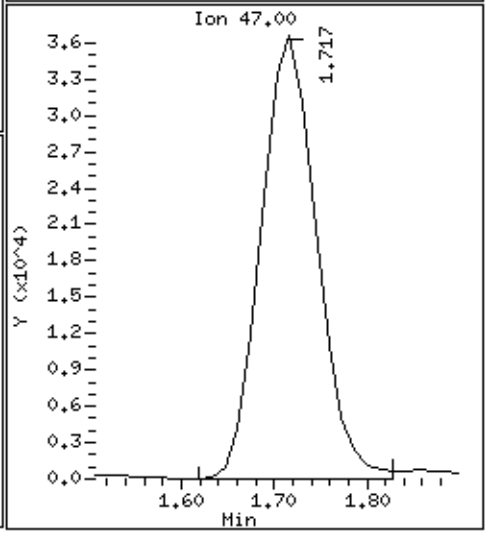


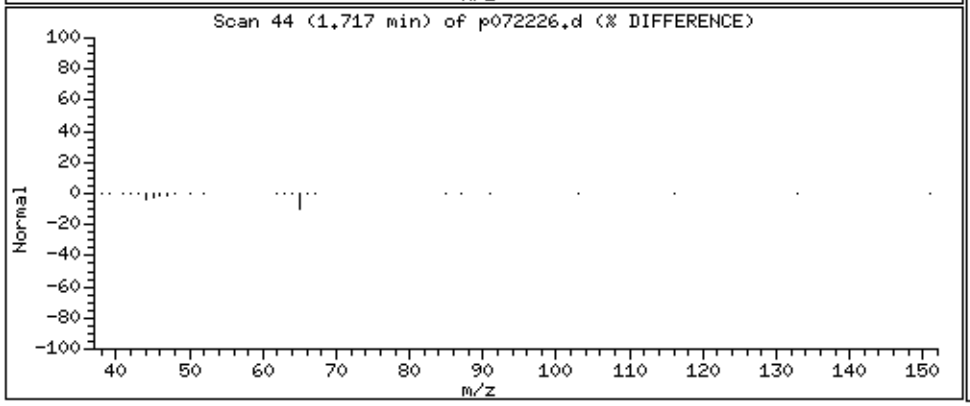












Data File: /chem/msdp.i/22JUL21.b/p072226.d

Date : 23-JUL-2021 02:33

Client ID:

Instrument: msdp.i

Sample Info: 200mL 37431

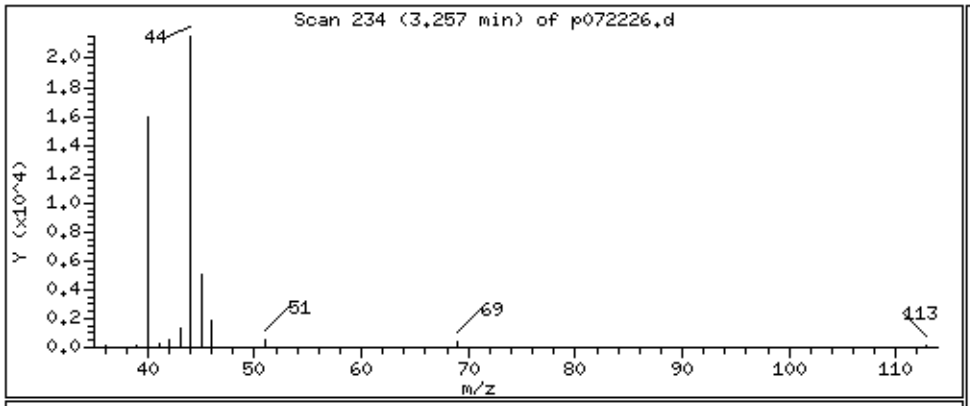
Operator: DF

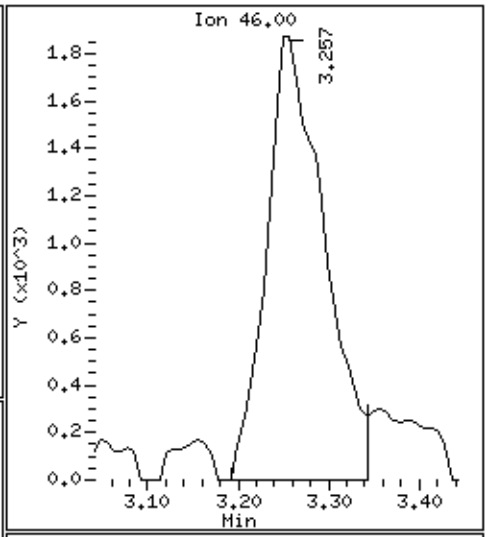
Column phase: RTX-624

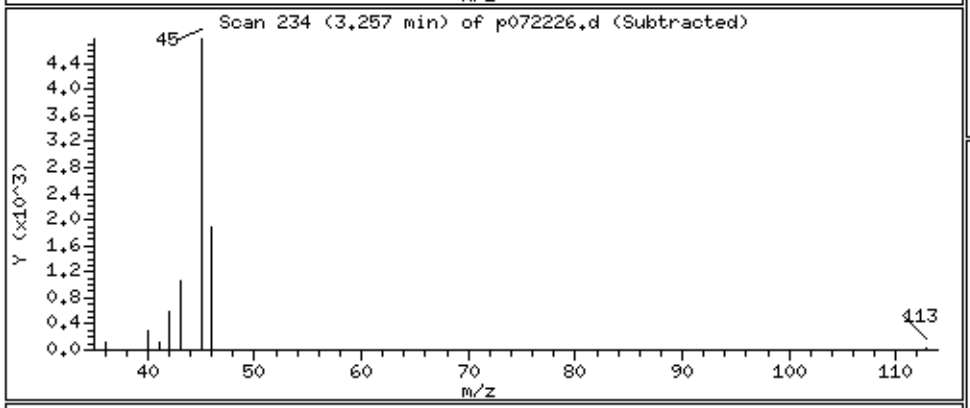
Column diameter: 0.25

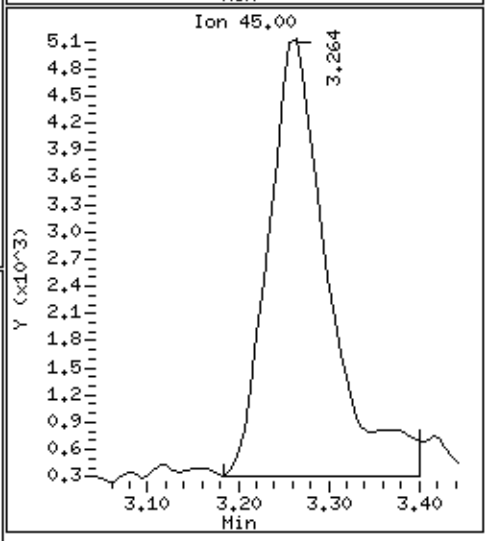
39 Ethanol

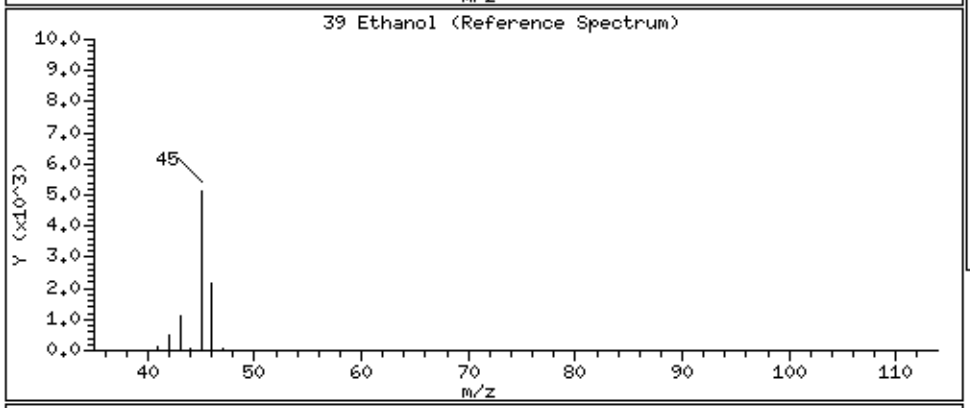
Concentration: 11.655 PPBV

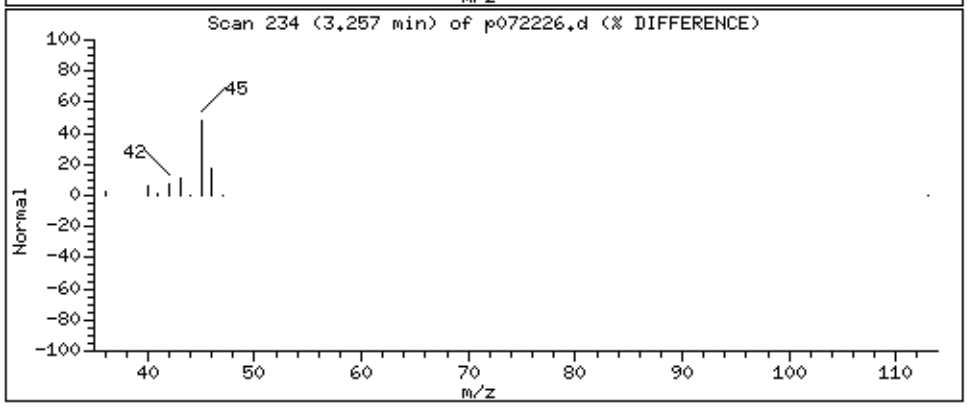












Data File: /chem/msdp.i/22JUL21.b/p072226.d

Date : 23-JUL-2021 02:33

Client ID:

Instrument: msdp.i

Sample Info: 200mL 37431

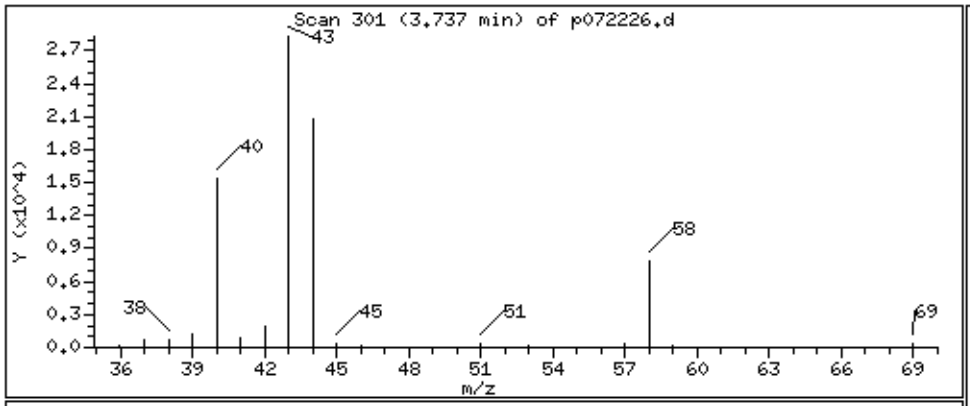
Operator: DF

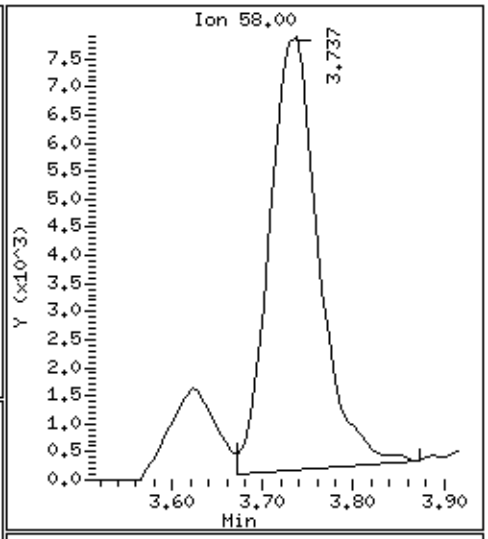
Column phase: RTX-624

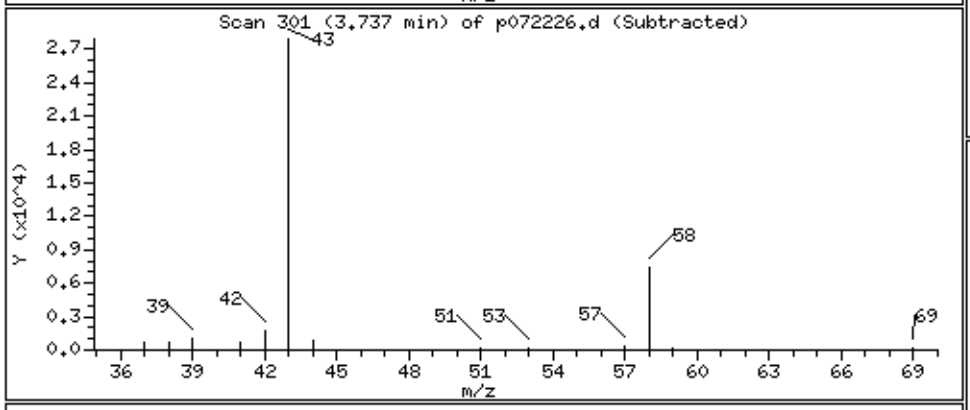
Column diameter: 0.25

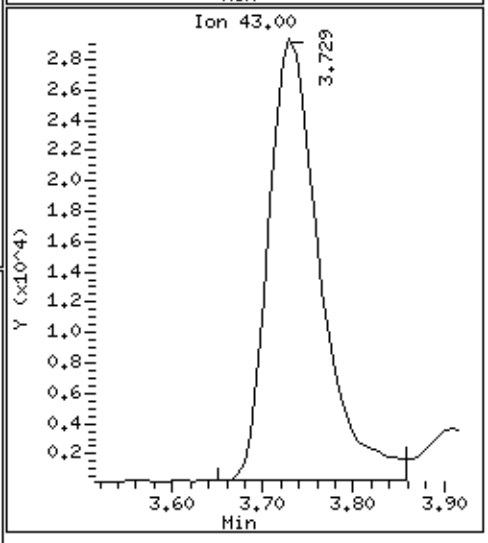
47 Acetone

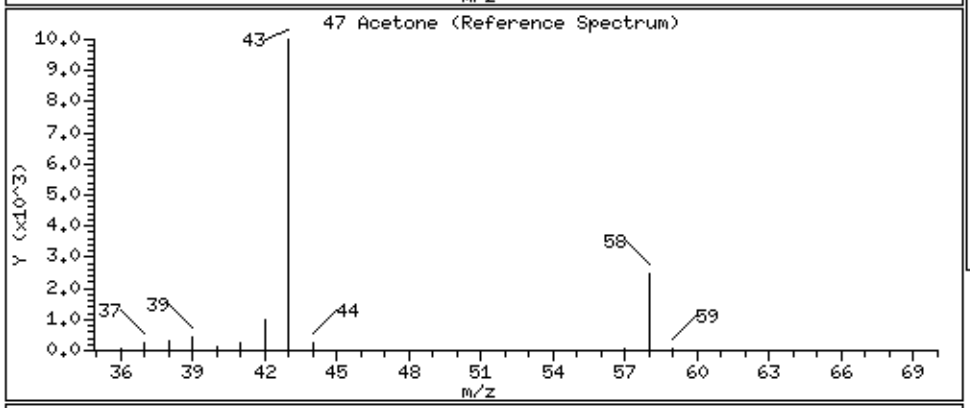
Concentration: 15.448 PPBV

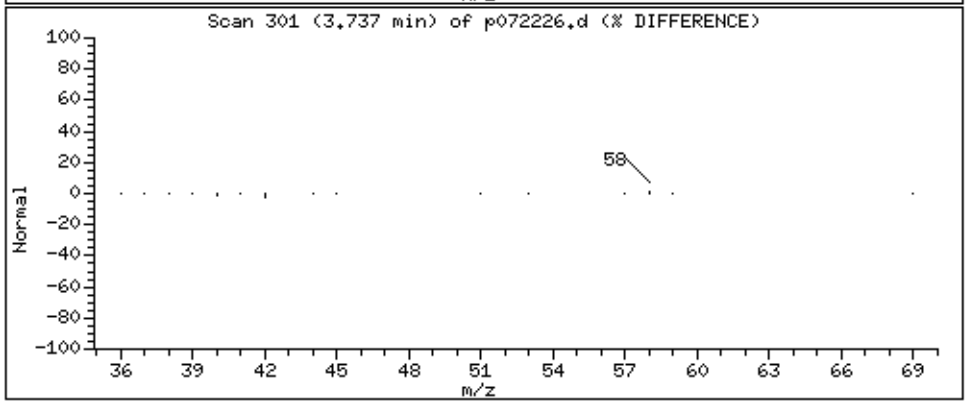












Data File: /chem/msdp.i/22JUL21.b/p072226.d

Date : 23-JUL-2021 02:33

Client ID:

Instrument: msdp.i

Sample Info: 200mL 37431

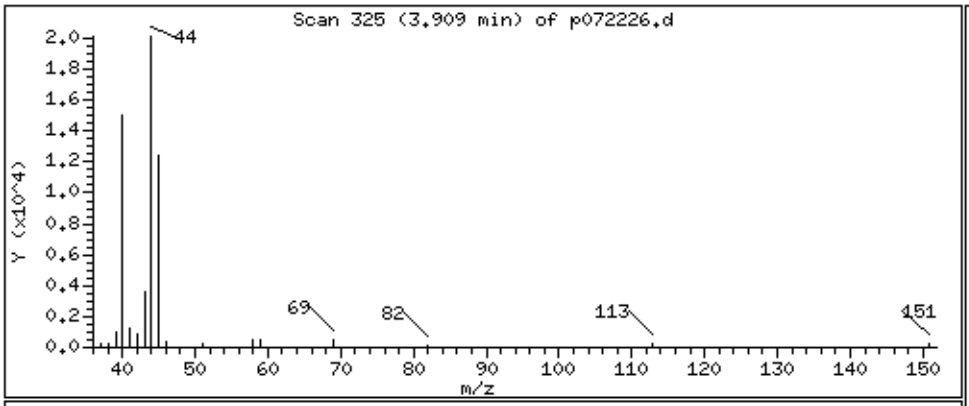
Operator: DF

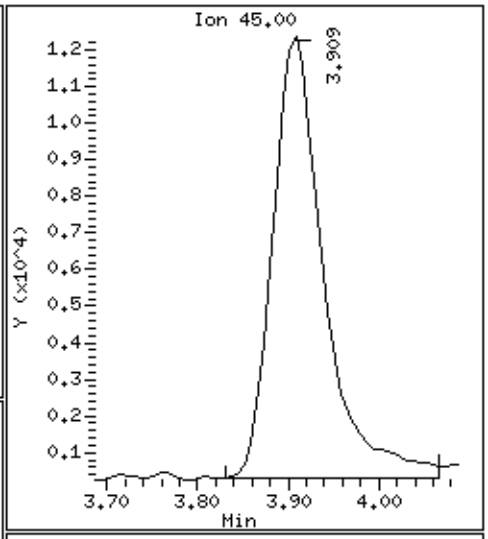
Column phase: RTX-624

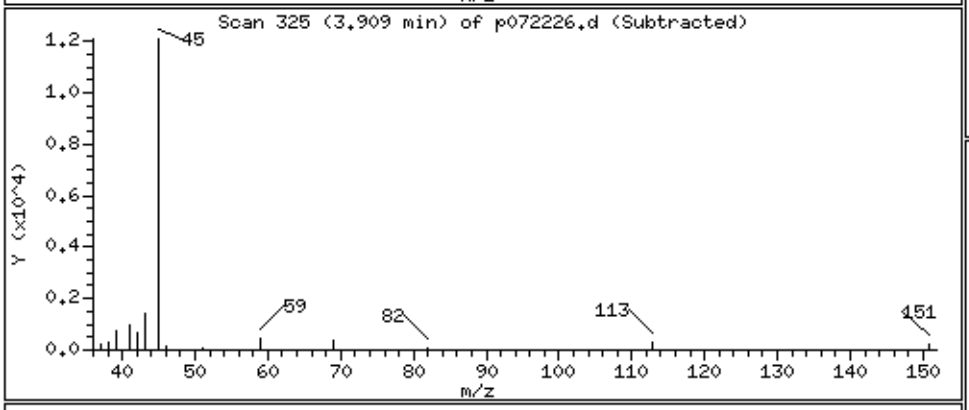
Column diameter: 0.25

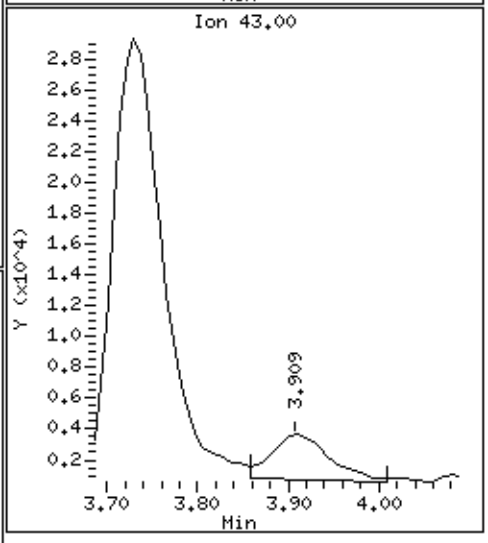
52 2-Propanol

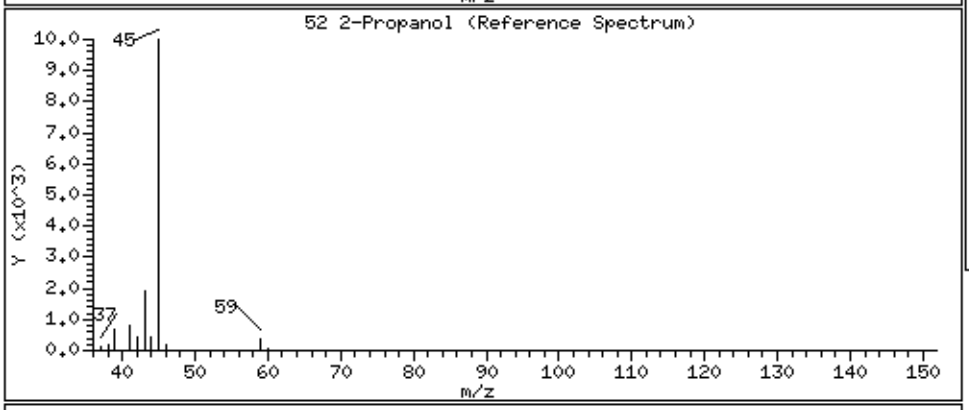
Concentration: 6.287 PPBV

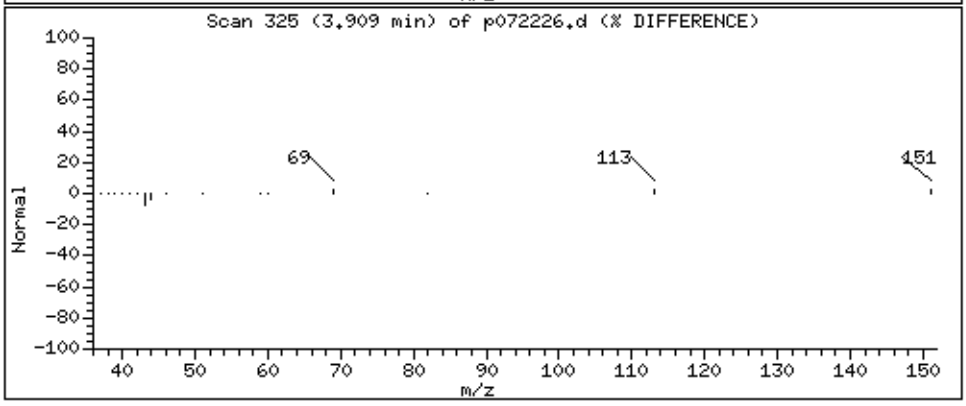












Data File: /chem/msdp.i/22JUL21.b/p072226.d

Date : 23-JUL-2021 02:33

Client ID:

Instrument: msdp.i

Sample Info: 200mL 37431

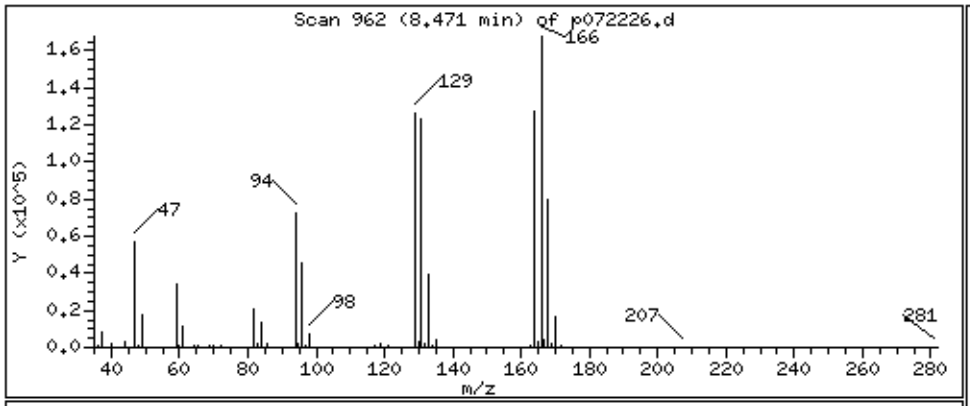
Operator: DF

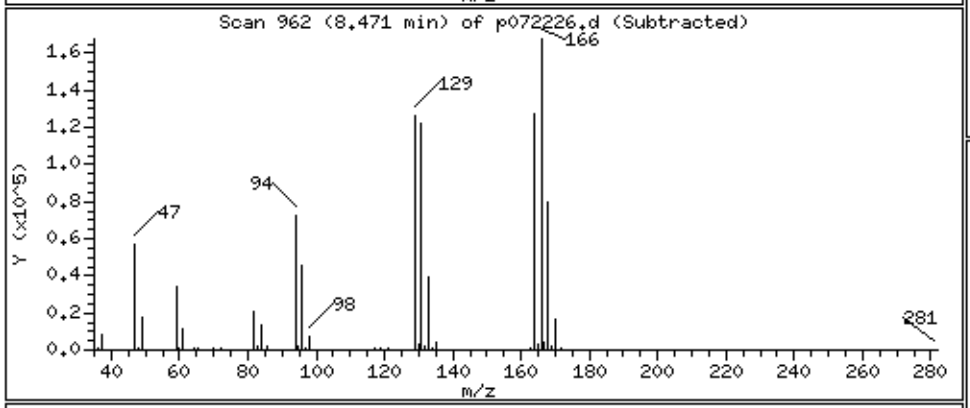
Column phase: RTX-624

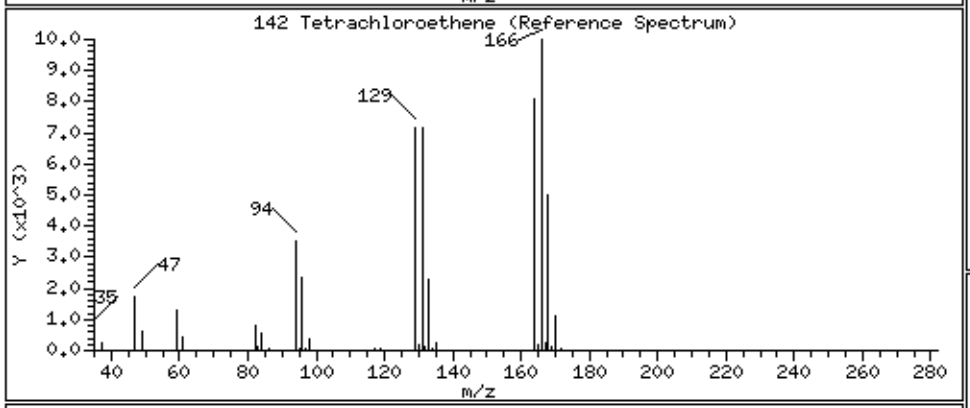
Column diameter: 0.25

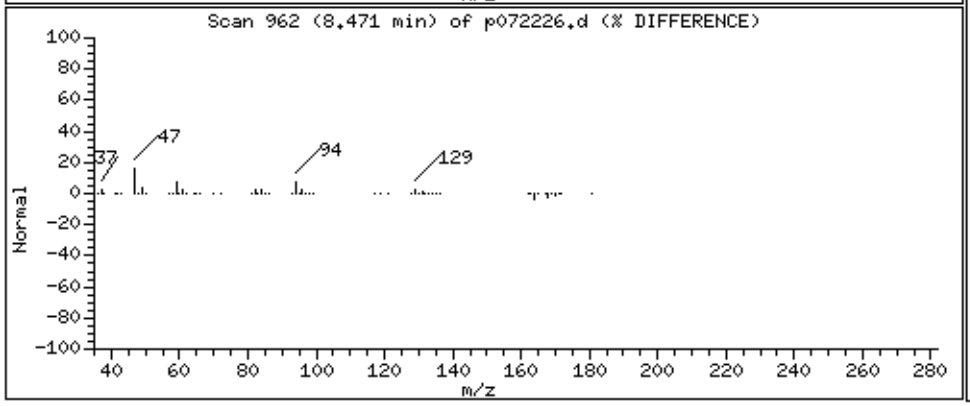
142 Tetrachloroethene

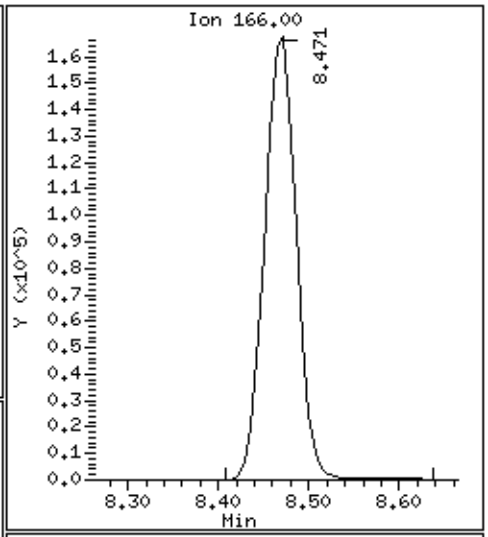
Concentration: 69.612 PPBV

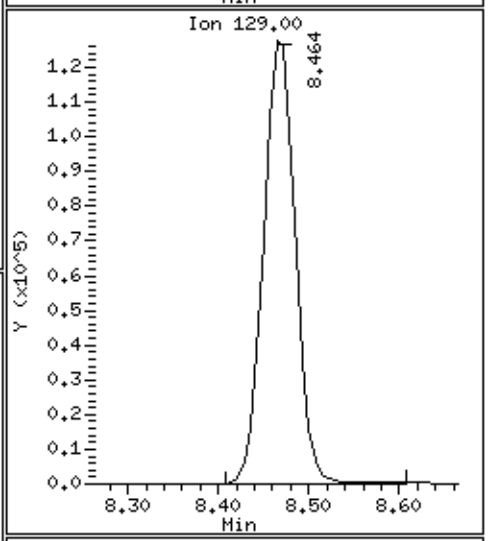


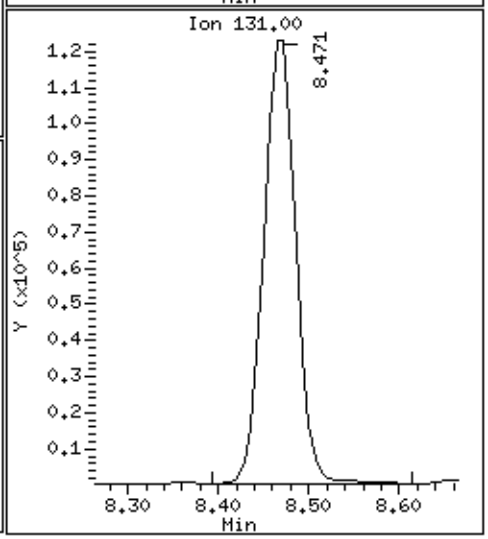












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Client Sample ID: SG-VW35B-02

Lab ID#: 2107241A-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072227**	**Date of Collection: 7/9/21 12:17:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 7/23/21 03:03 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.7	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	11	13	21	24
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	25	26	60
2-Propanol	4.4	6.2	11	15
Carbon Disulfide	4.4	Not Detected	14	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	4.8	5.4	23
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.4	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	28	7.5	190
2-Hexanone	4.4	Not Detected	18	Not Detected

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Client Sample ID: SG-VW35B-02

Lab ID#: 2107241A-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072227**	**Date of Collection:**	**7/9/21 12:17:00 PM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/23/21 03:03 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.6	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	33	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected
Naphthalene	2.2	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	11	13	34
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
1,1-Difluoroethane	4.4	19	12	50
Isopropyl ether	4.4	Not Detected	18	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Hexachloroethane	4.4	Not Detected	43	Not Detected
Iodomethane	11	Not Detected	64	Not Detected
Propylene	4.4	Not Detected	7.6	Not Detected
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW35B-02

Lab ID#: 2107241A-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072227**	**Date of Collection:**	**7/9/21 12:17:00 PM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/23/21 03:03 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072227.d
Lab Smp Id: 2107241A-23A
Inj Date : 23-JUL-2021 03:03
Operator : DF Inst ID: msdp.i
Smp Info : 200mL 1L1730
Misc Info : 7.1 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 10
Dil Factor: 2.20000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	148900	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	117765				48.23- 108.23	79.09
5.785	5.778 (1.000)	49	324496				150.57- 210.57	217.93
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	543906	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	77414				0.00- 45.71	14.23
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	554291	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	289083				23.78- 83.78	52.15
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	211699	25.7623	25.762		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	106120				27.21- 87.21	50.13
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	590676	25.0090	25.009		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65510				0.00- 40.44	11.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	383435			34.95- 94.95	64.91
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	343183	24.1108	24.111	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	420510			95.92- 155.92	122.53
10.921	10.921 (1.154)	176	331277			66.89- 126.89	96.53
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	28678	8.49694	18.693	80.00- 120.00	100.00
1.716	1.745 (0.297)	51	81482			597.63- 657.63	284.12
1.716	1.703 (0.297)	47	16085			33.72- 93.72	56.09
39 Ethanol					CAS #: 64-17-5		
3.257	3.242 (0.563)	46	8551	5.79088	12.740	80.00- 120.00	100.00
3.264	3.242 (0.564)	45	19871			511.19- 571.19	232.37
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	44529	11.4072	25.096	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	177056			302.95- 362.95	397.62
52 2-Propanol					CAS #: 67-63-0		
3.908	3.887 (0.676)	45	44002	2.79686	6.153	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	13053			0.00- 47.19	29.67
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	92303	5.03103	11.068	80.00- 120.00	100.00
4.345	4.338 (0.751)	41	26148			0.00- 51.11	28.33
4.353	4.338 (0.752)	57	10619			0.00- 40.49	11.51
92 Chloroform					CAS #: 67-66-3		
5.842	5.843 (1.010)	83	28330	2.18672	4.811	80.00- 120.00	100.00
5.842	5.843 (1.010)	85	17220			34.70- 94.70	60.79
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	161448	12.7801	28.116	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	127270			47.84- 107.84	78.83
8.464	8.464 (0.895)	131	127041			45.29- 105.29	78.69

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072227.d
Lab Smp Id: 2107241A-23A
Analysis Type: VOA
Quant Type: ISTD
Operator: DF
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->10 psi

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	148900	-6.50
108 1,4-Difluorobenze	573285	343971	802599	543906	-5.12
153 Chlorobenzene-d5	571549	342929	800169	554291	-3.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Jul-2021 14:43

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107241A-23A
Level: LOW Operator: DF
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.762	103.05	70-130
$ 134 Toluene-d8	25.000	25.009	100.04	70-130
$ 170 4-Bromofluorobenz	25.000	24.111	96.44	70-130

Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

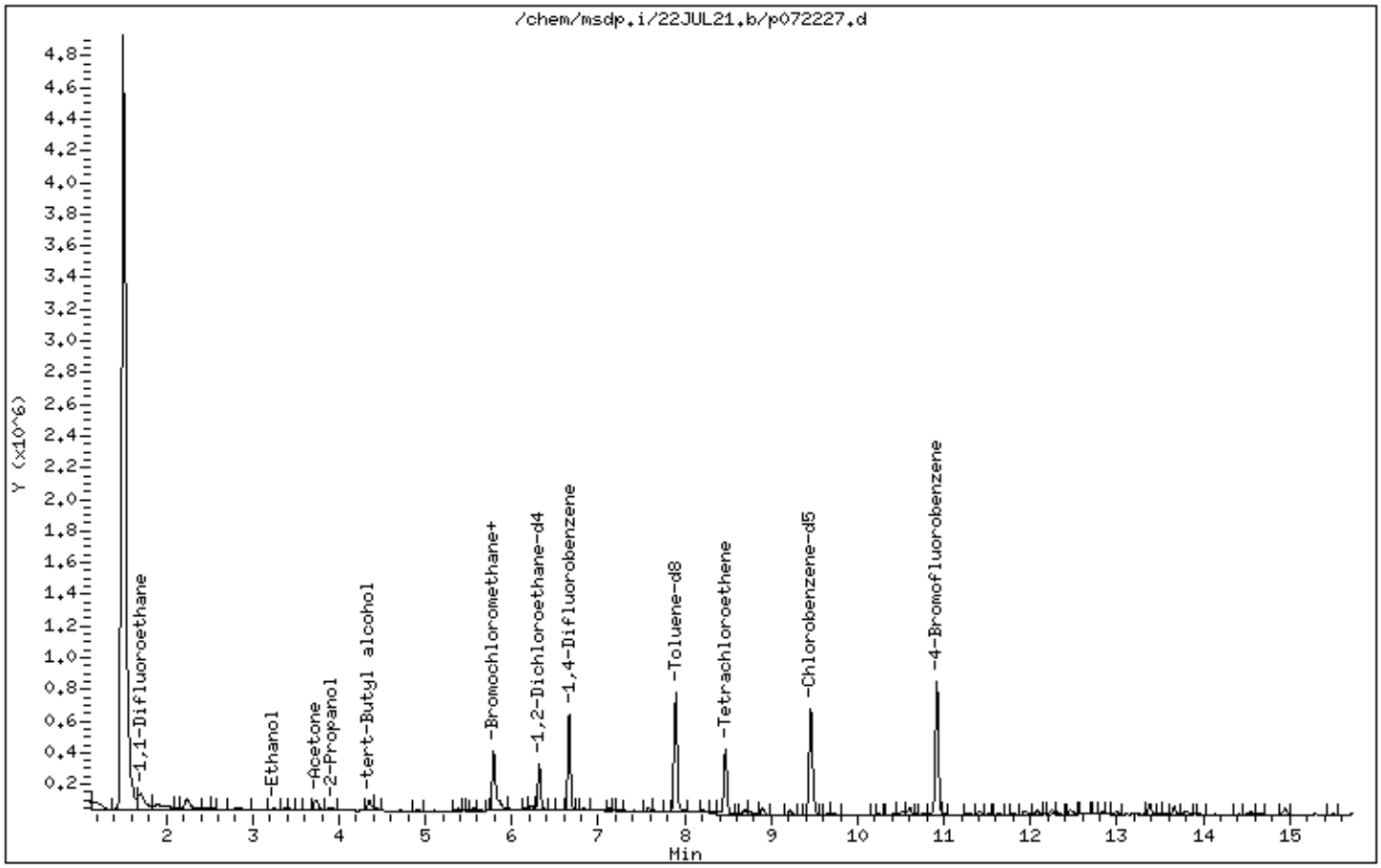
Instrument: msdp.i

Sample Info: 200mL 1L1730

Operator: DF

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1730

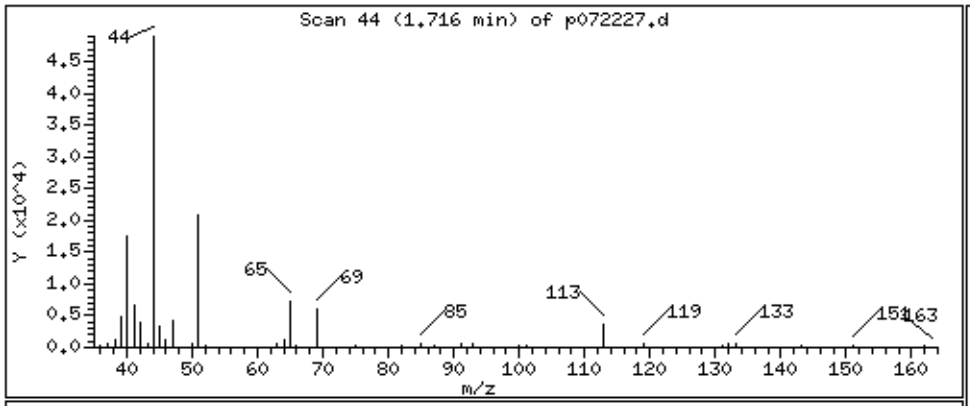
Operator: DF

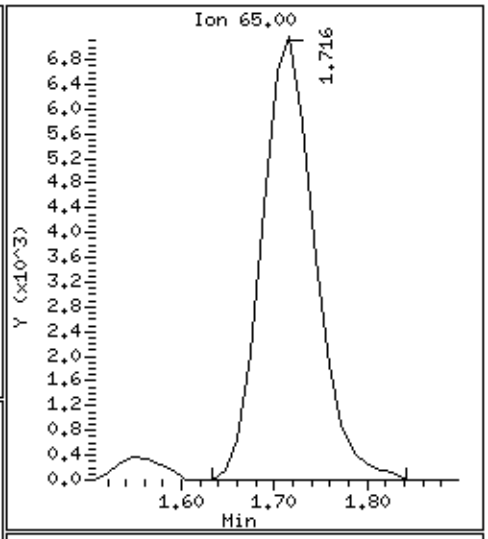
Column phase: RTX-624

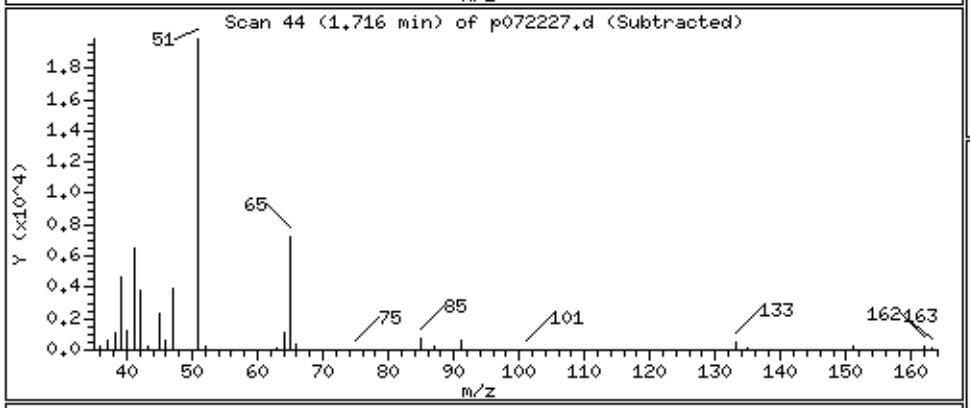
Column diameter: 0.25

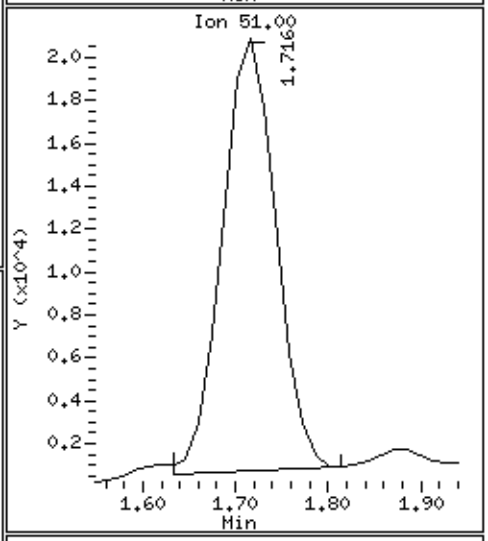
7 1,1-Difluoroethane

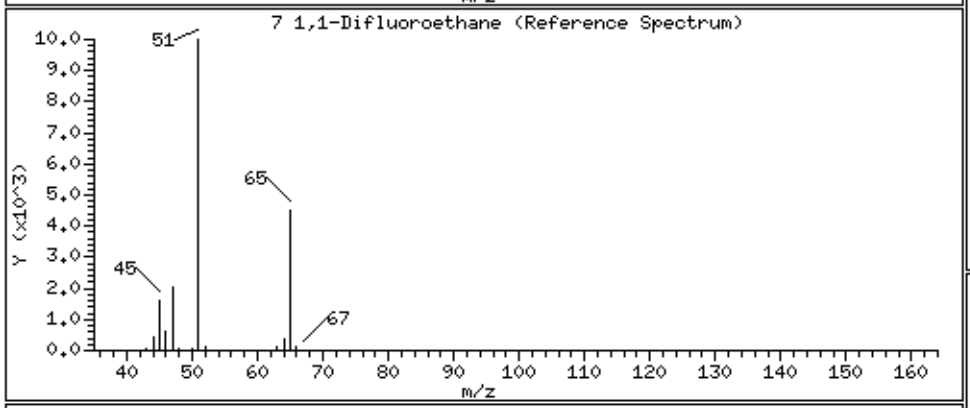
Concentration: 18.693 PPBV

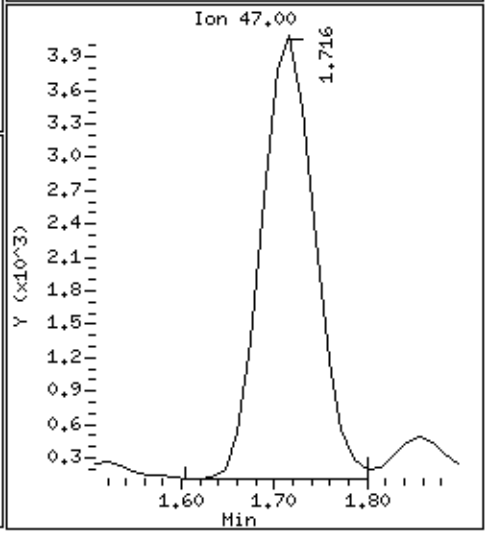


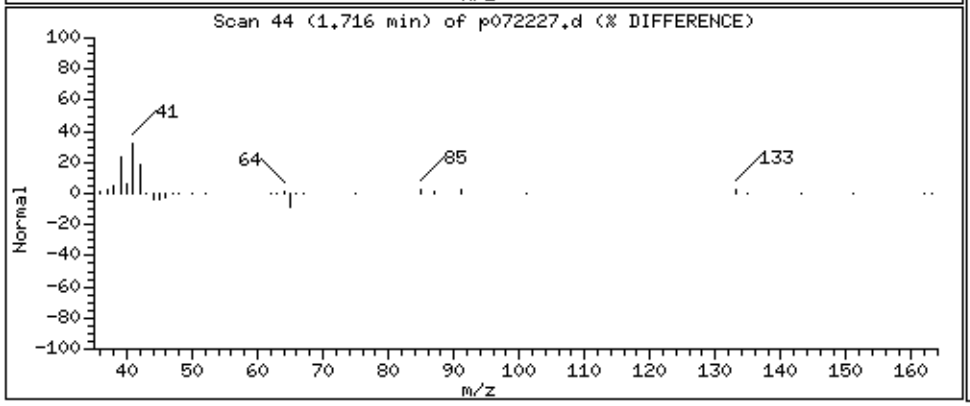












Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1730

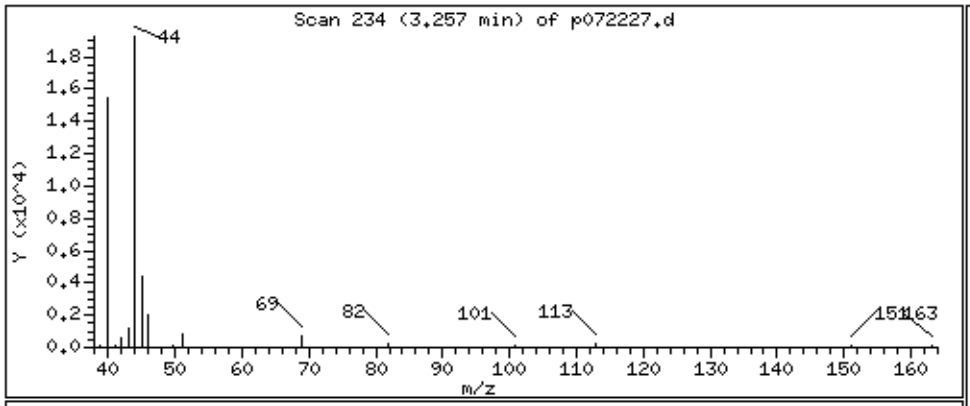
Operator: DF

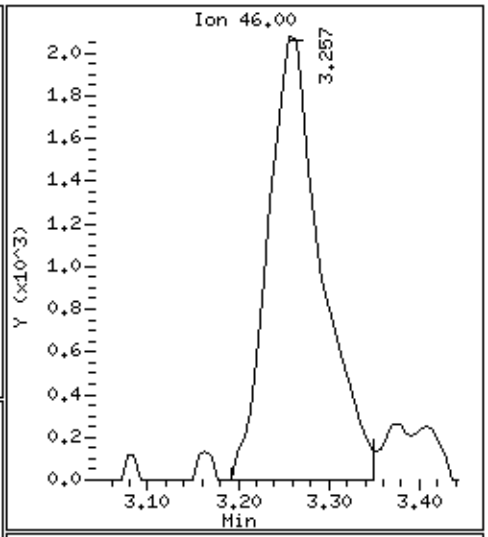
Column phase: RTX-624

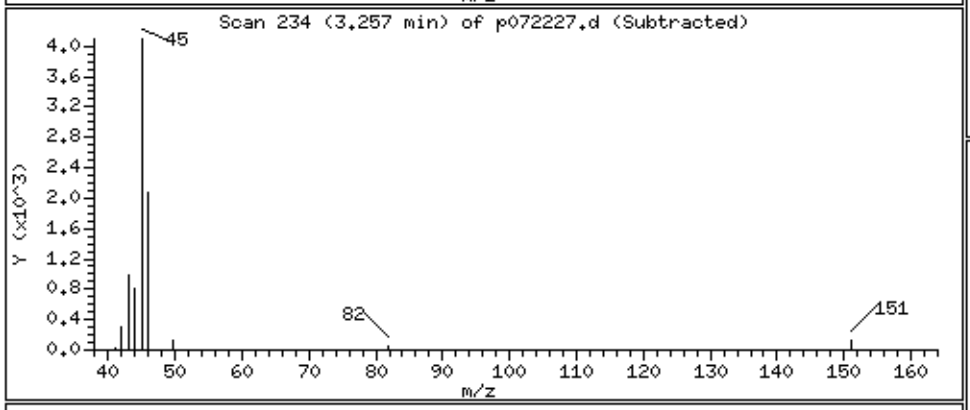
Column diameter: 0.25

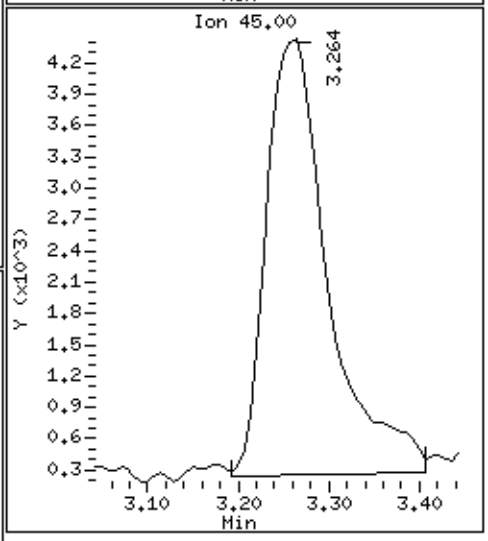
39 Ethanol

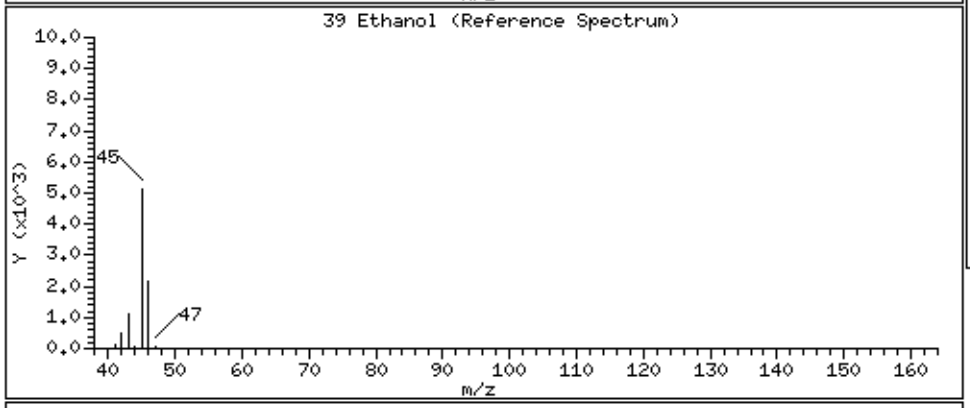
Concentration: 12.740 PPBV

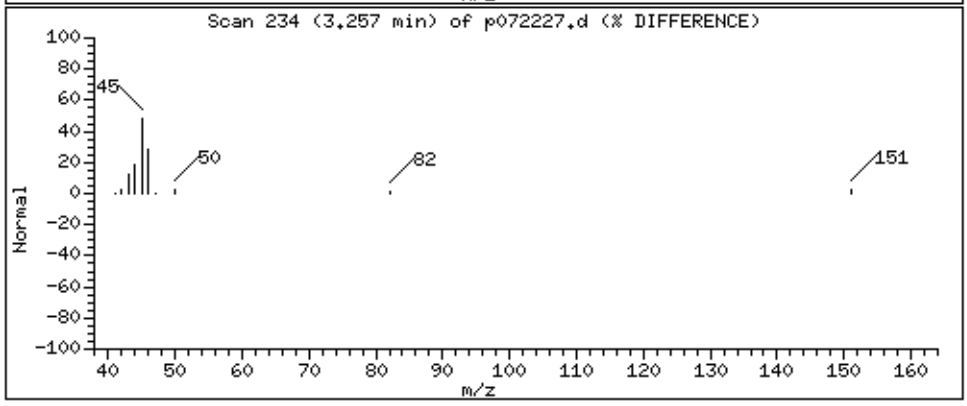












Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1730

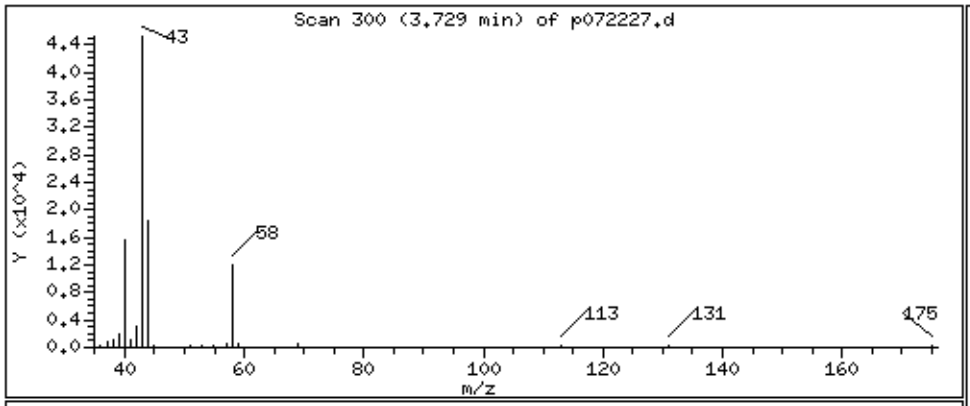
Operator: DF

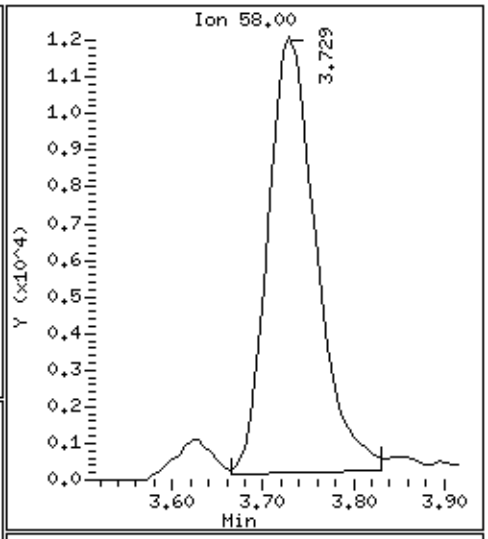
Column phase: RTX-624

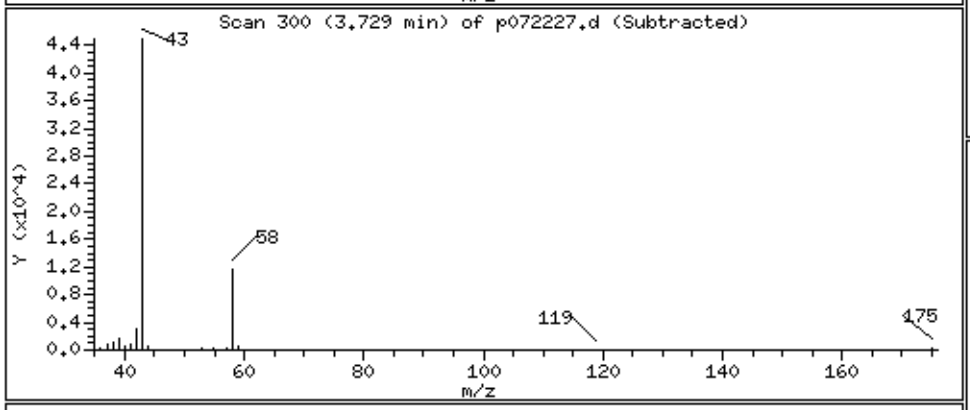
Column diameter: 0.25

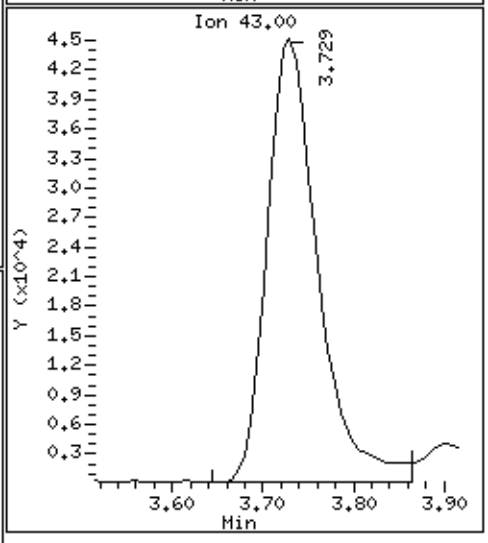
47 Acetone

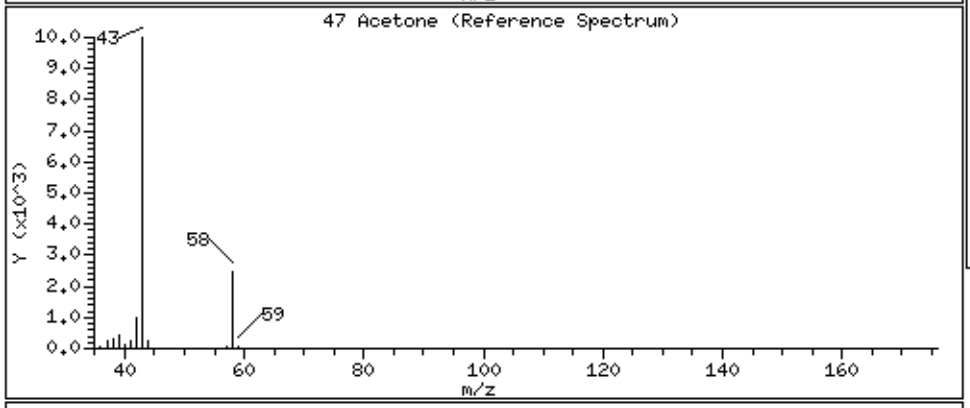
Concentration: 25.096 PPBV

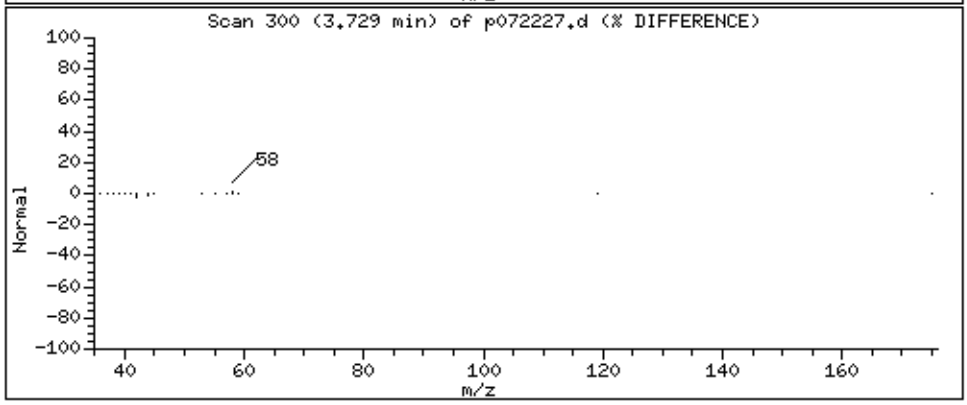












Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1730

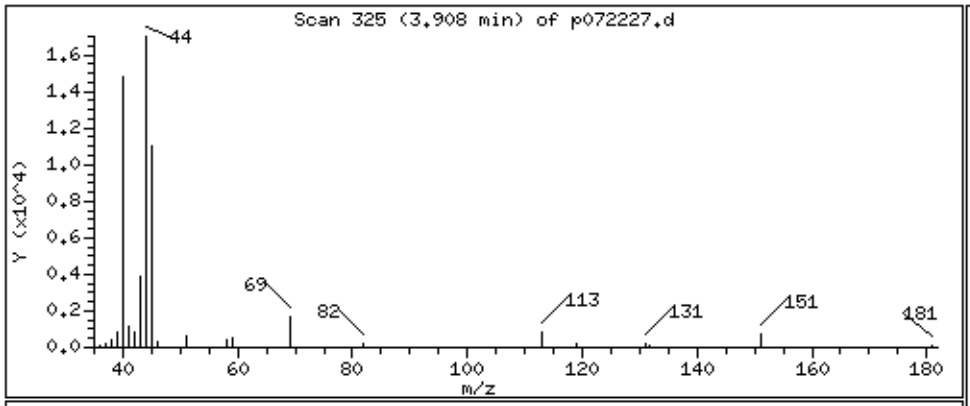
Operator: DF

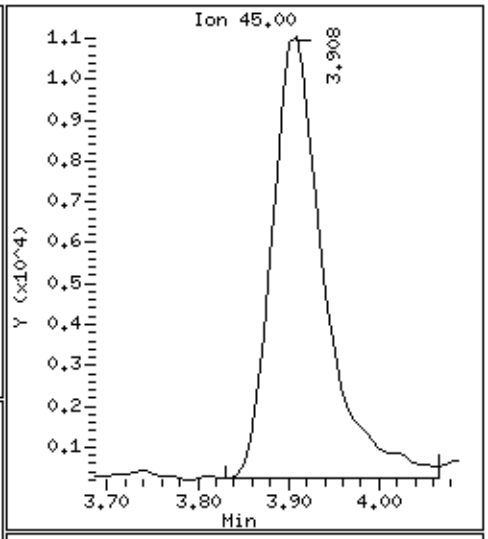
Column phase: RTX-624

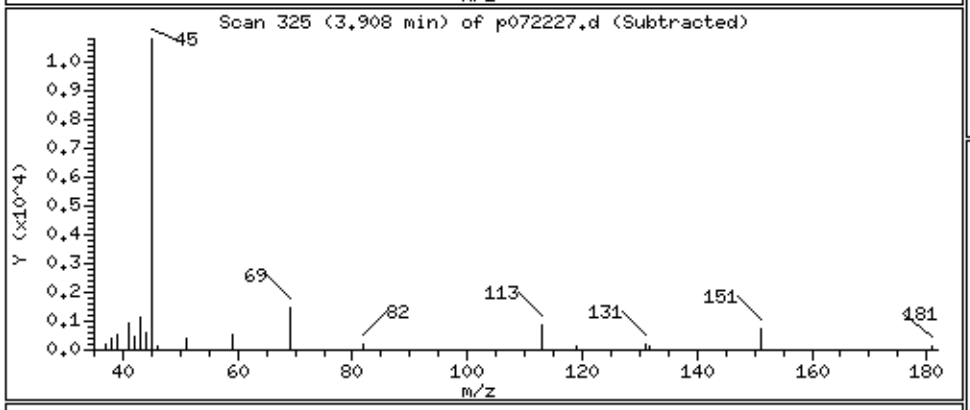
Column diameter: 0.25

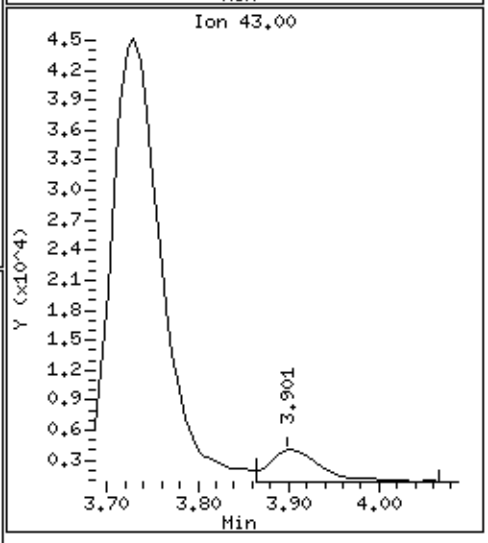
52 2-Propanol

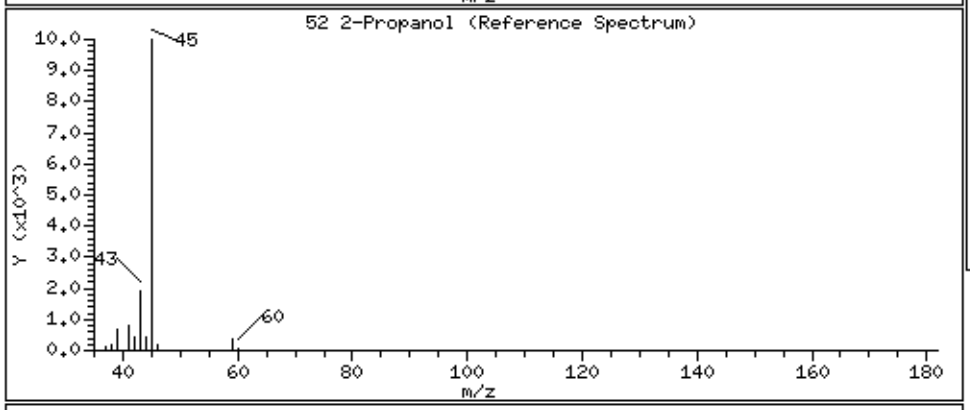
Concentration: 6.153 PPBV

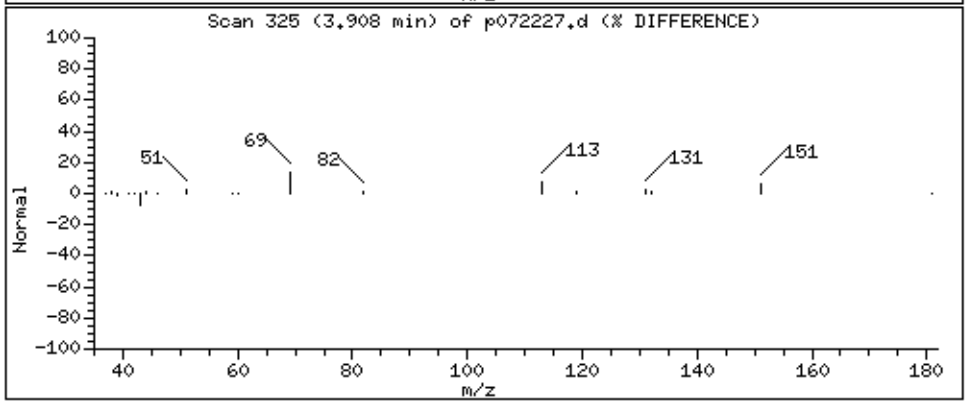












Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1730

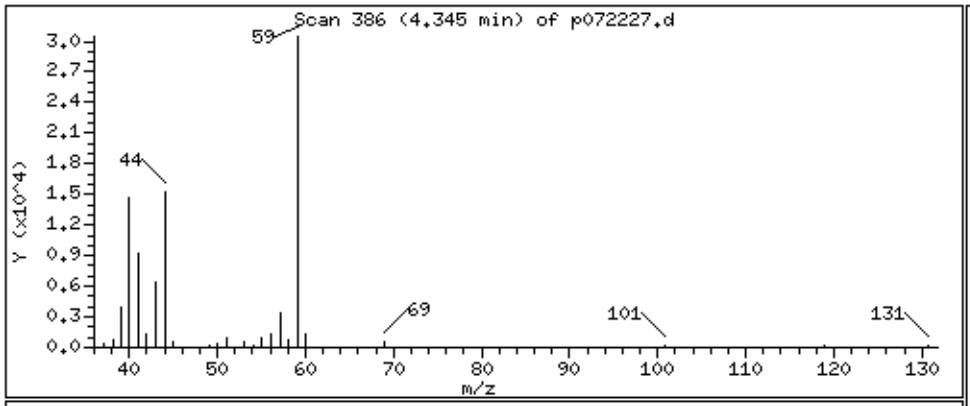
Operator: DF

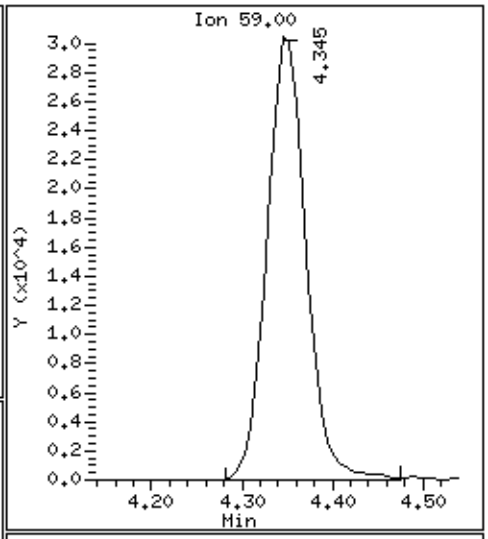
Column phase: RTX-624

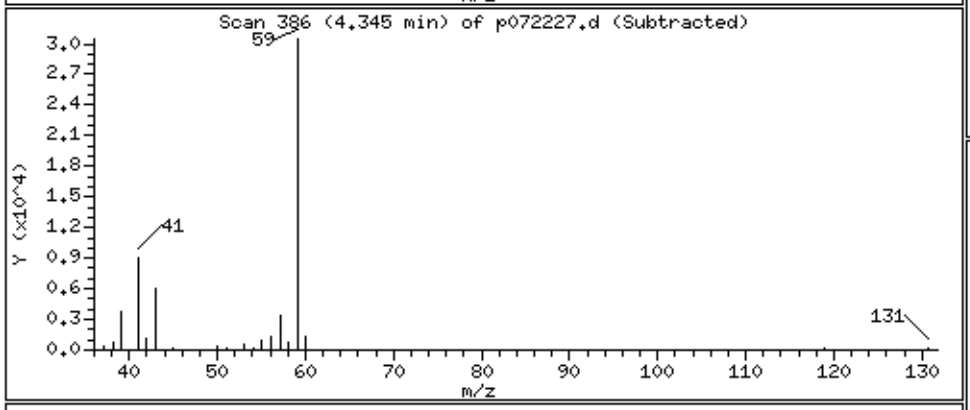
Column diameter: 0.25

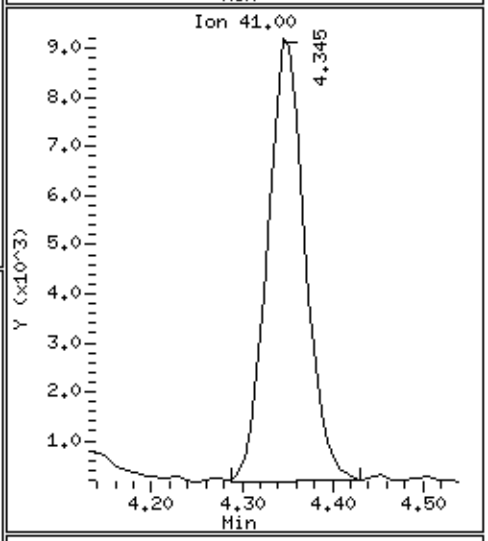
62 tert-Butyl alcohol

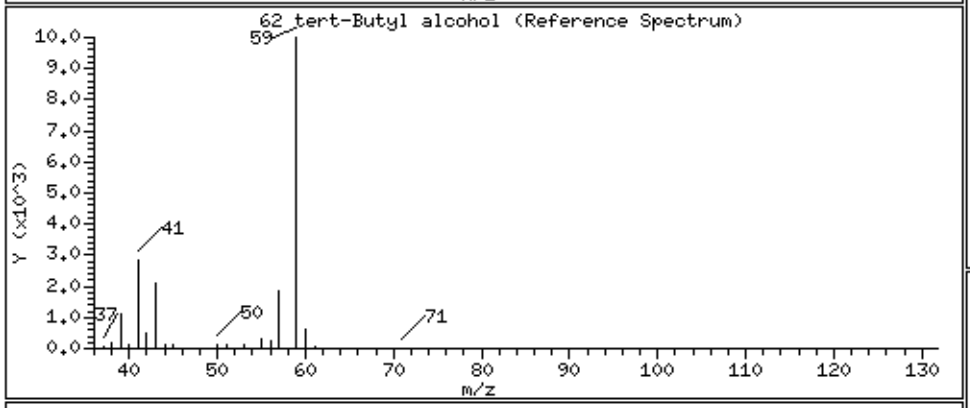
Concentration: 11.068 PPBV

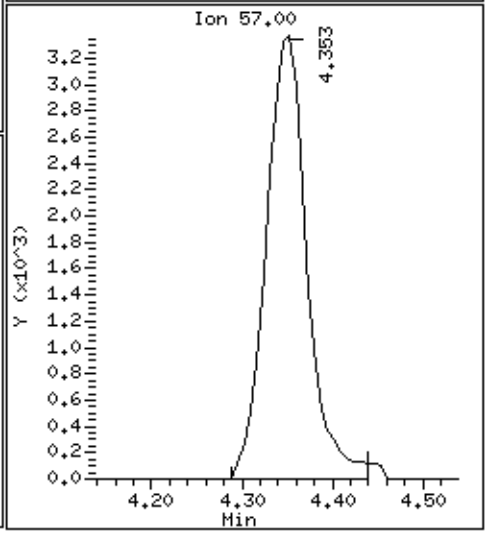


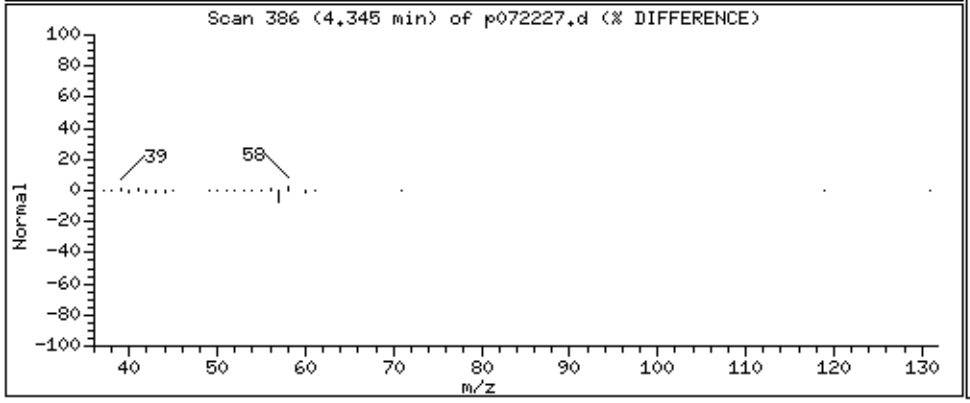












Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1730

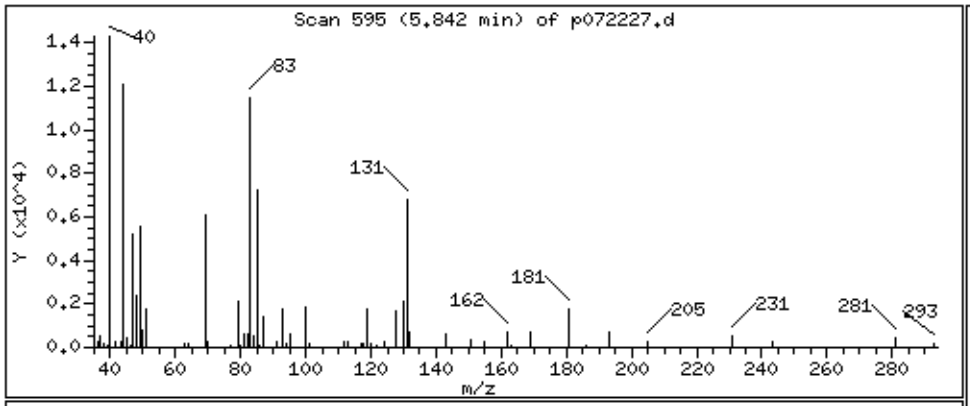
Operator: DF

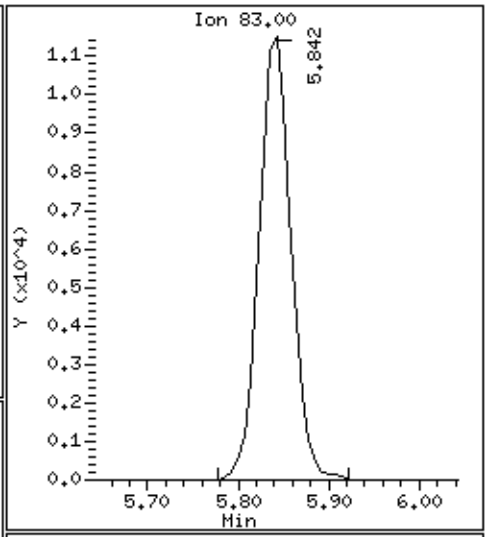
Column phase: RTX-624

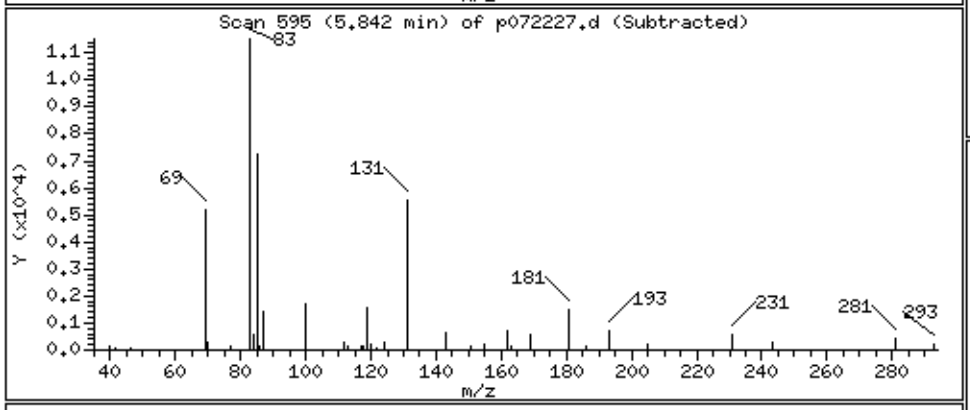
Column diameter: 0.25

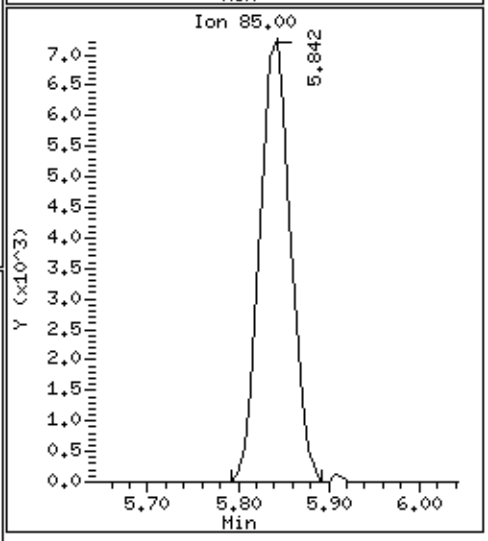
92 Chloroform

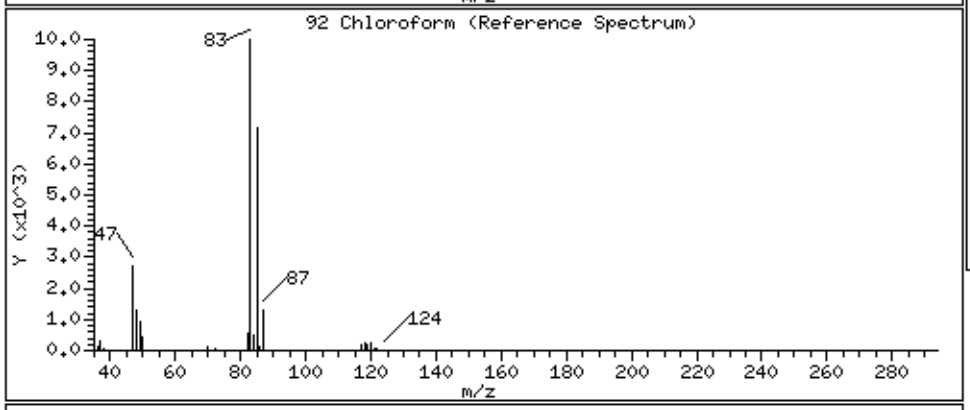
Concentration: 4.811 PPBV

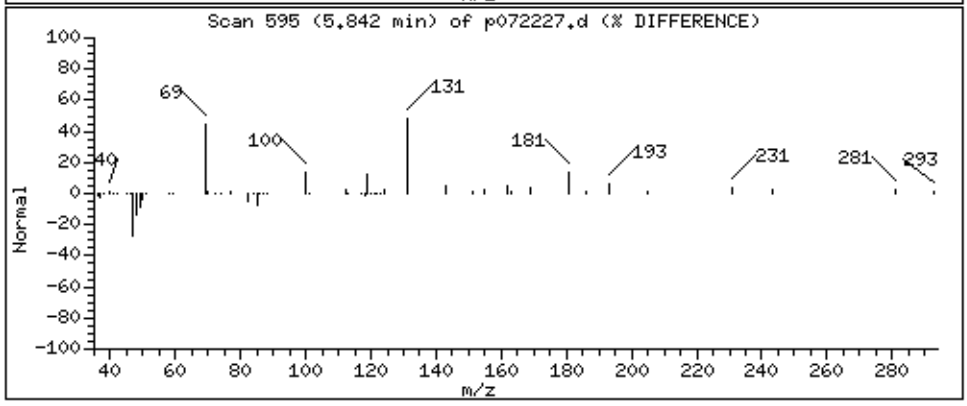












Data File: /chem/msdp.i/22JUL21.b/p072227.d

Date : 23-JUL-2021 03:03

Client ID:

Instrument: msdp.i

Sample Info: 200mL 1L1730

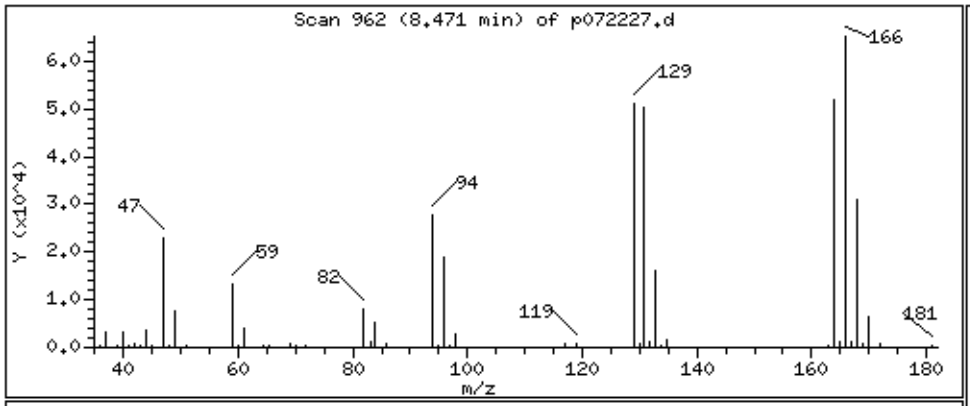
Operator: DF

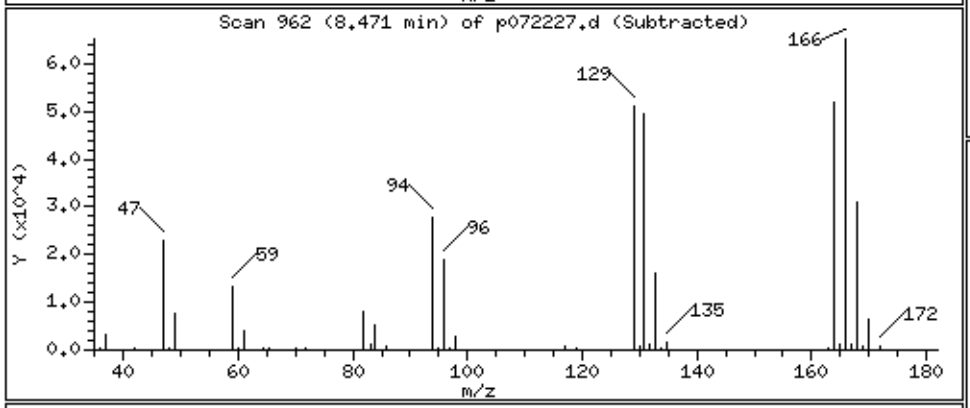
Column phase: RTX-624

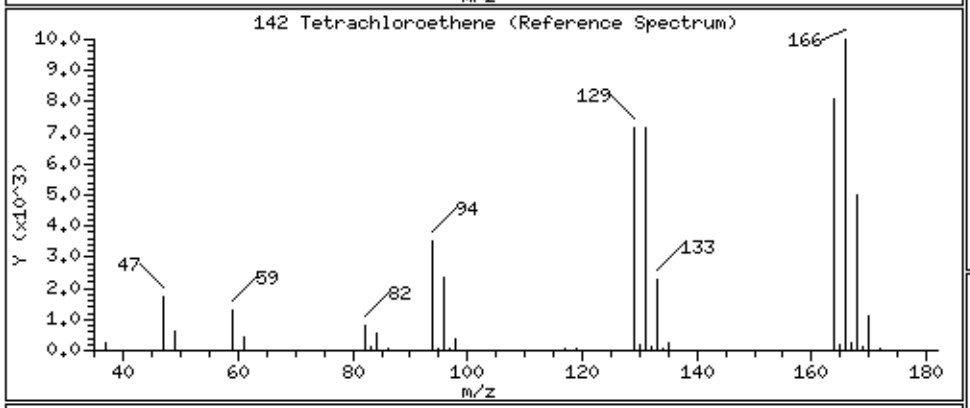
Column diameter: 0.25

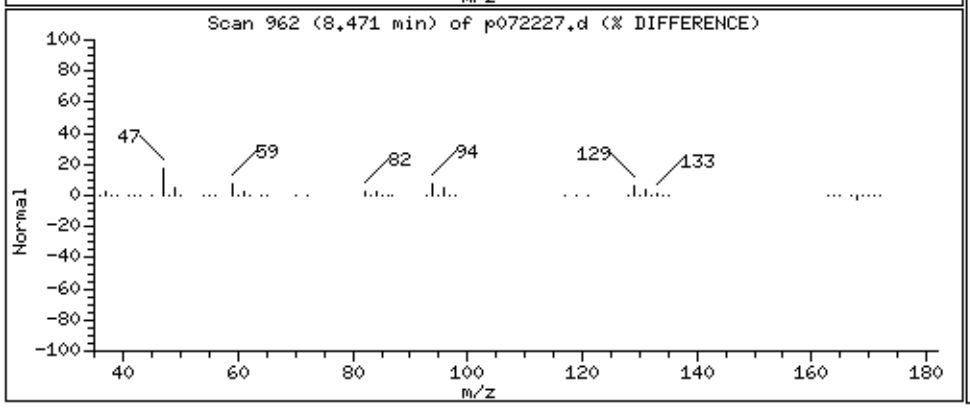
142 Tetrachloroethene

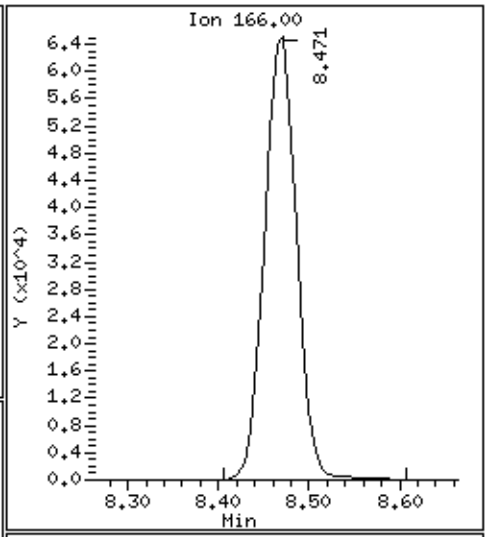
Concentration: 28.116 PPBV

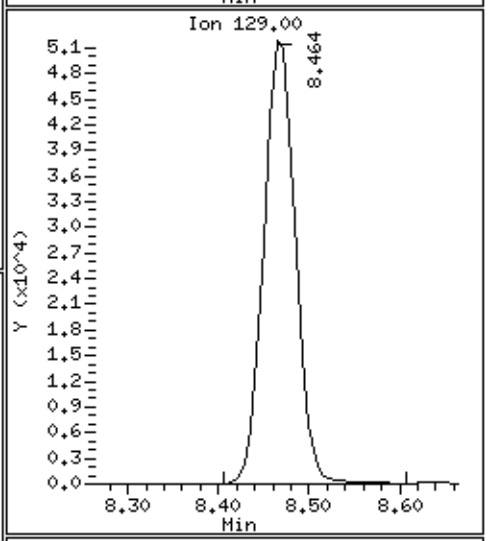


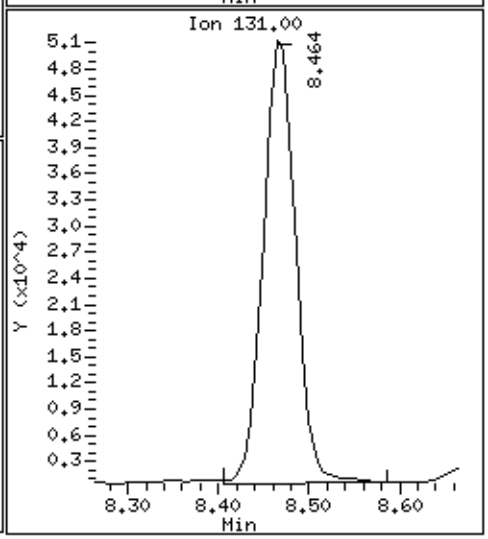












QC Results and Raw Data

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2107241A-24A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072207c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:23 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2107241A-24A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072207c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:23 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected
Freon 134a	2.0	Not Detected	8.3	Not Detected
Acrolein	2.0	Not Detected	4.6	Not Detected
Acrylonitrile	2.0	Not Detected	4.3	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
1,2-Dibromo-3-chloropropane	2.0	Not Detected	19	Not Detected
Dibromomethane	2.0	Not Detected	14	Not Detected
1,1-Difluoroethane	2.0	Not Detected	5.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl Acetate	2.0	Not Detected	7.2	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
Hexachloroethane	2.0	Not Detected	19	Not Detected
Iodomethane	5.0	Not Detected	29	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected
1,1,1,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected
1,2,3-Trichloropropane	2.0	Not Detected	12	Not Detected
Vinyl Acetate	2.0	Not Detected	7.0	Not Detected
Vinyl Bromide	2.0	Not Detected	8.7	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 2107241A-24A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072207c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:23 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	96	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072207c.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 22-JUL-2021 13:23
Operator : LD Inst ID: msdp.i
Smp Info : 200mL 35157
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 15:16 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	163917	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	124390				48.23- 108.23	75.89
5.785	5.778 (1.000)	49	331785				150.57- 210.57	202.41
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	597723	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	86098				0.00- 45.71	14.40
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	603595	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	319954				23.78- 83.78	53.01
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	230462	25.4763	25.476		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	113907				27.21- 87.21	49.43
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	661599	25.4898	25.490		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68911				0.00- 40.44	10.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	426699			34.95- 94.95	64.50
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	373385	24.0899	24.090	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	459781			95.92- 155.92	123.14
10.921	10.921 (1.154)	176	353452			66.89- 126.89	94.66

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072207c.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: Humid

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	163917	2.93
108 1,4-Difluorobenze	573285	343971	802599	597723	4.26
153 Chlorobenzene-d5	571549	342929	800169	603595	5.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 22-Jul-2021 15:16

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.476	101.91	70-130
$ 134 Toluene-d8	25.000	25.490	101.96	70-130
$ 170 4-Bromofluorobenz	25.000	24.090	96.36	70-130

Data File: /chem/msdp.i/22JUL21.b/p072207c.d

Date : 22-JUL-2021 13:23

Client ID: Lab Blank

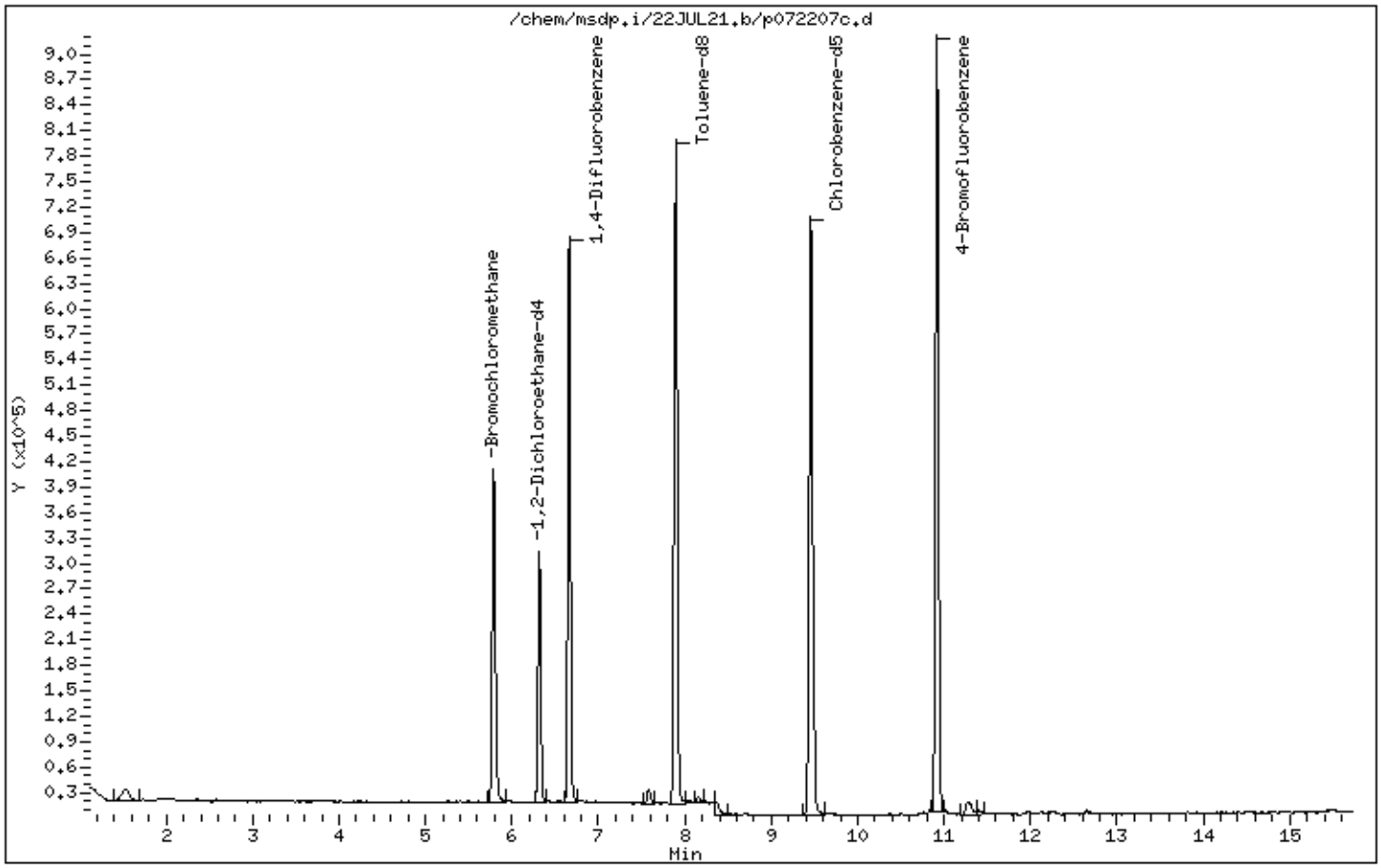
Instrument: msdp.i

Sample Info: 200mL 35157

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: Lab Blank

Lab ID#: 2107241A-24B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072211a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 03:15 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2107241A-24B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072211a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 03:15 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected
Freon 134a	2.0	Not Detected	8.3	Not Detected
Acrolein	2.0	Not Detected	4.6	Not Detected
Acrylonitrile	2.0	Not Detected	4.3	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
1,2-Dibromo-3-chloropropane	2.0	Not Detected	19	Not Detected
Dibromomethane	2.0	Not Detected	14	Not Detected
1,1-Difluoroethane	2.0	Not Detected	5.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
Ethyl Acetate	2.0	Not Detected	7.2	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
Hexachloroethane	2.0	Not Detected	19	Not Detected
Iodomethane	5.0	Not Detected	29	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected
1,1,1,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected
1,2,3-Trichloropropane	2.0	Not Detected	12	Not Detected
Vinyl Acetate	2.0	Not Detected	7.0	Not Detected
Vinyl Bromide	2.0	Not Detected	8.7	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 2107241A-24B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072211a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 03:15 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	97	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072211a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 22-JUL-2021 15:15
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 34353
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 15:18 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	237996	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	183209				48.46- 108.46	76.98
5.284	5.284 (1.000)	49	334701				120.39- 180.39	140.63
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	802671	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	120674				0.00- 45.52	15.03
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	713331	25.0000			80.00- 120.00	100.00
8.619	8.619 (1.000)	82	372677				25.46- 85.46	52.24
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	322800	24.6466	24.646		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	155593				21.66- 81.66	48.20
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	796101	24.0800	24.080		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	88694				0.00- 41.47	11.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	523518			36.47- 96.47	65.76
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.600	9.601 (1.114)	174	455951	24.1654	24.165	80.00- 120.00	100.00
9.600	9.601 (1.114)	95	518804			93.06- 153.06	113.79
9.600	9.601 (1.114)	176	422669			62.87- 122.87	92.70

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072211a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: Humid

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	237996	-1.08
108 1,4-Difluorobenze	805743	483446	1128040	802671	-0.38
153 Chlorobenzene-d5	719477	431686	1007268	713331	-0.85

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	-0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 22-Jul-2021 15:35

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RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.646	98.59	70-130
$ 134 Toluene-d8	25.000	24.080	96.32	70-130
$ 170 4-Bromofluorobenz	25.000	24.165	96.66	70-130

Data File: /chem/msd3.i/22JUL21.b/3072211a.d

Date : 22-JUL-2021 15:15

Client ID: Lab Blank

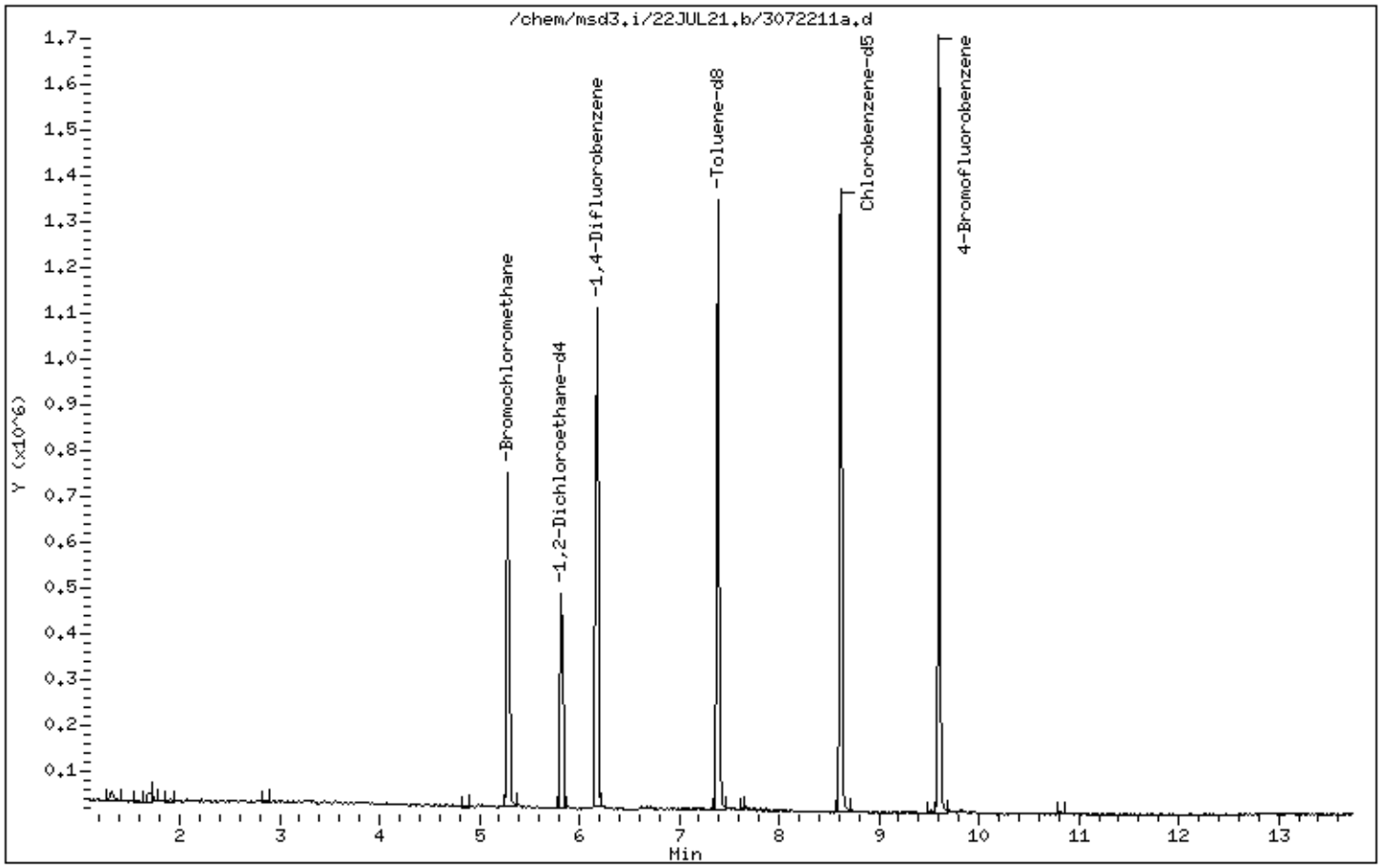
Instrument: msd3.i

Sample Info: 200mL 34353

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

SURROGATE RECOVERY FORM

Lab Name : Eurofins Air Toxics, LLC _____ SDG No. :2107241A

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY						
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#	TOTAL OUT
1	SG-VW43A-02	102		102		99		
2	SG-VW43B-02	104		100		96		
3	SG-VW45A-03	104		99		98		
4	SG-VW45B-02	100		96		98		
5	SG-VW46A-02	95		99		94		
6	SG-VW46B-02	99		96		96		
7	SG-VW44A-02	95		100		94		
8	SG-VW44B-02	96		98		96		
9	SG-VW47A-02	96		98		94		
10	SG-VW47A-03	97		104		94		
11	SG-VW47B-02	97		97		97		
12	SG-VW48A-03	99		97		95		
13	SG-VW48B-02	100		96		94		
14	SG-VW49A-03	101		100		96		
15	SG-VW49B-02	104		102		96		
16	SG-VW50A-03	102		101		97		
17	SG-VW50B-02	105		103		95		
18	SG-VW31A-02	101		103		97		
19	SG-VW31B-02	102		101		97		
20	SG-VW31B-03	106		102		97		
21	SG-VW26A-02	102		101		98		
22	SG-VW35A-02	103		103		99		
23	SG-VW35B-02	103		100		96		
24	Lab Blank	102		102		96		
25	Lab Blank	98		96		97		
26	CCV	104		102		102		
27	CCV	98		97		103		
28	LCS	103		100		101		
29	LCSD	102		100		100		
30	LCS	98		97		102		
31	LCSD	97		96		100		

Surrogate Recovery Limits

1,2-Dichloroethane-d4	70 - 130
Toluene-d8	70 - 130
4-Bromofluorobenzene	70 - 130

* Designates Values Outside of QC limits

LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name : Eurofins Air Toxics, LLC File ID: 3072206.d Date : 2021-07-22 12:28:00 SDG No. : 2107241A

		Bromochloromethane	RT	1,4-Difluorobenzene	RT	Chlorobenzene-d5	RT
	24-HOUR CCV	240594	5.28	805743	6.18	719477	8.62
	UPPER LIMIT	336831	5.61	1128040	6.51	1007267	8.95
	LOWER LIMIT	144356	4.95	483445	5.85	431686	8.29
	CLIENT SAMPLE NO.						
1	SG-VW45B-02	273075	5.28	930209	6.18	815118	8.62
2	SG-VW46A-02	261629	5.28	854118	6.17	793524	8.62
3	SG-VW46B-02	259785	5.28	866351	6.18	774677	8.62
4	SG-VW44A-02	260475	5.28	858891	6.17	790833	8.61
5	SG-VW44B-02	271712	5.28	899983	6.17	814050	8.61
6	SG-VW47A-02	276702	5.27	916535	6.17	844400	8.61
7	SG-VW47A-03	300706	5.28	976719	6.18	917525	8.61
8	SG-VW47B-02	240668	5.28	781263	6.18	700808	8.62
9	SG-VW48A-03	222073	5.28	727365	6.18	657675	8.62
10	SG-VW48B-02	236910	5.28	758202	6.18	683029	8.62
11	Lab Blank	237996	5.28	802671	6.18	713331	8.62
12	CCV	240594	5.28	805743	6.18	719477	8.62
13	LCS	259845	5.28	871680	6.18	776236	8.62
14	LCSD	300841	5.28	1028130	6.17	902259	8.61

Area Upper Limit = +40% of intenral standard area

Area Lower Limit = -40% of intenral standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Designates Values Outside of QC limits

LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name : Eurofins Air Toxics, LLC File ID: p072202.d Date : 2021-07-22 10:40:00 SDG No. : 2107241A

		Bromochloromethane	RT	1,4-Difluorobenzene	RT	Chlorobenzene-d5	RT
	24-HOUR CCV	159252	5.78	573285	6.67	571549	9.46
	UPPER LIMIT	222952	6.11	802599	7.00	800168	9.79
	LOWER LIMIT	95551	5.45	343971	6.34	342929	9.13
	CLIENT SAMPLE NO.						
1	SG-VW43A-02	158641	5.79	571926	6.67	589966	9.46
2	SG-VW43B-02	156225	5.79	567522	6.67	580867	9.46
3	SG-VW45A-03	153416	5.79	566893	6.67	579275	9.46
4	SG-VW49A-03	148904	5.79	537462	6.66	543083	9.46
5	SG-VW49B-02	147404	5.78	529546	6.66	538607	9.46
6	SG-VW50A-03	149373	5.79	531005	6.67	541344	9.46
7	SG-VW50B-02	145247	5.79	515142	6.66	526492	9.46
8	SG-VW31A-02	156413	5.79	541803	6.67	571594	9.46
9	SG-VW31B-02	156946	5.79	559552	6.67	580141	9.46
10	SG-VW31B-03	153355	5.79	545575	6.67	567049	9.46
11	SG-VW26A-02	153191	5.79	545188	6.67	561222	9.46
12	SG-VW35A-02	153561	5.79	538441	6.67	552408	9.46
13	SG-VW35B-02	148900	5.79	543906	6.67	554291	9.46
14	Lab Blank	163917	5.79	597723	6.67	603595	9.46
15	CCV	159252	5.78	573285	6.67	571549	9.46
16	LCS	160796	5.79	593115	6.67	581318	9.46
17	LCSD	165029	5.79	610054	6.67	592267	9.46

Area Upper Limit = +40% of intenral standard area

Area Lower Limit = -40% of intenral standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Designates Values Outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab File ID: p072203.d & p072204.d

Lab Sample ID: 26A & 26AA

CAS Number	Compound	Original Amount	Duplicate Amount	RPD	Result Less Than 5X RL
630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	0	
71-55-6	1,1,1-Trichloroethane	100	101	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	107	108	0.93	
79-00-5	1,1,2-Trichloroethane	106	108	1.9	
75-34-3	1,1-Dichloroethane	105	106	0.95	
75-35-4	1,1-Dichloroethene	97	97	0	
75-37-6	1,1-Difluoroethane	ND	ND	0	
96-18-4	1,2,3-Trichloropropane	ND	ND	0	
120-82-1	1,2,4-Trichlorobenzene	106	122	14	
95-63-6	1,2,4-Trimethylbenzene	102	104	1.9	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	110	112	1.8	
95-50-1	1,2-Dichlorobenzene	103	105	1.9	
107-06-2	1,2-Dichloroethane	117	118	0.85	
78-87-5	1,2-Dichloropropane	106	107	0.94	
108-67-8	1,3,5-Trimethylbenzene	102	103	0.98	
106-99-0	1,3-Butadiene	115	116	0.87	
541-73-1	1,3-Dichlorobenzene	106	108	1.9	
106-46-7	1,4-Dichlorobenzene	106	108	1.9	
123-91-1	1,4-Dioxane	100	100	0	
540-84-1	2,2,4-Trimethylpentane	102	104	1.9	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	95	96	1.0	
591-78-6	2-Hexanone	105	106	0.95	
67-63-0	2-Propanol	111	111	0	
107-05-1	3-Chloropropene	94	96	2.1	
622-96-8	4-Ethyltoluene	102	104	1.9	
108-10-1	4-Methyl-2-pentanone	103	102	0.98	
67-64-1	Acetone	105	104	0.96	
107-02-8	Acrolein	ND	ND	0	
107-13-1	Acrylonitrile	ND	ND	0	
100-44-7	alpha-Chlorotoluene	101	102	0.99	
71-43-2	Benzene	105	106	0.95	
75-27-4	Bromodichloromethane	112	112	0	
75-25-2	Bromoform	109	110	0.91	
74-83-9	Bromomethane	92	92	0	
75-15-0	Carbon Disulfide	95	96	1.0	

56-23-5	Carbon Tetrachloride	108	110	1.8
108-90-7	Chlorobenzene	105	107	1.9
75-00-3	Chloroethane	94	98	4.2
67-66-3	Chloroform	106	107	0.94
74-87-3	Chloromethane	108	106	1.9
156-59-2	cis-1,2-Dichloroethene	102	103	0.98
10061-01-5	cis-1,3-Dichloropropene	106	106	0
98-82-8	Cumene	99	101	2.0
110-82-7	Cyclohexane	95	95	0
124-48-1	Dibromochloromethane	111	113	1.8
74-95-3	Dibromomethane	ND	ND	0
64-17-5	Ethanol	90	90	0
141-78-6	Ethyl Acetate	ND	ND	0
100-41-4	Ethyl Benzene	103	104	0.97
637-92-3	Ethyl-tert-butyl ether	ND	ND	0
75-69-4	Freon 11	106	107	0.94
76-13-1	Freon 113	99	99	0
76-14-2	Freon 114	101	101	0
75-71-8	Freon 12	107	110	2.8
811-97-2	Freon 134a	ND	ND	0
142-82-5	Heptane	100	101	1.00
87-68-3	Hexachlorobutadiene	113	128	12
110-54-3	Hexane	101	101	0
74-88-4	Iodomethane	ND	ND	0
108-20-3	Isopropyl ether	ND	ND	0
108-38-3	m,p-Xylene	103	103	0
1634-04-4	Methyl tert-butyl ether	91	92	1.1
75-09-2	Methylene Chloride	116	116	0
91-20-3	Naphthalene	92	108	16
95-47-6	o-Xylene	100	100	0
103-65-1	Propylbenzene	103	105	1.9
115-07-1	Propylene	110	110	0
100-42-5	Styrene	97	98	1.0
994-05-8	tert-Amyl methyl ether	ND	ND	0
75-65-0	tert-Butyl alcohol	ND	ND	0
127-18-4	Tetrachloroethene	108	108	0
109-99-9	Tetrahydrofuran	114	116	1.7
108-88-3	Toluene	102	104	1.9
156-60-5	trans-1,2-Dichloroethene	98	95	3.1
10061-02-6	trans-1,3-Dichloropropene	107	111	3.7
79-01-6	Trichloroethene	107	110	2.8
108-05-4	Vinyl Acetate	94	98	4.2

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	93	95	2.1

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab File ID: 3072207.d & 3072208.d

Lab Sample ID: 26B & 26BB

CAS Number	Compound	Original Amount	Duplicate Amount	RPD	Result Less Than 5X RL
630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	0	
71-55-6	1,1,1-Trichloroethane	90	91	1.1	
79-34-5	1,1,2,2-Tetrachloroethane	97	98	1.0	
79-00-5	1,1,2-Trichloroethane	97	99	2.0	
75-34-3	1,1-Dichloroethane	94	95	1.1	
75-35-4	1,1-Dichloroethene	97	95	2.1	
75-37-6	1,1-Difluoroethane	ND	ND	0	
96-18-4	1,2,3-Trichloropropane	ND	ND	0	
120-82-1	1,2,4-Trichlorobenzene	112	117	4.4	
95-63-6	1,2,4-Trimethylbenzene	102	100	2.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	101	101	0	
95-50-1	1,2-Dichlorobenzene	103	103	0	
107-06-2	1,2-Dichloroethane	102	101	0.99	
78-87-5	1,2-Dichloropropane	80	77	3.8	
108-67-8	1,3,5-Trimethylbenzene	99	98	1.0	
106-99-0	1,3-Butadiene	92	96	4.3	
541-73-1	1,3-Dichlorobenzene	105	104	0.96	
106-46-7	1,4-Dichlorobenzene	104	102	1.9	
123-91-1	1,4-Dioxane	97	94	3.1	
540-84-1	2,2,4-Trimethylpentane	89	90	1.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	93	94	1.1	
591-78-6	2-Hexanone	94	97	3.1	
67-63-0	2-Propanol	100	100	0	
107-05-1	3-Chloropropene	95	94	1.1	
622-96-8	4-Ethyltoluene	99	100	1.0	
108-10-1	4-Methyl-2-pentanone	84	84	0	
67-64-1	Acetone	97	97	0	
107-02-8	Acrolein	ND	ND	0	
107-13-1	Acrylonitrile	ND	ND	0	
100-44-7	alpha-Chlorotoluene	96	97	1.0	
71-43-2	Benzene	101	99	2.0	
75-27-4	Bromodichloromethane	95	92	3.2	
75-25-2	Bromoform	104	106	1.9	
74-83-9	Bromomethane	101	101	0	
75-15-0	Carbon Disulfide	104	104	0	

56-23-5	Carbon Tetrachloride	99	100	1.0
108-90-7	Chlorobenzene	98	99	1.0
75-00-3	Chloroethane	100	100	0
67-66-3	Chloroform	94	94	0
74-87-3	Chloromethane	110	108	1.8
156-59-2	cis-1,2-Dichloroethene	89	90	1.1
10061-01-5	cis-1,3-Dichloropropene	94	92	2.2
98-82-8	Cumene	97	97	0
110-82-7	Cyclohexane	88	89	1.1
124-48-1	Dibromochloromethane	105	107	1.9
74-95-3	Dibromomethane	ND	ND	0
64-17-5	Ethanol	73	73	0
141-78-6	Ethyl Acetate	ND	ND	0
100-41-4	Ethyl Benzene	100	100	0
637-92-3	Ethyl-tert-butyl ether	ND	ND	0
75-69-4	Freon 11	107	107	0
76-13-1	Freon 113	103	103	0
76-14-2	Freon 114	107	107	0
75-71-8	Freon 12	104	104	0
811-97-2	Freon 134a	ND	ND	0
142-82-5	Heptane	91	89	2.2
87-68-3	Hexachlorobutadiene	114	119	4.3
110-54-3	Hexane	94	95	1.1
74-88-4	Iodomethane	ND	ND	0
108-20-3	Isopropyl ether	ND	ND	0
108-38-3	m,p-Xylene	100	100	0
1634-04-4	Methyl tert-butyl ether	95	96	1.0
75-09-2	Methylene Chloride	96	96	0
91-20-3	Naphthalene	86	92	6.7
95-47-6	o-Xylene	96	98	2.1
103-65-1	Propylbenzene	100	100	0
115-07-1	Propylene	96	96	0
100-42-5	Styrene	96	98	2.1
994-05-8	tert-Amyl methyl ether	ND	ND	0
75-65-0	tert-Butyl alcohol	ND	ND	0
127-18-4	Tetrachloroethene	103	107	3.8
109-99-9	Tetrahydrofuran	87	87	0
108-88-3	Toluene	94	94	0
156-60-5	trans-1,2-Dichloroethene	90	91	1.1
10061-02-6	trans-1,3-Dichloropropene	98	101	3.0
79-01-6	Trichloroethene	98	98	0
108-05-4	Vinyl Acetate	97	98	1.0

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	102	100	2.0

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Calibration File Names:
Level 2: /chem/msd3.i/22JUN21.b/3062215.d
Level 3: /chem/msd3.i/22JUN21.b/3062216.d
Level 5: /chem/msd3.i/22JUN21.b/3062217.d
Level 6: /chem/msd3.i/22JUN21.b/3062218.d
Level 7: /chem/msd3.i/22JUN21.b/3062219.d
Level 8: /chem/msd3.i/22JUN21.b/3062220.d
Level 9: /chem/msd3.i/22JUN21.b/3062221.d
Level 10: /chem/msd3.i/22JUN21.b/3062222.d
Level 11: /chem/msd3.i/22JUN21.b/3062223.d

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Freon 143a	+++++	+++++	+++++	0.39291	0.44265	0.44864		
	0.42230	0.41716	0.38549				0.41819	6.098
4 Freon 134a	+++++	+++++	0.63865	0.60478	0.59997	0.61448		
	0.58371	0.56637	0.55610				0.59487	4.787
5 Propylene	+++++	+++++	+++++	0.65170	0.58539	0.61293		
	0.60477	0.58759	0.58081				0.60387	4.387

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
6 Propane	+++++	+++++	+++++	0.25834	0.22661	0.22466		
	0.22548	0.21771	0.21415				0.22783	6.904
7 1,1-Difluoroethane	+++++	+++++	+++++	0.46192	0.39747	0.39789		
	0.37311	0.37063	0.36078				0.39363	9.318
8 Freon 12	+++++	2.15603	1.89816	1.71961	1.69339	1.70056		
	1.63747	1.60084	1.52621				1.74153	11.439
9 Chlorodifluoromethane	+++++	+++++	0.25854	0.19306	0.18741	0.18633		
	0.17510	0.17147	0.16789				0.19140	16.198
10 Freon 114	+++++	1.42810	1.34458	1.34985	1.29466	1.27769		
	1.24628	1.21706	1.16502				1.29040	6.461
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
12 Isobutane	+++++	+++++	1.34906	1.44535	1.36698	1.39313		
	1.34963	1.32626	1.27032				1.35725	4.011
13 Freon 142b	+++++	+++++	+++++	1.34756	1.29500	1.38610		
	1.35039	1.32331	1.27674				1.32985	3.004
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
15 Chloromethane	+++++	+++++	+++++	0.82763	0.72732	0.74182		
	0.72479	0.68082	0.64063				0.72383	8.712
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
18 Butane	+++++	+++++	+++++	0.20113	0.23357	0.15790		
	0.15259	0.14406	0.13639				0.17094	22.286
19 Vinyl Chloride	+++++	1.12980	0.86470	0.78857	0.71677	0.70750		
	0.68973	0.65899	0.64054				0.77458	20.752
20 1,3-Butadiene	+++++	1.03243	0.84231	0.72895	0.69007	0.65005		
	0.60500	0.57217	0.55799				0.70987	22.523
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
24 Bromomethane	+++++	+++++	+++++	0.67314	0.74066	0.57705		
	0.57021	0.57219	0.54233				0.61260	12.580
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
30 Chloroethane	+++++	+++++	+++++	0.40138	0.37327	0.36736		
	0.35675	0.34449	0.33834				0.36360	6.254
31 Isopentane	+++++	+++++	+++++	0.99549	0.94525	0.97775		
	0.90728	0.88280	0.87022				0.92980	5.509
32 Vinyl Bromide	+++++	+++++	0.75093	0.69351	0.67421	0.66583		
	0.64939	0.62307	0.60538				0.66605	7.209

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
33 Freon 11	+++++	2.03908	1.88806	1.94469	1.86978	1.86503		
	1.76682	1.71424	1.65341				1.84264	6.814
34 Dichlorofluoromethane	+++++	+++++	1.56202	1.56160	1.45002	1.50906		
	1.46222	1.40697	1.35915				1.47301	5.188
35 Pentane	+++++	+++++	1.56512	1.57917	1.48190	1.50343		
	1.45505	1.40603	1.37871				1.48134	5.080
36 1-Pentene	+++++	+++++	+++++	0.84456	0.82508	0.86645		
	0.85550	0.84812	0.82750				0.84453	1.896
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
38 Ethyl Ether	+++++	+++++	0.39240	0.37333	0.33203	0.31725		
	0.30985	0.30127	0.29877				0.33213	11.071
39 Ethanol	+++++	+++++	+++++	0.20784	0.16584	0.13654		
	0.13230	0.12826	0.12362				0.14907	21.746
40 Freon 123a	+++++	+++++	+++++	0.98582	0.95494	1.02622		
	0.99781	0.98345	0.95217				0.98340	2.815
41 Freon 123	+++++	+++++	+++++	1.44622	1.42044	1.49355		
	1.45220	1.44145	1.40015				1.44234	2.192

US32TAR1

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Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
42 Acrolein	+++++	+++++	+++++	0.27311	0.23701	0.24881		
	0.24693	0.24379	0.23457				0.24737	5.569
43 Freon 113	+++++	1.46824	1.31921	1.29076	1.21478	1.29651		
	1.19339	1.15481	1.13941				1.25964	8.552
44 1,1-Dichloroethene	+++++	0.99526	0.88651	0.79755	0.71745	0.69929		
	0.67490	0.65436	0.64436				0.75871	16.524
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
47 Acetone	+++++	+++++	+++++	0.51469	0.44425	0.40084		
	0.39639	0.38588	0.37313				0.41920	12.549
48 Carbon Disulfide	+++++	+++++	+++++	2.05775	1.93862	1.90843		
	1.84826	1.80791	1.76509				1.88768	5.551
49 Iodomethane	+++++	+++++	+++++	1.65946	1.28082	1.88529		
	1.79371	1.63354	1.54101				1.63230	12.928
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
52 2-Propanol	+++++	+++++	+++++	1.55257	1.52862	1.55402		
	1.52396	1.47517	1.41118				1.50759	3.661
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
54 3-Chloropropene	+++++	+++++	0.40376	0.34789	0.32210	0.30733		
	0.29846	0.29912	0.29628				0.32499	12.080
55 Cyclopentene	+++++	+++++	+++++	1.54893	1.47899	1.57264		
	1.55307	1.55116	1.50686				1.53527	2.280
56 Methyl Acetate	+++++	+++++	+++++	1.66411	1.65826	1.56879		
	1.56601	1.54169	1.49440				1.58221	4.220
57 Acetonitrile	+++++	+++++	+++++	0.70457	0.66923	0.66054		
	0.65603	0.63131	0.63893				0.66010	3.924
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	1.12275	1.03732	1.01485		
	0.96969	0.94713	0.92775				1.00325	7.126

US32TAR1

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Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	2.06813	1.88426	1.96728	1.85902	1.80438	1.77065	1.89229	5.801
63 Methyl tert-butyl ether	+++++	+++++	2.33752	2.14499	2.05012	2.08189	1.95664	1.88244	1.84330	2.04241	8.286
64 trans-1,2-Dichloroethene	+++++	0.70810	0.61753	0.51542	0.47696	0.45306	0.44165	0.43998	0.43195	0.51058	19.702
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	0.94125	0.68377	0.65726	0.53958	0.52132	0.52644	0.51492	0.51761	0.61277	24.262
67 Hexane	+++++	1.64886	1.36501	1.39813	1.34449	1.35927	1.33134	1.31741	1.31083	1.38442	7.980
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	1.65400	1.53910	1.44790	1.45129	1.40169	1.35543	1.34743	1.31085	1.30599	1.42374	8.056
72 Isopropyl ether	+++++	+++++	+++++	3.03891	2.92537	3.07842	2.89703	2.82512	2.76512	2.92166	4.129
73 Vinyl Acetate	+++++	+++++	+++++	0.20069	0.17412	0.16618	0.17310	0.16880	0.16735	0.17504	7.401
74 Chloroprene	+++++	+++++	+++++	1.32729	1.31878	1.36187	1.37195	1.35051	1.30853	1.33982	1.892
75 1-Propanol	+++++	+++++	+++++	0.27964	0.21494	0.19133	0.18786	0.18713	0.18191	0.20714	18.032
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	3.00888	2.84283	2.90543		
	2.77800	2.71606	2.67248				2.82061	4.423
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	1.41174	1.38403	1.34012	1.35294		
	1.30280	1.25609	1.23673				1.32635	4.871
85 cis-1,2-Dichloroethene	+++++	0.63031	0.57390	0.54892	0.48648	0.45435		
	0.45262	0.45380	0.44869				0.50614	13.731
86 2-Butanone	+++++	+++++	+++++	0.37903	0.37296	0.35087		
	0.34136	0.34189	0.33506				0.35353	5.154

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Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
87 Ethyl Acetate	+++++	+++++	+++++	0.27562	0.29852	0.29822		
	0.29575	0.29213	0.28844				0.29145	2.969
88 Methyl Acrylate	+++++	+++++	+++++	1.66838	1.64750	1.58199		
	1.61233	1.60036	1.55070				1.61021	2.666
89 Tetrahydrofuran	+++++	1.07008	1.00292	1.04787	1.00636	0.97799		
	0.96310	0.95636	0.95055				0.99690	4.384
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
92 Chloroform	1.96521	1.64019	1.50840	1.61041	1.49476	1.50595		
	1.48492	1.45775	1.43932				1.56743	10.414
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
94 Cyclohexane	+++++	1.22023	1.07215	1.01365	0.93034	0.97861		
	0.91761	0.90108	0.89226				0.99074	11.233
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
96 1,1,1-Trichloroethane	2.23129	2.05048	1.81091	1.75915	1.67257	1.67685		
	1.59247	1.55264	1.51015				1.76184	13.567

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Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
97 Carbon Tetrachloride	+++++	1.84434	1.51851	1.59602	1.58811	1.68095		
	1.61629	1.57619	1.56099				1.62268	6.219
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
99 1,1-Dichloropropene	+++++	+++++	0.12119	0.11613	0.11694	0.11346		
	0.11216	0.11077	0.10576				0.11377	4.342
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
101 2,2,4-Trimethylpentane	+++++	4.78156	4.38481	4.33179	4.21293	4.42535		
	4.25264	4.15467	4.09124				4.32938	4.965
102 Benzene	+++++	0.65505	0.59983	0.57117	0.55674	0.56004		
	0.55416	0.54394	0.52302				0.57049	7.116
103 Isobutanol	+++++	+++++	+++++	0.49942	0.37776	0.23624		
	0.22752	0.22265	0.21185				0.29591	39.638 <-
105 tert-Amyl methyl ether	+++++	+++++	+++++	0.15923	0.15616	0.15814		
	0.15062	0.14634	0.14220				0.15212	4.528
106 1,2-Dichloroethane	+++++	0.37902	0.34806	0.33618	0.32981	0.31718		
	0.31483	0.30818	0.29434				0.32845	8.047

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Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD	
	50.000 Level 9	100.000 Level 10	200.000 Level 11						
107 Heptane	+++++	0.33792	0.22403	0.20766	0.20608	0.21729			
	0.20793	0.20256	0.19418				0.22471	20.747	
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
110 n-Butanol	+++++	+++++	+++++	0.18934	0.19071	0.17762			
	0.18239	0.18056	0.17653				0.18286	3.250	
111 Trichloroethene	+++++	0.31117	0.32769	0.29118	0.27710	0.27541			
	0.27509	0.27051	0.26149				0.28620	7.868	
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
113 Ethyl acrylate	+++++	+++++	+++++	0.04509	0.04589	0.03861			
	0.03720	0.03653	0.03639				0.03995	10.936	
114 1,2-Dichloropropane	+++++	0.20680	0.17987	0.15597	0.12037	0.11612			
	0.09207	0.10091	0.08582				0.13224	33.260	<-
115 2-Pentanone	+++++	+++++	+++++	1.11388	1.03670	0.82493			
	0.89586	0.87342	0.86203				0.93447	12.211	
116 Methyl Methacrylate	+++++	+++++	0.29806	0.23701	0.23039	0.23977			
	0.22896	0.22635	0.22363				0.24060	10.793	

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Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
117 1,4-Dioxane	+++++	+++++	0.15020	0.15052	0.14901	0.14603		
	0.14111	0.13926	0.13549				0.14452	4.109
118 Dibromomethane	+++++	0.29449	0.28101	0.26147	0.26360	0.26460		
	0.26313	0.26053	0.25477				0.26795	4.885
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
122 Bromodichloromethane	0.55191	0.57875	0.48462	0.47042	0.45398	0.45550		
	0.44937	0.44453	0.42613				0.47947	10.789
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
126 cis-1,3-Dichloropropene	+++++	0.38484	0.36508	0.35464	0.35120	0.35787		
	0.35615	0.34711	0.33406				0.35637	4.110
127 Methylcyclohexane	+++++	0.49350	0.42088	0.37921	0.35673	0.37356		
	0.35568	0.34798	0.33420				0.38272	13.539
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
131 4-Methyl-2-pentanone	+++++	0.33023	0.25196	0.22701	0.22484	0.23852		
	0.22744	0.22179	0.21673				0.24232	15.340
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
136 Octane	+++++	0.29765	0.26256	0.24020	0.24794	0.26178		
	0.24913	0.24264	0.23554				0.25468	7.792

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
137 Toluene	+++++	0.91701	0.76758	0.75540	0.74698	0.77174		
	0.74467	0.72579	0.69469				0.76548	8.619
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
139 trans-1,3-Dichloropropene	+++++	0.40687	0.37993	0.36744	0.35787	0.37172		
	0.35844	0.35616	0.34723				0.36821	5.063
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
141 1,1,2-Trichloroethane	+++++	0.34720	0.29011	0.27882	0.27255	0.28256		
	0.26991	0.26544	0.25880				0.28317	9.776
142 Tetrachloroethene	+++++	0.43410	0.40731	0.38596	0.38515	0.39520		
	0.37964	0.37852	0.36735				0.39165	5.322
143 2-Hexanone	+++++	+++++	+++++	0.31990	0.32699	0.34401		
	0.32729	0.32069	0.31273				0.32527	3.269
144 1,3-Dichloropropane	+++++	0.41984	0.38640	0.36235	0.35686	0.36795		
	0.35318	0.34457	0.33063				0.36522	7.523
145 Butyl Acetate	+++++	+++++	+++++	0.37428	0.36225	0.32044		
	0.30786	0.30617	0.30638				0.32956	9.311

US32TAR1

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
146 Dibromochloromethane	+++++	0.56921	0.54488	0.53586	0.51292	0.55310		
	0.53597	0.52826	0.51753				0.53722	3.444
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
148 1,2-Dibromoethane (EDB)	+++++	0.48087	0.43657	0.44243	0.43273	0.44944		
	0.43280	0.42753	0.41566				0.43975	4.407
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	0.47903	0.47277	0.46515		
	0.46257	0.45698	0.43971				0.46270	2.956
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
154 Chlorobenzene	0.76910	0.74560	0.72064	0.66663	0.65193	0.68685		
	0.65267	0.63792	0.61813				0.68328	7.526
155 Ethyl Benzene	+++++	0.36451	0.34530	0.34543	0.34070	0.35619		
	0.33501	0.32785	0.31833				0.34167	4.342

US32TAR1

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
156 Nonane	+++++	+++++	0.71920	0.66701	0.64345	0.70654		
	0.66135	0.63353	0.60456				0.66223	6.082
157 1,1,1,2-Tetrachloroethane	+++++	0.44284	0.37328	0.35539	0.34747	0.39755		
	0.37098	0.36365	0.35719				0.37604	8.233
158 m,p-Xylene	+++++	0.48145	0.44650	0.41386	0.40778	0.43652		
	0.41628	0.40382	0.39426				0.42506	6.697
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
160 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
163 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
164 o-Xylene	+++++	0.45314	0.40808	0.39628	0.38390	0.42267		
	0.39648	0.38811	0.37953				0.40353	6.034

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
165 Styrene	+++++	0.76486	0.73265	0.66912	0.66488	0.73099		
	0.69299	0.67552	0.66197				0.69912	5.542
166 2-Heptanone	+++++	+++++	+++++	2.07850	2.02853	1.76276		
	1.72790	1.71667	1.69635				1.83512	9.333
167 Bromoform	+++++	0.55582	0.49485	0.49209	0.48297	0.52943		
	0.51178	0.50891	0.49935				0.50940	4.617
168 Cumene	+++++	1.46347	1.32018	1.25126	1.24254	1.33307		
	1.24859	1.20423	1.14310				1.27581	7.591
169 Cyclohexanone	+++++	+++++	0.49888	0.43341	0.38419	0.39800		
	0.37159	0.36798	0.35640				0.40149	12.398
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
172 D-Limonene	+++++	+++++	+++++	0.41613	0.42102	0.48642		
	0.47452	0.46711	0.46003				0.45421	6.383
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
174 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
175 1,1,2,2-Tetrachloroethane	+++++	0.73988	0.66457	0.63414	0.60752	0.65052		
	0.60387	0.58908	0.57075				0.63254	8.456
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
177 Bromobenzene	+++++	+++++	0.41758	0.39469	0.38831	0.42203		
	0.39264	0.38566	0.37533				0.39660	4.303
178 Propylbenzene	+++++	1.63248	1.52426	1.49879	1.44291	1.59042		
	1.47490	1.41973	1.32553				1.48863	6.526
179 1,2,3-Trichloropropane	+++++	0.21832	0.19260	0.18821	0.18486	0.19859		
	0.18622	0.18030	0.17525				0.19054	6.973
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
181 trans-1,4-Dichloro-2-butene	+++++	+++++	0.17894	0.15447	0.14080	0.15603		
	0.14575	0.14239	0.13704				0.15077	9.452
182 Decane	+++++	+++++	0.82127	0.78301	0.76466	0.82898		
	0.76049	0.73340	0.69627				0.76973	6.087
183 4-Ethyltoluene	+++++	0.44626	0.38352	0.38395	0.37080	0.40565		
	0.37645	0.36551	0.35475				0.38586	7.426

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
184 2-Chlorotoluene	+++++	0.33540	0.32249	0.30729	0.30590	0.33413		
	0.30764	0.30110	0.29427				0.31353	4.882
185 1,3,5-Trimethylbenzene	+++++	0.62236	0.56602	0.52640	0.51744	0.56132		
	0.52664	0.51298	0.50253				0.54196	7.278
186 4-Chlorotoluene	+++++	+++++	+++++	0.33149	0.33329	0.33791		
	0.32580	0.31978	0.31580				0.32734	2.582
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
188 alpha Methyl Styrene	+++++	0.58674	0.55163	0.54458	0.52340	0.59373		
	0.55896	0.54819	0.53323				0.55506	4.393
189 tert-Butylbenzene	+++++	+++++	1.05940	1.01750	0.95902	1.07649		
	0.99956	0.94305	0.92521				0.99718	5.811
190 1,2,4-Trimethylbenzene	+++++	1.23256	1.10654	1.03187	1.02225	1.11861		
	1.04393	1.01613	0.97757				1.06868	7.583
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
192 sec-Butylbenzene	+++++	0.34742	0.34215	0.31549	0.30761	0.33721		
	0.31815	0.30969	0.29897				0.32209	5.541

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
193 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
194 p-Cymene	+++++	1.50554	1.35565	1.31539	1.30460	1.43659		
	1.34323	1.30113	1.22848				1.34882	6.401
195 1,3-Dichlorobenzene	+++++	0.76718	0.73738	0.71502	0.69941	0.76661		
	0.72843	0.70729	0.68717				0.72606	4.088
196 1,4-Dichlorobenzene	+++++	0.81657	0.76389	0.75583	0.71833	0.77930		
	0.73468	0.71905	0.69530				0.74787	5.220
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	0.44184	0.44487	0.46203		
	0.44756	0.44921	0.44673				0.44871	1.559
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
199 alpha-Chlorotoluene	+++++	1.13155	1.00249	1.00181	0.98469	1.08287		
	1.02949	1.01381	0.97942				1.02827	5.134
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
201 Undecane	+++++	+++++	0.98102	0.92723	0.87231	0.95819		
	0.90352	0.87389	0.83312				0.90704	5.743

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
202 Butylbenzene	+++++	0.37762	0.34507	0.35117	0.34380	0.36489		
	0.34524	0.33876	0.33129				0.34973	4.251
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
204 1,2-Dichlorobenzene	+++++	0.74510	0.70537	0.70212	0.67508	0.74275		
	0.69885	0.67872	0.66494				0.70162	4.234
205 Hexachloroethane	+++++	+++++	+++++	0.25073	0.22807	0.31064		
	0.28724	0.28330	0.28360				0.27393	10.765
206 1,2-Dibromo-3-chloropropane	+++++	+++++	+++++	0.41149	0.40289	0.43195		
	0.40756	0.39876	0.38829				0.40682	3.609
207 Dodecane	+++++	0.81660	0.76273	0.77645	0.75742	0.77338		
	0.77451	0.75867	0.71615				0.76699	3.625
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	0.63274	0.64837	0.52413		
	0.58122	0.59822	0.59901				0.59728	7.291
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	0.77525	0.76555	0.81070		
	0.77613	0.76205	0.74860				0.77304	2.717

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	0.52439	0.51233	0.49622	0.51061		
	0.49833	0.48084	0.46566				0.49834	4.016
214 beta-Pinene	+++++	+++++	+++++	0.59511	0.57596	0.65627		
	0.62204	0.60187	0.59120				0.60708	4.679
215 Hexachlorobutadiene	+++++	+++++	0.40609	0.37526	0.37381	0.39489		
	0.37593	0.36008	0.34901				0.37644	5.142
216 Naphthalene	+++++	+++++	1.91443	1.85945	1.72125	1.33565		
	1.31107	1.27329	1.23705				1.52174	19.528
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	0.49108	0.47734	0.45571	0.46004		
	0.45065	0.43868	0.41862				0.45602	5.242
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
225 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
228 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 234 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
238 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
239 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
240 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
241 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
242 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
243 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
244 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
245 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
246 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
247 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
248 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
249 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
250 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2 / 50.000 Level 9	0.40000 Level 3 / 100.000 Level 10	0.80000 Level 5 / 200.000 Level 11	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
256 C8 - C9 Hydrocarbons	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref C5 + C6	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref Heptane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref Decane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref Dodecan	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,2,3-TMB	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++

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Start Cal Date : 22-JUN-2021 15:51
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
266 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
267 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 104 1,2-Dichloroethane-d4	1.39594	1.39931	1.39591	1.38860	1.38809	1.39744		
	1.36655	1.34902	1.30112				1.37578	2.373
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 134 Toluene-d8	1.02949	1.03423	1.02563	1.02620	1.03253	1.03211		
	1.03424	1.03707	1.01586				1.02971	0.623
$ 170 4-Bromofluorobenzene	0.65667	0.65828	0.66384	0.65372	0.65403	0.66471		
	0.66865	0.67027	0.66119				0.66126	0.916

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INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdp.i/19MAY21.b/p051914.d
Level 3: /chem/msdp.i/19MAY21.b/p051915.d
Level 4: /chem/msdp.i/19MAY21.b/p051916.d
Level 5: /chem/msdp.i/19MAY21.b/p051917.d
Level 6: /chem/msdp.i/19MAY21.b/p051918.d
Level 7: /chem/msdp.i/19MAY21.b/p051919.d
Level 8: /chem/msdp.i/19MAY21.b/p051920.d
Level 9: /chem/msdp.i/19MAY21.b/p051921.d
Level 10: /chem/msdp.i/19MAY21.b/p051924.d

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	0.64347	0.55833	0.28699	0.48663	0.54132	0.53859	0.32618	+++++		0.48307	26.850
4 Freon 134a	+++++	0.77011	0.84089	0.78129	0.71828	0.77669	0.83041	0.82114	+++++		0.79126	5.405
5 Propylene	+++++	+++++	1.30044	1.16437	0.97808	1.08818	1.14258	1.19048	+++++		1.14402	9.390

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Quant Method : ISTD
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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
6 Propane	0.35885	0.70755	0.41224	0.45766	0.35651	0.39030		
	0.42780	0.42956	+++++				0.44256	25.464
7 1,1-Difluoroethane	+++++	+++++	0.71318	0.51293	0.51356	0.55570		
	0.58422	0.52044	+++++				0.56667	13.609
8 Freon 12	+++++	1.89452	2.25684	2.41287	1.98305	2.23908		
	2.37709	2.51953	2.25486				2.24223	9.426
9 Chlorodifluoromethane	+++++	0.19040	0.21703	0.22854	0.20953	0.22781		
	0.23846	0.23864	+++++				0.22149	7.823
10 Freon 114	+++++	2.19697	2.35022	2.42550	1.98865	2.15848		
	2.32315	2.38505	1.78003				2.20100	10.095
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
12 Isobutane	+++++	+++++	2.94068	2.70679	2.13532	2.31544		
	2.47976	2.61851	+++++				2.53275	11.334
13 Freon 142b	2.88379	2.72504	2.51717	2.51995	1.92155	2.20295		
	2.38394	2.38895	+++++				2.44292	12.194
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
15 Chloromethane	+++++	+++++	1.62633	1.12803	1.35456	1.40983		
	1.30365	0.98253	+++++				1.30082	17.255
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
18 Butane	+++++	+++++	0.36632	0.35071	0.20777	0.23711		
	0.29558	0.35050	+++++				0.30133	22.008
19 Vinyl Chloride	+++++	1.63750	1.79369	1.70399	1.29644	1.43002		
	1.50248	1.58819	1.56702				1.56492	10.007
20 1,3-Butadiene	+++++	1.15962	1.11125	1.12135	1.33604	1.33164		
	1.39178	1.46398	1.15352				1.25865	10.936
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
24 Bromomethane	+++++	+++++	1.20010	1.20656	0.84526	0.89756		
	0.93585	0.95210	+++++				1.00624	15.607
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
30 Chloroethane	+++++	+++++	0.55246	0.65854	0.47089	0.52675		
	0.57230	0.59544	+++++				0.56273	11.288
31 Isopentane	+++++	+++++	1.67935	1.76478	1.70699	1.64818		
	1.70298	1.77148	+++++				1.71230	2.809
32 Vinyl Bromide	+++++	0.89521	1.00012	0.99635	0.80298	0.86636		
	0.95282	0.99672	+++++				0.93008	8.292

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
33 Freon 11	+++++	2.37298	2.30540	2.51055	2.23314	2.30111		
	2.43347	2.54911	2.35618				2.38274	4.554
34 Dichlorofluoromethane	+++++	2.10328	2.06570	2.13311	1.73001	1.97932		
	2.12384	2.24043	+++++				2.05367	7.927
35 Pentane	+++++	2.89800	2.83104	2.84872	2.63186	2.68332		
	2.75389	2.83565	+++++				2.78321	3.479
36 1-Pentene	2.06121	1.59213	1.56421	1.63474	1.37543	1.48214		
	1.53709	1.54332	+++++				1.59878	12.659
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
38 Ethyl Ether	+++++	0.41543	0.47730	0.50593	0.42858	0.46228		
	0.48772	0.50964	+++++				0.46955	7.767
39 Ethanol	+++++	+++++	0.27474	0.25602	0.21630	0.23850		
	0.24473	0.25725	+++++				0.24792	8.009
40 Freon 123a	1.67643	1.70260	1.56653	1.71267	1.35347	1.42708		
	1.48357	1.59067	+++++				1.56413	8.516
41 Freon 123	2.23549	2.28998	2.32261	2.22470	2.10291	2.12379		
	2.22936	2.25042	+++++				2.22241	3.385

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD	
	100.000 Level 8	200.000 Level 9	0.50000 Level 10						
42 Acrolein	+++++	+++++	0.43742	0.46343	0.37582	0.40776			
	0.43668	0.46010	+++++				0.43020	7.747	
43 Freon 113	+++++	1.66116	1.75764	1.84846	1.81076	1.72301			
	1.78692	1.85367	1.72082				1.77031	3.803	
44 1,1-Dichloroethene	+++++	1.13047	0.98158	1.08462	0.90481	0.98246			
	1.04403	1.08444	1.24812				1.05757	9.982	
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
47 Acetone	+++++	+++++	0.71912	0.66713	0.55646	0.62462			
	0.66710	0.69799	+++++				0.65540	8.867	
48 Carbon Disulfide	+++++	+++++	2.82595	2.99407	2.45111	2.66619			
	2.81912	2.96077	+++++				2.78620	7.233	
49 Iodomethane	+++++	+++++	1.13057	1.12578	1.89275	2.20331			
	2.35282	2.40768	+++++				1.85215	31.782	<-
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
52 2-Propanol	+++++	+++++	2.69785	2.66069	2.37669	2.59218		
	2.71904	2.80241	+++++				2.64148	5.564
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
54 3-Chloropropene	+++++	0.46426	0.51422	0.48997	0.39775	0.44877		
	0.47843	0.46484	+++++				0.46546	7.851
55 Cyclopentene	2.17715	2.47822	2.46632	2.56699	2.14041	2.34707		
	2.46346	2.49030	+++++				2.39124	6.514
56 Methyl Acetate	2.75833	2.64156	2.95164	2.98908	2.39164	2.73802		
	2.95740	2.94353	+++++				2.79640	7.421
57 Acetonitrile	+++++	+++++	1.17773	1.29138	1.02662	1.19401		
	1.30642	1.39067	+++++				1.23114	10.326
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
59 Methylene Chloride	+++++	+++++	1.66058	1.84335	1.45839	1.64567		
	1.75730	1.84887	+++++				1.70236	8.667

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
61 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	3.20065	3.30496	2.90583	2.89744	3.04086	3.13252	+++++	3.08038	5.297
63 Methyl tert-butyl ether	+++++	3.20233	3.03539	3.11282	3.04059	2.95544	3.02504	3.11966	+++++	3.07018	2.627
64 trans-1,2-Dichloroethene	+++++	0.70368	0.71795	0.72086	0.61472	0.66913	0.70892	0.74337	0.77451	0.70664	6.798
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
66 Acrylonitrile	+++++	1.08486	1.02749	1.03009	0.83743	0.92318	0.97672	1.03119	0.95852	0.98368	7.902
67 Hexane	+++++	2.36995	2.44383	2.55815	2.23183	2.38896	2.51048	2.60764	2.59146	2.46279	5.242
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
71 1,1-Dichloroethane	+++++	2.12050	2.15298	2.31268	1.88443	2.09213		
	2.23176	2.32442	1.81878				2.11721	8.735
72 Isopropyl ether	+++++	+++++	5.59896	5.72998	5.66571	5.66877		
	5.76012	5.94316	+++++				5.72778	2.086
73 Vinyl Acetate	+++++	+++++	0.27670	0.27644	0.22773	0.26524		
	0.28486	0.30161	+++++				0.27210	9.135
74 Chloroprene	2.14359	2.03061	2.29463	2.44863	1.90092	2.21243		
	2.40069	2.43763	+++++				2.23364	8.953
75 1-Propanol	0.34779	0.37288	0.37461	0.33474	0.25627	0.30465		
	0.32597	0.32511	+++++				0.33025	11.608
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	4.83620	5.05574	4.88798	4.89187		
	4.97055	5.10638	+++++				4.95812	2.131
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
84 2,2-Dichloropropane	+++++	1.77964	1.81997	1.87272	1.91022	1.85607		
	1.92796	1.99401	+++++				1.88008	3.793
85 cis-1,2-Dichloroethene	+++++	0.63006	0.72053	0.77116	0.61241	0.72577		
	0.77548	0.80235	0.82883				0.73332	10.638
86 2-Butanone	+++++	+++++	0.58624	0.61354	0.46455	0.53642		
	0.58432	0.60531	+++++				0.56506	9.921

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
87 Ethyl Acetate	+++++	+++++	0.57084	0.59355	0.47870	0.54564		
	0.57818	0.60540	+++++				0.56205	8.124
88 Methyl Acrylate	3.17133	2.76269	2.95610	3.12287	2.41468	2.81782		
	3.08995	3.13777	+++++				2.93415	8.839
89 Tetrahydrofuran	+++++	1.93446	1.95308	2.03673	1.59091	1.83806		
	1.94537	2.03649	1.69916				1.87928	8.525
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
92 Chloroform	+++++	2.04196	2.15806	2.35426	1.86695	2.17101		
	2.31664	2.42886	2.06383				2.17519	8.546
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
94 Cyclohexane	+++++	1.43367	1.50722	1.58410	1.57245	1.53317		
	1.54570	1.61103	1.79345				1.57260	6.636
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
96 1,1,1-Trichloroethane	+++++	2.46156	2.42553	2.48444	2.36393	2.36921		
	2.42958	2.51331	2.61099				2.45732	3.291

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
97 Carbon Tetrachloride	+++++	2.25147	2.24440	2.22561	2.35635	2.31498		
	2.45306	2.54156	2.05010				2.30469	6.528
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
99 1,1-Dichloropropene	+++++	0.17378	0.17794	0.17658	0.15112	0.16544		
	0.17360	0.17276	+++++				0.17017	5.462
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
101 2,2,4-Trimethylpentane	+++++	8.25963	8.27890	8.75173	8.57253	8.58971		
	8.69563	8.91957	8.41247				8.56002	2.709
102 Benzene	+++++	0.78550	0.87685	0.84553	0.74484	0.82677		
	0.84553	0.84637	0.82851				0.82499	5.017
103 Isobutanol	0.54457	0.28827	0.32257	0.35375	0.28589	0.33052		
	0.36043	0.34600	+++++				0.35400	23.128
105 tert-Amyl methyl ether	+++++	+++++	0.24796	0.22661	0.23645	0.23382		
	0.22848	0.22244	+++++				0.23262	3.884
106 1,2-Dichloroethane	+++++	0.41345	0.44525	0.47019	0.38312	0.44057		
	0.45058	0.44750	0.38354				0.42928	7.531

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
107 Heptane	+++++	0.30034	0.32485	0.33244	0.32365	0.33156		
	0.32821	0.32372	0.34983				0.32683	4.186
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
110 n-Butanol	+++++	+++++	0.28572	0.30596	0.28104	0.30551		
	0.31292	0.30849	+++++				0.29994	4.393
111 Trichloroethene	+++++	0.38664	0.41237	0.41315	0.35498	0.40036		
	0.41626	0.41270	0.40610				0.40032	5.166
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
113 Ethyl acrylate	0.05846	0.06007	0.06293	0.05929	0.05058	0.05740		
	0.05605	0.05682	+++++				0.05770	6.225
114 1,2-Dichloropropane	+++++	0.43979	0.42737	0.42567	0.39065	0.41185		
	0.42060	0.42118	0.44647				0.42295	4.035
115 2-Pentanone	1.21904	1.27106	1.31222	1.33128	1.17591	1.27524		
	1.28236	1.28701	+++++				1.26926	3.934
116 Methyl Methacrylate	+++++	0.35343	0.34137	0.34552	0.32431	0.34108		
	0.34921	0.34961	+++++				0.34351	2.790

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
117 1,4-Dioxane	+++++	0.22595	0.23899	0.23631	0.21158	0.22036		
	0.22028	0.21996	+++++				0.22478	4.349
118 Dibromomethane	+++++	0.34506	0.39714	0.39205	0.34241	0.37852		
	0.39319	0.38886	0.33065				0.37098	7.285
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
122 Bromodichloromethane	+++++	0.58233	0.63649	0.64840	0.58270	0.62912		
	0.65408	0.65615	0.57631				0.62070	5.563
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
126 cis-1,3-Dichloropropene	+++++	0.50516	0.52561	0.54285	0.48751	0.51912		
	0.54679	0.54891	0.51913				0.52438	4.097
127 Methylcyclohexane	+++++	0.61465	0.55349	0.55932	0.59377	0.58677		
	0.57314	0.56161	0.59163				0.57930	3.623
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
131 4-Methyl-2-pentanone	+++++	0.44567	0.41535	0.42739	0.42024	0.41445		
	0.41323	0.40846	0.49125				0.42950	6.406
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
136 Octane	+++++	0.49928	0.45400	0.47320	0.49988	0.47864		
	0.47697	0.47146	0.52912				0.48532	4.775

US32TAR1

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
137 Toluene	+++++	1.17435	1.15077	1.15598	1.08690	1.13273		
	1.13471	1.13158	1.13864				1.13821	2.227
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
139 trans-1,3-Dichloropropene	+++++	0.47393	0.50610	0.49304	0.46856	0.50673		
	0.51882	0.51939	0.44922				0.49197	5.206
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
141 1,1,2-Trichloroethane	+++++	0.39429	0.40170	0.39839	0.38144	0.40439		
	0.41066	0.41457	0.44769				0.40664	4.784
142 Tetrachloroethene	+++++	0.60799	0.58444	0.57342	0.55590	0.57612		
	0.57841	0.58067	0.50122				0.56977	5.476
143 2-Hexanone	+++++	+++++	0.57709	0.59101	0.58032	0.57999		
	0.57982	0.57760	+++++				0.58097	0.877
144 1,3-Dichloropropane	+++++	0.50031	0.56980	0.56359	0.52057	0.55649		
	0.56248	0.55833	0.49258				0.54052	5.748
145 Butyl Acetate	0.62964	0.65442	0.64029	0.63612	0.60754	0.62559		
	0.62661	0.61750	+++++				0.62971	2.270

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
146 Dibromochloromethane	+++++	0.78306	0.76265	0.73963	0.72881	0.77388		
	0.79214	0.79892	0.69915				0.75978	4.551
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
148 1,2-Dibromoethane (EDB)	+++++	0.66728	0.66954	0.65728	0.60433	0.66080		
	0.67392	0.67207	0.61234				0.65220	4.249
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	0.78697	0.80160	0.70538	0.77001		
	0.79910	0.79313	+++++				0.77603	4.691
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
154 Chlorobenzene	+++++	0.98039	1.00297	1.00615	0.95318	0.98786		
	1.00429	1.00931	0.99753				0.99271	1.887
155 Ethyl Benzene	+++++	0.54541	0.51726	0.50090	0.51483	0.52055		
	0.51499	0.51317	0.52561				0.51909	2.460

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
156 Nonane	+++++	1.38941	1.32633	1.28604	1.42437	1.31837		
	1.30797	1.29642	+++++				1.33556	3.856
157 1,1,1,2-Tetrachloroethane	0.61281	0.53381	0.51050	0.53112	0.56741	0.57195		
	0.55638	0.56243	+++++				0.55580	5.622
158 m,p-Xylene	+++++	0.67481	0.63902	0.63767	0.64445	0.64388		
	0.63345	0.63344	0.69432				0.65013	3.424
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
160 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
163 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
164 o-Xylene	+++++	0.62320	0.64348	0.61211	0.64029	0.61923		
	0.61359	0.61455	0.61674				0.62290	1.967

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
165 Styrene	+++++	1.11525	1.07016	1.03759	1.05319	1.04745		
	1.04414	1.04408	1.11034				1.06528	2.899
166 2-Heptanone	3.67167	3.65906	3.63687	3.79847	3.47203	3.63504		
	3.74717	3.74578	+++++				3.67076	2.721
167 Bromoform	+++++	0.73776	0.73139	0.72964	0.73975	0.76576		
	0.77834	0.78519	0.72346				0.74891	3.192
168 Cumene	+++++	2.00688	1.92184	1.93874	2.01036	1.95640		
	1.93477	1.91851	1.96634				1.95673	1.829
169 Cyclohexanone	+++++	0.76224	0.72554	0.66914	0.71016	0.68589		
	0.67623	0.66926	+++++				0.69978	4.981
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
172 D-Limonene	0.41095	0.35482	0.36589	0.34451	0.78397	0.78575		
	0.74309	0.72747	+++++				0.56456	37.333 <-
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
174 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
175 1,1,2,2-Tetrachloroethane	+++++	0.98352	0.94583	0.93628	0.96719	0.95406		
	0.94385	0.94078	0.96890				0.95505	1.733
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
177 Bromobenzene	+++++	0.57508	0.60639	0.58293	0.59010	0.60294		
	0.60418	0.60421	+++++				0.59512	2.090
178 Propylbenzene	+++++	0.60804	0.57139	0.56757	0.59410	0.57645		
	0.57084	0.56325	0.58989				0.58019	2.677
179 1,2,3-Trichloropropane	+++++	0.31533	0.32131	0.28626	0.30096	0.29557		
	0.29066	0.28564	0.33945				0.30440	6.324
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
181 trans-1,4-Dichloro-2-butene	+++++	0.19277	0.21017	0.19835	0.19195	0.20110		
	0.20192	0.20059	+++++				0.19955	3.082
182 Decane	+++++	1.79609	1.57143	1.44505	1.61070	1.49654		
	1.37373	1.36070	+++++				1.52203	10.036
183 4-Ethyltoluene	+++++	0.65033	0.64054	0.60196	0.63791	0.61418		
	0.60505	0.58832	0.70940				0.63096	6.073

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
184 2-Chlorotoluene	+++++	0.49984	0.49658	0.48311	0.50814	0.48663		
	0.47710	0.47426	0.52646				0.49401	3.541
185 1,3,5-Trimethylbenzene	+++++	0.88840	0.83919	0.85191	0.89900	0.86876		
	0.85974	0.86328	0.87938				0.86871	2.254
186 4-Chlorotoluene	0.50588	0.49708	0.52780	0.52855	0.50077	0.52139		
	0.50962	0.50476	+++++				0.51198	2.399
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
188 alpha Methyl Styrene	+++++	0.86535	0.87923	0.83462	0.89343	0.87794		
	0.86963	0.86867	0.81509				0.86300	2.969
189 tert-Butylbenzene	+++++	1.62733	1.62633	1.57945	1.65095	1.62250		
	1.63890	1.62816	+++++				1.62480	1.368
190 1,2,4-Trimethylbenzene	+++++	1.70877	1.62174	1.59089	1.69054	1.63659		
	1.62056	1.60514	1.64323				1.63968	2.487
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
192 sec-Butylbenzene	+++++	0.49560	0.50610	0.49423	0.52391	0.50675		
	0.50351	0.50154	0.50833				0.50500	1.821

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
193 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
194 p-Cymene	+++++	2.30462	2.16921	2.12863	2.30933	2.22972		
	2.20755	2.18683	2.32036				2.23203	3.228
195 1,3-Dichlorobenzene	+++++	1.15658	1.15643	1.11720	1.11291	1.12849		
	1.10749	1.10683	1.09255				1.12231	2.086
196 1,4-Dichlorobenzene	+++++	1.16982	1.13485	1.12938	1.10992	1.14109		
	1.13566	1.13005	1.12236				1.13414	1.523
197 1,2,3-Trimethylbenzene	0.74930	0.74831	0.73294	0.73383	0.76340	0.76689		
	0.73531	0.73354	+++++				0.74544	1.857
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
199 alpha-Chlorotoluene	+++++	1.51181	1.54888	1.53627	1.57168	1.58619		
	1.58130	1.57052	1.55269				1.55742	1.609
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
201 Undecane	+++++	1.88866	1.82307	1.77843	1.79835	1.77435		
	1.69116	1.55266	+++++				1.75810	6.155

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
202 Butylbenzene	+++++	0.58573	0.58249	0.55423	0.58167	0.56357		
	0.53997	0.53683	0.59066				0.56690	3.760
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
204 1,2-Dichlorobenzene	+++++	1.10407	1.12539	1.09831	1.11450	1.09041		
	1.07307	1.07027	1.12778				1.10047	1.987
205 Hexachloroethane	0.25905	0.24933	0.20237	0.17807	0.37549	0.37170		
	0.35119	0.35730	+++++				0.29306	27.359
206 1,2-Dibromo-3-chloropropane	+++++	+++++	0.65994	0.64226	0.67551	0.68086		
	0.67149	0.66910	+++++				0.66653	2.068
207 Dodecane	+++++	1.08884	1.29307	1.39322	1.32012	1.47555		
	1.50880	1.50906	1.55944				1.39351	11.157
208 1,3,5-Trichlorobenzene	1.03535	1.05171	1.06253	1.06764	0.99487	1.06875		
	1.05551	1.04770	+++++				1.04801	2.304
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
210 alpha-Pinene	0.88866	0.92999	0.95994	0.95225	1.08022	1.15606		
	1.13931	1.16647	+++++				1.03411	10.952

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD	
	100.000 Level 8	200.000 Level 9	0.50000 Level 10						
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
213 1,2,4-Trichlorobenzene	+++++	0.73365	0.82349	0.83826	0.78299	0.83257			
	0.83665	0.84391	+++++				0.81307	4.981	
214 beta-Pinene	0.45942	0.49034	0.48541	0.49081	0.86434	0.92317			
	0.87191	0.83101	+++++				0.67705	31.130	<-
215 Hexachlorobutadiene	+++++	0.49305	0.57072	0.57784	0.56417	0.59160			
	0.59973	0.60841	+++++				0.57222	6.696	
216 Naphthalene	+++++	2.17464	2.22406	2.02701	1.91757	2.04984			
	2.05935	2.09326	+++++				2.07796	4.828	
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
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Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	0.63662	0.72700	0.71965	0.68156	0.74340	0.75801	0.76517	+++++	0.71877	6.351
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
225 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
228 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

US32TAR1

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Start Cal Date : 19-MAY-2021 14:02
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Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 234 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
238 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
247 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

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Start Cal Date : 19-MAY-2021 14:02
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
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Quant Method : ISTD
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Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
266 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
267 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 104 1,2-Dichloroethane-d4	+++++	1.29421	1.33794	1.42747	1.32413	1.34572		
	1.44423	1.55619	1.30758				1.37968	6.488
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 134 Toluene-d8	+++++	1.07349	1.09274	1.09966	1.07597	1.08471		
	1.09026	1.08938	1.07858				1.08560	0.834
$ 170 4-Bromofluorobenzene	+++++	0.64219	0.64090	0.63876	0.63357	0.63698		
	0.64598	0.65756	0.63983				0.64197	1.133

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Average %RSD Results.
Calculated Average %RSD = 7.06874
Maximun Average %RSD = 30.00000
* Passed Average %RSD Test.

Report Date: 23-Jun-2021 12:05

Calibration History

Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Start Cal Date: 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.30000		
22-JUN-2021 20:28	AT20_Level2	/chem/msd3.i/22JUN21.b/3062215.d
Cal Level: 3 , Cal Amount: 0.40000		
22-JUN-2021 20:55	AT20_Level3	/chem/msd3.i/22JUN21.b/3062216.d
22-JUN-2021 15:51	AT20spICAL_lv3	/chem/msd3.i/22JUN21.b/3062205.d
Cal Level: 5 , Cal Amount: 0.80000		
22-JUN-2021 21:22	AT20_Level5	/chem/msd3.i/22JUN21.b/3062217.d
22-JUN-2021 16:17	AT20spICAL_lv3	/chem/msd3.i/22JUN21.b/3062206.d
Cal Level: 6 , Cal Amount: 2.00000		
22-JUN-2021 21:49	AT20ICAL	/chem/msd3.i/22JUN21.b/3062218.d
22-JUN-2021 16:44	AT20spICAL	/chem/msd3.i/22JUN21.b/3062207.d
Cal Level: 7 , Cal Amount: 5.00000		
22-JUN-2021 22:18	AT20ICAL	/chem/msd3.i/22JUN21.b/3062219.d
22-JUN-2021 17:13	AT20spICAL	/chem/msd3.i/22JUN21.b/3062208.d
Cal Level: 8 , Cal Amount: 20.00000		
22-JUN-2021 22:44	AT20ICAL	/chem/msd3.i/22JUN21.b/3062220.d
22-JUN-2021 17:39	AT20spICAL	/chem/msd3.i/22JUN21.b/3062209.d
Cal Level: 9 , Cal Amount: 50.00000		
22-JUN-2021 23:12	AT20ICAL	/chem/msd3.i/22JUN21.b/3062221.d
22-JUN-2021 18:07	AT20spICAL	/chem/msd3.i/22JUN21.b/3062210.d

Cal Level: 10, Cal Amount: 100.00000		
22-JUN-2021 23:39	AT20ICAL	/chem/msd3.i/22JUN21.b/3062222.d
22-JUN-2021 18:34	AT20spICAL	/chem/msd3.i/22JUN21.b/3062211.d

Cal Level: 11, Cal Amount: 200.00000		
23-JUN-2021 00:09	AT20ICAL	/chem/msd3.i/22JUN21.b/3062223.d
22-JUN-2021 19:03	AT20spICAL	/chem/msd3.i/22JUN21.b/3062212.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 9

Ccal Level: 9 , Ccal Amount: 50.000		
22-JUN-2021 23:12	AT20ICAL	/chem/msd3.i/22JUN21.b/3062221.d

Ccal Level: 9 , Ccal Amount: 50.000		
22-JUN-2021 18:07	AT20spICAL	/chem/msd3.i/22JUN21.b/3062210.d

Report Date: 20-May-2021 11:06

Calibration History

Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Start Cal Date: 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.40000		
19-MAY-2021 19:17	AT20spICAL	/chem/msdp.i/19MAY21.b/p051914.d
Cal Level: 3 , Cal Amount: 0.80000		
19-MAY-2021 19:45	AT20spICAL	/chem/msdp.i/19MAY21.b/p051915.d
19-MAY-2021 14:02	AT20_Level3	/chem/msdp.i/19MAY21.b/p051904.d
Cal Level: 4 , Cal Amount: 2.00000		
19-MAY-2021 20:13	AT20spICAL	/chem/msdp.i/19MAY21.b/p051916.d
19-MAY-2021 14:30	AT20ICAL	/chem/msdp.i/19MAY21.b/p051905.d
Cal Level: 5 , Cal Amount: 5.00000		
19-MAY-2021 20:43	AT20spICAL	/chem/msdp.i/19MAY21.b/p051917.d
19-MAY-2021 15:00	AT20ICAL	/chem/msdp.i/19MAY21.b/p051906.d
Cal Level: 6 , Cal Amount: 20.00000		
19-MAY-2021 21:10	AT20spICAL	/chem/msdp.i/19MAY21.b/p051918.d
19-MAY-2021 15:27	AT20ICAL	/chem/msdp.i/19MAY21.b/p051907.d
Cal Level: 7 , Cal Amount: 50.00000		
19-MAY-2021 21:38	AT20spICAL	/chem/msdp.i/19MAY21.b/p051919.d
19-MAY-2021 15:55	AT20ICAL	/chem/msdp.i/19MAY21.b/p051908.d
Cal Level: 8 , Cal Amount: 100.00000		
19-MAY-2021 22:07	AT20spICAL	/chem/msdp.i/19MAY21.b/p051920.d
19-MAY-2021 16:24	AT20ICAL	/chem/msdp.i/19MAY21.b/p051909.d

Cal Level: 9 , Cal Amount: 200.00000		
19-MAY-2021 22:39	AT20spICAL	/chem/msdp.i/19MAY21.b/p051921.d
19-MAY-2021 16:53	AT20ICAL	/chem/msdp.i/19MAY21.b/p051910.d

Cal Level: 10, Cal Amount: 0.50000		
20-MAY-2021 00:05	AT20_Level2	/chem/msdp.i/19MAY21.b/p051924.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 7

Ccal Level: 7 , Ccal Amount: 50.000		
19-MAY-2021 15:55	AT20ICAL	/chem/msdp.i/19MAY21.b/p051908.d
Ccal Level: 7 , Ccal Amount: 50.000		
19-MAY-2021 21:38	AT20spICAL	/chem/msdp.i/19MAY21.b/p051919.d

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Please see Calibration History page(s) for all the calibration files.

UP 6/23/21

Calibration File Names:
Level 2: /chem/msd3.i/22JUN21.b/3062215.d
Level 3: /chem/msd3.i/22JUN21.b/3062216.d
Level 5: /chem/msd3.i/22JUN21.b/3062217.d
Level 6: /chem/msd3.i/22JUN21.b/3062218.d
Level 7: /chem/msd3.i/22JUN21.b/3062219.d
Level 8: /chem/msd3.i/22JUN21.b/3062220.d
Level 9: /chem/msd3.i/22JUN21.b/3062221.d
Level 10: /chem/msd3.i/22JUN21.b/3062222.d
Level 11: /chem/msd3.i/22JUN21.b/3062223.d

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Freon 143a	+++++	+++++	+++++	0.39291	0.44265	0.44864		
	0.42230	0.41716	0.38549				0.41819	6.098
4 Freon 134a	+++++	+++++	0.63865	0.60478	0.59997	0.61448		
	0.58371	0.56637	0.55610				0.59487	4.787
5 Propylene	+++++	+++++	+++++	0.65170	0.58539	0.61293		
	0.60477	0.58759	0.58081				0.60387	4.387

Initial Calibration Narrative
321Q0622A.m

A multi-point TO-15 initial calibration was analyzed on MSD-3 on 06/22/2021.

ICAL: 1 out. 1,2-Dichloropropane @ 33.26%
Naph: 19.528%RSD.

ICV: 1 out. Trans-1,4-dichloro-2-butene @ 132.92%. File: 3062226.
Naph Recovery: 76.92%R.
DOD QSM: 1 out. Trans-1,4-dichloro-2-butene @ 132.92%. File: 3062226a.
RCP: 3 Non RCP compounds out: See file 3062226c.
DODsp (PID 23339): 1 out. Trans-1,4-dichloro-2-butene @ 132.92%. File: 3062226d.

The concentrations for Ethanol, Acrolein, 1,2,4-Trichlorobenzene, Naphthalene, 1,2,3-Trichlorobenzene, and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

An 8-point ICAL for AT20 supplemental compounds was analyzed on MSD on 06/22/2021.

ICAL: 1 out. Isobutanol @ 39.638%

NO ICV for AT20 supplemental compounds except 1,1,1,2-Tetrachloroethane.

The low point spike verification file is 3062216x for BTEXS.

The concentrations for Dodecane, 1,2,4-TCB, Hexachlorobutadiene, 1,2,3-TCB, and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.

-Dodecane was curved at 0.4944ppbv→ 247.2ppbv.
-1,2,4-TCB was curved at 1.0072ppbv→251.8ppbv
-Hexachlorobutadiene was curved at 1.0296ppbv→257.4ppbv
-1,2,3-TCB was curved at 1.0648ppbv→266.2ppbv
-Naphthalene was curved at 0.10160ppbv →25.4ppbv*

*The secondary mass ion peak, 127amu, for Naphthalene shows baseline interference at the special reporting limit of 0.05ppbv. Identification of Naphthalene is however reliable at the lowest concentrations based on the presence and abundance ratio of the primary ion. The spectrum of Naphthalene in this ICAL point will be used as the reference to determine the ion ratio target in the samples for this ICAL.

The following compounds were calibrated down to 0.3ppbv:

1,1-Dichloroethane	Chloroform	1,1,1-Trichloroethane
Bromodichloroethane	Chlorobenzene	

BFB tune file:
1. 3062204.

The AT20MDL Expires 6/8/22.

The MDL for 1,1,1,2-PCE expires 05/05/22.

MSD3

							Method TO-15/TO-14					
BFB Tune Verification: (321984/343552) * 100 =93.72%							SOP# 6					
	3234-42	Exp. Date:	9/22/2021			Vacuum:	NA					
BCM	243405			Surrogate # 3234-42		Exp Date:	9/22/2021				Exp Date	
1,4-DFB	874076			CCV	3018-2115	Exp Date:	9/21/2021	LCS	3018-2121		Exp Date	9/22/2021
CB-d5	831223			CCV SP 1 #	3018-2116	Exp Date:	9/21/2021	LCS Sp #1	NA		Exp Date	NA
				CCV SP 2 #	3018-2078	Exp Date:	8/4/2021	LCS Sp #2	NA		Exp Date	NA
				CCV SP 3#	3018-2013	Exp Date:	8/4/2021	LCS Sp #3	NA		Exp Date	NA
Verified CCV vs. ICAL midpoint (-40%): LD				CCV SP 4#	NA	Exp Date:	NA					
Method: 321q0622a.m												

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init.	Date Analyzed	Time	Review Init	Comments
√	3062204	BFB Tune Check	3234-42	3	36ng	200mL	1.00	LD	LD	06/22/21	1428	LD	Exp. 9/22/21
√	3062205	ICAL Level 3	3018-2078	4	0.4ppbv (5.0ppbv)	16mL	1.00	LD	LD	06/22/21	1551	LD	Exp. 8/04/21
√	3062206	ICAL Level 5	3018-2078	4	0.8ppbv (5.0ppbv)	32mL	1.00	LD	LD	06/22/21	1617	LD	
√	3062207	ICAL Level 6	3018-2078	4	2.0ppbv (5.0ppbv)	80mL	1.00	LD	LD	06/22/21	1644	LD	
√	3062208	ICAL Level 7	3018-2078	4	5.0ppbv (5.0ppbv)	200mL	1.00	LD	LD	06/22/21	1713	LD	
√	3062209	ICAL Level 8	3018-2013	5	20ppbv (200ppbv)	20mL	1.00	LD	LD	06/22/21	1739	LD	Exp. 8/04/21
√	3062210	ICAL Level 9	3018-2013	5	50ppbv (200ppbv)	50mL	1.00	LD	LD	06/22/21	1807	LD	
√	3062211	ICAL Level 10	3018-2013	5	100ppbv (200ppbv)	100mL	1.00	LD	LD	06/22/21	1834	LD	
√	3062212	ICAL Level 11	3018-2013	5	200ppbv (200ppbv)	200mL	1.00	LD	LD	06/22/21	1903	LD	
√	3062213	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/22/21	1932	LD	
√	3062214	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/22/21	2001	LD	
√	3062215	ICAL Level 2	3018-2116	1	0.3ppbv (5.0ppbv)	12mL	1.00	LD	LD	06/22/21	2028	LD	Exp. 9/21/21
√	3062216	ICAL Level 3	3018-2116	1	0.4ppbv (5.0ppbv)	16mL	1.00	LD	LD	06/22/21	2055	LD	
√	3062217	ICAL Level 5	3018-2116	1	0.8ppbv (5.0ppbv)	32mL	1.00	LD	LD	06/22/21	2122	LD	
√	3062218	ICAL Level 6	3018-2116	1	2.0ppbv (5.0ppbv)	80mL	1.00	LD	LD	06/22/21	2149	LD	
√	3062219	ICAL Level 7	3018-2116	1	5.0ppbv (5.0ppbv)	200mL	1.00	LD	LD	06/22/21	2218	LD	
√	3062220	ICAL Level 8	3018-2115	2	20ppbv (200ppbv)	20mL	1.00	LD	LD	06/22/21	2244	LD	Exp. 9/21/21
√	3062221	ICAL Level 9	3018-2115	2	50ppbv (200ppbv)	50mL	1.00	LD	LD	06/22/21	2312	LD	
√	3062222	ICAL Level 10	3018-2115	2	100ppbv (200ppbv)	100mL	1.00	LD	LD	06/22/21	2339	LD	
√	3062223	ICAL Level 11	3018-2115	2	200ppbv (200ppbv)	200mL	1.00	LD	LD	06/23/21	0009	LD	
√	3062224	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/23/21	0038	LD	
√	3062225	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/23/21	0107	LD	
√	3062226	ICV	3018-2121	14	50ppbv (200ppbv)	50mL	1.00	LD	LD	06/23/21	0945	LD	Exp. 9/22/21

GD 6/23/21

IS and Associated Target Compounds and Surr.
Instruction #: I1.20

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane*
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

*Note: If Bromochloromethane (BCM) is required as a target compound, the internal standard mix is blended without BCM. Compounds and surrogates assigned to BCM are re-assigned to 1,4-Difluorobenzene for calibration and subsequent quantitation.

Initial Calibration Narrative (Extended)
P21Q0519a.m

A multi-point TO-15 initial calibration was analyzed on MSD-P on 05/19/21 and 05/20/21.

ICAL: 3 out. Iodomethane @ 32%, D-Limonene @ 37%, and beta-Pinene @ 31%
Naph RSD @ 4.8%

ICV: 3 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153%, and 1,2,3-Trichlorobenzene @ 133%
File: P051925. Naph recovery: 117%
DODQSM: 3 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153%, and 1,2,3-Trichlorobenzene @ 133% File: P051925a
DOD4.2: 0 (zero) out; File: P051925c
RCP: 0 (zero) RCP compounds out. 5 **Non-RCP** compounds outside 80-120%. File P051925d
DODsp: (PID 23339): 2 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153% and 1,2,3-Trichlorobenzene @ 133 File: P051925e

The concentrations for Ethanol, Acrolein, 1,2,4-Trichlorobenzene, Naphthalene, 1,2,3-Trichlorobenzene, and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

An 8-point ICAL for AT20 supplemental compounds was analyzed on MSDP on 05/19/21-05/20/21.

An ICV was analyzed for the following AT20 supplemental compounds: 1,1,1,2-Tetrachloroethane.
ICV: 0 out; File: P051925
RCP Compounds: 0 RCP compounds out. File P051925d

ICAL Levels 1 and 2 were not included due to poor peak quality.

*****Bottom of the curve is 0.5ppbv; no TA RLs.*****

The RL for Isobutane was raised from 0.8ppbv to 2.0ppbv.

The concentrations for Dodecane, 1,2,4-TCB, Hexachlorobutadiene, 1,2,3-TCB, and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.
-Dodecane was curved at 0.618ppbv→ 247ppbv.
-1,2,4-TCB was curved at 1.01ppbv→252ppbv
-Hexachlorobutadiene was curved at 1.03ppbv→257ppbv
-1,2,3-TCB was curved at 1.06ppbv→266ppbv
-Naphthalene was curved at 0.10ppbv →25.4ppbv

BFB tune file:
1. P051901

The TO-15MDL study expires on 10/29/21.
Select specials MDL study expires 10/29/21.

Initial Calibration Narrative (TO-15)
P21Q0519a.m

A multi-point TO-15 initial calibration was analyzed on MSD-P on 05/19/21 and 05/20/21.

ICAL: 0 out
Naph RSD @ 4.8%

ICV: 0 (zero) out. File: P051925
Naph recovery: 117%.
DODQSM: 0 (zero) out. File: P051925a
DOD4.2: 0 (zero) out; P051925c
RCP: 0 (zero) RCP compounds out. 2 **Non-RCP** compounds outside 80-120%. File P051925d
DODsp: (PID 23339): 2 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153% and 1,2,3-Trichlorobenzene @ 133 File: P051925e

The concentrations for Ethanol, 1,2,4-Trichlorobenzene, Naphthalene and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

ICAL Levels 1 and 2 were not included due to poor peak quality.

*****Bottom of the curve is 0.5ppbv; no TA RLs.*****

The RL for Isobutane was raised from 0.8ppbv to 2.0ppbv.

The concentrations for 1,2,4-TCB, Hexachlorobutadiene and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.

-1,2,4-TCB was curved at 1.01ppbv→252ppbv
-Hexachlorobutadiene was curved at 1.03ppbv→257ppbv
-Naphthalene was curved at 0.10ppbv →25.4ppbv

BFB tune file:
1. P051901

The TO-15MDL study expires on 10/29/21.

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Please see Calibration History page(s) for all the calibration files.

UD 5/20/21

GH 5/20/21

Calibration File Names:
Level 2: /chem/msdp.i/19MAY21.b/p051914.d
Level 3: /chem/msdp.i/19MAY21.b/p051915.d
Level 4: /chem/msdp.i/19MAY21.b/p051916.d
Level 5: /chem/msdp.i/19MAY21.b/p051917.d
Level 6: /chem/msdp.i/19MAY21.b/p051918.d
Level 7: /chem/msdp.i/19MAY21.b/p051919.d
Level 8: /chem/msdp.i/19MAY21.b/p051920.d
Level 9: /chem/msdp.i/19MAY21.b/p051921.d
Level 10: /chem/msdp.i/19MAY21.b/p051924.d

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
1 Dimethyl Ether	*****	*****	*****	*****	*****	*****		
	*****	*****	*****				*****	*****
2 1,1-Dichloro-1-Fluoroethane	*****	*****	*****	*****	*****	*****		
	*****	*****	*****				*****	*****
3 Freon 143a	*****	0.64347	0.55833	0.28699	0.48663	0.54132		
	0.53859	0.32618	*****				0.48307	26.850
4 Freon 134a	*****	0.77011	0.84089	0.78129	0.71828	0.77669		
	0.83041	0.82114	*****				0.79126	5.405
5 Propylene	*****	*****	1.30044	1.16437	0.97808	1.08818		
	1.14258	1.19048	*****				1.14402	9.390

MSDP

									Method TO-15/TO-14				
	BFB Verification of 176/174 ratio: (142592/146432)*100=97.37%								SOP# 6				
		3234-10	Exp. Date:		8/17/21				Vacuum:	NA			
	BCM	158,810							Please check all standards				
	1,4-DFB	597,103						Surr.# 3234-10	Exp. Date:	8/17/21	Surrogate# NA	Exp. Date:	NA
	CB-d5	587,747						CCV #3018-2034	Exp. Date:	8/17/21	LCS: #3018-2016	Exp. Date:	8/5/21
								CCV sp1# 3018-2045	Exp. Date:	8/17/21	LCS sp1 #	Exp. Date:	
								CCV sp2# 3018-1928	Exp. Date:	6/1/21	LCS sp2 #	Exp. Date:	
	Verified CCV vs ICAL mid-point(-40%): LD							CCV sp3# 3018-2013	Exp. Date:	8/4/21	LCS sp3 #	Exp. Date:	
	Method: p21q0519a.m												

	File #	Enter/Scan Sample ID#	Constant#	Cart Pos.	Pressure	mL	DF	Verify Lead	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P051901	BFB Tune Check	3234-10	4	36ng	200mL	1.00	LD	LD	5/19/2021	1139	LD	Exp. 8/17/21
X	P051902	ICAL Level 1	3018-2045	1	0.3ppbv (5.0ppbv)	12mL	1.00	LD	LD	5/19/2021	1224	LD	Exp. 8/17/21. Poor peak quality.
X	P051903	ICAL Level 2	3018-2045	1	0.4ppbv (5.0ppbv)	16mL	1.00	LD	LD	5/19/2021	1252	LD	Poor peak quality.
√	P051904	ICAL Level 3	3018-2045	1	0.8ppbv (5.0ppbv)	32mL	1.00	gh	LD	5/19/2021	1402	LD	
√	P051905	ICAL Level 4	3018-2045	1	2.0ppbv (5.0ppbv)	80mL	1.00	gh	LD	5/19/2021	1430	LD	
√	P051906	ICAL Level 5	3018-2045	1	5.0ppbv (5.0ppbv)	200mL	1.00	gh	LD	5/19/2021	1500	LD	
√	P051907	ICAL Level 6	3018-2034	13	20ppbv (200ppbv)	20mL	1.00	gh	LD	5/19/2021	1527	LD	Exp. 8/17/21.
√	P051908	ICAL Level 7	3018-2034	13	50ppbv (200ppbv)	50mL	1.00	gh	LD	5/19/2021	1555	LD	
√	P051909	ICAL Level 8	3018-2034	13	100ppbv (200ppbv)	100mL	1.00	gh	LD	5/19/2021	1624	LD	
√	P051910	ICAL Level 9	3018-2034	13	200ppbv (200ppbv)	200mL	1.00	gh	LD	5/19/2021	1653	LD	
√	P051911	System Blank	35157	4	Humid	200mL	1.00	gh	LD	5/19/2021	1723	LD	
√	P051912	System Blank	35157	4	Humid	200mL	1.00	gh	gh	5/19/2021	1809	LD	
X	P051913	ICAL Level 2	3018-2045	1	0.4ppbv (5.0ppbv)	16mL	1.00	gh	gh	5/19/2021	1849	LD	Exp. 8/17/21. Poor peak quality.
√	P051914	ICAL Level 2	3018-1928	2	0.4ppbv (5.0ppbv)	16mL	1.00	gh	gh	5/19/2021	1917	LD	Exp. 6/1/21.
√	P051915	ICAL Level 3	3018-1928	2	0.8ppbv (5.0ppbv)	32mL	1.00	gh	gh	5/19/2021	1945	LD	
√	P051916	ICAL Level 4	3018-1928	2	2.0ppbv (5.0ppbv)	80mL	1.00	gh	gh	5/19/2021	2013	LD	
√	P051917	ICAL Level 5	3018-1928	2	5.0ppbv (5.0ppbv)	200mL	1.00	gh	gh	5/19/2021	2043	LD	
√	P051918	ICAL Level 6	3018-2013	3	20ppbv (200ppbv)	20mL	1.00	gh	gh	5/19/2021	2110	LD	Exp. 8/4/21.
√	P051919	ICAL Level 7	3018-2013	3	50ppbv (200ppbv)	50mL	1.00	gh	gh	5/19/2021	2138	LD	
√	P051920	ICAL Level 8	3018-2013	3	100ppbv (200ppbv)	100mL	1.00	gh	gh	5/19/2021	2207	LD	
√	P051921	ICAL Level 9	3018-2013	3	200ppbv (200ppbv)	200mL	1.00	LD	gh	5/19/2021	2239	LD	
√	P051922	System Blank	35157	4	Humid	200mL	1.00	LD	gh	5/19/2021	2308	LD	
√	P051923	System Blank	35157	4	Humid	200mL	1.00	LD	gh	5/19/2021	2338	LD	
√	P051924	ICAL Level 10	3018-2045	1	0.5ppbv (5.0ppbv)	20mL	1.00	LD	gh	5/20/2021	0005	LD	Exp. 8/17/21.
√	P051925	ICV	3018-2016	14	50ppbv (200ppbv)	50mL	1.00	LD	gh	5/20/2021	0033	LD	Exp. 8/5/21.

MB 5/20/21

IS and Associated Target Compounds and Surr.
Instruction #: I1.20

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane*
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

*Note: If Bromochloromethane (BCM) is required as a target compound, the internal standard mix is blended without BCM. Compounds and surrogates assigned to BCM are re-assigned to 1,4-Difluorobenzene for calibration and subsequent quantitation.

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062215.d
Lab Smp Id: ICAL Level 2
Inj Date : 22-JUN-2021 20:28
Operator : LD Inst ID: msd3.i
Smp Info : 12mL 3018-2116
Misc Info : 0.3ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 20:28 Cal File: 3062215.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level2.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	4948	0.30000	0.3485	80.00- 120.00	100.00(a)
4.459	4.459 (0.844)	65	2065			0.76- 60.76	41.73
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	249295	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	193294			48.46- 108.46	77.54
5.270	5.270 (1.000)	49	375698			120.39- 180.39	150.70
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	5879	0.30000	0.3761	80.00- 120.00	100.00(a)
5.340	5.340 (1.011)	85	3350			34.71- 94.71	56.98
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	6675	0.30000	0.3799	80.00- 120.00	100.00(a)
5.452	5.466 (1.032)	99	3504			33.76- 93.76	52.49
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	348002	25.0000	25.366	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	168803			21.66- 81.66	48.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	904126	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	141697			0.00- 45.52	15.67
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	5988	0.30000	0.3453	80.00- 120.00	100.00(a)
6.836	6.836 (1.109)	85	3626			34.31- 94.31	60.55
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	930785	25.0000	24.995	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	105468			0.00- 41.47	11.33
7.387	7.387 (1.198)	100	607392			36.47- 96.47	65.26
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	849694	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	472432			25.46- 85.46	55.60
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	7842	0.30000	0.3377	80.00- 120.00	100.00(a)
8.641	8.641 (1.003)	114	2767			2.13- 62.13	35.28
8.612	8.641 (1.000)	77	14194			26.35- 86.35	181.00
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	557967	25.0000	24.826	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	696856			93.06- 153.06	124.89
9.601	9.601 (1.115)	176	527415			62.87- 122.87	94.52

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062215.d
Lab Smp Id: ICAL Level 2
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.3ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	249295	2.42
108 1,4-Difluorobenze	874076	524446	1223706	904126	3.44
153 Chlorobenzene-d5	831223	498734	1163712	849694	2.22

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062215.d

Date : 22-JUN-2021 20:28

Client ID:

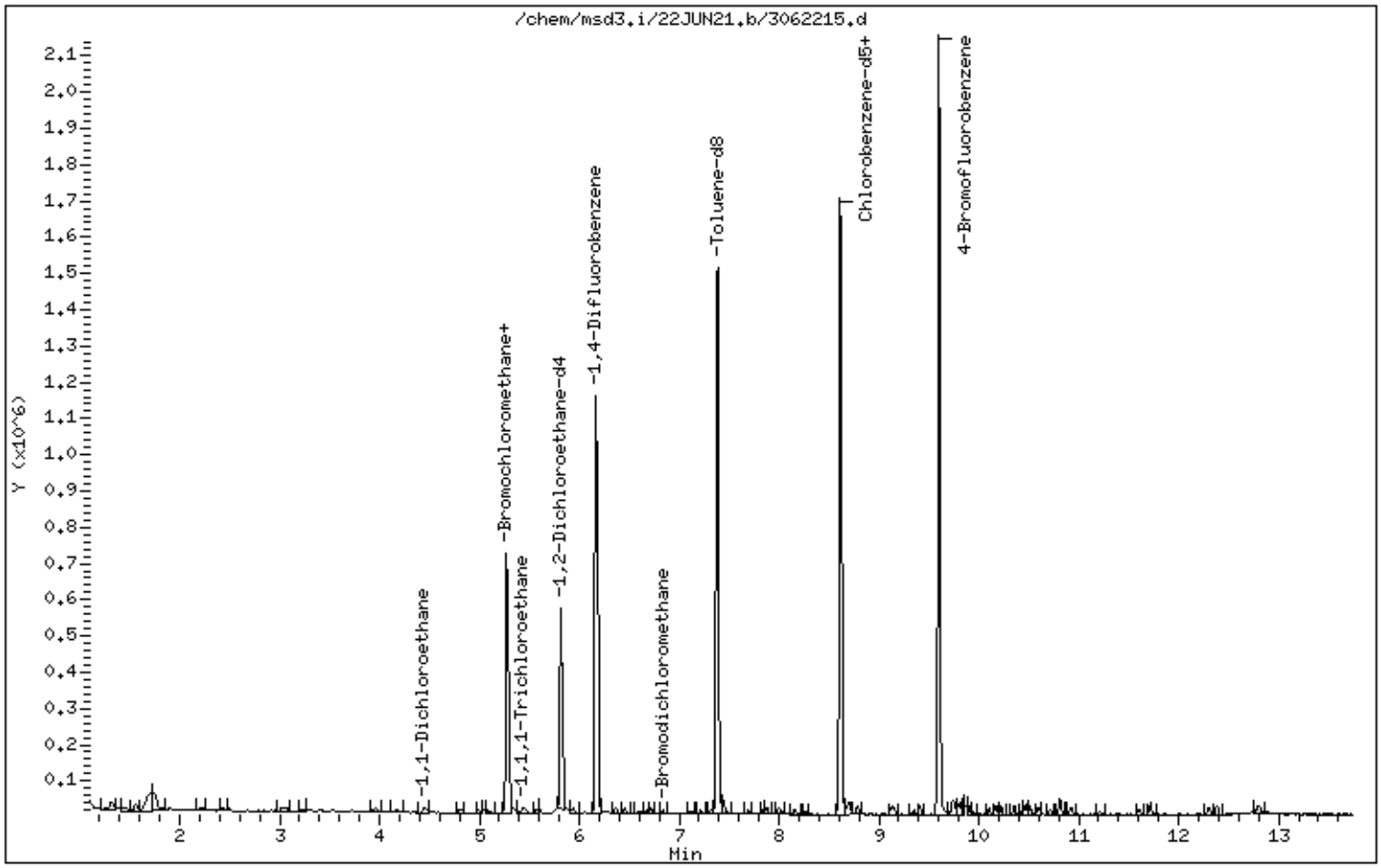
Instrument: msd3.i

Sample Info: 12mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051914.d
Lab Smp Id: ICAL Level 2
Inj Date : 19-MAY-2021 19:17
Operator : gh Inst ID: msdp.i
Smp Info : 16mL 3018-1928
Misc Info : 0.4ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:17 Cal File: p051914.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	163890	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127715			48.23- 108.23	77.93
5.771	5.778 (1.000)	49	296851			150.57- 210.57	181.13
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	600935	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93335			0.00- 45.71	15.53
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	587965	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	324501			23.78- 83.78	55.19
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	941	0.40000	0.3085	80.00- 120.00	100.00(a)
1.675	1.674 (0.290)	39	1309			34.98- 94.98	139.11
1.689	1.674 (0.292)	41	861			25.22- 85.22	91.50
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	7562	0.40000	0.4489	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
13 Freon 142b (continued)							
1.898	1.884 (0.329)	45	2247			0.00- 59.77	29.71
36 1-Pentene					CAS #: 109-67-1		
2.891	2.906 (0.500)	55	5405	0.40000	0.4946	80.00- 120.00	100.00(a)
2.899	2.906 (0.502)	42	6051			105.17- 165.17	111.95
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	4396	0.40000	0.4147	80.00- 120.00	100.00(a)
3.378	3.378 (0.585)	67	4936			104.69- 164.69	112.28
41 Freon 123					CAS #: 306-83-2		
3.464	3.479 (0.600)	83	5862	0.40000	0.3993	80.00- 120.00	100.00(a)
3.486	3.479 (0.603)	133	1216			0.00- 50.87	20.74
3.472	3.479 (0.601)	85	3801			36.08- 96.08	64.84
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	5709	0.40000	0.3618	80.00- 120.00	100.00(a)
4.066	4.073 (0.704)	68	2522			6.76- 66.76	44.18
4.066	4.073 (0.704)	53	1675			0.00- 57.54	29.34
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.073 (0.706)	43	7233	0.40000	0.3918	80.00- 120.00	100.00(a)
4.080	4.073 (0.706)	74	768			0.00- 44.13	10.62
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	5621	0.40000	0.3852	80.00- 120.00	100.00(a)
5.019	5.019 (0.869)	88	2057			9.21- 69.21	36.59
5.012	5.019 (0.867)	50	1789			0.00- 54.25	31.83
75 1-Propanol					CAS #: 71-23-8		
5.098	5.083 (0.882)	59	912	0.40000	0.4010	80.00- 120.00	100.00(a)
5.098	5.083 (0.882)	42	931			63.23- 123.23	102.08
5.105	5.083 (0.883)	41	494			24.74- 84.74	54.17
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.974)	55	8316	0.40000	0.4277	80.00- 120.00	100.00(a)
5.621	5.620 (0.973)	85	1426			0.00- 41.28	17.15
5.628	5.620 (0.974)	58	1499			0.00- 38.22	18.03
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	1428	0.40000	0.5920	80.00- 120.00	100.00(a)
6.244	6.244 (1.081)	43	3902			448.18- 508.18	273.25
6.244	6.244 (1.081)	41	2603			299.99- 359.99	182.28
113 Ethyl acrylate					CAS #: 140-88-5		
6.939	6.938 (0.733)	99	550	0.40000	0.3922	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
113 Ethyl acrylate (continued)							
6.939	6.938 (0.733)	45	1161			149.95- 209.95	211.09
6.939	6.938 (0.733)	55	9624			1849.07-1909.07	1749.82
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	11468	0.40000	0.3804	80.00- 120.00	100.00(a)
7.039	7.031 (0.744)	58	1303			0.00- 37.44	11.36
7.032	7.031 (0.743)	86	1613			0.00- 42.78	14.07
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	6054	0.40000	0.3952	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	2892			0.00- 59.10	47.77
8.665	8.657 (1.301)	43	14727			215.30- 275.30	243.26
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	5765	0.40000	0.4440	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	587965			57.42- 117.42	10198.87
9.596	9.596 (1.014)	95	2522			5.70- 65.70	43.75
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	9628	0.40000	0.3991	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	17002			136.03- 196.03	176.59
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	3866	0.40000	0.3634	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	2278			39.41- 99.41	58.92
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	4759	0.40000	0.3920	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	14696			295.02- 355.02	308.80
11.437	11.444 (1.209)	63	2158			11.82- 71.82	45.35
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	7049	0.40000	0.4016	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	15461			192.40- 252.40	219.34
12.318	12.318 (1.302)	77	2242			0.00- 54.69	31.81
205 Hexachloroethane					CAS #: 67-72-1		
12.963	12.970 (1.370)	201	2437	0.40000	0.4110	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	3360			102.99- 162.99	137.87
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	9740	0.40000	0.3917	80.00- 120.00	100.00(a)
13.758	13.758 (1.454)	182	8432			65.24- 125.24	86.57
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	8360	0.40000	0.3637	80.00- 120.00	100.00(a)

				AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
210 alpha-Pinene (continued)							
10.599	10.599 (1.120)	77	2517			0.00- 58.21	30.11
214 beta-Pinene					CAS #: 127-91-3		
11.415	11.422 (1.207)	93	4322	0.40000	0.3225	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	14696			153.57- 213.57	340.03

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051914.d
Lab Smp Id: ICAL Level 2
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.4ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	163890	3.20
108 1,4-Difluorobenze	597103	358262	835944	600935	0.64
153 Chlorobenzene-d5	587747	352648	822846	587965	0.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051914.d

Date : 19-MAY-2021 19:17

Client ID:

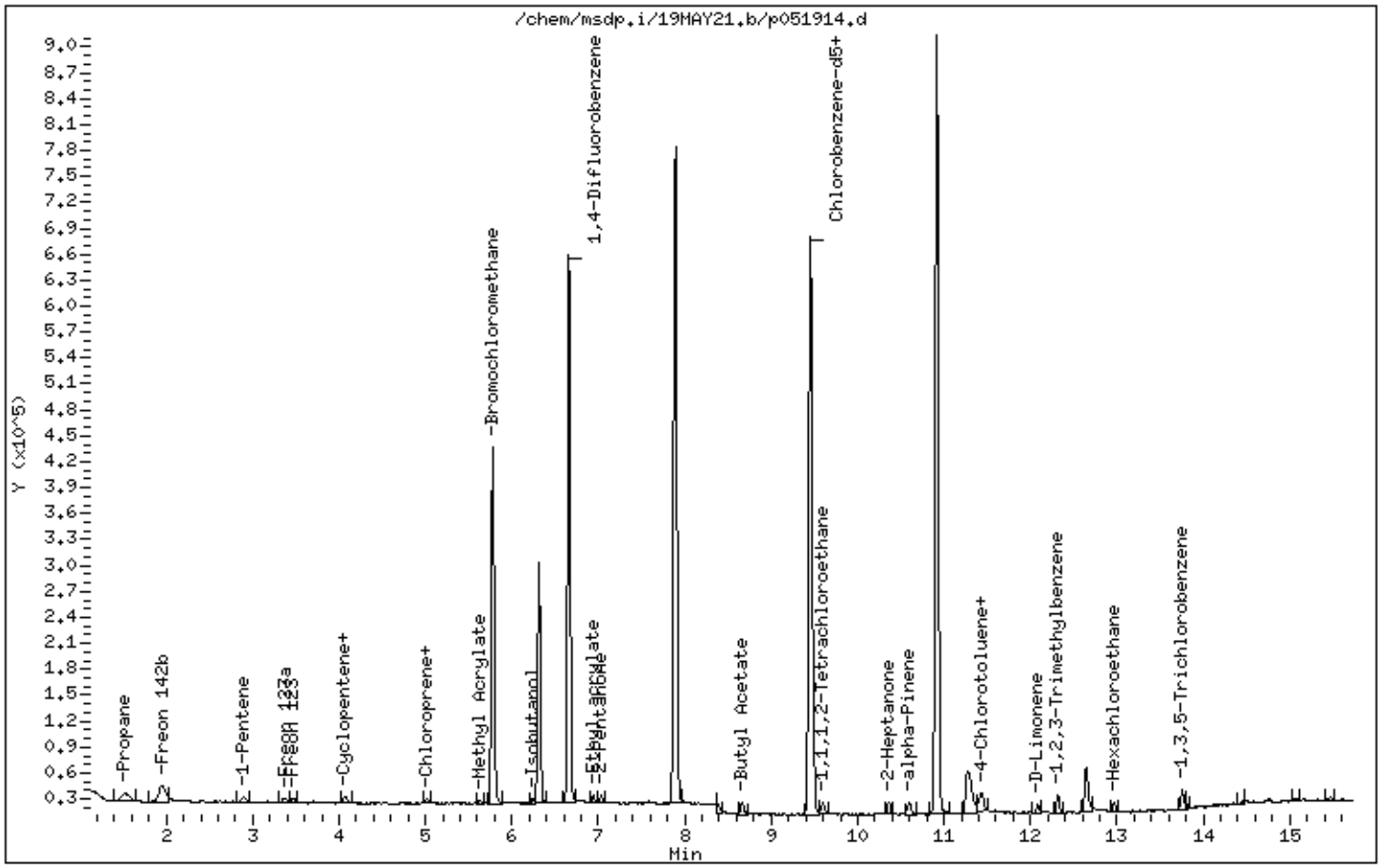
Instrument: msdp.i

Sample Info: 16mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062205.d
Lab Smp Id: ICAL Level 3
Inj Date : 22-JUN-2021 15:51
Operator : LD Inst ID: msd3.i
Smp Info : 16mL 3018-2078
Misc Info : 0.4ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 20:55 Cal File: 3062216.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL_lv3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	233349	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	177990			48.46- 108.46	76.28
5.270	5.270 (1.000)	49	342636			120.39- 180.39	146.83
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	847428	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	132894			0.00- 45.52	15.68
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	791619	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	440182			25.46- 85.46	55.61
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	5609	0.40000	0.4710	80.00- 120.00	100.00(a)
8.712	8.712 (1.011)	117	8658			38.22- 98.22	154.36
8.705	8.712 (1.010)	95	2537			7.54- 67.54	45.23

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062205.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.4ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	233349	-4.13
108 1,4-Difluorobenze	874076	524446	1223706	847428	-3.05
153 Chlorobenzene-d5	831223	498734	1163712	791619	-4.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.23
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062205.d

Date : 22-JUN-2021 15:51

Client ID:

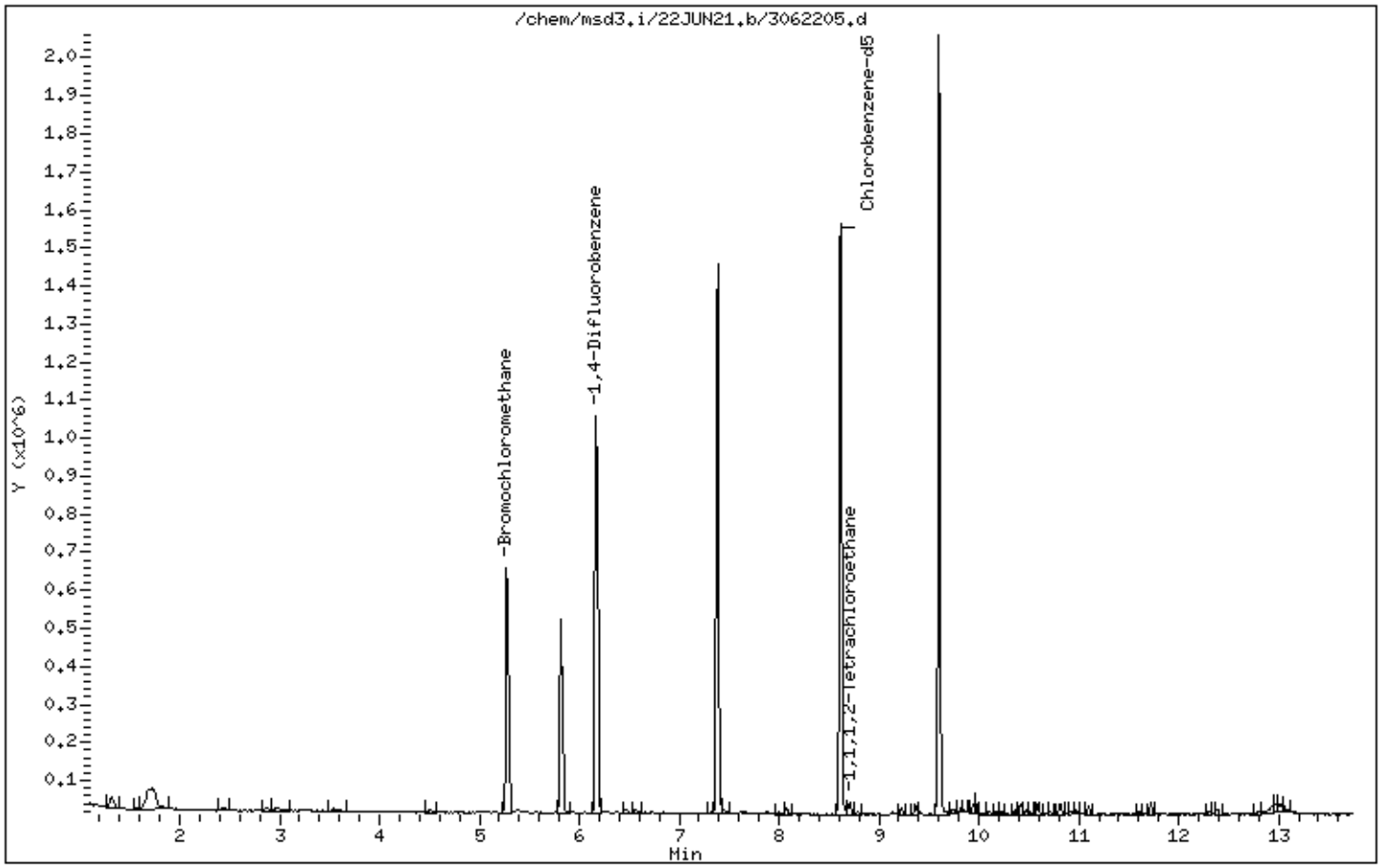
Instrument: msd3.i

Sample Info: 16mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062216.d
Lab Smp Id: ICAL Level 3
Inj Date : 22-JUN-2021 20:55
Operator : LD Inst ID: msd3.i
Smp Info : 16mL 3018-2116
Misc Info : 0.4ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 20:55 Cal File: 3062216.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
8 Freon 12					CAS #: 75-71-8		
1.451	1.465 (0.275)	85	8702	0.40000	0.4952	80.00- 120.00	100.00(a)
1.451	1.465 (0.275)	87	2729			2.63- 62.63	31.36
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	5764	0.40000	0.4427	80.00- 120.00	100.00(a)
1.563	1.562 (0.296)	137	1919			2.12- 62.12	33.29
19 Vinyl Chloride					CAS #: 75-01-4		
1.730	1.744 (0.328)	62	4560	0.40000	0.5834	80.00- 120.00	100.00
1.730	1.744 (0.328)	64	2703			1.28- 61.28	59.28
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.334)	54	4167	0.40000	0.5818	80.00- 120.00	100.00
1.758	1.758 (0.334)	39	7808			69.23- 129.23	187.38
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.461)	101	8230	0.40000	0.4426	80.00- 120.00	100.00(a)
2.430	2.430 (0.461)	103	6134			35.12- 95.12	74.53

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.575)	151	5926	0.40000	0.4662	80.00- 120.00	100.00(a)
3.032	3.032 (0.575)	153	3856			33.72- 93.72	65.07
3.032	3.032 (0.575)	101	7302			89.67- 149.67	123.22
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.060	3.074 (0.581)	96	4017	0.40000	0.5247	80.00- 120.00	100.00
3.060	3.074 (0.581)	98	2920			33.39- 93.39	72.69
3.060	3.074 (0.581)	61	6159			163.82- 223.82	153.32
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.753)	98	2858	0.40000	0.5547	80.00- 120.00	100.00
3.969	3.969 (0.753)	61	5551			244.59- 304.59	194.23
3.969	3.969 (0.753)	96	3975			129.84- 189.84	139.08
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.772)	52	3799	0.40000	0.6144	80.00- 120.00	100.00
4.081	4.067 (0.774)	53	3113			88.50- 148.50	81.94
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.790)	57	6655	0.40000	0.4764	80.00- 120.00	100.00(a)
4.165	4.179 (0.790)	43	5008			32.99- 92.99	75.25
4.179	4.179 (0.793)	86	1092			0.00- 42.56	16.41
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.846)	63	6212	0.40000	0.4324	80.00- 120.00	100.00(a)
4.459	4.459 (0.846)	65	2569			0.76- 60.76	41.36
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.046 (0.958)	98	2544	0.40000	0.4981	80.00- 120.00	100.00(a)
5.047	5.046 (0.958)	96	4023			127.22- 187.22	158.14
5.047	5.046 (0.958)	61	5227			283.85- 343.85	205.46
* 90 Bromochloromethane					CAS #: 74-97-5		
5.270	5.284 (1.000)	130	252258	25.0000		80.00- 120.00	100.00
5.270	5.284 (1.000)	128	193973			48.46- 108.46	76.89
5.270	5.270 (1.000)	49	377607			120.39- 180.39	149.69
89 Tetrahydrofuran					CAS #: 109-99-9		
5.284	5.270 (1.003)	42	4319	0.40000	0.4294	80.00- 120.00	100.00(a)
5.284	5.270 (1.003)	71	2513			2.92- 62.92	58.18
5.284	5.270 (1.003)	72	1686			3.54- 63.54	39.04
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.013)	83	6620	0.40000	0.4186	80.00- 120.00	100.00(a)
5.340	5.340 (1.013)	85	4523			34.71- 94.71	68.32

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.032)	84	4925	0.40000	0.4926	80.00- 120.00	100.00(a)
5.438	5.438 (1.032)	56	6278			120.40- 180.40	127.47
5.438	5.438 (1.032)	41	3996			54.20- 114.20	81.14
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.034)	97	8276	0.40000	0.4655	80.00- 120.00	100.00(a)
5.452	5.466 (1.034)	99	5016			33.76- 93.76	60.61
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.058)	119	7444	0.40000	0.4546	80.00- 120.00	100.00(a)
5.578	5.578 (1.058)	117	7310			73.68- 133.68	98.20
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.760	5.774 (1.093)	57	19299	0.40000	0.4418	80.00- 120.00	100.00(a)
5.774	5.774 (1.096)	56	6206			1.12- 61.12	32.16
5.760	5.774 (1.093)	41	5471			0.00- 57.49	28.35
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	9452	0.40000	0.4593	80.00- 120.00	100.00(a)
5.788	5.788 (0.939)	77	3560			0.00- 53.80	37.66
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.104)	65	352987	25.0000	25.428	80.00- 120.00	100.00
5.816	5.816 (1.104)	67	172487			21.66- 81.66	48.86
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	5469	0.40000	0.4616	80.00- 120.00	100.00(a)
5.886	5.886 (0.955)	64	1777			1.20- 61.20	32.49
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	4876	0.40000	0.6015	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	7418			179.02- 239.02	152.13
5.942	5.942 (0.964)	57	3845			84.85- 144.85	78.86
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	901842	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	141172			0.00- 45.52	15.65
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.032)	95	4490	0.40000	0.4349	80.00- 120.00	100.00(a)
6.362	6.362 (1.032)	130	4609			74.96- 134.96	102.65
6.362	6.362 (1.032)	97	3359			34.80- 94.80	74.81
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	2984	0.40000	0.6255	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 1,2-Dichloropropane (continued)							
6.586	6.586 (1.068)	62	2025			52.03- 112.03	67.86
6.586	6.586 (1.068)	41	1552			79.97- 139.97	52.01
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	4067	0.40000	0.4396	80.00- 120.00	100.00(a)
6.721	6.721 (0.780)	93	4699			67.27- 127.27	115.54
6.721	6.721 (0.780)	95	3967			50.92- 110.92	97.54
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	8351	0.40000	0.4828	80.00- 120.00	100.00(a)
6.836	6.836 (1.109)	85	5109			34.31- 94.31	61.18
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.215	7.208 (1.170)	75	5553	0.40000	0.4320	80.00- 120.00	100.00(a)
7.208	7.208 (1.169)	77	2297			1.42- 61.42	41.37
7.208	7.208 (1.169)	39	4193			38.56- 98.56	75.51
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	7121	0.40000	0.5158	80.00- 120.00	100.00(a)
6.460	6.460 (1.048)	98	3326			15.60- 75.60	46.71
6.460	6.460 (1.048)	55	6479			78.53- 138.53	90.98
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.323	7.316 (1.188)	58	4765	0.40000	0.5451	80.00- 120.00	100.00
7.323	7.316 (1.188)	43	10377			231.30- 291.30	217.78
7.316	7.316 (1.186)	85	1814			8.94- 68.94	38.07
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	932713	25.0000	25.110	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	106484			0.00- 41.47	11.42
7.380	7.387 (1.197)	100	622084			36.47- 96.47	66.70
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	13232	0.40000	0.4792	80.00- 120.00	100.00(a)
7.445	7.437 (1.207)	92	7422			28.30- 88.30	56.09
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.207)	57	4295	0.40000	0.4675	80.00- 120.00	100.00(a)
7.445	7.444 (1.207)	85	4221			67.11- 127.11	98.28
7.445	7.444 (1.207)	43	11135			214.21- 274.21	259.25
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.695	7.688 (0.894)	75	5619	0.40000	0.4420	80.00- 120.00	100.00(a)
7.688	7.688 (0.893)	77	2679			2.15- 62.15	47.68
7.688	7.688 (0.893)	39	3678			36.09- 96.09	65.46

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
141 1,1,2-Trichloroethane						CAS #: 79-00-5	
7.846	7.846 (0.911)	97	4795	0.40000	0.4904	80.00- 120.00	100.00(a)
7.846	7.846 (0.911)	99	2721			31.62- 91.62	56.75
7.846	7.846 (0.911)	83	4102			56.35- 116.35	85.55
142 Tetrachloroethene						CAS #: 127-18-4	
7.874	7.881 (0.914)	166	5995	0.40000	0.4433	80.00- 120.00	100.00(a)
7.874	7.881 (0.914)	129	5111			48.71- 108.71	85.25
7.874	7.881 (0.914)	131	4723			46.55- 106.55	78.78
144 1,3-Dichloropropane						CAS #: 142-28-9	
7.989	7.989 (1.296)	76	6058	0.40000	0.4598	80.00- 120.00	100.00(a)
7.989	7.989 (1.296)	41	6050			82.96- 142.96	99.87
7.989	7.989 (1.296)	78	2306			2.55- 62.55	38.07
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	7861	0.40000	0.4238	80.00- 120.00	100.00(a)
8.154	8.154 (0.947)	127	6418			47.77- 107.77	81.64
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.960)	107	6641	0.40000	0.4374	80.00- 120.00	100.00(a)
8.261	8.268 (0.959)	109	6195			64.60- 124.60	93.28
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	863143	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	476163			25.46- 85.46	55.17
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	10297	0.40000	0.4365	80.00- 120.00	100.00(a)
8.641	8.641 (1.003)	114	4003			2.13- 62.13	38.88
8.619	8.641 (1.001)	77	15051			26.35- 86.35	146.17
155 Ethyl Benzene						CAS #: 100-41-4	
8.691	8.684 (1.009)	106	5034	0.40000	0.4267	80.00- 120.00	100.00(a)
8.691	8.684 (1.009)	91	16494			282.48- 342.48	327.65
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	6649	0.40000	0.4531	80.00- 120.00	100.00(a)
8.784	8.784 (1.020)	91	12700			171.36- 231.36	191.01
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	6258	0.40000	0.4492	80.00- 120.00	100.00(a)
9.121	9.128 (1.059)	91	13678			179.99- 239.99	218.57
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.062)	104	10563	0.40000	0.4376	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
165 Styrene (continued)							
9.149	9.149 (1.062)	78	5781			19.09- 79.09	54.73
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	7676	0.40000	0.4364	80.00- 120.00	100.00(a)
9.357	9.350 (1.086)	171	4098			21.45- 81.45	53.39
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	20211	0.40000	0.4588	80.00- 120.00	100.00(a)
9.414	9.414 (1.093)	120	5508			0.00- 56.99	27.25
9.407	9.407 (1.092)	51	2729			0.00- 41.77	13.50
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	568188	25.0000	24.887	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	704540			93.06- 153.06	124.00
9.601	9.601 (1.115)	176	531559			62.87- 122.87	93.55
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	10218	0.40000	0.4679	80.00- 120.00	100.00(a)
9.737	9.737 (1.131)	85	6485			34.35- 94.35	63.47
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	22545	0.40000	0.4386	80.00- 120.00	100.00(a)
9.758	9.758 (1.133)	120	5690			0.00- 53.77	25.24
9.758	9.758 (1.133)	105	1648			0.00- 33.81	7.31
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.794	9.787 (1.137)	110	3015	0.40000	0.4583	80.00- 120.00	100.00(a)
9.787	9.787 (1.136)	75	9110			285.00- 345.00	302.16
9.787	9.787 (1.136)	61	3083			54.06- 114.06	102.26
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	6163	0.40000	0.4626	80.00- 120.00	100.00(a)
9.851	9.851 (1.144)	105	19828			296.79- 356.79	321.73
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	4632	0.40000	0.4279	80.00- 120.00	100.00(a)
9.873	9.873 (1.146)	91	18214			336.29- 396.29	393.22
9.873	9.873 (1.146)	65	2871			38.83- 98.83	61.98
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.150)	120	8595	0.40000	0.4593	80.00- 120.00	100.00(a)
9.901	9.901 (1.150)	105	17963			176.40- 236.40	208.99
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.109	10.102 (1.174)	118	8103	0.40000	0.4228	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
188 alpha Methyl Styrene (continued)							
10.102	10.102 (1.173)	103	4467			26.64- 86.64	55.13
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	17022	0.40000	0.4613	80.00- 120.00	100.00(a)
10.224	10.224 (1.187)	120	7387			16.58- 76.58	43.40
192 sec-Butylbenzene					CAS #: 135-98-8		
10.353	10.360 (1.202)	134	4798	0.40000	0.4315	80.00- 120.00	100.00(a)
10.353	10.360 (1.202)	105	23991			451.53- 511.53	500.02
10.353	10.353 (1.202)	91	3952			46.48- 106.48	82.37
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	20792	0.40000	0.4465	80.00- 120.00	100.00(a)
10.467	10.467 (1.215)	134	5696			0.00- 56.79	27.40
10.467	10.467 (1.215)	91	5277			0.00- 54.04	25.38
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.221)	146	10595	0.40000	0.4226	80.00- 120.00	100.00(a)
10.518	10.517 (1.221)	148	7151			33.53- 93.53	67.49
10.518	10.517 (1.221)	111	4722			11.05- 71.05	44.57
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	11277	0.40000	0.4367	80.00- 120.00	100.00(a)
10.596	10.596 (1.230)	148	7136			33.47- 93.47	63.28
10.596	10.596 (1.230)	111	4453			9.65- 69.65	39.49
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	15627	0.40000	0.4402	80.00- 120.00	100.00(a)
10.718	10.711 (1.245)	126	2806			0.00- 52.04	17.96
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	5215	0.40000	0.4319	80.00- 120.00	100.00(a)
10.818	10.818 (1.256)	91	19669			331.99- 391.99	377.16
10.818	10.818 (1.256)	92	10403			161.01- 221.01	199.48
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	10290	0.40000	0.4248	80.00- 120.00	100.00(a)
10.926	10.926 (1.269)	148	6583			33.23- 93.23	63.97
10.926	10.918 (1.269)	111	4235			12.36- 72.36	41.16
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	13939	0.49440	0.5264	80.00- 120.00	100.00(a)
11.721	11.714 (1.361)	43	11307			50.85- 110.85	81.12

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062216.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.4ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	252258	3.64
108 1,4-Difluorobenze	874076	524446	1223706	901842	3.18
153 Chlorobenzene-d5	831223	498734	1163712	863143	3.84

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.26
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062216.d

Date : 22-JUN-2021 20:55

Client ID:

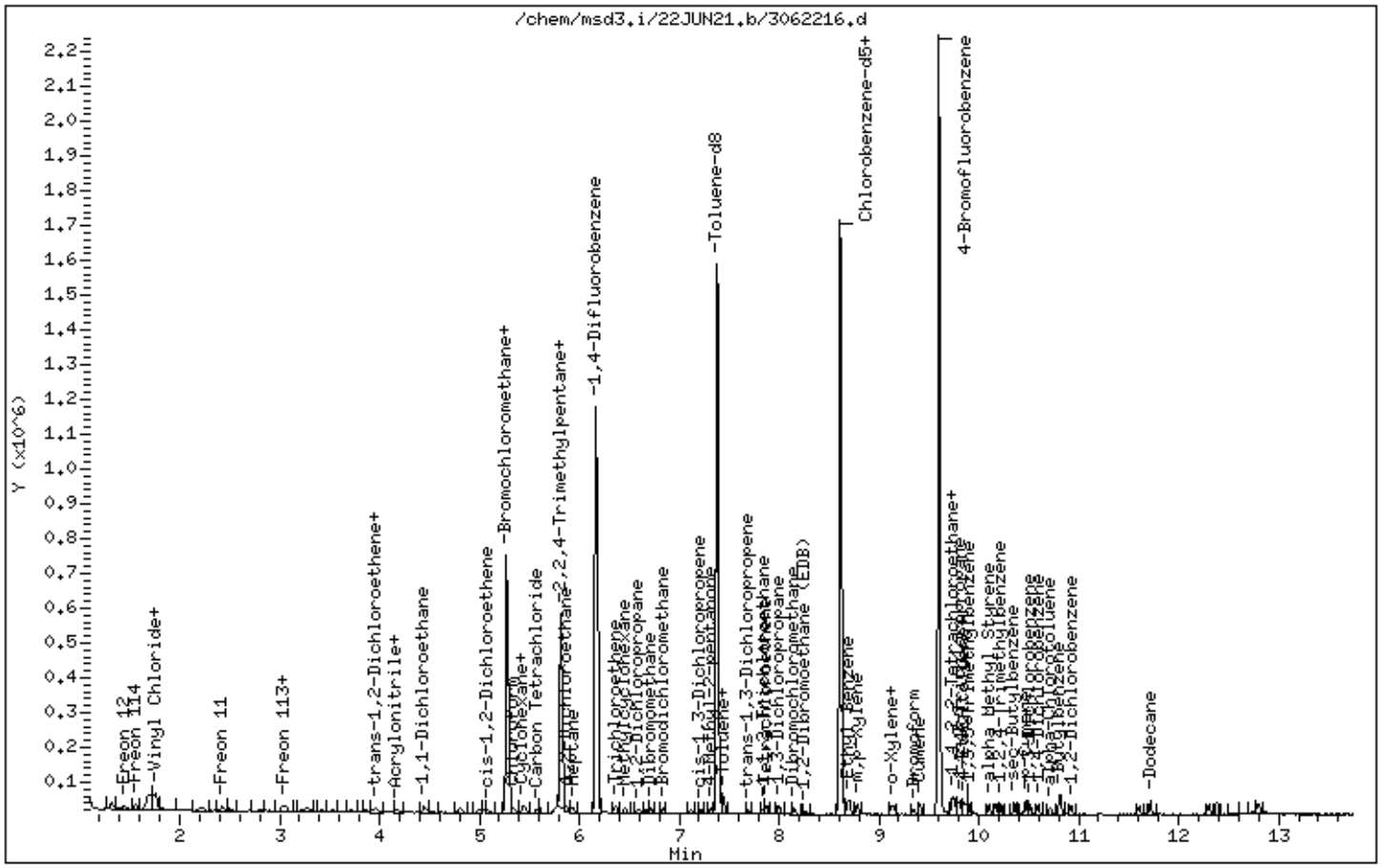
Instrument: msd3.i

Sample Info: 16mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051904.d
Lab Smp Id: ICAL Level 3
Inj Date : 19-MAY-2021 14:02
Operator : LD Inst ID: msdp.i
Smp Info : 32mL 3018-2045
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 11:07 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	4069	0.80000	0.7786	80.00- 120.00	100.00(a)
1.633	1.633 (0.283)	69	3525			59.44- 119.44	86.63
1.744	1.745 (0.302)	51	16724			419.06- 479.06	411.01
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	10010	0.80000	0.6759	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	3731			2.37- 62.37	37.27
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	1006	0.80000	0.6877	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	16724			1501.01-1561.01	1662.43
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	11608	0.80000	0.7985	80.00- 120.00	100.00
1.842	1.856 (0.319)	137	3024			2.30- 62.30	26.05
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	8652	0.80000	0.8371	80.00- 120.00	100.00
2.060	2.068 (0.357)	64	2015			0.00- 59.69	23.29

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
20 1,3-Butadiene						CAS #: 106-99-0	
2.089	2.089 (0.362)	54	6127	0.80000	0.7370	80.00- 120.00	100.00
2.082	2.089 (0.360)	39	6271			52.37- 112.37	102.35
32 Vinyl Bromide						CAS #: 593-60-2	
2.834	2.841 (0.490)	106	4730	0.80000	0.7700	80.00- 120.00	100.00
2.834	2.841 (0.490)	108	4577			69.27- 129.27	96.77
33 Freon 11						CAS #: 75-69-4	
2.884	2.884 (0.499)	101	12538	0.80000	0.7967	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	8055			34.72- 94.72	64.24
34 Dichlorofluoromethane						CAS #: 75-43-4	
2.891	2.899 (0.500)	67	11113	0.80000	0.8193	80.00- 120.00	100.00(a)
2.891	2.899 (0.500)	69	4116			0.84- 60.84	37.04
35 Pentane						CAS #: 109-66-0	
2.963	2.970 (0.513)	43	15312	0.80000	0.8330	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	3948			0.00- 44.98	25.78
2.970	2.970 (0.514)	72	1224			0.00- 37.39	7.99
38 Ethyl Ether						CAS #: 60-29-7	
3.300	3.285 (0.571)	74	2195	0.80000	0.7078	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	5814			163.46- 223.46	264.87
3.278	3.285 (0.567)	45	7546			250.40- 310.40	343.78
43 Freon 113						CAS #: 76-13-1	
3.550	3.550 (0.614)	151	8777	0.80000	0.7507	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	5991			33.56- 93.56	68.26
3.550	3.550 (0.614)	101	10762			89.21- 149.21	122.62
44 1,1-Dichloroethene						CAS #: 75-35-4	
3.572	3.579 (0.618)	96	5973	0.80000	0.8551	80.00- 120.00	100.00
3.572	3.579 (0.618)	98	4228			34.02- 94.02	70.79
3.572	3.579 (0.618)	61	10403			168.77- 228.77	174.17
54 3-Chloropropene						CAS #: 107-05-1	
4.037	4.052 (0.699)	76	2453	0.80000	0.7979	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	9150			396.19- 456.19	373.01
63 Methyl tert-butyl ether						CAS #: 1634-04-4	
4.446	4.446 (0.769)	73	16920	0.80000	0.8344	80.00- 120.00	100.00
4.453	4.446 (0.771)	57	5536			3.10- 63.10	32.72
4.446	4.446 (0.769)	41	6146			1.28- 61.28	36.32
64 trans-1,2-Dichloroethene						CAS #: 156-60-5	
4.474	4.482 (0.774)	98	3718	0.80000	0.7966	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
64 trans-1,2-Dichloroethene (continued)							
4.474	4.482 (0.774)	61	9389			255.84- 315.84	252.53
4.474	4.482 (0.774)	96	5939			127.59- 187.59	159.74
66 Acrylonitrile					CAS #: 107-13-1		
4.553	4.560 (0.788)	52	5732	0.80000	0.8823	80.00- 120.00	100.00
4.553	4.560 (0.788)	53	5440			88.05- 148.05	94.91
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	12522	0.80000	0.7698	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	8321			37.52- 97.52	66.45
4.696	4.697 (0.813)	86	1347			0.00- 41.48	10.76
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	11204	0.80000	0.8012	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	3451			0.00- 59.70	30.80
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	9403	0.80000	0.7573	80.00- 120.00	100.00(a)
5.506	5.506 (0.953)	79	3306			2.28- 62.28	35.16
5.506	5.506 (0.953)	97	2804			0.00- 53.93	29.82
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.542	5.549 (0.959)	98	3329	0.80000	0.6873	80.00- 120.00	100.00
5.542	5.549 (0.959)	96	6335			125.75- 185.75	190.30
5.542	5.549 (0.959)	61	13408			332.40- 392.40	402.76
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	10221	0.80000	0.8235	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	1918			0.00- 55.82	18.77
5.778	5.771 (1.000)	72	2670			0.00- 57.59	26.12
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	165114	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	125643			48.23- 108.23	76.09
5.771	5.778 (1.000)	49	294417			150.57- 210.57	178.31
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	10789	0.80000	0.7510	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	7171			34.70- 94.70	66.47
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	7575	0.80000	0.7293	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	14971			142.57- 202.57	197.64
5.957	5.957 (1.031)	41	7502			62.09- 122.09	99.04

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	13006	0.80000	0.8014	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	7613			34.02- 94.02	58.53
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	11896	0.80000	0.7815	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	10211			70.64- 130.64	85.84
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	3371	0.80000	0.8170	80.00- 120.00	100.00(a)
6.115	6.115 (0.918)	75	7643			226.85- 286.85	226.73
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	43641	0.80000	0.7719	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	13299			2.24- 62.24	30.47
6.280	6.280 (1.087)	41	11333			0.00- 54.39	25.97
102 Benzene					CAS #: 71-43-2		
6.294	6.301 (0.945)	78	15237	0.80000	0.7617	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	4544			0.00- 52.90	29.82
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213692	25.0000	23.451	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	105735			27.21- 87.21	49.48
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	8020	0.80000	0.7705	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	2408			0.79- 60.79	30.02
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	5826	0.80000	0.7352	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	17276			226.53- 286.53	296.53
6.444	6.444 (0.968)	57	8717			100.85- 160.85	149.62
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	606184	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94479			0.00- 45.71	15.59
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	7500	0.80000	0.7727	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	8249			76.29- 136.29	109.99
6.867	6.867 (1.031)	97	5319			33.63- 93.63	70.92
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	8531	0.80000	0.8318	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	5060			41.07- 101.07	59.31

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
114 1,2-Dichloropropane (continued)							
7.089	7.089 (1.065)	41	4367			22.53- 82.53	51.19
116 Methyl Methacrylate					CAS #: 80-62-6		
7.132	7.132 (0.754)	69	6670	0.80000	0.8231	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	13396			179.84- 239.84	200.84
7.139	7.139 (0.755)	100	2488			9.59- 69.59	37.30
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.079)	88	4383	0.80000	0.8042	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	4085			68.28- 128.28	93.20
7.182	7.175 (1.079)	57	1304			2.68- 62.68	29.75
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	6512	0.80000	0.7441	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	7271			60.09- 120.09	111.66
7.204	7.204 (0.761)	95	5822			48.38- 108.38	89.40
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	11296	0.80000	0.7506	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	7568			35.24- 95.24	67.00
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	9799	0.80000	0.7707	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	3081			2.42- 62.42	31.44
7.691	7.691 (1.155)	39	6857			37.16- 97.16	69.98
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	11923	0.80000	0.8488	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	4960			15.78- 75.78	41.60
6.974	6.974 (1.047)	55	14478			84.64- 144.64	121.43
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.791 (1.171)	58	8645	0.80000	0.8301	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	23117			242.35- 302.35	267.40
7.798	7.791 (1.171)	85	3561			3.24- 63.24	41.19
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	650730	25.0000	24.721	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	72936			0.00- 40.44	11.21
7.891	7.891 (1.185)	100	428196			34.95- 94.95	65.80
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	22780	0.80000	0.8254	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	12614			28.38- 88.38	55.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	9685	0.80000	0.8230	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	8103			56.00- 116.00	83.67
7.941	7.949 (1.193)	43	24475			228.66- 288.66	252.71
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	8944	0.80000	0.7706	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	3413			1.24- 61.24	38.16
8.214	8.214 (0.868)	39	5828			34.11- 94.11	65.16
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	7441	0.80000	0.7757	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	4988			31.96- 91.96	67.03
8.400	8.400 (0.888)	83	6109			52.93- 112.93	82.10
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	11474	0.80000	0.8537	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	9050			47.84- 107.84	78.87
8.464	8.464 (0.895)	131	8617			45.29- 105.29	75.10
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	9705	0.80000	0.7405	80.00- 120.00	100.00(a)
8.579	8.579 (1.288)	41	15102			94.99- 154.99	155.61
8.579	8.579 (1.288)	78	4420			2.05- 62.05	45.54
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	14778	0.80000	0.8245	80.00- 120.00	100.00
8.794	8.801 (0.930)	127	11344			47.45- 107.45	76.76
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	12593	0.80000	0.8185	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	11731			64.21- 124.21	93.15
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	589752	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	320479			23.78- 83.78	54.34
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	18502	0.80000	0.7901	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	5822			1.74- 61.74	31.47
9.496	9.496 (1.004)	77	16247			25.04- 85.04	87.81
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	10293	0.80000	0.8406	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	30246			273.74- 333.74	293.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	26221	0.80000	0.8322	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	21624			54.16- 114.16	82.47
9.603	9.603 (1.015)	85	6333			0.00- 53.90	24.15
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	12735	0.80000	0.8304	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	24959			163.73- 223.73	195.99
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	11761	0.80000	0.8004	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	25094			177.45- 237.45	213.37
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	21047	0.80000	0.8375	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	10991			17.88- 77.88	52.22
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	13923	0.80000	0.7881	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	7225			21.25- 81.25	51.89
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	37874	0.80000	0.8205	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	10437			0.00- 58.52	27.56
10.649	10.649 (1.126)	51	4962			0.00- 43.00	13.10
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	14385	0.80000	0.8714	80.00- 120.00	100.00(a)
10.878	10.871 (1.150)	98	5447			1.94- 61.94	37.87
10.871	10.871 (1.149)	42	10807			37.89- 97.89	75.13
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	378732	25.0000	25.008	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	481990			95.92- 155.92	127.26
10.921	10.921 (1.154)	176	365332			66.89- 126.89	96.46
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	18561	0.80000	0.8238	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	11307			35.20- 95.20	60.92
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	10853	0.80000	0.7731	80.00- 120.00	100.00(a)
11.107	11.107 (1.174)	158	10789			67.21- 127.21	99.41
11.179	11.179 (1.182)	77	6933			29.02- 89.02	63.88
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	11475	0.80000	0.8384	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
178 Propylbenzene (continued)							
11.150	11.150 (1.179)	91	43112			366.49- 426.49	375.70
11.143	11.150 (1.178)	105	2100			0.00- 44.85	18.30
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	5951	0.80000	0.8287	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	18371			280.55- 340.55	308.70
11.100	11.100 (1.173)	61	3117			15.49- 75.49	52.38
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	3638	0.80000	0.7728	80.00- 120.00	100.00(a)
11.179	11.179 (1.182)	89	2918			49.11- 109.11	80.21
11.179	11.179 (1.182)	75	18371			426.44- 486.44	504.98
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	33896	0.80000	0.9440	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	9535			0.00- 57.66	28.13
11.258	11.258 (1.190)	142	1347			0.00- 34.09	3.97
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	12273	0.80000	0.8246	80.00- 120.00	100.00
11.286	11.287 (1.193)	105	37727			284.55- 344.55	307.40
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	9433	0.80000	0.8094	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	32992			315.17- 375.17	349.75
11.308	11.301 (1.195)	65	4962			21.55- 81.55	52.60
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	16766	0.80000	0.8181	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	32345			164.93- 224.93	192.92
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	16331	0.80000	0.8022	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	9432			25.30- 85.30	57.76
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	30711	0.80000	0.8012	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	7000			0.00- 54.25	22.79
11.738	11.738 (1.241)	91	18642			31.27- 91.27	60.70
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	32248	0.80000	0.8337	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	16498			19.05- 79.05	51.16
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	9353	0.80000	0.7851	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
192 sec-Butylbenzene (continued)							
11.996	11.996 (1.268)	105	44701			437.55- 497.55	477.93
11.996	11.996 (1.268)	91	7110			40.76- 100.76	76.02
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	43493	0.80000	0.8260	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	10779			0.00- 55.54	24.78
12.153	12.153 (1.285)	91	9590			0.00- 51.48	22.05
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	21827	0.80000	0.8244	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	13524			33.21- 93.21	61.96
12.196	12.196 (1.289)	111	9335			11.31- 71.31	42.77
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	22077	0.80000	0.8252	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	13735			33.90- 93.90	62.21
12.311	12.311 (1.301)	111	9361			9.45- 69.45	42.40
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	28531	0.80000	0.7766	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	7255			0.00- 53.26	25.43
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	35643	0.80000	0.8594	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	32820			58.12- 118.12	92.08
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	11054	0.80000	0.8266	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	36768			314.79- 374.79	332.62
12.626	12.626 (1.335)	92	18539			154.29- 214.29	167.71
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	20836	0.80000	0.8026	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	14179			33.84- 93.84	68.05
12.733	12.741 (1.346)	111	9568			12.73- 72.73	45.92
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	25429	0.99000	0.7736	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	20311			52.87- 112.87	79.87
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	17480	1.01000	0.9113	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	17289			65.33- 125.33	98.91
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	11980	1.03000	0.8875	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
215 Hexachlorobutadiene (continued)							
14.581	14.582 (1.541)	223	7605			33.17- 93.17	63.48
216 Naphthalene					CAS #: 91-20-3		
14.761	14.768 (1.560)	128	5130	0.10000	0.1046	80.00- 120.00	100.00(a)
14.761	14.768 (1.560)	127	1046			0.00- 42.88	20.39
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	15919	1.06000	0.9388	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	15376			65.75- 125.75	96.59
15.069	15.069 (1.593)	145	5239			5.23- 65.23	32.91

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051904.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	165114	3.97
108 1,4-Difluorobenze	597103	358262	835944	606184	1.52
153 Chlorobenzene-d5	587747	352648	822846	589752	0.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051904.d

Date : 19-MAY-2021 14:02

Client ID:

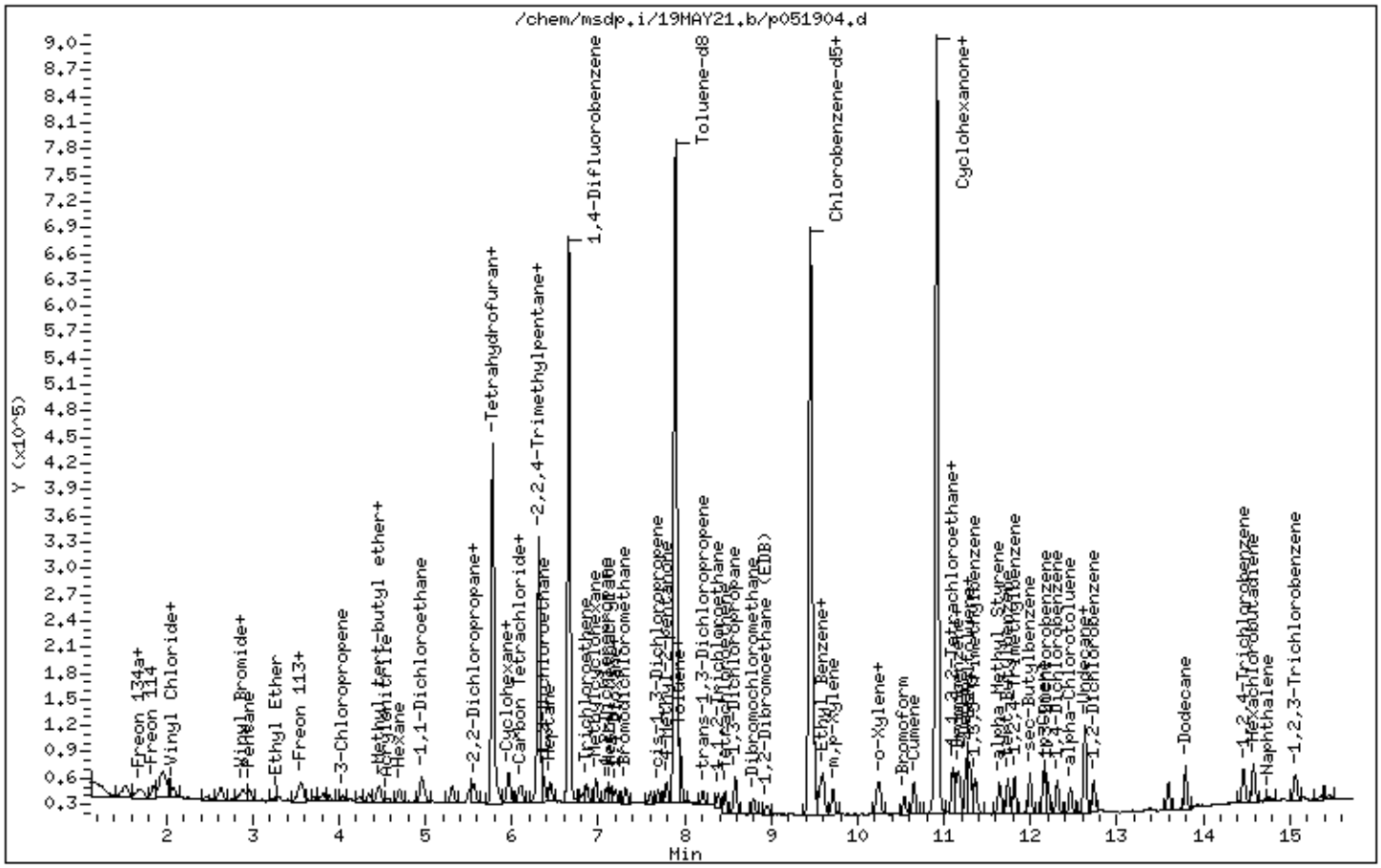
Instrument: msdp.i

Sample Info: 32mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051915.d
Lab Smp Id: ICAL Level 3
Inj Date : 19-MAY-2021 19:45
Operator : gh Inst ID: msdp.i
Smp Info : 32mL 3018-1928
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	164344	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	125886			48.23- 108.23	76.60
5.778	5.778 (1.000)	49	290825			150.57- 210.57	176.96
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	606504	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95686			0.00- 45.71	15.78
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	593084	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	324813			23.78- 83.78	54.77
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	3384	0.80000	1.014	80.00- 120.00	100.00(a)
1.591	1.590 (0.275)	69	8253			243.50- 303.50	243.88
1.591	1.590 (0.275)	64	1419			0.00- 54.06	41.93
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	3721	0.80000	1.216	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	2558			34.98- 94.98	68.74
1.688	1.674 (0.292)	41	1187			25.22- 85.22	31.90
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	14331	0.80000	0.8483	80.00- 120.00	100.00(a)
1.884	1.884 (0.326)	45	4817			0.00- 59.77	33.61
36 1-Pentene					CAS #: 109-67-1		
2.898	2.906 (0.502)	55	8373	0.80000	0.7641	80.00- 120.00	100.00(a)
2.898	2.906 (0.502)	42	10665			105.17- 165.17	127.37
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	8954	0.80000	0.8423	80.00- 120.00	100.00(a)
3.378	3.378 (0.585)	67	10000			104.69- 164.69	111.68
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	12043	0.80000	0.8181	80.00- 120.00	100.00(a)
3.486	3.479 (0.603)	133	2878			0.00- 50.87	23.90
3.472	3.479 (0.601)	85	7657			36.08- 96.08	63.58
55 Cyclopentene					CAS #: 142-29-0		
4.066	4.073 (0.704)	67	13033	0.80000	0.8236	80.00- 120.00	100.00(a)
4.073	4.073 (0.705)	68	5570			6.76- 66.76	42.74
4.073	4.073 (0.705)	53	4098			0.00- 57.54	31.44
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.073 (0.706)	43	13892	0.80000	0.7505	80.00- 120.00	100.00(a)
4.073	4.073 (0.705)	74	2356			0.00- 44.13	16.96
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	10679	0.80000	0.7298	80.00- 120.00	100.00(a)
5.019	5.019 (0.869)	88	4129			9.21- 69.21	38.66
5.019	5.019 (0.869)	50	3511			0.00- 54.25	32.88
75 1-Propanol					CAS #: 71-23-8		
5.090	5.083 (0.881)	59	1961	0.80000	0.8598	80.00- 120.00	100.00(a)
5.090	5.083 (0.881)	42	1356			63.23- 123.23	69.15
5.090	5.083 (0.881)	41	964			24.74- 84.74	49.16
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.974)	55	14529	0.80000	0.7451	80.00- 120.00	100.00(a)
5.620	5.620 (0.973)	85	2658			0.00- 41.28	18.29
5.620	5.620 (0.973)	58	1084			0.00- 38.22	7.46
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	1516	0.80000	0.6268	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	6586			448.18- 508.18	434.43
6.244	6.244 (1.081)	41	6296			299.99- 359.99	415.30
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	1140	0.80000	0.8059	80.00- 120.00	100.00(a)
6.938	6.938 (0.733)	45	2310			149.95- 209.95	202.63
6.938	6.938 (0.733)	55	19701			1849.07-1909.07	1728.16
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	24123	0.80000	0.7933	80.00- 120.00	100.00(a)
7.032	7.031 (0.743)	58	1837			0.00- 37.44	7.62
7.032	7.031 (0.743)	86	3321			0.00- 42.78	13.77
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	12701	0.80000	0.8216	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	3929			0.00- 59.10	30.93
8.665	8.657 (1.301)	43	29172			215.30- 275.30	229.68
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	10131	0.80000	0.7736	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	593084			57.42- 117.42	5854.15
9.596	9.596 (1.014)	95	4021			5.70- 65.70	39.69
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	19243	0.80000	0.7954	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	30387			136.03- 196.03	157.91
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	6734	0.80000	0.6275	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	4720			39.41- 99.41	70.09
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	9434	0.80000	0.7705	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	29750			295.02- 355.02	315.35
11.437	11.444 (1.209)	63	4126			11.82- 71.82	43.74
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	14202	0.80000	0.8022	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	30046			192.40- 252.40	211.56
12.318	12.318 (1.302)	77	4952			0.00- 54.69	34.87
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	4732	0.80000	0.7912	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	7064			102.99- 162.99	149.28

				AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	19960	0.80000	0.7958	80.00- 120.00	100.00(a)
13.758	13.758 (1.454)	182	18425			65.24- 125.24	92.31
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	17650	0.80000	0.7612	80.00- 120.00	100.00(a)
10.599	10.599 (1.120)	77	6081			0.00- 58.21	34.45
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	9306	0.80000	0.6884	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	29750			153.57- 213.57	319.69

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051915.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	164344	3.48
108 1,4-Difluorobenze	597103	358262	835944	606504	1.57
153 Chlorobenzene-d5	587747	352648	822846	593084	0.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051915.d

Date : 19-MAY-2021 19:45

Client ID:

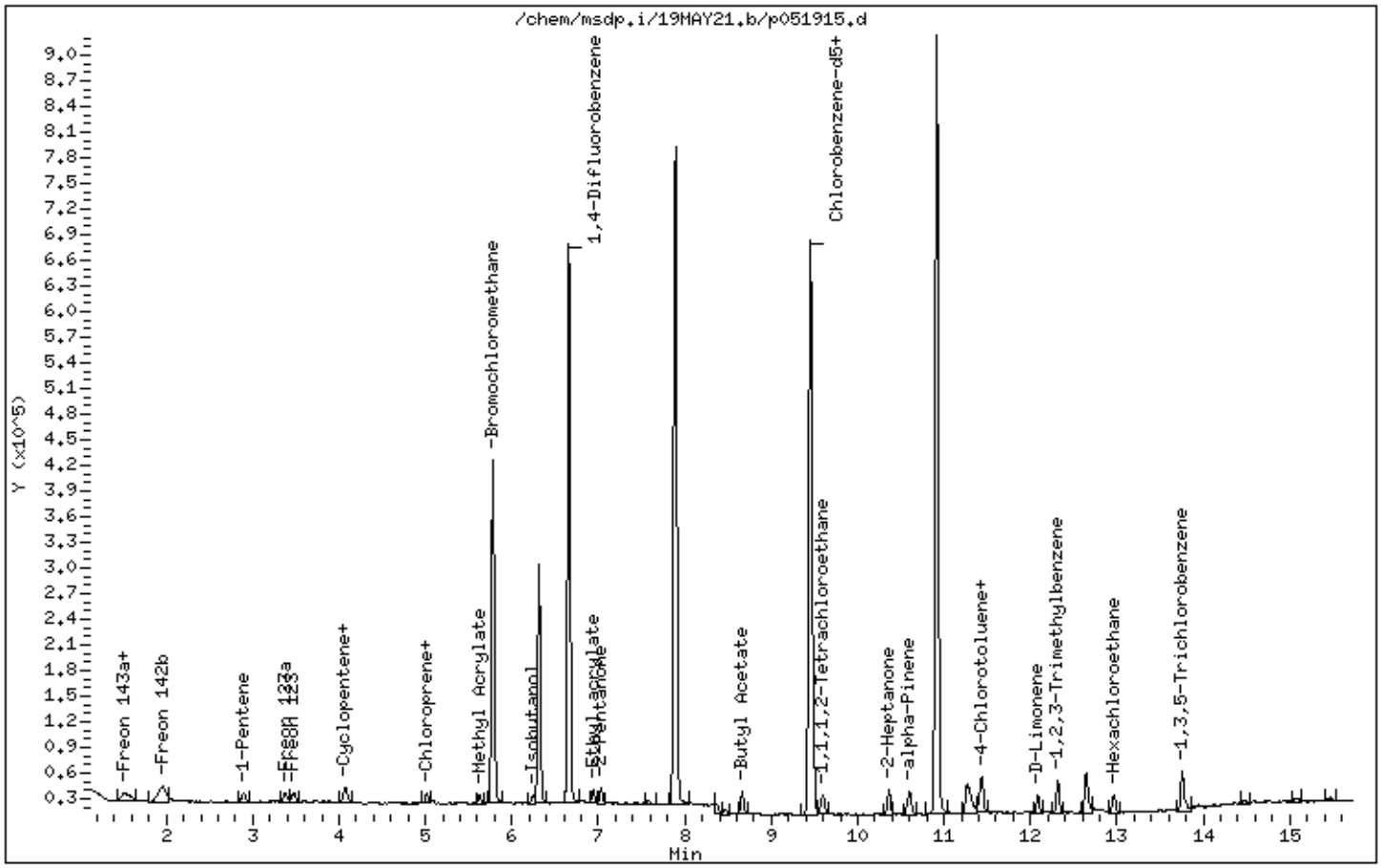
Instrument: msdp.i

Sample Info: 32mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051905.d
Lab Smp Id: ICAL Level 4
Inj Date : 19-MAY-2021 14:30
Operator : LD Inst ID: msdp.i
Smp Info : 80mL 3018-2045
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:13 Cal File: p051916.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.646	1.633 (0.285)	83	10752	2.00000	2.113	80.00- 120.00	100.00
1.646	1.633 (0.285)	69	9430			59.44- 119.44	87.70
1.744	1.745 (0.302)	51	44872			419.06- 479.06	417.34
5 Propylene					CAS #: 115-07-1		
1.674	1.675 (0.290)	41	16628	2.00000	2.178	80.00- 120.00	100.00
1.674	1.675 (0.290)	42	9737			35.28- 95.28	58.56
1.674	1.675 (0.290)	39	9475			38.35- 98.35	56.98
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.703 (0.295)	65	9119	2.00000	2.248	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	44872			597.63- 657.63	492.07
1.702	1.703 (0.295)	47	4376			33.72- 93.72	47.99
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	28857	2.00000	2.119	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	9809			2.37- 62.37	33.99
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	2775	2.00000	2.050	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	44872			1501.01-1561.01	1617.01
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	30051	2.00000	2.103	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	10561			2.30- 62.30	35.14
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	37601	2.00000	2.238	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	10224			2.44- 62.44	27.19
1.870	1.856 (0.324)	58	1126			0.00- 33.36	2.99
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	20795	2.00000	2.143	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	6777			0.00- 56.26	32.59
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	4684	2.00000	2.428	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	30160			823.29- 883.29	643.89
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	22935	2.00000	2.214	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	4016			0.00- 59.69	17.51
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	14209	2.00000	1.851	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	14860			52.37- 112.37	104.58
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	15345	2.00000	2.288	80.00- 120.00	100.00
2.476	2.483 (0.428)	96	14452			64.07- 124.07	94.18
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	7064	2.00000	2.048	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	2424			0.04- 60.04	34.31
2.619	2.612 (0.453)	49	2630			4.54- 64.54	37.23
31 Isopentane					CAS #: 78-78-4		
2.633	2.634 (0.456)	43	21473	2.00000	2.019	80.00- 120.00	100.00
2.633	2.634 (0.456)	57	14410			34.12- 94.12	67.11
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	12788	2.00000	2.173	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	11825			69.27- 129.27	92.47
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	29478	2.00000	1.982	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	21023			34.72- 94.72	71.32
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.899 (0.502)	67	26413	2.00000	2.016	80.00- 120.00	100.00
2.891	2.899 (0.500)	69	8532			0.84- 60.84	32.30
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	36199	2.00000	2.019	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	5481			0.00- 44.98	15.14
2.970	2.970 (0.514)	72	2569			0.00- 37.39	7.10
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.570)	74	6103	2.00000	2.113	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	11984			163.46- 223.46	196.36
3.285	3.285 (0.569)	45	17007			250.40- 310.40	278.67
39 Ethanol					CAS #: 64-17-5		
3.249	3.242 (0.562)	46	3513	2.00000	2.141	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	17032			511.19- 571.19	484.83
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	5593	2.00000	2.070	80.00- 120.00	100.00
3.529	3.529 (0.611)	56	9027			111.10- 171.10	161.40
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	22474	2.00000	2.051	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	14485			33.56- 93.56	64.45
3.550	3.550 (0.614)	101	27010			89.21- 149.21	120.18
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	12551	2.00000	1.903	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	8404			34.02- 94.02	66.96
3.579	3.579 (0.619)	61	26438			168.77- 228.77	210.64
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	9195	2.00000	2.141	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	30176			302.95- 362.95	328.18
48 Carbon Disulfide					CAS #: 75-15-0		
3.822	3.823 (0.662)	76	36134	2.00000	2.058	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	14456	2.00000	1.356	80.00- 120.00	100.00(a)
3.794	3.794 (0.657)	127	6010			12.22- 72.22	41.57

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.674)	45	34496	2.00000	2.040	80.00- 120.00	100.00
3.894	3.887 (0.674)	43	6922			0.00- 47.19	20.07
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	6575	2.00000	2.162	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	25612			396.19- 456.19	389.54
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.715)	41	15059	2.00000	1.986	80.00- 120.00	100.00
4.131	4.123 (0.715)	40	9224			20.95- 80.95	61.25
4.131	4.123 (0.715)	38	2726			0.00- 41.17	18.10
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.238 (0.732)	49	21233	2.00000	2.009	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	11130			22.03- 82.03	52.42
4.238	4.238 (0.733)	51	6579			0.18- 60.18	30.98
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.752)	59	40925	2.00000	2.099	80.00- 120.00	100.00
4.345	4.338 (0.752)	41	8206			0.00- 51.11	20.05
4.338	4.338 (0.751)	57	4155			0.00- 40.49	10.15
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.453	4.446 (0.771)	73	38812	2.00000	1.981	80.00- 120.00	100.00
4.453	4.446 (0.771)	57	12311			3.10- 63.10	31.72
4.453	4.446 (0.771)	41	12889			1.28- 61.28	33.21
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	9180	2.00000	2.060	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	24720			255.84- 315.84	269.28
4.474	4.482 (0.774)	96	14713			127.59- 187.59	160.27
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	13138	2.00000	2.031	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	14824			88.05- 148.05	112.83
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	31248	2.00000	2.036	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	21924			37.52- 97.52	70.16
4.696	4.697 (0.813)	86	3562			0.00- 41.48	11.40
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	27529	2.00000	2.029	80.00- 120.00	100.00
4.961	4.962 (0.859)	65	8205			0.00- 59.70	29.80

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.954	4.954 (0.857)	45	71591	2.00000	1.988	80.00- 120.00	100.00(a)
4.954	4.954 (0.857)	87	13182			0.00- 48.18	18.41
4.954	4.954 (0.857)	59	8012			0.00- 40.15	11.19
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.865)	86	3538	2.00000	2.042	80.00- 120.00	100.00
4.997	4.997 (0.865)	43	83098			2432.48-2492.48	2348.73
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.312	5.305 (0.919)	59	61838	2.00000	1.988	80.00- 120.00	100.00(a)
5.312	5.305 (0.919)	87	18730			1.00- 61.00	30.29
5.312	5.305 (0.919)	41	11608			0.00- 48.73	18.77
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.506	5.506 (0.953)	77	23271	2.00000	2.002	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	7682			2.28- 62.28	33.01
5.506	5.506 (0.953)	97	5978			0.00- 53.93	25.69
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.960)	98	9213	2.00000	2.082	80.00- 120.00	100.00
5.542	5.549 (0.959)	96	15160			125.75- 185.75	164.55
5.542	5.549 (0.959)	61	33574			332.40- 392.40	364.42
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.962)	72	7496	2.00000	2.089	80.00- 120.00	100.00
5.570	5.556 (0.964)	43	90870			1214.50-1274.50	1212.25
5.556	5.556 (0.962)	57	3054			14.68- 74.68	40.74
87 Ethyl Acetate						CAS #: 141-78-6	
5.577	5.570 (0.965)	45	7299	2.00000	2.045	80.00- 120.00	100.00
5.542	5.549 (0.959)	61	33574			452.04- 512.04	459.98
5.570	5.570 (0.964)	70	4007			22.77- 82.77	54.90
89 Tetrahydrofuran						CAS #: 109-99-9	
5.778	5.771 (1.000)	42	24973	2.00000	2.047	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	6164			0.00- 55.82	24.68
5.778	5.771 (1.000)	72	6913			0.00- 57.59	27.68
* 90 Bromochloromethane						CAS #: 74-97-5	
5.778	5.778 (1.000)	130	159831	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126227			48.23- 108.23	78.98
5.778	5.778 (1.000)	49	292527			150.57- 210.57	183.02
92 Chloroform						CAS #: 67-66-3	
5.835	5.835 (1.010)	83	27594	2.00000	2.032	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	18631			34.70- 94.70	67.52
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	19272	2.00000	2.021	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	34982			142.57- 202.57	181.52
5.957	5.957 (1.031)	41	20285			62.09- 122.09	105.26
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	31014	2.00000	2.006	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	19587			34.02- 94.02	63.16
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	28698	2.00000	1.977	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	27861			70.64- 130.64	97.08
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	8669	2.00000	2.064	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	21304			226.85- 286.85	245.75
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.280 (1.088)	57	105858	2.00000	1.977	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	34121			2.24- 62.24	32.23
6.287	6.280 (1.088)	41	25646			0.00- 54.39	24.23
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	42719	2.00000	2.114	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	9426			0.00- 52.90	22.07
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213845	25.0000	25.226	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	109056			27.21- 87.21	51.00
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	12080	2.00000	2.059	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	45185			372.79- 432.79	374.05
6.358	6.358 (0.955)	55	15451			112.09- 172.09	127.91
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	21692	2.00000	2.056	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	7191			0.79- 60.79	33.15
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	15826	2.00000	2.037	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	42456			226.53- 286.53	268.27
6.444	6.444 (0.968)	57	22790			100.85- 160.85	144.00

				AMOUNTS		
				CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	608981	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	97098			0.00- 45.71	15.94
110 n-Butanol					CAS #: 71-36-3		
6.817	6.810 (1.024)	56	13920	2.00000	1.933	80.00- 120.00	100.00
6.817	6.810 (1.024)	41	11206			40.99- 100.99	80.50
6.817	6.810 (1.024)	43	8308			27.38- 87.38	59.68
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	20090	2.00000	2.063	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	21639			76.29- 136.29	107.71
6.867	6.867 (1.031)	97	12122			33.63- 93.63	60.34
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.089 (1.066)	63	20821	2.00000	2.005	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	14576			41.07- 101.07	70.01
7.096	7.089 (1.066)	41	10584			22.53- 82.53	50.83
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	16454	2.00000	1.977	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	33345			179.84- 239.84	202.66
7.139	7.139 (0.755)	100	6482			9.59- 69.59	39.39
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.079)	88	11643	2.00000	2.092	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	11397			68.28- 128.28	97.89
7.175	7.175 (1.077)	57	4191			2.68- 62.68	36.00
118 Dibromomethane					CAS #: 74-95-3		
7.203	7.204 (0.761)	174	19142	2.00000	2.126	80.00- 120.00	100.00
7.203	7.204 (0.761)	93	16978			60.09- 120.09	88.70
7.203	7.204 (0.761)	95	14808			48.38- 108.38	77.36
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	31009	2.00000	2.066	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	19794			35.24- 95.24	63.83
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	25607	2.00000	2.035	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	8122			2.42- 62.42	31.72
7.691	7.691 (1.155)	39	17386			37.16- 97.16	67.90
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	26965	2.00000	1.892	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	13600			15.78- 75.78	50.44

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	34696			84.64- 144.64	128.67
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.791 (1.171)	58	20235	2.00000	1.954	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	55273			242.35- 302.35	273.16
7.798	7.791 (1.171)	85	7479			3.24- 63.24	36.96
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	665455	25.0000	25.210	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	77094			0.00- 40.44	11.59
7.891	7.891 (1.185)	100	431576			34.95- 94.95	64.85
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	56064	2.00000	1.997	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	34906			28.38- 88.38	62.26
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	22118	2.00000	1.902	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	18563			56.00- 116.00	83.93
7.941	7.949 (1.193)	43	60251			228.66- 288.66	272.41
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	24394	2.00000	2.042	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	8513			1.24- 61.24	34.90
8.213	8.214 (0.868)	39	16646			34.11- 94.11	68.24
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	19362	2.00000	2.008	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	12564			31.96- 91.96	64.89
8.400	8.400 (0.888)	83	17346			52.93- 112.93	89.59
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	28170	2.00000	1.983	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	21640			47.84- 107.84	76.82
8.464	8.464 (0.895)	131	20810			45.29- 105.29	73.87
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	27816	2.00000	1.995	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	55470			162.87- 222.87	199.42
8.586	8.586 (0.908)	100	4450			0.00- 45.94	16.00
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	27760	2.00000	2.102	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	35478			94.99- 154.99	127.80
8.579	8.579 (1.288)	78	9229			2.05- 62.05	33.25

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1		
8.801	8.801 (0.930)	129	36760	2.00000		1.973	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	28370				47.45- 107.45	77.18
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4		
8.951	8.951 (0.946)	107	32272	2.00000		2.011	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	30370				64.21- 124.21	94.11
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0		
7.605	7.605 (1.142)	63	38340	2.00000		2.022	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	11961				0.00- 59.64	31.20
7.605	7.605 (1.142)	144	3836				0.00- 39.63	10.01
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	602501	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	328882				23.78- 83.78	54.59
154 Chlorobenzene						CAS #: 108-90-7		
9.496	9.496 (1.004)	112	48343	2.00000		2.025	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	15057				1.74- 61.74	31.15
9.496	9.496 (1.004)	77	32004				25.04- 85.04	66.20
155 Ethyl Benzene						CAS #: 100-41-4		
9.567	9.567 (1.011)	106	24932	2.00000		1.960	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	76105				273.74- 333.74	305.25
156 Nonane						CAS #: 111-84-2		
9.596	9.596 (1.014)	43	63929	2.00000		1.973	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	51732				54.16- 114.16	80.92
9.596	9.603 (1.014)	85	15047				0.00- 53.90	23.54
158 m,p-Xylene						CAS #: 108-38-3		
9.718	9.718 (1.027)	106	30801	2.00000		1.958	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	61907				163.73- 223.73	200.99
164 o-Xylene						CAS #: 95-47-6		
10.226	10.226 (1.081)	106	31016	2.00000		2.047	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	61477				177.45- 237.45	198.21
165 Styrene						CAS #: 100-42-5		
10.255	10.255 (1.084)	104	51582	2.00000		1.986	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	24588				17.88- 77.88	47.67
167 Bromoform						CAS #: 75-25-2		
10.541	10.542 (1.114)	173	35253	2.00000		1.964	80.00- 120.00	100.00
10.549	10.542 (1.115)	171	18187				21.25- 81.25	51.59

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
168 Cumene						CAS #: 98-82-8		
10.649	10.649 (1.126)	105	92633	2.00000		1.959	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	25468				0.00- 58.52	27.49
10.649	10.649 (1.126)	51	12337				0.00- 43.00	13.32
169 Cyclohexanone						CAS #: 108-94-1		
10.871	10.871 (1.149)	55	34971	2.00000		2.003	80.00- 120.00	100.00(a)
10.878	10.871 (1.150)	98	11080				1.94- 61.94	31.68
10.871	10.871 (1.149)	42	22417				37.89- 97.89	64.10
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	386143	25.0000		25.034	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	491927				95.92- 155.92	127.40
10.921	10.921 (1.154)	176	373529				66.89- 126.89	96.73
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
11.100	11.100 (1.173)	83	45589	2.00000		1.968	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	30225				35.20- 95.20	66.30
177 Bromobenzene						CAS #: 108-86-1		
11.107	11.107 (1.174)	156	29228	2.00000		2.039	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	27871				67.21- 127.21	95.36
11.179	11.179 (1.182)	77	16535				29.02- 89.02	56.57
178 Propylbenzene						CAS #: 103-65-1		
11.150	11.150 (1.179)	120	27541	2.00000		1.952	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	110564				366.49- 426.49	401.45
11.150	11.150 (1.179)	105	4410				0.00- 44.85	16.01
179 1,2,3-Trichloropropane						CAS #: 96-18-4		
11.179	11.179 (1.182)	110	15487	2.00000		2.068	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	44040				280.55- 340.55	284.37
11.100	11.100 (1.173)	61	6929				15.49- 75.49	44.74
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6		
11.179	11.179 (1.182)	53	10130	2.00000		2.088	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	7740				49.11- 109.11	76.41
11.179	11.179 (1.182)	75	44040				426.44- 486.44	434.75
182 Decane						CAS #: 124-18-5		
11.251	11.251 (1.189)	57	75743	2.00000		1.938	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	21477				0.00- 57.66	28.36
11.258	11.258 (1.190)	142	2780				0.00- 34.09	3.67
183 4-Ethyltoluene						CAS #: 622-96-8		
11.286	11.287 (1.193)	120	30874	2.00000		2.017	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	94572			284.55- 344.55	306.32
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	23935	2.00000	2.009	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	81565			315.17- 375.17	340.78
11.301	11.301 (1.195)	65	12898			21.55- 81.55	53.89
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	40449	2.00000	1.939	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	83373			164.93- 224.93	206.12
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	42379	2.00000	2.012	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	23377			25.30- 85.30	55.16
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	78389	2.00000	2.001	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	18724			0.00- 54.25	23.89
11.738	11.738 (1.241)	91	46791			31.27- 91.27	59.69
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	78168	2.00000	1.959	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	40414			19.05- 79.05	51.70
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	24394	2.00000	2.013	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	113600			437.55- 497.55	465.69
11.996	11.996 (1.268)	91	17621			40.76- 100.76	72.23
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	104556	2.00000	1.942	80.00- 120.00	100.00
12.153	12.160 (1.285)	134	27205			0.00- 55.54	26.02
12.153	12.153 (1.285)	91	22499			0.00- 51.48	21.52
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	55740	2.00000	2.016	80.00- 120.00	100.00
12.196	12.196 (1.289)	148	34699			33.21- 93.21	62.25
12.196	12.196 (1.289)	111	22480			11.31- 71.31	40.33
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	54700	2.00000	1.976	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	35545			33.90- 93.90	64.98
12.311	12.311 (1.301)	111	21710			9.45- 69.45	39.69
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	74656	2.00000	2.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	17192			0.00- 53.26	23.03
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	87872	2.00000	1.994	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	80279			58.12- 118.12	91.36
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	28076	2.00000	2.018	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	92470			314.79- 374.79	329.36
12.626	12.626 (1.335)	92	50010			154.29- 214.29	178.12
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	54244	2.00000	2.034	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	33671			33.84- 93.84	62.07
12.733	12.741 (1.346)	111	23692			12.73- 72.73	43.68
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	31809	2.00000	1.969	80.00- 120.00	100.00(a)
13.600	13.600 (1.438)	75	26948			52.48- 112.48	84.72
13.600	13.600 (1.438)	155	24389			47.41- 107.41	76.67
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	76973	2.47000	2.484	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	66209			52.87- 112.87	86.02
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.460	14.467 (1.529)	180	50012	2.52000	2.605	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	47092			65.33- 125.33	94.16
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	35349	2.57000	2.658	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	22934			33.17- 93.17	64.88
216 Naphthalene					CAS #: 91-20-3		
14.760	14.768 (1.560)	128	13400	0.25000	0.2587	80.00- 120.00	100.00(a)
14.768	14.768 (1.561)	127	2043			0.00- 42.88	15.25
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	46605	2.66000	2.753	80.00- 120.00	100.00
15.068	15.069 (1.593)	182	42985			65.75- 125.75	92.23
15.061	15.069 (1.592)	145	15683			5.23- 65.23	33.65

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051905.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	159831	0.64
108 1,4-Difluorobenze	597103	358262	835944	608981	1.99
153 Chlorobenzene-d5	587747	352648	822846	602501	2.51

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051905.d

Date : 19-MAY-2021 14:30

Client ID:

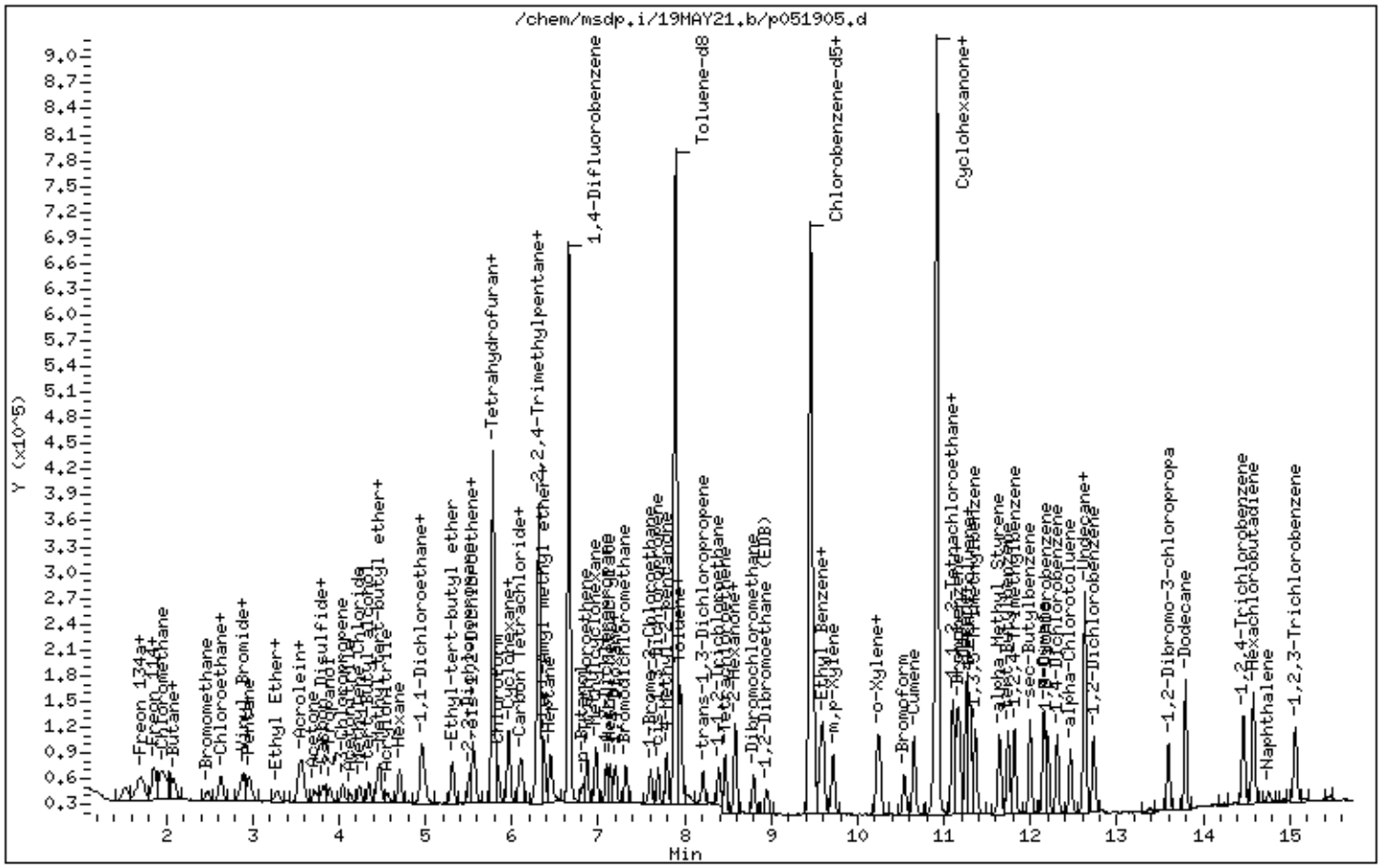
Instrument: msdp.i

Sample Info: 80mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051916.d
Lab Smp Id: ICAL Level 4
Inj Date : 19-MAY-2021 20:13
Operator : gh Inst ID: msdp.i
Smp Info : 80mL 3018-1928
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:13 Cal File: p051916.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	156828	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	122219			48.23- 108.23	77.93
5.778	5.778 (1.000)	49	287649			150.57- 210.57	183.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	605078	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	96791			0.00- 45.71	16.00
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	594880	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	325179			23.78- 83.78	54.66
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	7005	2.00000	2.200	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	17061			243.50- 303.50	243.55
1.591	1.590 (0.275)	64	2455			0.00- 54.06	35.05
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	5172	2.00000	1.772	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.675	1.674 (0.290)	39	4252			34.98- 94.98	82.21
1.675	1.674 (0.290)	41	3543			25.22- 85.22	68.50
13 Freon 142b						CAS #: 75-68-3	
1.898	1.884 (0.329)	65	31581	2.00000	1.959	80.00- 120.00	100.00(a)
1.884	1.884 (0.326)	45	11066			0.00- 59.77	35.04
36 1-Pentene						CAS #: 109-67-1	
2.906	2.906 (0.503)	55	19625	2.00000	1.877	80.00- 120.00	100.00(a)
2.906	2.906 (0.503)	42	27964			105.17- 165.17	142.49
40 Freon 123a						CAS #: 354-23-4	
3.378	3.385 (0.585)	117	19654	2.00000	1.937	80.00- 120.00	100.00(a)
3.386	3.378 (0.586)	67	26135			104.69- 164.69	132.98
41 Freon 123						CAS #: 306-83-2	
3.479	3.479 (0.602)	83	29140	2.00000	2.074	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	6343			0.00- 50.87	21.77
3.479	3.479 (0.602)	85	20407			36.08- 96.08	70.03
55 Cyclopentene						CAS #: 142-29-0	
4.073	4.073 (0.705)	67	30943	2.00000	2.049	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	11219			6.76- 66.76	36.26
4.073	4.073 (0.705)	53	8640			0.00- 57.54	27.92
56 Methyl Acetate						CAS #: 79-20-9	
4.080	4.073 (0.706)	43	37032	2.00000	2.096	80.00- 120.00	100.00(a)
4.080	4.073 (0.706)	74	5940			0.00- 44.13	16.04
74 Chloroprene						CAS #: 126-99-8	
5.019	5.019 (0.869)	53	28789	2.00000	2.062	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	11054			9.21- 69.21	38.40
5.019	5.019 (0.869)	50	7722			0.00- 54.25	26.82
75 1-Propanol						CAS #: 71-23-8	
5.090	5.083 (0.881)	59	4700	2.00000	2.160	80.00- 120.00	100.00
5.090	5.083 (0.881)	42	3899			63.23- 123.23	82.96
5.090	5.083 (0.881)	41	2821			24.74- 84.74	60.02
88 Methyl Acrylate						CAS #: 96-33-3	
5.628	5.620 (0.974)	55	37088	2.00000	1.993	80.00- 120.00	100.00(a)
5.628	5.620 (0.974)	85	5500			0.00- 41.28	14.83
5.628	5.620 (0.974)	58	3509			0.00- 38.22	9.46
103 Isobutanol						CAS #: 78-83-1	
6.244	6.244 (1.081)	39	4047	2.00000	1.753	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	20761			448.18- 508.18	513.00
6.244	6.244 (1.081)	41	13172			299.99- 359.99	325.48
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.938 (0.734)	99	2995	2.00000	2.111	80.00- 120.00	100.00
6.946	6.938 (0.734)	45	5574			149.95- 209.95	186.11
6.939	6.938 (0.733)	55	50476			1849.07-1909.07	1685.34
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	62449	2.00000	2.048	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	4500			0.00- 37.44	7.21
7.032	7.031 (0.743)	86	7757			0.00- 42.78	12.42
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	30994	2.00000	2.010	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	9804			0.00- 59.10	31.63
8.665	8.657 (1.301)	43	73858			215.30- 275.30	238.30
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	24295	2.00000	1.850	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	594880			57.42- 117.42	2448.57
9.603	9.596 (1.015)	95	9068			5.70- 65.70	37.32
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	45629	2.00000	1.976	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	77430			136.03- 196.03	169.69
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	17413	2.00000	1.618	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	11534			39.41- 99.41	66.24
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	25118	2.00000	2.045	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	72648			295.02- 355.02	289.23
11.444	11.444 (1.210)	63	9860			11.82- 71.82	39.25
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	34881	2.00000	1.964	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	77447			192.40- 252.40	222.03
12.311	12.318 (1.301)	77	8888			0.00- 54.69	25.48
205 Hexachloroethane					CAS #: 67-72-1		
12.963	12.970 (1.370)	201	9631	2.00000	1.605	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	13291			102.99- 162.99	138.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	50566	2.00000	2.010	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	47208			65.24- 125.24	93.36
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	45684	2.00000	1.964	80.00- 120.00	100.00(a)
10.599	10.599 (1.120)	77	14355			0.00- 58.21	31.42
214 beta-Pinene					CAS #: 127-91-3		
11.415	11.422 (1.207)	93	23101	2.00000	1.704	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	72648			153.57- 213.57	314.48

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051916.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	156828	-1.25
108 1,4-Difluorobenze	597103	358262	835944	605078	1.34
153 Chlorobenzene-d5	587747	352648	822846	594880	1.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051916.d

Date : 19-MAY-2021 20:13

Client ID:

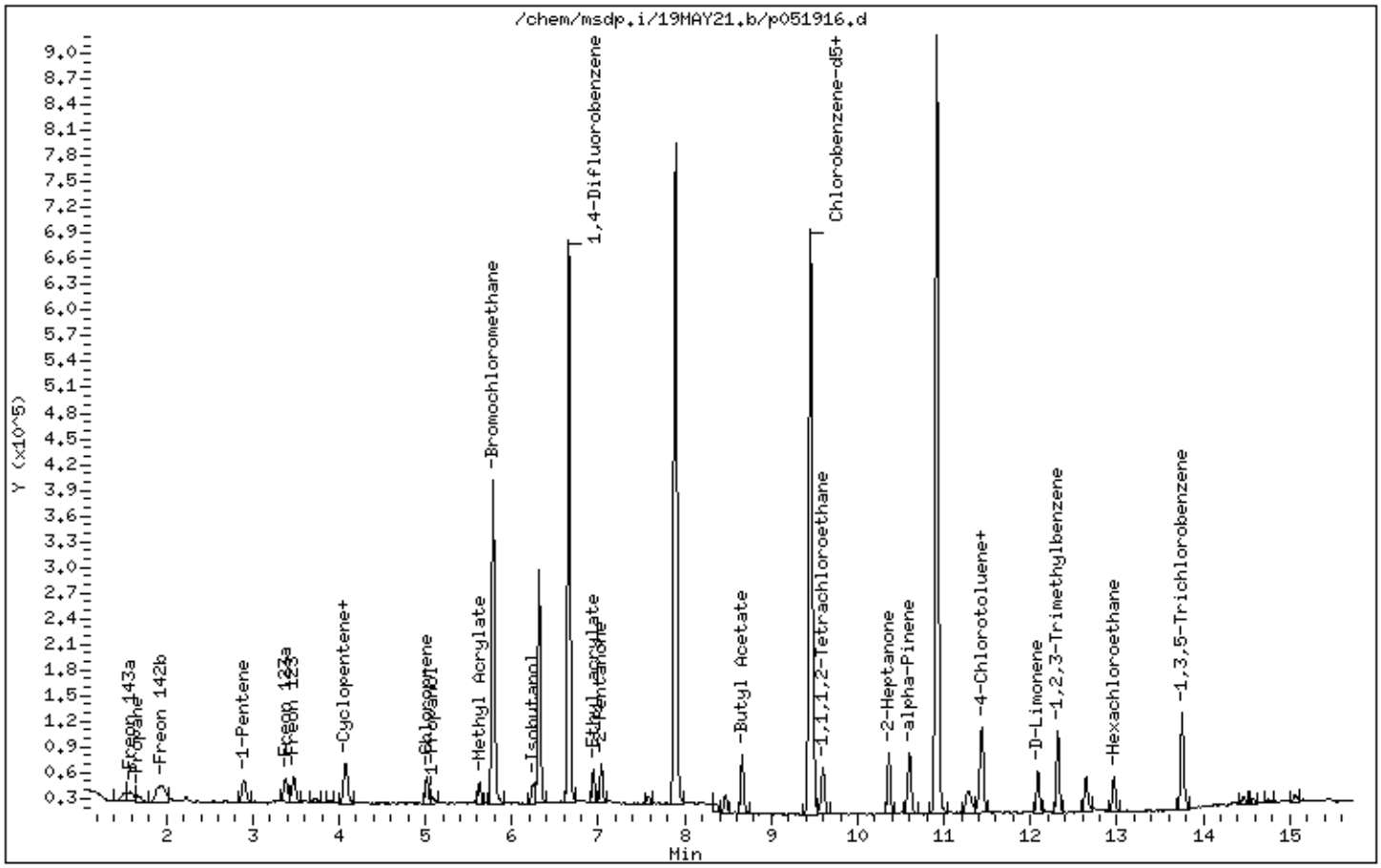
Instrument: msdp.i

Sample Info: 80mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062206.d
Lab Smp Id: ICAL Level 5
Inj Date : 22-JUN-2021 16:17
Operator : LD Inst ID: msd3.i
Smp Info : 32mL 3018-2078
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:22 Cal File: 3062217.d
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL_lv3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	230876	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	179221			48.46- 108.46	77.63
5.270	5.270 (1.000)	49	343480			120.39- 180.39	148.77
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	839788	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	132912			0.00- 45.52	15.83
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	799921	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	441630			25.46- 85.46	55.21
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	9555	0.80000	0.7941	80.00- 120.00	100.00(a)
8.712	8.712 (1.011)	117	10713			38.22- 98.22	112.12
8.712	8.712 (1.011)	95	4189			7.54- 67.54	43.84

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062206.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	230876	-5.15
108 1,4-Difluorobenze	874076	524446	1223706	839788	-3.92
153 Chlorobenzene-d5	831223	498734	1163712	799921	-3.77

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062206.d

Date : 22-JUN-2021 16:17

Client ID:

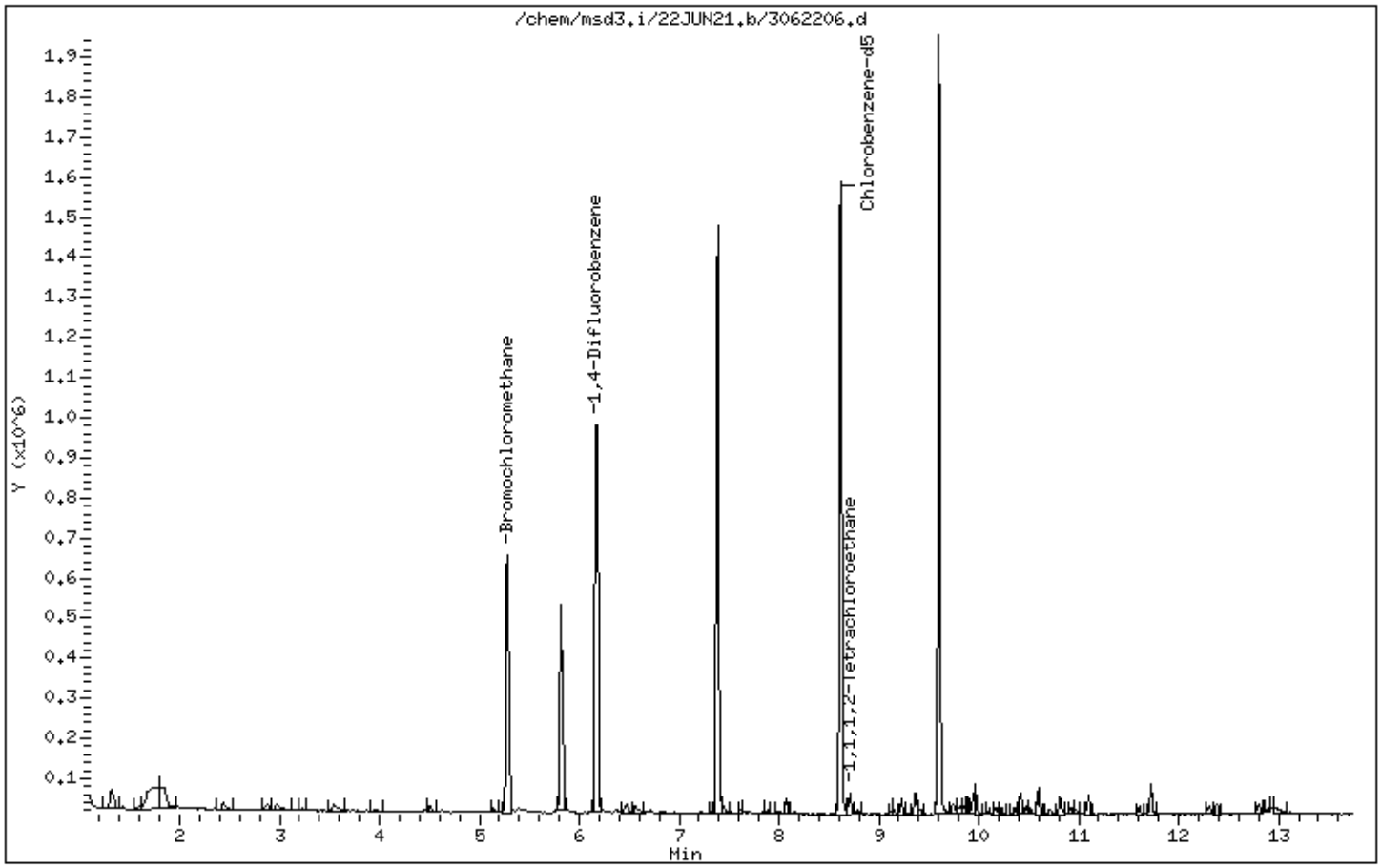
Instrument: msd3.i

Sample Info: 32mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062217.d
Lab Smp Id: ICAL Level 5
Inj Date : 22-JUN-2021 21:22
Operator : LD Inst ID: msd3.i
Smp Info : 32mL 3018-2116
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:22 Cal File: 3062217.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level5.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.265)	83	5563	0.80000	0.8589	80.00- 120.00	100.00
1.395	1.395 (0.265)	69	4431			51.82- 111.82	79.65
1.479	1.479 (0.281)	51	14662			194.91- 254.91	263.56
8 Freon 12					CAS #: 75-71-8		
1.451	1.465 (0.275)	85	16534	0.80000	0.8719	80.00- 120.00	100.00
1.451	1.465 (0.275)	87	5762			2.63- 62.63	34.85
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.479	1.479 (0.281)	67	2252	0.80000	1.081	80.00- 120.00	100.00
1.479	1.479 (0.281)	51	14662			719.76- 779.76	651.07
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	11712	0.80000	0.8336	80.00- 120.00	100.00
1.563	1.562 (0.296)	137	3517			2.12- 62.12	30.03
12 Isobutane					CAS #: 75-28-5		
1.577	1.576 (0.299)	43	11751	0.80000	0.7952	80.00- 120.00	100.00(a)
1.577	1.576 (0.299)	42	4362			2.44- 62.44	37.12

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
12 Isobutane (continued)							
1.577	1.576 (0.299)	58	1502			0.00- 33.26	12.78
19 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.744 (0.331)	62	7532	0.80000	0.8931	80.00- 120.00	100.00
1.731	1.744 (0.328)	64	3136			1.28- 61.28	41.64
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.334)	54	7337	0.80000	0.9492	80.00- 120.00	100.00
1.758	1.758 (0.334)	39	9535			69.23- 129.23	129.96
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.453)	106	6541	0.80000	0.9020	80.00- 120.00	100.00
2.388	2.388 (0.453)	108	5865			63.14- 123.14	89.67
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.461)	101	16446	0.80000	0.8197	80.00- 120.00	100.00
2.430	2.430 (0.461)	103	11426			35.12- 95.12	69.48
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.464)	67	13606	0.80000	0.8483	80.00- 120.00	100.00
2.444	2.444 (0.464)	69	4613			0.74- 60.74	33.90
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.474)	43	13633	0.80000	0.8452	80.00- 120.00	100.00
2.500	2.500 (0.474)	57	2861			0.00- 45.97	20.99
2.500	2.500 (0.474)	72	1508			0.00- 38.10	11.06
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.530)	74	3418	0.80000	0.9452	80.00- 120.00	100.00
2.794	2.780 (0.530)	59	5820			147.68- 207.68	170.28
2.794	2.780 (0.530)	45	8319			206.40- 266.40	243.39
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.575)	151	11491	0.80000	0.8378	80.00- 120.00	100.00
3.032	3.032 (0.575)	153	7583			33.72- 93.72	65.99
3.032	3.032 (0.575)	101	14089			89.67- 149.67	122.61
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.060	3.074 (0.581)	96	7722	0.80000	0.9348	80.00- 120.00	100.00
3.074	3.074 (0.583)	98	4733			33.39- 93.39	61.29
3.060	3.074 (0.581)	61	12988			163.82- 223.82	168.19
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.671)	76	3517	0.80000	0.9939	80.00- 120.00	100.00
3.535	3.535 (0.671)	41	10236			338.06- 398.06	291.04

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.748)	73	20361	0.80000	0.9156	80.00- 120.00	100.00
3.941	3.941 (0.748)	57	5537			0.00- 58.86	27.19
3.941	3.941 (0.748)	41	6338			0.00- 57.27	31.13
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.753)	98	5379	0.80000	0.9676	80.00- 120.00	100.00
3.969	3.969 (0.753)	61	11688			244.59- 304.59	217.29
3.969	3.969 (0.753)	96	7294			129.84- 189.84	135.60
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.772)	52	5956	0.80000	0.8927	80.00- 120.00	100.00
4.067	4.067 (0.772)	53	4861			88.50- 148.50	81.62
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.790)	57	11890	0.80000	0.7888	80.00- 120.00	100.00(a)
4.165	4.179 (0.790)	43	9089			32.99- 92.99	76.44
4.179	4.179 (0.793)	86	1816			0.00- 42.56	15.27
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.846)	63	12612	0.80000	0.8136	80.00- 120.00	100.00
4.459	4.459 (0.846)	65	4509			0.76- 60.76	35.75
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.004 (0.950)	77	12297	0.80000	0.8515	80.00- 120.00	100.00
5.005	5.004 (0.950)	79	5551			2.00- 62.00	45.14
5.005	5.004 (0.950)	97	3992			0.00- 53.36	32.46
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.046 (0.958)	98	4999	0.80000	0.9071	80.00- 120.00	100.00
5.047	5.046 (0.958)	96	7390			127.22- 187.22	147.83
5.047	5.046 (0.958)	61	10523			283.85- 343.85	210.50
* 90 Bromochloromethane					CAS #: 74-97-5		
5.270	5.284 (1.000)	130	272204	25.0000		80.00- 120.00	100.00
5.270	5.284 (1.000)	128	209444			48.46- 108.46	76.94
5.270	5.270 (1.000)	49	404014			120.39- 180.39	148.42
89 Tetrahydrofuran					CAS #: 109-99-9		
5.284	5.270 (1.003)	42	8736	0.80000	0.8048	80.00- 120.00	100.00
5.284	5.270 (1.003)	71	4820			2.92- 62.92	55.17
5.284	5.270 (1.003)	72	3472			3.54- 63.54	39.74
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.013)	83	13139	0.80000	0.7699	80.00- 120.00	100.00(a)
5.340	5.340 (1.013)	85	9115			34.71- 94.71	69.37

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
94 Cyclohexane						CAS #: 110-82-7	
5.438	5.438 (1.032)	84	9339	0.80000	0.8657	80.00- 120.00	100.00
5.438	5.438 (1.032)	56	13508			120.40- 180.40	144.64
5.438	5.438 (1.032)	41	7608			54.20- 114.20	81.46
96 1,1,1-Trichloroethane						CAS #: 71-55-6	
5.452	5.466 (1.034)	97	15774	0.80000	0.8223	80.00- 120.00	100.00
5.452	5.466 (1.034)	99	10080			33.76- 93.76	63.90
97 Carbon Tetrachloride						CAS #: 56-23-5	
5.578	5.578 (1.058)	119	13227	0.80000	0.7486	80.00- 120.00	100.00(a)
5.578	5.578 (1.058)	117	14856			73.68- 133.68	112.32
99 1,1-Dichloropropene						CAS #: 563-58-6	
5.606	5.606 (0.909)	110	3831	0.80000	0.8521	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	9872			231.09- 291.09	257.69
101 2,2,4-Trimethylpentane						CAS #: 540-84-1	
5.760	5.774 (1.093)	57	38194	0.80000	0.8102	80.00- 120.00	100.00
5.760	5.774 (1.093)	56	12051			1.12- 61.12	31.55
5.774	5.774 (1.096)	41	11237			0.00- 57.49	29.42
102 Benzene						CAS #: 71-43-2	
5.788	5.788 (0.939)	78	18962	0.80000	0.8411	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	5258			0.00- 53.80	27.73
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.816	5.816 (1.104)	65	379972	25.0000	25.366	80.00- 120.00	100.00
5.816	5.816 (1.104)	67	185171			21.66- 81.66	48.73
106 1,2-Dichloroethane						CAS #: 107-06-2	
5.886	5.886 (0.955)	62	11003	0.80000	0.8478	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	4135			1.20- 61.20	37.58
107 Heptane						CAS #: 142-82-5	
5.942	5.942 (0.964)	71	7082	0.80000	0.7976	80.00- 120.00	100.00(a)
5.942	5.942 (0.964)	43	15177			179.02- 239.02	214.30
5.942	5.942 (0.964)	57	8196			84.85- 144.85	115.73
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.166	6.180 (1.000)	114	987880	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	154426			0.00- 45.52	15.63
111 Trichloroethene						CAS #: 79-01-6	
6.362	6.362 (1.032)	95	10359	0.80000	0.9160	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	9499			74.96- 134.96	91.70

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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111 Trichloroethene (continued)							
6.362	6.362 (1.032)	97	6374			34.80- 94.80	61.53
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	5686	0.80000	1.088	80.00- 120.00	100.00
6.586	6.586 (1.068)	62	3461			52.03- 112.03	60.87
6.586	6.586 (1.068)	41	4388			79.97- 139.97	77.17
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	8883	0.80000	0.9911	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	11902			134.02- 194.02	133.99
6.664	6.664 (0.774)	100	2690			9.54- 69.54	30.28
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.699 (1.087)	88	4748	0.80000	0.8314	80.00- 120.00	100.00
6.700	6.699 (1.087)	58	4521			55.80- 115.80	95.22
6.700	6.699 (1.087)	57	1703			8.68- 68.68	35.87
118 Dibromomethane					CAS #: 74-95-3		
6.714	6.721 (0.780)	174	8375	0.80000	0.8390	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	8226			67.27- 127.27	98.22
6.714	6.721 (0.780)	95	7202			50.92- 110.92	85.99
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	15320	0.80000	0.8086	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	9492			34.31- 94.31	61.96
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.169)	75	11541	0.80000	0.8196	80.00- 120.00	100.00
7.215	7.208 (1.170)	77	4622			1.42- 61.42	40.05
7.208	7.208 (1.169)	39	7603			38.56- 98.56	65.88
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	13305	0.80000	0.8798	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	6080			15.60- 75.60	45.70
6.460	6.460 (1.048)	55	12160			78.53- 138.53	91.39
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	7965	0.80000	0.8318	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	20271			231.30- 291.30	254.50
7.316	7.316 (1.186)	85	3326			8.94- 68.94	41.76
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	1013202	25.0000	24.901	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	116440			0.00- 41.47	11.49
7.380	7.387 (1.197)	100	669730			36.47- 96.47	66.10

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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137 Toluene						CAS #: 108-88-3	
7.437	7.437 (1.206)	91	24265	0.80000	0.8022	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	14851			28.30- 88.30	61.20
136 Octane						CAS #: 111-65-9	
7.445	7.444 (1.207)	57	8300	0.80000	0.8247	80.00- 120.00	100.00
7.445	7.444 (1.207)	85	8637			67.11- 127.11	104.06
7.437	7.444 (1.206)	43	20072			214.21- 274.21	241.83
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
7.688	7.688 (0.893)	75	11323	0.80000	0.8255	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	4369			2.15- 62.15	38.59
7.688	7.688 (0.893)	39	7657			36.09- 96.09	67.62
141 1,1,2-Trichloroethane						CAS #: 79-00-5	
7.839	7.846 (0.910)	97	8646	0.80000	0.8196	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	5360			31.62- 91.62	61.99
7.846	7.846 (0.911)	83	7766			56.35- 116.35	89.82
142 Tetrachloroethene						CAS #: 127-18-4	
7.882	7.881 (0.915)	166	12139	0.80000	0.8320	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	9872			48.71- 108.71	81.32
7.874	7.881 (0.914)	131	8828			46.55- 106.55	72.72
144 1,3-Dichloropropane						CAS #: 142-28-9	
7.989	7.989 (1.296)	76	12215	0.80000	0.8464	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	13111			82.96- 142.96	107.34
7.989	7.989 (1.296)	78	4266			2.55- 62.55	34.92
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	16239	0.80000	0.8114	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	12828			47.77- 107.77	79.00
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.261	8.268 (0.959)	107	13011	0.80000	0.7942	80.00- 120.00	100.00(a)
8.261	8.268 (0.959)	109	12882			64.60- 124.60	99.01
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	931335	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	518350			25.46- 85.46	55.66
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	21477	0.80000	0.8437	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	6709			2.13- 62.13	31.24
8.634	8.641 (1.002)	77	14599			26.35- 86.35	67.98

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	10291	0.80000	0.8085	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	32077			282.48- 342.48	311.70
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	21434	0.80000	0.8688	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	19389			59.52- 119.52	90.46
8.705	8.705 (1.011)	85	6369			0.00- 59.76	29.71
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	13307	0.80000	0.8404	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	26472			171.36- 231.36	198.93
164 o-Xylene					CAS #: 95-47-6		
9.121	9.128 (1.059)	106	12162	0.80000	0.8090	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	26734			179.99- 239.99	219.82
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.062)	104	21835	0.80000	0.8384	80.00- 120.00	100.00
9.149	9.149 (1.062)	78	11448			19.09- 79.09	52.43
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	14748	0.80000	0.7772	80.00- 120.00	100.00(a)
9.350	9.350 (1.086)	171	7835			21.45- 81.45	53.13
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	39345	0.80000	0.8278	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	10793			0.00- 56.99	27.43
9.407	9.407 (1.092)	51	5195			0.00- 41.77	13.20
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	14868	0.80000	0.9940	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	4953			9.22- 69.22	33.31
9.579	9.579 (1.112)	42	8629			42.60- 102.60	58.04
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	618262	25.0000	25.098	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	759997			93.06- 153.06	122.92
9.601	9.601 (1.115)	176	579650			62.87- 122.87	93.75
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	19806	0.80000	0.8405	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	12524			34.35- 94.35	63.23
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.131)	156	12445	0.80000	0.8423	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
177 Bromobenzene (continued)							
9.730	9.737 (1.130)	158	12195			67.29- 127.29	97.99
9.730	9.729 (1.130)	77	19823			132.41- 192.41	159.28
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	45427	0.80000	0.8191	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	10884			0.00- 53.77	23.96
9.758	9.758 (1.133)	105	2279			0.00- 33.81	5.02
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	5740	0.80000	0.8086	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	18016			285.00- 345.00	313.87
9.787	9.787 (1.136)	61	5058			54.06- 114.06	88.12
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	5333	0.80000	0.9495	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	2077			21.19- 81.19	38.95
9.787	9.787 (1.136)	75	18016			372.45- 432.45	337.82
182 Decane					CAS #: 124-18-5		
9.816	9.808 (1.140)	57	24476	0.80000	0.8536	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	9202			4.13- 64.13	37.60
9.816	9.815 (1.140)	142	1267			0.00- 34.73	5.18
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	11430	0.80000	0.7951	80.00- 120.00	100.00(a)
9.851	9.851 (1.144)	105	38367			296.79- 356.79	335.67
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	9611	0.80000	0.8229	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	36422			336.29- 396.29	378.96
9.873	9.873 (1.146)	65	3999			38.83- 98.83	41.61
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.902	9.901 (1.150)	120	16869	0.80000	0.8355	80.00- 120.00	100.00
9.902	9.901 (1.150)	105	35487			176.40- 236.40	210.37
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	16440	0.80000	0.7950	80.00- 120.00	100.00(a)
10.109	10.102 (1.174)	103	9786			26.64- 86.64	59.53
189 tert-Butylbenzene					CAS #: 98-06-6		
10.167	10.174 (1.180)	119	31573	0.80000	0.8499	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	7634			0.00- 54.82	24.18
10.167	10.174 (1.180)	91	21604			36.92- 96.92	68.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	32978	0.80000	0.8283	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	15023			16.58- 76.58	45.55
192 sec-Butylbenzene					CAS #: 135-98-8		
10.353	10.360 (1.202)	134	10197	0.80000	0.8498	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	48258			451.53- 511.53	473.26
10.353	10.353 (1.202)	91	8204			46.48- 106.48	80.46
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	40402	0.80000	0.8040	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	11326			0.00- 56.79	28.03
10.467	10.467 (1.215)	91	9885			0.00- 54.04	24.47
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.221)	146	21976	0.80000	0.8125	80.00- 120.00	100.00
10.518	10.517 (1.221)	148	14046			33.53- 93.53	63.92
10.518	10.517 (1.221)	111	9550			11.05- 71.05	43.46
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	22766	0.80000	0.8171	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	15056			33.47- 93.47	66.13
10.596	10.596 (1.230)	111	9088			9.65- 69.65	39.92
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	29877	0.80000	0.7799	80.00- 120.00	100.00(a)
10.711	10.711 (1.244)	126	6621			0.00- 52.04	22.16
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	29237	0.80000	0.8652	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	25734			55.86- 115.86	88.02
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	10284	0.80000	0.7893	80.00- 120.00	100.00(a)
10.818	10.818 (1.256)	91	38305			331.99- 391.99	372.47
10.818	10.818 (1.256)	92	20988			161.01- 221.01	204.08
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.919	10.926 (1.268)	146	21022	0.80000	0.8043	80.00- 120.00	100.00
10.919	10.926 (1.268)	148	13579			33.23- 93.23	64.59
10.919	10.918 (1.268)	111	9180			12.36- 72.36	43.67
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	28096	0.98880	0.9833	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	23611			50.85- 110.85	84.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	19676	1.00720	1.060	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	18474			65.40- 125.40	93.89
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	15576	1.02960	1.111	80.00- 120.00	100.00
12.380	12.387 (1.437)	223	9805			33.70- 93.70	62.95
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	7246	0.10160	0.1278	80.00- 120.00	100.00(a)
12.559	12.552 (1.458)	127	730			0.00- 43.10	10.07
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.802 (1.487)	180	19480	1.06480	1.147	80.00- 120.00	100.00
12.803	12.802 (1.487)	182	18041			65.67- 125.67	92.61
12.803	12.802 (1.487)	145	7042			6.02- 66.02	36.15

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062217.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	272204	11.83
108 1,4-Difluorobenze	874076	524446	1223706	987880	13.02
153 Chlorobenzene-d5	831223	498734	1163712	931335	12.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.26
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062217.d

Page 1

Date : 22-JUN-2021 21:22

Client ID:

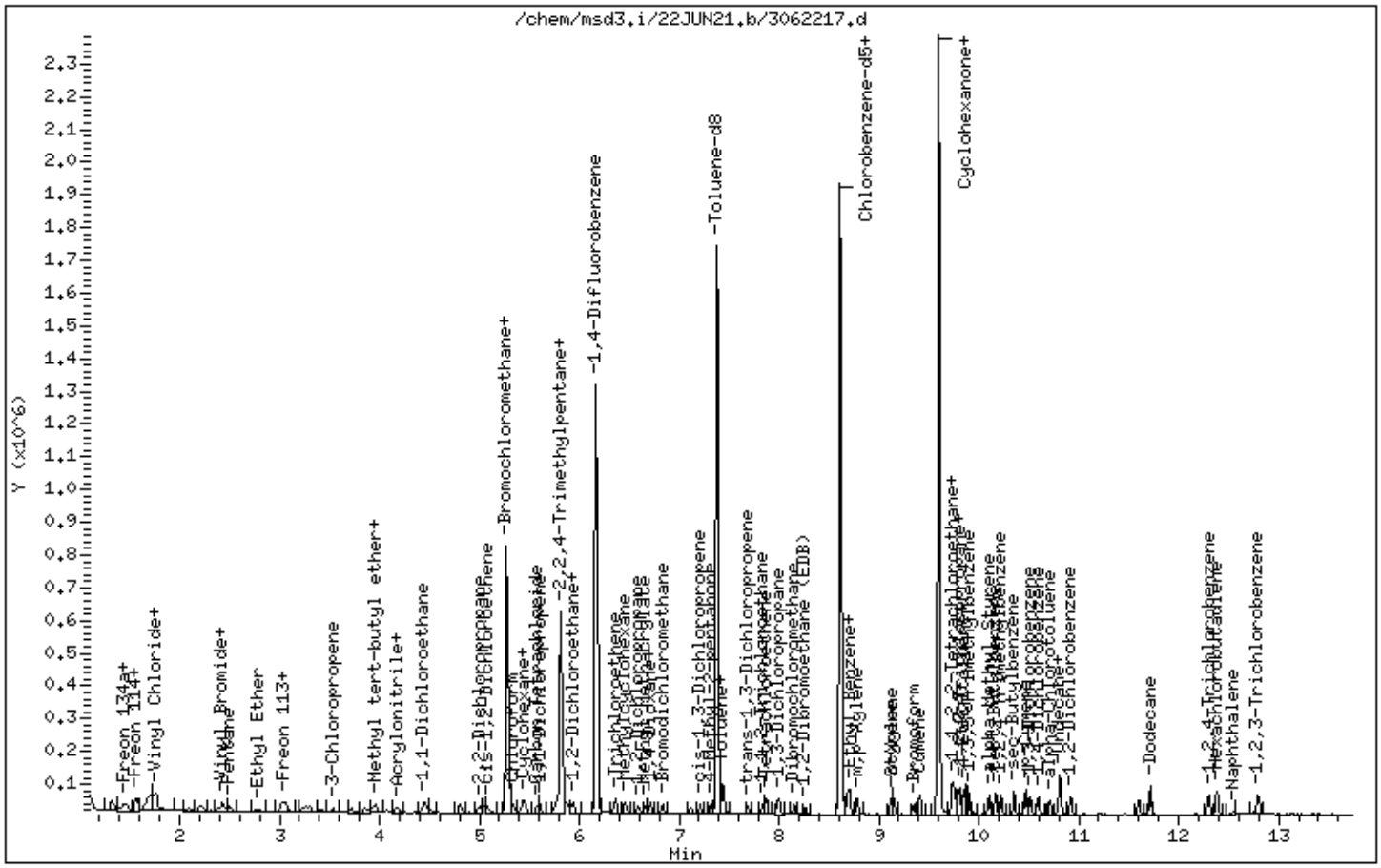
Instrument: msd3.i

Sample Info: 32mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051906.d
Lab Smp Id: ICAL Level 5
Inj Date : 19-MAY-2021 15:00
Operator : LD Inst ID: msdp.i
Smp Info : 200mL 3018-2045
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:43 Cal File: p051917.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.661	1.633 (0.287)	83	23995	5.00000	4.931	80.00- 120.00	100.00
1.661	1.633 (0.287)	69	22578			59.44- 119.44	94.09
1.759	1.745 (0.304)	51	102230			419.06- 479.06	426.05
5 Propylene					CAS #: 115-07-1		
1.689	1.675 (0.292)	41	35760	5.00000	4.916	80.00- 120.00	100.00
1.689	1.675 (0.292)	42	24631			35.28- 95.28	68.88
1.689	1.675 (0.292)	39	23528			38.35- 98.35	65.79
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	15753	5.00000	4.318	80.00- 120.00	100.00
1.759	1.745 (0.304)	51	102230			597.63- 657.63	648.96
1.717	1.703 (0.297)	47	10143			33.72- 93.72	64.39
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	74104	5.00000	5.482	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	24165			2.37- 62.37	32.61
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.745 (0.304)	67	7019	5.00000	5.292	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.759	1.745 (0.304)	51	102230			1501.01-1561.01	1456.48
10 Freon 114					CAS #: 76-14-2		
1.857	1.856 (0.321)	135	74492	5.00000	5.312	80.00- 120.00	100.00
1.857	1.856 (0.321)	137	23699			2.30- 62.30	31.81
12 Isobutane					CAS #: 75-28-5		
1.871	1.870 (0.323)	43	83131	5.00000	5.099	80.00- 120.00	100.00
1.871	1.870 (0.323)	42	28746			2.44- 62.44	34.58
1.871	1.856 (0.323)	58	3128			0.00- 33.36	3.76
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	34644	5.00000	4.063	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	9203			0.00- 56.26	26.56
18 Butane					CAS #: 106-97-8		
2.032	2.025 (0.351)	58	10771	5.00000	5.513	80.00- 120.00	100.00
2.039	2.025 (0.352)	43	81676			823.29- 883.29	758.30
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	52333	5.00000	5.191	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	16408			0.00- 59.69	31.35
20 1,3-Butadiene					CAS #: 106-99-0		
2.104	2.089 (0.364)	54	34439	5.00000	4.748	80.00- 120.00	100.00
2.096	2.089 (0.362)	39	40510			52.37- 112.37	117.63
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.429)	94	37056	5.00000	5.477	80.00- 120.00	100.00
2.483	2.483 (0.429)	96	35000			64.07- 124.07	94.45
30 Chloroethane					CAS #: 75-00-3		
2.619	2.612 (0.453)	64	20225	5.00000	5.684	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	5966			0.04- 60.04	29.50
2.612	2.612 (0.452)	49	6111			4.54- 64.54	30.22
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	54200	5.00000	5.198	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	34951			34.12- 94.12	64.49
32 Vinyl Bromide					CAS #: 593-60-2		
2.849	2.841 (0.492)	106	30600	5.00000	5.302	80.00- 120.00	100.00
2.849	2.841 (0.492)	108	29476			69.27- 129.27	96.33
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	77104	5.00000	5.291	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.891	2.884 (0.500)	103	50811			34.72- 94.72	65.90
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.899 (0.502)	67	65512	5.00000	5.152	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	21322			0.84- 60.84	32.55
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	87490	5.00000	5.059	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	12542			0.00- 44.98	14.34
2.970	2.970 (0.513)	72	6373			0.00- 37.39	7.28
38 Ethyl Ether					CAS #: 60-29-7		
3.293	3.285 (0.569)	74	15538	5.00000	5.437	80.00- 120.00	100.00
3.293	3.285 (0.569)	59	30441			163.46- 223.46	195.91
3.285	3.285 (0.568)	45	42142			250.40- 310.40	271.22
39 Ethanol					CAS #: 64-17-5		
3.250	3.242 (0.562)	46	7863	5.00000	4.992	80.00- 120.00	100.00
3.285	3.242 (0.568)	45	41557			511.19- 571.19	528.51
42 Acrolein					CAS #: 107-02-8		
3.543	3.529 (0.612)	55	14233	5.00000	5.312	80.00- 120.00	100.00
3.543	3.529 (0.612)	56	18296			111.10- 171.10	128.55
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	56770	5.00000	5.289	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	35706			33.56- 93.56	62.90
3.550	3.550 (0.614)	101	68951			89.21- 149.21	121.46
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	33311	5.00000	5.191	80.00- 120.00	100.00
3.586	3.579 (0.620)	98	21526			34.02- 94.02	64.62
3.586	3.579 (0.620)	61	66191			168.77- 228.77	198.71
47 Acetone					CAS #: 67-64-1		
3.722	3.708 (0.643)	58	20489	5.00000	4.976	80.00- 120.00	100.00
3.722	3.708 (0.643)	43	68525			302.95- 362.95	334.45
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	91954	5.00000	5.292	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.801	3.794 (0.657)	142	34575	5.00000	3.786	80.00- 120.00	100.00
3.801	3.794 (0.657)	127	14689			12.22- 72.22	42.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.673)	45	81715	5.00000	5.020	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	14133			0.00- 47.19	17.30
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	15048	5.00000	5.111	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	60762			396.19- 456.19	403.79
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	39661	5.00000	5.288	80.00- 120.00	100.00
4.138	4.123 (0.715)	40	25399			20.95- 80.95	64.04
4.138	4.123 (0.715)	38	4002			0.00- 41.17	10.09
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	56613	5.00000	5.369	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	29850			22.03- 82.03	52.73
4.238	4.238 (0.733)	51	17301			0.18- 60.18	30.56
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.346	4.338 (0.751)	59	101502	5.00000	5.272	80.00- 120.00	100.00
4.346	4.338 (0.751)	41	20240			0.00- 51.11	19.94
4.346	4.338 (0.751)	57	10646			0.00- 40.49	10.49
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.453	4.446 (0.770)	73	95601	5.00000	5.059	80.00- 120.00	100.00
4.453	4.446 (0.770)	57	32712			3.10- 63.10	34.22
4.446	4.446 (0.768)	41	29468			1.28- 61.28	30.82
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	22139	5.00000	5.128	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	65349			255.84- 315.84	295.18
4.482	4.482 (0.775)	96	35688			127.59- 187.59	161.20
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.790)	52	31636	5.00000	5.067	80.00- 120.00	100.00
4.568	4.560 (0.790)	53	37230			88.05- 148.05	117.68
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.812)	57	78566	5.00000	5.242	80.00- 120.00	100.00
4.697	4.697 (0.812)	43	52548			37.52- 97.52	66.88
4.697	4.697 (0.812)	86	8762			0.00- 41.48	11.15
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	71027	5.00000	5.330	80.00- 120.00	100.00
4.969	4.962 (0.859)	65	20959			0.00- 59.70	29.51

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether						CAS #: 108-20-3	
	4.954	4.954 (0.856)	45	175979	5.00000	5.056	80.00- 120.00	100.00
	4.954	4.954 (0.856)	87	32174			0.00- 48.18	18.28
	4.954	4.954 (0.856)	59	19101			0.00- 40.15	10.85
	73 Vinyl Acetate						CAS #: 108-05-4	
	4.997	4.997 (0.864)	86	8490	5.00000	5.067	80.00- 120.00	100.00
	4.997	4.997 (0.864)	43	210809			2432.48-2492.48	2483.03
	79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
	5.305	5.305 (0.917)	59	155272	5.00000	5.130	80.00- 120.00	100.00
	5.313	5.305 (0.918)	87	47844			1.00- 61.00	30.81
	5.305	5.305 (0.917)	41	29096			0.00- 48.73	18.74
	84 2,2-Dichloropropane						CAS #: 594-20-7	
	5.506	5.506 (0.952)	77	57515	5.00000	5.111	80.00- 120.00	100.00
	5.506	5.506 (0.952)	79	19126			2.28- 62.28	33.25
	5.513	5.506 (0.953)	97	14288			0.00- 53.93	24.84
	85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
	5.549	5.549 (0.959)	98	23684	5.00000	5.416	80.00- 120.00	100.00
	5.549	5.549 (0.959)	96	37228			125.75- 185.75	157.19
	5.549	5.549 (0.959)	61	88318			332.40- 392.40	372.90
	86 2-Butanone						CAS #: 78-93-3	
	5.563	5.556 (0.962)	72	18843	5.00000	5.301	80.00- 120.00	100.00
	5.570	5.556 (0.963)	43	231029			1214.50-1274.50	1226.07
	5.556	5.556 (0.960)	57	9599			14.68- 74.68	50.94
	87 Ethyl Acetate						CAS #: 141-78-6	
	5.578	5.570 (0.964)	45	18229	5.00000	5.206	80.00- 120.00	100.00
	5.549	5.549 (0.959)	61	88318			452.04- 512.04	484.49
	5.578	5.570 (0.964)	70	9745			22.77- 82.77	53.46
	89 Tetrahydrofuran						CAS #: 109-99-9	
	5.778	5.771 (0.999)	42	62552	5.00000	5.248	80.00- 120.00	100.00
	5.778	5.771 (0.999)	71	16889			0.00- 55.82	27.00
	5.778	5.771 (0.999)	72	17687			0.00- 57.59	28.28
*	90 Bromochloromethane						CAS #: 74-97-5	
	5.785	5.778 (1.000)	130	153560	25.0000		80.00- 120.00	100.00
	5.785	5.778 (1.000)	128	120740			48.23- 108.23	78.63
	5.785	5.778 (1.000)	49	285150			150.57- 210.57	185.69
	92 Chloroform						CAS #: 67-66-3	
	5.843	5.835 (1.010)	83	72304	5.00000	5.396	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.009)	85	48644			34.70- 94.70	67.28
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	48651	5.00000	5.230	80.00- 120.00	100.00
5.957	5.957 (1.030)	56	84034			142.57- 202.57	172.73
5.957	5.957 (1.030)	41	47136			62.09- 122.09	96.89
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.032)	97	76302	5.00000	5.101	80.00- 120.00	100.00
5.972	5.972 (1.032)	99	48638			34.02- 94.02	63.74
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.052)	119	68353	5.00000	4.926	80.00- 120.00	100.00
6.086	6.086 (1.052)	117	69130			70.64- 130.64	101.14
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.918)	110	21692	5.00000	5.091	80.00- 120.00	100.00
6.115	6.115 (0.917)	75	54412			226.85- 286.85	250.84
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.085)	57	268783	5.00000	5.166	80.00- 120.00	100.00
6.280	6.280 (1.085)	56	86771			2.24- 62.24	32.28
6.280	6.280 (1.085)	41	65018			0.00- 54.39	24.19
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	103868	5.00000	5.071	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	24431			0.00- 52.90	23.52
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	219202	25.0000	26.408	80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110588			27.21- 87.21	50.45
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	27837	5.00000	4.798	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	110361			372.79- 432.79	396.45
6.358	6.358 (0.954)	55	40445			112.09- 172.09	145.29
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	57760	5.00000	5.314	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	18494			0.79- 60.79	32.02
107 Heptane					CAS #: 142-82-5		
6.452	6.444 (0.968)	71	40838	5.00000	5.157	80.00- 120.00	100.00
6.452	6.444 (0.968)	43	109706			226.53- 286.53	268.64
6.452	6.444 (0.968)	57	53636			100.85- 160.85	131.34

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.659 (1.000)	114	614215	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	99192			0.00- 45.71	16.15
110 n-Butanol					CAS #: 71-36-3		
6.817	6.810 (1.023)	56	37585	5.00000	5.115	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	25791			40.99- 100.99	68.62
6.817	6.810 (1.023)	43	19657			27.38- 87.38	52.30
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	50753	5.00000	5.124	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	55306			76.29- 136.29	108.97
6.867	6.867 (1.030)	97	33227			33.63- 93.63	65.47
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.089 (1.064)	63	52290	5.00000	4.994	80.00- 120.00	100.00
7.096	7.089 (1.064)	62	37275			41.07- 101.07	71.29
7.096	7.089 (1.064)	41	32092			22.53- 82.53	61.37
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	42786	5.00000	5.002	80.00- 120.00	100.00
7.139	7.132 (0.755)	41	84724			179.84- 239.84	198.02
7.139	7.139 (0.755)	100	16675			9.59- 69.59	38.97
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.077)	88	29029	5.00000	5.128	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	30676			68.28- 128.28	105.67
7.175	7.175 (1.076)	57	10403			2.68- 62.68	35.84
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	48548	5.00000	5.183	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	44155			60.09- 120.09	90.95
7.204	7.204 (0.761)	95	37033			48.38- 108.38	76.28
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	79651	5.00000	5.195	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	50267			35.24- 95.24	63.11
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.691 (1.155)	75	66685	5.00000	5.188	80.00- 120.00	100.00
7.691	7.691 (1.154)	77	20474			2.42- 62.42	30.70
7.698	7.691 (1.155)	39	45208			37.16- 97.16	67.79
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	68708	5.00000	4.834	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	32707			15.78- 75.78	47.60

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)								
6.974	6.974	(1.046)	55	78753			84.64- 144.64	114.62
131 4-Methyl-2-pentanone						CAS #: 108-10-1		
7.798	7.791	(1.170)	58	52502	5.00000	5.020	80.00- 120.00	100.00
7.798	7.791	(1.170)	43	142064			242.35- 302.35	270.59
7.798	7.791	(1.170)	85	17584			3.24- 63.24	33.49
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891	(1.184)	98	675430	25.0000	25.276	80.00- 120.00	100.00
7.891	7.891	(1.184)	70	73047			0.00- 40.44	10.81
7.891	7.891	(1.184)	100	435947			34.95- 94.95	64.54
137 Toluene						CAS #: 108-88-3		
7.956	7.949	(1.193)	91	142004	5.00000	5.011	80.00- 120.00	100.00
7.956	7.949	(1.193)	92	83371			28.38- 88.38	58.71
136 Octane						CAS #: 111-65-9		
7.949	7.949	(1.192)	57	58129	5.00000	4.968	80.00- 120.00	100.00
7.949	7.949	(1.192)	85	50245			56.00- 116.00	86.44
7.949	7.949	(1.192)	43	157708			228.66- 288.66	271.31
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
8.214	8.214	(0.868)	75	61054	5.00000	4.981	80.00- 120.00	100.00
8.214	8.214	(0.868)	77	20798			1.24- 61.24	34.06
8.214	8.214	(0.868)	39	41024			34.11- 94.11	67.19
141 1,1,2-Trichloroethane						CAS #: 79-00-5		
8.400	8.400	(0.888)	97	49333	5.00000	4.984	80.00- 120.00	100.00
8.400	8.400	(0.888)	99	30960			31.96- 91.96	62.76
8.400	8.400	(0.888)	83	42360			52.93- 112.93	85.87
142 Tetrachloroethene						CAS #: 127-18-4		
8.464	8.464	(0.895)	166	71008	5.00000	4.897	80.00- 120.00	100.00
8.464	8.464	(0.895)	129	56371			47.84- 107.84	79.39
8.464	8.464	(0.895)	131	53822			45.29- 105.29	75.80
143 2-Hexanone						CAS #: 591-78-6		
8.586	8.586	(0.908)	58	73185	5.00000	5.071	80.00- 120.00	100.00
8.586	8.586	(0.908)	43	139375			162.87- 222.87	190.44
8.586	8.586	(0.908)	100	11054			0.00- 45.94	15.10
144 1,3-Dichloropropane						CAS #: 142-28-9		
8.579	8.579	(1.287)	76	69233	5.00000	5.146	80.00- 120.00	100.00
8.579	8.579	(1.287)	41	91020			94.99- 154.99	131.47
8.579	8.579	(1.287)	78	23803			2.05- 62.05	34.38

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	==	====== ========	====	========	=======	=======	==========	=====
	146 Dibromochloromethane					CAS #: 124-48-1		
	8.801	8.801 (0.930)	129	91590	5.00000	4.835	80.00- 120.00	100.00
	8.801	8.801 (0.930)	127	70825			47.45- 107.45	77.33
	148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
	8.951	8.951 (0.946)	107	81392	5.00000	4.951	80.00- 120.00	100.00
	8.951	8.951 (0.946)	109	77262			64.21- 124.21	94.93
	151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
	7.605	7.605 (1.141)	63	98471	5.00000	5.098	80.00- 120.00	100.00
	7.605	7.605 (1.141)	65	28839			0.00- 59.64	29.29
	7.612	7.605 (1.142)	144	9784			0.00- 39.63	9.94
*	153 Chlorobenzene-d5					CAS #: 3114-55-4		
	9.460	9.460 (1.000)	117	619157	25.0000		80.00- 120.00	100.00
	9.460	9.460 (1.000)	82	334026			23.78- 83.78	53.95
	154 Chlorobenzene					CAS #: 108-90-7		
	9.496	9.496 (1.004)	112	124593	5.00000	5.059	80.00- 120.00	100.00
	9.496	9.496 (1.004)	114	38052			1.74- 61.74	30.54
	9.496	9.496 (1.004)	77	71532			25.04- 85.04	57.41
	155 Ethyl Benzene					CAS #: 100-41-4		
	9.567	9.567 (1.011)	106	62027	5.00000	4.807	80.00- 120.00	100.00
	9.567	9.567 (1.011)	91	188972			273.74- 333.74	304.66
	156 Nonane					CAS #: 111-84-2		
	9.603	9.596 (1.015)	43	159252	5.00000	4.835	80.00- 120.00	100.00
	9.603	9.603 (1.015)	57	134249			54.16- 114.16	84.30
	9.603	9.603 (1.015)	85	35745			0.00- 53.90	22.45
	158 m,p-Xylene					CAS #: 108-38-3		
	9.718	9.718 (1.027)	106	78963	5.00000	4.914	80.00- 120.00	100.00
	9.718	9.718 (1.027)	91	153333			163.73- 223.73	194.18
	164 o-Xylene					CAS #: 95-47-6		
	10.226	10.226 (1.081)	106	75798	5.00000	4.901	80.00- 120.00	100.00
	10.226	10.226 (1.081)	91	152985			177.45- 237.45	201.83
	165 Styrene					CAS #: 100-42-5		
	10.255	10.255 (1.084)	104	128486	5.00000	4.859	80.00- 120.00	100.00
	10.255	10.255 (1.084)	78	63172			17.88- 77.88	49.17
	167 Bromoform					CAS #: 75-25-2		
	10.549	10.542 (1.115)	173	90352	5.00000	4.922	80.00- 120.00	100.00
	10.549	10.542 (1.115)	171	45856			21.25- 81.25	50.75

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene						CAS #: 98-82-8		
10.649	10.649 (1.126)	105	240077	5.00000	4.956	80.00- 120.00	100.00	
10.656	10.649 (1.126)	120	66515			0.00- 58.52	27.71	
10.649	10.649 (1.126)	51	32083			0.00- 43.00	13.36	
169 Cyclohexanone						CAS #: 108-94-1		
10.871	10.871 (1.149)	55	82861	5.00000	4.708	80.00- 120.00	100.00(a)	
10.871	10.871 (1.149)	98	26897			1.94- 61.94	32.46	
10.871	10.871 (1.149)	42	53882			37.89- 97.89	65.03	
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	395495	25.0000	24.963	80.00- 120.00	100.00	
10.921	10.921 (1.154)	95	504864			95.92- 155.92	127.65	
10.921	10.921 (1.154)	176	377124			66.89- 126.89	95.35	
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
11.107	11.100 (1.174)	83	115941	5.00000	4.902	80.00- 120.00	100.00	
11.107	11.100 (1.174)	85	75106			35.20- 95.20	64.78	
177 Bromobenzene						CAS #: 108-86-1		
11.107	11.107 (1.174)	156	72185	5.00000	4.925	80.00- 120.00	100.00	
11.107	11.107 (1.174)	158	70501			67.21- 127.21	97.67	
11.179	11.179 (1.182)	77	42638			29.02- 89.02	59.07	
178 Propylbenzene						CAS #: 103-65-1		
11.150	11.150 (1.179)	120	70283	5.00000	4.886	80.00- 120.00	100.00	
11.150	11.150 (1.179)	91	273213			366.49- 426.49	388.73	
11.150	11.150 (1.179)	105	11389			0.00- 44.85	16.20	
179 1,2,3-Trichloropropane						CAS #: 96-18-4		
11.179	11.179 (1.182)	110	35448	5.00000	4.699	80.00- 120.00	100.00	
11.179	11.179 (1.182)	75	108981			280.55- 340.55	307.44	
11.100	11.100 (1.173)	61	16930			15.49- 75.49	47.76	
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6		
11.179	11.179 (1.182)	53	24562	5.00000	4.944	80.00- 120.00	100.00	
11.179	11.179 (1.182)	89	19278			49.11- 109.11	78.49	
11.179	11.179 (1.182)	75	108981			426.44- 486.44	443.70	
182 Decane						CAS #: 124-18-5		
11.251	11.251 (1.189)	57	178943	5.00000	4.581	80.00- 120.00	100.00	
11.251	11.251 (1.189)	71	50239			0.00- 57.66	28.08	
11.258	11.258 (1.190)	142	7536			0.00- 34.09	4.21	
183 4-Ethyltoluene						CAS #: 622-96-8		
11.287	11.287 (1.193)	120	74542	5.00000	4.802	80.00- 120.00	100.00	

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
11.287	11.287 (1.193)	105	236331			284.55- 344.55	317.04
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	59824	5.00000	4.914	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	202772			315.17- 375.17	338.95
11.301	11.301 (1.195)	65	31085			21.55- 81.55	51.96
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	105493	5.00000	4.941	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	204343			164.93- 224.93	193.70
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	103352	5.00000	4.828	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	55037			25.30- 85.30	53.25
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	195585	5.00000	4.893	80.00- 120.00	100.00
11.745	11.738 (1.242)	134	47923			0.00- 54.25	24.50
11.738	11.738 (1.241)	91	122078			31.27- 91.27	62.42
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	197002	5.00000	4.852	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	100446			19.05- 79.05	50.99
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	61201	5.00000	4.936	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	289294			437.55- 497.55	472.69
11.996	11.996 (1.268)	91	43669			40.76- 100.76	71.35
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	263591	5.00000	4.820	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	69874			0.00- 55.54	26.51
12.160	12.153 (1.285)	91	57763			0.00- 51.48	21.91
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	138345	5.00000	4.901	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	88212			33.21- 93.21	63.76
12.196	12.196 (1.289)	111	57941			11.31- 71.31	41.88
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	139853	5.00000	4.937	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	90352			33.90- 93.90	64.60
12.311	12.311 (1.301)	111	54179			9.45- 69.45	38.74
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	190239	5.00000	4.969	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	42809			0.00- 53.26	22.50
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	220225	5.00000	4.896	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	195864			58.12- 118.12	88.94
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	68631	5.00000	4.849	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	231841			314.79- 374.79	337.81
12.626	12.626 (1.335)	92	123591			154.29- 214.29	180.08
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	136005	5.00000	4.972	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	85924			33.84- 93.84	63.18
12.733	12.741 (1.346)	111	58979			12.73- 72.73	43.37
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	79532	5.00000	4.858	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	66463			52.48- 112.48	83.57
13.600	13.600 (1.438)	155	62161			47.41- 107.41	78.16
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	213240	6.18000	6.559	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	173340			52.87- 112.87	81.29
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	130791	6.30000	6.544	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	126487			65.33- 125.33	96.71
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	92162	6.44000	6.665	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	58371			33.17- 93.17	63.34
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	32129	0.64000	0.6122	80.00- 120.00	100.00
14.761	14.768 (1.560)	127	4372			0.00- 42.88	13.61
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	118701	6.66000	6.782	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	113556			65.75- 125.75	95.67
15.069	15.069 (1.593)	145	41550			5.23- 65.23	35.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051906.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153560	-3.31
108 1,4-Difluorobenze	597103	358262	835944	614215	2.87
153 Chlorobenzene-d5	587747	352648	822846	619157	5.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.66	6.33	6.99	6.67	0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051906.d

Page 1

Date : 19-MAY-2021 15:00

Client ID:

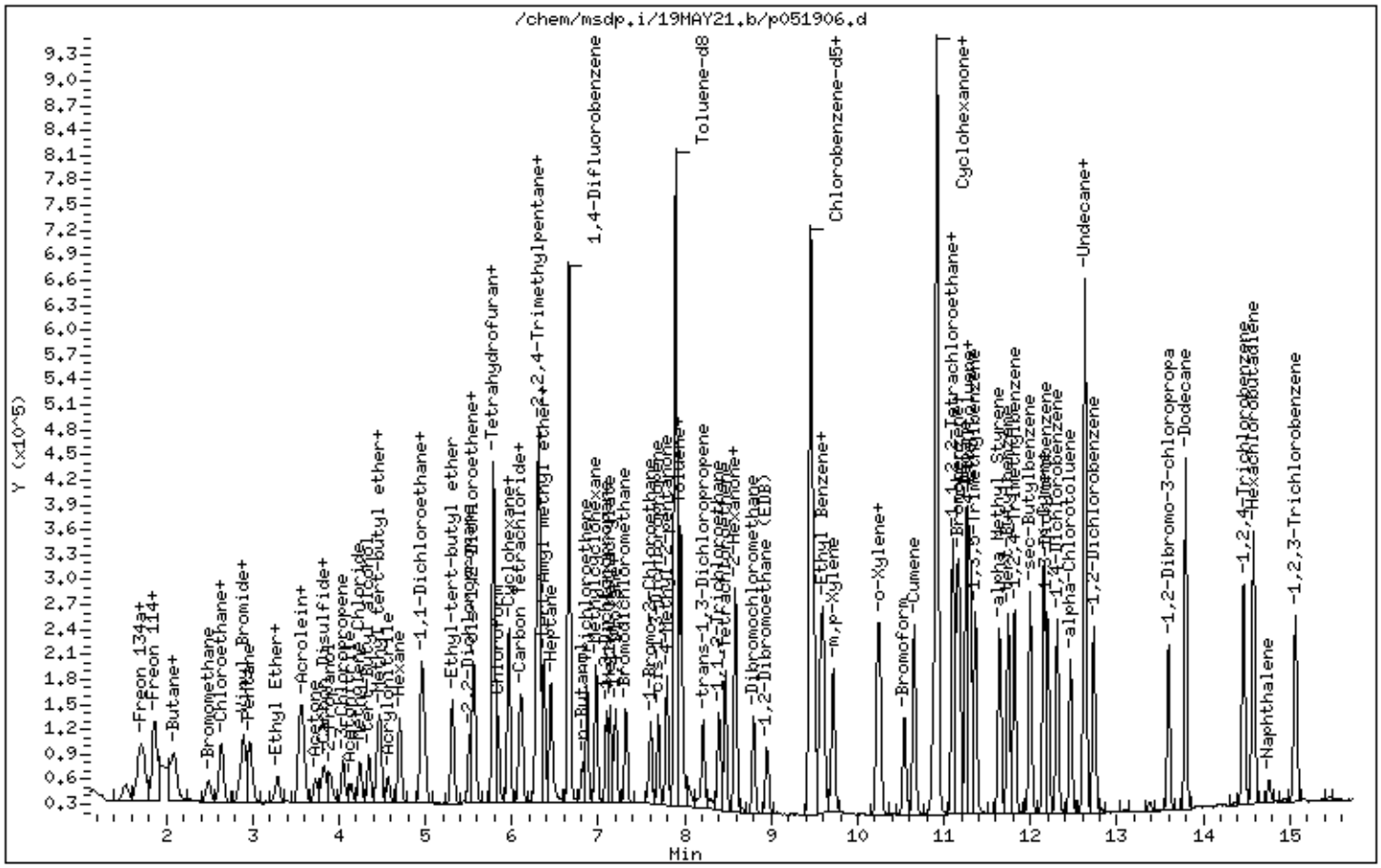
Instrument: msdp.i

Sample Info: 200mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051917.d
Lab Smp Id: ICAL Level 5
Inj Date : 19-MAY-2021 20:43
Operator : gh Inst ID: msdp.i
Smp Info : 200mL 3018-1928
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:43 Cal File: p051917.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.785	5.778 (1.000)	130	153596	25.0000		80.00- 120.00	100.00
5.785	5.778 (1.000)	128	120099			48.23- 108.23	78.19
5.785	5.778 (1.000)	49	277119			150.57- 210.57	180.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	607535	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95316			0.00- 45.71	15.69
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	599728	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	327307			23.78- 83.78	54.58
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	8816	5.00000	2.827	80.00- 120.00	100.00
1.605	1.590 (0.277)	69	21877			243.50- 303.50	248.15
1.605	1.590 (0.277)	64	2504			0.00- 54.06	28.40
6 Propane					CAS #: 74-98-6		
1.688	1.674 (0.292)	43	14059	5.00000	4.918	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.688	1.674 (0.292)	39	9149			34.98- 94.98	65.08
1.688	1.674 (0.292)	41	8274			25.22- 85.22	58.85
13 Freon 142b					CAS #: 75-68-3		
1.898	1.884 (0.328)	65	77411	5.00000	4.903	80.00- 120.00	100.00
1.898	1.884 (0.328)	45	23408			0.00- 59.77	30.24
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.502)	55	50218	5.00000	4.904	80.00- 120.00	100.00(a)
2.906	2.906 (0.502)	42	65836			105.17- 165.17	131.10
40 Freon 123a					CAS #: 354-23-4		
3.393	3.385 (0.586)	117	52612	5.00000	5.296	80.00- 120.00	100.00(a)
3.386	3.378 (0.585)	67	63816			104.69- 164.69	121.30
41 Freon 123					CAS #: 306-83-2		
3.486	3.479 (0.603)	83	68341	5.00000	4.967	80.00- 120.00	100.00
3.486	3.479 (0.603)	133	15880			0.00- 50.87	23.24
3.486	3.479 (0.603)	85	48933			36.08- 96.08	71.60
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.704)	67	78856	5.00000	5.332	80.00- 120.00	100.00
4.073	4.073 (0.704)	68	30336			6.76- 66.76	38.47
4.073	4.073 (0.704)	53	22763			0.00- 57.54	28.87
56 Methyl Acetate					CAS #: 79-20-9		
4.088	4.073 (0.707)	43	91822	5.00000	5.308	80.00- 120.00	100.00
4.088	4.073 (0.707)	74	13069			0.00- 44.13	14.23
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.868)	53	75220	5.00000	5.500	80.00- 120.00	100.00
5.019	5.019 (0.868)	88	29151			9.21- 69.21	38.75
5.019	5.019 (0.868)	50	18461			0.00- 54.25	24.54
75 1-Propanol					CAS #: 71-23-8		
5.090	5.083 (0.880)	59	10283	5.00000	4.824	80.00- 120.00	100.00
5.090	5.083 (0.880)	42	8877			63.23- 123.23	86.33
5.090	5.083 (0.880)	41	5590			24.74- 84.74	54.36
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.973)	55	95932	5.00000	5.264	80.00- 120.00	100.00
5.628	5.620 (0.973)	85	11014			0.00- 41.28	11.48
5.628	5.620 (0.973)	58	7843			0.00- 38.22	8.18
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.079)	39	10867	5.00000	4.807	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.079)	43	49327			448.18- 508.18	453.92
6.244	6.244 (1.079)	41	33984			299.99- 359.99	312.73
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.938 (0.734)	99	7111	5.00000	4.971	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	13011			149.95- 209.95	182.97
6.938	6.938 (0.733)	55	133152			1849.07-1909.07	1872.48
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	159681	5.00000	5.193	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	12244			0.00- 37.44	7.67
7.032	7.031 (0.743)	86	19990			0.00- 42.78	12.52
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	77293	5.00000	4.991	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	23632			0.00- 59.10	30.57
8.665	8.657 (1.301)	43	188441			215.30- 275.30	243.80
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	63705	5.00000	4.810	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	599728			57.42- 117.42	941.41
9.596	9.596 (1.014)	95	23461			5.70- 65.70	36.83
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.791)	58	116686	5.00000	5.161	80.00- 120.00	100.00
10.362	10.362 (1.791)	43	191827			136.03- 196.03	164.40
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	41323	5.00000	3.808	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	28530			39.41- 99.41	69.04
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	63397	5.00000	5.120	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	187470			295.02- 355.02	295.71
11.444	11.444 (1.210)	63	25896			11.82- 71.82	40.85
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	88020	5.00000	4.917	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	198476			192.40- 252.40	225.49
12.318	12.318 (1.302)	77	22835			0.00- 54.69	25.94
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	21359	5.00000	3.532	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	28923			102.99- 162.99	135.41

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	128059	5.00000	5.049	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	121863			65.24- 125.24	95.16
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	114218	5.00000	4.871	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	34098			0.00- 58.21	29.85
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	58870	5.00000	4.306	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	187470			153.57- 213.57	318.45

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051917.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153596	-3.28
108 1,4-Difluorobenze	597103	358262	835944	607535	1.75
153 Chlorobenzene-d5	587747	352648	822846	599728	2.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051917.d

Date : 19-MAY-2021 20:43

Client ID:

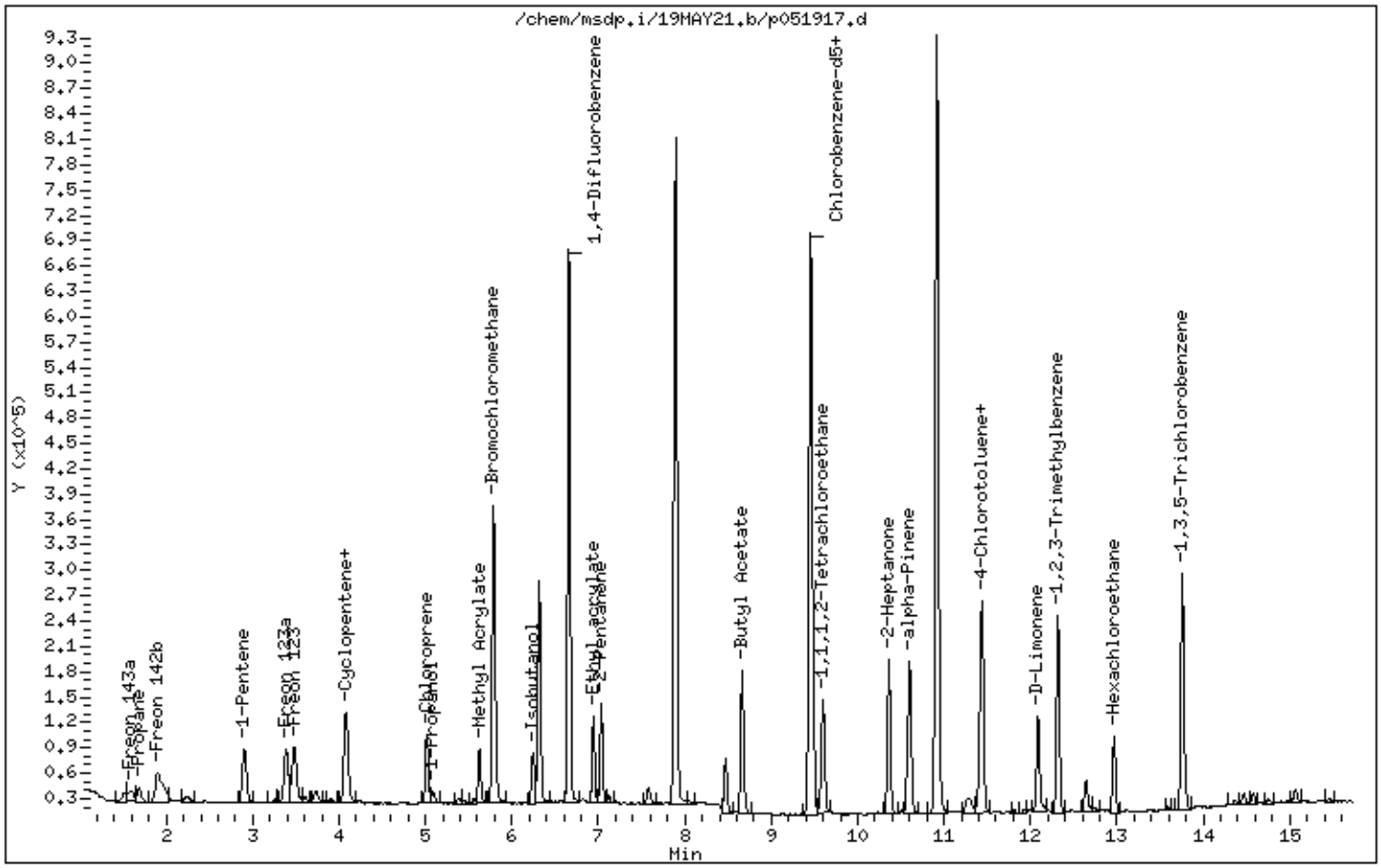
Instrument: msdp.i

Sample Info: 200mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062207.d
Lab Smp Id: ICAL Level 6
Inj Date : 22-JUN-2021 16:44
Operator : LD Inst ID: msd3.i
Smp Info : 80mL 3018-2078
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:49 Cal File: 3062218.d
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.270	5.284 (1.000)	130	289885	25.0000		80.00- 120.00	100.00
5.270	5.284 (1.000)	128	226876			48.46- 108.46	78.26
5.270	5.270 (1.000)	49	433966			120.39- 180.39	149.70
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	1078094	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	166843			0.00- 45.52	15.48
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	1013628	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	556752			25.46- 85.46	54.93
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.257)	65	9112	2.00000	1.879	80.00- 120.00	100.00(a)
1.353	1.353 (0.257)	69	25781			217.09- 277.09	282.93
1.353	1.353 (0.257)	64	3486			0.00- 55.87	38.26
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.273)	43	5991	2.00000	2.268	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
	6 Propane (continued)						
1.423	1.422 (0.270)	39	5192			41.62- 101.62	86.66
1.423	1.422 (0.270)	41	5108			22.97- 82.97	85.26
	13 Freon 142b				CAS #: 75-68-3		
1.605	1.604 (0.304)	65	31251	2.00000	2.027	80.00- 120.00	100.00
1.605	1.604 (0.304)	45	8855			0.00- 58.17	28.34
	36 1-Pentene				CAS #: 109-67-1		
2.444	2.444 (0.464)	55	19586	2.00000	2.000	80.00- 120.00	100.00(a)
2.444	2.444 (0.464)	42	30145			99.17- 159.17	153.91
	40 Freon 123a				CAS #: 354-23-4		
2.878	2.878 (0.546)	117	22862	2.00000	2.005	80.00- 120.00	100.00(a)
2.878	2.878 (0.546)	67	30241			103.13- 163.13	132.28
	41 Freon 123				CAS #: 306-83-2		
2.976	2.976 (0.565)	83	33539	2.00000	2.005	80.00- 120.00	100.00
2.976	2.976 (0.565)	133	8415			0.00- 51.81	25.09
2.976	2.976 (0.565)	85	25176			37.13- 97.13	75.06
	55 Cyclopentene				CAS #: 142-29-0		
3.549	3.549 (0.673)	67	35921	2.00000	2.018	80.00- 120.00	100.00
3.549	3.549 (0.673)	68	15513			7.90- 67.90	43.19
3.549	3.549 (0.673)	53	8899			0.00- 54.87	24.77
	56 Methyl Acetate				CAS #: 79-20-9		
3.591	3.577 (0.681)	43	38592	2.00000	2.104	80.00- 120.00	100.00(a)
3.591	3.577 (0.681)	74	7357			0.00- 47.15	19.06
	74 Chloroprene				CAS #: 126-99-8		
4.501	4.515 (0.854)	53	30781	2.00000	1.981	80.00- 120.00	100.00(a)
4.501	4.515 (0.854)	88	13327			12.33- 72.33	43.30
4.501	4.515 (0.854)	50	10224			0.00- 57.62	33.22
	75 1-Propanol				CAS #: 71-23-8		
4.627	4.613 (0.878)	59	6485	2.00000	2.700	80.00- 120.00	100.00
4.627	4.613 (0.878)	42	4281			53.89- 113.89	66.01
4.585	4.613 (0.870)	41	119			24.09- 84.09	1.84
	88 Methyl Acrylate				CAS #: 96-33-3		
5.145	5.130 (0.976)	55	38691	2.00000	2.072	80.00- 120.00	100.00(a)
5.145	5.130 (0.976)	85	6532			0.00- 43.24	16.88
5.131	5.130 (0.973)	58	5015			0.00- 38.83	12.96
	103 Isobutanol				CAS #: 78-83-1		
5.788	5.774 (1.098)	39	11582	2.00000	3.376	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.788	5.774 (1.098)	43	23653			327.69- 387.69	204.22
5.788	5.774 (1.098)	41	18940			237.56- 297.56	163.53
113 Ethyl acrylate						CAS #: 140-88-5	
6.460	6.474 (0.750)	99	3656	2.00000	2.257	80.00- 120.00	100.00
6.460	6.460 (0.750)	45	5038			124.67- 184.67	137.80
6.460	6.460 (0.750)	55	60018			1601.30-1661.30	1641.63
115 2-Pentanone						CAS #: 107-87-9	
6.558	6.557 (0.761)	43	90325	2.00000	2.384	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	7067			0.00- 37.25	7.82
6.558	6.557 (0.761)	86	12465			0.00- 45.08	13.80
145 Butyl Acetate						CAS #: 123-86-4	
8.068	8.068 (1.308)	56	32281	2.00000	2.271	80.00- 120.00	100.00(a)
8.068	8.068 (1.308)	73	11495			5.16- 65.16	35.61
8.068	8.068 (1.308)	43	75753			214.00- 274.00	234.67
157 1,1,1,2-Tetrachloroethane						CAS #: 630-20-6	
8.712	8.712 (1.012)	131	28819	2.00000	1.890	80.00- 120.00	100.00(a)
8.705	8.712 (1.011)	117	23948			38.22- 98.22	83.10
8.705	8.712 (1.011)	95	10938			7.54- 67.54	37.95
166 2-Heptanone						CAS #: 110-43-0	
9.221	9.221 (1.750)	58	48202	2.00000	2.265	80.00- 120.00	100.00
9.221	9.221 (1.750)	43	77902			133.36- 193.36	161.62
172 D-Limonene						CAS #: 5989-27-5	
10.417	10.417 (1.210)	68	33744	2.00000	1.832	80.00- 120.00	100.00(a)
10.417	10.424 (1.210)	93	24954			42.08- 102.08	73.95
186 4-Chlorotoluene						CAS #: 106-43-4	
9.966	9.973 (1.157)	126	26881	2.00000	2.025	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	88725			305.94- 365.94	330.07
9.966	9.966 (1.157)	63	12715			15.44- 75.44	47.30
197 1,2,3-Trimethylbenzene						CAS #: 526-73-8	
10.596	10.596 (1.230)	120	35829	2.00000	1.969	80.00- 120.00	100.00(a)
10.589	10.596 (1.230)	105	84796			206.43- 266.43	236.67
10.589	10.596 (1.230)	77	11184			0.00- 58.29	31.21
205 Hexachloroethane						CAS #: 67-72-1	
11.098	11.098 (1.289)	201	20332	2.00000	1.831	80.00- 120.00	100.00(a)
11.098	11.098 (1.289)	117	28407			109.77- 169.77	139.72

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.728 (1.361)	180	51309	2.00000	2.119	80.00- 120.00	100.00
11.721	11.728 (1.361)	182	47707			65.79- 125.79	92.98
210 alpha-Pinene					CAS #: 80-56-8		
9.364	9.371 (1.087)	93	62865	2.00000	2.006	80.00- 120.00	100.00
9.364	9.371 (1.087)	77	18260			0.13- 60.13	29.05
214 beta-Pinene					CAS #: 127-91-3		
9.945	9.944 (1.155)	93	48258	2.00000	1.960	80.00- 120.00	100.00(a)
9.966	9.966 (1.157)	91	88725			145.95- 205.95	183.86

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062207.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	289885	19.10
108 1,4-Difluorobenze	874076	524446	1223706	1078094	23.34
153 Chlorobenzene-d5	831223	498734	1163712	1013628	21.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.26
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062207.d

Page 1

Date : 22-JUN-2021 16:44

Client ID:

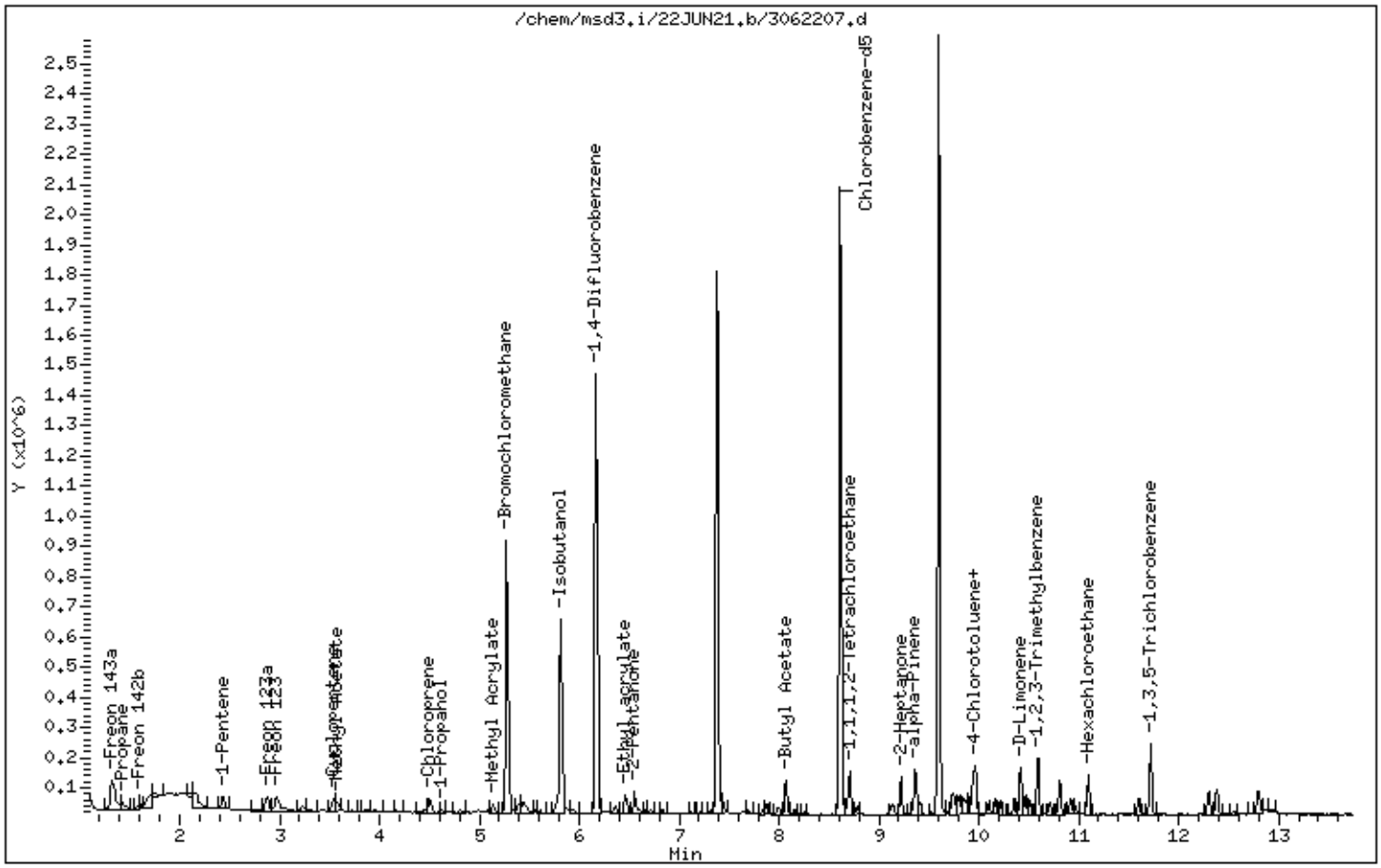
Instrument: msd3.i

Sample Info: 80mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062218.d
Lab Smp Id: ICAL Level 6
Inj Date : 22-JUN-2021 21:49
Operator : LD Inst ID: msd3.i
Smp Info : 80mL 3018-2116
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:49 Cal File: 3062218.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	12527	2.00000	2.033	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	10184			51.82- 111.82	81.30
1.493	1.479 (0.282)	51	30849			194.91- 254.91	246.26
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	13499	2.00000	2.158	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	8457			35.61- 95.61	62.65
1.437	1.423 (0.272)	39	10196			42.66- 102.66	75.53
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	9568	2.00000	2.347	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	30849			321.86- 381.86	322.42
1.451	1.437 (0.275)	47	7395			45.34- 105.34	77.29
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	35619	2.00000	1.975	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	12194			2.63- 62.63	34.23
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	3999	2.00000	2.017	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.493	1.479 (0.282)	51	30849			719.76- 779.76	771.42
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	27960	2.00000	2.092	80.00- 120.00	100.00
1.563	1.562 (0.296)	137	9352			2.12- 62.12	33.45
12 Isobutane					CAS #: 75-28-5		
1.577	1.576 (0.298)	43	29938	2.00000	2.130	80.00- 120.00	100.00
1.577	1.576 (0.298)	42	9552			2.44- 62.44	31.91
1.577	1.576 (0.298)	58	2044			0.00- 33.26	6.83
15 Chloromethane					CAS #: 74-87-3		
1.647	1.646 (0.312)	50	17143	2.00000	2.287	80.00- 120.00	100.00
1.647	1.646 (0.312)	52	5650			2.41- 62.41	32.96
18 Butane					CAS #: 106-97-8		
1.703	1.702 (0.322)	58	4166	2.00000	2.353	80.00- 120.00	100.00
1.703	1.702 (0.322)	43	35051			727.41- 787.41	841.36
19 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.744 (0.330)	62	16334	2.00000	2.036	80.00- 120.00	100.00
1.745	1.744 (0.330)	64	5799			1.28- 61.28	35.50
20 1,3-Butadiene					CAS #: 106-99-0		
1.759	1.758 (0.333)	54	15099	2.00000	2.054	80.00- 120.00	100.00
1.759	1.758 (0.333)	39	18165			69.23- 129.23	120.31
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	13943	2.00000	2.198	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	12872			62.78- 122.78	92.32
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	8314	2.00000	2.208	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	3518			1.44- 61.44	42.31
2.192	2.206 (0.415)	49	3656			4.12- 64.12	43.97
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	20620	2.00000	2.141	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	14321			38.82- 98.82	69.45
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	14365	2.00000	2.082	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	13693			63.14- 123.14	95.32
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	40281	2.00000	2.111	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.430	2.430 (0.460)	103	26149			35.12- 95.12	64.92
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	32346	2.00000	2.120	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	12285			0.74- 60.74	37.98
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	32710	2.00000	2.132	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	5841			0.00- 45.97	17.86
2.500	2.500 (0.473)	72	3353			0.00- 38.10	10.25
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	7733	2.00000	2.248	80.00- 120.00	100.00
2.794	2.780 (0.529)	59	13463			147.68- 207.68	174.10
2.780	2.780 (0.526)	45	15377			206.40- 266.40	198.85
39 Ethanol					CAS #: 64-17-5		
2.780	2.766 (0.526)	46	4305	2.00000	2.788	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	15543			523.01- 583.01	361.05
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	5657	2.00000	2.208	80.00- 120.00	100.00
3.046	3.032 (0.576)	56	7738			110.33- 170.33	136.79
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	26736	2.00000	2.049	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	17279			33.72- 93.72	64.63
3.032	3.032 (0.574)	101	32869			89.67- 149.67	122.94
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	16520	2.00000	2.102	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	10176			33.39- 93.39	61.60
3.074	3.074 (0.582)	61	30134			163.82- 223.82	182.41
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	10661	2.00000	2.456	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	29629			299.66- 359.66	277.92
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.297 (0.624)	76	42623	2.00000	2.180	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.269 (0.619)	142	34373	2.00000	2.033	80.00- 120.00	100.00
3.270	3.269 (0.619)	127	15306			14.58- 74.58	44.53

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.410	3.395 (0.645)	45	32159	2.00000	2.060	80.00- 120.00	100.00
3.410	3.395 (0.645)	43	7570			0.00- 48.61	23.54
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	7206	2.00000	2.141	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	24505			338.06- 398.06	340.06
57 Acetonitrile					CAS #: 75-05-8		
3.647	3.633 (0.690)	41	14594	2.00000	2.135	80.00- 120.00	100.00
3.647	3.633 (0.690)	40	8254			21.81- 81.81	56.56
3.647	3.633 (0.690)	38	2096			0.00- 41.86	14.36
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	23256	2.00000	2.238	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	14521			30.77- 90.77	62.44
3.717	3.717 (0.703)	51	8384			1.39- 61.39	36.05
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.871	3.857 (0.733)	59	42838	2.00000	2.186	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	7649			0.00- 51.05	17.86
3.857	3.857 (0.730)	57	4880			0.00- 41.68	11.39
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	44430	2.00000	2.100	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	12345			0.00- 58.86	27.79
3.941	3.941 (0.746)	41	13055			0.00- 57.27	29.38
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	10676	2.00000	2.019	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	27646			244.59- 304.59	258.95
3.969	3.969 (0.751)	96	15803			129.84- 189.84	148.02
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	13614	2.00000	2.145	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	12537			88.50- 148.50	92.09
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	28960	2.00000	2.020	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	19813			32.99- 92.99	68.42
4.179	4.179 (0.791)	86	3928			0.00- 42.56	13.56
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	30061	2.00000	2.039	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	9575			0.76- 60.76	31.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.445	4.445 (0.841)	45	62946	2.00000	2.080	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	13914			0.00- 51.37	22.10
4.445	4.445 (0.841)	59	8128			0.00- 41.09	12.91
73 Vinyl Acetate						CAS #: 108-05-4	
4.501	4.501 (0.852)	86	4157	2.00000	2.293	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	51442			1391.63-1451.63	1237.48
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
4.809	4.809 (0.910)	59	62324	2.00000	2.133	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	19376			3.22- 63.22	31.09
4.809	4.809 (0.910)	41	11767			0.00- 48.12	18.88
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.005	5.004 (0.947)	77	28668	2.00000	2.087	80.00- 120.00	100.00
5.005	5.004 (0.947)	79	9974			2.00- 62.00	34.79
5.005	5.004 (0.947)	97	7911			0.00- 53.36	27.60
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.047	5.046 (0.955)	98	11370	2.00000	2.169	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	15084			127.22- 187.22	132.66
5.047	5.046 (0.955)	61	25421			283.85- 343.85	223.58
86 2-Butanone						CAS #: 78-93-3	
5.075	5.074 (0.960)	72	7851	2.00000	2.144	80.00- 120.00	100.00
5.089	5.074 (0.963)	43	78294			1055.75-1115.75	997.25
5.075	5.074 (0.960)	57	3411			10.59- 70.59	43.45
87 Ethyl Acetate						CAS #: 141-78-6	
5.089	5.088 (0.963)	45	5709	2.00000	1.891	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	25421			450.31- 510.31	445.28
5.089	5.088 (0.963)	70	4574			30.42- 90.42	80.12
89 Tetrahydrofuran						CAS #: 109-99-9	
5.284	5.270 (1.000)	42	21705	2.00000	2.102	80.00- 120.00	100.00
5.284	5.270 (1.000)	71	8067			2.92- 62.92	37.17
5.284	5.270 (1.000)	72	7888			3.54- 63.54	36.34
* 90 Bromochloromethane						CAS #: 74-97-5	
5.284	5.284 (1.000)	130	258917	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	201783			48.46- 108.46	77.93
5.270	5.270 (1.000)	49	385968			120.39- 180.39	149.07
92 Chloroform						CAS #: 67-66-3	
5.340	5.340 (1.011)	83	33357	2.00000	2.055	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.011)	85	21529			34.71- 94.71	64.54
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	20996	2.00000	2.046	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	29244			120.40- 180.40	139.28
5.438	5.438 (1.029)	41	17106			54.20- 114.20	81.47
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.032)	97	36438	2.00000	1.997	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	22845			33.76- 93.76	62.70
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	33059	2.00000	1.967	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	33894			73.68- 133.68	102.53
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	8789	2.00000	2.041	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	23996			231.09- 291.09	273.02
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	89726	2.00000	2.001	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	27046			1.12- 61.12	30.14
5.774	5.774 (1.093)	41	25210			0.00- 57.49	28.10
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	43228	2.00000	2.002	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	11463			0.00- 53.80	26.52
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	359531	25.0000	25.233	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173715			21.66- 81.66	48.32
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	12051	2.00000	2.094	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	46557			365.20- 425.20	386.33
5.858	5.858 (0.950)	55	13263			91.31- 151.31	110.06
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	25443	2.00000	2.047	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	8919			1.20- 61.20	35.05
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	15716	2.00000	1.848	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	33799			179.02- 239.02	215.06
5.942	5.942 (0.964)	57	17903			84.85- 144.85	113.92

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	946034	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	148259			0.00- 45.52	15.67
110 n-Butanol					CAS #: 71-36-3		
6.362	6.348 (1.032)	56	14330	2.00000	2.071	80.00- 120.00	100.00
6.362	6.348 (1.032)	41	10628			40.21- 100.21	74.17
6.348	6.348 (1.030)	43	7980			25.00- 85.00	55.69
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.032)	95	22037	2.00000	2.035	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	22117			74.96- 134.96	100.36
6.362	6.362 (1.032)	97	14434			34.80- 94.80	65.50
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	11804	2.00000	2.359	80.00- 120.00	100.00
6.586	6.586 (1.068)	62	7528			52.03- 112.03	63.77
6.586	6.586 (1.068)	41	8139			79.97- 139.97	68.95
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	16998	2.00000	1.970	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	28082			134.02- 194.02	165.21
6.664	6.664 (0.774)	100	6257			9.54- 69.54	36.81
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.699 (1.087)	88	11392	2.00000	2.083	80.00- 120.00	100.00
6.700	6.699 (1.087)	58	9905			55.80- 115.80	86.95
6.700	6.699 (1.087)	57	3944			8.68- 68.68	34.62
118 Dibromomethane					CAS #: 74-95-3		
6.714	6.721 (0.780)	174	18752	2.00000	1.952	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	19344			67.27- 127.27	103.16
6.714	6.721 (0.780)	95	16647			50.92- 110.92	88.77
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	35603	2.00000	1.962	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	22516			34.31- 94.31	63.24
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.169)	75	26840	2.00000	1.990	80.00- 120.00	100.00
7.208	7.208 (1.169)	77	9456			1.42- 61.42	35.23
7.208	7.208 (1.169)	39	18349			38.56- 98.56	68.36
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	28700	2.00000	1.982	80.00- 120.00	100.00(a)
6.460	6.460 (1.048)	98	13249			15.60- 75.60	46.16

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
127 Methylcyclohexane (continued)							
6.460	6.460 (1.048)	55	28200			78.53- 138.53	98.26
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	17181	2.00000	1.874	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	45888			231.30- 291.30	267.09
7.316	7.316 (1.186)	85	7262			8.94- 68.94	42.27
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	970823	25.0000	24.915	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	111479			0.00- 41.47	11.48
7.387	7.387 (1.198)	100	636499			36.47- 96.47	65.56
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	57171	2.00000	1.974	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	33030			28.30- 88.30	57.77
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.207)	57	18179	2.00000	1.886	80.00- 120.00	100.00
7.445	7.444 (1.207)	85	18740			67.11- 127.11	103.09
7.445	7.444 (1.207)	43	45414			214.21- 274.21	249.82
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	26352	2.00000	1.996	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	9021			2.15- 62.15	34.23
7.688	7.688 (0.893)	39	17627			36.09- 96.09	66.89
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	19996	2.00000	1.969	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	12392			31.62- 91.62	61.97
7.839	7.846 (0.910)	83	17818			56.35- 116.35	89.11
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.915)	166	27680	2.00000	1.971	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	22388			48.71- 108.71	80.88
7.882	7.881 (0.915)	131	21304			46.55- 106.55	76.97
143 2-Hexanone					CAS #: 591-78-6		
8.010	8.003 (0.930)	58	22942	2.00000	1.967	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	45796			157.91- 217.91	199.62
8.010	8.003 (0.930)	100	4202			0.00- 47.86	18.32
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	27424	2.00000	1.984	80.00- 120.00	100.00(a)
7.989	7.989 (1.296)	41	30899			82.96- 142.96	112.67
7.989	7.989 (1.296)	78	8899			2.55- 62.55	32.45

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	38430	2.00000	1.995	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	29685			47.77- 107.77	77.24
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.960)	107	31730	2.00000	2.012	80.00- 120.00	100.00
8.261	8.268 (0.959)	109	29448			64.60- 124.60	92.81
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.154)	63	36254	2.00000	2.070	80.00- 120.00	100.00
7.115	7.115 (1.154)	65	11738			0.95- 60.95	32.38
7.122	7.122 (1.155)	144	3735			0.00- 40.45	10.30
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	896463	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	496632			25.46- 85.46	55.40
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	47809	2.00000	1.951	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	15417			2.13- 62.13	32.25
8.641	8.641 (1.003)	77	36657			26.35- 86.35	76.67
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.008)	106	24773	2.00000	2.022	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	76793			282.48- 342.48	309.99
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.011)	43	47836	2.00000	2.014	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	41901			59.52- 119.52	87.59
8.705	8.705 (1.011)	85	14792			0.00- 59.76	30.92
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	29681	2.00000	1.947	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	60240			171.36- 231.36	202.96
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	28420	2.00000	1.964	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	58681			179.99- 239.99	206.48
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.062)	104	47987	2.00000	1.914	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	24297			19.09- 79.09	50.63
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.086)	173	35291	2.00000	1.932	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	17840			21.45- 81.45	50.55

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	89737	2.00000	1.962	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	24498			0.00- 56.99	27.30
9.407	9.407 (1.092)	51	11332			0.00- 41.77	12.63
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	31083	2.00000	2.159	80.00- 120.00	100.00(a)
9.579	9.579 (1.112)	98	11891			9.22- 69.22	38.26
9.579	9.579 (1.112)	42	20956			42.60- 102.60	67.42
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	586034	25.0000	24.715	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	730126			93.06- 153.06	124.59
9.601	9.601 (1.115)	176	549908			62.87- 122.87	93.84
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	45479	2.00000	2.005	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	28003			34.35- 94.35	61.57
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.131)	156	28306	2.00000	1.990	80.00- 120.00	100.00(a)
9.737	9.737 (1.131)	158	27654			67.29- 127.29	97.70
9.730	9.729 (1.130)	77	45934			132.41- 192.41	162.28
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	107489	2.00000	2.014	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	25682			0.00- 53.77	23.89
9.758	9.758 (1.133)	105	4623			0.00- 33.81	4.30
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	13498	2.00000	1.976	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	40201			285.00- 345.00	297.83
9.787	9.787 (1.136)	61	11873			54.06- 114.06	87.96
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	11078	2.00000	2.049	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	5431			21.19- 81.19	49.03
9.787	9.787 (1.136)	75	40201			372.45- 432.45	362.89
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	56155	2.00000	2.034	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	19932			4.13- 64.13	35.49
9.816	9.815 (1.140)	142	2636			0.00- 34.73	4.69
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	27536	2.00000	1.990	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
9.851	9.851 (1.144)	105	89192			296.79- 356.79	323.91
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	22038	2.00000	1.960	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	82197			336.29- 396.29	372.98
9.866	9.873 (1.146)	65	13007			38.83- 98.83	59.02
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.902	9.901 (1.150)	120	37752	2.00000	1.942	80.00- 120.00	100.00
9.902	9.901 (1.150)	105	80271			176.40- 236.40	212.63
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	39056	2.00000	1.962	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	22102			26.64- 86.64	56.59
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.181)	119	72972	2.00000	2.041	80.00- 120.00	100.00
10.167	10.174 (1.180)	134	17377			0.00- 54.82	23.81
10.174	10.174 (1.181)	91	48613			36.92- 96.92	66.62
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	74003	2.00000	1.931	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	34304			16.58- 76.58	46.35
192 sec-Butylbenzene					CAS #: 135-98-8		
10.353	10.360 (1.202)	134	22626	2.00000	1.959	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	109866			451.53- 511.53	485.57
10.353	10.353 (1.202)	91	18185			46.48- 106.48	80.37
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	94336	2.00000	1.950	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	25449			0.00- 56.79	26.98
10.467	10.467 (1.215)	91	23235			0.00- 54.04	24.63
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.221)	146	51279	2.00000	1.970	80.00- 120.00	100.00
10.518	10.517 (1.221)	148	32439			33.53- 93.53	63.26
10.518	10.517 (1.221)	111	20660			11.05- 71.05	40.29
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	54206	2.00000	2.021	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	34266			33.47- 93.47	63.21
10.596	10.596 (1.230)	111	21091			9.65- 69.65	38.91
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	71847	2.00000	1.948	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	15914			0.00- 52.04	22.15
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	66498	2.00000	2.044	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	57381			55.86- 115.86	86.29
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	25185	2.00000	2.008	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	90951			331.99- 391.99	361.13
10.818	10.818 (1.256)	92	48740			161.01- 221.01	193.53
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	50354	2.00000	2.001	80.00- 120.00	100.00
10.919	10.926 (1.268)	148	31905			33.23- 93.23	63.36
10.919	10.918 (1.268)	111	21630			12.36- 72.36	42.96
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	29511	2.00000	2.023	80.00- 120.00	100.00
11.606	11.599 (1.348)	75	26419			58.96- 118.96	89.52
11.606	11.606 (1.348)	155	23036			47.82- 107.82	78.06
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	68826	2.47200	2.502	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	55006			50.85- 110.85	79.92
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	46259	2.51800	2.589	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	44390			65.40- 125.40	95.96
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.380	12.387 (1.437)	225	34636	2.57400	2.566	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	22076			33.70- 93.70	63.74
216 Naphthalene					CAS #: 91-20-3		
12.559	12.552 (1.458)	128	16936	0.25400	0.3104	80.00- 120.00	100.00(a)
12.559	12.552 (1.458)	127	2207			0.00- 43.10	13.03
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.802 (1.487)	180	45565	2.66200	2.786	80.00- 120.00	100.00
12.803	12.802 (1.487)	182	41761			65.67- 125.67	91.65
12.795	12.802 (1.486)	145	16507			6.02- 66.02	36.23

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062218.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	258917	6.37
108 1,4-Difluorobenze	874076	524446	1223706	946034	8.23
153 Chlorobenzene-d5	831223	498734	1163712	896463	7.85

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062218.d

Date : 22-JUN-2021 21:49

Client ID:

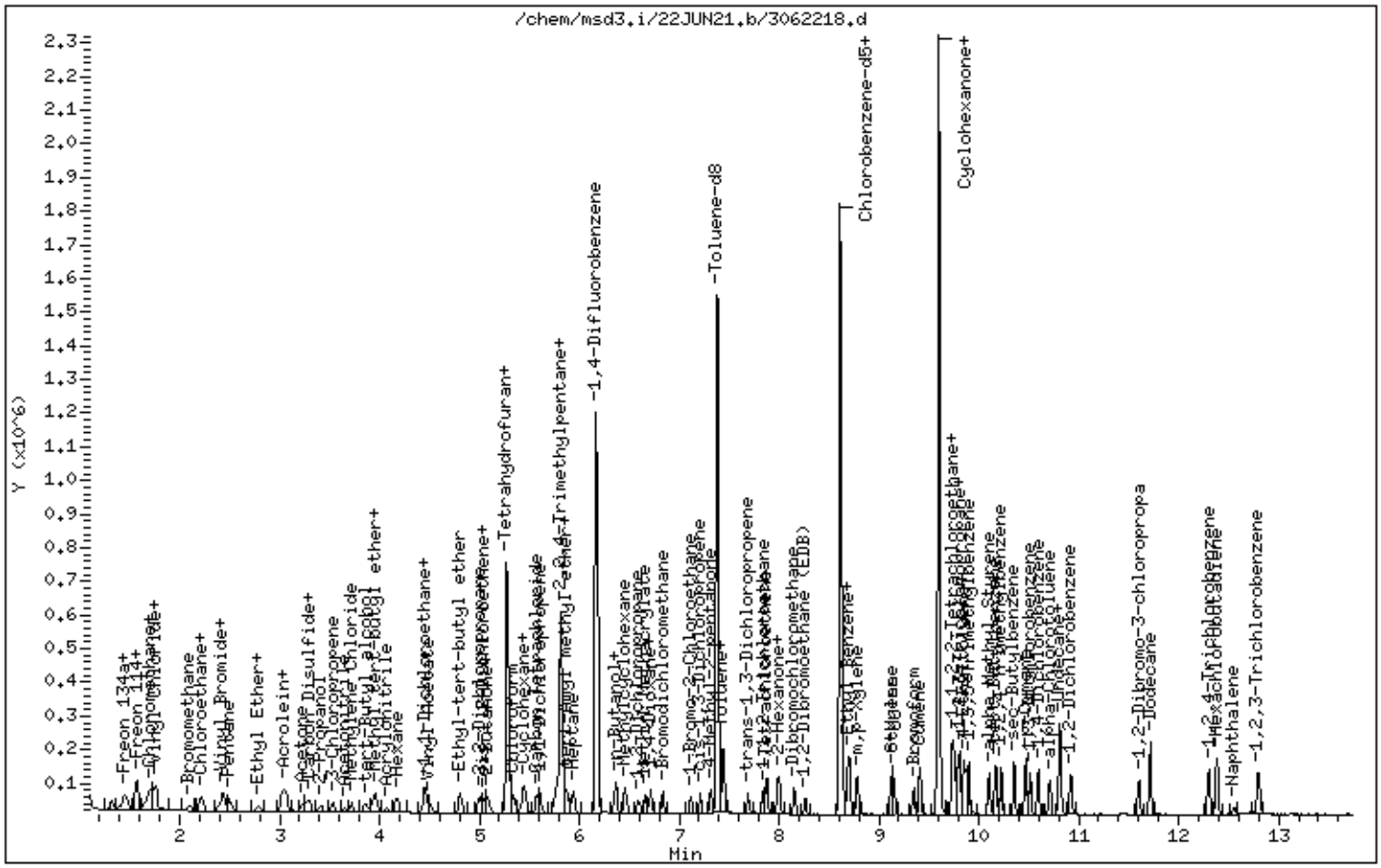
Instrument: msd3.i

Sample Info: 80mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051907.d
Lab Smp Id: ICAL Level 6
Inj Date : 19-MAY-2021 15:27
Operator : LD Inst ID: msdp.i
Smp Info : 20mL 3018-2034
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 15:27 Cal File: p051907.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	93022	20.0000	18.478	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	85552			59.44- 119.44	91.97
1.744	1.745 (0.302)	51	410469			419.06- 479.06	441.26
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	126668	20.0000	17.269	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	83011			35.28- 95.28	65.53
1.675	1.675 (0.290)	39	87777			38.35- 98.35	69.30
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.688	1.703 (0.292)	65	66510	20.0000	17.899	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	410469			597.63- 657.63	617.15
1.688	1.703 (0.292)	47	42224			33.72- 93.72	63.49
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	256819	20.0000	18.385	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	83094			2.37- 62.37	32.36
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	27136	20.0000	19.522	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	410469			1501.01-1561.01	1512.64
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	257544	20.0000	17.884	80.00- 120.00	100.00
1.842	1.856 (0.319)	137	84530			2.30- 62.30	32.82
12 Isobutane					CAS #: 75-28-5		
1.856	1.870 (0.321)	43	276539	20.0000	16.916	80.00- 120.00	100.00
1.856	1.870 (0.321)	42	89198			2.44- 62.44	32.26
1.856	1.856 (0.321)	58	9258			0.00- 33.36	3.35
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	175425	20.0000	19.636	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	48487			0.00- 56.26	27.64
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	26908	20.0000	14.306	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	210189			823.29- 883.29	781.14
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	167898	20.0000	16.491	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	51574			0.00- 59.69	30.72
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	173027	20.0000	22.047	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	131220			52.37- 112.37	75.84
24 Bromomethane					CAS #: 74-83-9		
2.476	2.483 (0.428)	94	109467	20.0000	16.296	80.00- 120.00	100.00
2.476	2.483 (0.428)	96	101049			64.07- 124.07	92.31
30 Chloroethane					CAS #: 75-00-3		
2.605	2.612 (0.451)	64	60984	20.0000	17.056	80.00- 120.00	100.00
2.605	2.612 (0.451)	66	18278			0.04- 60.04	29.97
2.605	2.612 (0.451)	49	19753			4.54- 64.54	32.39
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	221068	20.0000	20.084	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	143195			34.12- 94.12	64.77
32 Vinyl Bromide					CAS #: 593-60-2		
2.834	2.841 (0.490)	106	103992	20.0000	17.605	80.00- 120.00	100.00
2.834	2.841 (0.490)	108	100338			69.27- 129.27	96.49
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	289208	20.0000	19.049	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	188691			34.72- 94.72	65.24
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	224049	20.0000	17.280	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	67915			0.84- 60.84	30.31
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	340845	20.0000	18.944	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	51294			0.00- 44.98	15.05
2.970	2.970 (0.514)	72	24256			0.00- 37.39	7.12
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	55504	20.0000	18.719	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	102072			163.46- 223.46	183.90
3.278	3.285 (0.567)	45	151025			250.40- 310.40	272.10
39 Ethanol					CAS #: 64-17-5		
3.235	3.242 (0.560)	46	28012	20.0000	17.557	80.00- 120.00	100.00
3.278	3.242 (0.567)	45	150850			511.19- 571.19	538.52
42 Acrolein					CAS #: 107-02-8		
3.522	3.529 (0.609)	55	48671	20.0000	17.849	80.00- 120.00	100.00
3.522	3.529 (0.609)	56	67406			111.10- 171.10	138.49
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	234506	20.0000	20.574	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	150010			33.56- 93.56	63.97
3.550	3.550 (0.614)	101	277635			89.21- 149.21	118.39
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	117179	20.0000	17.797	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	73665			34.02- 94.02	62.87
3.579	3.579 (0.619)	61	234280			168.77- 228.77	199.93
47 Acetone					CAS #: 67-64-1		
3.708	3.708 (0.642)	58	72065	20.0000	17.340	80.00- 120.00	100.00
3.708	3.708 (0.642)	43	241838			302.95- 362.95	335.58
48 Carbon Disulfide					CAS #: 75-15-0		
3.815	3.823 (0.660)	76	317436	20.0000	17.928	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.787	3.794 (0.655)	142	245125	20.0000	23.837	80.00- 120.00	100.00
3.787	3.794 (0.655)	127	102171			12.22- 72.22	41.68

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.880	3.887 (0.671)	45	307798	20.0000	18.411	80.00- 120.00	100.00
3.880	3.887 (0.671)	43	51379			0.00- 47.19	16.69
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	51511	20.0000	17.182	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	225722			396.19- 456.19	438.20
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	132955	20.0000	17.513	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	69875			20.95- 80.95	52.56
4.123	4.123 (0.714)	38	15334			0.00- 41.17	11.53
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.238 (0.732)	49	188872	20.0000	17.656	80.00- 120.00	100.00
4.231	4.238 (0.732)	84	97783			22.03- 82.03	51.77
4.231	4.238 (0.732)	51	56590			0.18- 60.18	29.96
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	376326	20.0000	18.886	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	79824			0.00- 51.11	21.21
4.338	4.338 (0.751)	57	39827			0.00- 40.49	10.58
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	393778	20.0000	19.813	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	131571			3.10- 63.10	33.41
4.446	4.446 (0.769)	41	127804			1.28- 61.28	32.46
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	79611	20.0000	17.941	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	222503			255.84- 315.84	279.49
4.474	4.482 (0.774)	96	121969			127.59- 187.59	153.21
66 Acrylonitrile					CAS #: 107-13-1		
4.553	4.560 (0.788)	52	108453	20.0000	17.080	80.00- 120.00	100.00
4.553	4.560 (0.788)	53	125300			88.05- 148.05	115.53
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	289038	20.0000	18.610	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	192159			37.52- 97.52	66.48
4.696	4.697 (0.813)	86	34504			0.00- 41.48	11.94
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	244047	20.0000	17.840	80.00- 120.00	100.00
4.961	4.962 (0.859)	65	72133			0.00- 59.70	29.56

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether						CAS #: 108-20-3	
	4.947	4.954 (0.856)	45	733750	20.0000	19.999	80.00- 120.00	100.00
	4.954	4.954 (0.857)	87	130937			0.00- 48.18	17.84
	4.947	4.954 (0.856)	59	74206			0.00- 40.15	10.11
	73 Vinyl Acetate						CAS #: 108-05-4	
	4.997	4.997 (0.865)	86	29493	20.0000	17.415	80.00- 120.00	100.00
	4.990	4.997 (0.864)	43	540307			2432.48-2492.48	1831.98
	79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
	5.305	5.305 (0.918)	59	633028	20.0000	19.878	80.00- 120.00	100.00
	5.305	5.305 (0.918)	87	196731			1.00- 61.00	31.08
	5.305	5.305 (0.918)	41	121691			0.00- 48.73	19.22
	84 2,2-Dichloropropane						CAS #: 594-20-7	
	5.506	5.506 (0.953)	77	247387	20.0000	20.676	80.00- 120.00	100.00
	5.506	5.506 (0.953)	79	79013			2.28- 62.28	31.94
	5.506	5.506 (0.953)	97	59214			0.00- 53.93	23.94
	85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
	5.542	5.549 (0.959)	98	79311	20.0000	17.700	80.00- 120.00	100.00
	5.542	5.549 (0.959)	96	126353			125.75- 185.75	159.31
	5.542	5.549 (0.959)	61	301739			332.40- 392.40	380.45
	86 2-Butanone						CAS #: 78-93-3	
	5.556	5.556 (0.962)	72	60163	20.0000	16.887	80.00- 120.00	100.00
	5.563	5.556 (0.963)	43	755298			1214.50-1274.50	1255.42
	5.556	5.556 (0.962)	57	27140			14.68- 74.68	45.11
	87 Ethyl Acetate						CAS #: 141-78-6	
	5.570	5.570 (0.964)	45	61995	20.0000	17.497	80.00- 120.00	100.00
	5.542	5.549 (0.959)	61	301739			452.04- 512.04	486.72
	5.570	5.570 (0.964)	70	32560			22.77- 82.77	52.52
	89 Tetrahydrofuran						CAS #: 109-99-9	
	5.771	5.771 (0.999)	42	206034	20.0000	17.009	80.00- 120.00	100.00
	5.771	5.771 (0.999)	71	54220			0.00- 55.82	26.32
	5.771	5.771 (0.999)	72	59914			0.00- 57.59	29.08
*	90 Bromochloromethane						CAS #: 74-97-5	
	5.778	5.778 (1.000)	130	161884	25.0000		80.00- 120.00	100.00
	5.778	5.778 (1.000)	128	125674			48.23- 108.23	77.63
	5.771	5.778 (1.000)	49	290833			150.57- 210.57	179.66
	92 Chloroform						CAS #: 67-66-3	
	5.835	5.835 (1.010)	83	241783	20.0000	17.626	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	158829			34.70- 94.70	65.69
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	203644	20.0000	20.607	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	346268			142.57- 202.57	170.04
5.957	5.957 (1.031)	41	187080			62.09- 122.09	91.87
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	306146	20.0000	19.529	80.00- 120.00	100.00
5.964	5.972 (1.032)	99	199684			34.02- 94.02	65.23
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	305164	20.0000	20.683	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	305319			70.64- 130.64	100.05
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	71487	20.0000	17.887	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	180986			226.85- 286.85	253.17
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	1110205	20.0000	20.193	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	359061			2.24- 62.24	32.34
6.279	6.280 (1.087)	41	278205			0.00- 54.39	25.06
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	352350	20.0000	18.258	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	82919			0.00- 52.90	23.53
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	214356	25.0000	24.596	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	113737			27.21- 87.21	53.06
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	111853	20.0000	20.020	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	458075			372.79- 432.79	409.53
6.358	6.358 (0.955)	55	161464			112.09- 172.09	144.35
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	181236	20.0000	17.798	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	57046			0.79- 60.79	31.48
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	153106	20.0000	20.067	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	404624			226.53- 286.53	264.28
6.444	6.444 (0.968)	57	205765			100.85- 160.85	134.39

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	591321	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94057			0.00- 45.71	15.91
110 n-Butanol						CAS #: 71-36-3	
6.810	6.810 (1.023)	56	132950	20.0000	19.082	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	94545			40.99- 100.99	71.11
6.810	6.810 (1.023)	43	78634			27.38- 87.38	59.15
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	167926	20.0000	18.042	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	180875			76.29- 136.29	107.71
6.867	6.867 (1.031)	97	109619			33.63- 93.63	65.28
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.089	7.089 (1.065)	63	184802	20.0000	18.644	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	133840			41.07- 101.07	72.42
7.089	7.089 (1.065)	41	101498			22.53- 82.53	54.92
116 Methyl Methacrylate						CAS #: 80-62-6	
7.132	7.132 (0.754)	69	150281	20.0000	19.013	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	320687			179.84- 239.84	213.39
7.132	7.139 (0.754)	100	60103			9.59- 69.59	39.99
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	100090	20.0000	18.671	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	98658			68.28- 128.28	98.57
7.175	7.175 (1.077)	57	32744			2.68- 62.68	32.71
118 Dibromomethane						CAS #: 74-95-3	
7.204	7.204 (0.761)	174	158665	20.0000	18.457	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	142936			60.09- 120.09	90.09
7.204	7.204 (0.761)	95	122464			48.38- 108.38	77.18
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	275648	20.0000	18.925	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	177537			35.24- 95.24	64.41
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.691	7.691 (1.155)	75	230619	20.0000	18.894	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	72627			2.42- 62.42	31.49
7.691	7.691 (1.155)	39	154077			37.16- 97.16	66.81
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	280885	20.0000	20.418	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	132474			15.78- 75.78	47.16

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	326597			84.64- 144.64	116.27
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	198797	20.0000	19.794	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	542659			242.35- 302.35	272.97
7.791	7.791 (1.170)	85	66078			3.24- 63.24	33.24
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	636242	25.0000	24.785	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	65527			0.00- 40.44	10.30
7.891	7.891 (1.185)	100	416442			34.95- 94.95	65.45
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	514167	20.0000	19.066	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	307832			28.38- 88.38	59.87
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	236470	20.0000	20.785	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	199342			56.00- 116.00	84.30
7.941	7.949 (1.193)	43	614834			228.66- 288.66	260.01
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	217123	20.0000	19.138	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	68252			1.24- 61.24	31.43
8.214	8.214 (0.868)	39	141891			34.11- 94.11	65.35
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	176754	20.0000	19.263	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	111333			31.96- 91.96	62.99
8.400	8.400 (0.888)	83	150175			52.93- 112.93	84.96
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	257592	20.0000	19.183	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	201058			47.84- 107.84	78.05
8.464	8.464 (0.895)	131	191367			45.29- 105.29	74.29
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	268908	20.0000	19.939	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	517945			162.87- 222.87	192.61
8.586	8.586 (0.908)	100	41484			0.00- 45.94	15.43
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	246257	20.0000	19.204	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	314850			94.99- 154.99	127.85
8.579	8.579 (1.288)	78	78397			2.05- 62.05	31.84

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1	
8.801	8.801 (0.930)	129	337715	20.0000	19.240	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	263594			47.45- 107.45	78.05
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.951	8.951 (0.946)	107	280035	20.0000	18.542	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	267724			64.21- 124.21	95.60
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.605	7.605 (1.142)	63	333684	20.0000	18.417	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	97824			0.00- 59.64	29.32
7.605	7.605 (1.142)	144	32120			0.00- 39.63	9.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	579226	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	311215			23.78- 83.78	53.73
154 Chlorobenzene						CAS #: 108-90-7	
9.496	9.496 (1.004)	112	441684	20.0000	19.332	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	142490			1.74- 61.74	32.26
9.496	9.496 (1.004)	77	248503			25.04- 85.04	56.26
155 Ethyl Benzene						CAS #: 100-41-4	
9.567	9.567 (1.011)	106	238564	20.0000	19.809	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	733130			273.74- 333.74	307.31
156 Nonane						CAS #: 111-84-2	
9.596	9.596 (1.014)	43	660026	20.0000	21.119	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	552781			54.16- 114.16	83.75
9.596	9.603 (1.014)	85	158629			0.00- 53.90	24.03
158 m,p-Xylene						CAS #: 108-38-3	
9.718	9.718 (1.027)	106	298628	20.0000	19.892	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	589189			163.73- 223.73	197.30
164 o-Xylene						CAS #: 95-47-6	
10.226	10.226 (1.081)	106	296697	20.0000	20.402	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	604874			177.45- 237.45	203.87
165 Styrene						CAS #: 100-42-5	
10.255	10.255 (1.084)	104	488029	20.0000	19.783	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	228738			17.88- 77.88	46.87
167 Bromoform						CAS #: 75-25-2	
10.541	10.542 (1.114)	173	342784	20.0000	19.970	80.00- 120.00	100.00
10.541	10.542 (1.114)	171	175679			21.25- 81.25	51.25

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
168 Cumene					CAS #: 98-82-8			
10.649	10.649 (1.126)	105	931561	20.0000	20.442	80.00- 120.00		100.00
10.649	10.649 (1.126)	120	266395			0.00- 58.52		28.60
10.649	10.649 (1.126)	51	122943			0.00- 43.00		13.20
169 Cyclohexanone					CAS #: 108-94-1			
10.871	10.871 (1.149)	55	329076	20.0000	19.988	80.00- 120.00		100.00
10.871	10.871 (1.149)	98	105887			1.94- 61.94		32.18
10.871	10.871 (1.149)	42	225892			37.89- 97.89		68.64
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4			
10.921	10.921 (1.154)	174	366979	25.0000	24.808	80.00- 120.00		100.00
10.914	10.921 (1.154)	95	468117			95.92- 155.92		127.56
10.921	10.921 (1.154)	176	351685			66.89- 126.89		95.83
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
11.107	11.100 (1.174)	83	448177	20.0000	20.205	80.00- 120.00		100.00
11.107	11.100 (1.174)	85	290309			35.20- 95.20		64.78
177 Bromobenzene					CAS #: 108-86-1			
11.107	11.107 (1.174)	156	273442	20.0000	19.953	80.00- 120.00		100.00
11.107	11.107 (1.174)	158	268738			67.21- 127.21		98.28
11.179	11.179 (1.182)	77	168602			29.02- 89.02		61.66
178 Propylbenzene					CAS #: 103-65-1			
11.150	11.150 (1.179)	120	275295	20.0000	20.363	80.00- 120.00		100.00
11.150	11.150 (1.179)	91	1090818			366.49- 426.49		396.24
11.150	11.150 (1.179)	105	41933			0.00- 44.85		15.23
179 1,2,3-Trichloropropane					CAS #: 96-18-4			
11.179	11.179 (1.182)	110	139458	20.0000	19.807	80.00- 120.00		100.00
11.179	11.179 (1.182)	75	427261			280.55- 340.55		306.37
11.100	11.100 (1.173)	61	62807			15.49- 75.49		45.04
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6			
11.179	11.179 (1.182)	53	88946	20.0000	19.304	80.00- 120.00		100.00
11.172	11.179 (1.181)	89	71489			49.11- 109.11		80.37
11.179	11.179 (1.182)	75	427261			426.44- 486.44		480.36
182 Decane					CAS #: 124-18-5			
11.251	11.251 (1.189)	57	746366	20.0000	20.338	80.00- 120.00		100.00
11.251	11.251 (1.189)	71	204118			0.00- 57.66		27.35
11.258	11.258 (1.190)	142	29608			0.00- 34.09		3.97
183 4-Ethyltoluene					CAS #: 622-96-8			
11.286	11.287 (1.193)	120	295596	20.0000	20.284	80.00- 120.00		100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	929331			284.55- 344.55	314.39
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	235462	20.0000	20.537	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	804535			315.17- 375.17	341.68
11.301	11.301 (1.195)	65	116734			21.55- 81.55	49.58
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	416581	20.0000	20.680	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	804831			164.93- 224.93	193.20
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	413999	20.0000	20.536	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	229936			25.30- 85.30	55.54
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	765020	20.0000	20.366	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	183021			0.00- 54.25	23.92
11.738	11.738 (1.241)	91	463050			31.27- 91.27	60.53
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	783363	20.0000	20.495	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	381421			19.05- 79.05	48.69
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	242771	20.0000	20.736	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	1145624			437.55- 497.55	471.89
11.996	11.996 (1.268)	91	174745			40.76- 100.76	71.98
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	1070099	20.0000	20.727	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	276177			0.00- 55.54	25.81
12.153	12.153 (1.285)	91	231505			0.00- 51.48	21.63
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	515702	20.0000	19.622	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	331017			33.21- 93.21	64.19
12.196	12.196 (1.289)	111	214395			11.31- 71.31	41.57
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	514316	20.0000	19.523	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	333938			33.90- 93.90	64.93
12.311	12.311 (1.301)	111	204966			9.45- 69.45	39.85
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	728285	20.0000	20.267	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	167108			0.00- 53.26	22.95
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	833319	20.0000	19.843	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	748015			58.12- 118.12	89.76
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	269536	20.0000	20.284	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	921873			314.79- 374.79	342.02
12.626	12.626 (1.335)	92	496131			154.29- 214.29	184.07
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	516436	20.0000	20.144	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	324827			33.84- 93.84	62.90
12.733	12.741 (1.346)	111	222511			12.73- 72.73	43.09
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	313020	20.0000	20.327	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	265111			52.48- 112.48	84.69
13.600	13.600 (1.438)	155	243659			47.41- 107.41	77.84
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	755474	24.7000	24.812	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	627549			52.87- 112.87	83.07
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	457157	25.2000	24.597	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	438717			65.33- 125.33	95.97
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	335930	25.7000	25.915	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	210653			33.17- 93.17	62.71
216 Naphthalene					CAS #: 91-20-3		
14.761	14.768 (1.560)	128	112848	2.54000	2.343	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	14592			0.00- 42.88	12.93
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	420041	26.6000	25.838	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	398636			65.75- 125.75	94.90
15.069	15.069 (1.593)	145	147343			5.23- 65.23	35.08

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051907.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	161884	1.94
108 1,4-Difluorobenze	597103	358262	835944	591321	-0.97
153 Chlorobenzene-d5	587747	352648	822846	579226	-1.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051907.d

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Date : 19-MAY-2021 15:27

Client ID:

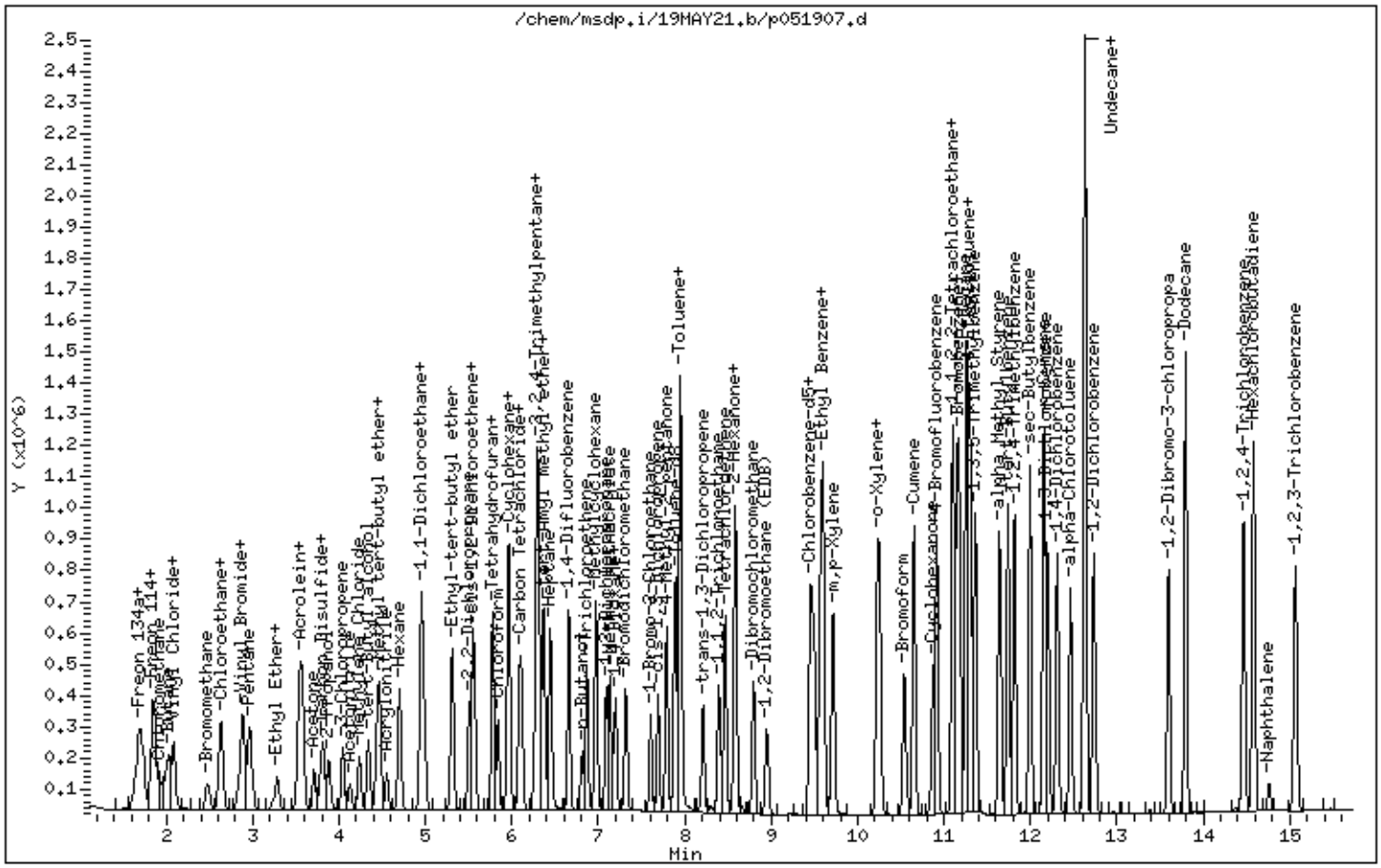
Instrument: msdp.i

Sample Info: 20mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051918.d
Lab Smp Id: ICAL Level 6
Inj Date : 19-MAY-2021 21:10
Operator : gh Inst ID: msdp.i
Smp Info : 20mL 3018-2013
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:10 Cal File: p051918.d
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	164276	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126583			48.23- 108.23	77.06
5.771	5.778 (1.000)	49	292813			150.57- 210.57	178.24
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	594883	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94502			0.00- 45.71	15.89
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	584012	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	316968			23.78- 83.78	54.27
3 Freon 143a					CAS #: 420-46-2		
1.577	1.590 (0.273)	65	63953	20.0000	19.336	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	170661			243.50- 303.50	266.85
1.591	1.590 (0.275)	64	16338			0.00- 54.06	25.55
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	46853	20.0000	15.945	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	29481			34.98- 94.98	62.92
1.674	1.674 (0.290)	41	25457			25.22- 85.22	54.33
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	252531	20.0000	15.611	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	76512			0.00- 59.77	30.30
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	180760	20.0000	16.998	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	247205			105.17- 165.17	136.76
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	177874	20.0000	17.207	80.00- 120.00	100.00
3.378	3.378 (0.585)	67	248317			104.69- 164.69	139.60
41 Freon 123					CAS #: 306-83-2		
3.472	3.479 (0.601)	83	276366	20.0000	18.974	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	56290			0.00- 50.87	20.37
3.472	3.479 (0.601)	85	179827			36.08- 96.08	65.07
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	281294	20.0000	18.118	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	105999			6.76- 66.76	37.68
4.066	4.073 (0.704)	53	78449			0.00- 57.54	27.89
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	314311	20.0000	17.425	80.00- 120.00	100.00
4.073	4.073 (0.705)	74	43403			0.00- 44.13	13.81
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	249821	20.0000	17.505	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	97837			9.21- 69.21	39.16
5.019	5.019 (0.869)	50	60899			0.00- 54.25	24.38
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	33679	20.0000	15.446	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	32228			63.23- 123.23	95.69
5.083	5.083 (0.880)	41	20019			24.74- 84.74	59.44
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	317339	20.0000	16.802	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	34842			0.00- 41.28	10.98
5.620	5.620 (0.973)	58	27405			0.00- 38.22	8.64
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	37572	20.0000	16.140	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	188703			448.18- 508.18	502.24
6.244	6.244 (1.081)	41	131184			299.99- 359.99	349.15
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	23633	20.0000	17.406	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	44798			149.95- 209.95	189.56
6.938	6.938 (0.733)	55	458959			1849.07-1909.07	1942.03
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	549397	20.0000	18.604	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	42813			0.00- 37.44	7.79
7.032	7.031 (0.743)	86	69391			0.00- 42.78	12.63
145 Butyl Acetate					CAS #: 123-86-4		
8.658	8.665 (1.300)	56	289132	20.0000	19.218	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	85224			0.00- 59.10	29.48
8.658	8.657 (1.300)	43	710835			215.30- 275.30	245.85
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	265099	20.0000	20.462	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	584012			57.42- 117.42	220.30
9.596	9.596 (1.014)	95	96156			5.70- 65.70	36.27
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	456297	20.0000	19.048	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	750475			136.03- 196.03	164.47
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	366276	20.0000	30.886	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	252611			39.41- 99.41	68.97
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	233965	20.0000	19.501	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	762751			295.02- 355.02	326.01
11.444	11.444 (1.210)	63	101096			11.82- 71.82	43.21
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	356670	20.0000	20.382	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	795713			192.40- 252.40	223.10
12.318	12.318 (1.302)	77	89457			0.00- 54.69	25.08
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	175433	20.0000	27.542	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	236009			102.99- 162.99	134.53

					AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
208 1,3,5-Trichlorobenzene						CAS #: 108-70-3		
13.758	13.758 (1.454)	180	464814	20.0000	19.008	80.00- 120.00	100.00	
13.758	13.758 (1.454)	182	442074			65.24- 125.24	95.11	
210 alpha-Pinene						CAS #: 80-56-8		
10.599	10.599 (1.120)	93	504688	20.0000	21.723	80.00- 120.00	100.00	
10.599	10.599 (1.120)	77	146698			0.00- 58.21	29.07	
214 beta-Pinene						CAS #: 127-91-3		
11.423	11.422 (1.207)	93	403829	20.0000	27.931	80.00- 120.00	100.00	
11.444	11.444 (1.210)	91	762751			153.57- 213.57	188.88	

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051918.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	164276	3.44
108 1,4-Difluorobenze	597103	358262	835944	594883	-0.37
153 Chlorobenzene-d5	587747	352648	822846	584012	-0.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051918.d

Date : 19-MAY-2021 21:10

Client ID:

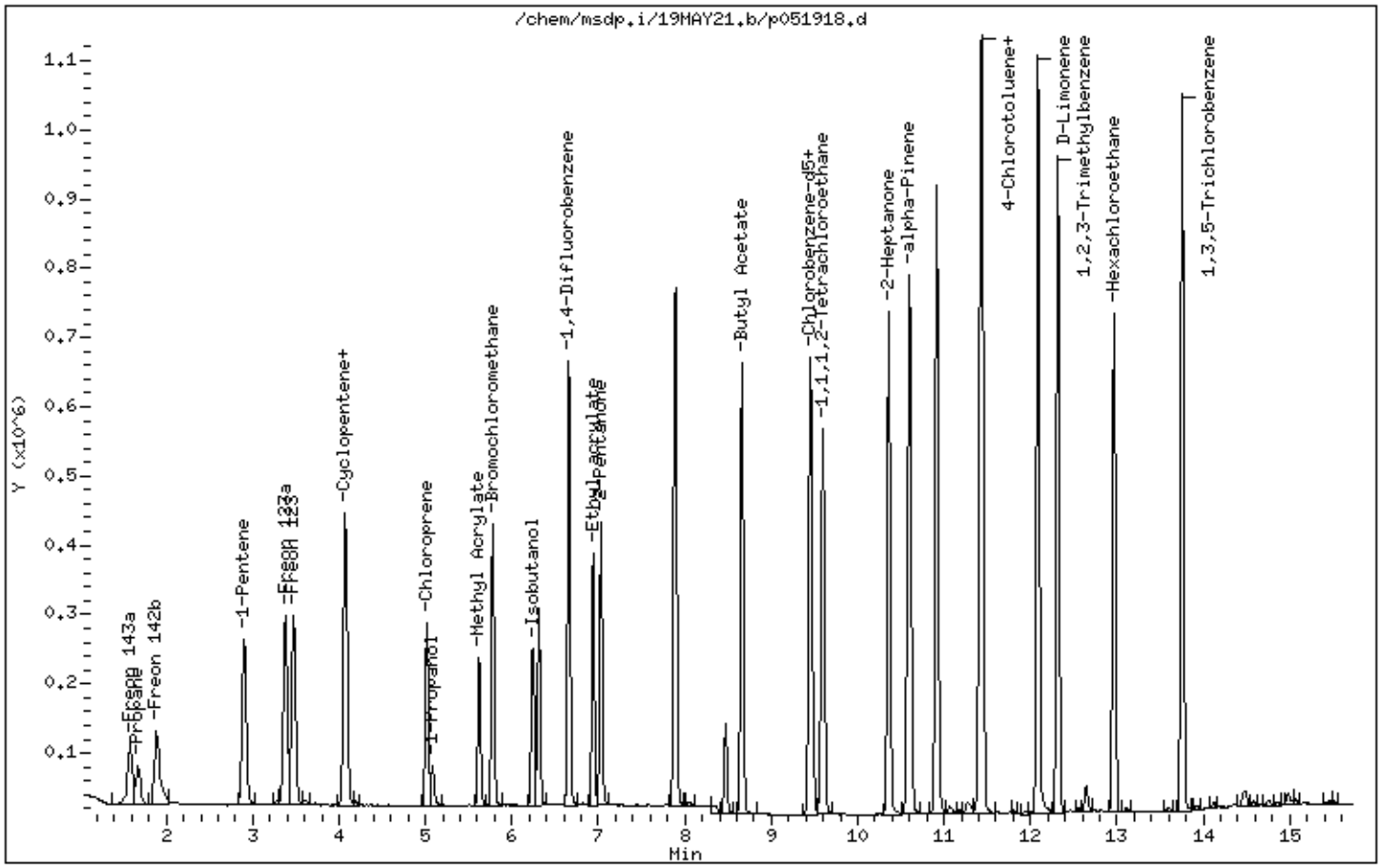
Instrument: msdp.i

Sample Info: 20mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062208.d
Lab Smp Id: ICAL Level 7
Inj Date : 22-JUN-2021 17:13
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2078
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:18 Cal File: 3062219.d
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	293494	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	228507			48.46- 108.46	77.86
5.270	5.270 (1.000)	49	438123			120.39- 180.39	149.28
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	1058029	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	166272			0.00- 45.52	15.72
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	1004400	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	564944			25.46- 85.46	56.25
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	25983	5.00000	5.292	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	63841			217.09- 277.09	245.70
1.353	1.353 (0.256)	64	6250			0.00- 55.87	24.05
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.272)	43	13302	5.00000	4.973	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
	6 Propane (continued)						
1.437	1.422 (0.272)	39	11936			41.62- 101.62	89.73
1.437	1.422 (0.272)	41	11547			22.97- 82.97	86.81
	13 Freon 142b				CAS #: 75-68-3		
1.605	1.604 (0.304)	65	76015	5.00000	4.869	80.00- 120.00	100.00
1.605	1.604 (0.304)	45	23649			0.00- 58.17	31.11
	36 1-Pentene				CAS #: 109-67-1		
2.444	2.444 (0.463)	55	48431	5.00000	4.885	80.00- 120.00	100.00(a)
2.444	2.444 (0.463)	42	69052			99.17- 159.17	142.58
	40 Freon 123a				CAS #: 354-23-4		
2.878	2.878 (0.545)	117	56054	5.00000	4.855	80.00- 120.00	100.00(a)
2.878	2.878 (0.545)	67	73224			103.13- 163.13	130.63
	41 Freon 123				CAS #: 306-83-2		
2.976	2.976 (0.563)	83	83378	5.00000	4.924	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	19265			0.00- 51.81	23.11
2.976	2.976 (0.563)	85	60487			37.13- 97.13	72.55
	55 Cyclopentene				CAS #: 142-29-0		
3.549	3.549 (0.672)	67	86815	5.00000	4.817	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	34754			7.90- 67.90	40.03
3.549	3.549 (0.672)	53	22334			0.00- 54.87	25.73
	56 Methyl Acetate				CAS #: 79-20-9		
3.591	3.577 (0.680)	43	97338	5.00000	5.240	80.00- 120.00	100.00
3.591	3.577 (0.680)	74	16823			0.00- 47.15	17.28
	74 Chloroprene				CAS #: 126-99-8		
4.501	4.515 (0.852)	53	77411	5.00000	4.921	80.00- 120.00	100.00
4.501	4.515 (0.852)	88	32483			12.33- 72.33	41.96
4.501	4.515 (0.852)	50	21250			0.00- 57.62	27.45
	75 1-Propanol				CAS #: 71-23-8		
4.627	4.613 (0.876)	59	12617	5.00000	5.188	80.00- 120.00	100.00
4.627	4.613 (0.876)	42	10989			53.89- 113.89	87.10
4.627	4.613 (0.876)	41	7991			24.09- 84.09	63.34
	88 Methyl Acrylate				CAS #: 96-33-3		
5.130	5.130 (0.971)	55	96706	5.00000	5.116	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	14547			0.00- 43.24	15.04
5.130	5.130 (0.971)	58	8124			0.00- 38.83	8.40
	103 Isobutanol				CAS #: 78-83-1		
5.788	5.774 (1.095)	39	22174	5.00000	6.383	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.788	5.774 (1.095)	43	58502			327.69- 387.69	263.83
5.788	5.774 (1.095)	41	49233			237.56- 297.56	222.03
113 Ethyl acrylate					CAS #: 140-88-5		
6.460	6.474 (0.750)	99	9219	5.00000	5.744	80.00- 120.00	100.00
6.460	6.460 (0.750)	45	13614			124.67- 184.67	147.67
6.460	6.460 (0.750)	55	147002			1601.30-1661.30	1594.55
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	208253	5.00000	5.547	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	18363			0.00- 37.25	8.82
6.558	6.557 (0.761)	86	31845			0.00- 45.08	15.29
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.308)	56	76654	5.00000	5.496	80.00- 120.00	100.00
8.068	8.068 (1.308)	73	28367			5.16- 65.16	37.01
8.068	8.068 (1.308)	43	192544			214.00- 274.00	251.19
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.012)	131	69799	5.00000	4.620	80.00- 120.00	100.00
8.705	8.712 (1.011)	117	53334			38.22- 98.22	76.41
8.705	8.712 (1.011)	95	27234			7.54- 67.54	39.02
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	119072	5.00000	5.527	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	194999			133.36- 193.36	163.77
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.210)	68	84575	5.00000	4.635	80.00- 120.00	100.00
10.417	10.424 (1.210)	93	60187			42.08- 102.08	71.16
186 4-Chlorotoluene					CAS #: 106-43-4		
9.966	9.973 (1.157)	126	66952	5.00000	5.091	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	215822			305.94- 365.94	322.35
9.966	9.966 (1.157)	63	29938			15.44- 75.44	44.72
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.589	10.596 (1.230)	120	89366	5.00000	4.957	80.00- 120.00	100.00(a)
10.589	10.596 (1.230)	105	206875			206.43- 266.43	231.49
10.589	10.596 (1.230)	77	25868			0.00- 58.29	28.95
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.289)	201	45814	5.00000	4.163	80.00- 120.00	100.00
11.098	11.098 (1.289)	117	64441			109.77- 169.77	140.66

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.728 (1.361)	180	130245	5.00000	5.428	80.00- 120.00	100.00
11.721	11.728 (1.361)	182	123901			65.79- 125.79	95.13
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.088)	93	153783	5.00000	4.952	80.00- 120.00	100.00
9.371	9.371 (1.088)	77	45062			0.13- 60.13	29.30
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.155)	93	115699	5.00000	4.744	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	215822			145.95- 205.95	186.54

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062208.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	293494	20.58
108 1,4-Difluorobenze	874076	524446	1223706	1058029	21.05
153 Chlorobenzene-d5	831223	498734	1163712	1004400	20.83

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062208.d

Date : 22-JUN-2021 17:13

Client ID:

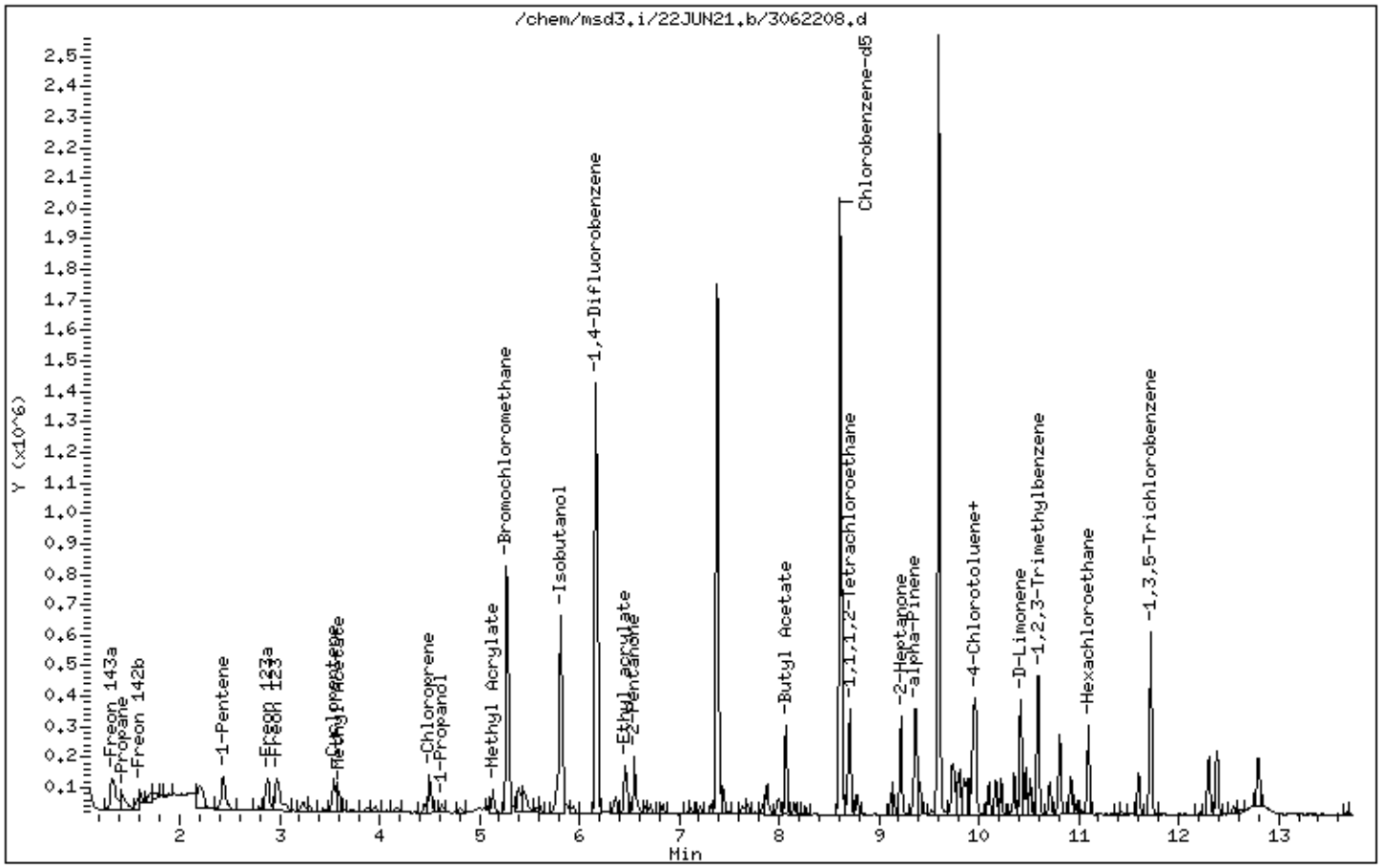
Instrument: msd3.i

Sample Info: 200mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062219.d
Lab Smp Id: ICAL Level 7
Inj Date : 22-JUN-2021 22:18
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2116
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:18 Cal File: 3062219.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.409	1.395 (0.267)	83	30870	5.00000	5.043	80.00- 120.00	100.00
1.409	1.395 (0.267)	69	27437			51.82- 111.82	88.88
1.493	1.479 (0.282)	51	115062			194.91- 254.91	372.73
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	30120	5.00000	4.847	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	20252			35.61- 95.61	67.24
1.437	1.423 (0.272)	39	23134			42.66- 102.66	76.81
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	20451	5.00000	5.049	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	115062			321.86- 381.86	562.62
1.465	1.437 (0.277)	47	15872			45.34- 105.34	77.61
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	87130	5.00000	4.862	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	28738			2.63- 62.63	32.98
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	9643	5.00000	4.896	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
9 Chlorodifluoromethane (continued)							
1.493	1.479 (0.282)	51	115062			719.76- 779.76	1193.22
10 Freon 114					CAS #: 76-14-2		
1.576	1.562 (0.298)	135	66614	5.00000	5.016	80.00- 120.00	100.00
1.576	1.562 (0.298)	137	21590			2.12- 62.12	32.41
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	70335	5.00000	5.036	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	23270			2.44- 62.44	33.08
1.576	1.576 (0.298)	58	3709			0.00- 33.26	5.27
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	37423	5.00000	5.024	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	14009			2.41- 62.41	37.43
18 Butane					CAS #: 106-97-8		
1.716	1.702 (0.325)	58	12018	5.00000	6.832	80.00- 120.00	100.00
1.716	1.702 (0.325)	43	73577			727.41- 787.41	612.22
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	36880	5.00000	4.627	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	13097			1.28- 61.28	35.51
20 1,3-Butadiene					CAS #: 106-99-0		
1.772	1.758 (0.335)	54	35506	5.00000	4.860	80.00- 120.00	100.00
1.772	1.758 (0.335)	39	35507			69.23- 129.23	100.00
24 Bromomethane					CAS #: 74-83-9		
2.108	2.094 (0.399)	94	38109	5.00000	6.045	80.00- 120.00	100.00
2.108	2.094 (0.399)	96	35133			62.78- 122.78	92.19
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	19206	5.00000	5.133	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	6521			1.44- 61.44	33.95
2.206	2.206 (0.417)	49	6939			4.12- 64.12	36.13
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	48636	5.00000	5.083	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	33342			38.82- 98.82	68.55
32 Vinyl Bromide					CAS #: 593-60-2		
2.402	2.388 (0.455)	106	34690	5.00000	5.061	80.00- 120.00	100.00
2.402	2.388 (0.455)	108	32419			63.14- 123.14	93.45
33 Freon 11					CAS #: 75-69-4		
2.444	2.430 (0.462)	101	96206	5.00000	5.074	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.444	2.430 (0.462)	103	62473			35.12- 95.12	64.94
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.458	2.444 (0.465)	67	74608	5.00000	4.922	80.00- 120.00	100.00
2.458	2.444 (0.465)	69	23139			0.74- 60.74	31.01
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	76248	5.00000	5.002	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	12267			0.00- 45.97	16.09
2.500	2.500 (0.473)	72	6676			0.00- 38.10	8.76
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	17084	5.00000	4.998	80.00- 120.00	100.00
2.794	2.780 (0.529)	59	30253			147.68- 207.68	177.08
2.794	2.780 (0.529)	45	39009			206.40- 266.40	228.34
39 Ethanol					CAS #: 64-17-5		
2.780	2.766 (0.526)	46	8533	5.00000	5.563	80.00- 120.00	100.00
2.794	2.780 (0.529)	45	39144			523.01- 583.01	458.74
42 Acrolein					CAS #: 107-02-8		
3.046	3.032 (0.576)	55	12195	5.00000	4.791	80.00- 120.00	100.00
3.046	3.032 (0.576)	56	17604			110.33- 170.33	144.35
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	62504	5.00000	4.822	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	41155			33.72- 93.72	65.84
3.032	3.032 (0.574)	101	77780			89.67- 149.67	124.44
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	36915	5.00000	4.728	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	23464			33.39- 93.39	63.56
3.074	3.074 (0.582)	61	69877			163.82- 223.82	189.29
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	22858	5.00000	5.299	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	68759			299.66- 359.66	300.81
48 Carbon Disulfide					CAS #: 75-15-0		
3.311	3.297 (0.627)	76	99748	5.00000	5.135	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.283	3.269 (0.621)	142	65902	5.00000	3.923	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	30617			14.58- 74.58	46.46

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.409	3.395 (0.645)	45	78652	5.00000	5.070	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	15386			0.00- 48.61	19.56
54 3-Chloropropene					CAS #: 107-05-1		
3.549	3.535 (0.672)	76	16573	5.00000	4.955	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	56964			338.06- 398.06	343.72
57 Acetonitrile					CAS #: 75-05-8		
3.647	3.633 (0.690)	41	34434	5.00000	5.069	80.00- 120.00	100.00
3.647	3.633 (0.690)	40	17283			21.81- 81.81	50.19
3.647	3.633 (0.690)	38	4545			0.00- 41.86	13.20
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	53373	5.00000	5.170	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	31988			30.77- 90.77	59.93
3.731	3.717 (0.706)	51	16157			1.39- 61.39	30.27
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	96951	5.00000	4.979	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	19154			0.00- 51.05	19.76
3.857	3.857 (0.730)	57	10645			0.00- 41.68	10.98
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	105485	5.00000	5.019	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	29722			0.00- 58.86	28.18
3.941	3.941 (0.746)	41	29577			0.00- 57.27	28.04
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	24541	5.00000	4.671	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	64474			244.59- 304.59	262.72
3.969	3.969 (0.751)	96	37973			129.84- 189.84	154.73
66 Acrylonitrile					CAS #: 107-13-1		
4.081	4.067 (0.772)	52	27763	5.00000	4.403	80.00- 120.00	100.00
4.081	4.067 (0.772)	53	31591			88.50- 148.50	113.79
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	69178	5.00000	4.856	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	44269			32.99- 92.99	63.99
4.179	4.179 (0.791)	86	9063			0.00- 42.56	13.10
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	72121	5.00000	4.922	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	22325			0.76- 60.76	30.95

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether					CAS #: 108-20-3		
	4.445	4.445 (0.841)	45	150519	5.00000	5.006	80.00- 120.00	100.00
	4.445	4.445 (0.841)	87	33160			0.00- 51.37	22.03
	4.445	4.445 (0.841)	59	17494			0.00- 41.09	11.62
	73 Vinyl Acetate					CAS #: 108-05-4		
	4.501	4.501 (0.852)	86	8959	5.00000	4.974	80.00- 120.00	100.00
	4.501	4.501 (0.852)	43	127594			1391.63-1451.63	1424.20
	79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
	4.809	4.809 (0.910)	59	146272	5.00000	5.039	80.00- 120.00	100.00
	4.809	4.809 (0.910)	87	48988			3.22- 63.22	33.49
	4.809	4.809 (0.910)	41	28007			0.00- 48.12	19.15
	84 2,2-Dichloropropane					CAS #: 594-20-7		
	5.004	5.004 (0.947)	77	68953	5.00000	5.052	80.00- 120.00	100.00
	5.004	5.004 (0.947)	79	22612			2.00- 62.00	32.79
	5.004	5.004 (0.947)	97	17231			0.00- 53.36	24.99
	85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
	5.046	5.046 (0.955)	98	25031	5.00000	4.806	80.00- 120.00	100.00
	5.046	5.046 (0.955)	96	37341			127.22- 187.22	149.18
	5.046	5.046 (0.955)	61	61406			283.85- 343.85	245.32
	86 2-Butanone					CAS #: 78-93-3		
	5.074	5.074 (0.960)	72	19190	5.00000	5.275	80.00- 120.00	100.00
	5.088	5.074 (0.963)	43	194878			1055.75-1115.75	1015.52
	5.074	5.074 (0.960)	57	7584			10.59- 70.59	39.52
	87 Ethyl Acetate					CAS #: 141-78-6		
	5.088	5.088 (0.963)	45	15360	5.00000	5.121	80.00- 120.00	100.00
	5.046	5.046 (0.955)	61	61406			450.31- 510.31	399.78
	5.088	5.088 (0.963)	70	11074			30.42- 90.42	72.10
	89 Tetrahydrofuran					CAS #: 109-99-9		
	5.284	5.270 (1.000)	42	51780	5.00000	5.047	80.00- 120.00	100.00
	5.284	5.270 (1.000)	71	17506			2.92- 62.92	33.81
	5.284	5.270 (1.000)	72	17706			3.54- 63.54	34.19
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.284	5.284 (1.000)	130	257265	25.0000		80.00- 120.00	100.00
	5.284	5.284 (1.000)	128	198868			48.46- 108.46	77.30
	5.284	5.270 (1.000)	49	382161			120.39- 180.39	148.55
	92 Chloroform					CAS #: 67-66-3		
	5.340	5.340 (1.011)	83	76910	5.00000	4.768	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.011)	85	51690			34.71- 94.71	67.21
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	47869	5.00000	4.695	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	71544			120.40- 180.40	149.46
5.438	5.438 (1.029)	41	39336			54.20- 114.20	82.17
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	86059	5.00000	4.747	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	53345			33.76- 93.76	61.99
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	81713	5.00000	4.893	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	85199			73.68- 133.68	104.27
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	21667	5.00000	5.139	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	54993			231.09- 291.09	253.81
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	216768	5.00000	4.866	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	66699			1.12- 61.12	30.77
5.774	5.774 (1.093)	41	61380			0.00- 57.49	28.32
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	103158	5.00000	4.879	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	24658			0.00- 53.80	23.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	357108	25.0000	25.224	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173770			21.66- 81.66	48.66
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	28935	5.00000	5.133	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	109587			365.20- 425.20	378.74
5.858	5.858 (0.948)	55	33901			91.31- 151.31	117.16
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	61110	5.00000	5.021	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	19136			1.20- 61.20	31.31
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	38185	5.00000	4.586	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	80884			179.02- 239.02	211.82
5.942	5.942 (0.962)	57	43453			84.85- 144.85	113.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	926448	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	143997			0.00- 45.52	15.54
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	35336	5.00000	5.214	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	25658			40.21- 100.21	72.61
6.348	6.348 (1.027)	43	19921			25.00- 85.00	56.38
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	51343	5.00000	4.841	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	53310			74.96- 134.96	103.83
6.362	6.362 (1.029)	97	34367			34.80- 94.80	66.94
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	22303	5.00000	4.551	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	18119			52.03- 112.03	81.24
6.586	6.586 (1.066)	41	18449			79.97- 139.97	82.72
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	40620	5.00000	4.788	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	63946			134.02- 194.02	157.42
6.664	6.664 (0.773)	100	16200			9.54- 69.54	39.88
117 1,4-Dioxane					CAS #: 123-91-1		
6.707	6.699 (1.085)	88	27610	5.00000	5.155	80.00- 120.00	100.00
6.699	6.699 (1.084)	58	24280			55.80- 115.80	87.94
6.699	6.699 (1.084)	57	8469			8.68- 68.68	30.67
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	46476	5.00000	4.919	80.00- 120.00	100.00
6.714	6.721 (0.779)	93	46503			67.27- 127.27	100.06
6.714	6.721 (0.779)	95	38973			50.92- 110.92	83.86
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	84118	5.00000	4.734	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	54033			34.31- 94.31	64.23
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	65073	5.00000	4.927	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	20430			1.42- 61.42	31.40
7.215	7.208 (1.168)	39	45406			38.56- 98.56	69.78
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	66098	5.00000	4.660	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	31051			15.60- 75.60	46.98

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
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127 Methylcyclohexane (continued)								
6.460	6.460 (1.045)	55	67155				78.53- 138.53	101.60
131 4-Methyl-2-pentanone						CAS #: 108-10-1		
7.316	7.316 (1.184)	58	41661	5.00000		4.639	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	110219				231.30- 291.30	264.56
7.316	7.316 (1.184)	85	17067				8.94- 68.94	40.97
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	956581	25.0000		25.068	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	107663				0.00- 41.47	11.25
7.387	7.387 (1.195)	100	634365				36.47- 96.47	66.32
137 Toluene						CAS #: 108-88-3		
7.444	7.437 (1.205)	91	138408	5.00000		4.879	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	78368				28.30- 88.30	56.62
136 Octane						CAS #: 111-65-9		
7.444	7.444 (1.205)	57	45941	5.00000		4.868	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	44692				67.11- 127.11	97.28
7.444	7.444 (1.205)	43	108512				214.21- 274.21	236.20
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	63095	5.00000		4.860	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	21719				2.15- 62.15	34.42
7.688	7.688 (0.892)	39	40536				36.09- 96.09	64.25
141 1,1,2-Trichloroethane						CAS #: 79-00-5		
7.846	7.846 (0.910)	97	48053	5.00000		4.812	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	29801				31.62- 91.62	62.02
7.846	7.846 (0.910)	83	40996				56.35- 116.35	85.31
142 Tetrachloroethene						CAS #: 127-18-4		
7.881	7.881 (0.914)	166	67905	5.00000		4.917	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	52325				48.71- 108.71	77.06
7.881	7.881 (0.914)	131	51507				46.55- 106.55	75.85
143 2-Hexanone						CAS #: 591-78-6		
8.003	8.003 (0.929)	58	57652	5.00000		5.026	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	108442				157.91- 217.91	188.10
8.010	8.003 (0.929)	100	10390				0.00- 47.86	18.02
144 1,3-Dichloropropane						CAS #: 142-28-9		
7.989	7.989 (1.293)	76	66122	5.00000		4.885	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	74797				82.96- 142.96	113.12
7.989	7.989 (1.293)	78	21067				2.55- 62.55	31.86

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.946)	129	90433	5.00000	4.774	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	72167			47.77- 107.77	79.80
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.959)	107	76295	5.00000	4.920	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	71622			64.60- 124.60	93.88
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.151)	63	87600	5.00000	5.109	80.00- 120.00	100.00
7.122	7.115 (1.152)	65	27142			0.95- 60.95	30.98
7.122	7.122 (1.152)	144	9349			0.00- 40.45	10.67
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.619	8.619 (1.000)	117	881547	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	488998			25.46- 85.46	55.47
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.002)	112	114941	5.00000	4.771	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	37258			2.13- 62.13	32.41
8.641	8.641 (1.002)	77	73881			26.35- 86.35	64.28
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.007)	106	60069	5.00000	4.986	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	182813			282.48- 342.48	304.34
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.010)	43	113446	5.00000	4.858	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	102410			59.52- 119.52	90.27
8.705	8.705 (1.010)	85	34795			0.00- 59.76	30.67
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.019)	106	71896	5.00000	4.797	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	145208			171.36- 231.36	201.97
164 o-Xylene						CAS #: 95-47-6	
9.128	9.128 (1.059)	106	67685	5.00000	4.757	80.00- 120.00	100.00
9.121	9.128 (1.058)	91	144014			179.99- 239.99	212.77
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.061)	104	117224	5.00000	4.755	80.00- 120.00	100.00
9.149	9.149 (1.061)	78	60052			19.09- 79.09	51.23
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.085)	173	85153	5.00000	4.741	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	42688			21.45- 81.45	50.13

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene						CAS #: 98-82-8	
9.407	9.414 (1.091)	105	219071	5.00000	4.870	80.00- 120.00	100.00
9.407	9.414 (1.091)	120	58840			0.00- 56.99	26.86
9.407	9.407 (1.091)	51	26142			0.00- 41.77	11.93
169 Cyclohexanone						CAS #: 108-94-1	
9.579	9.579 (1.111)	55	67736	5.00000	4.784	80.00- 120.00	100.00(a)
9.579	9.579 (1.111)	98	25727			9.22- 69.22	37.98
9.579	9.579 (1.111)	42	47657			42.60- 102.60	70.36
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4	
9.601	9.601 (1.114)	174	576562	25.0000	24.727	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	723420			93.06- 153.06	125.47
9.601	9.601 (1.114)	176	545541			62.87- 122.87	94.62
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
9.737	9.737 (1.130)	83	107112	5.00000	4.802	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	68773			34.35- 94.35	64.21
177 Bromobenzene						CAS #: 108-86-1	
9.737	9.729 (1.130)	156	68462	5.00000	4.895	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	64845			67.29- 127.29	94.72
9.729	9.729 (1.129)	77	111900			132.41- 192.41	163.45
178 Propylbenzene						CAS #: 103-65-1	
9.758	9.758 (1.132)	91	254398	5.00000	4.846	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	61239			0.00- 53.77	24.07
9.758	9.758 (1.132)	105	10150			0.00- 33.81	3.99
179 1,2,3-Trichloropropane						CAS #: 96-18-4	
9.787	9.787 (1.135)	110	32592	5.00000	4.851	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	101946			285.00- 345.00	312.79
9.787	9.787 (1.135)	61	28367			54.06- 114.06	87.04
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6	
9.787	9.787 (1.135)	53	24824	5.00000	4.669	80.00- 120.00	100.00
9.787	9.787 (1.135)	89	12613			21.19- 81.19	50.81
9.787	9.787 (1.135)	75	101946			372.45- 432.45	410.68
182 Decane						CAS #: 124-18-5	
9.808	9.808 (1.138)	57	134816	5.00000	4.967	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	46047			4.13- 64.13	34.16
9.808	9.815 (1.138)	142	6372			0.00- 34.73	4.73
183 4-Ethyltoluene						CAS #: 622-96-8	
9.851	9.851 (1.143)	120	65376	5.00000	4.805	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.143)	105	212999				296.79- 356.79	325.81
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.145)	126	53933	5.00000		4.878	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	196435				336.29- 396.29	364.22
9.873	9.873 (1.145)	65	14803				38.83- 98.83	27.45
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.149)	120	91229	5.00000		4.774	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	188732				176.40- 236.40	206.88
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.172)	118	92281	5.00000		4.715	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	52780				26.64- 86.64	57.19
189 tert-Butylbenzene						CAS #: 98-06-6		
10.174	10.174 (1.180)	119	169085	5.00000		4.809	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	41511				0.00- 54.82	24.55
10.166	10.174 (1.179)	91	114268				36.92- 96.92	67.58
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.186)	105	180232	5.00000		4.783	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	83645				16.58- 76.58	46.41
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.202)	134	54234	5.00000		4.775	80.00- 120.00	100.00
10.353	10.360 (1.201)	105	264018				451.53- 511.53	486.81
10.360	10.353 (1.202)	91	42149				46.48- 106.48	77.72
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.214)	119	230013	5.00000		4.836	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	61361				0.00- 56.79	26.68
10.467	10.467 (1.214)	91	54876				0.00- 54.04	23.86
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.220)	146	123312	5.00000		4.816	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	79006				33.53- 93.53	64.07
10.517	10.517 (1.220)	111	51949				11.05- 71.05	42.13
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.229)	146	126649	5.00000		4.802	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	81497				33.47- 93.47	64.35
10.596	10.596 (1.229)	111	50009				9.65- 69.65	39.49
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.243)	91	173610	5.00000		4.788	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.243)	126	39012			0.00- 52.04	22.47
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	153796	5.00000	4.808	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	133916			55.86- 115.86	87.07
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	60615	5.00000	4.915	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	218931			331.99- 391.99	361.18
10.818	10.818 (1.255)	92	114155			161.01- 221.01	188.33
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	119023	5.00000	4.811	80.00- 120.00	100.00
10.919	10.926 (1.267)	148	75395			33.23- 93.23	63.34
10.919	10.918 (1.267)	111	50749			12.36- 72.36	42.64
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	71033	5.00000	4.952	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	63095			58.96- 118.96	88.82
11.606	11.606 (1.347)	155	53742			47.82- 107.82	75.66
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	165056	6.18000	6.103	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	134248			50.85- 110.85	81.33
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	110148	6.29500	6.268	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	106996			65.40- 125.40	97.14
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	84822	6.43500	6.390	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	53972			33.70- 93.70	63.63
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.456)	128	38541	0.63500	0.7182	80.00- 120.00	100.00
12.552	12.552 (1.456)	127	5058			0.00- 43.10	13.12
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.485)	180	106940	6.65500	6.650	80.00- 120.00	100.00
12.802	12.802 (1.485)	182	103120			65.67- 125.67	96.43
12.795	12.802 (1.484)	145	37861			6.02- 66.02	35.40

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062219.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	257265	5.69
108 1,4-Difluorobenze	874076	524446	1223706	926448	5.99
153 Chlorobenzene-d5	831223	498734	1163712	881547	6.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062219.d

Date : 22-JUN-2021 22:18

Client ID:

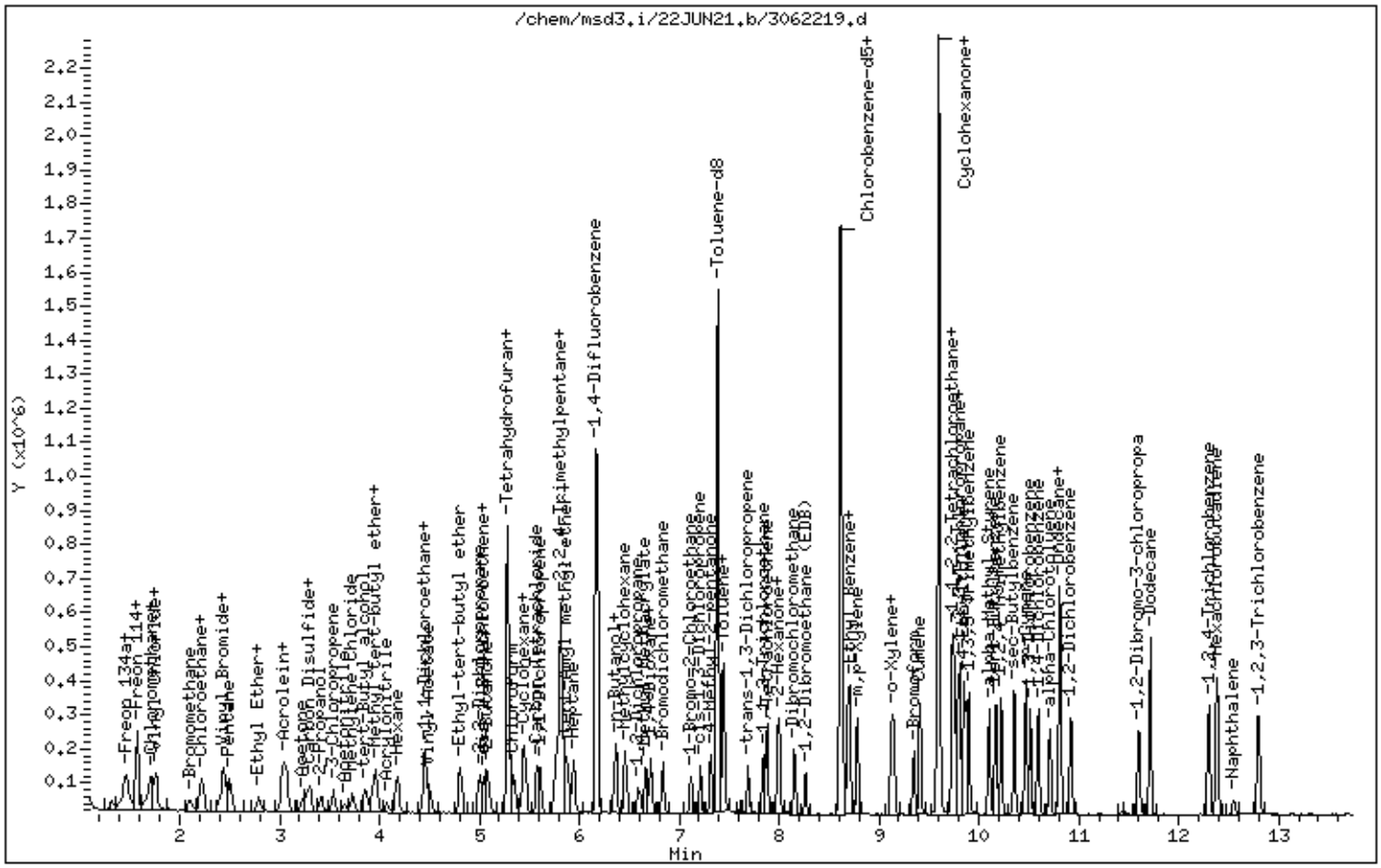
Instrument: msd3.i

Sample Info: 200mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051908.d
Lab Smp Id: ICAL Level 7
Inj Date : 19-MAY-2021 15:55
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2034
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:49 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:38 Cal File: p051919.d
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	246691	50.0000	50.000	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	220643			59.44- 119.44	89.44
1.745	1.745 (0.302)	51	1107781			419.06- 479.06	449.06
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	345627	50.0000	50.000	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	225623			35.28- 95.28	65.28
1.675	1.675 (0.290)	39	236222			38.35- 98.35	68.35
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	176502	50.0000	50.000	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1107781			597.63- 657.63	627.63
1.703	1.703 (0.295)	47	112469			33.72- 93.72	63.72
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	711177	50.0000	50.000	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	230217			2.37- 62.37	32.37
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.745	1.745 (0.302)	67	72356	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.745	1.745 (0.302)	51	1107781			1501.01-1561.01	1531.01
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	685577	50.0000	50.000	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	221438			2.30- 62.30	32.30
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	735430	50.0000	50.000	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	238581			2.44- 62.44	32.44
1.856	1.856 (0.321)	58	24710			0.00- 33.36	3.36
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	447790	50.0000	50.000	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	117587			0.00- 56.26	26.26
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	75310	50.0000	50.000	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	642610			823.29- 883.29	853.29
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	454203	50.0000	50.000	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	134867			0.00- 59.69	29.69
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	422955	50.0000	50.000	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	348369			52.37- 112.37	82.37
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	285084	50.0000	50.000	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	268184			64.07- 124.07	94.07
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	167305	50.0000	50.000	80.00- 120.00	100.00
2.605	2.605 (0.451)	66	50256			0.04- 60.04	30.04
2.612	2.612 (0.452)	49	57784			4.54- 64.54	34.54
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	523495	50.0000	50.000	80.00- 120.00	100.00
2.641	2.641 (0.457)	57	335680			34.12- 94.12	64.12
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	275173	50.0000	50.000	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	273159			69.27- 129.27	99.27
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	730878	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	472992			34.72- 94.72	64.72
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	628672	50.0000	50.000	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	193895			0.84- 60.84	30.84
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	852276	50.0000	50.000	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	127691			0.00- 44.98	14.98
2.970	2.970 (0.514)	72	63019			0.00- 37.39	7.39
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	146830	50.0000	50.000	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	284064			163.46- 223.46	193.46
3.285	3.285 (0.569)	45	411715			250.40- 310.40	280.40
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	75752	50.0000	50.000	80.00- 120.00	100.00
3.285	3.285 (0.569)	45	409963			511.19- 571.19	541.19
42 Acrolein					CAS #: 107-02-8		
3.529	3.529 (0.611)	55	129512	50.0000	50.000	80.00- 120.00	100.00
3.529	3.529 (0.611)	56	182747			111.10- 171.10	141.10
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	547261	50.0000	50.000	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	347836			33.56- 93.56	63.56
3.550	3.550 (0.614)	101	652410			89.21- 149.21	119.21
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	312049	50.0000	50.000	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	199778			34.02- 94.02	64.02
3.579	3.579 (0.619)	61	620248			168.77- 228.77	198.77
47 Acetone					CAS #: 67-64-1		
3.708	3.708 (0.642)	58	198391	50.0000	50.000	80.00- 120.00	100.00
3.708	3.708 (0.642)	43	660552			302.95- 362.95	332.95
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	846836	50.0000	50.000	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	699816	50.0000	50.000	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	295430			12.22- 72.22	42.22

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	823329	50.0000	50.000	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	141505			0.00- 47.19	17.19
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	142539	50.0000	50.000	80.00- 120.00	100.00
4.045	4.045 (0.700)	41	607488			396.19- 456.19	426.19
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	379243	50.0000	50.000	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	193207			20.95- 80.95	50.95
4.123	4.123 (0.714)	38	42379			0.00- 41.17	11.17
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	522699	50.0000	50.000	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	271957			22.03- 82.03	52.03
4.238	4.238 (0.733)	51	157735			0.18- 60.18	30.18
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	920285	50.0000	50.000	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	194304			0.00- 51.11	21.11
4.338	4.338 (0.751)	57	96551			0.00- 40.49	10.49
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	938706	50.0000	50.000	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	310725			3.10- 63.10	33.10
4.446	4.446 (0.769)	41	293659			1.28- 61.28	31.28
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.776)	98	212528	50.0000	50.000	80.00- 120.00	100.00
4.474	4.474 (0.774)	61	607494			255.84- 315.84	285.84
4.482	4.482 (0.776)	96	334925			127.59- 187.59	157.59
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	293221	50.0000	50.000	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	346138			88.05- 148.05	118.05
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.813)	57	758783	50.0000	50.000	80.00- 120.00	100.00
4.697	4.697 (0.813)	43	512299			37.52- 97.52	67.52
4.697	4.697 (0.813)	86	87084			0.00- 41.48	11.48
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	664501	50.0000	50.000	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	197374			0.00- 59.70	29.70

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.954	4.954 (0.857)	45	1800515	50.0000	50.000	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	327418			0.00- 48.18	18.18
4.954	4.954 (0.857)	59	182720			0.00- 40.15	10.15
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.865)	86	84247	50.0000	50.000	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2074564			2432.48-2492.48	2462.48
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.305	5.305 (0.918)	59	1553756	50.0000	50.000	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	481611			1.00- 61.00	31.00
5.305	5.305 (0.918)	41	291010			0.00- 48.73	18.73
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.506	5.506 (0.953)	77	589524	50.0000	50.000	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	190269			2.28- 62.28	32.28
5.506	5.506 (0.953)	97	141063			0.00- 53.93	23.93
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.960)	98	230520	50.0000	50.000	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	359034			125.75- 185.75	155.75
5.549	5.549 (0.960)	61	835407			332.40- 392.40	362.40
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.962)	72	170377	50.0000	50.000	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2120337			1214.50-1274.50	1244.50
5.556	5.556 (0.962)	57	76128			14.68- 74.68	44.68
87 Ethyl Acetate						CAS #: 141-78-6	
5.570	5.570 (0.964)	45	173307	50.0000	50.000	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	835407			452.04- 512.04	482.04
5.570	5.570 (0.964)	70	91460			22.77- 82.77	52.77
89 Tetrahydrofuran						CAS #: 109-99-9	
5.771	5.771 (0.999)	42	583804	50.0000	50.000	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	150745			0.00- 55.82	25.82
5.771	5.771 (0.999)	72	161049			0.00- 57.59	27.59
* 90 Bromochloromethane						CAS #: 74-97-5	
5.778	5.778 (1.000)	130	158810	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	124237			48.23- 108.23	78.23
5.778	5.778 (1.000)	49	286765			150.57- 210.57	180.57
92 Chloroform						CAS #: 67-66-3	
5.835	5.835 (1.010)	83	689555	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	446160			34.70- 94.70	64.70
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	486964	50.0000	50.000	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	840372			142.57- 202.57	172.57
5.957	5.957 (1.031)	41	448455			62.09- 122.09	92.09
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.033)	97	752510	50.0000	50.000	80.00- 120.00	100.00
5.972	5.972 (1.033)	99	481725			34.02- 94.02	64.02
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	735285	50.0000	50.000	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	739982			70.64- 130.64	100.64
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	197564	50.0000	50.000	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	507450			226.85- 286.85	256.85
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	2728265	50.0000	50.000	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	879725			2.24- 62.24	32.24
6.280	6.280 (1.087)	41	665520			0.00- 54.39	24.39
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	987337	50.0000	50.000	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	226078			0.00- 52.90	22.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213713	25.0000	25.000	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	122256			27.21- 87.21	57.21
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	279227	50.0000	50.000	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1124694			372.79- 432.79	402.79
6.358	6.358 (0.955)	55	396758			112.09- 172.09	142.09
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	526134	50.0000	50.000	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	162017			0.79- 60.79	30.79
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	395953	50.0000	50.000	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1015753			226.53- 286.53	256.53
6.444	6.444 (0.968)	57	518123			100.85- 160.85	130.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	597103	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93822			0.00- 45.71	15.71
110 n-Butanol						CAS #: 71-36-3	
6.810	6.810 (1.023)	56	364840	50.0000	50.000	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	258986			40.99- 100.99	70.99
6.810	6.810 (1.023)	43	209354			27.38- 87.38	57.38
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	478111	50.0000	50.000	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	508207			76.29- 136.29	106.29
6.867	6.867 (1.031)	97	304245			33.63- 93.63	63.63
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.089	7.089 (1.065)	63	491834	50.0000	50.000	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	349523			41.07- 101.07	71.07
7.096	7.096 (1.066)	41	258375			22.53- 82.53	52.53
116 Methyl Methacrylate						CAS #: 80-62-6	
7.132	7.132 (0.754)	69	400937	50.0000	50.000	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	841331			179.84- 239.84	209.84
7.139	7.139 (0.755)	100	158742			9.59- 69.59	39.59
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	263150	50.0000	50.000	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	258613			68.28- 128.28	98.28
7.175	7.175 (1.077)	57	86007			2.68- 62.68	32.68
118 Dibromomethane						CAS #: 74-95-3	
7.204	7.204 (0.761)	174	444945	50.0000	50.000	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	400838			60.09- 120.09	90.09
7.204	7.204 (0.761)	95	348769			48.38- 108.38	78.38
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	751298	50.0000	50.000	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	490118			35.24- 95.24	65.24
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.691	7.691 (1.155)	75	619937	50.0000	50.000	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	200964			2.42- 62.42	32.42
7.691	7.691 (1.155)	39	416341			37.16- 97.16	67.16
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	700725	50.0000	50.000	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	320784			15.78- 75.78	45.78

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	803336			84.64- 144.64	114.64
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	494934	50.0000	50.000	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1347937			242.35- 302.35	272.35
7.791	7.791 (1.170)	85	164527			3.24- 63.24	33.24
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	647681	25.0000	25.000	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	67618			0.00- 40.44	10.44
7.891	7.891 (1.185)	100	420696			34.95- 94.95	64.95
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	1352715	50.0000	50.000	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	789761			28.38- 88.38	58.38
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.194)	57	571594	50.0000	50.000	80.00- 120.00	100.00
7.949	7.949 (1.194)	85	491595			56.00- 116.00	86.00
7.949	7.949 (1.194)	43	1478464			228.66- 288.66	258.66
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	595661	50.0000	50.000	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	186109			1.24- 61.24	31.24
8.214	8.214 (0.868)	39	381886			34.11- 94.11	64.11
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	475355	50.0000	50.000	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	294547			31.96- 91.96	61.96
8.400	8.400 (0.888)	83	394203			52.93- 112.93	82.93
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	677222	50.0000	50.000	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	527121			47.84- 107.84	77.84
8.464	8.464 (0.895)	131	509856			45.29- 105.29	75.29
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	681778	50.0000	50.000	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1314958			162.87- 222.87	192.87
8.586	8.586 (0.908)	100	108687			0.00- 45.94	15.94
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	664559	50.0000	50.000	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	830619			94.99- 154.99	124.99
8.579	8.579 (1.288)	78	212995			2.05- 62.05	32.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	909694	50.0000	50.000	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	704539			47.45- 107.45	77.45
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	776769	50.0000	50.000	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	731780			64.21- 124.21	94.21
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	919549	50.0000	50.000	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	272524			0.00- 59.64	29.64
7.605	7.605 (1.142)	144	88579			0.00- 39.63	9.63
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	587747	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	316106			23.78- 83.78	53.78
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1161228	50.0000	50.000	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	368543			1.74- 61.74	31.74
9.496	9.496 (1.004)	77	639171			25.04- 85.04	55.04
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	611900	50.0000	50.000	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1858590			273.74- 333.74	303.74
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	1549739	50.0000	50.000	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1304255			54.16- 114.16	84.16
9.603	9.603 (1.015)	85	370362			0.00- 53.90	23.90
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	756872	50.0000	50.000	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1466255			163.73- 223.73	193.73
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	727897	50.0000	50.000	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1509987			177.45- 237.45	207.45
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1231272	50.0000	50.000	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	589570			17.88- 77.88	47.88
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	900150	50.0000	50.000	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	461304			21.25- 81.25	51.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2299741	50.0000	50.000	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	655786			0.00- 58.52	28.52
10.649	10.649 (1.126)	51	299021			0.00- 43.00	13.00
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	806258	50.0000	50.000	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	257503			1.94- 61.94	31.94
10.871	10.871 (1.149)	42	547332			37.89- 97.89	67.89
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	374384	25.0000	25.000	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	471423			95.92- 155.92	125.92
10.921	10.921 (1.154)	176	362754			66.89- 126.89	96.89
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.100 (1.173)	83	1121488	50.0000	50.000	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	731261			35.20- 95.20	65.20
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	708749	50.0000	50.000	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	689001			67.21- 127.21	97.21
11.179	11.179 (1.182)	77	418295			29.02- 89.02	59.02
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	677615	50.0000	50.000	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2686688			366.49- 426.49	396.49
11.150	11.150 (1.179)	105	100610			0.00- 44.85	14.85
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	347438	50.0000	50.000	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1078964			280.55- 340.55	310.55
11.100	11.100 (1.173)	61	158059			15.49- 75.49	45.49
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	236389	50.0000	50.000	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	187005			49.11- 109.11	79.11
11.179	11.179 (1.182)	75	1078964			426.44- 486.44	456.44
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1759170	50.0000	50.000	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	486507			0.00- 57.66	27.66
11.258	11.258 (1.190)	142	71926			0.00- 34.09	4.09
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	721963	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
11.287	11.287 (1.193)	105	2270938			284.55- 344.55	314.55
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	572035	50.0000	50.000	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1974474			315.17- 375.17	345.17
11.301	11.301 (1.195)	65	294904			21.55- 81.55	51.55
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1021220	50.0000	50.000	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1990658			164.93- 224.93	194.93
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	1032008	50.0000	50.000	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	570738			25.30- 85.30	55.30
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	1907239	50.0000	50.000	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	462558			0.00- 54.25	24.25
11.738	11.738 (1.241)	91	1168575			31.27- 91.27	61.27
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1923799	50.0000	50.000	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	943605			19.05- 79.05	49.05
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	595687	50.0000	50.000	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2785108			437.55- 497.55	467.55
11.996	11.996 (1.268)	91	421521			40.76- 100.76	70.76
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2621026	50.0000	50.000	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	669378			0.00- 55.54	25.54
12.153	12.153 (1.285)	91	562900			0.00- 51.48	21.48
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	1326539	50.0000	50.000	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	838543			33.21- 93.21	63.21
12.196	12.196 (1.289)	111	547931			11.31- 71.31	41.31
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1341343	50.0000	50.000	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	857150			33.90- 93.90	63.90
12.311	12.311 (1.301)	111	529140			9.45- 69.45	39.45
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1864560	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	433710			0.00- 53.26	23.26
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2085733	50.0000	50.000	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	1838043			58.12- 118.12	88.12
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	662478	50.0000	50.000	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2284179			314.79- 374.79	344.79
12.626	12.626 (1.335)	92	1220868			154.29- 214.29	184.29
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1281765	50.0000	50.000	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	818290			33.84- 93.84	63.84
12.733	12.733 (1.346)	111	547687			12.73- 72.73	42.73
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	800345	50.0000	50.000	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	660103			52.48- 112.48	82.48
13.600	13.600 (1.438)	155	619570			47.41- 107.41	77.41
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2143839	61.8000	61.800	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1776648			52.87- 112.87	82.87
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1233138	63.0000	63.000	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1175567			65.33- 125.33	95.33
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	895709	64.4000	64.400	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	565855			33.17- 93.17	63.17
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	306016	6.35000	6.350	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	39402			0.00- 42.88	12.88
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1163980	66.6000	66.600	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	1114530			65.75- 125.75	95.75
15.069	15.069 (1.593)	145	410098			5.23- 65.23	35.23

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051908.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	158810	0.00
108 1,4-Difluorobenze	597103	358262	835944	597103	0.00
153 Chlorobenzene-d5	587747	352648	822846	587747	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051908.d

Page 1

Date : 19-MAY-2021 15:55

Client ID:

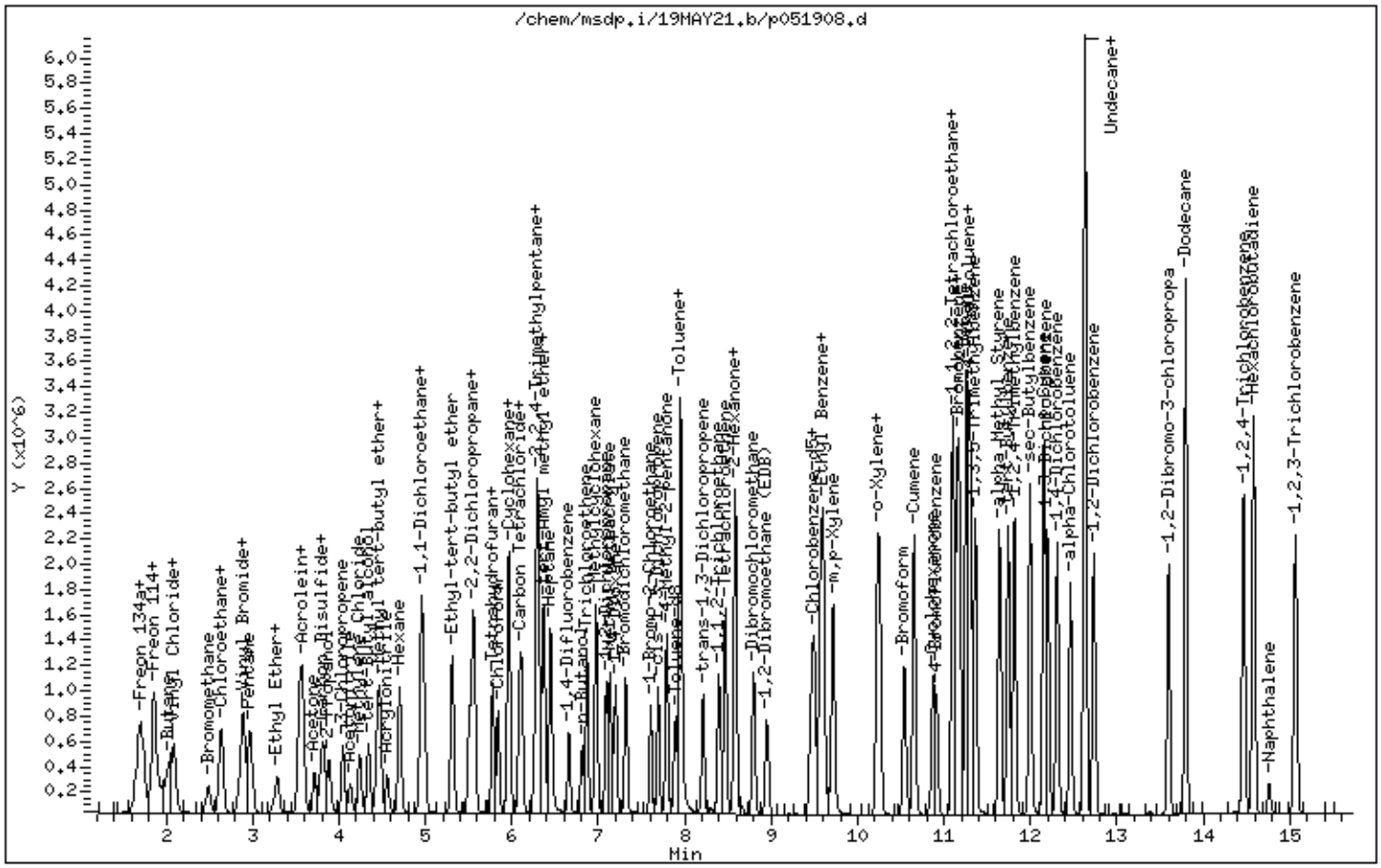
Instrument: msdp.i

Sample Info: 50mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051919.d
Lab Smp Id: ICAL Level 7
Inj Date : 19-MAY-2021 21:38
Operator : gh Inst ID: msdp.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:48 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:38 Cal File: p051919.d
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	161689	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	124860			47.22- 107.22	77.22
5.778	5.778 (1.000)	49	289657			149.14- 209.14	179.14
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	604813	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94059			0.00- 45.55	15.55
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	587682	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	320961			24.61- 84.61	54.61
3 Freon 143a					CAS #: 420-46-2		
1.590	1.590 (0.275)	65	175050	50.0000	50.000	80.00- 120.00	100.00
1.590	1.590 (0.275)	69	478765			243.50- 303.50	273.50
1.590	1.590 (0.275)	64	42119			0.00- 54.06	24.06
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	126213	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	82019			34.98- 94.98	64.98
1.674	1.674 (0.290)	41	69691			25.22- 85.22	55.22
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	712387	50.0000	50.000	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	212071			0.00- 59.77	29.77
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	479291	50.0000	50.000	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	647860			105.17- 165.17	135.17
40 Freon 123a					CAS #: 354-23-4		
3.385	3.385 (0.586)	117	461487	50.0000	50.000	80.00- 120.00	100.00
3.378	3.378 (0.585)	67	621572			104.69- 164.69	134.69
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	686787	50.0000	50.000	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	143333			0.00- 50.87	20.87
3.479	3.479 (0.602)	85	453806			36.08- 96.08	66.08
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	758990	50.0000	50.000	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	279019			6.76- 66.76	36.76
4.073	4.073 (0.705)	53	209054			0.00- 57.54	27.54
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	885414	50.0000	50.000	80.00- 120.00	100.00
4.073	4.073 (0.705)	74	125122			0.00- 44.13	14.13
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	715451	50.0000	50.000	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	280509			9.21- 69.21	39.21
5.019	5.019 (0.869)	50	173487			0.00- 54.25	24.25
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	98517	50.0000	50.000	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	91848			63.23- 123.23	93.23
5.083	5.083 (0.880)	41	53925			24.74- 84.74	54.74
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	911220	50.0000	50.000	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	102793			0.00- 41.28	11.28
5.620	5.620 (0.973)	58	74910			0.00- 38.22	8.22
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	106882	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	511089			448.18- 508.18	478.18
6.244	6.244 (1.081)	41	352703			299.99- 359.99	329.99
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	67461	50.0000	50.000	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	121394			149.95- 209.95	179.95
6.938	6.938 (0.733)	55	1267640			1849.07-1909.07	1879.07
115 2-Pentanone					CAS #: 107-87-9		
7.031	7.031 (0.743)	43	1498872	50.0000	50.000	80.00- 120.00	100.00
7.031	7.031 (0.743)	58	111516			0.00- 37.44	7.44
7.031	7.031 (0.743)	86	191499			0.00- 42.78	12.78
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	756724	50.0000	50.000	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	220224			0.00- 59.10	29.10
8.657	8.657 (1.300)	43	1856227			215.30- 275.30	245.30
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	672251	50.0000	50.000	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	587682			57.42- 117.42	87.42
9.596	9.596 (1.014)	95	240014			5.70- 65.70	35.70
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	1175492	50.0000	50.000	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	1951662			136.03- 196.03	166.03
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	923546	50.0000	50.000	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	641066			39.41- 99.41	69.41
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	612826	50.0000	50.000	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1991813			295.02- 355.02	325.02
11.444	11.444 (1.210)	63	256306			11.82- 71.82	41.82
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	901378	50.0000	50.000	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	2004624			192.40- 252.40	222.40
12.318	12.318 (1.302)	77	222560			0.00- 54.69	24.69
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	436881	50.0000	50.000	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	581027			102.99- 162.99	132.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	1256168	50.0000	50.000	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	1196432			65.24- 125.24	95.24
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	1358794	50.0000	50.000	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	383320			0.00- 58.21	28.21
214 beta-Pinene					CAS #: 127-91-3		
11.422	11.422 (1.207)	93	1085058	50.0000	50.000	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1991813			153.57- 213.57	183.57

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051919.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 21:38
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	161689	97013	226365	161689	0.00
108 1,4-Difluorobenze	604813	362888	846738	604813	0.00
153 Chlorobenzene-d5	587682	352609	822755	587682	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051919.d

Date : 19-MAY-2021 21:38

Client ID:

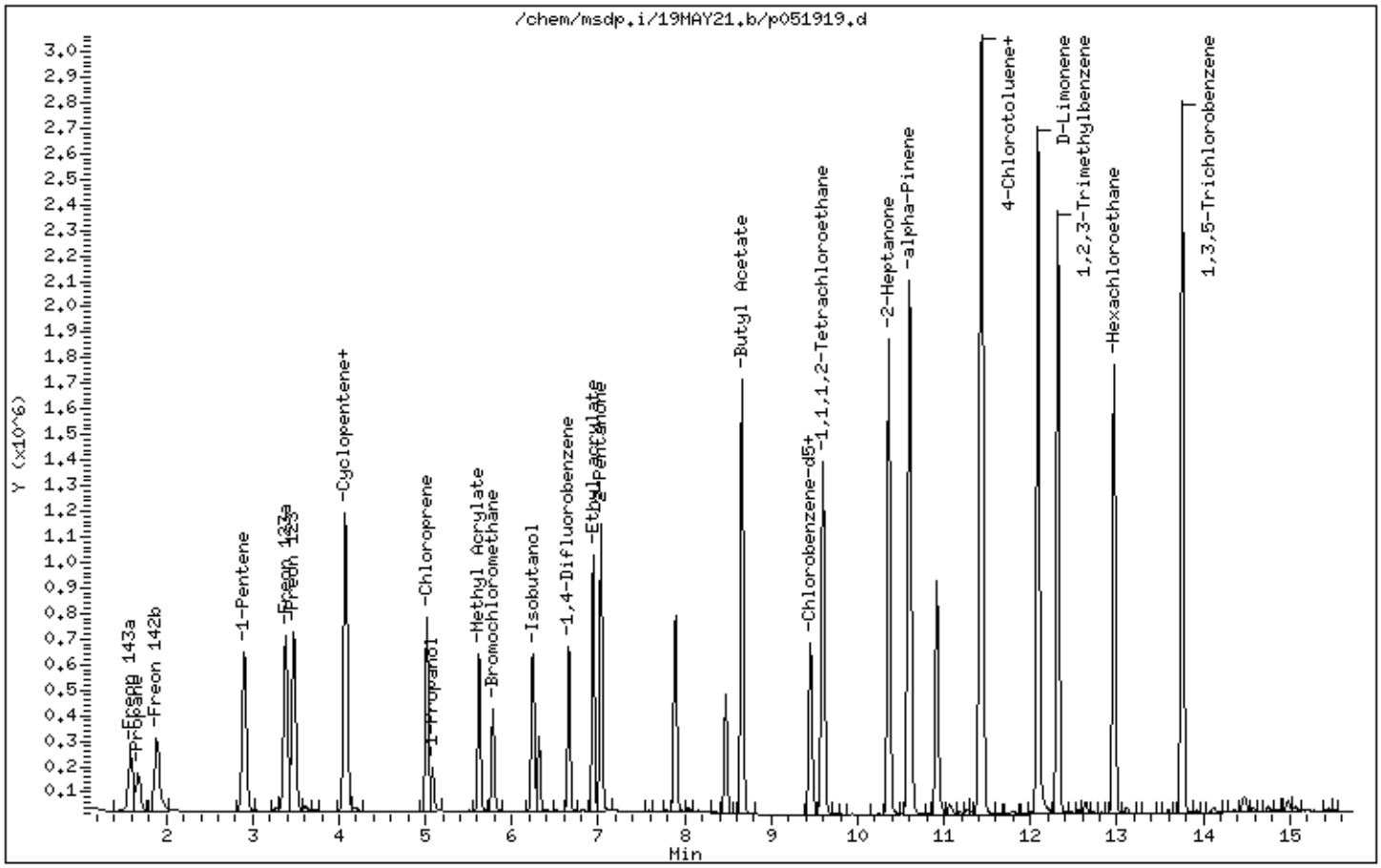
Instrument: msdp.i

Sample Info: 50mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062209.d
Lab Smp Id: ICAL Level 8
Inj Date : 22-JUN-2021 17:39
Operator : LD Inst ID: msd3.i
Smp Info : 20mL 3018-2013
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:44 Cal File: 3062220.d
Als bottle: 5 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	238218	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	185268			48.46- 108.46	77.77
5.270	5.270 (1.000)	49	355143			120.39- 180.39	149.08
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	858832	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	133184			0.00- 45.52	15.51
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	811449	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	449887			25.46- 85.46	55.44
3 Freon 143a					CAS #: 420-46-2		
1.339	1.353 (0.253)	65	85500	20.0000	21.456	80.00- 120.00	100.00
1.339	1.353 (0.253)	69	206588			217.09- 277.09	241.62
1.339	1.353 (0.253)	64	22705			0.00- 55.87	26.56
6 Propane					CAS #: 74-98-6		
1.423	1.422 (0.269)	43	42815	20.0000	19.722	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.423	1.422 (0.269)	39	31090			41.62- 101.62	72.61
1.423	1.422 (0.269)	41	23906			22.97- 82.97	55.84
13 Freon 142b					CAS #: 75-68-3		
1.591	1.604 (0.301)	65	264156	20.0000	20.846	80.00- 120.00	100.00
1.591	1.604 (0.301)	45	74425			0.00- 58.17	28.17
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.463)	55	165124	20.0000	20.519	80.00- 120.00	100.00
2.444	2.444 (0.463)	42	211095			99.17- 159.17	127.84
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	195571	20.0000	20.871	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	262508			103.13- 163.13	134.23
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	284633	20.0000	20.710	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	62462			0.00- 51.81	21.94
2.976	2.976 (0.563)	85	190087			37.13- 97.13	66.78
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	299705	20.0000	20.487	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	113549			7.90- 67.90	37.89
3.549	3.549 (0.672)	53	75244			0.00- 54.87	25.11
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	298972	20.0000	19.830	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	51281			0.00- 47.15	17.15
74 Chloroprene					CAS #: 126-99-8		
4.501	4.515 (0.852)	53	259538	20.0000	20.329	80.00- 120.00	100.00
4.515	4.515 (0.854)	88	110252			12.33- 72.33	42.48
4.501	4.515 (0.852)	50	71326			0.00- 57.62	27.48
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	36462	20.0000	18.474	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	29989			53.89- 113.89	82.25
4.613	4.613 (0.873)	41	20012			24.09- 84.09	54.88
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	301487	20.0000	19.650	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	42054			0.00- 43.24	13.95
5.130	5.130 (0.971)	58	28731			0.00- 38.83	9.53
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	45022	20.0000	15.967	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	157318			327.69- 387.69	349.42
5.774	5.774 (1.093)	41	117147			237.56- 297.56	260.20
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	25065	20.0000	19.329	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	38581			124.67- 184.67	153.92
6.460	6.460 (0.749)	55	404461			1601.30-1661.30	1613.65
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	535509	20.0000	17.656	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	47669			0.00- 37.25	8.90
6.558	6.557 (0.761)	86	88921			0.00- 45.08	16.60
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	220160	20.0000	19.446	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	79760			5.16- 65.16	36.23
8.068	8.068 (1.305)	43	546587			214.00- 274.00	248.27
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	258075	20.0000	21.144	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	177086			38.22- 98.22	68.62
8.712	8.712 (1.011)	95	95847			7.54- 67.54	37.14
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	335936	20.0000	19.211	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	545255			133.36- 193.36	162.31
172 D-Limonene					CAS #: 5989-27-5		
10.424	10.417 (1.209)	68	315767	20.0000	21.419	80.00- 120.00	100.00
10.424	10.424 (1.209)	93	228493			42.08- 102.08	72.36
186 4-Chlorotoluene					CAS #: 106-43-4		
9.973	9.973 (1.157)	126	219355	20.0000	20.645	80.00- 120.00	100.00
9.973	9.966 (1.157)	91	743925			305.94- 365.94	339.14
9.966	9.966 (1.156)	63	100352			15.44- 75.44	45.75
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	299929	20.0000	20.594	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	696099			206.43- 266.43	232.09
10.596	10.596 (1.229)	77	85107			0.00- 58.29	28.38
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.288)	201	201656	20.0000	22.680	80.00- 120.00	100.00
11.098	11.098 (1.288)	117	276979			109.77- 169.77	137.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.728	11.728 (1.361)	180	340241	20.0000	17.550	80.00- 120.00	100.00
11.728	11.728 (1.361)	182	325140			65.79- 125.79	95.56
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	526271	20.0000	20.974	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	158800			0.13- 60.13	30.17
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	426022	20.0000	21.620	80.00- 120.00	100.00
9.973	9.966 (1.157)	91	743925			145.95- 205.95	174.62

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062209.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	238218	-2.13
108 1,4-Difluorobenze	874076	524446	1223706	858832	-1.74
153 Chlorobenzene-d5	831223	498734	1163712	811449	-2.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062209.d

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Date : 22-JUN-2021 17:39

Client ID:

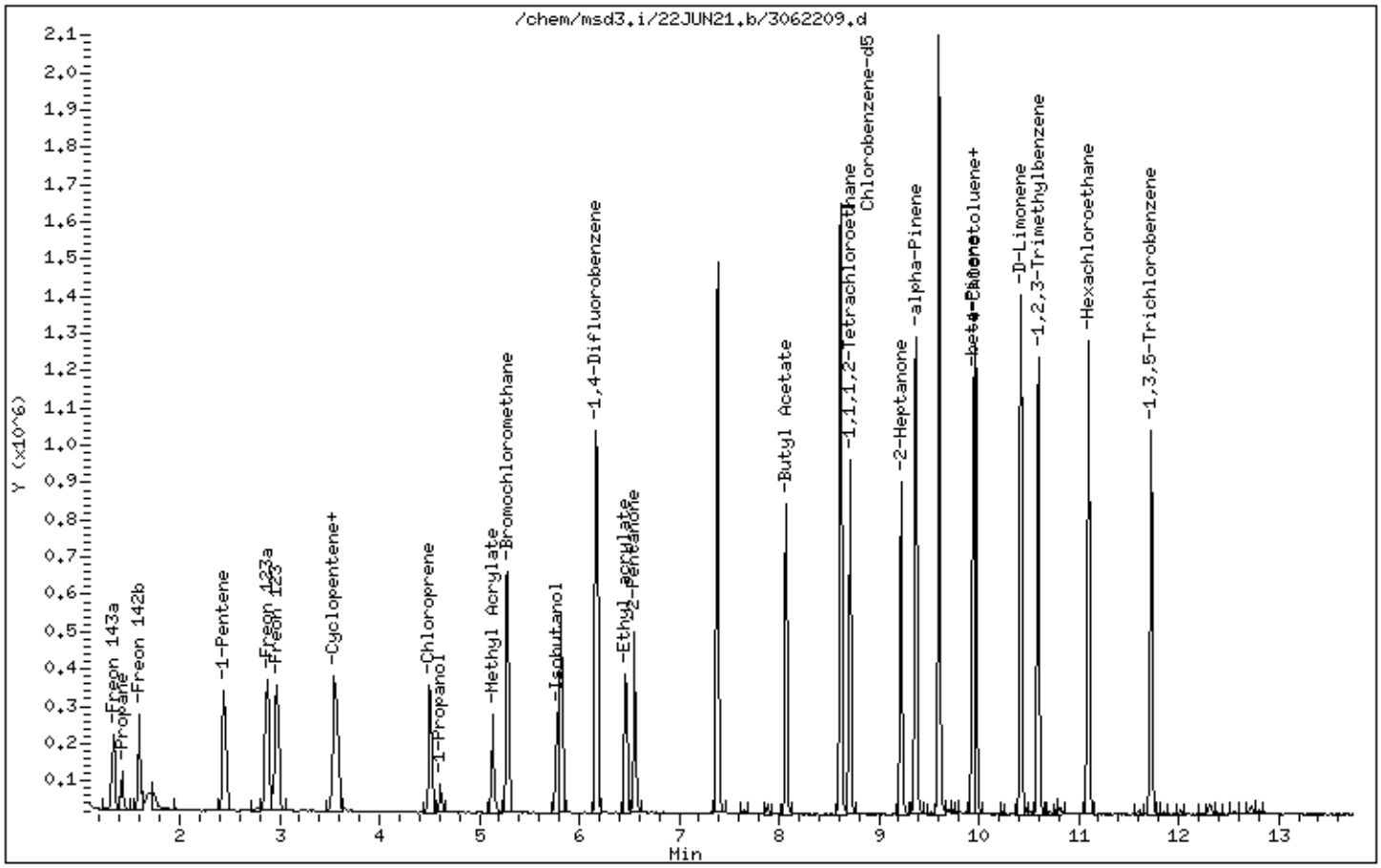
Instrument: msd3.i

Sample Info: 20mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062220.d
Lab Smp Id: ICAL Level 8
Inj Date : 22-JUN-2021 22:44
Operator : LD Inst ID: msd3.i
Smp Info : 20mL 3018-2115
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:44 Cal File: 3062220.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.265)	83	129641	20.0000	20.659	80.00- 120.00	100.00
1.395	1.395 (0.265)	69	106473			51.82- 111.82	82.13
1.478	1.479 (0.281)	51	337072			194.91- 254.91	260.00
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.270)	41	129315	20.0000	20.300	80.00- 120.00	100.00
1.423	1.423 (0.270)	42	85896			35.61- 95.61	66.42
1.423	1.423 (0.270)	39	94582			42.66- 102.66	73.14
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.273)	65	83946	20.0000	20.216	80.00- 120.00	100.00
1.478	1.479 (0.281)	51	337072			321.86- 381.86	401.53
1.437	1.437 (0.273)	47	63389			45.34- 105.34	75.51
8 Freon 12					CAS #: 75-71-8		
1.450	1.465 (0.275)	85	358781	20.0000	19.529	80.00- 120.00	100.00
1.450	1.465 (0.275)	87	117251			2.63- 62.63	32.68
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.478	1.479 (0.281)	67	39312	20.0000	19.470	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.478	1.479 (0.281)	51	337072			719.76- 779.76	857.43
10 Freon 114					CAS #: 76-14-2		
1.562	1.562 (0.296)	135	269564	20.0000	19.803	80.00- 120.00	100.00
1.562	1.562 (0.296)	137	86297			2.12- 62.12	32.01
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.299)	43	293920	20.0000	20.529	80.00- 120.00	100.00
1.576	1.576 (0.299)	42	95420			2.44- 62.44	32.46
1.576	1.576 (0.299)	58	11334			0.00- 33.26	3.86
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	156507	20.0000	20.497	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	53916			2.41- 62.41	34.45
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.323)	58	33313	20.0000	18.474	80.00- 120.00	100.00
1.702	1.702 (0.323)	43	254263			727.41- 787.41	763.25
19 Vinyl Chloride					CAS #: 75-01-4		
1.730	1.744 (0.328)	62	149268	20.0000	18.268	80.00- 120.00	100.00
1.730	1.744 (0.328)	64	46821			1.28- 61.28	31.37
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.334)	54	137146	20.0000	18.314	80.00- 120.00	100.00
1.758	1.758 (0.334)	39	133734			69.23- 129.23	97.51
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.397)	94	121745	20.0000	18.839	80.00- 120.00	100.00
2.094	2.094 (0.397)	96	114666			62.78- 122.78	94.19
30 Chloroethane					CAS #: 75-00-3		
2.192	2.206 (0.416)	64	77505	20.0000	20.207	80.00- 120.00	100.00
2.192	2.206 (0.416)	66	25715			1.44- 61.44	33.18
2.192	2.206 (0.416)	49	27043			4.12- 64.12	34.89
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.421)	43	206284	20.0000	21.031	80.00- 120.00	100.00
2.220	2.220 (0.421)	57	140968			38.82- 98.82	68.34
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.453)	106	140476	20.0000	19.994	80.00- 120.00	100.00
2.388	2.388 (0.453)	108	132323			63.14- 123.14	94.20
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.461)	101	393482	20.0000	20.243	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.430	2.430 (0.461)	103	253926			35.12- 95.12	64.53
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.464)	67	318380	20.0000	20.490	80.00- 120.00	100.00
2.444	2.444 (0.464)	69	97738			0.74- 60.74	30.70
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.474)	43	317191	20.0000	20.298	80.00- 120.00	100.00
2.500	2.500 (0.474)	57	49339			0.00- 45.97	15.55
2.500	2.500 (0.474)	72	26407			0.00- 38.10	8.33
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.527)	74	66932	20.0000	19.104	80.00- 120.00	100.00
2.780	2.780 (0.527)	59	119789			147.68- 207.68	178.97
2.780	2.780 (0.527)	45	159778			206.40- 266.40	238.72
39 Ethanol					CAS #: 64-17-5		
2.752	2.766 (0.522)	46	28807	20.0000	18.320	80.00- 120.00	100.00
2.780	2.780 (0.527)	45	159778			523.01- 583.01	554.65
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.575)	55	52494	20.0000	20.117	80.00- 120.00	100.00
3.032	3.032 (0.575)	56	75605			110.33- 170.33	144.03
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.575)	151	273535	20.0000	20.585	80.00- 120.00	100.00
3.032	3.032 (0.575)	153	173964			33.72- 93.72	63.60
3.032	3.032 (0.575)	101	323471			89.67- 149.67	118.26
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.583)	96	147536	20.0000	18.434	80.00- 120.00	100.00
3.074	3.074 (0.583)	98	94290			33.39- 93.39	63.91
3.060	3.074 (0.581)	61	282368			163.82- 223.82	191.39
47 Acetone					CAS #: 67-64-1		
3.213	3.213 (0.610)	58	84569	20.0000	19.124	80.00- 120.00	100.00
3.213	3.213 (0.610)	43	283524			299.66- 359.66	335.26
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.626)	76	402637	20.0000	20.220	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.620)	142	397755	20.0000	23.100	80.00- 120.00	100.00
3.269	3.269 (0.620)	127	177692			14.58- 74.58	44.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.395	3.395 (0.644)	45	327864	20.0000	20.616	80.00- 120.00	100.00
3.395	3.395 (0.644)	43	59812			0.00- 48.61	18.24
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.671)	76	64840	20.0000	18.913	80.00- 120.00	100.00
3.535	3.535 (0.671)	41	237428			338.06- 398.06	366.18
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.689)	41	139359	20.0000	20.013	80.00- 120.00	100.00
3.633	3.633 (0.689)	40	74812			21.81- 81.81	53.68
3.633	3.633 (0.689)	38	16914			0.00- 41.86	12.14
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.705)	49	214111	20.0000	20.231	80.00- 120.00	100.00
3.717	3.717 (0.705)	84	126022			30.77- 90.77	58.86
3.717	3.717 (0.705)	51	64303			1.39- 61.39	30.03
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.732)	59	415054	20.0000	20.793	80.00- 120.00	100.00
3.857	3.857 (0.732)	41	88359			0.00- 51.05	21.29
3.857	3.857 (0.732)	57	43467			0.00- 41.68	10.47
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.748)	73	439233	20.0000	20.386	80.00- 120.00	100.00
3.941	3.941 (0.748)	57	128756			0.00- 58.86	29.31
3.941	3.941 (0.748)	41	118579			0.00- 57.27	27.00
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.753)	98	95585	20.0000	17.747	80.00- 120.00	100.00
3.969	3.969 (0.753)	61	259923			244.59- 304.59	271.93
3.969	3.969 (0.753)	96	151389			129.84- 189.84	158.38
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.772)	52	109987	20.0000	17.015	80.00- 120.00	100.00
4.067	4.067 (0.772)	53	130352			88.50- 148.50	118.52
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.790)	57	286776	20.0000	19.637	80.00- 120.00	100.00
4.165	4.179 (0.790)	43	179251			32.99- 92.99	62.51
4.165	4.179 (0.790)	86	36198			0.00- 42.56	12.62
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.846)	63	285967	20.0000	19.040	80.00- 120.00	100.00
4.459	4.459 (0.846)	65	87277			0.76- 60.76	30.52

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.445	4.445 (0.843)	45	649480	20.0000	21.073	80.00- 120.00	100.00
4.445	4.445 (0.843)	87	138914			0.00- 51.37	21.39
4.445	4.445 (0.843)	59	70481			0.00- 41.09	10.85
73 Vinyl Acetate						CAS #: 108-05-4	
4.501	4.501 (0.854)	86	35060	20.0000	18.987	80.00- 120.00	100.00
4.501	4.501 (0.854)	43	511715			1391.63-1451.63	1459.54
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
4.809	4.809 (0.912)	59	612983	20.0000	20.601	80.00- 120.00	100.00
4.809	4.809 (0.912)	87	208206			3.22- 63.22	33.97
4.809	4.809 (0.912)	41	116192			0.00- 48.12	18.96
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.004	5.004 (0.950)	77	285442	20.0000	20.401	80.00- 120.00	100.00
5.004	5.004 (0.950)	79	93306			2.00- 62.00	32.69
5.004	5.004 (0.950)	97	69169			0.00- 53.36	24.23
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.046	5.046 (0.958)	98	95859	20.0000	17.954	80.00- 120.00	100.00
5.046	5.046 (0.958)	96	153492			127.22- 187.22	160.12
5.046	5.046 (0.958)	61	319089			283.85- 343.85	332.87
86 2-Butanone						CAS #: 78-93-3	
5.060	5.074 (0.960)	72	74025	20.0000	19.849	80.00- 120.00	100.00
5.074	5.074 (0.963)	43	790149			1055.75-1115.75	1067.41
5.060	5.074 (0.960)	57	29507			10.59- 70.59	39.86
87 Ethyl Acetate						CAS #: 141-78-6	
5.088	5.088 (0.965)	45	62917	20.0000	20.464	80.00- 120.00	100.00
5.046	5.046 (0.958)	61	319089			450.31- 510.31	507.16
5.088	5.088 (0.965)	70	39555			30.42- 90.42	62.87
89 Tetrahydrofuran						CAS #: 109-99-9	
5.270	5.270 (1.000)	42	206335	20.0000	19.620	80.00- 120.00	100.00
5.270	5.270 (1.000)	71	65936			2.92- 62.92	31.96
5.270	5.270 (1.000)	72	70062			3.54- 63.54	33.96
* 90 Bromochloromethane						CAS #: 74-97-5	
5.270	5.284 (1.000)	130	263723	25.0000		80.00- 120.00	100.00
5.270	5.284 (1.000)	128	203258			48.46- 108.46	77.07
5.270	5.270 (1.000)	49	398101			120.39- 180.39	150.95
92 Chloroform						CAS #: 67-66-3	
5.340	5.340 (1.013)	83	317723	20.0000	19.215	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
92 Chloroform (continued)							
5.340	5.340 (1.013)	85	208174			34.71- 94.71	65.52
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.032)	84	206465	20.0000	19.755	80.00- 120.00	100.00
5.438	5.438 (1.032)	56	305753			120.40- 180.40	148.09
5.438	5.438 (1.032)	41	173004			54.20- 114.20	83.79
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.034)	97	353780	20.0000	19.035	80.00- 120.00	100.00
5.452	5.466 (1.034)	99	226711			33.76- 93.76	64.08
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.058)	119	354645	20.0000	20.718	80.00- 120.00	100.00
5.578	5.578 (1.058)	117	369659			73.68- 133.68	104.23
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	86731	20.0000	19.946	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	225888			231.09- 291.09	260.45
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.096)	57	933654	20.0000	20.443	80.00- 120.00	100.00
5.774	5.774 (1.096)	56	290883			1.12- 61.12	31.16
5.774	5.774 (1.096)	41	258502			0.00- 57.49	27.69
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	428096	20.0000	19.634	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	100116			0.00- 53.80	23.39
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.104)	65	368537	25.0000	25.394	80.00- 120.00	100.00
5.816	5.816 (1.104)	67	184306			21.66- 81.66	50.01
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	120883	20.0000	20.792	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	475761			365.20- 425.20	393.57
5.858	5.858 (0.950)	55	144092			91.31- 151.31	119.20
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	242448	20.0000	19.314	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	75740			1.20- 61.20	31.24
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	166097	20.0000	19.340	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	348495			179.02- 239.02	209.81
5.942	5.942 (0.964)	57	189277			84.85- 144.85	113.96

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.166	6.180 (1.000)	114	955496	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	150786			0.00- 45.52	15.78
110 n-Butanol						CAS #: 71-36-3	
6.348	6.348 (1.030)	56	135772	20.0000	19.427	80.00- 120.00	100.00
6.348	6.348 (1.030)	41	97586			40.21- 100.21	71.87
6.348	6.348 (1.030)	43	75984			25.00- 85.00	55.96
111 Trichloroethene						CAS #: 79-01-6	
6.362	6.362 (1.032)	95	210526	20.0000	19.246	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	220731			74.96- 134.96	104.85
6.362	6.362 (1.032)	97	136718			34.80- 94.80	64.94
114 1,2-Dichloropropane						CAS #: 78-87-5	
6.585	6.586 (1.068)	63	88762	20.0000	17.562	80.00- 120.00	100.00
6.585	6.586 (1.068)	62	71989			52.03- 112.03	81.10
6.585	6.586 (1.068)	41	85754			79.97- 139.97	96.61
116 Methyl Methacrylate						CAS #: 80-62-6	
6.664	6.664 (0.774)	69	173646	20.0000	19.932	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	278436			134.02- 194.02	160.35
6.664	6.664 (0.774)	100	67667			9.54- 69.54	38.97
117 1,4-Dioxane						CAS #: 123-91-1	
6.699	6.699 (1.087)	88	111628	20.0000	20.210	80.00- 120.00	100.00
6.699	6.699 (1.087)	58	94250			55.80- 115.80	84.43
6.692	6.699 (1.085)	57	41965			8.68- 68.68	37.59
118 Dibromomethane						CAS #: 74-95-3	
6.714	6.721 (0.780)	174	191623	20.0000	19.750	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	188128			67.27- 127.27	98.18
6.714	6.721 (0.780)	95	155218			50.92- 110.92	81.00
122 Bromodichloromethane						CAS #: 75-27-4	
6.836	6.836 (1.109)	83	348185	20.0000	19.000	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	221251			34.31- 94.31	63.54
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.208	7.208 (1.169)	75	273558	20.0000	20.084	80.00- 120.00	100.00
7.208	7.208 (1.169)	77	88939			1.42- 61.42	32.51
7.208	7.208 (1.169)	39	191840			38.56- 98.56	70.13
127 Methylcyclohexane						CAS #: 108-87-2	
6.460	6.460 (1.048)	83	285545	20.0000	19.521	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	127891			15.60- 75.60	44.79

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
127 Methylcyclohexane (continued)							
6.460	6.460 (1.048)	55	287852			78.53- 138.53	100.81
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.315	7.316 (1.186)	58	182321	20.0000	19.686	80.00- 120.00	100.00
7.315	7.316 (1.186)	43	476447			231.30- 291.30	261.32
7.315	7.316 (1.186)	85	69771			8.94- 68.94	38.27
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	986180	25.0000	25.058	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	114166			0.00- 41.47	11.58
7.380	7.387 (1.197)	100	654564			36.47- 96.47	66.37
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	589912	20.0000	20.163	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	342233			28.30- 88.30	58.01
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.207)	57	200106	20.0000	20.558	80.00- 120.00	100.00
7.444	7.444 (1.207)	85	198709			67.11- 127.11	99.30
7.444	7.444 (1.207)	43	493159			214.21- 274.21	246.45
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	269205	20.0000	20.191	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	86100			2.15- 62.15	31.98
7.688	7.688 (0.893)	39	181147			36.09- 96.09	67.29
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.838	7.846 (0.910)	97	204634	20.0000	19.957	80.00- 120.00	100.00
7.838	7.846 (0.910)	99	125849			31.62- 91.62	61.50
7.838	7.846 (0.910)	83	177971			56.35- 116.35	86.97
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.881 (0.914)	166	286206	20.0000	20.181	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	225244			48.71- 108.71	78.70
7.874	7.881 (0.914)	131	221908			46.55- 106.55	77.53
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	249131	20.0000	21.152	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	465953			157.91- 217.91	187.03
8.003	8.003 (0.929)	100	45265			0.00- 47.86	18.17
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	281259	20.0000	20.149	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	321798			82.96- 142.96	114.41
7.989	7.989 (1.296)	78	91933			2.55- 62.55	32.69

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	400555	20.0000	20.591	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	309809			47.77- 107.77	77.34
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.261	8.268 (0.959)	107	325483	20.0000	20.440	80.00- 120.00	100.00
8.261	8.268 (0.959)	109	308152			64.60- 124.60	94.68
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.154)	63	355559	20.0000	20.106	80.00- 120.00	100.00
7.115	7.115 (1.154)	65	109912			0.95- 60.95	30.91
7.115	7.122 (1.154)	144	36823			0.00- 40.45	10.36
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	905256	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	503885			25.46- 85.46	55.66
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	497423	20.0000	20.105	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	163024			2.13- 62.13	32.77
8.641	8.641 (1.003)	77	283757			26.35- 86.35	57.05
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.008)	106	257953	20.0000	20.850	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	805391			282.48- 342.48	312.22
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.011)	43	511680	20.0000	21.338	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	461512			59.52- 119.52	90.20
8.705	8.705 (1.011)	85	155284			0.00- 59.76	30.35
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	316131	20.0000	20.539	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	644124			171.36- 231.36	203.75
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	306102	20.0000	20.949	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	645277			179.99- 239.99	210.80
165 Styrene						CAS #: 100-42-5	
9.142	9.149 (1.062)	104	529383	20.0000	20.912	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	262274			19.09- 79.09	49.54
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.086)	173	383414	20.0000	20.786	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	199648			21.45- 81.45	52.07

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
168 Cumene						CAS #: 98-82-8	
9.407	9.414 (1.092)	105	965419	20.0000	20.898	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	262721			0.00- 56.99	27.21
9.407	9.407 (1.092)	51	114165			0.00- 41.77	11.83
169 Cyclohexanone						CAS #: 108-94-1	
9.579	9.579 (1.112)	55	288233	20.0000	19.826	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	111377			9.22- 69.22	38.64
9.579	9.579 (1.112)	42	205722			42.60- 102.60	71.37
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4	
9.600	9.601 (1.115)	174	601735	25.0000	25.130	80.00- 120.00	100.00
9.600	9.601 (1.115)	95	749593			93.06- 153.06	124.57
9.600	9.601 (1.115)	176	564236			62.87- 122.87	93.77
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
9.737	9.737 (1.131)	83	471108	20.0000	20.568	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	302417			34.35- 94.35	64.19
177 Bromobenzene						CAS #: 108-86-1	
9.729	9.729 (1.130)	156	305636	20.0000	21.282	80.00- 120.00	100.00
9.729	9.737 (1.130)	158	293703			67.29- 127.29	96.10
9.729	9.729 (1.130)	77	498110			132.41- 192.41	162.97
178 Propylbenzene						CAS #: 103-65-1	
9.758	9.758 (1.133)	91	1151787	20.0000	21.368	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	273172			0.00- 53.77	23.72
9.758	9.758 (1.133)	105	43998			0.00- 33.81	3.82
179 1,2,3-Trichloropropane						CAS #: 96-18-4	
9.787	9.787 (1.136)	110	143818	20.0000	20.844	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	453627			285.00- 345.00	315.42
9.787	9.787 (1.136)	61	122921			54.06- 114.06	85.47
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6	
9.787	9.787 (1.136)	53	112999	20.0000	20.697	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	48773			21.19- 81.19	43.16
9.787	9.787 (1.136)	75	453627			372.45- 432.45	401.44
182 Decane						CAS #: 124-18-5	
9.808	9.808 (1.139)	57	600354	20.0000	21.540	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	205326			4.13- 64.13	34.20
9.808	9.815 (1.139)	142	27594			0.00- 34.73	4.60
183 4-Ethyltoluene						CAS #: 622-96-8	
9.851	9.851 (1.144)	120	293774	20.0000	21.026	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.144)	105	962719				296.79- 356.79	327.71
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.146)	126	241975	20.0000		21.314	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	875996				336.29- 396.29	362.02
9.873	9.873 (1.146)	65	119876				38.83- 98.83	49.54
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.150)	120	406512	20.0000		20.714	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	838492				176.40- 236.40	206.27
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.173)	118	429983	20.0000		21.393	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	242282				26.64- 86.64	56.35
189 tert-Butylbenzene						CAS #: 98-06-6		
10.166	10.174 (1.180)	119	779597	20.0000		21.591	80.00- 120.00	100.00
10.166	10.174 (1.180)	134	188686				0.00- 54.82	24.20
10.166	10.174 (1.180)	91	525911				36.92- 96.92	67.46
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.187)	105	810102	20.0000		20.934	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	374725				16.58- 76.58	46.26
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.203)	134	244206	20.0000		20.939	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	1180941				451.53- 511.53	483.58
10.353	10.353 (1.202)	91	188846				46.48- 106.48	77.33
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.215)	119	1040383	20.0000		21.301	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	273377				0.00- 56.79	26.28
10.467	10.467 (1.215)	91	250444				0.00- 54.04	24.07
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.221)	146	555180	20.0000		21.117	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	354339				33.53- 93.53	63.82
10.517	10.517 (1.221)	111	229208				11.05- 71.05	41.29
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.230)	146	564376	20.0000		20.841	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	358009				33.47- 93.47	63.43
10.596	10.596 (1.230)	111	223496				9.65- 69.65	39.60
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.244)	91	784223	20.0000		21.062	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	173331			0.00- 52.04	22.10
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	693926	20.0000	21.128	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	599450			55.86- 115.86	86.39
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	264258	20.0000	20.867	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	975496			331.99- 391.99	369.15
10.818	10.818 (1.256)	92	511283			161.01- 221.01	193.48
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.918	10.926 (1.268)	146	537905	20.0000	21.173	80.00- 120.00	100.00
10.918	10.926 (1.268)	148	339671			33.23- 93.23	63.15
10.918	10.918 (1.268)	111	228348			12.36- 72.36	42.45
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	312823	20.0000	21.235	80.00- 120.00	100.00
11.599	11.599 (1.347)	75	277182			58.96- 118.96	88.61
11.606	11.606 (1.348)	155	243263			47.82- 107.82	77.76
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	692267	24.7200	24.926	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	562156			50.85- 110.85	81.21
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	465565	25.1800	25.800	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	448092			65.40- 125.40	96.25
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	368056	25.7400	27.002	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	232220			33.70- 93.70	63.09
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	122845	2.54000	2.229	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	15728			0.00- 43.10	12.80
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.487)	180	443444	26.6200	26.855	80.00- 120.00	100.00
12.802	12.802 (1.487)	182	422798			65.67- 125.67	95.34
12.802	12.802 (1.487)	145	159126			6.02- 66.02	35.88

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062220.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	263723	8.35
108 1,4-Difluorobenze	874076	524446	1223706	955496	9.31
153 Chlorobenzene-d5	831223	498734	1163712	905256	8.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.27
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.23
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062220.d

Page 1

Date : 22-JUN-2021 22:44

Client ID:

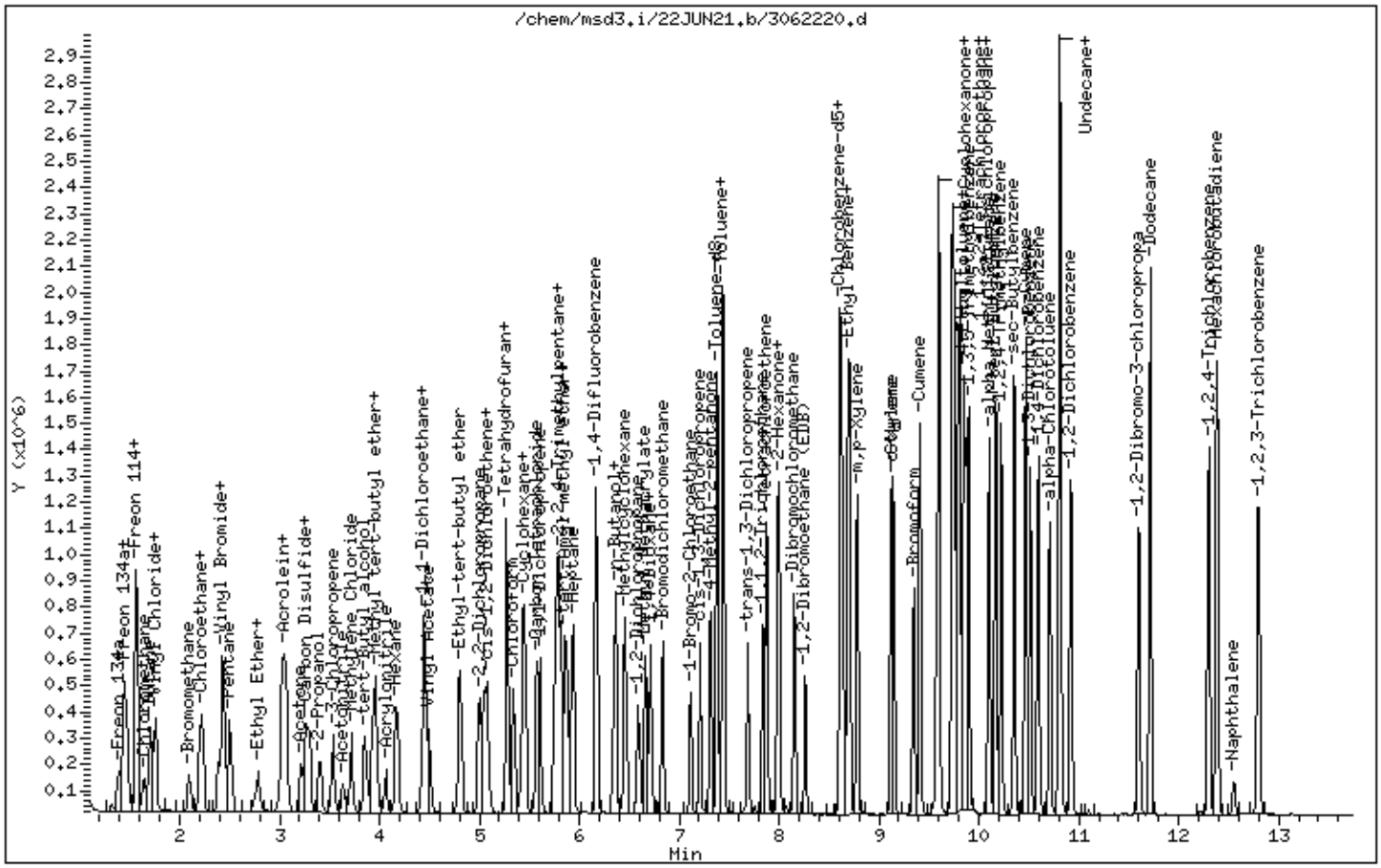
Instrument: msd3.i

Sample Info: 20mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051909.d
Lab Smp Id: ICAL Level 8
Inj Date : 19-MAY-2021 16:24
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2034
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 16:24 Cal File: p051909.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.646	1.633 (0.285)	83	507565	100.000	105.61	80.00- 120.00	100.00
1.646	1.633 (0.285)	69	455041			59.44- 119.44	89.65
1.744	1.745 (0.302)	51	2268262			419.06- 479.06	446.89
5 Propylene					CAS #: 115-07-1		
1.674	1.675 (0.290)	41	698368	100.000	100.69	80.00- 120.00	100.00
1.674	1.675 (0.290)	42	460529			35.28- 95.28	65.94
1.674	1.675 (0.290)	39	475977			38.35- 98.35	68.16
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.703 (0.295)	65	357088	100.000	101.44	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	2268262			597.63- 657.63	635.21
1.702	1.703 (0.295)	47	231703			33.72- 93.72	64.89
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	1452922	100.000	108.35	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	469974			2.37- 62.37	32.35
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.745 (0.304)	67	145754	100.000	109.07	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	2268262			1501.01-1561.01	1556.23
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	1419953	100.000	103.69	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	456158			2.30- 62.30	32.12
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	1515676	100.000	98.575	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	485596			2.44- 62.44	32.04
1.870	1.856 (0.324)	58	50044			0.00- 33.36	3.30
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	796816	100.000	95.542	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	204373			0.00- 56.26	25.65
18 Butane					CAS #: 106-97-8		
2.039	2.025 (0.353)	58	180663	100.000	101.40	80.00- 120.00	100.00
2.039	2.025 (0.353)	43	1466054			823.29- 883.29	811.49
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	918346	100.000	96.270	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	270816			0.00- 59.69	29.49
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.089 (0.363)	54	850684	100.000	112.06	80.00- 120.00	100.00
2.096	2.089 (0.363)	39	739010			52.37- 112.37	86.87
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	572011	100.000	92.015	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	535822			64.07- 124.07	93.67
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	349804	100.000	102.90	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	100650			0.04- 60.04	28.77
2.612	2.612 (0.452)	49	117019			4.54- 64.54	33.45
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.457)	43	1040896	100.000	100.15	80.00- 120.00	100.00
2.641	2.634 (0.457)	57	666459			34.12- 94.12	64.03
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	582384	100.000	103.68	80.00- 120.00	100.00
2.848	2.841 (0.493)	108	563942			69.27- 129.27	96.83
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	1487386	100.000	103.14	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.891	2.884 (0.500)	103	967038			34.72- 94.72	65.02
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.899 (0.502)	67	1298135	100.000	105.01	80.00- 120.00	100.00
2.898	2.899 (0.502)	69	401988			0.84- 60.84	30.97
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	1683232	100.000	99.258	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	245789			0.00- 44.98	14.60
2.970	2.970 (0.514)	72	121307			0.00- 37.39	7.21
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	298105	100.000	105.37	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	576501			163.46- 223.46	193.39
3.285	3.285 (0.569)	45	836034			250.40- 310.40	280.45
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	149584	100.000	99.460	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	832557			511.19- 571.19	556.58
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	266909	100.000	102.94	80.00- 120.00	100.00
3.536	3.529 (0.612)	56	376803			111.10- 171.10	141.17
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	1092200	100.000	101.26	80.00- 120.00	100.00
3.557	3.550 (0.616)	153	689565			33.56- 93.56	63.14
3.550	3.550 (0.614)	101	1295372			89.21- 149.21	118.60
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.621)	96	638130	100.000	102.22	80.00- 120.00	100.00
3.586	3.579 (0.621)	98	399466			34.02- 94.02	62.60
3.586	3.579 (0.621)	61	1261088			168.77- 228.77	197.62
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	407743	100.000	103.12	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	1336506			302.95- 362.95	327.78
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.663)	76	1723104	100.000	102.46	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	1438092	100.000	135.14	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	601035			12.22- 72.22	41.79

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	1661934	100.000	104.21	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	292411			0.00- 47.19	17.59
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	292429	100.000	102.76	80.00- 120.00	100.00
4.052	4.052 (0.701)	41	1196303			396.19- 456.19	409.09
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	798509	100.000	108.94	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	401874			20.95- 80.95	50.33
4.123	4.123 (0.714)	38	88300			0.00- 41.17	11.06
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	1074098	100.000	105.04	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	556924			22.03- 82.03	51.85
4.238	4.238 (0.733)	51	323217			0.18- 60.18	30.09
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	1858636	100.000	99.052	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	385487			0.00- 51.11	20.74
4.338	4.338 (0.751)	57	191013			0.00- 40.49	10.28
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	1848968	100.000	98.795	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	604553			3.10- 63.10	32.70
4.446	4.446 (0.769)	41	579143			1.28- 61.28	31.32
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.481	4.482 (0.776)	98	433306	100.000	102.86	80.00- 120.00	100.00
4.481	4.482 (0.776)	61	1236426			255.84- 315.84	285.35
4.481	4.482 (0.776)	96	693293			127.59- 187.59	160.00
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	596989	100.000	99.669	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	715968			88.05- 148.05	119.93
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	1534457	100.000	103.86	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	1029510			37.52- 97.52	67.09
4.696	4.697 (0.813)	86	176385			0.00- 41.48	11.49
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.860)	63	1364098	100.000	104.66	80.00- 120.00	100.00
4.969	4.962 (0.860)	65	405911			0.00- 59.70	29.76

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	==	====== ========	====	========	=======	=======	==========	=====
	72 Isopropyl ether					CAS #: 108-20-3		
	4.947	4.954 (0.856)	45	3520699	100.000	101.33	80.00- 120.00	100.00
	4.947	4.954 (0.856)	87	644730			0.00- 48.18	18.31
	4.947	4.954 (0.856)	59	358329			0.00- 40.15	10.18
	73 Vinyl Acetate					CAS #: 108-05-4		
	4.997	4.997 (0.865)	86	174113	100.000	107.01	80.00- 120.00	100.00
	4.990	4.997 (0.864)	43	3073069			2432.48-2492.48	1764.99
	79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
	5.305	5.305 (0.918)	59	3038101	100.000	100.85	80.00- 120.00	100.00
	5.305	5.305 (0.918)	87	938894			1.00- 61.00	30.90
	5.305	5.305 (0.918)	41	568486			0.00- 48.73	18.71
	84 2,2-Dichloropropane					CAS #: 594-20-7		
	5.506	5.506 (0.953)	77	1178409	100.000	103.59	80.00- 120.00	100.00
	5.506	5.506 (0.953)	79	375834			2.28- 62.28	31.89
	5.513	5.506 (0.954)	97	287766			0.00- 53.93	24.42
	85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
	5.549	5.549 (0.960)	98	473987	100.000	109.86	80.00- 120.00	100.00
	5.549	5.549 (0.960)	96	736483			125.75- 185.75	155.38
	5.549	5.549 (0.960)	61	1694585			332.40- 392.40	357.52
	86 2-Butanone					CAS #: 78-93-3		
	5.556	5.556 (0.962)	72	357150	100.000	104.90	80.00- 120.00	100.00
	5.563	5.556 (0.963)	43	4378918			1214.50-1274.50	1226.07
	5.556	5.556 (0.962)	57	154664			14.68- 74.68	43.31
	87 Ethyl Acetate					CAS #: 141-78-6		
	5.570	5.570 (0.964)	45	353395	100.000	104.48	80.00- 120.00	100.00
	5.549	5.549 (0.960)	61	1695217			452.04- 512.04	479.69
	5.570	5.570 (0.964)	70	189420			22.77- 82.77	53.60
	89 Tetrahydrofuran					CAS #: 109-99-9		
	5.771	5.771 (0.999)	42	1189052	100.000	103.31	80.00- 120.00	100.00
	5.771	5.771 (0.999)	71	309814			0.00- 55.82	26.06
	5.771	5.771 (0.999)	72	335384			0.00- 57.59	28.21
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.778	5.778 (1.000)	130	152805	25.0000		80.00- 120.00	100.00
	5.778	5.778 (1.000)	128	121664			48.23- 108.23	79.62
	5.778	5.778 (1.000)	49	281698			150.57- 210.57	184.35
	92 Chloroform					CAS #: 67-66-3		
	5.835	5.835 (1.010)	83	1415975	100.000	107.68	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	915346			34.70- 94.70	64.64
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	944762	100.000	101.07	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	1666010			142.57- 202.57	176.34
5.957	5.957 (1.031)	41	886450			62.09- 122.09	93.83
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.972 (1.033)	97	1485005	100.000	100.30	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	948874			34.02- 94.02	63.90
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	1499358	100.000	106.30	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	1503563			70.64- 130.64	100.28
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	416114	100.000	102.27	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	1049030			226.85- 286.85	252.10
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	5314941	100.000	102.00	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	1735895			2.24- 62.24	32.66
6.279	6.280 (1.087)	41	1349070			0.00- 54.39	25.38
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	2026776	100.000	103.01	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	474028			0.00- 52.90	23.39
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	220685	25.0000	26.504	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	141968			27.21- 87.21	64.33
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	547673	100.000	97.366	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	2227568			372.79- 432.79	406.73
6.358	6.358 (0.955)	55	768756			112.09- 172.09	140.37
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	1080056	100.000	103.85	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	332034			0.79- 60.79	30.74
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	786728	100.000	101.45	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	2022288			226.53- 286.53	257.05
6.444	6.444 (0.968)	57	1020722			100.85- 160.85	129.74

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	599259	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	96032			0.00- 45.71	16.03
110 n-Butanol						CAS #: 71-36-3	
6.809	6.810 (1.023)	56	750083	100.000	104.92	80.00- 120.00	100.00
6.809	6.810 (1.023)	41	530236			40.99- 100.99	70.69
6.809	6.810 (1.023)	43	429051			27.38- 87.38	57.20
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	997780	100.000	104.77	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	1060416			76.29- 136.29	106.28
6.867	6.867 (1.031)	97	630792			33.63- 93.63	63.22
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.089	7.089 (1.065)	63	1008198	100.000	100.30	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	717137			41.07- 101.07	71.13
7.096	7.089 (1.066)	41	522377			22.53- 82.53	51.81
116 Methyl Methacrylate						CAS #: 80-62-6	
7.139	7.132 (0.755)	69	824440	100.000	101.96	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	1710649			179.84- 239.84	207.49
7.139	7.139 (0.755)	100	331918			9.59- 69.59	40.26
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	528029	100.000	97.653	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	524400			68.28- 128.28	99.31
7.175	7.175 (1.077)	57	177216			2.68- 62.68	33.56
118 Dibromomethane						CAS #: 74-95-3	
7.203	7.204 (0.761)	174	928250	100.000	104.93	80.00- 120.00	100.00
7.203	7.204 (0.761)	93	831541			60.09- 120.09	89.58
7.203	7.204 (0.761)	95	722804			48.38- 108.38	77.87
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	1567843	100.000	105.12	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	1011256			35.24- 95.24	64.50
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.690	7.691 (1.155)	75	1310676	100.000	104.92	80.00- 120.00	100.00
7.690	7.691 (1.155)	77	416599			2.42- 62.42	31.79
7.690	7.691 (1.155)	39	879596			37.16- 97.16	67.11
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	1373843	100.000	98.785	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	639936			15.78- 75.78	46.58

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	1577222			84.64- 144.64	114.80
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	990523	100.000	97.755	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	2685952			242.35- 302.35	271.17
7.798	7.791 (1.171)	85	326227			3.24- 63.24	32.93
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	653351	25.0000	25.095	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	69659			0.00- 40.44	10.66
7.891	7.891 (1.185)	100	427970			34.95- 94.95	65.50
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	2719947	100.000	99.602	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	1593607			28.38- 88.38	58.59
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	1143310	100.000	99.301	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	970463			56.00- 116.00	84.88
7.948	7.949 (1.194)	43	2966309			228.66- 288.66	259.45
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	1224849	100.000	104.91	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	387990			1.24- 61.24	31.68
8.213	8.214 (0.868)	39	804536			34.11- 94.11	65.68
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	969495	100.000	103.06	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	600278			31.96- 91.96	61.92
8.400	8.400 (0.888)	83	805643			52.93- 112.93	83.10
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	1365527	100.000	99.832	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	1069381			47.84- 107.84	78.31
8.464	8.464 (0.895)	131	1033508			45.29- 105.29	75.69
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	1368856	100.000	99.686	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	2631318			162.87- 222.87	192.23
8.586	8.586 (0.908)	100	212248			0.00- 45.94	15.51
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	1348288	100.000	103.10	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	1683093			94.99- 154.99	124.83
8.579	8.579 (1.288)	78	436936			2.05- 62.05	32.41

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	146 Dibromochloromethane						CAS #: 124-48-1	
	8.801	8.801 (0.930)	129	1870111	100.000	103.77	80.00- 120.00	100.00
	8.801	8.801 (0.930)	127	1452482			47.45- 107.45	77.67
	148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
	8.951	8.951 (0.946)	107	1591018	100.000	102.80	80.00- 120.00	100.00
	8.951	8.951 (0.946)	109	1499795			64.21- 124.21	94.27
	151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
	7.605	7.605 (1.142)	63	1915471	100.000	103.43	80.00- 120.00	100.00
	7.605	7.605 (1.142)	65	566303			0.00- 59.64	29.56
	7.605	7.605 (1.142)	144	182840			0.00- 39.63	9.55
*	153 Chlorobenzene-d5						CAS #: 3114-55-4	
	9.460	9.460 (1.000)	117	590210	25.0000		80.00- 120.00	100.00
	9.460	9.460 (1.000)	82	323727			23.78- 83.78	54.85
	154 Chlorobenzene						CAS #: 108-90-7	
	9.496	9.496 (1.004)	112	2370958	100.000	101.53	80.00- 120.00	100.00
	9.496	9.496 (1.004)	114	756993			1.74- 61.74	31.93
	9.496	9.496 (1.004)	77	1286889			25.04- 85.04	54.28
	155 Ethyl Benzene						CAS #: 100-41-4	
	9.567	9.567 (1.011)	106	1215808	100.000	99.229	80.00- 120.00	100.00
	9.567	9.567 (1.011)	91	3709578			273.74- 333.74	305.11
	156 Nonane						CAS #: 111-84-2	
	9.603	9.596 (1.015)	43	3087905	100.000	97.458	80.00- 120.00	100.00
	9.603	9.603 (1.015)	57	2613991			54.16- 114.16	84.65
	9.603	9.603 (1.015)	85	738081			0.00- 53.90	23.90
	158 m,p-Xylene						CAS #: 108-38-3	
	9.718	9.718 (1.027)	106	1495472	100.000	98.126	80.00- 120.00	100.00
	9.718	9.718 (1.027)	91	2934052			163.73- 223.73	196.20
	164 o-Xylene						CAS #: 95-47-6	
	10.226	10.226 (1.081)	106	1448581	100.000	98.124	80.00- 120.00	100.00
	10.226	10.226 (1.081)	91	2977601			177.45- 237.45	205.55
	165 Styrene						CAS #: 100-42-5	
	10.255	10.255 (1.084)	104	2465052	100.000	98.384	80.00- 120.00	100.00
	10.255	10.255 (1.084)	78	1179971			17.88- 77.88	47.87
	167 Bromoform						CAS #: 75-25-2	
	10.549	10.542 (1.115)	173	1837525	100.000	104.18	80.00- 120.00	100.00
	10.541	10.542 (1.114)	171	942585			21.25- 81.25	51.30

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene						CAS #: 98-82-8		
10.649	10.649 (1.126)	105	4567679	100.000	98.637	80.00- 120.00		100.00
10.649	10.649 (1.126)	120	1306308			0.00- 58.52		28.60
10.649	10.649 (1.126)	51	589542			0.00- 43.00		12.91
169 Cyclohexanone						CAS #: 108-94-1		
10.871	10.871 (1.149)	55	1596477	100.000	95.938	80.00- 120.00		100.00
10.871	10.871 (1.149)	98	513572			1.94- 61.94		32.17
10.871	10.871 (1.149)	42	1073939			37.89- 97.89		67.27
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	381266	25.0000	25.244	80.00- 120.00		100.00
10.921	10.921 (1.154)	95	486727			95.92- 155.92		127.66
10.921	10.921 (1.154)	176	367158			66.89- 126.89		96.30
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
11.107	11.100 (1.174)	83	2228280	100.000	98.820	80.00- 120.00		100.00
11.107	11.100 (1.174)	85	1439832			35.20- 95.20		64.62
177 Bromobenzene						CAS #: 108-86-1		
11.107	11.107 (1.174)	156	1426381	100.000	101.78	80.00- 120.00		100.00
11.107	11.107 (1.174)	158	1394001			67.21- 127.21		97.73
11.179	11.179 (1.182)	77	841614			29.02- 89.02		59.00
178 Propylbenzene						CAS #: 103-65-1		
11.150	11.150 (1.179)	120	1347671	100.000	98.184	80.00- 120.00		100.00
11.150	11.150 (1.179)	91	5312611			366.49- 426.49		394.21
11.150	11.150 (1.179)	105	203289			0.00- 44.85		15.08
179 1,2,3-Trichloropropane						CAS #: 96-18-4		
11.179	11.179 (1.182)	110	686203	100.000	96.347	80.00- 120.00		100.00
11.179	11.179 (1.182)	75	2133287			280.55- 340.55		310.88
11.100	11.100 (1.173)	61	307567			15.49- 75.49		44.82
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6		
11.179	11.179 (1.182)	53	476707	100.000	101.28	80.00- 120.00		100.00
11.179	11.179 (1.182)	89	367391			49.11- 109.11		77.07
11.179	11.179 (1.182)	75	2133287			426.44- 486.44		447.50
182 Decane						CAS #: 124-18-5		
11.251	11.251 (1.189)	57	3243150	100.000	88.689	80.00- 120.00		100.00
11.258	11.251 (1.190)	71	905505			0.00- 57.66		27.92
11.258	11.258 (1.190)	142	133433			0.00- 34.09		4.11
183 4-Ethyltoluene						CAS #: 622-96-8		
11.286	11.287 (1.193)	120	1428430	100.000	96.809	80.00- 120.00		100.00

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
183 4-Ethyltoluene (continued)								
11.286	11.287 (1.193)	105	4478546			284.55- 344.55		313.53
184 2-Chlorotoluene					CAS #: 95-49-8			
11.315	11.308 (1.196)	126	1126349	100.000	96.991	80.00- 120.00		100.00
11.308	11.308 (1.195)	91	3926471			315.17- 375.17		348.60
11.301	11.301 (1.195)	65	571555			21.55- 81.55		50.74
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
11.365	11.365 (1.201)	120	2029709	100.000	99.067	80.00- 120.00		100.00
11.365	11.365 (1.201)	105	3958269			164.93- 224.93		195.02
188 alpha Methyl Styrene					CAS #: 98-83-9			
11.644	11.645 (1.231)	118	2053068	100.000	99.954	80.00- 120.00		100.00
11.644	11.645 (1.231)	103	1126967			25.30- 85.30		54.89
189 tert-Butylbenzene					CAS #: 98-06-6			
11.738	11.738 (1.241)	119	3869191	100.000	100.90	80.00- 120.00		100.00
11.745	11.738 (1.242)	134	937426			0.00- 54.25		24.23
11.738	11.738 (1.241)	91	2366627			31.27- 91.27		61.17
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
11.816	11.817 (1.249)	105	3825889	100.000	98.524	80.00- 120.00		100.00
11.816	11.817 (1.249)	120	1877483			19.05- 79.05		49.07
192 sec-Butylbenzene					CAS #: 135-98-8			
11.995	11.996 (1.268)	134	1188712	100.000	99.702	80.00- 120.00		100.00
11.995	11.996 (1.268)	105	5589774			437.55- 497.55		470.24
11.995	11.996 (1.268)	91	846180			40.76- 100.76		71.18
194 p-Cymene					CAS #: 99-87-6			
12.160	12.160 (1.285)	119	5211679	100.000	99.223	80.00- 120.00		100.00
12.160	12.160 (1.285)	134	1335569			0.00- 55.54		25.63
12.160	12.153 (1.285)	91	1113414			0.00- 51.48		21.36
195 1,3-Dichlorobenzene					CAS #: 541-73-1			
12.203	12.196 (1.290)	146	2614617	100.000	98.021	80.00- 120.00		100.00
12.203	12.196 (1.290)	148	1681191			33.21- 93.21		64.30
12.196	12.196 (1.289)	111	1089961			11.31- 71.31		41.69
196 1,4-Dichlorobenzene					CAS #: 106-46-7			
12.311	12.311 (1.301)	146	2681111	100.000	99.901	80.00- 120.00		100.00
12.311	12.311 (1.301)	148	1693939			33.90- 93.90		63.18
12.311	12.311 (1.301)	111	1052991			9.45- 69.45		39.27
199 alpha-Chlorotoluene					CAS #: 100-44-7			
12.461	12.461 (1.317)	91	3733206	100.000	101.62	80.00- 120.00		100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	855205			0.00- 53.26	22.91
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	3992563	100.000	94.355	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	3525819			58.12- 118.12	88.31
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	1274791	100.000	95.075	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	4476615			314.79- 374.79	351.16
12.626	12.626 (1.335)	92	2399035			154.29- 214.29	188.19
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	2533352	100.000	97.467	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	1616747			33.84- 93.84	63.82
12.733	12.741 (1.346)	111	1075764			12.73- 72.73	42.46
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	1585272	100.000	100.82	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	1323143			52.48- 112.48	83.46
13.600	13.600 (1.438)	155	1237839			47.41- 107.41	78.08
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	4416932	124.000	138.94	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	3610956			52.87- 112.87	81.75
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	2488736	126.000	130.48	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	2388833			65.33- 125.33	95.99
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	1826473	129.000	136.64	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	1154987			33.17- 93.17	63.24
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	617447	12.7000	12.602	80.00- 120.00	100.00
14.760	14.768 (1.560)	127	78355			0.00- 42.88	12.69
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	2380079	133.000	141.78	80.00- 120.00	100.00
15.068	15.069 (1.593)	182	2269705			65.75- 125.75	95.36
15.061	15.069 (1.592)	145	846452			5.23- 65.23	35.56

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051909.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	152805	-3.78
108 1,4-Difluorobenze	597103	358262	835944	599259	0.36
153 Chlorobenzene-d5	587747	352648	822846	590210	0.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051909.d

Page 1

Date : 19-MAY-2021 16:24

Client ID:

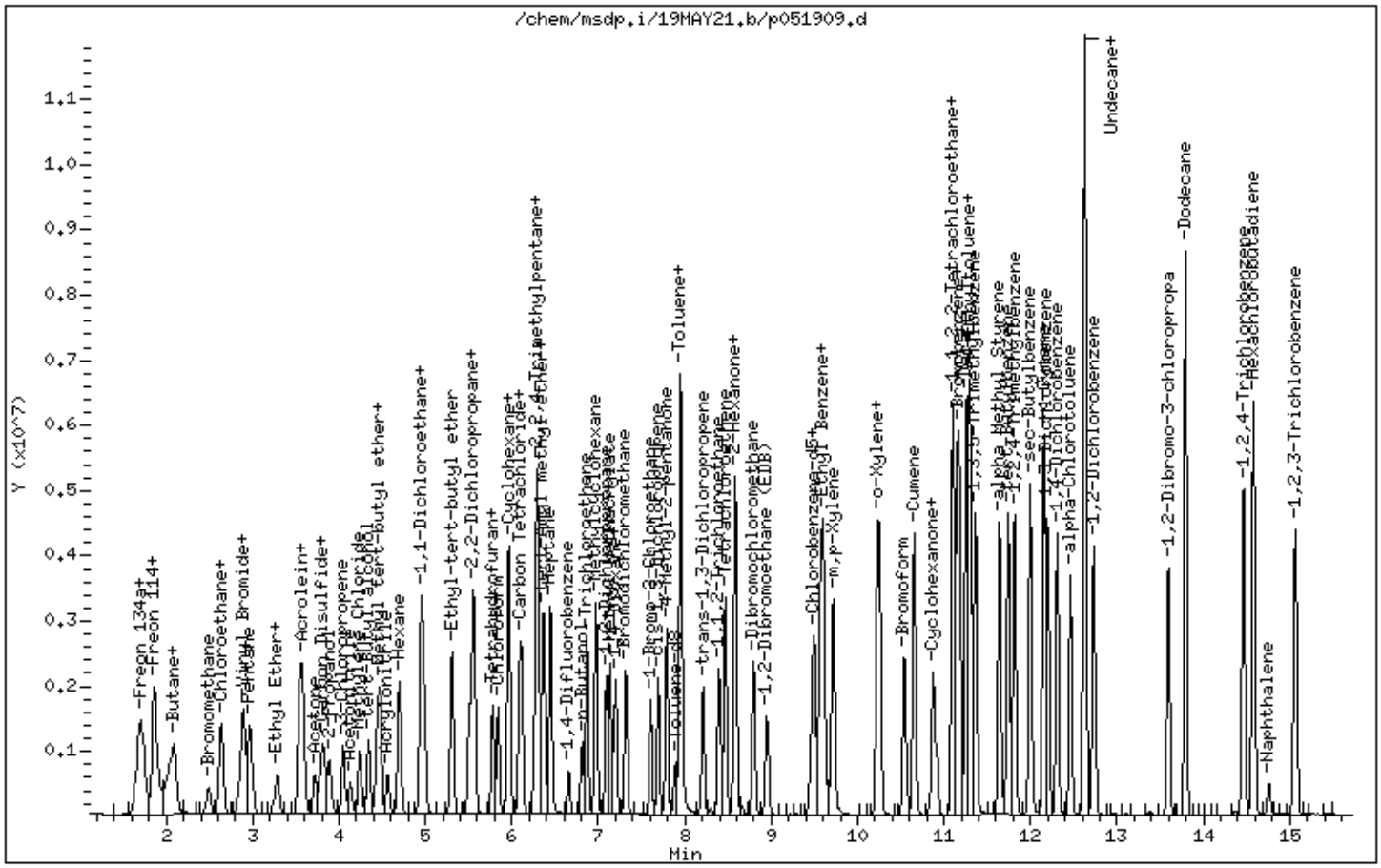
Instrument: msdp.i

Sample Info: 100mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051920.d
Lab Smp Id: ICAL Level 8
Inj Date : 19-MAY-2021 22:07
Operator : gh Inst ID: msdp.i
Smp Info : 100mL 3018-2013
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 22:07 Cal File: p051920.d
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.778	5.778 (1.000)	130	157260	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127325				48.23- 108.23	80.96
5.778	5.778 (1.000)	49	290406				150.57- 210.57	184.67
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	611896	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94534				0.00- 45.71	15.45
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	605655	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	331071				23.78- 83.78	54.66
3 Freon 143a						CAS #: 420-46-2		
1.590	1.590 (0.275)	65	338792	100.000	105.77		80.00- 120.00	100.00
1.590	1.590 (0.275)	69	923313				243.50- 303.50	272.53
1.590	1.590 (0.275)	64	80203				0.00- 54.06	23.67
6 Propane						CAS #: 74-98-6		
1.674	1.674 (0.290)	43	269102	100.000	96.261		80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	170552			34.98- 94.98	63.38
1.674	1.674 (0.290)	41	145053			25.22- 85.22	53.90
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	1499593	100.000	97.279	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	444419			0.00- 59.77	29.64
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	966890	100.000	95.667	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	1331259			105.17- 165.17	137.68
40 Freon 123a					CAS #: 354-23-4		
3.386	3.385 (0.586)	117	933222	100.000	95.080	80.00- 120.00	100.00
3.386	3.378 (0.586)	67	1253615			104.69- 164.69	134.33
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	1402358	100.000	100.49	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	293086			0.00- 50.87	20.90
3.479	3.479 (0.602)	85	954375			36.08- 96.08	68.06
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	1549614	100.000	103.63	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	574894			6.76- 66.76	37.10
4.073	4.073 (0.705)	53	430697			0.00- 57.54	27.79
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	1860322	100.000	106.56	80.00- 120.00	100.00
4.080	4.073 (0.706)	74	265330			0.00- 44.13	14.26
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	1510132	100.000	108.90	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	592673			9.21- 69.21	39.25
5.019	5.019 (0.869)	50	359244			0.00- 54.25	23.79
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	205049	100.000	98.484	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	189310			63.23- 123.23	92.32
5.083	5.083 (0.880)	41	113051			24.74- 84.74	55.13
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	1943701	100.000	106.36	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	217090			0.00- 41.28	11.17
5.620	5.620 (0.973)	58	162912			0.00- 38.22	8.38
103 Isobutanol					CAS #: 78-83-1		
6.236	6.244 (1.079)	39	226725	100.000	101.49	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	1059873			448.18- 508.18	467.47
6.244	6.244 (1.081)	41	745566			299.99- 359.99	328.84
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	135799	100.000	96.936	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	252316			149.95- 209.95	185.80
6.938	6.938 (0.733)	55	2635755			1849.07-1909.07	1940.92
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	3106672	100.000	101.23	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	227526			0.00- 37.44	7.32
7.032	7.031 (0.743)	86	400164			0.00- 42.78	12.88
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	1533686	100.000	99.232	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	450207			0.00- 59.10	29.35
8.658	8.657 (1.300)	43	3763757			215.30- 275.30	245.41
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	1347909	100.000	100.28	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	605655			57.42- 117.42	44.93
9.596	9.596 (1.014)	95	485333			5.70- 65.70	36.01
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	2357119	100.000	102.38	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	3890207			136.03- 196.03	165.04
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	1800213	100.000	137.28	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	1238262			39.41- 99.41	68.78
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	1234609	100.000	99.338	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	3962866			295.02- 355.02	320.98
11.444	11.444 (1.210)	63	506526			11.82- 71.82	41.03
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	1781367	100.000	98.416	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	3973322			192.40- 252.40	223.05
12.318	12.318 (1.302)	77	442101			0.00- 54.69	24.82
205 Hexachloroethane					CAS #: 67-72-1		
12.977	12.970 (1.372)	201	850803	100.000	123.71	80.00- 120.00	100.00
12.977	12.970 (1.372)	117	1124452			102.99- 162.99	132.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.779	13.758 (1.457)	180	2557091	100.000	100.71	80.00- 120.00	100.00
13.779	13.758 (1.457)	182	2439083			65.24- 125.24	95.39
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	2760113	100.000	112.22	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	796024			0.00- 58.21	28.84
214 beta-Pinene					CAS #: 127-91-3		
11.422	11.422 (1.207)	93	2112301	100.000	133.10	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	3962866			153.57- 213.57	187.61

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051920.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	157260	-0.98
108 1,4-Difluorobenze	597103	358262	835944	611896	2.48
153 Chlorobenzene-d5	587747	352648	822846	605655	3.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051920.d

Date : 19-MAY-2021 22:07

Client ID:

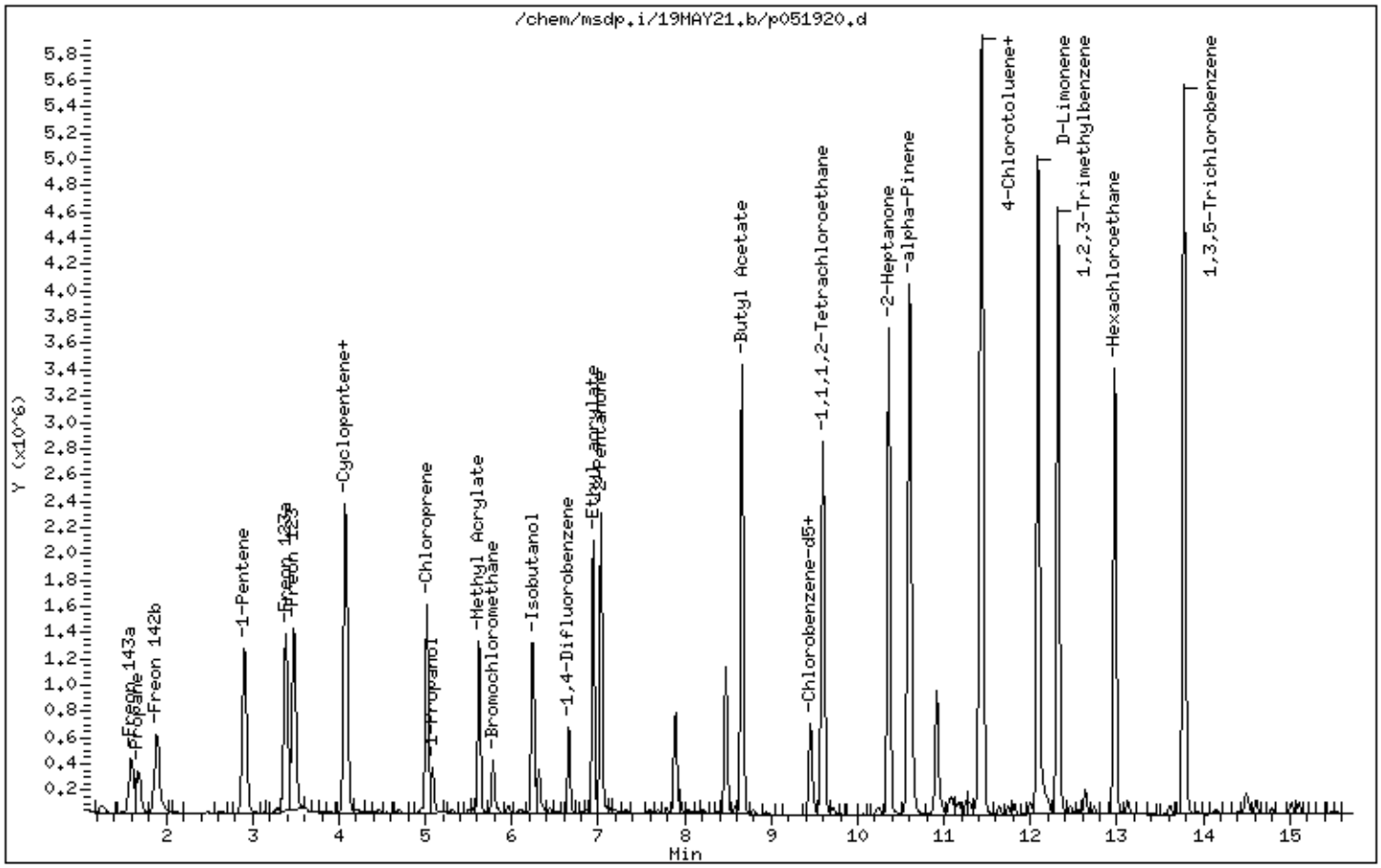
Instrument: msdp.i

Sample Info: 100mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062210.d
Lab Smp Id: ICAL Level 9
Inj Date : 22-JUN-2021 18:07
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 11:20 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:12 Cal File: 3062221.d
Als bottle: 5 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	240505	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	188690			48.46- 108.46	78.46
5.284	5.284 (1.000)	49	361684			120.39- 180.39	150.39
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	875857	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	135961			0.00- 45.52	15.52
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	827590	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	458953			25.46- 85.46	55.46
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	203130	50.0000	50.491	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	501917			217.09- 277.09	247.09
1.353	1.353 (0.256)	64	52555			0.00- 55.87	25.87
6 Propane					CAS #: 74-98-6		
1.422	1.422 (0.269)	43	108458	50.0000	49.485	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.422	1.422 (0.269)	39	77673			41.62- 101.62	71.62
1.422	1.422 (0.269)	41	57452			22.97- 82.97	52.97
13 Freon 142b					CAS #: 75-68-3		
1.604	1.604 (0.304)	65	649549	50.0000	50.772	80.00- 120.00	100.00
1.604	1.604 (0.304)	45	182976			0.00- 58.17	28.17
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.462)	55	411503	50.0000	50.649	80.00- 120.00	100.00
2.444	2.444 (0.462)	42	531533			99.17- 159.17	129.17
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	479957	50.0000	50.732	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	638983			103.13- 163.13	133.13
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	698523	50.0000	50.342	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	152375			0.00- 51.81	21.81
2.976	2.976 (0.563)	85	468904			37.13- 97.13	67.13
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	747040	50.0000	50.579	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	283092			7.90- 67.90	37.90
3.549	3.549 (0.672)	53	185808			0.00- 54.87	24.87
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	753266	50.0000	49.488	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	129155			0.00- 47.15	17.15
74 Chloroprene					CAS #: 126-99-8		
4.515	4.515 (0.854)	53	659922	50.0000	51.199	80.00- 120.00	100.00
4.515	4.515 (0.854)	88	279320			12.33- 72.33	42.33
4.515	4.515 (0.854)	50	182245			0.00- 57.62	27.62
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	90362	50.0000	45.347	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	75804			53.89- 113.89	83.89
4.613	4.613 (0.873)	41	48874			24.09- 84.09	54.09
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	775548	50.0000	50.066	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	102700			0.00- 43.24	13.24
5.130	5.130 (0.971)	58	68476			0.00- 38.83	8.83
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	109438	50.0000	38.444	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	391444			327.69- 387.69	357.69
5.774	5.774 (1.093)	41	292812			237.56- 297.56	267.56
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	61569	50.0000	46.554	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	95230			124.67- 184.67	154.67
6.460	6.460 (0.749)	55	1004376			1601.30-1661.30	1631.30
115 2-Pentanone					CAS #: 107-87-9		
6.557	6.557 (0.761)	43	1482803	50.0000	47.934	80.00- 120.00	100.00
6.557	6.557 (0.761)	58	107563			0.00- 37.25	7.25
6.557	6.557 (0.761)	86	223633			0.00- 45.08	15.08
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	539276	50.0000	46.707	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	189604			5.16- 65.16	35.16
8.068	8.068 (1.305)	43	1315845			214.00- 274.00	244.00
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	614036	50.0000	49.326	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	418914			38.22- 98.22	68.22
8.712	8.712 (1.011)	95	230491			7.54- 67.54	37.54
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	831136	50.0000	47.079	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	1357775			133.36- 193.36	163.36
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.209)	68	785422	50.0000	52.236	80.00- 120.00	100.00
10.424	10.424 (1.209)	93	566139			42.08- 102.08	72.08
186 4-Chlorotoluene					CAS #: 106-43-4		
9.973	9.973 (1.157)	126	539265	50.0000	49.765	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1811592			305.94- 365.94	335.94
9.966	9.966 (1.156)	63	245019			15.44- 75.44	45.44
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	740798	50.0000	49.872	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	1751480			206.43- 266.43	236.43
10.596	10.596 (1.229)	77	209551			0.00- 58.29	28.29
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.288)	201	475431	50.0000	52.429	80.00- 120.00	100.00
11.098	11.098 (1.288)	117	664512			109.77- 169.77	139.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.728	11.728 (1.361)	180	962027	50.0000	48.656	80.00- 120.00	100.00
11.728	11.728 (1.361)	182	921537			65.79- 125.79	95.79
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	1284627	50.0000	50.199	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	387101			0.13- 60.13	30.13
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	1029595	50.0000	51.233	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1811592			145.95- 205.95	175.95

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062210.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 18:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240505	144303	336707	240505	0.00
108 1,4-Difluorobenze	875857	525514	1226200	875857	0.00
153 Chlorobenzene-d5	827590	496554	1158626	827590	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062210.d

Date : 22-JUN-2021 18:07

Client ID:

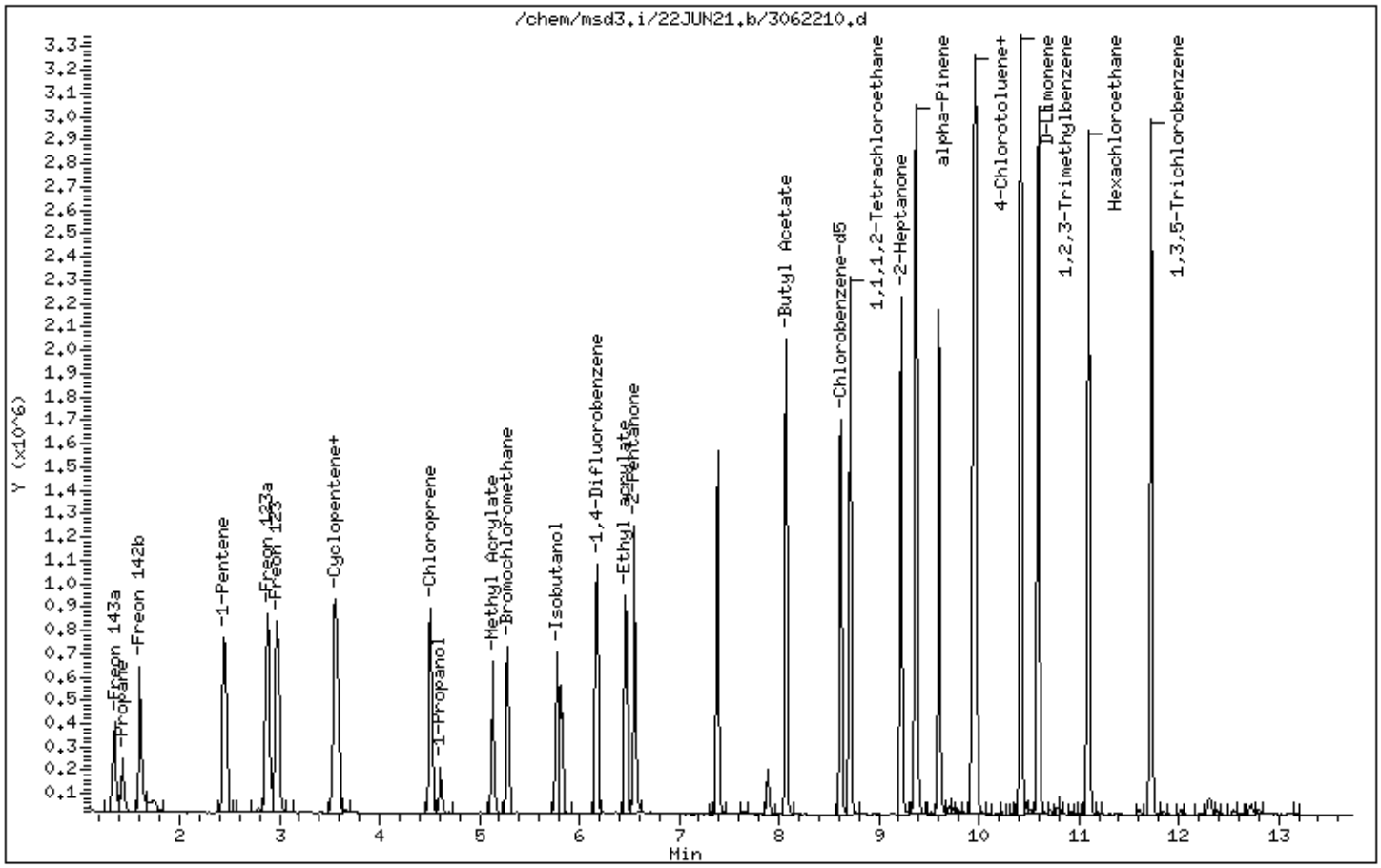
Instrument: msd3.i

Sample Info: 50mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062221.d
Lab Smp Id: ICAL Level 9
Inj Date : 22-JUN-2021 23:12
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2115
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:12 Cal File: 3062221.d
Als bottle: 2 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	284157	50.0000	49.062	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	232500			51.82- 111.82	81.82
1.479	1.479 (0.280)	51	639099			194.91- 254.91	224.91
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	294407	50.0000	50.075	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	193171			35.61- 95.61	65.61
1.423	1.423 (0.269)	39	213929			42.66- 102.66	72.66
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	181633	50.0000	47.393	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	639099			321.86- 381.86	351.86
1.437	1.437 (0.272)	47	136835			45.34- 105.34	75.34
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	797137	50.0000	47.012	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	260143			2.63- 62.63	32.63
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.479	1.479 (0.280)	67	85241	50.0000	45.742	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.479	1.479 (0.280)	51	639099			719.76- 779.76	749.76
10 Freon 114					CAS #: 76-14-2		
1.562	1.562 (0.296)	135	606702	50.0000	48.290	80.00- 120.00	100.00
1.562	1.562 (0.296)	137	194861			2.12- 62.12	32.12
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	657014	50.0000	49.719	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	213159			2.44- 62.44	32.44
1.576	1.576 (0.298)	58	21428			0.00- 33.26	3.26
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	352835	50.0000	50.066	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	114369			2.41- 62.41	32.41
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	74284	50.0000	44.633	80.00- 120.00	100.00
1.702	1.702 (0.322)	43	562632			727.41- 787.41	757.41
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	335767	50.0000	44.523	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	105035			1.28- 61.28	31.28
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	294521	50.0000	42.614	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	292262			69.23- 129.23	99.23
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	277582	50.0000	46.540	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	257551			62.78- 122.78	92.78
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	173670	50.0000	49.058	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	54600			1.44- 61.44	31.44
2.206	2.206 (0.417)	49	59249			4.12- 64.12	34.12
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	441673	50.0000	48.789	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	303981			38.82- 98.82	68.82
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	316129	50.0000	48.750	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	294456			63.14- 123.14	93.14
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	860106	50.0000	47.943	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.430	2.430 (0.460)	103	560066			35.12- 95.12	65.12
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	711822	50.0000	49.634	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	218791			0.74- 60.74	30.74
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	708333	50.0000	49.112	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	113101			0.00- 45.97	15.97
2.500	2.500 (0.473)	72	57350			0.00- 38.10	8.10
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	150840	50.0000	46.646	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	268008			147.68- 207.68	177.68
2.780	2.780 (0.526)	45	356586			206.40- 266.40	236.40
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	64405	50.0000	44.377	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	356168			523.01- 583.01	553.01
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	120208	50.0000	49.911	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	168682			110.33- 170.33	140.33
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	580955	50.0000	47.370	80.00- 120.00	100.00
3.032	3.032 (0.574)	153	370172			33.72- 93.72	63.72
3.032	3.032 (0.574)	101	695257			89.67- 149.67	119.67
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	328546	50.0000	44.476	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	208255			33.39- 93.39	63.39
3.074	3.074 (0.582)	61	636783			163.82- 223.82	193.82
47 Acetone					CAS #: 67-64-1		
3.213	3.213 (0.608)	58	192966	50.0000	47.280	80.00- 120.00	100.00
3.213	3.213 (0.608)	43	636127			299.66- 359.66	329.66
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.624)	76	899750	50.0000	48.956	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.619)	142	873195	50.0000	54.944	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	389245			14.58- 74.58	44.58

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.395	3.395 (0.643)	45	741880	50.0000	50.543	80.00- 120.00	100.00
3.395	3.395 (0.643)	43	138075			0.00- 48.61	18.61
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	145295	50.0000	45.918	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	534774			338.06- 398.06	368.06
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	319360	50.0000	49.691	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	165465			21.81- 81.81	51.81
3.633	3.633 (0.688)	38	37890			0.00- 41.86	11.86
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	472054	50.0000	48.327	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	286866			30.77- 90.77	60.77
3.717	3.717 (0.703)	51	148173			1.39- 61.39	31.39
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	904991	50.0000	49.121	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	190462			0.00- 51.05	21.05
3.857	3.857 (0.730)	57	105718			0.00- 41.68	11.68
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	952511	50.0000	47.900	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	274918			0.00- 58.86	28.86
3.941	3.941 (0.746)	41	259771			0.00- 57.27	27.27
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	214998	50.0000	43.249	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	590364			244.59- 304.59	274.59
3.969	3.969 (0.751)	96	343649			129.84- 189.84	159.84
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	256275	50.0000	42.956	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	303684			88.50- 148.50	118.50
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	648110	50.0000	48.083	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	408223			32.99- 92.99	62.99
4.179	4.179 (0.791)	86	81408			0.00- 42.56	12.56
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	655941	50.0000	47.320	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	201779			0.76- 60.76	30.76

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether						CAS #: 108-20-3	
	4.445	4.445 (0.841)	45	1410302	50.0000	49.578	80.00- 120.00	100.00
	4.445	4.445 (0.841)	87	301331			0.00- 51.37	21.37
	4.445	4.445 (0.841)	59	156455			0.00- 41.09	11.09
	73 Vinyl Acetate						CAS #: 108-05-4	
	4.501	4.501 (0.852)	86	84268	50.0000	49.446	80.00- 120.00	100.00
	4.501	4.501 (0.852)	43	1197978			1391.63-1451.63	1421.63
	79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
	4.809	4.809 (0.910)	59	1352357	50.0000	49.244	80.00- 120.00	100.00
	4.809	4.809 (0.910)	87	449268			3.22- 63.22	33.22
	4.809	4.809 (0.910)	41	245055			0.00- 48.12	18.12
	84 2,2-Dichloropropane						CAS #: 594-20-7	
	5.004	5.004 (0.947)	77	634214	50.0000	49.112	80.00- 120.00	100.00
	5.004	5.004 (0.947)	79	202924			2.00- 62.00	32.00
	5.004	5.004 (0.947)	97	148175			0.00- 53.36	23.36
	85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
	5.046	5.046 (0.955)	98	220341	50.0000	44.714	80.00- 120.00	100.00
	5.046	5.046 (0.955)	96	346411			127.22- 187.22	157.22
	5.046	5.046 (0.955)	61	691531			283.85- 343.85	313.85
	86 2-Butanone						CAS #: 78-93-3	
	5.074	5.074 (0.960)	72	166176	50.0000	48.279	80.00- 120.00	100.00
	5.074	5.074 (0.960)	43	1804252			1055.75-1115.75	1085.75
	5.074	5.074 (0.960)	57	67453			10.59- 70.59	40.59
	87 Ethyl Acetate						CAS #: 141-78-6	
	5.088	5.088 (0.963)	45	143976	50.0000	50.739	80.00- 120.00	100.00
	5.046	5.046 (0.955)	61	691531			450.31- 510.31	480.31
	5.088	5.088 (0.963)	70	86986			30.42- 90.42	60.42
	89 Tetrahydrofuran						CAS #: 109-99-9	
	5.270	5.270 (0.997)	42	468847	50.0000	48.304	80.00- 120.00	100.00
	5.270	5.270 (0.997)	71	154354			2.92- 62.92	32.92
	5.270	5.270 (0.997)	72	157262			3.54- 63.54	33.54
*	90 Bromochloromethane						CAS #: 74-97-5	
	5.284	5.284 (1.000)	130	243405	25.0000		80.00- 120.00	100.00
	5.284	5.284 (1.000)	128	187819			48.46- 108.46	77.16
	5.270	5.270 (1.000)	49	366478			120.39- 180.39	150.56
	92 Chloroform						CAS #: 67-66-3	
	5.340	5.340 (1.011)	83	722872	50.0000	47.368	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.011)	85	467764			34.71- 94.71	64.71
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	446703	50.0000	46.309	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	671853			120.40- 180.40	150.40
5.438	5.438 (1.029)	41	376139			54.20- 114.20	84.20
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	775232	50.0000	45.194	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	494293			33.76- 93.76	63.76
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	786825	50.0000	49.803	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	815784			73.68- 133.68	103.68
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	196065	50.0000	49.289	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	511915			231.09- 291.09	261.09
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2070229	50.0000	49.114	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	644269			1.12- 61.12	31.12
5.774	5.774 (1.093)	41	569117			0.00- 57.49	27.49
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	968752	50.0000	48.568	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	230565			0.00- 53.80	23.80
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	332625	25.0000	24.832	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	171829			21.66- 81.66	51.66
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	263298	50.0000	49.507	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	1040562			365.20- 425.20	395.20
5.858	5.858 (0.948)	55	319398			91.31- 151.31	121.31
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	550376	50.0000	47.927	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	171716			1.20- 61.20	31.20
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	363489	50.0000	46.267	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	759758			179.02- 239.02	209.02
5.942	5.942 (0.962)	57	417473			84.85- 144.85	114.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	874076	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	137446			0.00- 45.52	15.72
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	318843	50.0000	49.871	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	223844			40.21- 100.21	70.21
6.348	6.348 (1.027)	43	175356			25.00- 85.00	55.00
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	480894	50.0000	48.058	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	504760			74.96- 134.96	104.96
6.362	6.362 (1.029)	97	311621			34.80- 94.80	64.80
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	160946	50.0000	34.810	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	132017			52.03- 112.03	82.03
6.586	6.586 (1.066)	41	176994			79.97- 139.97	109.97
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	380639	50.0000	47.582	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	624336			134.02- 194.02	164.02
6.664	6.664 (0.773)	100	150491			9.54- 69.54	39.54
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.699 (1.084)	88	246677	50.0000	48.820	80.00- 120.00	100.00
6.699	6.699 (1.084)	58	211647			55.80- 115.80	85.80
6.699	6.699 (1.084)	57	95411			8.68- 68.68	38.68
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	437437	50.0000	49.100	80.00- 120.00	100.00
6.721	6.721 (0.780)	93	425485			67.27- 127.27	97.27
6.721	6.721 (0.780)	95	353956			50.92- 110.92	80.92
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	785560	50.0000	46.861	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	505163			34.31- 94.31	64.31
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	622612	50.0000	49.970	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	195644			1.42- 61.42	31.42
7.208	7.208 (1.166)	39	426887			38.56- 98.56	68.56
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	621789	50.0000	46.468	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	283551			15.60- 75.60	45.60

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
127 Methylcyclohexane (continued)							
6.460	6.460 (1.045)	55	674811			78.53- 138.53	108.53
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	397607	50.0000	46.931	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	1038955			231.30- 291.30	261.30
7.316	7.316 (1.184)	85	154832			8.94- 68.94	38.94
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	904005	25.0000	25.110	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	103668			0.00- 41.47	11.47
7.387	7.387 (1.195)	100	600870			36.47- 96.47	66.47
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1301803	50.0000	48.641	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	758903			28.30- 88.30	58.30
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	435525	50.0000	48.911	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	422920			67.11- 127.11	97.11
7.444	7.444 (1.205)	43	1063600			214.21- 274.21	244.21
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	595888	50.0000	48.674	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	191552			2.15- 62.15	32.15
7.688	7.688 (0.892)	39	393842			36.09- 96.09	66.09
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	448705	50.0000	47.657	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	276484			31.62- 91.62	61.62
7.846	7.846 (0.910)	83	387448			56.35- 116.35	86.35
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	631135	50.0000	48.467	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	496786			48.71- 108.71	78.71
7.881	7.881 (0.914)	131	483117			46.55- 106.55	76.55
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	544103	50.0000	50.311	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	1022398			157.91- 217.91	187.91
8.003	8.003 (0.929)	100	97172			0.00- 47.86	17.86
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	617417	50.0000	48.352	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	697427			82.96- 142.96	112.96
7.989	7.989 (1.293)	78	200948			2.55- 62.55	32.55

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.946)	129	891015	50.0000	49.884	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	692953			47.77- 107.77	77.77
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.959)	107	719507	50.0000	49.209	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	680686			64.60- 124.60	94.60
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.151)	63	808634	50.0000	49.985	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	250233			0.95- 60.95	30.95
7.122	7.122 (1.152)	144	84530			0.00- 40.45	10.45
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.619	8.619 (1.000)	117	831223	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	457929			25.46- 85.46	55.09
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.002)	112	1085035	50.0000	47.761	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	348609			2.13- 62.13	32.13
8.641	8.641 (1.002)	77	611405			26.35- 86.35	56.35
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.007)	106	556944	50.0000	49.027	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1740322			282.48- 342.48	312.48
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.010)	43	1099456	50.0000	49.933	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	984285			59.52- 119.52	89.52
8.705	8.705 (1.010)	85	327172			0.00- 59.76	29.76
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.019)	106	692050	50.0000	48.968	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1393518			171.36- 231.36	201.36
164 o-Xylene						CAS #: 95-47-6	
9.128	9.128 (1.059)	106	659123	50.0000	49.127	80.00- 120.00	100.00
9.128	9.128 (1.059)	91	1384085			179.99- 239.99	209.99
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.061)	104	1152063	50.0000	49.562	80.00- 120.00	100.00
9.149	9.149 (1.061)	78	565543			19.09- 79.09	49.09
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.085)	173	850814	50.0000	50.234	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	437768			21.45- 81.45	51.45

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	2075717	50.0000	48.933	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	560258			0.00- 56.99	26.99
9.407	9.407 (1.091)	51	244414			0.00- 41.77	11.77
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	617741	50.0000	46.276	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	242258			9.22- 69.22	39.22
9.579	9.579 (1.111)	42	448465			42.60- 102.60	72.60
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	555796	25.0000	25.279	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	683945			93.06- 153.06	123.06
9.601	9.601 (1.114)	176	516176			62.87- 122.87	92.87
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	1003904	50.0000	47.734	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	646042			34.35- 94.35	64.35
177 Bromobenzene					CAS #: 108-86-1		
9.729	9.729 (1.129)	156	652747	50.0000	49.500	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	635065			67.29- 127.29	97.29
9.729	9.729 (1.129)	77	1060120			132.41- 192.41	162.41
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2451939	50.0000	49.539	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	582723			0.00- 53.77	23.77
9.758	9.758 (1.132)	105	93517			0.00- 33.81	3.81
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	309574	50.0000	48.865	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	975160			285.00- 345.00	315.00
9.787	9.787 (1.135)	61	260223			54.06- 114.06	84.06
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	242305	50.0000	48.334	80.00- 120.00	100.00
9.787	9.787 (1.135)	89	124031			21.19- 81.19	51.19
9.787	9.787 (1.135)	75	975160			372.45- 432.45	402.45
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.138)	57	1264280	50.0000	49.400	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	431474			4.13- 64.13	34.13
9.815	9.815 (1.139)	142	59836			0.00- 34.73	4.73
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	625823	50.0000	48.780	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
9.851	9.851 (1.143)	105	2045098			296.79- 356.79	326.79
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	511437	50.0000	49.061	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1873358			336.29- 396.29	366.29
9.873	9.873 (1.145)	65	352019			38.83- 98.83	68.83
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	875517	50.0000	48.587	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1807106			176.40- 236.40	206.40
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	929249	50.0000	50.352	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	526312			26.64- 86.64	56.64
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1661718	50.0000	50.120	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	412478			0.00- 54.82	24.82
10.174	10.174 (1.180)	91	1112004			36.92- 96.92	66.92
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1735479	50.0000	48.842	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	808333			16.58- 76.58	46.58
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	528908	50.0000	49.389	80.00- 120.00	100.00
10.360	10.360 (1.202)	105	2546830			451.53- 511.53	481.53
10.353	10.353 (1.201)	91	404509			46.48- 106.48	76.48
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	2233043	50.0000	49.792	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	598181			0.00- 56.79	26.79
10.467	10.467 (1.214)	91	536886			0.00- 54.04	24.04
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.220)	146	1210970	50.0000	50.163	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	769344			33.53- 93.53	63.53
10.517	10.517 (1.220)	111	497099			11.05- 71.05	41.05
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.229)	146	1221365	50.0000	49.118	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	775158			33.47- 93.47	63.47
10.596	10.596 (1.229)	111	484328			9.65- 69.65	39.65
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1711464	50.0000	50.059	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.243)	126	377222			0.00- 52.04	22.04
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1502052	50.0000	49.806	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1289714			55.86- 115.86	85.86
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	573948	50.0000	49.358	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	2077626			331.99- 391.99	361.99
10.818	10.818 (1.255)	92	1096298			161.01- 221.01	191.01
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1161793	50.0000	49.802	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	734569			33.23- 93.23	63.23
10.918	10.918 (1.267)	111	492079			12.36- 72.36	42.36
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	677550	50.0000	50.091	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	602730			58.96- 118.96	88.96
11.606	11.606 (1.347)	155	527267			47.82- 107.82	77.82
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1591448	61.8000	62.406	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	1286745			50.85- 110.85	80.85
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	1043013	62.9500	62.948	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	995018			65.40- 125.40	95.40
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	804329	64.3500	64.263	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	512377			33.70- 93.70	63.70
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.456)	128	276806	6.35000	5.471	80.00- 120.00	100.00
12.552	12.552 (1.456)	127	36248			0.00- 43.10	13.10
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.485)	180	997150	66.5500	65.766	80.00- 120.00	100.00
12.802	12.802 (1.485)	182	953973			65.67- 125.67	95.67
12.802	12.802 (1.485)	145	359141			6.02- 66.02	36.02

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062221.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	243405	0.00
108 1,4-Difluorobenze	874076	524446	1223706	874076	0.00
153 Chlorobenzene-d5	831223	498734	1163712	831223	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062221.d

Page 1

Date : 22-JUN-2021 23:12

Client ID:

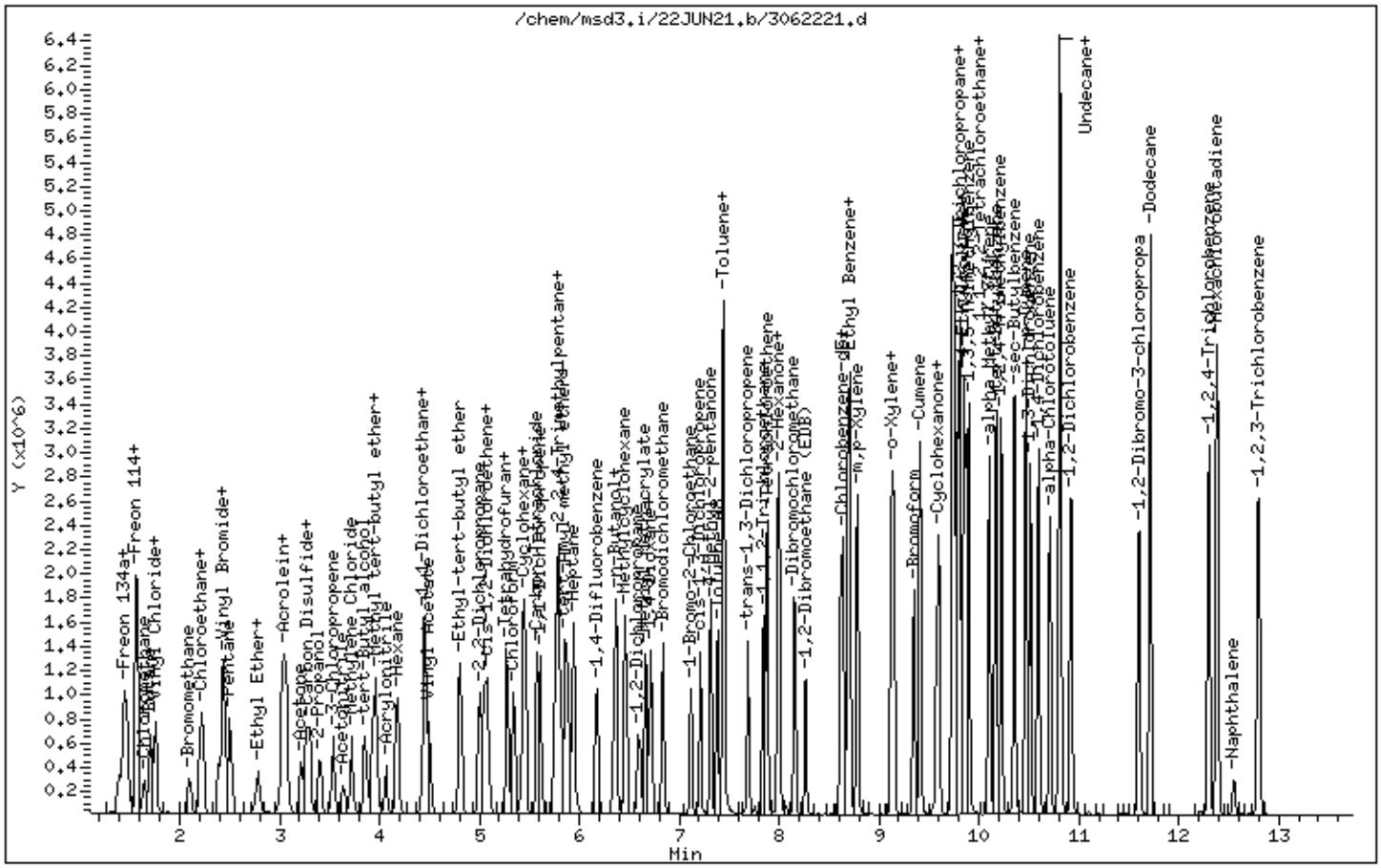
Instrument: msd3.i

Sample Info: 50mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051910.d
Lab Smp Id: ICAL Level 9
Inj Date : 19-MAY-2021 16:53
Operator : LD Inst ID: msdp.i
Smp Info : 200mL 3018-2034
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 16:53 Cal File: p051910.d
Als bottle: 13 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.660	1.633 (0.287)	83	963392	200.000	207.55	80.00- 120.00	100.00(A)
1.646	1.633 (0.285)	69	867624			59.44- 119.44	90.06
1.758	1.745 (0.304)	51	4138681			419.06- 479.06	429.59
5 Propylene					CAS #: 115-07-1		
1.688	1.675 (0.292)	41	1396714	200.000	208.12	80.00- 120.00	100.00(A)
1.688	1.675 (0.292)	42	925437			35.28- 95.28	66.26
1.688	1.675 (0.292)	39	960683			38.35- 98.35	68.78
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	610604	200.000	183.68	80.00- 120.00	100.00
1.758	1.745 (0.304)	51	4138681			597.63- 657.63	677.80
1.716	1.703 (0.297)	47	402984			33.72- 93.72	66.00
8 Freon 12					CAS #: 75-71-8		
1.730	1.717 (0.299)	85	2956019	200.000	224.92	80.00- 120.00	100.00(A)
1.730	1.717 (0.299)	87	956315			2.37- 62.37	32.35
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.745 (0.304)	67	279979	200.000	215.49	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.758	1.745 (0.304)	51	4138681			1501.01-1561.01	1478.21
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	2798238	200.000	210.96	80.00- 120.00	100.00(A)
1.856	1.856 (0.321)	137	896202			2.30- 62.30	32.03
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	3072142	200.000	206.77	80.00- 120.00	100.00(A)
1.870	1.870 (0.323)	42	980915			2.44- 62.44	31.93
1.870	1.856 (0.323)	58	99396			0.00- 33.36	3.24
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	1152746	200.000	151.06	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	283410			0.00- 56.26	24.59
18 Butane					CAS #: 106-97-8		
2.053	2.025 (0.355)	58	411216	200.000	232.63	80.00- 120.00	100.00(A)
2.053	2.025 (0.355)	43	3342638			823.29- 883.29	812.87
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	1863332	200.000	203.01	80.00- 120.00	100.00(A)
2.075	2.068 (0.359)	64	541008			0.00- 59.69	29.03
20 1,3-Butadiene					CAS #: 106-99-0		
2.111	2.089 (0.365)	54	1717595	200.000	229.88	80.00- 120.00	100.00(A)
2.111	2.089 (0.365)	39	2054933			52.37- 112.37	119.64
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	1117043	200.000	189.24	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	1045104			64.07- 124.07	93.56
30 Chloroethane					CAS #: 75-00-3		
2.619	2.612 (0.453)	64	698592	200.000	211.62	80.00- 120.00	100.00(A)
2.619	2.612 (0.453)	66	205685			0.04- 60.04	29.44
2.619	2.612 (0.453)	49	231191			4.54- 64.54	33.09
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	2078373	200.000	206.91	80.00- 120.00	100.00(A)
2.641	2.634 (0.456)	57	1341657			34.12- 94.12	64.55
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.492)	106	1169390	200.000	214.33	80.00- 120.00	100.00(A)
2.848	2.841 (0.492)	108	1149051			69.27- 129.27	98.26
33 Freon 11					CAS #: 75-69-4		
2.898	2.884 (0.501)	101	2990714	200.000	213.62	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.898	2.884 (0.501)	103	1954067			34.72- 94.72	65.34
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.899 (0.502)	67	2628562	200.000	218.19	80.00- 120.00	100.00(A)
2.906	2.899 (0.502)	69	808198			0.84- 60.84	30.75
35 Pentane					CAS #: 109-66-0		
2.977	2.970 (0.515)	43	3326896	200.000	203.77	80.00- 120.00	100.00(A)
2.977	2.970 (0.515)	57	497125			0.00- 44.98	14.94
2.977	2.970 (0.515)	72	250044			0.00- 37.39	7.52
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	597925	200.000	217.07	80.00- 120.00	100.00(A)
3.292	3.285 (0.569)	59	1144802			163.46- 223.46	191.46
3.285	3.285 (0.568)	45	1667751			250.40- 310.40	278.92
39 Ethanol					CAS #: 64-17-5		
3.249	3.242 (0.562)	46	301814	200.000	207.52	80.00- 120.00	100.00(A)
3.285	3.242 (0.568)	45	1657457			511.19- 571.19	549.17
42 Acrolein					CAS #: 107-02-8		
3.543	3.529 (0.612)	55	539808	200.000	213.90	80.00- 120.00	100.00(A)
3.543	3.529 (0.612)	56	750593			111.10- 171.10	139.05
43 Freon 113					CAS #: 76-13-1		
3.557	3.550 (0.615)	151	2174805	200.000	208.58	80.00- 120.00	100.00(A)
3.557	3.550 (0.615)	153	1392066			33.56- 93.56	64.01
3.557	3.550 (0.615)	101	2603153			89.21- 149.21	119.70
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.593	3.579 (0.621)	96	1272304	200.000	210.50	80.00- 120.00	100.00(A)
3.593	3.579 (0.621)	98	804446			34.02- 94.02	63.23
3.593	3.579 (0.621)	61	2540756			168.77- 228.77	199.70
47 Acetone					CAS #: 67-64-1		
3.722	3.708 (0.643)	58	818913	200.000	213.00	80.00- 120.00	100.00(A)
3.722	3.708 (0.643)	43	2670673			302.95- 362.95	326.12
48 Carbon Disulfide					CAS #: 75-15-0		
3.837	3.823 (0.663)	76	3473690	200.000	212.53	80.00- 120.00	100.00(A)
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	2824784	200.000	259.99	80.00- 120.00	100.00(A)
3.794	3.794 (0.656)	127	1185970			12.22- 72.22	41.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	3287894	200.000	212.18	80.00- 120.00	100.00(A)
3.901	3.887 (0.674)	43	565170			0.00- 47.19	17.19
54 3-Chloropropene					CAS #: 107-05-1		
4.059	4.052 (0.702)	76	545365	200.000	199.73	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	2224570			396.19- 456.19	407.90
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	1631593	200.000	225.92	80.00- 120.00	100.00(A)
4.131	4.123 (0.714)	40	829052			20.95- 80.95	50.81
4.131	4.123 (0.714)	38	182363			0.00- 41.17	11.18
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	2169168	200.000	217.21	80.00- 120.00	100.00(A)
4.238	4.238 (0.733)	84	1125402			22.03- 82.03	51.88
4.238	4.238 (0.733)	51	657885			0.18- 60.18	30.33
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	3675194	200.000	203.38	80.00- 120.00	100.00(A)
4.345	4.338 (0.751)	41	762931			0.00- 51.11	20.76
4.345	4.338 (0.751)	57	374274			0.00- 40.49	10.18
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	3660106	200.000	203.22	80.00- 120.00	100.00(A)
4.446	4.446 (0.768)	57	1205080			3.10- 63.10	32.92
4.446	4.446 (0.768)	41	1137977			1.28- 61.28	31.09
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	872146	200.000	213.32	80.00- 120.00	100.00(A)
4.482	4.482 (0.775)	61	2471299			255.84- 315.84	283.36
4.482	4.482 (0.775)	96	1368568			127.59- 187.59	156.92
66 Acrylonitrile					CAS #: 107-13-1		
4.567	4.560 (0.789)	52	1209839	200.000	208.90	80.00- 120.00	100.00(A)
4.567	4.560 (0.789)	53	1441756			88.05- 148.05	119.17
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.812)	57	3059384	200.000	213.36	80.00- 120.00	100.00(A)
4.696	4.697 (0.812)	43	2035499			37.52- 97.52	66.53
4.696	4.697 (0.812)	86	348023			0.00- 41.48	11.38
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	2727099	200.000	215.24	80.00- 120.00	100.00(A)
4.969	4.962 (0.859)	65	807144			0.00- 59.70	29.60

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.947	4.954 (0.855)	45	6972756	200.000	207.52	80.00- 120.00	100.00(A)
4.947	4.954 (0.855)	87	1261426			0.00- 48.18	18.09
4.947	4.954 (0.855)	59	707319			0.00- 40.15	10.14
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.864)	86	353856	200.000	221.69	80.00- 120.00	100.00(A)
4.997	4.997 (0.864)	43	6152688			2432.48-2492.48	1738.75
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.305	5.305 (0.917)	59	5991015	200.000	205.98	80.00- 120.00	100.00(A)
5.305	5.305 (0.917)	87	1852036			1.00- 61.00	30.91
5.305	5.305 (0.917)	41	1108520			0.00- 48.73	18.50
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.513	5.506 (0.953)	77	2339456	200.000	212.12	80.00- 120.00	100.00(A)
5.513	5.506 (0.953)	79	759579			2.28- 62.28	32.47
5.513	5.506 (0.953)	97	577290			0.00- 53.93	24.68
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.959)	98	941351	200.000	222.97	80.00- 120.00	100.00(A)
5.549	5.549 (0.959)	96	1475590			125.75- 185.75	156.75
5.549	5.549 (0.959)	61	3406307			332.40- 392.40	361.85
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.960)	72	710177	200.000	214.24	80.00- 120.00	100.00(A)
5.563	5.556 (0.962)	43	8748765			1214.50-1274.50	1231.91
5.556	5.556 (0.960)	57	313614			14.68- 74.68	44.16
87 Ethyl Acetate						CAS #: 141-78-6	
5.570	5.570 (0.963)	45	710278	200.000	215.42	80.00- 120.00	100.00(A)
5.549	5.549 (0.959)	61	3406439			452.04- 512.04	479.59
5.570	5.570 (0.963)	70	376648			22.77- 82.77	53.03
89 Tetrahydrofuran						CAS #: 109-99-9	
5.778	5.771 (0.999)	42	2389288	200.000	213.80	80.00- 120.00	100.00(A)
5.778	5.771 (0.999)	71	621062			0.00- 55.82	25.99
5.778	5.771 (0.999)	72	679138			0.00- 57.59	28.42
* 90 Bromochloromethane						CAS #: 74-97-5	
5.785	5.778 (1.000)	130	146655	25.0000		80.00- 120.00	100.00
5.785	5.778 (1.000)	128	114483			48.23- 108.23	78.06
5.785	5.778 (1.000)	49	264310			150.57- 210.57	180.23
92 Chloroform						CAS #: 67-66-3	
5.842	5.835 (1.010)	83	2849633	200.000	221.70	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.842	5.835 (1.010)	85	1839274			34.70- 94.70	64.54
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	1890120	200.000	209.08	80.00- 120.00	100.00(A)
5.957	5.957 (1.030)	56	3281786			142.57- 202.57	173.63
5.957	5.957 (1.030)	41	1740496			62.09- 122.09	92.08
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.972 (1.032)	97	2948715	200.000	206.40	80.00- 120.00	100.00(A)
5.971	5.972 (1.032)	99	1896974			34.02- 94.02	64.33
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.053)	119	2981854	200.000	217.13	80.00- 120.00	100.00(A)
6.093	6.086 (1.053)	117	3007163			70.64- 130.64	100.85
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.919)	110	839217	200.000	203.04	80.00- 120.00	100.00(A)
6.115	6.115 (0.918)	75	2124877			226.85- 286.85	253.20
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.085)	57	10464793	200.000	207.89	80.00- 120.00	100.00(A)
6.279	6.280 (1.085)	56	3399889			2.24- 62.24	32.49
6.279	6.280 (1.085)	41	2587604			0.00- 54.39	24.73
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	4111436	200.000	205.31	80.00- 120.00	100.00(A)
6.301	6.301 (0.946)	77	947596			0.00- 52.90	23.05
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	228223	25.0000	27.989	80.00- 120.00	100.00
6.308	6.308 (1.090)	67	169168			27.21- 87.21	74.12
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	1080564	200.000	191.25	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	4364452			372.79- 432.79	403.90
6.358	6.358 (0.955)	55	1482176			112.09- 172.09	137.17
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	2173814	200.000	205.36	80.00- 120.00	100.00(A)
6.380	6.380 (0.958)	64	662081			0.79- 60.79	30.46
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	1572559	200.000	200.11	80.00- 120.00	100.00(A)
6.444	6.444 (0.968)	43	4039565			226.53- 286.53	256.88
6.444	6.444 (0.968)	57	2057612			100.85- 160.85	130.84

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	607214	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93970			0.00- 45.71	15.48
110 n-Butanol						CAS #: 71-36-3	
6.809	6.810 (1.023)	56	1498541	200.000	205.70	80.00- 120.00	100.00(A)
6.809	6.810 (1.023)	41	1046025			40.99- 100.99	69.80
6.809	6.810 (1.023)	43	852168			27.38- 87.38	56.87
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	2004771	200.000	206.61	80.00- 120.00	100.00(A)
6.867	6.867 (1.031)	130	2152958			76.29- 136.29	107.39
6.867	6.867 (1.031)	97	1282796			33.63- 93.63	63.99
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.096	7.089 (1.066)	63	2045978	200.000	200.76	80.00- 120.00	100.00(A)
7.096	7.089 (1.066)	62	1452463			41.07- 101.07	70.99
7.096	7.089 (1.066)	41	1025055			22.53- 82.53	50.10
116 Methyl Methacrylate						CAS #: 80-62-6	
7.139	7.132 (0.755)	69	1664410	200.000	203.56	80.00- 120.00	100.00(A)
7.139	7.132 (0.755)	41	3490137			179.84- 239.84	209.69
7.139	7.139 (0.755)	100	669735			9.59- 69.59	40.24
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	1068493	200.000	195.71	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	1054342			68.28- 128.28	98.68
7.175	7.175 (1.077)	57	357622			2.68- 62.68	33.47
118 Dibromomethane						CAS #: 74-95-3	
7.211	7.204 (0.762)	174	1851234	200.000	206.43	80.00- 120.00	100.00(A)
7.203	7.204 (0.761)	93	1651072			60.09- 120.09	89.19
7.203	7.204 (0.761)	95	1434152			48.38- 108.38	77.47
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	3187397	200.000	209.29	80.00- 120.00	100.00(A)
7.318	7.318 (1.099)	85	2050718			35.24- 95.24	64.34
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.698	7.691 (1.156)	75	2666430	200.000	209.05	80.00- 120.00	100.00(A)
7.698	7.691 (1.156)	77	846283			2.42- 62.42	31.74
7.691	7.691 (1.155)	39	1760038			37.16- 97.16	66.01
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	2728123	200.000	194.48	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	1272958			15.78- 75.78	46.66

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	3109761			84.64- 144.64	113.99
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	1984175	200.000	194.19	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	5363252			242.35- 302.35	270.30
7.798	7.791 (1.171)	85	653050			3.24- 63.24	32.91
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	661488	25.0000	25.064	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62867			0.00- 40.44	9.50
7.891	7.891 (1.185)	100	430214			34.95- 94.95	65.04
137 Toluene					CAS #: 108-88-3		
7.956	7.949 (1.195)	91	5496866	200.000	198.84	80.00- 120.00	100.00
7.956	7.949 (1.195)	92	3223093			28.38- 88.38	58.64
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	2290202	200.000	196.83	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	1946174			56.00- 116.00	84.98
7.948	7.949 (1.194)	43	5895371			228.66- 288.66	257.42
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	2472659	200.000	208.56	80.00- 120.00	100.00(A)
8.213	8.214 (0.868)	77	780505			1.24- 61.24	31.57
8.213	8.214 (0.868)	39	1616909			34.11- 94.11	65.39
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	1973653	200.000	206.88	80.00- 120.00	100.00(A)
8.400	8.400 (0.888)	99	1227648			31.96- 91.96	62.20
8.400	8.400 (0.888)	83	1639096			52.93- 112.93	83.05
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	2764412	200.000	200.38	80.00- 120.00	100.00(A)
8.464	8.464 (0.895)	129	2156828			47.84- 107.84	78.02
8.464	8.464 (0.895)	131	2092898			45.29- 105.29	75.71
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	2749799	200.000	198.84	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	5238084			162.87- 222.87	190.49
8.586	8.586 (0.908)	100	433880			0.00- 45.94	15.78
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	2712190	200.000	204.00	80.00- 120.00	100.00(A)
8.579	8.579 (1.288)	41	3365614			94.99- 154.99	124.09
8.579	8.579 (1.288)	78	882760			2.05- 62.05	32.55

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1		
8.801	8.801 (0.930)	129	3803420	200.000		207.93	80.00- 120.00	100.00(A)
8.801	8.801 (0.930)	127	2948441				47.45- 107.45	77.52
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4		
8.951	8.951 (0.946)	107	3199545	200.000		204.31	80.00- 120.00	100.00(A)
8.951	8.951 (0.946)	109	3015665				64.21- 124.21	94.25
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0		
7.605	7.605 (1.142)	63	3852793	200.000		204.41	80.00- 120.00	100.00(A)
7.605	7.605 (1.142)	65	1142924				0.00- 59.64	29.66
7.605	7.605 (1.142)	144	374076				0.00- 39.63	9.71
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	595090	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	322638				23.78- 83.78	54.22
154 Chlorobenzene						CAS #: 108-90-7		
9.496	9.496 (1.004)	112	4805022	200.000		203.48	80.00- 120.00	100.00(A)
9.496	9.496 (1.004)	114	1542900				1.74- 61.74	32.11
9.496	9.496 (1.004)	77	2584699				25.04- 85.04	53.79
155 Ethyl Benzene						CAS #: 100-41-4		
9.567	9.567 (1.011)	106	2443043	200.000		198.07	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	7445132				273.74- 333.74	304.75
156 Nonane						CAS #: 111-84-2		
9.603	9.596 (1.015)	43	6171885	200.000		194.14	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	5253139				54.16- 114.16	85.11
9.603	9.603 (1.015)	85	1482943				0.00- 53.90	24.03
158 m,p-Xylene						CAS #: 108-38-3		
9.718	9.718 (1.027)	106	3015614	200.000		196.78	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	5869082				163.73- 223.73	194.62
164 o-Xylene						CAS #: 95-47-6		
10.226	10.226 (1.081)	106	2925715	200.000		197.04	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	5968076				177.45- 237.45	203.99
165 Styrene						CAS #: 100-42-5		
10.255	10.255 (1.084)	104	4970586	200.000		197.21	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	2372058				17.88- 77.88	47.72
167 Bromoform						CAS #: 75-25-2		
10.549	10.542 (1.115)	173	3738056	200.000		208.68	80.00- 120.00	100.00(A)
10.549	10.542 (1.115)	171	1919438				21.25- 81.25	51.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.656	10.649 (1.126)	105	9133490	200.000	196.23	80.00- 120.00	100.00
10.656	10.649 (1.126)	120	2612516			0.00- 58.52	28.60
10.649	10.649 (1.126)	51	1174655			0.00- 43.00	12.86
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	3186182	200.000	191.28	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	1023262			1.94- 61.94	32.12
10.871	10.871 (1.149)	42	2155068			37.89- 97.89	67.64
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	391305	25.0000	25.595	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	492677			95.92- 155.92	125.91
10.921	10.921 (1.154)	176	379433			66.89- 126.89	96.97
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	4478778	200.000	197.42	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	2889301			35.20- 95.20	64.51
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	2876488	200.000	203.06	80.00- 120.00	100.00(A)
11.107	11.107 (1.174)	158	2796126			67.21- 127.21	97.21
11.179	11.179 (1.182)	77	1690886			29.02- 89.02	58.78
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	2681478	200.000	194.62	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	10576237			366.49- 426.49	394.42
11.150	11.150 (1.179)	105	403848			0.00- 44.85	15.06
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	1359844	200.000	190.81	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	4281561			280.55- 340.55	314.86
11.107	11.100 (1.174)	61	607928			15.49- 75.49	44.71
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	954975	200.000	201.05	80.00- 120.00	100.00(A)
11.179	11.179 (1.182)	89	738088			49.11- 109.11	77.29
11.179	11.179 (1.182)	75	4281561			426.44- 486.44	448.34
182 Decane					CAS #: 124-18-5		
11.258	11.251 (1.190)	57	6477918	200.000	178.80	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	1764517			0.00- 57.66	27.24
11.258	11.258 (1.190)	142	263248			0.00- 34.09	4.06
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	2800806	200.000	189.85	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	9001865			284.55- 344.55	321.40
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.308 (1.196)	126	2257842	200.000	193.82	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	7834055			315.17- 375.17	346.97
11.301	11.301 (1.195)	65	1128270			21.55- 81.55	49.97
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	4109840	200.000	199.10	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	7853670			164.93- 224.93	191.09
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	4135477	200.000	199.73	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	2280562			25.30- 85.30	55.15
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.738 (1.242)	119	7751216	200.000	200.41	80.00- 120.00	100.00(A)
11.745	11.738 (1.242)	134	1872880			0.00- 54.25	24.16
11.738	11.738 (1.241)	91	4741993			31.27- 91.27	61.18
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	7641602	200.000	195.85	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	3760947			19.05- 79.05	49.22
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	11.996 (1.269)	134	2387678	200.000	198.82	80.00- 120.00	100.00
12.003	11.996 (1.269)	105	11138250			437.55- 497.55	466.49
11.996	11.996 (1.268)	91	1685037			40.76- 100.76	70.57
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	10410880	200.000	197.06	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	2680251			0.00- 55.54	25.74
12.160	12.153 (1.285)	91	2223506			0.00- 51.48	21.36
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	5269323	200.000	196.50	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	3364893			33.21- 93.21	63.86
12.196	12.196 (1.289)	111	2179310			11.31- 71.31	41.36
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	5379837	200.000	198.98	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	3443156			33.90- 93.90	64.00
12.311	12.311 (1.301)	111	2132840			9.45- 69.45	39.65
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	7476818	200.000	201.60	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	1723549			0.00- 53.26	23.05
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	7391785	200.000	176.63	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	6481442			58.12- 118.12	87.68
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	2555712	200.000	190.54	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	8833770			314.79- 374.79	345.65
12.626	12.626 (1.335)	92	4753356			154.29- 214.29	185.99
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	5095250	200.000	195.20	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	3245004			33.84- 93.84	63.69
12.733	12.741 (1.346)	111	2166463			12.73- 72.73	42.52
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	3185412	200.000	200.77	80.00- 120.00	100.00(A)
13.600	13.600 (1.438)	75	2632735			52.48- 112.48	82.65
13.600	13.600 (1.438)	155	2459698			47.41- 107.41	77.22
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	8872524	247.000	272.11	80.00- 120.00	100.00(A)
13.801	13.801 (1.459)	43	7239358			52.87- 112.87	81.59
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	5062178	252.000	261.56	80.00- 120.00	100.00(A)
14.467	14.467 (1.529)	182	4827276			65.33- 125.33	95.36
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	3721949	257.000	273.25	80.00- 120.00	100.00(A)
14.581	14.582 (1.541)	223	2342743			33.17- 93.17	62.94
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	1265607	25.4000	25.587	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	157387			0.00- 42.88	12.44
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	4844896	266.000	283.17	80.00- 120.00	100.00(A)
15.068	15.069 (1.593)	182	4630533			65.75- 125.75	95.58
15.068	15.069 (1.593)	145	1724268			5.23- 65.23	35.59

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051910.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	146655	-7.65
108 1,4-Difluorobenze	597103	358262	835944	607214	1.69
153 Chlorobenzene-d5	587747	352648	822846	595090	1.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051910.d

Date : 19-MAY-2021 16:53

Client ID:

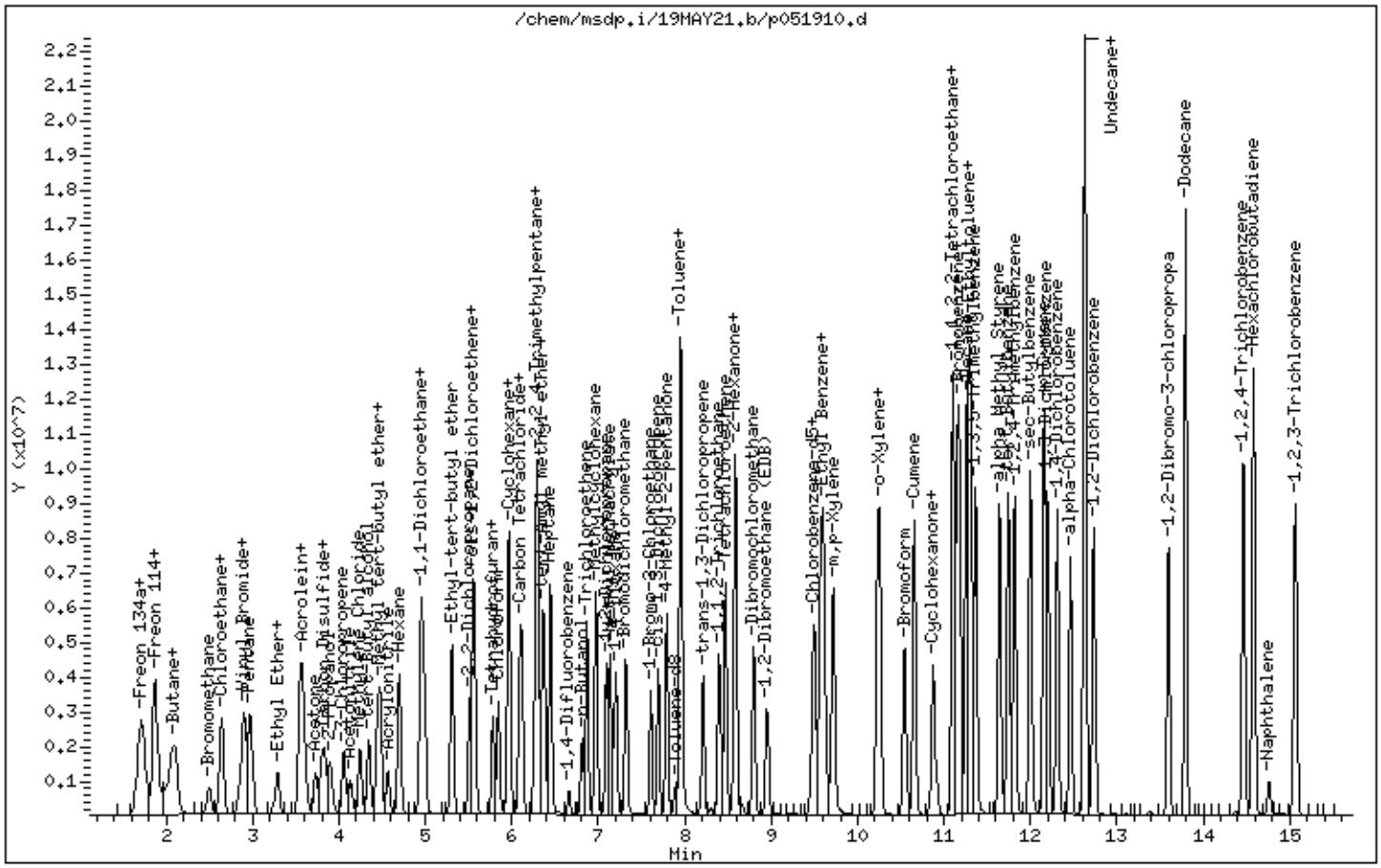
Instrument: msdp.i

Sample Info: 200mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051921.d
Lab Smp Id: ICAL Level 9
Inj Date : 19-MAY-2021 22:39
Operator : gh Inst ID: msdp.i
Smp Info : 200mL 3018-2013
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 22:39 Cal File: p051921.d
Als bottle: 3 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	153421	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	119993			48.23- 108.23	78.21
5.778	5.778 (1.000)	49	281111			150.57- 210.57	183.23
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	611809	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95212			0.00- 45.71	15.56
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	591968	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	325404			23.78- 83.78	54.97
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	400344	200.000	135.04	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	1105090			243.50- 303.50	276.04
1.591	1.590 (0.275)	64	95760			0.00- 54.06	23.92
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	527234	200.000	194.13	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.675	1.674 (0.290)	39	330737			34.98- 94.98	62.73
1.675	1.674 (0.290)	41	280905			25.22- 85.22	53.28
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	2932126	200.000	195.58	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	866027			0.00- 59.77	29.54
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	1894226	200.000	193.06	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	2580451			105.17- 165.17	136.23
40 Freon 123a					CAS #: 354-23-4		
3.386	3.385 (0.586)	117	1952332	200.000	203.39	80.00- 120.00	100.00(A)
3.378	3.378 (0.585)	67	2434248			104.69- 164.69	124.68
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	2762089	200.000	202.52	80.00- 120.00	100.00(A)
3.479	3.479 (0.602)	133	571513			0.00- 50.87	20.69
3.479	3.479 (0.602)	85	1881243			36.08- 96.08	68.11
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	3056516	200.000	208.28	80.00- 120.00	100.00(A)
4.073	4.073 (0.705)	68	1136453			6.76- 66.76	37.18
4.066	4.073 (0.704)	53	851928			0.00- 57.54	27.87
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	3612790	200.000	210.52	80.00- 120.00	100.00(A)
4.073	4.073 (0.705)	74	515897			0.00- 44.13	14.28
74 Chloroprene					CAS #: 126-99-8		
5.012	5.019 (0.867)	53	2991875	200.000	218.26	80.00- 120.00	100.00(A)
5.019	5.019 (0.869)	88	1176445			9.21- 69.21	39.32
5.012	5.019 (0.867)	50	709040			0.00- 54.25	23.70
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	399024	200.000	196.88	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	379166			63.23- 123.23	95.02
5.083	5.083 (0.880)	41	223562			24.74- 84.74	56.03
88 Methyl Acrylate					CAS #: 96-33-3		
5.621	5.620 (0.973)	55	3851199	200.000	213.88	80.00- 120.00	100.00(A)
5.621	5.620 (0.973)	85	434023			0.00- 41.28	11.27
5.621	5.620 (0.973)	58	316363			0.00- 38.22	8.21
103 Isobutanol					CAS #: 78-83-1		
6.237	6.244 (1.079)	39	424672	200.000	195.48	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.237	6.244 (1.079)	43	2091776			448.18- 508.18	492.56
6.237	6.244 (1.079)	41	1430737			299.99- 359.99	336.90
113 Ethyl acrylate					CAS #: 140-88-5		
6.939	6.938 (0.733)	99	269080	200.000	196.94	80.00- 120.00	100.00
6.939	6.938 (0.733)	45	496156			149.95- 209.95	184.39
6.939	6.938 (0.733)	55	5189842			1849.07-1909.07	1928.74
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	6094951	200.000	202.80	80.00- 120.00	100.00(A)
7.032	7.031 (0.743)	58	460764			0.00- 37.44	7.56
7.032	7.031 (0.743)	86	784528			0.00- 42.78	12.87
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	3022342	200.000	196.12	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	883323			0.00- 59.10	29.23
8.665	8.657 (1.301)	43	7358553			215.30- 275.30	243.47
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	2663540	200.000	202.39	80.00- 120.00	100.00(A)
9.460	9.460 (1.000)	117	591968			57.42- 117.42	22.22
9.596	9.596 (1.014)	95	938731			5.70- 65.70	35.24
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	4597454	200.000	204.09	80.00- 120.00	100.00(A)
10.362	10.362 (1.793)	43	7586394			136.03- 196.03	165.01
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	3445097	200.000	257.71	80.00- 120.00	100.00(A)
12.089	12.089 (1.278)	93	2389612			39.41- 99.41	69.36
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	2390402	200.000	197.18	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	7653013			295.02- 355.02	320.16
11.444	11.444 (1.210)	63	988176			11.82- 71.82	41.34
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	3473836	200.000	196.80	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	7726951			192.40- 252.40	222.43
12.318	12.318 (1.302)	77	848060			0.00- 54.69	24.41
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	1692084	200.000	243.84	80.00- 120.00	100.00(A)
12.963	12.970 (1.370)	117	2255610			102.99- 162.99	133.30

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	4961639	200.000	199.94	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	4745365			65.24- 125.24	95.64
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	5524082	200.000	225.60	80.00- 120.00	100.00(A)
10.599	10.599 (1.120)	77	1558779			0.00- 58.21	28.22
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	3935444	200.000	245.48	80.00- 120.00	100.00(A)
11.444	11.444 (1.210)	91	7653013			153.57- 213.57	194.46

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051921.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153421	-3.39
108 1,4-Difluorobenze	597103	358262	835944	611809	2.46
153 Chlorobenzene-d5	587747	352648	822846	591968	0.72

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051921.d

Date : 19-MAY-2021 22:39

Client ID:

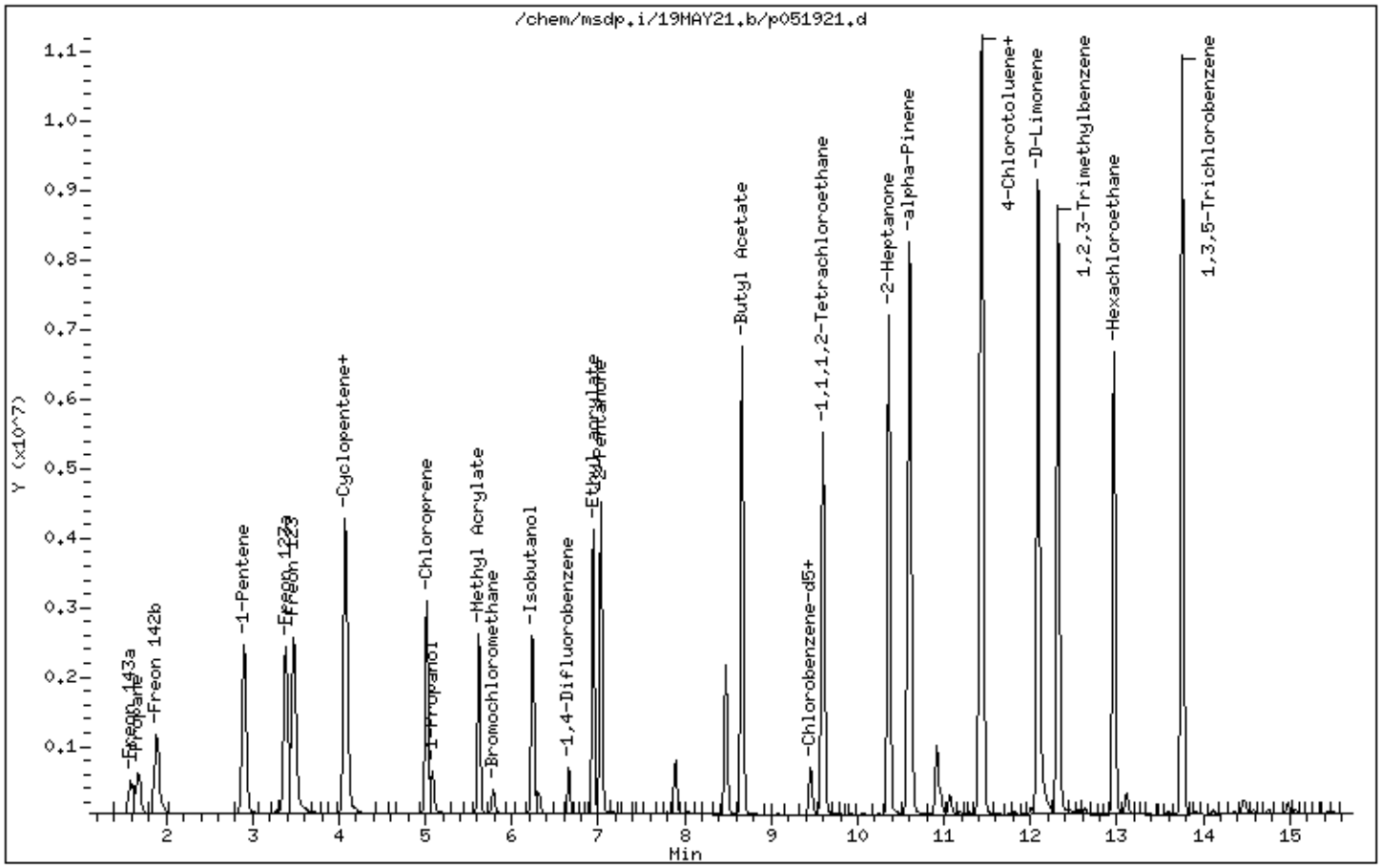
Instrument: msdp.i

Sample Info: 200mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062211.d
Lab Smp Id: ICAL Level 10
Inj Date : 22-JUN-2021 18:34
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2013
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:39 Cal File: 3062222.d
Als bottle: 5 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	253083	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	197908			48.46- 108.46	78.20
5.284	5.270 (1.000)	49	379733			120.39- 180.39	150.04
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	922710	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	143994			0.00- 45.52	15.61
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	877543	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	481707			25.46- 85.46	54.89
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	422301	100.000	99.752	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	1045065			217.09- 277.09	247.47
1.353	1.353 (0.256)	64	103510			0.00- 55.87	24.51
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.272)	43	220396	100.000	95.560	80.00- 120.00	100.00

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.437	1.422 (0.272)	39	154993			41.62- 101.62	70.32
1.437	1.422 (0.272)	41	124136			22.97- 82.97	56.32
13 Freon 142b					CAS #: 75-68-3		
1.605	1.604 (0.304)	65	1339634	100.000	99.508	80.00- 120.00	100.00
1.605	1.604 (0.304)	45	375942			0.00- 58.17	28.06
36 1-Pentene					CAS #: 109-67-1		
2.458	2.444 (0.465)	55	858577	100.000	100.42	80.00- 120.00	100.00
2.444	2.444 (0.463)	42	1104782			99.17- 159.17	128.68
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	995577	100.000	100.00	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	1327677			103.13- 163.13	133.36
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	1459229	100.000	99.939	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	313282			0.00- 51.81	21.47
2.976	2.976 (0.563)	85	961907			37.13- 97.13	65.92
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	1570286	100.000	101.03	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	593419			7.90- 67.90	37.79
3.549	3.549 (0.672)	53	385199			0.00- 54.87	24.53
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	1560707	100.000	97.439	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	264599			0.00- 47.15	16.95
74 Chloroprene					CAS #: 126-99-8		
4.515	4.515 (0.854)	53	1367166	100.000	100.80	80.00- 120.00	100.00
4.515	4.515 (0.854)	88	580254			12.33- 72.33	42.44
4.515	4.515 (0.854)	50	373283			0.00- 57.62	27.30
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	189442	100.000	90.344	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	160675			53.89- 113.89	84.81
4.613	4.613 (0.873)	41	100475			24.09- 84.09	53.04
88 Methyl Acrylate					CAS #: 96-33-3		
5.131	5.130 (0.971)	55	1620095	100.000	99.388	80.00- 120.00	100.00
5.131	5.130 (0.971)	85	212661			0.00- 43.24	13.13
5.131	5.130 (0.971)	58	139809			0.00- 38.83	8.63
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	225396	100.000	75.243	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	831274			327.69- 387.69	368.81
5.774	5.774 (1.093)	41	612193			237.56- 297.56	271.61
113 Ethyl acrylate					CAS #: 140-88-5		
6.460	6.474 (0.750)	99	128213	100.000	91.427	80.00- 120.00	100.00
6.460	6.460 (0.750)	45	194063			124.67- 184.67	151.36
6.460	6.460 (0.750)	55	2114618			1601.30-1661.30	1649.30
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	3065851	100.000	93.467	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	246156			0.00- 37.25	8.03
6.558	6.557 (0.761)	86	468245			0.00- 45.08	15.27
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	1130017	100.000	92.901	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	396522			5.16- 65.16	35.09
8.068	8.068 (1.305)	43	2753919			214.00- 274.00	243.71
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.012)	131	1276488	100.000	96.705	80.00- 120.00	100.00
8.712	8.712 (1.012)	117	862064			38.22- 98.22	67.53
8.712	8.712 (1.012)	95	481397			7.54- 67.54	37.71
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	1737838	100.000	93.545	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	2814385			133.36- 193.36	161.95
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.210)	68	1639621	100.000	102.84	80.00- 120.00	100.00
10.417	10.424 (1.210)	93	1183759			42.08- 102.08	72.20
186 4-Chlorotoluene					CAS #: 106-43-4		
9.966	9.973 (1.157)	126	1122466	100.000	97.688	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	3789856			305.94- 365.94	337.64
9.966	9.966 (1.157)	63	502773			15.44- 75.44	44.79
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.230)	120	1576820	100.000	100.11	80.00- 120.00	100.00
10.596	10.596 (1.230)	105	3678486			206.43- 266.43	233.29
10.596	10.596 (1.230)	77	434629			0.00- 58.29	27.56
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.289)	201	994424	100.000	103.42	80.00- 120.00	100.00
11.098	11.098 (1.289)	117	1375706			109.77- 169.77	138.34

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.728 (1.361)	180	2099856	100.000	100.16	80.00- 120.00	100.00
11.728	11.728 (1.362)	182	1998399			65.79- 125.79	95.17
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.088)	93	2674923	100.000	98.578	80.00- 120.00	100.00
9.371	9.371 (1.088)	77	798194			0.13- 60.13	29.84
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.155)	93	2112661	100.000	99.142	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	3789856			145.95- 205.95	179.39

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062211.d
Lab Smp Id: ICAL Level 10
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	253083	3.98
108 1,4-Difluorobenze	874076	524446	1223706	922710	5.56
153 Chlorobenzene-d5	831223	498734	1163712	877543	5.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062211.d

Date : 22-JUN-2021 18:34

Client ID:

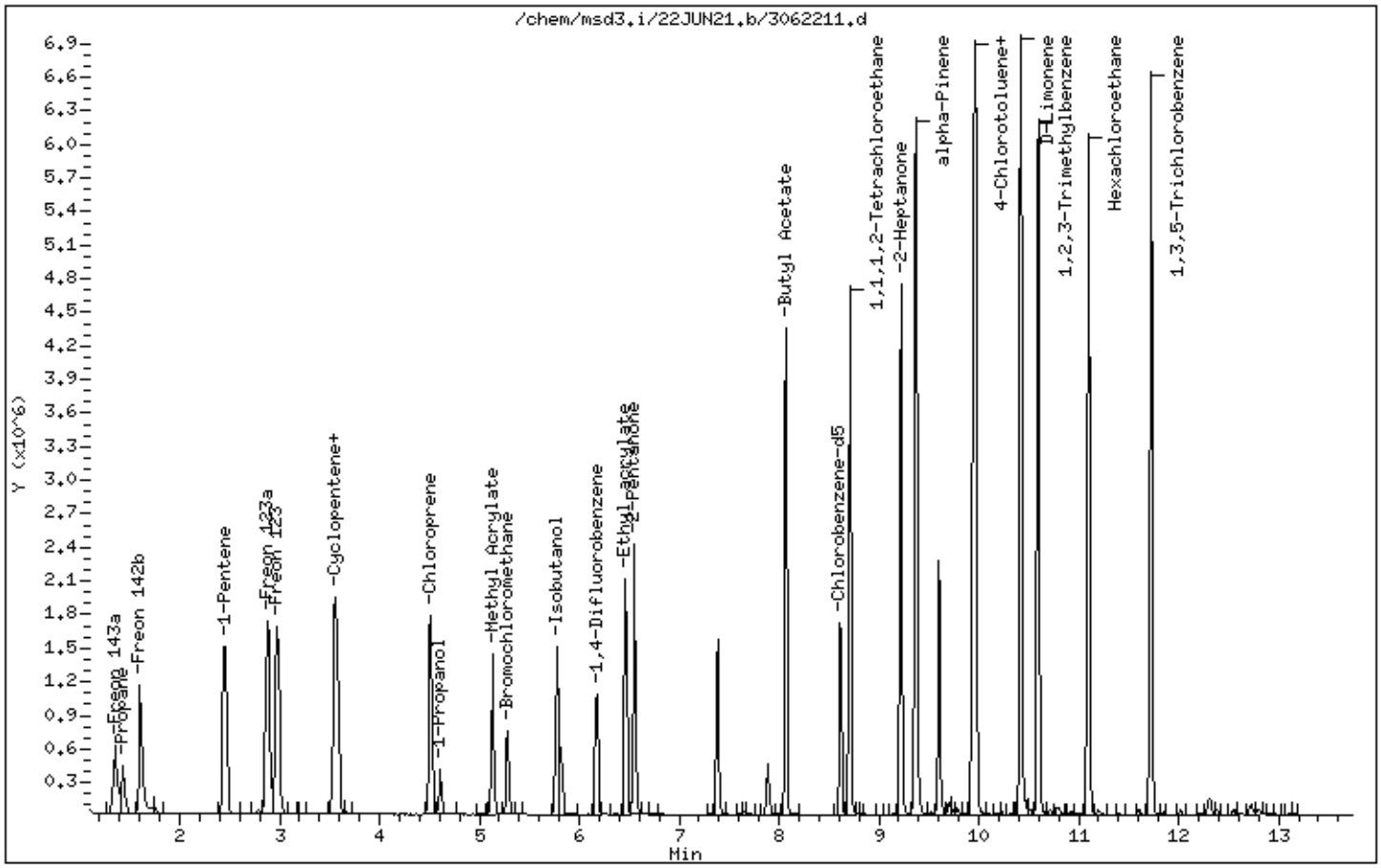
Instrument: msd3.i

Sample Info: 100mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062222.d
Lab Smp Id: ICAL Level 10
Inj Date : 22-JUN-2021 23:39
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2115
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:39 Cal File: 3062222.d
Als bottle: 2 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	613528	100.000	95.210	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	511616			51.82- 111.82	83.39
1.492	1.479 (0.282)	51	1594986			194.91- 254.91	259.97
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	636513	100.000	97.305	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	424408			35.61- 95.61	66.68
1.437	1.423 (0.272)	39	467122			42.66- 102.66	73.39
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.450	1.437 (0.274)	65	401492	100.000	94.157	80.00- 120.00	100.00
1.492	1.479 (0.282)	51	1594986			321.86- 381.86	397.26
1.450	1.437 (0.274)	47	291028			45.34- 105.34	72.49
8 Freon 12					CAS #: 75-71-8		
1.464	1.465 (0.277)	85	1734118	100.000	91.921	80.00- 120.00	100.00
1.464	1.465 (0.277)	87	560580			2.63- 62.63	32.33
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.492	1.479 (0.282)	67	185750	100.000	89.588	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.492	1.479 (0.282)	51	1594986			719.76- 779.76	858.67
10 Freon 114					CAS #: 76-14-2		
1.576	1.562 (0.298)	135	1318387	100.000	94.316	80.00- 120.00	100.00
1.576	1.562 (0.298)	137	422419			2.12- 62.12	32.04
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	1436676	100.000	97.717	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	471194			2.44- 62.44	32.80
1.576	1.576 (0.298)	58	49177			0.00- 33.26	3.42
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	737502	100.000	94.057	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	236973			2.41- 62.41	32.13
18 Butane					CAS #: 106-97-8		
1.716	1.702 (0.325)	58	156059	100.000	84.277	80.00- 120.00	100.00
1.702	1.702 (0.322)	43	1166146			727.41- 787.41	747.25
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	713856	100.000	85.078	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	217647			1.28- 61.28	30.49
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	619808	100.000	80.602	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	613422			69.23- 129.23	98.97
24 Bromomethane					CAS #: 74-83-9		
2.108	2.094 (0.399)	94	619825	100.000	93.404	80.00- 120.00	100.00
2.108	2.094 (0.399)	96	581336			62.78- 122.78	93.79
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	373173	100.000	94.745	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	116387			1.44- 61.44	31.19
2.206	2.206 (0.417)	49	119717			4.12- 64.12	32.08
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	956298	100.000	94.945	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	662049			38.82- 98.82	69.23
32 Vinyl Bromide					CAS #: 593-60-2		
2.402	2.388 (0.455)	106	674945	100.000	93.548	80.00- 120.00	100.00
2.402	2.388 (0.455)	108	624999			63.14- 123.14	92.60
33 Freon 11					CAS #: 75-69-4		
2.444	2.430 (0.462)	101	1856957	100.000	93.032	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.444	2.430 (0.462)	103	1205290			35.12- 95.12	64.91
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	1524106	100.000	95.517	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	465350			0.74- 60.74	30.53
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	1523095	100.000	94.916	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	243603			0.00- 45.97	15.99
2.500	2.500 (0.473)	72	127162			0.00- 38.10	8.35
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	326353	100.000	90.709	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	579526			147.68- 207.68	177.58
2.780	2.780 (0.526)	45	779526			206.40- 266.40	238.86
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	138933	100.000	86.040	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	778648			523.01- 583.01	560.45
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	264085	100.000	98.552	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	363405			110.33- 170.33	137.61
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	1250959	100.000	91.678	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	798630			33.72- 93.72	63.84
3.032	3.032 (0.574)	101	1511159			89.67- 149.67	120.80
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	708836	100.000	86.246	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	448778			33.39- 93.39	63.31
3.074	3.074 (0.582)	61	1363659			163.82- 223.82	192.38
47 Acetone					CAS #: 67-64-1		
3.213	3.213 (0.608)	58	418004	100.000	92.052	80.00- 120.00	100.00
3.213	3.213 (0.608)	43	1359990			299.66- 359.66	325.35
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.624)	76	1958428	100.000	95.774	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.619)	142	1769537	100.000	100.08	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	783525			14.58- 74.58	44.28

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.409	3.395 (0.645)	45	1597988	100.000	97.850	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	297202			0.00- 48.61	18.60
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	324026	100.000	92.040	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	1158928			338.06- 398.06	357.67
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	683875	100.000	95.639	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	358324			21.81- 81.81	52.40
3.633	3.633 (0.688)	38	82419			0.00- 41.86	12.05
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	1025987	100.000	94.407	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	622839			30.77- 90.77	60.71
3.731	3.717 (0.706)	51	315351			1.39- 61.39	30.74
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	1954601	100.000	95.354	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	411903			0.00- 51.05	21.07
3.857	3.857 (0.730)	57	206768			0.00- 41.68	10.58
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	2039161	100.000	92.167	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	612141			0.00- 58.86	30.02
3.941	3.941 (0.746)	41	551449			0.00- 57.27	27.04
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	476616	100.000	86.173	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	1275368			244.59- 304.59	267.59
3.969	3.969 (0.751)	96	745512			129.84- 189.84	156.42
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	557795	100.000	84.032	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	664587			88.50- 148.50	119.15
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	1427094	100.000	95.160	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	899519			32.99- 92.99	63.03
4.179	4.179 (0.791)	86	172439			0.00- 42.56	12.08
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	1419983	100.000	92.070	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	436496			0.76- 60.76	30.74

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether						CAS #: 108-20-3	
	4.445	4.445 (0.841)	45	3060328	100.000	96.696	80.00- 120.00	100.00
	4.445	4.445 (0.841)	87	670085			0.00- 51.37	21.90
	4.445	4.445 (0.841)	59	344177			0.00- 41.09	11.25
	73 Vinyl Acetate						CAS #: 108-05-4	
	4.501	4.501 (0.852)	86	182859	100.000	96.437	80.00- 120.00	100.00
	4.501	4.501 (0.852)	43	2614522			1391.63-1451.63	1429.80
	79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
	4.809	4.809 (0.910)	59	2942184	100.000	96.293	80.00- 120.00	100.00
	4.809	4.809 (0.910)	87	985529			3.22- 63.22	33.50
	4.809	4.809 (0.910)	41	533952			0.00- 48.12	18.15
	84 2,2-Dichloropropane						CAS #: 594-20-7	
	5.004	5.004 (0.947)	77	1360664	100.000	94.702	80.00- 120.00	100.00
	5.004	5.004 (0.947)	79	444158			2.00- 62.00	32.64
	5.004	5.004 (0.947)	97	317666			0.00- 53.36	23.35
	85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
	5.046	5.046 (0.955)	98	491586	100.000	89.660	80.00- 120.00	100.00
	5.046	5.046 (0.955)	96	761611			127.22- 187.22	154.93
	5.046	5.046 (0.955)	61	1517092			283.85- 343.85	308.61
	86 2-Butanone						CAS #: 78-93-3	
	5.060	5.074 (0.958)	72	370355	100.000	96.708	80.00- 120.00	100.00
	5.074	5.074 (0.960)	43	3955007			1055.75-1115.75	1067.90
	5.060	5.074 (0.958)	57	149566			10.59- 70.59	40.38
	87 Ethyl Acetate						CAS #: 141-78-6	
	5.088	5.088 (0.963)	45	316451	100.000	100.23	80.00- 120.00	100.00
	5.046	5.046 (0.955)	61	1517092			450.31- 510.31	479.41
	5.088	5.088 (0.963)	70	192551			30.42- 90.42	60.85
	89 Tetrahydrofuran						CAS #: 109-99-9	
	5.270	5.270 (0.997)	42	1035981	100.000	95.933	80.00- 120.00	100.00
	5.270	5.270 (0.997)	71	333878			2.92- 62.92	32.23
	5.270	5.270 (0.997)	72	344828			3.54- 63.54	33.29
*	90 Bromochloromethane						CAS #: 74-97-5	
	5.284	5.284 (1.000)	130	270814	25.0000		80.00- 120.00	100.00
	5.284	5.284 (1.000)	128	210159			48.46- 108.46	77.60
	5.270	5.270 (1.000)	49	408222			120.39- 180.39	150.74
	92 Chloroform						CAS #: 67-66-3	
	5.340	5.340 (1.011)	83	1579112	100.000	93.002	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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92 Chloroform (continued)							
5.340	5.340 (1.011)	85	1020939			34.71- 94.71	64.65
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	976098	100.000	90.950	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	1468324			120.40- 180.40	150.43
5.438	5.438 (1.029)	41	805074			54.20- 114.20	82.48
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	1681907	100.000	88.126	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	1071661			33.76- 93.76	63.72
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	1707419	100.000	97.135	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	1780267			73.68- 133.68	104.27
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	429711	100.000	97.363	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	1116661			231.09- 291.09	259.86
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	4500575	100.000	95.965	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	1406154			1.12- 61.12	31.24
5.774	5.774 (1.093)	41	1217054			0.00- 57.49	27.04
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	2110049	100.000	95.345	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	493874			0.00- 53.80	23.41
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	365334	25.0000	24.514	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	193990			21.66- 81.66	53.10
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	567701	100.000	96.206	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	2251162			365.20- 425.20	396.54
5.858	5.858 (0.948)	55	682011			91.31- 151.31	120.14
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	1195487	100.000	93.828	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	370222			1.20- 61.20	30.97
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	785763	100.000	90.143	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	1642483			179.02- 239.02	209.03
5.942	5.942 (0.962)	57	909991			84.85- 144.85	115.81

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	969803	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	151552			0.00- 45.52	15.63
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	700436	100.000	98.744	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	494892			40.21- 100.21	70.65
6.348	6.348 (1.027)	43	386523			25.00- 85.00	55.18
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	1049365	100.000	94.516	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	1108357			74.96- 134.96	105.62
6.362	6.362 (1.029)	97	680678			34.80- 94.80	64.87
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.585	6.586 (1.066)	63	391457	100.000	76.309	80.00- 120.00	100.00
6.585	6.586 (1.066)	62	250711			52.03- 112.03	64.05
6.585	6.586 (1.066)	41	383309			79.97- 139.97	97.92
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	834771	100.000	94.078	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	1363486			134.02- 194.02	163.34
6.664	6.664 (0.774)	100	333587			9.54- 69.54	39.96
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.699 (1.084)	88	540204	100.000	96.360	80.00- 120.00	100.00
6.692	6.699 (1.083)	58	467204			55.80- 115.80	86.49
6.692	6.699 (1.083)	57	199887			8.68- 68.68	37.00
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	960834	100.000	97.231	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	929216			67.27- 127.27	96.71
6.714	6.721 (0.780)	95	768363			50.92- 110.92	79.97
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	1724424	100.000	92.713	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	1104118			34.31- 94.31	64.03
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	1346503	100.000	97.401	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	430744			1.42- 61.42	31.99
7.208	7.208 (1.166)	39	915435			38.56- 98.56	67.99
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	1349887	100.000	90.923	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	614901			15.60- 75.60	45.55

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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127 Methylcyclohexane (continued)							
6.460	6.460 (1.045)	55	1514744			78.53- 138.53	112.21
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.315	7.316 (1.184)	58	860374	100.000	91.530	80.00- 120.00	100.00
7.315	7.316 (1.184)	43	2250859			231.30- 291.30	261.61
7.315	7.316 (1.184)	85	329277			8.94- 68.94	38.27
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	1005757	25.0000	25.179	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	114191			0.00- 41.47	11.35
7.387	7.387 (1.195)	100	672050			36.47- 96.47	66.82
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	2815495	100.000	94.814	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	1643396			28.30- 88.30	58.37
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	941260	100.000	95.273	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	918231			67.11- 127.11	97.55
7.444	7.444 (1.205)	43	2265956			214.21- 274.21	240.74
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	1313517	100.000	96.729	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	417074			2.15- 62.15	31.75
7.688	7.688 (0.893)	39	852170			36.09- 96.09	64.88
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	978950	100.000	93.739	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	608344			31.62- 91.62	62.14
7.846	7.846 (0.911)	83	846723			56.35- 116.35	86.49
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.915)	166	1395971	100.000	96.647	80.00- 120.00	100.00
7.881	7.881 (0.915)	129	1092821			48.71- 108.71	78.28
7.881	7.881 (0.915)	131	1058130			46.55- 106.55	75.80
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	1182682	100.000	98.592	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	2214530			157.91- 217.91	187.25
8.003	8.003 (0.929)	100	213311			0.00- 47.86	18.04
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	1336647	100.000	94.344	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	1510339			82.96- 142.96	112.99
7.989	7.989 (1.293)	78	439394			2.55- 62.55	32.87

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	1948212	100.000	98.333	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	1522204			47.77- 107.77	78.13
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.960)	107	1576705	100.000	97.220	80.00- 120.00	100.00
8.268	8.268 (0.960)	109	1483694			64.60- 124.60	94.10
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.151)	63	1772704	100.000	98.763	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	547792			0.95- 60.95	30.90
7.115	7.122 (1.151)	144	182664			0.00- 40.45	10.30
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	921990	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	511597			25.46- 85.46	55.49
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	2352628	100.000	93.362	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	762481			2.13- 62.13	32.41
8.641	8.641 (1.003)	77	1324984			26.35- 86.35	56.32
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.008)	106	1209107	100.000	95.957	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	3757569			282.48- 342.48	310.77
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.011)	43	2336438	100.000	95.666	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	2117667			59.52- 119.52	90.64
8.705	8.705 (1.011)	85	691015			0.00- 59.76	29.58
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	1489255	100.000	95.002	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	2985822			171.36- 231.36	200.49
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	1431351	100.000	96.181	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	3022397			179.99- 239.99	211.16
165 Styrene						CAS #: 100-42-5	
9.142	9.149 (1.062)	104	2491307	100.000	96.625	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	1233241			19.09- 79.09	49.50
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.086)	173	1876827	100.000	99.903	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	970844			21.45- 81.45	51.73

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.093)	105	4441141	100.000	94.389	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	1213205			0.00- 56.99	27.32
9.407	9.407 (1.092)	51	520168			0.00- 41.77	11.71
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	1357093	100.000	91.653	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	519078			9.22- 69.22	38.25
9.579	9.579 (1.112)	42	966302			42.60- 102.60	71.20
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.600	9.601 (1.115)	174	617978	25.0000	25.340	80.00- 120.00	100.00
9.600	9.601 (1.115)	95	766815			93.06- 153.06	124.08
9.600	9.601 (1.115)	176	568534			62.87- 122.87	92.00
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	2172510	100.000	93.129	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	1409525			34.35- 94.35	64.88
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.131)	156	1422294	100.000	97.240	80.00- 120.00	100.00
9.729	9.737 (1.130)	158	1378995			67.29- 127.29	96.96
9.729	9.729 (1.130)	77	2306309			132.41- 192.41	162.15
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	5235902	100.000	95.372	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	1259252			0.00- 53.77	24.05
9.758	9.758 (1.133)	105	201142			0.00- 33.81	3.84
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	664921	100.000	94.622	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	2103413			285.00- 345.00	316.34
9.787	9.787 (1.136)	61	561893			54.06- 114.06	84.51
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	525143	100.000	94.441	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	264898			21.19- 81.19	50.44
9.787	9.787 (1.136)	75	2103413			372.45- 432.45	400.54
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	2704752	100.000	95.281	80.00- 120.00	100.00
9.815	9.808 (1.140)	71	909461			4.13- 64.13	33.62
9.815	9.815 (1.140)	142	126798			0.00- 34.73	4.69
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	1347972	100.000	94.725	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
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183 4-Ethyltoluene (continued)								
9.851	9.851 (1.144)	105	4384263				296.79- 356.79	325.25
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.146)	126	1110440	100.000		96.036	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	4029584				336.29- 396.29	362.88
9.873	9.873 (1.146)	65	638776				38.83- 98.83	57.52
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.150)	120	1891863	100.000		94.653	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	3870232				176.40- 236.40	204.57
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.173)	118	2021719	100.000		98.763	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	1137074				26.64- 86.64	56.24
189 tert-Butylbenzene						CAS #: 98-06-6		
10.174	10.174 (1.181)	119	3477934	100.000		94.572	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	876103				0.00- 54.82	25.19
10.174	10.174 (1.181)	91	2342532				36.92- 96.92	67.35
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.187)	105	3747431	100.000		95.082	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	1759100				16.58- 76.58	46.94
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.203)	134	1142132	100.000		96.152	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	5423689				451.53- 511.53	474.87
10.353	10.353 (1.202)	91	862410				46.48- 106.48	75.51
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.215)	119	4798506	100.000		96.464	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	1298497				0.00- 56.79	27.06
10.467	10.467 (1.215)	91	1164811				0.00- 54.04	24.27
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.221)	146	2608452	100.000		97.415	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	1662791				33.53- 93.53	63.75
10.517	10.517 (1.221)	111	1080794				11.05- 71.05	41.43
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.230)	146	2651837	100.000		96.147	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	1689235				33.47- 93.47	63.70
10.596	10.596 (1.230)	111	1056200				9.65- 69.65	39.83
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.244)	91	3738875	100.000		98.594	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	834770			0.00- 52.04	22.33
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	3222859	100.000	96.345	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	2761339			55.86- 115.86	85.68
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	1249319	100.000	96.862	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	4460893			331.99- 391.99	357.07
10.818	10.818 (1.256)	92	2360311			161.01- 221.01	188.93
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.918	10.926 (1.268)	146	2503101	100.000	96.737	80.00- 120.00	100.00
10.926	10.926 (1.269)	148	1595663			33.23- 93.23	63.75
10.918	10.918 (1.268)	111	1066702			12.36- 72.36	42.62
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	1470618	100.000	98.018	80.00- 120.00	100.00
11.606	11.599 (1.348)	75	1299661			58.96- 118.96	88.38
11.606	11.606 (1.348)	155	1132957			47.82- 107.82	77.04
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	3458257	123.600	122.26	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	2784562			50.85- 110.85	80.52
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	2232617	125.900	121.48	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	2139821			65.40- 125.40	95.84
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	1709087	128.700	123.11	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	1090155			33.70- 93.70	63.79
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	596371	12.7000	10.626	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	78294			0.00- 43.10	13.13
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.487)	180	2153358	133.100	128.04	80.00- 120.00	100.00
12.802	12.802 (1.487)	182	2052941			65.67- 125.67	95.34
12.802	12.802 (1.487)	145	775566			6.02- 66.02	36.02

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062222.d
Lab Smp Id: ICAL Level 10
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	270814	11.26
108 1,4-Difluorobenze	874076	524446	1223706	969803	10.95
153 Chlorobenzene-d5	831223	498734	1163712	921990	10.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	-0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062222.d

Date : 22-JUN-2021 23:39

Client ID:

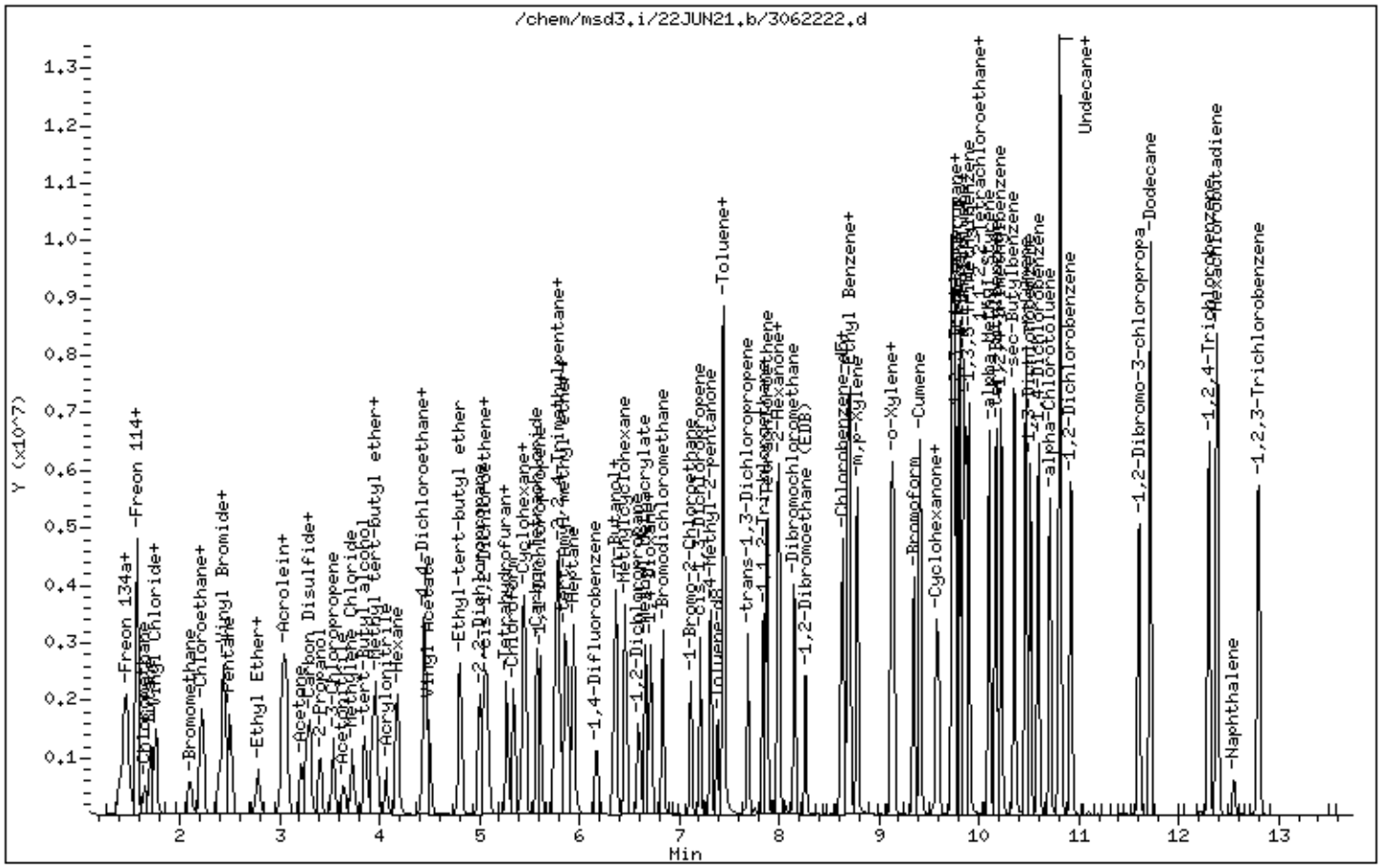
Instrument: msd3.i

Sample Info: 100mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051924.d
Lab Smp Id: ICAL Level 10
Inj Date : 20-MAY-2021 00:05
Operator : gh Inst ID: msdp.i
Smp Info : 20mL 3018-2045
Misc Info : 0.5ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 20-MAY-2021 00:05 Cal File: p051924.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level2.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	163846	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127369			48.23- 108.23	77.74
5.771	5.778 (1.000)	49	298690			150.57- 210.57	182.30
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	600718	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95422			0.00- 45.71	15.88
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	590361	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	322116			23.78- 83.78	54.56
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	214241	25.0000	23.693	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	108928			27.21- 87.21	50.84
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	647924	25.0000	24.838	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	71814			0.00- 40.44	11.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	419509			34.95- 94.95	64.75
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	377731	25.0000	24.917	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	484972			95.92- 155.92	128.39
10.921	10.921 (1.154)	176	368139			66.89- 126.89	97.46
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	7389	0.50000	0.5028	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	2098			2.37- 62.37	28.39
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	5833	0.50000	0.4044	80.00- 120.00	100.00(a)
1.842	1.856 (0.319)	137	1678			2.30- 62.30	28.77
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	5135	0.50000	0.5007	80.00- 120.00	100.00
2.053	2.068 (0.355)	64	2485			0.00- 59.69	48.39
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	3780	0.50000	0.4582	80.00- 120.00	100.00(a)
2.082	2.089 (0.360)	39	3849			52.37- 112.37	101.83
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	7721	0.50000	0.4944	80.00- 120.00	100.00(a)
2.877	2.884 (0.498)	103	5435			34.72- 94.72	70.39
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	5639	0.50000	0.4860	80.00- 120.00	100.00(a)
3.550	3.550 (0.614)	153	3997			33.56- 93.56	70.88
3.543	3.550 (0.613)	101	6873			89.21- 149.21	121.88
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	4090	0.50000	0.5901	80.00- 120.00	100.00
3.572	3.579 (0.618)	98	2595			34.02- 94.02	63.45
3.579	3.579 (0.619)	61	6008			168.77- 228.77	146.89
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	2538	0.50000	0.5480	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	5211			255.84- 315.84	205.32
4.474	4.482 (0.774)	96	4298			127.59- 187.59	169.35
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	3141	0.50000	0.4872	80.00- 120.00	100.00(a)
4.553	4.560 (0.788)	53	3388			88.05- 148.05	107.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
67 Hexane					CAS #: 110-54-3		
4.689	4.697 (0.812)	57	8492	0.50000	0.5261	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	5530			37.52- 97.52	65.12
4.696	4.697 (0.813)	86	877			0.00- 41.48	10.33
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	5960	0.50000	0.4295	80.00- 120.00	100.00(a)
4.961	4.962 (0.859)	65	2369			0.00- 59.70	39.75
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.542	5.549 (0.959)	98	2716	0.50000	0.5651	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	3855			125.75- 185.75	141.94
5.542	5.549 (0.959)	61	7686			332.40- 392.40	282.99
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	5568	0.50000	0.4521	80.00- 120.00	100.00(a)
5.778	5.771 (1.000)	71	1335			0.00- 55.82	23.98
5.778	5.771 (1.000)	72	1481			0.00- 57.59	26.60
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	6763	0.50000	0.4744	80.00- 120.00	100.00(a)
5.835	5.835 (1.010)	85	4617			34.70- 94.70	68.27
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	5877	0.50000	0.5702	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	9323			142.57- 202.57	158.64
5.957	5.957 (1.031)	41	5136			62.09- 122.09	87.39
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	8556	0.50000	0.5313	80.00- 120.00	100.00
5.964	5.972 (1.032)	99	5329			34.02- 94.02	62.28
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	6718	0.50000	0.4448	80.00- 120.00	100.00(a)
6.086	6.086 (1.053)	117	6855			70.64- 130.64	102.04
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	27567	0.50000	0.4914	80.00- 120.00	100.00(a)
6.279	6.280 (1.087)	56	8468			2.24- 62.24	30.72
6.279	6.280 (1.087)	41	9487			0.00- 54.39	34.41
102 Benzene					CAS #: 71-43-2		
6.294	6.301 (0.945)	78	9954	0.50000	0.5021	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	2384			0.00- 52.90	23.95
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	4608	0.50000	0.4467	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
106 1,2-Dichloroethane (continued)							
6.380	6.380 (0.958)	64	1942			0.79- 60.79	42.14
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	4203	0.50000	0.5352	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	9247			226.53- 286.53	220.01
6.444	6.444 (0.968)	57	5163			100.85- 160.85	122.84
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	4879	0.50000	0.5072	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	4525			76.29- 136.29	92.74
6.867	6.867 (1.031)	97	2893			33.63- 93.63	59.29
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	5364	0.50000	0.5278	80.00- 120.00	100.00
7.096	7.089 (1.066)	62	3356			41.07- 101.07	62.57
7.096	7.089 (1.066)	41	2982			22.53- 82.53	55.59
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.204 (0.762)	174	3904	0.50000	0.4456	80.00- 120.00	100.00(a)
7.204	7.204 (0.761)	93	4176			60.09- 120.09	106.97
7.204	7.204 (0.761)	95	4289			48.38- 108.38	109.86
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	6924	0.50000	0.4642	80.00- 120.00	100.00(a)
7.318	7.318 (1.099)	85	4799			35.24- 95.24	69.31
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	6237	0.50000	0.4950	80.00- 120.00	100.00(a)
7.691	7.691 (1.155)	77	2224			2.42- 62.42	35.66
7.698	7.691 (1.156)	39	4083			37.16- 97.16	65.46
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	7108	0.50000	0.5106	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	3734			15.78- 75.78	52.53
6.967	6.974 (1.046)	55	8514			84.64- 144.64	119.78
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	5902	0.50000	0.5719	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	15074			242.35- 302.35	255.40
7.798	7.791 (1.171)	85	2388			3.24- 63.24	40.46
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	13680	0.50000	0.5002	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	7825			28.38- 88.38	57.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	6357	0.50000	0.5451	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	5775			56.00- 116.00	90.84
7.941	7.949 (1.193)	43	15538			228.66- 288.66	244.42
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	5304	0.50000	0.4565	80.00- 120.00	100.00(a)
8.213	8.214 (0.868)	77	3481			1.24- 61.24	65.63
8.213	8.214 (0.868)	39	3904			34.11- 94.11	73.60
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.393	8.400 (0.887)	97	5286	0.50000	0.5505	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	2785			31.96- 91.96	52.69
8.400	8.400 (0.888)	83	4153			52.93- 112.93	78.57
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	5918	0.50000	0.4398	80.00- 120.00	100.00(a)
8.464	8.464 (0.895)	129	5123			47.84- 107.84	86.57
8.464	8.464 (0.895)	131	4693			45.29- 105.29	79.30
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	5918	0.50000	0.4556	80.00- 120.00	100.00(a)
8.579	8.579 (1.288)	41	8417			94.99- 154.99	142.23
8.579	8.579 (1.288)	78	2554			2.05- 62.05	43.16
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	8255	0.50000	0.4601	80.00- 120.00	100.00(a)
8.794	8.801 (0.930)	127	6763			47.45- 107.45	81.93
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	7230	0.50000	0.4694	80.00- 120.00	100.00(a)
8.951	8.951 (0.946)	109	7175			64.21- 124.21	99.24
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	11778	0.50000	0.5024	80.00- 120.00	100.00
9.489	9.496 (1.003)	114	3810			1.74- 61.74	32.35
9.489	9.496 (1.003)	77	11483			25.04- 85.04	97.50
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	6206	0.50000	0.5063	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	18714			273.74- 333.74	301.55
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	8198	0.50000	0.5340	80.00- 120.00	100.00
9.711	9.718 (1.026)	91	15993			163.73- 223.73	195.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	7282	0.50000	0.4950	80.00- 120.00	100.00(a)
10.226	10.226 (1.081)	91	15872			177.45- 237.45	217.96
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	13110	0.50000	0.5212	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	6253			17.88- 77.88	47.70
167 Bromoform					CAS #: 75-25-2		
10.549	10.542 (1.115)	173	8542	0.50000	0.4830	80.00- 120.00	100.00(a)
10.549	10.542 (1.115)	171	4517			21.25- 81.25	52.88
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	23217	0.50000	0.5024	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	6594			0.00- 58.52	28.40
10.649	10.649 (1.126)	51	3671			0.00- 43.00	15.81
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	11440	0.50000	0.5072	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	7316			35.20- 95.20	63.95
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	6965	0.50000	0.5084	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	26590			366.49- 426.49	381.77
11.150	11.150 (1.179)	105	910			0.00- 44.85	13.07
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	4008	0.50000	0.5576	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	11313			280.55- 340.55	282.26
11.100	11.100 (1.173)	61	1733			15.49- 75.49	43.24
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	8376	0.50000	0.5622	80.00- 120.00	100.00
11.286	11.287 (1.193)	105	23951			284.55- 344.55	285.95
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	6216	0.50000	0.5328	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	20231			315.17- 375.17	325.47
11.294	11.301 (1.194)	65	3746			21.55- 81.55	60.26
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.358	11.365 (1.201)	120	10383	0.50000	0.5061	80.00- 120.00	100.00
11.358	11.365 (1.201)	105	18974			164.93- 224.93	182.74
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	9624	0.50000	0.4722	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
188 alpha Methyl Styrene (continued)							
11.645	11.645 (1.231)	103	5344			25.30- 85.30	55.53
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	19402	0.50000	0.5011	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	9573			19.05- 79.05	49.34
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	6002	0.50000	0.5033	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	29055			437.55- 497.55	484.09
11.996	11.996 (1.268)	91	4721			40.76- 100.76	78.66
194 p-Cymene					CAS #: 99-87-6		
12.153	12.160 (1.285)	119	27397	0.50000	0.5198	80.00- 120.00	100.00(a)
12.160	12.160 (1.285)	134	6978			0.00- 55.54	25.47
12.153	12.153 (1.285)	91	6676			0.00- 51.48	24.37
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	12900	0.50000	0.4867	80.00- 120.00	100.00(a)
12.203	12.196 (1.290)	148	8737			33.21- 93.21	67.73
12.203	12.196 (1.290)	111	5935			11.31- 71.31	46.01
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	13252	0.50000	0.4948	80.00- 120.00	100.00(a)
12.311	12.311 (1.301)	148	8912			33.90- 93.90	67.25
12.311	12.311 (1.301)	111	5613			9.45- 69.45	42.36
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	18333	0.50000	0.4985	80.00- 120.00	100.00(a)
12.461	12.461 (1.317)	126	4052			0.00- 53.26	22.10
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	6974	0.50000	0.5210	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	24024			314.79- 374.79	344.48
12.626	12.626 (1.335)	92	13531			154.29- 214.29	194.02
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	13316	0.50000	0.5124	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	8543			33.84- 93.84	64.16
12.733	12.741 (1.346)	111	6040			12.73- 72.73	45.36
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	22758	0.61800	0.6916	80.00- 120.00	100.00(a)
13.801	13.801 (1.459)	43	20608			52.87- 112.87	90.55

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051924.d
Lab Smp Id: ICAL Level 10
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	163846	3.17
108 1,4-Difluorobenze	597103	358262	835944	600718	0.61
153 Chlorobenzene-d5	587747	352648	822846	590361	0.44

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051924.d

Page 1

Date : 20-MAY-2021 00:05

Client ID:

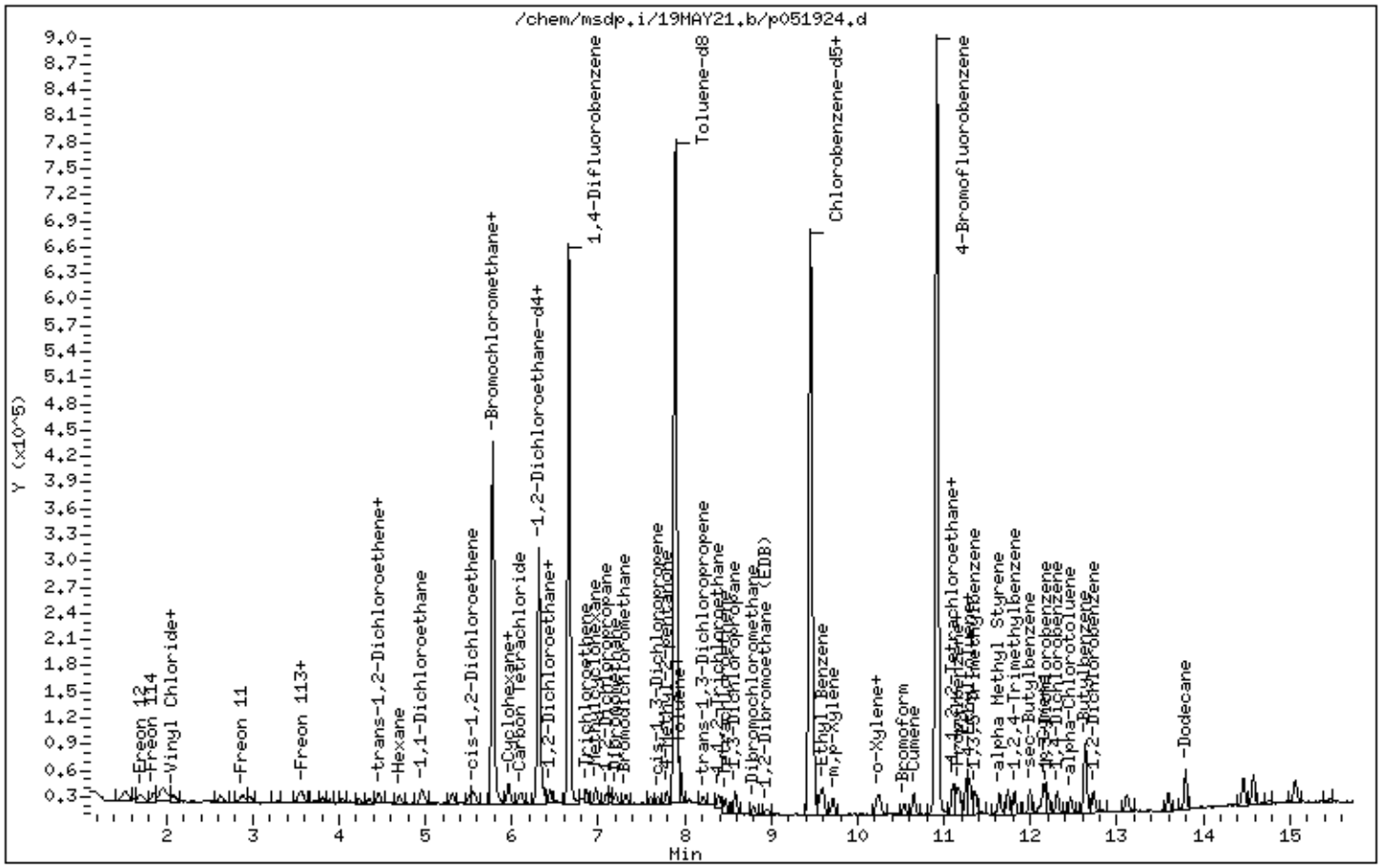
Instrument: msdp.i

Sample Info: 20mL 3018-2045

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062212.d
Lab Smp Id: ICAL Level 11
Inj Date : 22-JUN-2021 19:03
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2013
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 5 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	238686	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	184595			48.46- 108.46	77.34
5.284	5.270 (1.000)	49	359400			120.39- 180.39	150.57
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	855175	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	133937			0.00- 45.52	15.66
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	819732	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	458641			25.46- 85.46	55.95
3 Freon 143a					CAS #: 420-46-2		
1.367	1.353 (0.259)	65	736095	200.000	184.36	80.00- 120.00	100.00
1.367	1.353 (0.259)	69	1817010			217.09- 277.09	246.84
1.367	1.353 (0.259)	64	176211			0.00- 55.87	23.94
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.272)	43	408916	200.000	187.99	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
6 Propane (continued)							
1.437	1.422 (0.272)	39	284533			41.62- 101.62	69.58
1.437	1.422 (0.272)	41	226156			22.97- 82.97	55.31
13 Freon 142b					CAS #: 75-68-3		
1.604	1.604 (0.304)	65	2437918	200.000	192.01	80.00- 120.00	100.00
1.604	1.604 (0.304)	45	682416			0.00- 58.17	27.99
36 1-Pentene					CAS #: 109-67-1		
2.458	2.444 (0.465)	55	1580097	200.000	195.96	80.00- 120.00	100.00
2.458	2.444 (0.465)	42	2019285			99.17- 159.17	127.80
40 Freon 123a					CAS #: 354-23-4		
2.892	2.878 (0.547)	117	1818166	200.000	193.65	80.00- 120.00	100.00
2.892	2.878 (0.547)	67	2459121			103.13- 163.13	135.25
41 Freon 123					CAS #: 306-83-2		
2.990	2.976 (0.566)	83	2673564	200.000	194.15	80.00- 120.00	100.00
2.990	2.976 (0.566)	133	572215			0.00- 51.81	21.40
2.990	2.976 (0.566)	85	1774129			37.13- 97.13	66.36
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	2877324	200.000	196.30	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	1088968			7.90- 67.90	37.85
3.549	3.549 (0.672)	53	712030			0.00- 54.87	24.75
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	2853533	200.000	188.90	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	493560			0.00- 47.15	17.30
74 Chloroprene					CAS #: 126-99-8		
4.515	4.515 (0.854)	53	2498620	200.000	195.33	80.00- 120.00	100.00
4.515	4.515 (0.854)	88	1063999			12.33- 72.33	42.58
4.515	4.515 (0.854)	50	674100			0.00- 57.62	26.98
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	347356	200.000	175.64	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	296931			53.89- 113.89	85.48
4.613	4.613 (0.873)	41	186816			24.09- 84.09	53.78
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	2961043	200.000	192.61	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	391358			0.00- 43.24	13.22
5.130	5.130 (0.971)	58	264860			0.00- 38.83	8.94
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	404518	200.000	143.18	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	1541951			327.69- 387.69	381.18
5.774	5.774 (1.093)	41	1133973			237.56- 297.56	280.33
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	238652	200.000	182.18	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	367576			124.67- 184.67	154.02
6.460	6.460 (0.749)	55	3959794			1601.30-1661.30	1659.23
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	5653052	200.000	184.50	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	456621			0.00- 37.25	8.08
6.558	6.557 (0.761)	86	871681			0.00- 45.08	15.42
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	2096069	200.000	185.93	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	730739			5.16- 65.16	34.86
8.068	8.068 (1.305)	43	5054712			214.00- 274.00	241.15
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	2342378	200.000	189.97	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	1580451			38.22- 98.22	67.47
8.712	8.712 (1.011)	95	883866			7.54- 67.54	37.73
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	3239163	200.000	184.88	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	5150416			133.36- 193.36	159.00
172 D-Limonene					CAS #: 5989-27-5		
10.424	10.417 (1.209)	68	3016819	200.000	202.56	80.00- 120.00	100.00(A)
10.424	10.424 (1.209)	93	2188422			42.08- 102.08	72.54
186 4-Chlorotoluene					CAS #: 106-43-4		
9.973	9.973 (1.157)	126	2070941	200.000	192.94	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	6921803			305.94- 365.94	334.23
9.966	9.966 (1.156)	63	912677			15.44- 75.44	44.07
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	2929619	200.000	199.12	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	6724542			206.43- 266.43	229.54
10.596	10.596 (1.229)	77	803081			0.00- 58.29	27.41
205 Hexachloroethane					CAS #: 67-72-1		
11.105	11.098 (1.288)	201	1859811	200.000	207.06	80.00- 120.00	100.00(A)
11.098	11.098 (1.288)	117	2577561			109.77- 169.77	138.59

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.728	11.728 (1.361)	180	3928237	200.000	200.58	80.00- 120.00	100.00(A)
11.728	11.728 (1.361)	182	3720649			65.79- 125.79	94.72
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	4909231	200.000	193.68	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	1471700			0.13- 60.13	29.98
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	3877029	200.000	194.77	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	6921803			145.95- 205.95	178.53

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062212.d
Lab Smp Id: ICAL Level 11
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	238686	-1.94
108 1,4-Difluorobenze	874076	524446	1223706	855175	-2.16
153 Chlorobenzene-d5	831223	498734	1163712	819732	-1.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062212.d

Date : 22-JUN-2021 19:03

Client ID:

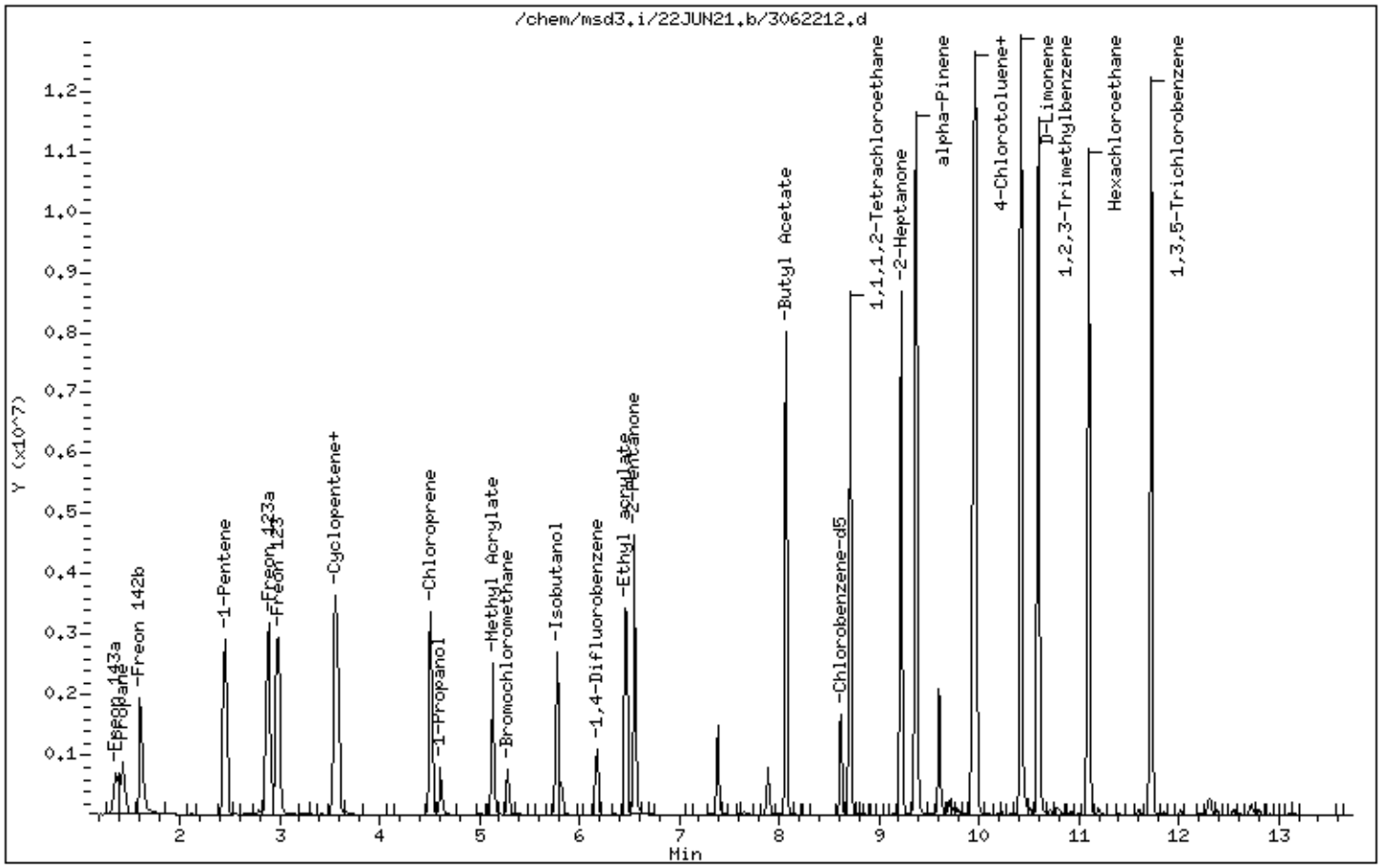
Instrument: msd3.i

Sample Info: 200mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062223.d
Lab Smp Id: ICAL Level 11
Inj Date : 23-JUN-2021 00:09
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2115
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.409	1.395 (0.267)	83	1248422	200.000	186.97	80.00- 120.00	100.00
1.409	1.395 (0.267)	69	1149722			51.82- 111.82	92.09
1.493	1.479 (0.282)	51	4726763			194.91- 254.91	378.62
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	1303911	200.000	192.36	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	862742			35.61- 95.61	66.17
1.437	1.423 (0.272)	39	941321			42.66- 102.66	72.19
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	809939	200.000	183.31	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	4726763			321.86- 381.86	583.59
1.465	1.437 (0.277)	47	547200			45.34- 105.34	67.56
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	3426295	200.000	175.27	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	1111289			2.63- 62.63	32.43
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	376917	200.000	175.44	80.00- 120.00	100.00

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
9 Chlorodifluoromethane (continued)								
1.493	1.479 (0.282)	51	4726763			719.76- 779.76		1254.06
10 Freon 114					CAS #: 76-14-2			
1.577	1.562 (0.298)	135	2615427	200.000	180.57	80.00- 120.00		100.00
1.577	1.562 (0.298)	137	835578			2.12- 62.12		31.95
12 Isobutane					CAS #: 75-28-5			
1.591	1.576 (0.301)	43	2851832	200.000	187.19	80.00- 120.00		100.00
1.591	1.576 (0.301)	42	908644			2.44- 62.44		31.86
1.577	1.576 (0.298)	58	94650			0.00- 33.26		3.32
15 Chloromethane					CAS #: 74-87-3			
1.647	1.646 (0.312)	50	1438189	200.000	177.01	80.00- 120.00		100.00
1.647	1.646 (0.312)	52	428405			2.41- 62.41		29.79
18 Butane					CAS #: 106-97-8			
1.716	1.702 (0.325)	58	306201	200.000	159.58	80.00- 120.00		100.00
1.716	1.702 (0.325)	43	2380035			727.41- 787.41		777.28
19 Vinyl Chloride					CAS #: 75-01-4			
1.744	1.744 (0.330)	62	1437998	200.000	165.39	80.00- 120.00		100.00
1.744	1.744 (0.330)	64	435136			1.28- 61.28		30.26
20 1,3-Butadiene					CAS #: 106-99-0			
1.772	1.758 (0.335)	54	1252672	200.000	157.21	80.00- 120.00		100.00
1.772	1.758 (0.335)	39	1248954			69.23- 129.23		99.70
24 Bromomethane					CAS #: 74-83-9			
2.108	2.094 (0.399)	94	1217522	200.000	177.06	80.00- 120.00		100.00
2.108	2.094 (0.399)	96	1140143			62.78- 122.78		93.64
30 Chloroethane					CAS #: 75-00-3			
2.206	2.206 (0.417)	64	759564	200.000	186.11	80.00- 120.00		100.00
2.206	2.206 (0.417)	66	229887			1.44- 61.44		30.27
2.206	2.206 (0.417)	49	240097			4.12- 64.12		31.61
31 Isopentane					CAS #: 78-78-4			
2.220	2.220 (0.420)	43	1953607	200.000	187.18	80.00- 120.00		100.00
2.220	2.220 (0.420)	57	1353192			38.82- 98.82		69.27
32 Vinyl Bromide					CAS #: 593-60-2			
2.402	2.388 (0.455)	106	1359049	200.000	181.78	80.00- 120.00		100.00
2.402	2.388 (0.455)	108	1264813			63.14- 123.14		93.07
33 Freon 11					CAS #: 75-69-4			
2.444	2.430 (0.463)	101	3711846	200.000	179.46	80.00- 120.00		100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.444	2.430 (0.463)	103	2428462			35.12- 95.12	65.42
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.458	2.444 (0.465)	67	3051239	200.000	184.54	80.00- 120.00	100.00
2.458	2.444 (0.465)	69	939246			0.74- 60.74	30.78
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	3095149	200.000	186.14	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	496522			0.00- 45.97	16.04
2.500	2.500 (0.473)	72	257490			0.00- 38.10	8.32
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	670734	200.000	179.91	80.00- 120.00	100.00
2.794	2.780 (0.529)	59	1190553			147.68- 207.68	177.50
2.780	2.780 (0.526)	45	1586644			206.40- 266.40	236.55
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	277518	200.000	165.86	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	1584044			523.01- 583.01	570.79
42 Acrolein					CAS #: 107-02-8		
3.046	3.032 (0.576)	55	526592	200.000	189.65	80.00- 120.00	100.00
3.046	3.032 (0.576)	56	737600			110.33- 170.33	140.07
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	2557928	200.000	180.91	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	1629708			33.72- 93.72	63.71
3.046	3.032 (0.576)	101	3066258			89.67- 149.67	119.87
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	1446563	200.000	169.86	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	921828			33.39- 93.39	63.73
3.074	3.074 (0.582)	61	2754233			163.82- 223.82	190.40
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	837664	200.000	178.02	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	2686866			299.66- 359.66	320.76
48 Carbon Disulfide					CAS #: 75-15-0		
3.312	3.297 (0.627)	76	3962561	200.000	187.01	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.284	3.269 (0.621)	142	3459520	200.000	188.81	80.00- 120.00	100.00
3.284	3.269 (0.621)	127	1527438			14.58- 74.58	44.15

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol						CAS #: 67-63-0	
3.409	3.395 (0.645)	45	3168063	200.000	187.21	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	578653			0.00- 48.61	18.27
54 3-Chloropropene						CAS #: 107-05-1	
3.549	3.535 (0.672)	76	665132	200.000	182.33	80.00- 120.00	100.00
3.549	3.535 (0.672)	41	2336930			338.06- 398.06	351.35
57 Acetonitrile						CAS #: 75-05-8	
3.647	3.633 (0.690)	41	1434382	200.000	193.58	80.00- 120.00	100.00
3.647	3.633 (0.690)	40	735330			21.81- 81.81	51.26
3.647	3.633 (0.690)	38	161098			0.00- 41.86	11.23
59 Methylene Chloride						CAS #: 75-09-2	
3.731	3.717 (0.706)	49	2082765	200.000	184.95	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	1258942			30.77- 90.77	60.45
3.731	3.717 (0.706)	51	640889			1.39- 61.39	30.77
62 tert-Butyl alcohol						CAS #: 75-65-0	
3.857	3.857 (0.730)	59	3975050	200.000	187.14	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	826780			0.00- 51.05	20.80
3.857	3.857 (0.730)	57	422561			0.00- 41.68	10.63
63 Methyl tert-butyl ether						CAS #: 1634-04-4	
3.941	3.941 (0.746)	73	4138145	200.000	180.50	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	1251638			0.00- 58.86	30.25
3.941	3.941 (0.746)	41	1110563			0.00- 57.27	26.84
64 trans-1,2-Dichloroethene						CAS #: 156-60-5	
3.969	3.969 (0.751)	98	969712	200.000	169.20	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	2604019			244.59- 304.59	268.54
3.969	3.969 (0.751)	96	1524600			129.84- 189.84	157.22
66 Acrylonitrile						CAS #: 107-13-1	
4.067	4.067 (0.770)	52	1162022	200.000	168.94	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	1354428			88.50- 148.50	116.56
67 Hexane						CAS #: 110-54-3	
4.179	4.179 (0.791)	57	2942768	200.000	189.37	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	1830463			32.99- 92.99	62.20
4.179	4.179 (0.791)	86	357479			0.00- 42.56	12.15
71 1,1-Dichloroethane						CAS #: 75-34-3	
4.459	4.459 (0.844)	63	2931915	200.000	183.46	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	896339			0.76- 60.76	30.57

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether					CAS #: 108-20-3		
	4.445	4.445 (0.841)	45	6207613	200.000	189.28	80.00- 120.00	100.00
	4.445	4.445 (0.841)	87	1358337			0.00- 51.37	21.88
	4.445	4.445 (0.841)	59	701959			0.00- 41.09	11.31
	73 Vinyl Acetate					CAS #: 108-05-4		
	4.501	4.501 (0.852)	86	375695	200.000	191.21	80.00- 120.00	100.00
	4.501	4.501 (0.852)	43	5279652			1391.63-1451.63	1405.30
	79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
	4.809	4.809 (0.910)	59	5999639	200.000	189.50	80.00- 120.00	100.00
	4.809	4.809 (0.910)	87	2013318			3.22- 63.22	33.56
	4.809	4.809 (0.910)	41	1083834			0.00- 48.12	18.06
	84 2,2-Dichloropropane					CAS #: 594-20-7		
	5.005	5.004 (0.947)	77	2776414	200.000	186.48	80.00- 120.00	100.00
	5.005	5.004 (0.947)	79	898403			2.00- 62.00	32.36
	5.005	5.004 (0.947)	97	660944			0.00- 53.36	23.81
	85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
	5.047	5.046 (0.955)	98	1007295	200.000	177.30	80.00- 120.00	100.00
	5.047	5.046 (0.955)	96	1561663			127.22- 187.22	155.04
	5.047	5.046 (0.955)	61	3116398			283.85- 343.85	309.38
	86 2-Butanone					CAS #: 78-93-3		
	5.061	5.074 (0.958)	72	752204	200.000	189.55	80.00- 120.00	100.00
	5.075	5.074 (0.960)	43	7965323			1055.75-1115.75	1058.93
	5.061	5.074 (0.958)	57	303494			10.59- 70.59	40.35
	87 Ethyl Acetate					CAS #: 141-78-6		
	5.089	5.088 (0.963)	45	647543	200.000	197.94	80.00- 120.00	100.00
	5.047	5.046 (0.955)	61	3116398			450.31- 510.31	481.27
	5.089	5.088 (0.963)	70	398005			30.42- 90.42	61.46
	89 Tetrahydrofuran					CAS #: 109-99-9		
	5.270	5.270 (0.997)	42	2133956	200.000	190.70	80.00- 120.00	100.00
	5.270	5.270 (0.997)	71	683656			2.92- 62.92	32.04
	5.270	5.270 (0.997)	72	713970			3.54- 63.54	33.46
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.284	5.284 (1.000)	130	280621	25.0000		80.00- 120.00	100.00
	5.284	5.284 (1.000)	128	221732			48.46- 108.46	79.01
	5.284	5.270 (1.000)	49	420383			120.39- 180.39	149.80
	92 Chloroform					CAS #: 67-66-3		
	5.340	5.340 (1.011)	83	3231224	200.000	183.65	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.011)	85	2099027			34.71- 94.71	64.96
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	2003099	200.000	180.12	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	3006241			120.40- 180.40	150.08
5.438	5.438 (1.029)	41	1654291			54.20- 114.20	82.59
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	3390242	200.000	171.43	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	2171642			33.76- 93.76	64.06
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	3504381	200.000	192.40	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	3650955			73.68- 133.68	104.18
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	871622	200.000	185.92	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	2259954			231.09- 291.09	259.28
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.760	5.774 (1.090)	57	9184710	200.000	189.00	80.00- 120.00	100.00
5.760	5.774 (1.090)	56	2853004			1.12- 61.12	31.06
5.760	5.774 (1.090)	41	2495514			0.00- 57.49	27.17
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	4310366	200.000	183.36	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	1029979			0.00- 53.80	23.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	365121	25.0000	23.643	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	213543			21.66- 81.66	58.49
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	1171898	200.000	186.96	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	4600758			365.20- 425.20	392.59
5.858	5.858 (0.948)	55	1389945			91.31- 151.31	118.61
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	2425778	200.000	179.23	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	763575			1.20- 61.20	31.48
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	1600316	200.000	172.83	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	3358124			179.02- 239.02	209.84
5.942	5.942 (0.962)	57	1864974			84.85- 144.85	116.54

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	1030162	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	156599			0.00- 45.52	15.20
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	1454858	200.000	193.08	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	1016569			40.21- 100.21	69.87
6.348	6.348 (1.027)	43	800851			25.00- 85.00	55.05
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	2154997	200.000	182.73	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	2276279			74.96- 134.96	105.63
6.362	6.362 (1.029)	97	1394870			34.80- 94.80	64.73
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	707267	200.000	129.79	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	498517			52.03- 112.03	70.48
6.586	6.586 (1.066)	41	791037			79.97- 139.97	111.84
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	1732766	200.000	185.90	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	2771921			134.02- 194.02	159.97
6.664	6.664 (0.774)	100	689459			9.54- 69.54	39.79
117 1,4-Dioxane					CAS #: 123-91-1		
6.692	6.699 (1.083)	88	1116627	200.000	187.51	80.00- 120.00	100.00
6.692	6.699 (1.083)	58	970635			55.80- 115.80	86.93
6.692	6.699 (1.083)	57	401009			8.68- 68.68	35.91
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	1973983	200.000	190.16	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	1896487			67.27- 127.27	96.07
6.714	6.721 (0.780)	95	1584974			50.92- 110.92	80.29
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	3511830	200.000	177.75	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	2273528			34.31- 94.31	64.74
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	2753100	200.000	187.48	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	882386			1.42- 61.42	32.05
7.208	7.208 (1.166)	39	1880986			38.56- 98.56	68.32
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	2754207	200.000	174.64	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	1262828			15.60- 75.60	45.85

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	=======	==========	=====
127 Methylcyclohexane (continued)								
6.460	6.460 (1.045)	55	3106460				78.53- 138.53	112.79
131 4-Methyl-2-pentanone						CAS #: 108-10-1		
7.316	7.316 (1.184)	58	1786119	200.000	178.88		80.00- 120.00	100.00
7.316	7.316 (1.184)	43	4615020				231.30- 291.30	258.38
7.316	7.316 (1.184)	85	675752				8.94- 68.94	37.83
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	1046502	25.0000	24.664		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	117636				0.00- 41.47	11.24
7.387	7.387 (1.195)	100	699156				36.47- 96.47	66.81
137 Toluene						CAS #: 108-88-3		
7.437	7.437 (1.203)	91	5725161	200.000	181.50		80.00- 120.00	100.00
7.437	7.437 (1.203)	92	3388088				28.30- 88.30	59.18
136 Octane						CAS #: 111-65-9		
7.445	7.444 (1.205)	57	1941160	200.000	184.97		80.00- 120.00	100.00
7.445	7.444 (1.205)	85	1885654				67.11- 127.11	97.14
7.445	7.444 (1.205)	43	4613237				214.21- 274.21	237.65
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	2690414	200.000	188.60		80.00- 120.00	100.00
7.688	7.688 (0.893)	77	860699				2.15- 62.15	31.99
7.688	7.688 (0.893)	39	1729052				36.09- 96.09	64.27
141 1,1,2-Trichloroethane						CAS #: 79-00-5		
7.846	7.846 (0.911)	97	2005268	200.000	182.79		80.00- 120.00	100.00
7.846	7.846 (0.911)	99	1245924				31.62- 91.62	62.13
7.846	7.846 (0.911)	83	1746685				56.35- 116.35	87.10
142 Tetrachloroethene						CAS #: 127-18-4		
7.881	7.881 (0.915)	166	2846291	200.000	187.59		80.00- 120.00	100.00
7.881	7.881 (0.915)	129	2242287				48.71- 108.71	78.78
7.881	7.881 (0.915)	131	2176960				46.55- 106.55	76.48
143 2-Hexanone						CAS #: 591-78-6		
8.003	8.003 (0.929)	58	2423064	200.000	192.29		80.00- 120.00	100.00
8.003	8.003 (0.929)	43	4499303				157.91- 217.91	185.69
8.003	8.003 (0.929)	100	434674				0.00- 47.86	17.94
144 1,3-Dichloropropane						CAS #: 142-28-9		
7.989	7.989 (1.293)	76	2724813	200.000	181.06		80.00- 120.00	100.00
7.989	7.989 (1.293)	41	3071294				82.96- 142.96	112.72
7.989	7.989 (1.293)	78	895221				2.55- 62.55	32.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.947)	129	4009938	200.000	192.67	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	3128882			47.77- 107.77	78.03
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.261	8.268 (0.959)	107	3220648	200.000	189.04	80.00- 120.00	100.00
8.261	8.268 (0.959)	109	3039854			64.60- 124.60	94.39
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	3623818	200.000	190.06	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	1124304			0.95- 60.95	31.03
7.122	7.122 (1.152)	144	384041			0.00- 40.45	10.60
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	968526	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	534124			25.46- 85.46	55.15
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	4789428	200.000	180.93	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	1559401			2.13- 62.13	32.56
8.641	8.641 (1.003)	77	2694421			26.35- 86.35	56.26
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	2466472	200.000	186.34	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	7515848			282.48- 342.48	304.72
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	4684239	200.000	182.58	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	4249274			59.52- 119.52	90.71
8.705	8.705 (1.011)	85	1368284			0.00- 59.76	29.21
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	3054787	200.000	185.51	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	6087484			171.36- 231.36	199.28
164 o-Xylene					CAS #: 95-47-6		
9.121	9.128 (1.059)	106	2940706	200.000	188.11	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	6120254			179.99- 239.99	208.12
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.062)	104	5129048	200.000	189.37	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	2527067			19.09- 79.09	49.27
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	3869043	200.000	196.05	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	2017665			21.45- 81.45	52.15

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.093)	105	8856968	200.000	179.20	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	2474357			0.00- 56.99	27.94
9.407	9.407 (1.092)	51	1059754			0.00- 41.77	11.97
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	2761472	200.000	177.54	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	1065852			9.22- 69.22	38.60
9.579	9.579 (1.112)	42	1967492			42.60- 102.60	71.25
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	640376	25.0000	24.997	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	797484			93.06- 153.06	124.53
9.601	9.601 (1.115)	176	605747			62.87- 122.87	94.59
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	4422270	200.000	180.46	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	2877992			34.35- 94.35	65.08
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.729 (1.130)	156	2908112	200.000	189.27	80.00- 120.00	100.00
9.730	9.737 (1.130)	158	2812927			67.29- 127.29	96.73
9.730	9.729 (1.130)	77	4663366			132.41- 192.41	160.36
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	10270460	200.000	178.09	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	2524198			0.00- 53.77	24.58
9.758	9.758 (1.133)	105	406300			0.00- 33.81	3.96
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	1357894	200.000	183.95	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	4261505			285.00- 345.00	313.83
9.787	9.787 (1.136)	61	1147024			54.06- 114.06	84.47
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	1061786	200.000	181.78	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	556074			21.19- 81.19	52.37
9.787	9.787 (1.136)	75	4261505			372.45- 432.45	401.35
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	5394837	200.000	180.91	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	1811637			4.13- 64.13	33.58
9.816	9.815 (1.140)	142	252871			0.00- 34.73	4.69
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	2748666	200.000	183.87	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.144)	105	8951786				296.79- 356.79	325.68
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.146)	126	2280030	200.000		187.71	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	8187497				336.29- 396.29	359.10
9.873	9.873 (1.146)	65	1552268				38.83- 98.83	68.08
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.150)	120	3893688	200.000		185.45	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	7694703				176.40- 236.40	197.62
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.173)	118	4131575	200.000		192.13	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	2350391				26.64- 86.64	56.89
189 tert-Butylbenzene						CAS #: 98-06-6		
10.174	10.174 (1.181)	119	7168687	200.000		185.56	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	1814326				0.00- 54.82	25.31
10.174	10.174 (1.181)	91	4712707				36.92- 96.92	65.74
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.187)	105	7574431	200.000		182.95	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	3624792				16.58- 76.58	47.86
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.203)	134	2316459	200.000		185.64	80.00- 120.00	100.00
10.360	10.360 (1.203)	105	10717996				451.53- 511.53	462.69
10.360	10.353 (1.203)	91	1750377				46.48- 106.48	75.56
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.215)	119	9518485	200.000		182.15	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	2670560				0.00- 56.79	28.06
10.467	10.467 (1.215)	91	2378503				0.00- 54.04	24.99
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.221)	146	5324302	200.000		189.29	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	3428685				33.53- 93.53	64.40
10.517	10.517 (1.221)	111	2249453				11.05- 71.05	42.25
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.230)	146	5387311	200.000		185.94	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	3449292				33.47- 93.47	64.03
10.596	10.596 (1.230)	111	2177041				9.65- 69.65	40.41
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.244)	91	7588758	200.000		190.50	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	1728896			0.00- 52.04	22.78
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	6455210	200.000	183.70	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	5437451			55.86- 115.86	84.23
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	2566869	200.000	189.45	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	8905405			331.99- 391.99	346.94
10.818	10.818 (1.256)	92	4849144			161.01- 221.01	188.91
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	5152127	200.000	189.55	80.00- 120.00	100.00
10.926	10.926 (1.269)	148	3295260			33.23- 93.23	63.96
10.919	10.918 (1.268)	111	2226669			12.36- 72.36	43.22
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	3008551	200.000	190.89	80.00- 120.00	100.00
11.599	11.599 (1.347)	75	2640903			58.96- 118.96	87.78
11.606	11.606 (1.348)	155	2340600			47.82- 107.82	77.80
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	6858381	247.200	230.81	80.00- 120.00	100.00(A)
11.714	11.714 (1.360)	43	5511292			50.85- 110.85	80.36
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	4542514	251.800	235.29	80.00- 120.00	100.00(A)
12.301	12.301 (1.428)	182	4306455			65.40- 125.40	94.80
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	3480322	257.400	238.65	80.00- 120.00	100.00(A)
12.387	12.387 (1.438)	223	2234146			33.70- 93.70	64.19
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	1217286	25.4000	20.648	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	160451			0.00- 43.10	13.18
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.802 (1.487)	180	4317164	266.200	244.37	80.00- 120.00	100.00(A)
12.803	12.802 (1.487)	182	4109388			65.67- 125.67	95.19
12.803	12.802 (1.487)	145	1586688			6.02- 66.02	36.75

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062223.d
Lab Smp Id: ICAL Level 11
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	280621	15.29
108 1,4-Difluorobenze	874076	524446	1223706	1030162	17.86
153 Chlorobenzene-d5	831223	498734	1163712	968526	16.52

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062223.d

Page 1

Date : 23-JUN-2021 00:09

Client ID:

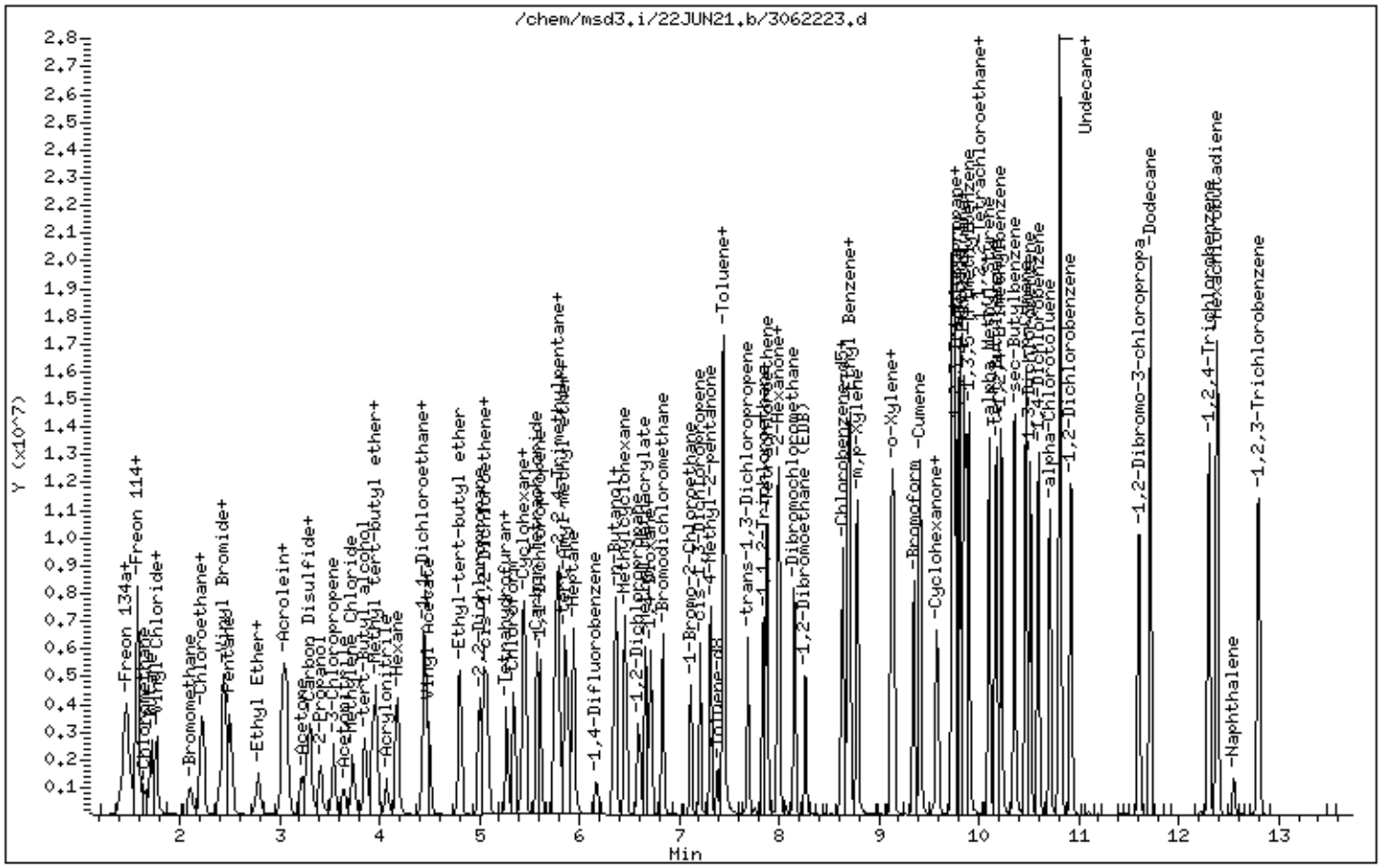
Instrument: msd3.i

Sample Info: 200mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062226.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 23-JUN-2021 09:45
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2121
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 11:20 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 14 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	230839	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	179182				48.46- 108.46	77.62
5.270	5.270 (1.000)	49	344686				120.39- 180.39	149.32
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	830933	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	129192				0.00- 45.52	15.55
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	786155	25.0000			80.00- 120.00	100.00
8.612	8.619 (1.000)	82	431570				25.46- 85.46	54.90
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	307921	24.2394	24.239		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	157280				21.66- 81.66	51.08
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	848994	24.8065	24.806		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	98028				0.00- 41.47	11.55

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	567231			36.47- 96.47	66.81
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	514712	24.7527	24.753	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	638497			93.06- 153.06	124.05
9.601	9.601 (1.114)	176	486174			62.87- 122.87	94.46
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	276653	50.3672	50.367	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	237465			51.82- 111.82	85.83
1.479	1.479 (0.280)	51	652737			194.91- 254.91	235.94
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	265441	47.6056	47.606	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	180339			35.61- 95.61	67.94
1.423	1.423 (0.269)	39	191086			42.66- 102.66	71.99
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	181412	49.9119	49.912	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	652737			321.86- 381.86	359.81
1.437	1.437 (0.272)	47	116541			45.34- 105.34	64.24
8 Freon 12					CAS #: 75-71-8		
1.451	1.465 (0.275)	85	746394	46.4159	46.416	80.00- 120.00	100.00
1.451	1.465 (0.275)	87	242142			2.63- 62.63	32.44
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.479	1.479 (0.280)	67	73808	41.7626	41.762	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	652737			719.76- 779.76	884.37
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	585845	49.1686	49.168	80.00- 120.00	100.00
1.563	1.562 (0.296)	137	187786			2.12- 62.12	32.05
12 Isobutane					CAS #: 75-28-5		
1.577	1.576 (0.298)	43	609350	48.5739	48.574	80.00- 120.00	100.00
1.577	1.576 (0.298)	42	198445			2.44- 62.44	32.57
1.577	1.576 (0.298)	58	20678			0.00- 33.26	3.39
15 Chloromethane					CAS #: 74-87-3		
1.633	1.646 (0.309)	50	303441	45.4010	45.401	80.00- 120.00	100.00
1.633	1.646 (0.309)	52	103286			2.41- 62.41	34.04
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	63208	40.0457	40.046	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.702	1.702 (0.322)	43	477397			727.41- 787.41	755.28
19 Vinyl Chloride					CAS #: 75-01-4		
1.730	1.744 (0.327)	62	296122	41.4035	41.404	80.00- 120.00	100.00
1.730	1.744 (0.327)	64	92690			1.28- 61.28	31.30
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	263401	40.1855	40.185	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	247265			69.23- 129.23	93.87
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	261180	46.1739	46.174	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	245228			62.78- 122.78	93.89
30 Chloroethane					CAS #: 75-00-3		
2.192	2.206 (0.415)	64	163745	48.7725	48.772	80.00- 120.00	100.00
2.192	2.206 (0.415)	66	52790			1.44- 61.44	32.24
2.192	2.206 (0.415)	49	54045			4.12- 64.12	33.01
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	412845	48.0872	48.087	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	288174			38.82- 98.82	69.80
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	294472	47.8819	47.882	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	270982			63.14- 123.14	92.02
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	801961	47.1350	47.135	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	525485			35.12- 95.12	65.53
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	668886	49.1789	49.179	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	205287			0.74- 60.74	30.69
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	636532	46.5367	46.537	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	102112			0.00- 45.97	16.04
2.500	2.500 (0.473)	72	54671			0.00- 38.10	8.59
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	148680	48.4815	48.481	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	261727			147.68- 207.68	176.03
2.780	2.780 (0.526)	45	348533			206.40- 266.40	234.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.752	2.766 (0.521)	46	64671	46.9856	46.986	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	348533			523.01- 583.01	538.93
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	119957	52.5183	52.518	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	170363			110.33- 170.33	142.02
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	558862	48.0496	48.050	80.00- 120.00	100.00
3.032	3.032 (0.574)	153	357889			33.72- 93.72	64.04
3.032	3.032 (0.574)	101	669810			89.67- 149.67	119.85
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	320675	45.7741	45.774	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	205419			33.39- 93.39	64.06
3.060	3.074 (0.579)	61	608891			163.82- 223.82	189.88
47 Acetone					CAS #: 67-64-1		
3.214	3.213 (0.608)	58	182264	47.0884	47.088	80.00- 120.00	100.00
3.214	3.213 (0.608)	43	580286			299.66- 359.66	318.38
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.297 (0.624)	76	862907	49.5071	49.507	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.269 (0.619)	142	871666	57.8336	57.834	80.00- 120.00	100.00
3.270	3.269 (0.619)	127	377131			14.58- 74.58	43.27
52 2-Propanol					CAS #: 67-63-0		
3.396	3.395 (0.643)	45	720407	51.7519	51.752	80.00- 120.00	100.00
3.396	3.395 (0.643)	43	130730			0.00- 48.61	18.15
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	140946	46.9689	46.969	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	498302			338.06- 398.06	353.54
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	291218	47.7791	47.779	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	154337			21.81- 81.81	53.00
3.633	3.633 (0.688)	38	35776			0.00- 41.86	12.28
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	441798	47.6921	47.692	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	271820			30.77- 90.77	61.53
3.717	3.717 (0.703)	51	137904			1.39- 61.39	31.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	847744	48.5186	48.519	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	178217			0.00- 51.05	21.02
3.857	3.857 (0.730)	57	88570			0.00- 41.68	10.45
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	903456	47.9065	47.906	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	265771			0.00- 58.86	29.42
3.927	3.941 (0.743)	41	240075			0.00- 57.27	26.57
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	208277	44.1782	44.178	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	553514			244.59- 304.59	265.76
3.969	3.969 (0.751)	96	326683			129.84- 189.84	156.85
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	242318	42.8272	42.827	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	290915			88.50- 148.50	120.06
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	617136	48.2775	48.277	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	387908			32.99- 92.99	62.86
4.179	4.179 (0.791)	86	76914			0.00- 42.56	12.46
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	617626	46.9813	46.981	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	187405			0.76- 60.76	30.34
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1329420	49.2791	49.279	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	290396			0.00- 51.37	21.84
4.445	4.445 (0.841)	59	147222			0.00- 41.09	11.07
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	80675	49.9148	49.915	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1120059			1391.63-1451.63	1388.36
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1275211	48.9632	48.963	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	426576			3.22- 63.22	33.45
4.809	4.809 (0.910)	41	228698			0.00- 48.12	17.93
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.004 (0.947)	77	590995	48.2566	48.256	80.00- 120.00	100.00
5.005	5.004 (0.947)	79	192709			2.00- 62.00	32.61
5.005	5.004 (0.947)	97	141275			0.00- 53.36	23.90

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.046 (0.955)	98	219389	46.9439	46.944	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	338814			127.22- 187.22	154.44
5.047	5.046 (0.955)	61	695365			283.85- 343.85	316.96
86 2-Butanone					CAS #: 78-93-3		
5.061	5.074 (0.958)	72	159453	48.8472	48.847	80.00- 120.00	100.00
5.075	5.074 (0.960)	43	1698541			1055.75-1115.75	1065.23
5.061	5.074 (0.958)	57	63424			10.59- 70.59	39.78
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.088 (0.963)	45	135429	50.3248	50.325	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	695365			450.31- 510.31	513.45
5.089	5.088 (0.963)	70	82618			30.42- 90.42	61.00
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	450175	48.9056	48.906	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	147888			2.92- 62.92	32.85
5.270	5.270 (0.997)	72	150501			3.54- 63.54	33.43
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	682394	47.1495	47.149	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	443132			34.71- 94.71	64.94
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	426290	46.5989	46.599	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	637500			120.40- 180.40	149.55
5.438	5.438 (1.029)	41	351146			54.20- 114.20	82.37
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	732951	45.0547	45.055	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	467751			33.76- 93.76	63.82
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	747752	49.9064	49.906	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	783754			73.68- 133.68	104.81
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	184273	48.7302	48.730	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	478848			231.09- 291.09	259.86
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1944713	48.6476	48.648	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	606500			1.12- 61.12	31.19
5.774	5.774 (1.093)	41	525031			0.00- 57.49	27.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	923835	48.7211	48.721	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	219980			0.00- 53.80	23.81
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	246941	48.8421	48.842	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	988323			365.20- 425.20	400.23
5.858	5.858 (0.948)	55	292246			91.31- 151.31	118.35
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	514115	47.0940	47.094	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	159770			1.20- 61.20	31.08
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	345477	46.2572	46.257	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	714720			179.02- 239.02	206.88
5.942	5.942 (0.962)	57	389337			84.85- 144.85	112.70
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	362639	59.6668	59.667	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	254365			40.21- 100.21	70.14
6.348	6.348 (1.027)	43	200559			25.00- 85.00	55.31
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	451180	47.4295	47.429	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	479590			74.96- 134.96	106.30
6.362	6.362 (1.029)	97	293531			34.80- 94.80	65.06
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	177010	40.2725	40.272	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	138474			52.03- 112.03	78.23
6.586	6.586 (1.066)	41	160835			79.97- 139.97	90.86
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	468768	61.9580	61.958	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	579449			134.02- 194.02	123.61
6.664	6.664 (0.773)	100	141197			9.54- 69.54	30.12
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.699 (1.084)	88	233447	48.6009	48.601	80.00- 120.00	100.00
6.700	6.699 (1.084)	58	204594			55.80- 115.80	87.64
6.700	6.699 (1.084)	57	85755			8.68- 68.68	36.73
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	410747	48.7473	48.747	80.00- 120.00	100.00
6.714	6.721 (0.779)	93	398942			67.27- 127.27	97.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.714	6.721 (0.779)	95	332955			50.92- 110.92	81.06
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	736581	46.2205	46.220	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	476785			34.31- 94.31	64.73
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	584209	49.3222	49.322	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	186879			1.42- 61.42	31.99
7.208	7.208 (1.166)	39	397058			38.56- 98.56	67.97
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	581182	45.6885	45.688	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	267415			15.60- 75.60	46.01
6.460	6.460 (1.045)	55	588990			78.53- 138.53	101.34
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	375128	46.5771	46.577	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	987393			231.30- 291.30	263.21
7.316	7.316 (1.184)	85	142840			8.94- 68.94	38.08
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1211925	47.6336	47.634	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	705909			28.30- 88.30	58.25
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.205)	57	411162	48.5724	48.572	80.00- 120.00	100.00
7.445	7.444 (1.205)	85	397266			67.11- 127.11	96.62
7.445	7.444 (1.205)	43	993852			214.21- 274.21	241.72
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	567866	49.0437	49.044	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	179211			2.15- 62.15	31.56
7.688	7.688 (0.892)	39	362676			36.09- 96.09	63.87
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	418129	46.9556	46.956	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	259959			31.62- 91.62	62.17
7.846	7.846 (0.910)	83	364240			56.35- 116.35	87.11
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	602834	48.9472	48.947	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	471766			48.71- 108.71	78.26
7.881	7.881 (0.914)	131	456078			46.55- 106.55	75.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	511144	49.9730	49.973	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	961960			157.91- 217.91	188.20
8.003	8.003 (0.929)	100	91824			0.00- 47.86	17.96
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	566994	46.7084	46.708	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	641768			82.96- 142.96	113.19
7.989	7.989 (1.293)	78	186383			2.55- 62.55	32.87
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.946)	129	846162	50.0883	50.088	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	651984			47.77- 107.77	77.05
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.268 (0.959)	107	678752	49.0832	49.083	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	641952			64.60- 124.60	94.58
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	755211	49.1069	49.107	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	231086			0.95- 60.95	30.60
7.122	7.122 (1.152)	144	79308			0.00- 40.45	10.50
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	1023504	47.6349	47.635	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	330682			2.13- 62.13	32.31
8.641	8.641 (1.002)	77	577849			26.35- 86.35	56.46
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	522969	48.6750	48.675	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1634715			282.48- 342.48	312.58
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	1029711	49.4466	49.446	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	930261			59.52- 119.52	90.34
8.705	8.705 (1.010)	85	309137			0.00- 59.76	30.02
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	506531	42.8350	42.835	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	345244			38.22- 98.22	68.16
8.712	8.712 (1.011)	95	189031			7.54- 67.54	37.32
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	656920	49.1467	49.147	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1321984			171.36- 231.36	201.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
9.121	9.128 (1.058)	106	613695	48.3631	48.363	80.00- 120.00	100.00
9.121	9.128 (1.058)	91	1301162			179.99- 239.99	212.02
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	1061214	48.2705	48.270	80.00- 120.00	100.00
9.149	9.149 (1.061)	78	522635			19.09- 79.09	49.25
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	806097	50.3223	50.322	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	412227			21.45- 81.45	51.14
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.091)	105	1900407	47.3689	47.369	80.00- 120.00	100.00
9.407	9.414 (1.091)	120	514504			0.00- 56.99	27.07
9.407	9.407 (1.091)	51	220885			0.00- 41.77	11.62
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	611030	48.3969	48.397	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	236867			9.22- 69.22	38.77
9.579	9.579 (1.111)	42	437371			42.60- 102.60	71.58
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	936271	47.0699	47.070	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	600808			34.35- 94.35	64.17
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.130)	156	607057	48.6747	48.675	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	593292			67.29- 127.29	97.73
9.730	9.729 (1.129)	77	995300			132.41- 192.41	163.95
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2290878	48.9382	48.938	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	541415			0.00- 53.77	23.63
9.758	9.758 (1.132)	105	86417			0.00- 33.81	3.77
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	289933	48.3881	48.388	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	1009679			285.00- 345.00	348.25
9.787	9.787 (1.135)	61	246266			54.06- 114.06	84.94
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	315097	66.4580	66.458	80.00- 120.00	100.00(R)
9.787	9.787 (1.135)	89	163024			21.19- 81.19	51.74
9.787	9.787 (1.135)	75	1009679			372.45- 432.45	320.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.138)	57	1197898	49.4898	49.490	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	405230			4.13- 64.13	33.83
9.816	9.815 (1.139)	142	55996			0.00- 34.73	4.67
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	585173	48.2264	48.226	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1911490			296.79- 356.79	326.65
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	476561	48.3366	48.337	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1735908			336.29- 396.29	364.26
9.873	9.873 (1.145)	65	325512			38.83- 98.83	68.30
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	799023	46.8837	46.884	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1648088			176.40- 236.40	206.26
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	855997	49.0416	49.042	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	483742			26.64- 86.64	56.51
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1502829	47.9258	47.926	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	374135			0.00- 54.82	24.90
10.174	10.174 (1.180)	91	1013570			36.92- 96.92	67.44
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1620169	48.2107	48.211	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	750731			16.58- 76.58	46.34
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	485531	47.9377	47.938	80.00- 120.00	100.00
10.360	10.360 (1.202)	105	2338945			451.53- 511.53	481.73
10.360	10.353 (1.202)	91	369819			46.48- 106.48	76.17
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	2043204	48.1713	48.171	80.00- 120.00	100.00
10.475	10.467 (1.215)	134	548005			0.00- 56.79	26.82
10.467	10.467 (1.214)	91	490581			0.00- 54.04	24.01
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.220)	146	1106363	48.4571	48.457	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	703822			33.53- 93.53	63.62
10.517	10.517 (1.220)	111	455868			11.05- 71.05	41.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.229)	146	1115809	47.4456	47.446	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	716661			33.47- 93.47	64.23
10.596	10.596 (1.229)	111	449960			9.65- 69.65	40.33
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1619916	50.0978	50.098	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	353017			0.00- 52.04	21.79
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1303110	45.6864	45.686	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1118498			55.86- 115.86	85.83
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	526009	47.8292	47.829	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	1894116			331.99- 391.99	360.09
10.818	10.818 (1.255)	92	993791			161.01- 221.01	188.93
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1049945	47.5881	47.588	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	670191			33.23- 93.23	63.83
10.919	10.918 (1.267)	111	443537			12.36- 72.36	42.24
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	625255	48.8744	48.874	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	554821			58.96- 118.96	88.74
11.606	11.606 (1.347)	155	488548			47.82- 107.82	78.14
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1020660	42.3179	42.318	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	820544			50.85- 110.85	80.39
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	814851	51.9976	51.998	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	773714			65.40- 125.40	94.95
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	634879	53.6326	53.633	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	401706			33.70- 93.70	63.27
216 Naphthalene					CAS #: 91-20-3		
12.559	12.552 (1.457)	128	213475	4.46106	4.461	80.00- 120.00	100.00
12.559	12.552 (1.457)	127	27510			0.00- 43.10	12.89
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.810	12.802 (1.486)	180	708948	49.4384	49.438	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
12.810	12.802 (1.486)	182	672604			65.67- 125.67	94.87
12.810	12.802 (1.486)	145	253332			6.02- 66.02	35.73

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062226.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	230839	-5.16
108 1,4-Difluorobenze	874076	524446	1223706	830933	-4.94
153 Chlorobenzene-d5	831223	498734	1163712	786155	-5.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

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RECOVERY REPORT

Client Name: Client SDG: 22JUN21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: LD
Data Type: MS DATA SampleType: ICV
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	50.367	100.73	70-130
5 Propylene	50.000	47.606	95.21	70-130
7 1,1-Difluoroethan	50.000	49.912	99.82	70-130
8 Freon 12	50.000	46.416	92.83	70-130
9 Chlorodifluoromet	50.000	41.762	83.53	70-130
10 Freon 114	50.000	49.168	98.34	70-130
12 Isobutane	50.000	48.574	97.15	70-130
15 Chloromethane	50.000	45.401	90.80	70-130
18 Butane	50.000	40.046	80.09	70-130
19 Vinyl Chloride	50.000	41.404	82.81	70-130
20 1,3-Butadiene	50.000	40.185	80.37	70-130
24 Bromomethane	50.000	46.174	92.35	70-130
30 Chloroethane	50.000	48.772	97.55	70-130
31 Isopentane	50.000	48.087	96.17	70-130
32 Vinyl Bromide	50.000	47.882	95.76	70-130
33 Freon 11	50.000	47.135	94.27	70-130
34 Dichlorofluoromet	50.000	49.179	98.36	70-130
35 Pentane	50.000	46.537	93.07	70-130
38 Ethyl Ether	50.000	48.481	96.96	70-130
39 Ethanol	58.000	46.986	81.01	70-130
42 Acrolein	58.000	52.518	90.55	70-130
43 Freon 113	50.000	48.050	96.10	70-130
44 1,1-Dichloroethen	50.000	45.774	91.55	70-130
47 Acetone	50.000	47.088	94.18	70-130
48 Carbon Disulfide	50.000	49.507	99.01	70-130
49 Iodomethane	50.000	57.834	115.67	70-130
52 2-Propanol	50.000	51.752	103.50	70-130
54 3-Chloropropene	50.000	46.969	93.94	70-130
57 Acetonitrile	50.000	47.779	95.56	70-130
59 Methylene Chlorid	50.000	47.692	95.38	70-130
62 tert-Butyl alcoho	50.000	48.519	97.04	70-130
63 Methyl tert-butyl	50.000	47.906	95.81	70-130
64 trans-1,2-Dichlor	50.000	44.178	88.36	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	42.827	85.65	70-130
67	Hexane	50.000	48.277	96.55	70-130
71	1,1-Dichloroethan	50.000	46.981	93.96	70-130
72	Isopropyl ether	50.000	49.279	98.56	70-130
73	Vinyl Acetate	50.000	49.915	99.83	70-130
79	Ethyl-tert-butyl	50.000	48.963	97.93	70-130
84	2,2-Dichloropropa	50.000	48.256	96.51	70-130
85	cis-1,2-Dichloroe	50.000	46.944	93.89	70-130
86	2-Butanone	50.000	48.847	97.69	70-130
87	Ethyl Acetate	50.000	50.325	100.65	70-130
89	Tetrahydrofuran	50.000	48.906	97.81	70-130
92	Chloroform	50.000	47.149	94.30	70-130
94	Cyclohexane	50.000	46.599	93.20	70-130
96	1,1,1-Trichloroet	50.000	45.055	90.11	70-130
99	1,1-Dichloroprope	50.000	48.730	97.46	70-130
97	Carbon Tetrachlor	50.000	49.906	99.81	70-130
101	2,2,4-Trimethylpe	50.000	48.648	97.30	70-130
102	Benzene	50.000	48.721	97.44	70-130
105	tert-Amyl methyl	50.000	48.842	97.68	70-130
106	1,2-Dichloroethan	50.000	47.094	94.19	70-130
107	Heptane	50.000	46.257	92.51	70-130
110	n-Butanol	50.000	59.667	119.33	70-130
111	Trichloroethene	50.000	47.429	94.86	70-130
118	Dibromomethane	50.000	48.747	97.49	70-130
127	Methylcyclohexane	50.000	45.688	91.38	70-130
114	1,2-Dichloropropa	50.000	40.272	80.55	70-130
116	Methyl Methacryla	50.000	61.958	123.92	70-130
117	1,4-Dioxane	50.000	48.601	97.20	70-130
122	Bromodichlorometh	50.000	46.220	92.44	70-130
126	cis-1,3-Dichlorop	50.000	49.322	98.64	70-130
131	4-Methyl-2-pentan	50.000	46.577	93.15	70-130
136	Octane	50.000	48.572	97.14	70-130
137	Toluene	50.000	47.634	95.27	70-130
139	trans-1,3-Dichlor	50.000	49.044	98.09	70-130
141	1,1,2-Trichloroet	50.000	46.956	93.91	70-130
142	Tetrachloroethene	50.000	48.947	97.89	70-130
143	2-Hexanone	50.000	49.973	99.95	70-130
144	1,3-Dichloropropa	50.000	46.708	93.42	70-130
146	Dibromochlorometh	50.000	50.088	100.18	70-130
148	1,2-Dibromoethane	50.000	49.083	98.17	70-130
151	1-Bromo-2-Chloroe	50.000	49.107	98.21	70-130
154	Chlorobenzene	50.000	47.635	95.27	70-130
155	Ethyl Benzene	50.000	48.675	97.35	70-130
156	Nonane	50.000	49.446	98.89	70-130
157	1,1,1,2-Tetrachlo	50.000	42.835	85.67	70-130
158	m,p-Xylene	50.000	49.147	98.29	70-130
164	o-Xylene	50.000	48.363	96.73	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	48.270	96.54	70-130
167 Bromoform	50.000	50.322	100.64	70-130
168 Cumene	50.000	47.369	94.74	70-130
169 Cyclohexanone	50.000	48.397	96.79	70-130
175 1,1,2,2-Tetrachlo	50.000	47.070	94.14	70-130
177 Bromobenzene	50.000	48.675	97.35	70-130
178 Propylbenzene	50.000	48.938	97.88	70-130
179 1,2,3-Trichloropr	50.000	48.388	96.78	70-130
181 trans-1,4-Dichlor	50.000	66.458	132.92*	70-130
182 Decane	50.000	49.490	98.98	70-130
183 4-Ethyltoluene	50.000	48.226	96.45	70-130
184 2-Chlorotoluene	50.000	48.337	96.67	70-130
185 1,3,5-Trimethylbe	50.000	46.884	93.77	70-130
188 alpha Methyl Styr	50.000	49.042	98.08	70-130
189 tert-Butylbenzene	50.000	47.926	95.85	70-130
190 1,2,4-Trimethylbe	50.000	48.211	96.42	70-130
192 sec-Butylbenzene	50.000	47.938	95.88	70-130
194 p-Cymene	50.000	48.171	96.34	70-130
195 1,3-Dichlorobenze	50.000	48.457	96.91	70-130
196 1,4-Dichlorobenze	50.000	47.446	94.89	70-130
199 alpha-Chlorotolue	50.000	50.098	100.20	70-130
201 Undecane	50.000	45.686	91.37	70-130
202 Butylbenzene	50.000	47.829	95.66	70-130
204 1,2-Dichlorobenze	50.000	47.588	95.18	70-130
206 1,2-Dibromo-3-chl	50.000	48.874	97.75	70-130
207 Dodecane	50.000	42.318	84.64	70-130
213 1,2,4-Trichlorobe	58.000	51.998	89.65	70-130
215 Hexachlorobutadie	58.000	53.633	92.47	70-130
216 Naphthalene	5.800	4.461	76.91	60-140
222 1,2,3-Trichlorobe	58.000	49.438	85.24	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.239	96.96	70-130
$ 134 Toluene-d8	25.000	24.806	99.23	70-130
$ 170 4-Bromofluorobenz	25.000	24.753	99.01	70-130

Data File: /chem/msd3.i/22JUN21.b/3062226.d

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Date : 23-JUN-2021 09:45

Client ID: ICV

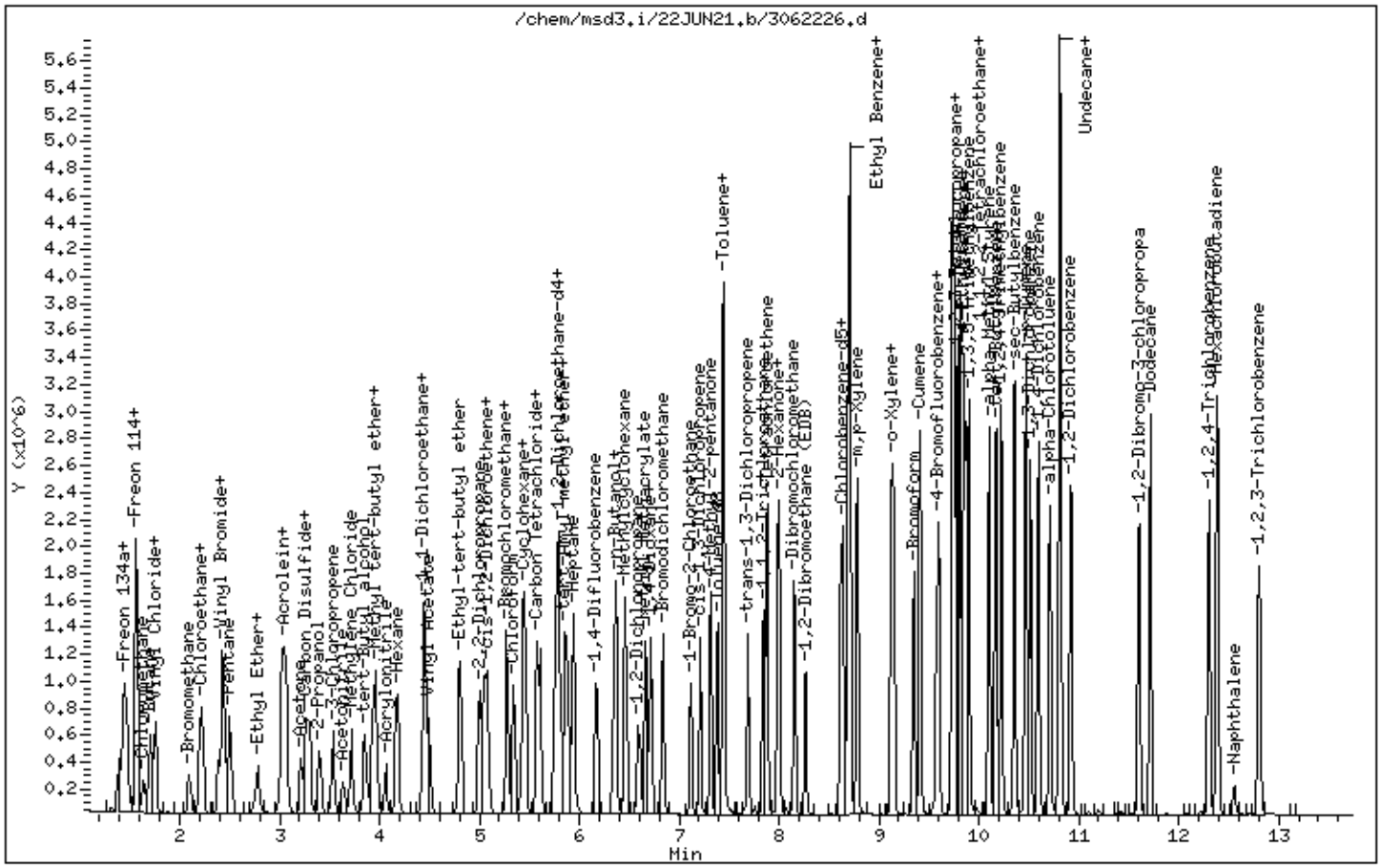
Instrument: msd3.i

Sample Info: 50mL 3018-2121

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051925.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 20-MAY-2021 00:33
Operator : gh Inst ID: msdp.i
Smp Info : 50mL 3018-2016
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 11:31 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.778	5.778 (1.000)	130	159261	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	123314				48.23- 108.23	77.43
5.778	5.778 (1.000)	49	287112				150.57- 210.57	180.28
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.659 (1.000)	114	599327	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93610				0.00- 45.71	15.62
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	583008	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	317926				23.78- 83.78	54.53
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.308	6.308 (1.092)	65	217297	24.7232	24.723		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	123853				27.21- 87.21	57.00
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	648333	24.9118	24.912		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	65745				0.00- 40.44	10.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	421967			34.95- 94.95	65.08
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	376160	25.1259	25.126	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	479143			95.92- 155.92	127.38
10.921	10.921 (1.154)	176	367133			66.89- 126.89	97.60
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	269381	53.4416	53.442	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	238008			59.44- 119.44	88.35
1.745	1.745 (0.302)	51	1146080			419.06- 479.06	425.45
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	351150	48.1826	48.182	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	231660			35.28- 95.28	65.97
1.675	1.675 (0.290)	39	239136			38.35- 98.35	68.10
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	184945	51.2320	51.232	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1146080			597.63- 657.63	619.69
1.703	1.703 (0.295)	47	118519			33.72- 93.72	64.08
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	729033	51.0385	51.038	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	236858			2.37- 62.37	32.49
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.745	1.745 (0.302)	67	72194	51.1662	51.166	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1146080			1501.01-1561.01	1587.50
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	701038	49.9978	49.998	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	225650			2.30- 62.30	32.19
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	765128	47.4212	47.421	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	246889			2.44- 62.44	32.27
1.856	1.856 (0.321)	58	25257			0.00- 33.36	3.30
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	437995	52.8545	52.854	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	114348			0.00- 56.26	26.11
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	80145	41.7506	41.751	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.025	2.025 (0.350)	43	645591			823.29- 883.29	805.53
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	464010	46.5443	46.544	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	139745			0.00- 59.69	30.12
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	446648	55.7047	55.705	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	360563			52.37- 112.37	80.73
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	297578	46.4227	46.423	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	278799			64.07- 124.07	93.69
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	171538	47.8510	47.851	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	50751			0.04- 60.04	29.59
2.612	2.612 (0.452)	49	59140			4.54- 64.54	34.48
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	529089	48.5043	48.504	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	338228			34.12- 94.12	63.93
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	279438	47.1623	47.162	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	273101			69.27- 129.27	97.73
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	742373	48.9075	48.908	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	483442			34.72- 94.72	65.12
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	646344	49.4042	49.404	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	195128			0.84- 60.84	30.19
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	832217	46.9376	46.938	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	122475			0.00- 44.98	14.72
2.970	2.970 (0.514)	72	59490			0.00- 37.39	7.15
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	152084	50.8427	50.843	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	294053			163.46- 223.46	193.35
3.285	3.285 (0.569)	45	421334			250.40- 310.40	277.04

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	73066	46.2624	46.262	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	419314			511.19- 571.19	573.88
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	138287	50.4592	50.459	80.00- 120.00	100.00
3.536	3.529 (0.612)	56	194444			111.10- 171.10	140.61
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	550653	48.8270	48.827	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	354592			33.56- 93.56	64.39
3.550	3.550 (0.614)	101	666533			89.21- 149.21	121.04
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	337843	50.1462	50.146	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	214195			34.02- 94.02	63.40
3.579	3.579 (0.619)	61	675008			168.77- 228.77	199.80
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	199513	47.7852	47.785	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	667100			302.95- 362.95	334.36
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	862293	48.5817	48.582	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	700808	59.3954	59.395	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	293044			12.22- 72.22	41.82
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	849259	50.4689	50.469	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	140946			0.00- 47.19	16.60
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	145308	49.0044	49.004	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	618664			396.19- 456.19	425.76
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	381456	48.6371	48.637	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	193635			20.95- 80.95	50.76
4.123	4.123 (0.714)	38	41374			0.00- 41.17	10.85
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	531632	49.0219	49.022	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	271047			22.03- 82.03	50.98
4.238	4.238 (0.733)	51	161032			0.18- 60.18	30.29

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	909661	46.3560	46.356	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	192086			0.00- 51.11	21.12
4.338	4.338 (0.751)	57	96676			0.00- 40.49	10.63
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	942632	48.1957	48.196	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	317705			3.10- 63.10	33.70
4.446	4.446 (0.769)	41	299560			1.28- 61.28	31.78
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	218803	48.6055	48.605	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	620102			255.84- 315.84	283.41
4.474	4.482 (0.774)	96	343318			127.59- 187.59	156.91
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	303698	48.4637	48.464	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	359381			88.05- 148.05	118.33
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.813)	57	776348	49.4834	49.483	80.00- 120.00	100.00
4.697	4.697 (0.813)	43	525013			37.52- 97.52	67.63
4.697	4.697 (0.813)	86	88068			0.00- 41.48	11.34
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	682714	50.6181	50.618	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	199004			0.00- 59.70	29.15
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.954 (0.856)	45	1790476	49.0696	49.070	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	321907			0.00- 48.18	17.98
4.954	4.954 (0.857)	59	180794			0.00- 40.15	10.10
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.865)	86	88227	50.8989	50.899	80.00- 120.00	100.00
4.990	4.997 (0.864)	43	2127436			2432.48-2492.48	2411.32
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1542046	48.8215	48.821	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	471804			1.00- 61.00	30.60
5.305	5.305 (0.918)	41	285817			0.00- 48.73	18.53
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	590380	49.2930	49.293	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	190828			2.28- 62.28	32.32
5.513	5.506 (0.954)	97	143176			0.00- 53.93	24.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.960)	98	233240	49.9273	49.927	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	363999			125.75- 185.75	156.06
5.549	5.549 (0.960)	61	845213			332.40- 392.40	362.38
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	172909	48.0341	48.034	80.00- 120.00	100.00
5.563	5.556 (0.963)	43	2166913			1214.50-1274.50	1253.21
5.556	5.556 (0.962)	57	75659			14.68- 74.68	43.76
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	177582	49.5968	49.597	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	845213			452.04- 512.04	475.96
5.570	5.570 (0.964)	70	92639			22.77- 82.77	52.17
89 Tetrahydrofuran					CAS #: 109-99-9		
5.771	5.771 (0.999)	42	596496	49.8249	49.825	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	151172			0.00- 55.82	25.34
5.771	5.771 (0.999)	72	164276			0.00- 57.59	27.54
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	698985	50.4429	50.443	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	450734			34.70- 94.70	64.48
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	484683	48.3805	48.380	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	852306			142.57- 202.57	175.85
5.957	5.957 (1.031)	41	457785			62.09- 122.09	94.45
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.033)	97	760233	48.5642	48.564	80.00- 120.00	100.00
5.972	5.972 (1.033)	99	490526			34.02- 94.02	64.52
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	745174	50.7546	50.755	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	752839			70.64- 130.64	101.03
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	203160	49.7993	49.799	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	511996			226.85- 286.85	252.02
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	2687519	49.2841	49.284	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	862052			2.24- 62.24	32.08
6.280	6.280 (1.087)	41	651161			0.00- 54.39	24.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	1008062	50.9701	50.970	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	234415			0.00- 52.90	23.25
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	277129	49.6938	49.694	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1123129			372.79- 432.79	405.27
6.358	6.358 (0.955)	55	386701			112.09- 172.09	139.54
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	539745	52.4480	52.448	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	168125			0.79- 60.79	31.15
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	404133	51.5803	51.580	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1034181			226.53- 286.53	255.90
6.444	6.444 (0.968)	57	534196			100.85- 160.85	132.18
110 n-Butanol					CAS #: 71-36-3		
6.810	6.810 (1.023)	56	349325	48.5815	48.581	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	250704			40.99- 100.99	71.77
6.810	6.810 (1.023)	43	202468			27.38- 87.38	57.96
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	487275	50.7743	50.774	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	525030			76.29- 136.29	107.75
6.867	6.867 (1.031)	97	316440			33.63- 93.63	64.94
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	501779	49.4882	49.488	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	357412			41.07- 101.07	71.23
7.096	7.089 (1.066)	41	260924			22.53- 82.53	52.00
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	396710	49.5227	49.523	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	847515			179.84- 239.84	213.64
7.139	7.139 (0.755)	100	159570			9.59- 69.59	40.22
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	259955	48.2421	48.242	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	255954			68.28- 128.28	98.46
7.175	7.175 (1.077)	57	86664			2.68- 62.68	33.34
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	458044	52.9443	52.944	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	407519			60.09- 120.09	88.97

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.204	7.204 (0.761)	95	354189			48.38- 108.38	77.33
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	770056	51.7510	51.751	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	492807			35.24- 95.24	64.00
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	636121	50.6019	50.602	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	200691			2.42- 62.42	31.55
7.691	7.691 (1.155)	39	434030			37.16- 97.16	68.23
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	691986	49.8280	49.828	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	322440			15.78- 75.78	46.60
6.974	6.974 (1.047)	55	795373			84.64- 144.64	114.94
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	480926	46.7077	46.708	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1325477			242.35- 302.35	275.61
7.798	7.791 (1.171)	85	161202			3.24- 63.24	33.52
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	1343637	49.2421	49.242	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	787609			28.38- 88.38	58.62
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.194)	57	566390	48.6818	48.682	80.00- 120.00	100.00
7.949	7.949 (1.194)	85	479927			56.00- 116.00	84.73
7.949	7.949 (1.194)	43	1456775			228.66- 288.66	257.20
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	600175	52.3121	52.312	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	190922			1.24- 61.24	31.81
8.214	8.214 (0.868)	39	389221			34.11- 94.11	64.85
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	476355	50.2326	50.232	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	296859			31.96- 91.96	62.32
8.400	8.400 (0.888)	83	396895			52.93- 112.93	83.32
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	682961	51.3998	51.400	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	535513			47.84- 107.84	78.41
8.464	8.464 (0.895)	131	516602			45.29- 105.29	75.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	657966	48.5640	48.564	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1278689			162.87- 222.87	194.34
8.586	8.586 (0.908)	100	102219			0.00- 45.94	15.54
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	649887	50.1538	50.154	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	820466			94.99- 154.99	126.25
8.579	8.579 (1.288)	78	211986			2.05- 62.05	32.62
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	922140	52.0444	52.044	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	712882			47.45- 107.45	77.31
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	783569	51.5187	51.519	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	740572			64.21- 124.21	94.51
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	920567	49.4826	49.482	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	271612			0.00- 59.64	29.50
7.605	7.605 (1.142)	144	89030			0.00- 39.63	9.67
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1170183	50.5473	50.547	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	376526			1.74- 61.74	32.18
9.496	9.496 (1.004)	77	640652			25.04- 85.04	54.75
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	610182	50.4060	50.406	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1864363			273.74- 333.74	305.54
156 Nonane					CAS #: 111-84-2		
9.603	9.596 (1.015)	43	1509244	48.4576	48.458	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1271714			54.16- 114.16	84.26
9.603	9.603 (1.015)	85	358055			0.00- 53.90	23.72
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	532758	41.1032	41.103	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	583008			57.42- 117.42	109.43
9.596	9.596 (1.014)	95	192120			5.70- 65.70	36.06
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	760695	50.1737	50.174	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1493758			163.73- 223.73	196.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	723870	49.8321	49.832	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1494892			177.45- 237.45	206.51
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1208123	48.6312	48.631	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	579213			17.88- 77.88	47.94
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	906568	51.9083	51.908	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	460931			21.25- 81.25	50.84
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2265548	49.6487	49.649	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	647806			0.00- 58.52	28.59
10.649	10.649 (1.126)	51	293698			0.00- 43.00	12.96
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	751578	46.0550	46.055	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	241627			1.94- 61.94	32.15
10.871	10.871 (1.149)	42	519433			37.89- 97.89	69.11
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	1111439	49.9028	49.903	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	714222			35.20- 95.20	64.26
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	712211	51.3180	51.318	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	694838			67.21- 127.21	97.56
11.179	11.179 (1.182)	77	448248			29.02- 89.02	62.94
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	673698	49.7919	49.792	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2670473			366.49- 426.49	396.39
11.150	11.150 (1.179)	105	100975			0.00- 44.85	14.99
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	347282	48.9223	48.922	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1167359			280.55- 340.55	336.14
11.100	11.100 (1.173)	61	156927			15.49- 75.49	45.19
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	340414	73.1510	73.151	80.00- 120.00	100.00(R)
11.179	11.179 (1.182)	89	238240			49.11- 109.11	69.99
11.179	11.179 (1.182)	75	1167359			426.44- 486.44	342.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1694913	47.7517	47.752	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	465002			0.00- 57.66	27.44
11.258	11.258 (1.190)	142	69403			0.00- 34.09	4.09
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	721474	49.0325	49.032	80.00- 120.00	100.00
11.287	11.287 (1.193)	105	2282704			284.55- 344.55	316.39
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	570341	49.5063	49.506	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1973274			315.17- 375.17	345.98
11.301	11.301 (1.195)	65	288198			21.55- 81.55	50.53
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1019008	50.3002	50.300	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1992138			164.93- 224.93	195.50
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	1011075	50.2389	50.239	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	559661			25.30- 85.30	55.35
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	1828423	48.2549	48.255	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	453008			0.00- 54.25	24.78
11.738	11.738 (1.241)	91	1113434			31.27- 91.27	60.90
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1940625	50.7513	50.751	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	961894			19.05- 79.05	49.57
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	587147	49.8567	49.857	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2755895			437.55- 497.55	469.37
11.996	11.996 (1.268)	91	411332			40.76- 100.76	70.06
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2592253	49.8015	49.802	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	667083			0.00- 55.54	25.73
12.160	12.153 (1.285)	91	550118			0.00- 51.48	21.22
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	1321489	50.4912	50.491	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	844750			33.21- 93.21	63.92
12.196	12.196 (1.289)	111	544933			11.31- 71.31	41.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1351414	51.0959	51.096	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	860632			33.90- 93.90	63.68
12.311	12.311 (1.301)	111	545078			9.45- 69.45	40.33
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1867138	51.4087	51.409	80.00- 120.00	100.00
12.468	12.461 (1.318)	126	432223			0.00- 53.26	23.15
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2141161	52.2242	52.224	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	1903384			58.12- 118.12	88.89
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	659133	49.8581	49.858	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2279398			314.79- 374.79	345.82
12.626	12.626 (1.335)	92	1217501			154.29- 214.29	184.71
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1280596	49.8997	49.900	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	810645			33.84- 93.84	63.30
12.741	12.741 (1.347)	111	542670			12.73- 72.73	42.38
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.614	13.600 (1.439)	157	808811	52.0350	52.035	80.00- 120.00	100.00
13.614	13.600 (1.439)	75	667140			52.48- 112.48	82.48
13.614	13.600 (1.439)	155	627024			47.41- 107.41	77.52
207 Dodecane					CAS #: 112-40-3		
13.822	13.801 (1.461)	57	2491393	76.6649	76.665	80.00- 120.00	100.00(R)
13.822	13.801 (1.461)	43	2053107			52.87- 112.87	82.41
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.496	14.467 (1.532)	180	1351062	71.2544	71.254	80.00- 120.00	100.00
14.496	14.467 (1.532)	182	1288755			65.33- 125.33	95.39
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.617	14.582 (1.545)	225	961978	72.0891	72.089	80.00- 120.00	100.00
14.617	14.582 (1.545)	223	615317			33.17- 93.17	63.96
216 Naphthalene					CAS #: 91-20-3		
14.796	14.768 (1.564)	128	329062	6.79056	6.790	80.00- 120.00	100.00
14.804	14.768 (1.565)	127	41782			0.00- 42.88	12.70
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.104	15.069 (1.597)	180	1290198	76.9717	76.972	80.00- 120.00	100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.104	15.069 (1.597)	182	1235122			65.75- 125.75	95.73
15.104	15.069 (1.597)	145	454864			5.23- 65.23	35.26

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051925.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	159261	0.28
108 1,4-Difluorobenze	597103	358262	835944	599327	0.37
153 Chlorobenzene-d5	587747	352648	822846	583008	-0.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 19MAY21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: gh
Data Type: MS DATA SampleType: ICV
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	53.442	106.88	70-130
5 Propylene	50.000	48.182	96.37	70-130
7 1,1-Difluoroethan	50.000	51.232	102.46	70-130
8 Freon 12	50.000	51.038	102.08	70-130
9 Chlorodifluoromet	50.000	51.166	102.33	70-130
10 Freon 114	50.000	49.998	100.00	70-130
12 Isobutane	50.000	47.421	94.84	70-130
15 Chloromethane	50.000	52.854	105.71	70-130
18 Butane	50.000	41.751	83.50	70-130
19 Vinyl Chloride	50.000	46.544	93.09	70-130
20 1,3-Butadiene	50.000	55.705	111.41	70-130
24 Bromomethane	50.000	46.423	92.85	70-130
30 Chloroethane	50.000	47.851	95.70	70-130
31 Isopentane	50.000	48.504	97.01	70-130
32 Vinyl Bromide	50.000	47.162	94.32	70-130
33 Freon 11	50.000	48.908	97.82	70-130
34 Dichlorofluoromet	50.000	49.404	98.81	70-130
35 Pentane	50.000	46.938	93.88	70-130
38 Ethyl Ether	50.000	50.843	101.69	70-130
39 Ethanol	58.000	46.262	79.76	70-130
42 Acrolein	58.000	50.459	87.00	70-130
43 Freon 113	50.000	48.827	97.65	70-130
44 1,1-Dichloroethen	50.000	50.146	100.29	70-130
47 Acetone	50.000	47.785	95.57	70-130
48 Carbon Disulfide	50.000	48.582	97.16	70-130
49 Iodomethane	50.000	59.395	118.79	70-130
52 2-Propanol	50.000	50.469	100.94	70-130
54 3-Chloropropene	50.000	49.004	98.01	70-130
57 Acetonitrile	50.000	48.637	97.27	70-130
59 Methylene Chlorid	50.000	49.022	98.04	70-130
62 tert-Butyl alcoho	50.000	46.356	92.71	70-130
63 Methyl tert-butyl	50.000	48.196	96.39	70-130
64 trans-1,2-Dichlor	50.000	48.605	97.21	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	48.464	96.93	70-130
67	Hexane	50.000	49.483	98.97	70-130
71	1,1-Dichloroethan	50.000	50.618	101.24	70-130
72	Isopropyl ether	50.000	49.070	98.14	70-130
73	Vinyl Acetate	50.000	50.899	101.80	70-130
79	Ethyl-tert-butyl	50.000	48.821	97.64	70-130
84	2,2-Dichloropropa	50.000	49.293	98.59	70-130
85	cis-1,2-Dichloroe	50.000	49.927	99.85	70-130
86	2-Butanone	50.000	48.034	96.07	70-130
87	Ethyl Acetate	50.000	49.597	99.19	70-130
89	Tetrahydrofuran	50.000	49.825	99.65	70-130
92	Chloroform	50.000	50.443	100.89	70-130
94	Cyclohexane	50.000	48.380	96.76	70-130
96	1,1,1-Trichloroet	50.000	48.564	97.13	70-130
99	1,1-Dichloroprope	50.000	49.799	99.60	70-130
97	Carbon Tetrachlor	50.000	50.755	101.51	70-130
101	2,2,4-Trimethylpe	50.000	49.284	98.57	70-130
102	Benzene	50.000	50.970	101.94	70-130
105	tert-Amyl methyl	50.000	49.694	99.39	70-130
106	1,2-Dichloroethan	50.000	52.448	104.90	70-130
107	Heptane	50.000	51.580	103.16	70-130
110	n-Butanol	50.000	48.581	97.16	70-130
111	Trichloroethene	50.000	50.774	101.55	70-130
118	Dibromomethane	50.000	52.944	105.89	70-130
127	Methylcyclohexane	50.000	49.828	99.66	70-130
114	1,2-Dichloropropa	50.000	49.488	98.98	70-130
116	Methyl Methacryla	50.000	49.523	99.05	70-130
117	1,4-Dioxane	50.000	48.242	96.48	70-130
122	Bromodichlorometh	50.000	51.751	103.50	70-130
126	cis-1,3-Dichlorop	50.000	50.602	101.20	70-130
131	4-Methyl-2-pentan	50.000	46.708	93.42	70-130
136	Octane	50.000	48.682	97.36	70-130
137	Toluene	50.000	49.242	98.48	70-130
139	trans-1,3-Dichlor	50.000	52.312	104.62	70-130
141	1,1,2-Trichloroet	50.000	50.232	100.47	70-130
142	Tetrachloroethene	50.000	51.400	102.80	70-130
143	2-Hexanone	50.000	48.564	97.13	70-130
144	1,3-Dichloropropa	50.000	50.154	100.31	70-130
146	Dibromochlorometh	50.000	52.044	104.09	70-130
148	1,2-Dibromoethane	50.000	51.519	103.04	70-130
151	1-Bromo-2-Chloroe	50.000	49.482	98.97	70-130
154	Chlorobenzene	50.000	50.547	101.09	70-130
155	Ethyl Benzene	50.000	50.406	100.81	70-130
156	Nonane	50.000	48.458	96.92	70-130
157	1,1,1,2-Tetrachlo	50.000	41.103	82.21	70-130
158	m,p-Xylene	50.000	50.174	100.35	70-130
164	o-Xylene	50.000	49.832	99.66	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	48.631	97.26	70-130
167 Bromoform	50.000	51.908	103.82	70-130
168 Cumene	50.000	49.649	99.30	70-130
169 Cyclohexanone	50.000	46.055	92.11	70-130
175 1,1,2,2-Tetrachlo	50.000	49.903	99.81	70-130
177 Bromobenzene	50.000	51.318	102.64	70-130
178 Propylbenzene	50.000	49.792	99.58	70-130
179 1,2,3-Trichloropr	50.000	48.922	97.84	70-130
181 trans-1,4-Dichlor	50.000	73.151	146.30*	70-130
182 Decane	50.000	47.752	95.50	70-130
183 4-Ethyltoluene	50.000	49.032	98.07	70-130
184 2-Chlorotoluene	50.000	49.506	99.01	70-130
185 1,3,5-Trimethylbe	50.000	50.300	100.60	70-130
188 alpha Methyl Styr	50.000	50.239	100.48	70-130
189 tert-Butylbenzene	50.000	48.255	96.51	70-130
190 1,2,4-Trimethylbe	50.000	50.751	101.50	70-130
192 sec-Butylbenzene	50.000	49.857	99.71	70-130
194 p-Cymene	50.000	49.802	99.60	70-130
195 1,3-Dichlorobenze	50.000	50.491	100.98	70-130
196 1,4-Dichlorobenze	50.000	51.096	102.19	70-130
199 alpha-Chlorotolue	50.000	51.409	102.82	70-130
201 Undecane	50.000	52.224	104.45	70-130
202 Butylbenzene	50.000	49.858	99.72	70-130
204 1,2-Dichlorobenze	50.000	49.900	99.80	70-130
206 1,2-Dibromo-3-chl	50.000	52.035	104.07	70-130
207 Dodecane	50.000	76.665	153.33*	70-130
213 1,2,4-Trichlorobe	58.000	71.254	122.85	70-130
215 Hexachlorobutadie	58.000	72.089	124.29	70-130
216 Naphthalene	5.800	6.790	117.08	60-140
222 1,2,3-Trichlorobe	58.000	76.972	132.71*	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.723	98.89	70-130
$ 134 Toluene-d8	25.000	24.912	99.65	70-130
$ 170 4-Bromofluorobenz	25.000	25.126	100.50	70-130

Data File: /chem/msdp.i/19MAY21.b/p051925.d

Page 1

Date : 20-MAY-2021 00:33

Client ID: ICV

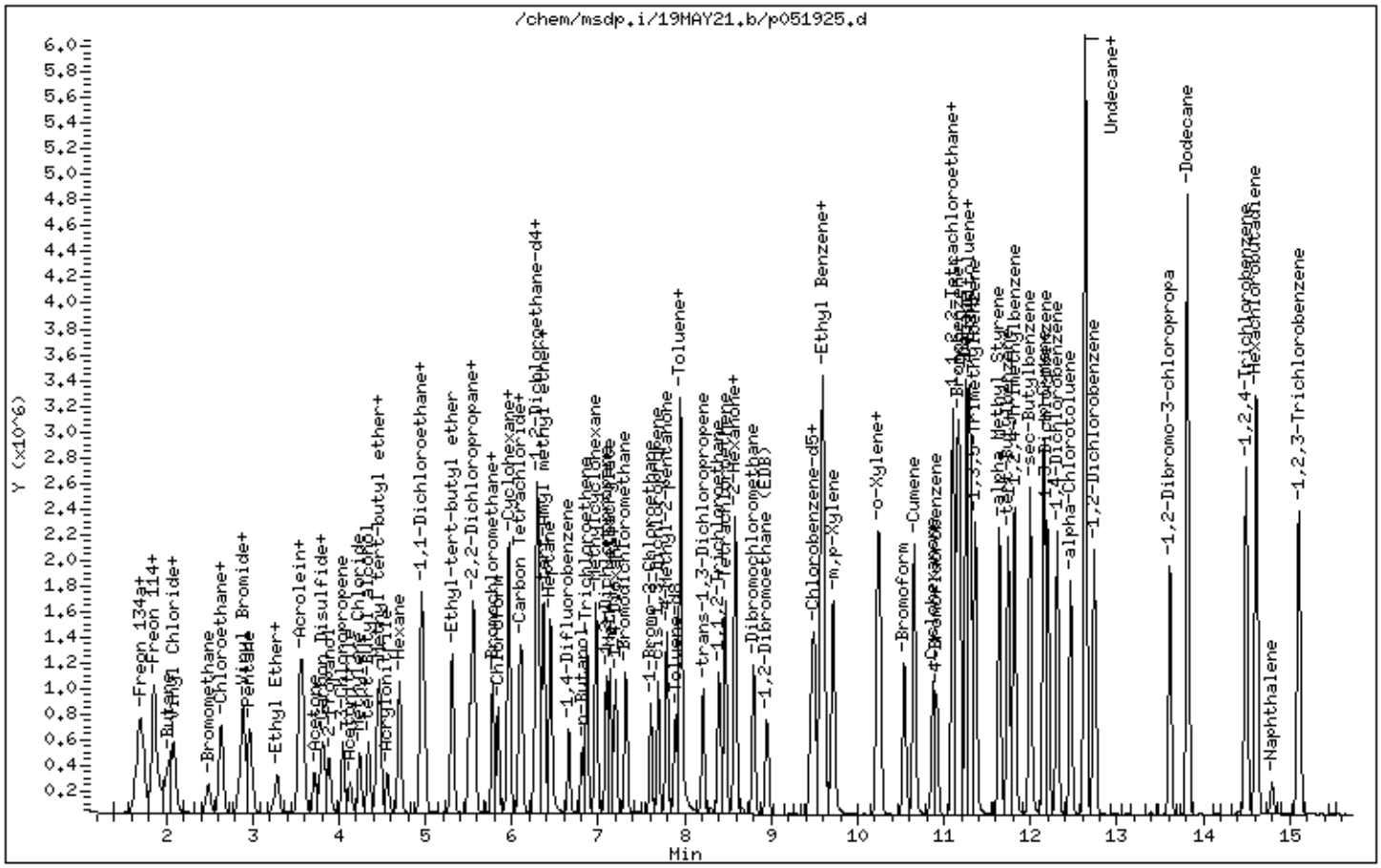
Instrument: msdp.i

Sample Info: 50mL 3018-2016

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



MSD-3 MDL Case Narrative

A Method Detection Limit Study for TO-15 method was performed on 05/03/21, 05/04/24, and 05/05/21, 06/01/21, 06/02/22, 06/03/21, 06/04/21, 06/07/21 and 06/08/21.

The MDL spikes were performed at:

- 0.3 ppbv (5.0ppbv->0.3ppbv); spike load of 12mL of standard #3018-2045
- 0.4 ppbv (5.0ppbv->0.4ppbv); spike load of 16mL of standard #3018-2045
- 0.8 ppbv (5.0ppbv->0.8ppbv); spike load of 32ml of standard #3018-2045 and #3018-1973
- 2.0 ppbv (5.0ppbv->2.0ppbv); spike load of 80ml of standard #3018-2045 and #3018-1973

The MDL verifications were analyzed on 6/15/21:

- 3061507: (0.3ppbv spike compounds). 5.0ppbv->0.25ppbv; spike load of 10ml of standard #3018-1973
- 3061508: (0.4ppbv spike compounds). 5.0ppbv->0.30ppbv; spike load of 12ml of standard #3018-1973
- 3061509: (0.8ppbv RL compounds). 5.0ppbv->0.50ppbv; spike load of 20ml of standard #3018-1973
- 3061510: (2.0 ppbv RL compounds). 5.0ppbv->1.25ppbv; spike load of 50ml of standard #3018-1973
- 3061510a (Naph only). 5.0ppbv->0.125ppbv; spike load of 50ml of standard #3018-1973

Notes:

1) **The MDL values for the following compounds were taken from the MDL blank:**
   - Toluene (0.12097ppbv)
   - Tetrachloroethane (0.08847ppbv)
   - m-p-Xylene (0.27315ppbv)
   - o-Xylene (0.13368ppbv)
   - 4-Ethyltoluene (0.12694ppbv)
   - 1,3,5-Trimethylbenzene (0.07763ppbv)
   - 1,2,4-Trimethylbenzene (0.18507ppbv)
   - Acetone (0.35944ppbv)
   - Carbon Disulfide (0.46909ppbv)

2) Dodecane mean recovered concentration and MDL ratio <1.

3) MDL verification for Naphthalene was less than 2-4X the MDL value.

4) The concentrations for Dodecane, 1,2,4-TCB, Hexachlorobutadiene, 1,2,3-TCB, and Naphthalene were adjusted in the MDL spikes due to the certified concentration exceeding more than 15% of the nominal concentration.

MDL expires 6/08/22

01 JUN21. 0.4ppbv - mdl.rp

MSD-3 TO15 Quad MDL

Standard 3018-2045

16 ml load volume

Spike concentration

0.4ppbv

Report Date : 04-Jun-2021 15:53

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060109	3060110	3060111	3060209	3060210	3060211	3060312	3060313	3060314
INJ.DATE:	01-JUN-2021	01-JUN-2021	01-JUN-2021	02-JUN-2021	02-JUN-2021	02-JUN-2021	03-JUN-2021	03-JUN-2021	03-JUN-2021
INJ.TIME:	14:01	14:29	14:56	14:10	14:38	15:05	16:50	17:18	17:45

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Freon 12	454.29	450.99	459.72	449.89	450.96	521.90	520.12	437.40	476.88	469.13	31.20	90.37	500 400
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
10 Freon 114	470.39	474.93	474.26	523.77	487.91	489.27	456.20	442.84	499.62	479.91	23.84	69.05	500 400
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Reviewer 1 _____ Date: 6/16/21
Reviewer 2 _____ Date: 6/16/21

Ratio of the mean recovered concentration and MDL value is between 1-20.

$\bar{X} = 90.78$
$2\bar{X} = 181.56$
$3\bar{X} = 272.34$
$4\bar{X} = 363.12$

MDL verification
Standard # 3018-1973 (5.0ppbv)
12 mL volume file # 3061508
spike concentration 0.3 ppbv

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PQTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Vinyl Chloride	520.09	567.60	562.12	528.99	641.59	506.36	653.03	614.57	703.97	588.70	68.09	197.20	500 400
20 1,3-Butadiene	538.14	632.50	627.40	629.38	532.48	659.05	526.06	637.99	669.42	605.83	56.97	164.99	500 400
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 Freon 11	467.18	475.49	444.90	493.51	456.60	484.61	495.38	482.36	507.43	478.61	19.83	57.42	500 400
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SpRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	400
43 Freon 113	490.98	485.04	500.15	532.82	449.70	514.81	533.10	480.82	478.98	496.27	27.18	78.72	500
44 1,1-Dichloroethene	471.23	417.05	403.58	502.55	401.29	415.87	413.26	466.25	453.20	438.25	36.01	104.27	500 800
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
64 trans-1,2-Dichloroethe	434.58	437.36	418.44	594.77	392.87	379.26	366.41	352.78	407.49	420.44	71.59	207.33	500	400
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
66 Acrylonitrile	460.96	500.76	523.53	501.36	329.25	401.49	385.40	412.03	485.66	444.49	65.47	189.59	2000	500
67 Hexane	397.44	390.85	381.15	396.45	393.83	395.15	352.61	358.99	301.22	374.19	32.03	92.77	500	800
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
85 cis-1,2-Dichloroethene	406.23	339.12	394.79	410.43	459.76	386.12	407.07	400.11	391.34	399.44	31.16	90.23	500	400
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89 Tetrahydrofuran	392.28	308.18	375.81	351.30	382.02	278.79	368.88	354.69	374.96	354.10	37.34	108.12	500 800
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
94 Cyclohexane	421.16	433.62	432.47	402.30	353.96	357.57	385.82	409.64	331.39	391.99	37.05	107.30	500 400
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 Carbon Tetrachloride	441.86	416.57	401.45	496.61	437.54	450.66	466.79	463.29	457.40	448.02	28.17	81.57	500 800
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
99 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
101 2,2,4-Trimethylpentane	366.02	354.98	374.91	364.34	345.24	369.91	351.32	336.42	342.33	356.16	13.37	38.72	500 400
102 Benzene	384.25	373.46	379.77	375.64	382.39	357.76	403.13	391.89	370.25	379.84	13.00	37.64	500 400
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 104 1,2-Dichloroethane-d4	26012.80	24530.93	25455.22	26543.26	27108.49	26931.37	27307.04	27270.32	27019.49	26464.32	953.12	2760.23	
105 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 1,2-Dichloroethane	446.36	440.55	473.99	465.84	483.48	500.97	507.75	551.39	507.50	486.43	34.69	100.46	500 800
107 Heptane	324.96	372.59	369.77	307.08	314.82	300.27	322.25	312.99	378.20	333.66	30.85	89.34	500 800
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	432.98	412.78	434.49	426.79	398.78	467.28	457.60	449.98	423.39	433.78	21.72	62.91	500	400	
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	424.16	543.68	543.45	628.55	524.98	560.69	610.59	571.80	548.48	550.71	58.07	168.16	500	400	
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
118 Dibromomethane	446.54	507.68	505.31	536.64	539.78	466.69	488.20	467.21	461.00	491.00	33.52	97.07	2000	400	80.81
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	390.26	427.63	436.33	364.46	404.43	422.02	431.56	402.29	441.35	413.37	25.12	72.75	500	400	
127 Methylcyclohexane	417.04	384.70	372.53	399.47	414.30	328.78	407.36	381.08	343.60	383.21	30.84	89.33	2000	400	
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	413.22	394.54	380.31	389.13	424.63	366.34	345.26	397.08	356.29	385.20	25.97	75.20	500	400	
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24812.98	25037.79	24745.78	24544.93	25002.36	24499.33	25124.77	25292.63	25011.02	24896.84	265.60	769.17			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	377.73	417.60	441.05	395.95	398.25	394.68	417.99	394.54	399.15	404.11	18.51	53.61
137 Toluene	429.11	406.62	421.60	411.51	455.86	399.72	402.79	379.76	426.55	414.84	21.66	62.72
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	396.13	376.83	443.62	416.16	438.65	440.75	424.09	396.52	433.45	418.47	23.75	68.78
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	407.47	393.54	461.94	440.32	433.21	437.85	458.30	451.48	414.88	433.22	23.54	68.17
142 Tetrachloroethene	477.52	458.32	462.79	462.43	455.71	485.11	442.27	451.47	408.16	455.97	22.08	63.95
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	458.56	380.29	433.12	408.65	450.25	410.65	424.12	460.15	431.47	428.58	26.14	75.69
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	440.26	428.71	428.43	472.03	460.96	428.50	419.84	468.80	486.20	448.19	24.04	69.63
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	417.98	426.05	414.82	421.18	435.58	444.67	448.51	411.32	408.04	425.35	14.55	42.14
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	364.58	412.70	432.65	359.94	359.32	405.37	382.39	428.89	405.19	394.56	28.89	83.66
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	375.42	350.56	433.73	402.14	412.55	398.21	362.11	362.61	368.10	385.05	27.82	80.56

PPTV RL | SPRL | MDL Blank

2000 | 400
500 | 400 | 120.97
500 | 400
500 | 400 | 88.4
500 | 400
2000 | 500
500 | 400
500 | 800
800 | 400
500 | 800 | 273.15

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PDTV RL SPRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
164 o-Xylene	360.39	357.64	385.95	366.63	386.16	380.27	370.40	340.52	352.46	366.71	15.64	45.30	500	400	133.6
165 Styrene	364.41	347.64	373.59	377.48	380.05	357.02	333.96	350.60	321.00	356.20	20.09	58.19	500	400	
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
167 Bromoform	426.94	444.59	437.91	458.93	427.02	434.01	459.30	458.58	464.41	445.74	14.90	43.14	500	400	
168 Cumene	378.24	397.47	397.21	383.06	374.09	375.05	349.86	337.74	344.12	370.76	22.04	63.84	500	800	
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 170 4-Bromofluorobenzene	26228.51	26286.57	26715.37	26196.73	26575.59	26324.98	26555.74	26222.00	26548.37	26405.98	192.72	558.13			
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
175 1,1,2,2-Tetrachloroeth	411.22	443.64	429.40	426.37	424.84	397.72	422.71	437.17	422.96	424.00	13.47	39.00	500	400	
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
178 Propylbenzene	415.18	403.90	410.25	417.37	402.47	409.14	387.22	403.40	417.91	407.43	9.63	27.88	500	400	
179 1,2,3-Trichloropropane	353.67	411.55	459.65	457.83	494.33	423.20	519.48	502.45	418.17	448.93	52.65	152.48	2000	400	
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	416.23	451.66	409.49	400.58	423.84	452.96	393.29	403.12	379.99	414.57	24.85	71.96
184 2-Chlorotoluene	399.81	443.34	404.82	459.95	412.16	455.86	417.43	432.16	434.47	428.89	21.74	62.95
185 1,3,5-Trimethylbenzene	386.43	396.74	425.00	409.73	396.70	401.73	440.80	357.16	387.96	400.25	23.91	69.24
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	368.66	361.27	347.68	364.57	378.24	362.63	327.92	352.95	373.95	359.76	15.26	44.18
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	371.01	404.88	382.39	386.33	381.42	368.31	349.08	354.63	367.82	373.98	16.98	49.18
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	374.76	355.04	391.28	426.93	393.20	338.76	390.14	364.61	386.77	380.17	25.60	74.12
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	395.01	369.71	354.29	381.01	387.47	358.95	362.91	369.07	330.28	367.63	19.36	56.08
195 1,3-Dichlorobenzene	420.15	448.97	452.39	479.41	459.18	441.28	450.12	496.82	465.52	457.09	22.09	63.97
196 1,4-Dichlorobenzene	436.69	444.02	449.75	444.21	448.35	427.96	448.94	422.21	457.05	442.13	11.18	32.39
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	387.37	418.08	392.75	402.39	415.91	404.49	414.03	404.91	376.73	401.85	13.92	40.31
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	377.98	409.21	399.32	376.58	371.53	391.53	321.56	388.79	377.51	379.33	24.85	71.97
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	459.79	458.84	436.36	432.09	432.68	452.83	459.30	470.11	467.48	452.16	14.76	42.75
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

PPTV RL SPRL MDL Blank

183	500	400	126.94
184	2000	400	
185	500	400	77.63
186			
187			
188	2000	400	
189			
190	500	800	185.10
191			
192	2000	800	
193			
194	2000	800	
195	500	400	
196	500	400	
197			
198			
199	500	800	
200			
201			
202	2000	400	27.37
203			
204	500	400	
205			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

01JUN21.0.3ppbv-mdl.rp

MSD3 TO1S Quad MDL
Standard 3018-2045
12mL load volume
Spike concentration
0.3 ppbv

Report Date : 04-Jun-2021 14:34

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060106	3060107	3060108	3060206	3060207	3060208	3060309	3060310	3060311
INJ.DATE:	01-JUN-2021	01-JUN-2021	01-JUN-2021	02-JUN-2021	02-JUN-2021	02-JUN-2021	03-JUN-2021	03-JUN-2021	03-JUN-2021
INJ.TIME:	12:41	13:07	13:34	12:50	13:16	13:42	15:30	15:56	16:22

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 6/16/21
Reviewer 2 _____ Date: 6/16/21

$\bar{X} = 64.88$
$2\bar{X} = 129.76$
$3\bar{X} = 194.64$
$4\bar{X} = 259.52$

MDL verification
Standard # 3018-1973 (5.0ppbv)
10mL volume file # 3061507
spike concentration 0.25 ppbv

Ratio of the mean recovered concentration and MDL value is between 1-20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	280.63	334.31	330.88	297.77	269.25	303.07	316.30	316.38	326.08	308.30	22.53	65.24
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SpRL

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
87	Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89	Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
92	Chloroform	332.42	287.99	325.03	322.59	329.86	365.62	317.23	340.28	326.41	327.49	20.45	59.21
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94	Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96	1,1,1-Trichloroethane	376.39	307.03	323.45	312.86	337.84	322.48	318.64	338.31	316.45	328.16	20.87	60.45
97	Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101	2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102	Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 104	1,2-Dichloroethane-d4	24732.82	24483.61	25193.83	26660.74	26303.99	26435.23	27396.85	27274.45	26821.81	26144.82	1080.25	3128.41
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106	1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107	Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 300

500 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PQTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	331.20	340.69	267.31	336.16	334.24	360.49	378.74	377.83	341.91	340.95	33.09	95.82
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	25052.44	25009.73	24504.59	24843.88	25083.33	24789.81	25111.34	25186.81	25305.54	24987.50	240.58	696.71

500 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	334.43	330.38	345.54	321.64	328.85	348.25	311.55	354.66	354.62	336.66	15.09	43.69
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 700

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	26639.07	26542.32	26711.43	26659.23	26349.17	26729.05	26446.99	26674.80	26523.06	26586.12	129.20	374.17
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

04JUN21: 0.8ppbv - mdl.rp.

MSD-3 TOIS Quad MDL
Standards 3018-2045
& 3018-1973

Report Date : 15-Jun-2021 11:33

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

32ml load volume
Spike concentration 0.8ppbv and Napka 0.08

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060406	3060407	3060408	3060707	3060708	3060709	3060808	3060809	3060810
INJ.DATE:	04-JUN-2021	04-JUN-2021	04-JUN-2021	07-JUN-2021	07-JUN-2021	07-JUN-2021	08-JUN-2021	08-JUN-2021	08-JUN-2021
INJ.TIME:	13:05	13:31	13:58	13:00	13:27	13:53	14:43	15:09	15:36

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPBV RL	SPRL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
4 Freon 134a	1020.23	880.17	1137.26	943.95	891.36	853.33	1032.03	892.71	1006.14	961.91	93.26	270.08	2000	800
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Chlorodifluoromethane	1361.40	1219.84	962.01	1224.96	1173.73	979.39	1194.48	1247.62	1008.83	1152.47	137.65	398.63	2000	800
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
12 Isobutane	878.19	794.03	684.12	845.10	813.74	808.70	782.30	774.87	774.82	795.10	53.90	156.08	2000	800
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Reviewer 1 _____ Date: 6/16/21
Reviewer 2 _____ Date: 6/17/21

$\bar{X}$ = 18.136
$2\bar{X}$ = 362.73
$3\bar{X}$ = 544.08
$4\bar{X}$ = 725.44

MDL verification
Napk file #3061510a
spike concentration 0.125ppbv
Standard # 3018-1973 (5.0 ppbv)
20ml Value file # 3061509
spike concentration 0.50 ppbv

Ratio of the mean recovered concentration and MDL value is between 1-20 minus Dodecane.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PQTVRL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
32 Vinyl Bromide	783.68	843.96	823.06	874.54	969.30	862.75	804.65	796.67	834.38	843.67	55.83	161.70	2000	800
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
34 Dichlorofluoromethane	905.08	894.83	906.95	913.77	843.49	898.09	850.30	875.24	837.60	880.59	29.74	86.12	2000	800
35 Pentane	740.14	744.53	796.56	870.47	692.97	855.75	768.27	787.27	794.77	783.42	55.81	161.64	2000	800
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
38 Ethyl Ether	803.87	833.64	752.75	1085.11	920.17	831.38	749.95	878.33	685.15	837.82	116.75	338.12	2000	800
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

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Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
54 3-Chloropropene	901.59	898.26	821.32	851.78	966.60	747.03	805.43	779.77	900.80	852.51	70.23	203.39	2000	800
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
63 Methyl tert-butyl ethe	778.85	724.05	719.70	833.74	759.76	807.87	747.85	783.09	830.76	776.18	42.32	122.57	2000	800

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

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Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	871.58	818.11	897.42	892.83	834.53	857.33	830.86	860.00	863.58	858.47	27.07	78.41
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

2000 800

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PQTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 1,1-Dichloropropene	899.88	905.84	829.55	980.05	897.19	789.24	789.83	884.79	788.68	862.78	67.06	194.21
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 104 1,2-Dichloroethane-d4	27490.57	26926.33	27656.30	27169.14	26370.11	26940.63	26165.27	26835.14	27387.76	26993.47	497.45	1440.61
105 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

2000 800

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

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Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	655.66	687.48	633.20	608.87	671.67	722.86	704.74	698.78	655.65	670.99	36.45	105.57
117 1,4-Dioxane	772.62	846.73	843.41	798.64	795.20	863.42	854.90	857.64	796.94	825.50	34.20	99.05
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	24688.19	25025.38	24938.39	25296.89	25010.04	25129.01	24732.71	24853.10	24734.30	24934.22	203.48	589.28

2000 800
2000 800

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

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Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	768.89	759.40	673.44	706.68	690.61	692.59	714.72	748.57	723.94	719.87	33.10	95.85
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

2000 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
169 Cyclohexanone	717.42	667.63	709.26	677.52	710.73	716.14	753.63	864.92	825.56	738.09	66.24	191.82	2000	800
$ 170 4-Bromofluorobenzene	26725.29	26946.13	26904.46	26509.83	26650.79	26586.99	26867.07	26857.17	26525.59	26730.37	169.23	490.09		
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
177 Bromobenzene	836.90	856.61	830.42	879.25	816.64	875.30	838.05	875.70	897.36	856.25	27.16	78.67	2000	800
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
181 trans-1,4-Dichloro-2-b	810.42	662.40	714.50	617.17	597.39	694.13	795.48	717.51	707.98	701.88	71.32	206.55	2000	800
182 Decane	881.51	765.94	920.42	810.18	785.49	795.67	690.77	760.67	748.96	795.51	69.41	201.01	2000	800

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	794.34	808.05	771.83	740.78	800.67	812.76	806.77	826.59	806.85	796.51	25.62	74.20
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	477.93	619.00	628.30	482.52	641.52	659.51	448.67	644.95	677.96	586.71	89.82	260.11
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

189: 74.20 — 2000 — 800
201: 260.11 — 2000 — 800

94.31
~~127.04~~
UP 6/17/21

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	140.32	409.60	509.31	198.46	454.37	517.47	291.67	482.12	574.24	397.51	152.33	441.14
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	36.66	67.50	84.44	37.01	70.86	89.41	46.82	88.21	90.79	67.97	22.52	65.21
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

RL SPRL MDLBlank

2000 800 42.10

1000 800 55. ~~32.~~ DQ

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

04JUN21: 2.0 ppbv_mdl.rp

MSD-3 TO15 Quad MDL
Standards 3018-2045
&
3018-1973
80 mL load volume
Spike concentration
2.0 ppbv

Report Date : 15-Jun-2021 11:51

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060409	3060410	3060411	3060710	3060711	3060712	3060811	3060812	3060813
INJ.DATE:	04-JUN-2021	04-JUN-2021	04-JUN-2021	07-JUN-2021	07-JUN-2021	07-JUN-2021	08-JUN-2021	08-JUN-2021	08-JUN-2021
INJ.TIME:	14:24	14:51	15:18	14:20	14:47	15:14	16:03	16:30	16:57

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPTV RL	SPRL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
5 Propylene	1895.27	1886.72	2016.75	2124.37	2008.50	2054.54	2262.16	1965.02	1844.81	2006.46	130.51	377.95	2000	2000
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
7 1,1-Difluoroethane	1772.53	1771.55	2123.15	1910.86	1785.64	1982.54	1961.37	1901.37	2087.22	1921.80	130.91	379.11	2000	2000
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
15 Chloromethane	2446.43	2396.33	2229.58	2457.74	2520.19	2184.14	1960.47	2164.84	2410.41	2307.79	182.91	529.72	5000	5000
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Reviewer 1 _____ Date: 6/17/21
Reviewer 2 _____ Date: _____

$\bar{X}$ = 355.52
$2\bar{X}$ = 711.04
$3\bar{X}$ = 1066.56
$4\bar{X}$ = 1422.08

MDL Verification
Standard # 3018-1973 (5.0ppbv)
50 ml volume file # 3061510
Spike concentration 1.25ppbv

Ratio of the mean recovered concentration and MDL value is between 1-20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PQL	SPL
18 Butane	3183.45	2279.06	3026.36	2558.65	3212.02	2317.47	2489.83	2920.02	2728.77	2746.18	357.09	1034.13	2000	2000
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
24 Bromomethane	2395.51	2439.94	2380.81	2531.05	2511.35	2478.22	2328.68	2332.32	2346.02	2415.99	77.42	224.22	5000	5000
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
30 Chloroethane	1880.59	1938.87	2234.46	2059.51	2192.55	1963.37	2222.99	1965.71	1925.32	2042.60	139.23	403.20	2000	2000
31 Isopentane	1900.93	1823.40	1959.41	1734.97	1927.37	1869.93	1974.60	2015.10	1844.44	1894.46	86.54	250.61	2000	2000
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
39 Ethanol	2224.57	2056.44	2095.67	2045.09	1935.11	2001.72	1584.64	1981.08	1778.21	1966.95	187.50	843.01	5000	5000

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	2183.92	2172.73	1737.46	1732.35	1757.32	1896.96	1777.44	1555.18	1856.45	1852.20	207.71	601.53
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	2147.22	2237.76	2296.68	2131.30	2222.89	2159.67	2322.43	2173.11	2217.20	2212.03	66.27	191.92
48 Carbon Disulfide	1934.24	1985.16	2039.49	2049.09	2040.18	2100.17	2073.16	2126.95	1990.51	2037.66	60.16	174.23
49 Iodomethane	1589.11	1635.17	1581.92	1587.37	1613.22	1691.75	1811.64	1803.18	1757.05	1674.49	94.36	273.27
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	1794.36	1822.54	1711.42	1791.57	1797.78	1796.45	1798.99	1857.55	1717.83	1787.61	46.31	134.12
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	2218.44	1733.46	1851.28	2534.21	2300.44	2012.33	1876.98	2324.73	2139.38	2110.14	261.61	757.62
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	2074.20	1893.47	1964.98	1963.63	1866.35	2124.24	1845.83	1971.89	1853.78	1950.93	98.09	284.07
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	1956.21	1860.61	2011.15	1914.12	2020.15	1968.71	2013.42	1901.20	1866.05	1945.74	62.86	182.05
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

PPTV RL SPRL MDL Blank

2000 2000
5000 5000
2000 2000
2000 2000
5000 5000
2000 2000

359.44
478.89
469.09
112.66

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
72 Isopropyl ether	1603.29	1674.62	1673.98	1668.64	1676.93	1665.61	1752.29	1740.61	1633.26	1676.58	46.47	134.57	2000	2000
73 Vinyl Acetate	1822.00	1897.09	1775.47	1954.36	1918.14	1849.38	1773.45	1506.56	1930.17	1825.18	136.37	394.94	2000	2000
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
79 Ethyl-tert-butyl ether	1680.62	1698.95	1744.65	1759.02	1820.78	1765.83	1823.59	1807.51	1728.22	1758.80	51.59	149.40	2000	2000
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
86 2-Butanone	1718.93	1997.91	1789.77	1970.41	1908.84	2026.98	1936.14	1728.27	2009.26	1898.50	121.65	352.31	2000	2000

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SpRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
87 Ethyl Acetate	1716.25	1997.76	2140.83	2102.54	2320.20	1795.83	2259.67	2103.62	2003.39	2048.90	197.40	571.67	2000	2000
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00		
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
99 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$ 104 1,2-Dichloroethane-d4	27065.78	27211.11	27839.35	26921.86	27261.09	27437.37	27796.97	27288.39	27087.91	27323.31	317.07	918.22		
105 tert-Amyl methyl ether	1898.82	1883.77	1874.83	2063.71	1929.81	2037.46	2151.64	2086.73	2020.48	1994.14	100.27	290.38	2000	2000
106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00		
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
110 n-Butanol	1805.09	1680.56	1702.49	1641.93	1728.46	1636.98	2012.85	1909.70	1958.21	1786.25	141.93	411.03	2000	2000

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	25056.76	24865.10	25701.80	25100.41	24712.41	25001.62	25005.75	25024.33	25090.63	25062.09	269.46	780.36

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
143 2-Hexanone	1468.29	1603.58	1609.32	1602.55	1560.39	1549.62	1655.20	1643.82	1638.50	1592.36	58.61	169.75	2000 2000
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
151 1-Bromo-2-Chloroethane	1973.65	1911.11	1988.34	1949.81	1904.01	1949.84	1903.35	1999.37	1964.31	1949.31	36.18	104.78	2000 2000
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	26871.86	26931.67	26614.16	26384.82	26782.21	26706.69	26303.23	26768.32	26674.45	26670.82	209.70	607.29
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SQRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	1951.44	1947.16	1977.57	2027.39	2008.69	1987.45	2081.78	2090.32	2136.24	2023.12	66.36	192.19
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	2631.64	2783.53	2686.74	2587.93	2673.01	2725.71	2667.73	2760.52	2834.63	2705.72	77.71	225.05
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	2747.79	2829.99	2973.42	2724.50	2871.60	2809.93	2783.77	2891.54	2843.95	2830.72	76.41	221.28
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	2702.06	2769.93	2767.74	2604.14	2729.64	2813.98	2773.79	2903.83	2934.27	2777.71	100.04	289.72
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

206: 2000 2000
213: 2000 2000 65.15
215: 2000 2000 45.73
222: 2000 2000 87.49

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

03MAY21.EPALB-mdl.rpt

MSD-3 Blank MDL

Can# 35157

Report Date : 17-JUN-2021 13:23

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m

Batch File: /chem/msd3.i/05MAY21.b

Instrument Names: msd3.i

Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3050306EPALB	3050307EPALB	3050308EPALB	3050406EPALB	3050407EPALB	3050408EPALB	3050506EPALB	3050507EPALB	3050508EPALB
INJ.DATE:	03-MAY-2021	03-MAY-2021	03-MAY-2021	04-MAY-2021	04-MAY-2021	04-MAY-2021	05-MAY-2021	05-MAY-2021	05-MAY-2021
INJ.TIME:	11:47	13:00	13:29	13:28	14:13	14:42	12:40	13:28	13:58

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1 Freon 134a	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
2 Propylene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
3 1,1-Difluoroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
4 Freon 12	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
5 Chlorodifluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
6 Freon 114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
7 Isobutane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
8 Chloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000
9 Butane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
10 Vinyl Chloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
11 1,3-Butadiene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
12 Bromomethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000
13 Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
14 Isopentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
15 Vinyl Bromide	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
16 Freon 11	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
17 Dichlorofluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
18 Pentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
19 Ethanol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000
20 Ethyl Ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
21 Acrolein	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000

Reviewer 1 _____ Date: 6/17/21

Reviewer 2 _____ Date: 6/17/21

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m

Batch File: /chem/msd3.i/05MAY21.b

Instrument Names: msd3.i

PPTV

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
22 Freon 113	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
23 1,1-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
24 Acetone 359.44	298.34	251.09	309.57	0.000000	359.44	92.36	167.90	235.09	194.44	212.03	113.07	0.000000	5.00	0.647	327.46	Ratio 1
25 Iodomethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
26 Carbon Disulfide 469.09	339.14	319.54	300.16	139.62	136.38	122.01	154.39	119.39	122.79	194.82	94.71	0.000000	2.00	0.710	274.27	Ratio 1
27 2-Propanol 112.66	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	112.66	0.000000	0.000000	12.52	37.55	0.000000	2.00	0.115	108.75	Ratio 1
28 3-Chloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
29 Acetonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
30 Methylene Chloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000	
31 tert-Butyl alcohol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
32 Methyl tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
33 trans-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
34 Acrylonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
35 Hexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
36 Isopropyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
37 1,1-Dichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
38 Vinyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
39 Ethyl-tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
40 2,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
41 cis-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
42 2-Butanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
43 Ethyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
44 Tetrahydrofuran	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
* 45 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000	
46 Chloroform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
47 Cyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
48 1,1,1-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
49 Carbon Tetrachloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	

Reviewer 1 _____ Date:_____

Reviewer 2 _____ Date:_____

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m

Batch File: /chem/msd3.i/05MAY21.b

Instrument Names: msd3.i

PPTV

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
50 1,1-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
51 2,2,4-Trimethylpentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
52 Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 53 1,2-Dichloroethane-d4	23867.00	23965.00	25269.00	24324.00	25031.00	24883.00	24739.00	25158.00	25187.00	24713.67	534.92	0.000000	2.00	15.95	1549.11	
54 tert-Amyl methyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
55 1,2-Dichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
56 Heptane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
* 57 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000	
58 n-Butanol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
59 Trichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
60 Methylcyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
61 1,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
62 Methyl Methacrylate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
63 1,4-Dioxane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
64 Dibromomethane 80.81	33.73	43.38	30.60	51.13	65.68	44.43	49.34	18.84	35.12	41.36	13.62	0.000000	0.400	1.05	39.45	
65 Bromodichloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
66 1-Bromo-2-Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
67 cis-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
68 4-Methyl-2-pentanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 69 Toluene-d8	24542.00	24548.00	25114.00	24548.00	24850.00	24479.00	24603.00	25251.00	25182.00	24790.78	313.26	0.000000	2.00	27.33	907.21	
70 Toluene 120.97	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	120.97	62.39	56.94	26.70	43.81	0.000000	0.400	0.210	126.86	Ratio 1
71 Octane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
72 trans-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
73 1,1,2-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
74 Tetrachloroethene 88.47	88.47	42.69	0.000000	59.53	47.20	0.000000	0.000000	0.000000	0.000000	26.43	33.79	0.000000	0.400	0.270	97.85	Ratio 1
75 1,3-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
76 2-Hexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
77 Dibromochloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
78 1,2-Dibromoethane (EDB)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
* 79 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000	

PPTV

80	Chlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000		
81	Ethyl Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
82	Nonane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
83	1,1,1,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
84	m,p-Xylene 273.15	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	273.15	94.60	44.99	45.86	91.28	0.000000	0.500	0.173	264.35	Ratio 1
85	o-Xylene 133.68	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	133.68	32.71	28.38	21.64	44.06	0.000000	0.400	0.170	127.60	Ratio 1
86	Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
87	Bromoform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
88	Cumene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000		
89	Cyclohexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
$ 90	4-Bromofluorobenzene	25896.00	25913.00	25874.00	25941.00	26040.00	26188.00	26321.00	25639.00	25907.00	25968.78	196.19	0.000000	2.00	45.71	568.17	
91	Bromobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
92	1,1,2,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
93	Propylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
94	1,2,3-Trichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
95	trans-1,4-Dichloro-2-butene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
96	Decane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
97	4-Ethyltoluene 126.94	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	126.94	29.81	0.000000	17.42	42.24	0.000000	0.400	0.142	122.32	Rat
98	2-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
99	1,3,5-Trimethylbenzene 77.63	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	77.63	5.00	0.000000	9.18	25.72	0.000000	0.400	0.123	74.49	Rat
100	alpha Methyl Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
101	tert-Butylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
102	1,2,4-Trimethylbenzene 185.07	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	185.07	47.06	23.44	28.40	60.99	0.000000	0.500	0.161	176.63	Rat
103	sec-Butylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000		
104	p-Cymene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000		
105	1,3-Dichlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
106	1,4-Dichlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
107	alpha-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000		
108	Undecane 94.31	74.50	80.07	0.000000	85.85	94.31	68.53	77.68	68.54	69.88	68.82	27.19	0.000000	0.800	0.874	78.74	Ratio 1
109	Butylbenzene 27.37	27.37	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.04	9.12	0.000000	0.400	0.115	26.42	Ratio 1
110	1,2-Dichlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	7.95	0.000000	0.000000	0.884	2.65	0.000000	0.400	0.115	7.68	Ratio 1
111	1,2-Dibromo-3-chloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000		
112	Dodecane 42.10	0.000000	0.000000	0.000000	11.78	13.12	12.16	42.10	17.61	0.000000	10.75	13.70	0.000000	0.800	0.271	39.66	Ratio 1
113	1,2,4-Trichlorobenzene 65.15	65.15	36.30	12.86	45.67	0.000000	0.000000	39.09	14.59	0.000000	23.74	23.67	0.000000	2.00	0.346	68.55	Ratio 1
114	Hexachlorobutadiene 45.73	45.73	14.83	0.000000	14.55	0.000000	0.000000	32.75	12.37	0.000000	13.36	16.36	0.000000	2.00	0.282	47.39	Ratio 1
115	Naphthalene 55.54	15.72	12.13	7.63	12.71	9.23	3.10	32.18	14.80	12.07	13.29	8.07	0.000000	0.800	0.569	23.36	Ratio 1
116	1,2,3-Trichlorobenzene 87.49	87.49	47.85	0.000000	46.72	26.16	23.57	49.71	16.01	0.000000	33.06	27.97	0.000000	2.00	0.408	81.01	Ratio 1

Reviewer 1 _____ Date:_____

Reviewer 2 _____ Date:_____

MSD-3 MDL Case Narrative

A Method Detection Limit study for select TA TO-15 specials was performed on 05/03/21, 05/04/24, and 05/05/21.

The MDL was performed at:

- 0.4ppbv(5.0ppbv->0.4ppbv) for 1,1,1,2-tetrachloroethane;16ml of #3018-1908

MDL verification was analyzed on 06/03/21:

- 3060308: (for 1,1,1,2-tetrachloroethane only). 5.0ppbv->0.25ppbv. 10ml of #3018-2078

No MDL values were taken from the MDL blank.

MDL expires 5/05/22

03MAY21: 1112PCE-mdl.rp

TO15Quad MDL/MSD

1,1,1,2-Tetrachloroethane only

Standard 3018-1908 (5.0ppbv)
16mL load volume
Spike concentration 0.4ppbv

Report Date : 03-Jun-2021 08:29

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3050309	3050310	3050311	3050409	3050410	3050411	3050509	3050510	3050511
INJ.DATE:	03-MAY-2021	03-MAY-2021	03-MAY-2021	04-MAY-2021	04-MAY-2021	04-MAY-2021	05-MAY-2021	05-MAY-2021	05-MAY-2021
INJ.TIME:	13:57	14:24	14:52	15:10	15:38	16:05	14:25	14:53	15:21

PPTV

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 6/3/21
Reviewer 2 _____ Date: 6/7/21

$\bar{X}$ = 73.89
$2\bar{X}$ = 147.78
$3\bar{X}$ = 221.67
$4\bar{X}$ = 295.56

MDL verification
standard # 3018-2078 (5ppbv)
10 mL volume File# 3060309
spike concentration
0.25ppbv

The ratio of the mean recovered concentration & the MDL is between 1-20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

PPTV RL

MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	526.98	516.97	486.41	540.40	522.14	530.23	475.21	539.09	553.76	521.24	25.52	73.89
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

400/500/2000

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
*	90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
	91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	99 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	104 1,2-Dichloroethane-d4	24697.90	24426.87	25043.25	25132.82	24889.42	25163.20	24848.38	25046.03	25137.35	24931.69	244.97	709.44
	105 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
*	108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
	109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	110 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	24676.03	24895.10	24771.68	24765.70	24403.43	24714.67	24398.32	24695.85	24589.38	24656.69	166.82	483.12

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	26453.98	26346.98	26114.19	26233.78	26044.32	26017.80	26203.48	25748.42	26019.91	26131.43	208.00	602.36
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

03MAY21: EPALB1112PCE_mdl.rp

MSD3 Blank 1,1,1,2 PCE MDL
can # 35157

Report Date : 04-JUN-2021 10:42 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/05MAY21.b
Instrument Names: msd3.i
Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3050306LB1112PCE	3050307LB1112PCE	3050308LB1112PCE	3050406LB1112PCE	3050407LB1112PCE	3050408LB1112PCE	3050506LB1112PCE	3050507LB1112PCE	3050508LE
INJ.DATE:	03-MAY-2021	03-MAY-2021	03-MAY-2021	04-MAY-2021	04-MAY-2021	04-MAY-2021	05-MAY-2021	05-MAY-2021	05-MAY-2021
INJ.TIME:	11:47	13:00	13:29	13:28	14:13	14:42	12:40	13:28	13:58

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
* 1 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 2 1,2-Dichloroethane-d4	23867.00	23965.00	25269.00	24324.00	25031.00	24883.00	24739.00	25158.00	25187.00	24713.67	534.92	0.000000	2.00	15.95	1549.11
* 3 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 4 Toluene-d8	24542.00	24548.00	25114.00	24548.00	24850.00	24479.00	24603.00	25251.00	25182.00	24790.78	313.26	0.000000	2.00	27.33	907.21
* 5 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
6 1,1,1,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
$ 7 4-Bromofluorobenzene	25896.00	25913.00	25873.00	25941.00	26040.00	26188.00	26321.00	25639.00	25907.00	25968.67	196.25	0.000000	2.00	45.69	568.34

Reviewer 1 _____ Date: 6/4/21

Reviewer 2 _____ Date: 6/7/21

MSD-P MDL Case Narrative

A Method Detection Limit study for TO-15 method was performed on 10/19/20-10/23/20,10/26/20-10/29/20 & 11/02/20,11/05/20,11/06/20.

The MDL was performed at:

- 0.3 ppbv (5.0ppbv->0.3ppbv) for the 0.3ppbv RL compounds; 12mL of #3018-1674
- 0.4 ppbv (5.0ppbv->0.4ppbv) for the 0.4ppbv RL compounds; 16mL of #3018-1674
- 0.8 ppbv (5.0ppbv->0.8ppbv) for 0.8ppbv RL compounds; 32ml of #3018-1674
- 1.0ppbv (5.0ppbv->1.0ppbv) for chloroethane & ethanol;40ml of 3018-1674 & 40ml of 3018-1682

A Method Detection Limit study for select TA TO-15 specials was performed on 11/27/20-11/29/20.

The MDL was performed at:

- 0.4ppbv(5.0ppbv->0.4ppbv) for 1,1,1,2-tetrachloroethane;16ml of #3018-1644

MDL verifications were analyzed on 11/03/20 & 11/10/20:

- P110313: (0.3ppbv & 0.4ppbv RL compounds). 5.0ppbv->0.25ppv; 10ml of #3018-1682.
- P110314: (0.8ppbv RL compounds). 5.0ppbv->0.6ppbv. 24ml of #3018-1682.
- P110315: (0.5 for naph only). 5.0->5.0ppbv; 200ml of #3018-1682.
- P110312: (for 1,1,1,2-PCA only). 5.0ppbv->0.25ppbv. 10ml of #3018-1644
- P111017: (for chloroethane, ethanol & vinyl acetate). 5.0ppbv->0.75ppbv. 30ml of 3018-1682.

Notes:

1. **The MDL values for the following compounds were taken from the MDL blank:**
    a. Dibromomethane (0.07607ppbv)
    b. Acetone (0.48647ppbv)
    c. Iodomethane (0.06508ppbv)
    d. Carbon disulfide (0.1958ppbv)
    e. Decane (0.57314ppbv)
    f. Undecane(0.1836ppbv)
    g. Dodecane (0.71923ppbv)
    h. Naphthalene (0.38524ppbv)

2. The ratio of the mean recovered concentration and the MDL value for naphthalene and dodecane recovered outside of 1-20.
3. The MDL verification for chloroethane and ethanol is less than 2X the mean MDL.

MDL Expires 10/29/21

0.3 mdl.rp

TO15 Quad MDL MSD-P
Standard 3018-1674 (5.0ppbv)
12mL load volume
Spike concentration: 0.3ppbv

Report Date : 28-Oct-2020 16:45

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p101908	p101909	p101910	p102008	p102009	p102010	p102107	p102108	p102109
INJ.DATE:	19-OCT-2020	19-OCT-2020	19-OCT-2020	20-OCT-2020	20-OCT-2020	20-OCT-2020	21-OCT-2020	21-OCT-2020	21-OCT-2020
INJ.TIME:	14:06	14:34	15:01	16:26	16:54	17:21	15:23	15:51	16:19

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

$\bar{x} = 70.54$
$2\bar{x} = 141.07$
$3\bar{x} = 211.62$
$4\bar{x} = 282.16$

Ratio of the mean recovered concentration and the MDL value is between 1 & 20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

PPTV RL(PPTV) Sp RL(PPTV) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	217.02	219.07	292.15	253.35	258.29	195.74	292.58	280.15	220.83	247.69	36.00	104.26
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

no spike in 500 — 300 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv	RL (ppbv)	SP RL (ppbv)	Blank
87	Ethyl Acetate	201.00	285.05	246.94	220.66	323.49	229.31	299.26	256.43	286.92	261.01	40.42	117.05		2000	300	—
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
89	Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				—
92	Chloroform	242.52	244.52	264.08	247.68	239.93	283.26	261.71	270.85	264.59	257.68	14.79	42.84		500	300	
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
94	Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
96	1,1,1-Trichloroethane	292.64	289.12	314.87	273.07	292.46	311.97	284.37	293.95	306.68	295.46	13.50	39.11		500	300	—
97	Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
101	2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
102	Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
$ 104	1,2-Dichloroethane-d4	23662.67	23877.71	24079.59	23563.77	24206.96	24182.62	23963.20	24552.71	24218.03	24034.14	305.26	884.02				
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
106	1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
107	Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
122 Bromodichloromethane	248.45	319.45	282.47	291.32	274.66	272.30	278.78	242.30	239.06	272.09	25.76	74.60	500 300 —
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 134 Toluene-d8	24585.67	24787.41	24622.65	24917.45	24550.68	25002.95	24999.39	25581.69	24685.96	24859.31	321.49	931.02	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	274.66	274.06	286.73	307.61	281.73	317.24	284.89	304.85	280.24	290.22	15.66	45.36
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 300 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
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Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	24680.65	24394.98	24458.85	24972.60	24217.99	24821.47	24904.35	25061.39	25327.68	24760.00	354.77	1027.42
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

0.4mdl.rp

TO15 Quad MDL - MSD-P
Standard 3018-1674 (5.0ppbv)
16ml load volume
spike concentration: 0.4ppbv

Report Date : 28-Oct-2020 18:51

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102207	p102208	p102209	p102307	p102308	p102309	p102606	p102607	p102608
INJ.DATE:	22-OCT-2020	22-OCT-2020	22-OCT-2020	23-OCT-2020	23-OCT-2020	23-OCT-2020	26-OCT-2020	26-OCT-2020	26-OCT-2020
INJ.TIME:	16:40	17:08	17:35	14:33	15:01	15:28	11:55	12:23	12:51

pptv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(pptv)	SpRL(pptv)	Blank
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
5 Propylene	436.27	459.07	358.71	365.97	442.84	407.04	328.83	315.33	395.64	389.97	51.11	148.02	2,000	400	—
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
8 Freon 12	368.05	362.51	350.90	422.39	382.44	336.13	389.94	336.87	366.98	368.47	27.28	79.01	500	400	—
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
10 Freon 114	402.19	319.34	374.64	343.74	334.54	363.82	297.84	361.33	350.45	349.77	30.80	89.20	500	400	—
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

$\bar{x} = 93.579$
$2\bar{x} = 187.16$
$3\bar{x} = 280.74$
$4\bar{x} = 374.32$

The ratio of the mean recovered concentration & the MDL value is b/w 1 & 20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SP RL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
19 Vinyl Chloride	238.72	286.52	271.11	333.74	362.20	338.00	255.39	295.79	250.02	292.39	43.60	126.26	500	400	—
20 1,3-Butadiene	312.68	378.59	382.05	250.04	280.91	275.23	257.72	279.89	265.49	298.07	49.87	144.41	500	400	—
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
33 Freon 11	457.24	407.10	435.95	369.75	393.31	349.16	378.67	348.37	383.63	391.46	36.91	106.88	500	400	—
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
43 Freon 113	426.15	433.79	441.55	364.87	456.53	443.18	409.02	415.07	401.94	421.35	27.52	79.69	500	400	—
44 1,1-Dichloroethene	411.86	277.89	289.34	245.03	323.41	408.62	342.89	361.09	322.12	331.36	56.67	164.11	500	800	—
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
59 Methylene Chloride	372.76	312.97	335.71	286.43	401.04	334.94	335.25	305.15	310.05	332.70	35.53	102.89	5000	400	60.72
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	pptv RL(pptv)	spRL(pptv)	Blank
64 trans-1,2-Dichloroethe	313.59	405.50	314.93	359.93	369.92	296.05	382.07	269.64	318.20	336.65	44.63	129.25	500	400	—
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
66 Acrylonitrile	340.64	301.35	399.89	330.73	361.11	300.84	267.26	315.86	273.74	321.27	42.21	122.24	2000	800	—
67 Hexane	284.59	274.85	274.18	282.13	331.11	344.69	341.12	289.67	342.62	307.22	31.56	91.39	500	800	—
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
85 cis-1,2-Dichloroethene	364.42	423.15	261.26	309.14	261.64	232.81	264.66	260.96	254.08	292.46	62.51	181.02	500	400	—
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPtV	RL(PPtV)	SPRL(PPtV)	Blank
87	Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
89	Tetrahydrofuran	300.42	300.83	294.38	309.82	323.07	338.59	237.00	237.36	280.14	291.29	34.92	101.13	500		800	—
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
92	Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				—
94	Cyclohexane	333.63	372.37	338.12	334.85	386.70	337.43	317.34	337.97	288.47	338.54	28.42	82.29	500		400	
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
96	1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
97	Carbon Tetrachloride	351.08	365.90	423.66	373.13	342.96	305.44	373.84	266.92	317.12	346.67	45.69	132.32	500		800	—
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
101	2,2,4-Trimethylpentane	355.69	333.15	292.38	297.05	306.33	311.83	333.39	309.71	308.79	316.48	20.28	58.72	500		400	—
102	Benzene	398.55	338.76	371.15	328.61	335.51	376.93	394.84	330.43	306.37	353.46	32.62	94.47	500		400	—
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
$ 104	1,2-Dichloroethane-d4	25538.41	25119.18	24972.96	25310.46	26037.22	25493.94	22898.21	23988.75	24315.92	24852.78	963.98	2791.69				
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
106	1,2-Dichloroethane	368.16	305.97	383.28	351.01	378.61	339.20	327.18	311.28	361.64	347.37	28.30	81.94	500		800	10.4
107	Heptane	377.00	338.49	321.63	237.39	335.69	324.80	348.25	362.21	369.78	335.03	41.40	119.90	500		500	—
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) Sp RL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	359.98	366.80	369.81	358.75	381.97	420.18	406.91	394.92	420.70	386.67	24.88	72.05	500	400	—
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	367.27	387.51	438.23	349.97	414.12	402.30	315.92	374.28	442.15	387.97	41.24	119.42	500	400	—
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
118 Dibromomethane	363.07	396.21	400.70	375.65	381.51	404.00	384.97	366.62	423.18	388.43	19.37	56.11	2000	400	76.07
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	280.09	346.41	399.61	350.41	326.89	332.36	325.16	374.56	344.71	342.24	33.38	96.67	500	400	—
127 Methylcyclohexane	421.60	402.15	396.00	283.94	356.13	415.49	365.32	368.56	344.41	372.62	42.80	123.96	~000	400	—
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	349.17	342.85	324.09	329.39	448.82	363.24	372.47	304.65	357.29	354.66	41.09	118.99	500	400	—
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24608.41	24757.16	24060.47	24358.97	24799.49	24544.21	24420.57	24318.45	25304.67	24574.71	356.92	1033.64			

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135	1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136	Octane	391.51	314.58	349.24	392.86	398.27	317.52	435.75	346.46	343.20	365.49	41.01	118.76
137	Toluene	393.31	369.84	335.47	374.46	391.89	378.56	364.69	361.01	383.40	372.52	17.82	51.60
138	1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139	trans-1,3-Dichloroprop	332.51	308.98	399.68	312.19	350.76	343.89	326.55	353.48	301.43	336.61	30.06	87.07
140	2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141	1,1,2-Trichloroethane	359.42	310.37	399.03	326.09	345.12	374.12	325.48	333.64	335.86	345.46	27.67	80.13
142	Tetrachloroethene	368.16	376.49	362.62	383.34	406.92	446.83	425.80	406.87	406.85	398.21	27.87	80.71
143	2-Hexanone	337.34	364.76	359.28	356.16	308.83	350.55	345.40	353.88	353.41	347.73	16.58	48.02
144	1,3-Dichloropropane	379.58	319.29	400.88	326.89	349.89	313.18	370.24	372.04	373.71	356.19	30.43	88.14
145	Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146	Dibromochloromethane	399.15	402.43	371.98	328.44	351.93	404.39	388.88	370.10	331.22	372.06	29.51	85.45
147	Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148	1,2-Dibromoethane (EDB	337.27	380.78	399.90	344.59	425.77	356.23	338.97	345.95	323.51	361.44	33.67	97.51
149	2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150	3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151	1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152	Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153	Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154	Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155	Ethyl Benzene	350.04	307.75	414.55	382.37	341.21	376.01	421.98	290.14	387.24	363.48	45.10	130.60
156	Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157	1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158	m,p-Xylene	381.11	385.02	373.70	279.50	328.49	371.80	390.58	345.71	301.63	350.84	39.78	115.22

ppbv RL(ppbv) SpRL(ppbv) Blank

	RL(ppbv)	SpRL(ppbv)	Blank
135			—
136	2000	400	—
137	500	400	—
138			
139	500	400	—
140			
141	500	400	—
142	500	400	7.09
143	2000	400	—
144	2000	400	—
145			
146	500	400	—
147			
148	500	800	—
149			
150			
151			
152			
* 153			
154			
155	500	400	—
156			19.29
157			~~46.24~~
158	500	800	GH 11/11/20

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	360.35	388.65	360.30	402.22	263.00	381.05	393.85	328.05	343.58	357.89	43.09	124.79
165 Styrene	363.22	358.96	355.97	332.09	332.19	352.82	322.68	355.25	294.72	340.88	22.41	64.90
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	384.81	405.27	406.78	365.38	370.81	375.07	374.03	369.63	351.46	378.14	18.12	52.48
168 Cumene	358.73	319.23	373.24	314.45	325.75	332.23	371.15	349.17	341.49	342.83	21.76	63.02
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	25111.07	24795.31	25807.35	25214.38	25273.17	25304.26	25170.01	25431.80	25249.38	25261.86	269.17	779.51
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	394.75	382.23	361.14	364.24	388.23	395.06	358.67	355.71	362.71	373.64	16.20	46.93
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	358.34	343.23	365.47	348.41	315.89	358.02	401.15	335.02	403.17	358.74	28.65	82.96
179 1,2,3-Trichloropropane	396.36	433.62	361.53	369.60	353.73	433.59	394.94	293.12	372.73	378.80	43.25	125.25
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

PPTV RL(PPTV) SP RL(PPTV) BLANK

164 o-Xylene: 124.79 | 500 | 400 | 8.96
165 Styrene: 64.90 | 500 | 400 | —
166 2-Heptanone: +++++ | | | —
167 Bromoform: 52.48 | 500 | 400 | —
168 Cumene: 63.02 | 500 | 800 | —
175 1,1,2,2-Tetrachloroeth: 46.93 | 500 | 400 | —
178 Propylbenzene: 82.96 | 500 | 400 | —
179 1,2,3-Trichloropropane: 125.25 | 2000 | 400 | —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv	RL(ppbv)	SPRL(ppbv)	Blank
183 4-Ethyltoluene	328.35	323.51	409.88	350.59	394.94	309.53	348.09	311.33	343.67	346.65	35.09	101.62	500		400	—
184 2-Chlorotoluene	367.12	437.45	399.61	324.10	337.68	379.55	388.66	368.97	399.59	378.08	34.12	98.81	2000		400	—
185 1,3,5-Trimethylbenzene	361.70	382.59	305.37	322.46	290.91	333.22	399.63	316.81	339.41	339.12	35.94	104.09	500		400	11.91
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
188 alpha Methyl Styrene	340.84	346.95	357.65	316.13	311.83	307.88	324.63	323.57	342.20	330.19	17.32	50.16	1000		400	—
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
190 1,2,4-Trimethylbenzene	351.77	366.19	384.29	326.05	339.25	336.74	376.07	351.72	372.74	356.09	19.91	57.67	500		800	40.41
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
192 sec-Butylbenzene	326.70	387.27	334.38	303.10	357.00	376.71	377.82	357.98	334.64	350.62	27.86	80.67	2000		400	—
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				491
194 p-Cymene	329.01	291.99	322.26	303.61	342.86	308.30	363.77	346.10	361.19	329.90	25.52	73.91	2000		800	
195 1,3-Dichlorobenzene	396.73	395.68	406.80	347.34	383.69	416.48	403.45	401.34	390.46	393.55	19.74	57.16	500		400	6.61
196 1,4-Dichlorobenzene	397.02	396.80	373.82	336.65	380.96	372.10	379.74	387.84	407.73	381.41	20.51	59.40	500		400	10.61
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
199 alpha-Chlorotoluene	355.07	348.38	383.67	358.47	379.84	352.56	372.19	361.56	392.68	367.16	15.53	44.97	500		800	—
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
202 Butylbenzene	358.91	342.67	328.13	333.54	305.09	329.53	365.04	339.04	387.15	343.23	24.06	69.69	1000		400	45.09
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
204 1,2-Dichlorobenzene	405.81	403.04	358.55	356.29	398.25	390.07	392.01	401.55	406.90	390.27	19.48	56.41	500		400	26.05
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

0.8mdl.rp

TO1S Quad MDL MSD-P
standard 3018-16674 (5.0ppbv)
32mL load volume
Spike concentration: 0.8 ppbv
Naph @ 0.08ppbv

Report Date : 30-Oct-2020 15:35

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102713	p102714	p102715	p102812	p102813	p102814	p102913	p102914	p102915
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	16:13	16:41	17:09	16:20	16:48	17:16	16:09	16:37	17:05

ppbv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(pptv)	SPRL(pptv)	Blank
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
4 Freon 134a	782.35	724.88	886.81	836.87	782.13	915.12	890.85	977.30	953.51	861.09	85.21	246.77	2000	800	-
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
7 1,1-Difluoroethane	828.20	1034.35	526.55	766.58	681.54	895.20	701.39	694.22	904.48	781.39	151.42	438.51	2000	800	-
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
9 Chlorodifluoromethane	854.60	805.17	642.55	827.65	687.63	812.52	1041.61	928.38	684.55	809.41	126.85	367.37	2000	800	-
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
12 Isobutane	719.04	711.25	707.49	729.52	689.89	671.33	801.41	778.78	804.87	734.84	48.61	140.77	2000	800	—
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
15 Chloromethane	882.85	931.18	918.86	751.25	728.44	745.41	1061.42	972.38	1001.77	888.17	121.18	350.93	5000	800	—
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

ms 11/03/20

$\bar{X}$ = ~~253.78~~ ~~254.04~~ 243.95
$2\bar{X}$ = 507.56 508.08 487.90
$3\bar{X}$ = 761.34 762.12 731.85
$4\bar{X}$ = ~~1,015.12~~ ~~1,016.16~~ 975.80

The ratio of the mean recovered concentration to the MDL value is b/w 1-20 for all compounds except dodecane and Naphthalene.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPTV RL(PPTV)	SP RL(PPTV)	Blank
18 Butane	898.47	689.60	606.50	714.19	994.52	733.80	751.23	938.98	1233.61	840.10	194.99	564.68	2000	800	—
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
24 Bromomethane	834.50	796.28	852.48	898.11	761.37	815.39	846.32	919.26	1012.42	859.57	74.89	216.88	5000	800	—
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
31 Isopentane	655.87	662.86	650.61	734.81	705.95	701.65	727.87	655.13	699.75	688.28	32.73	94.78	2000	2000	—
32 Vinyl Bromide	737.71	813.81	758.98	757.93	700.24	661.88	709.79	675.94	746.89	729.24	47.22	136.75	2000	800	—
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
34 Dichlorofluoromethane	778.66	732.59	744.21	814.55	761.68	702.11	748.89	790.16	735.31	756.46	33.93	98.25	2000	800	—
35 Pentane	639.53	701.46	729.10	649.67	678.40	698.89	670.06	598.35	821.94	687.49	63.44	183.72	2000	800	—
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
38 Ethyl Ether	564.60	615.24	558.00	800.06	654.88	660.41	744.34	741.00	309.41	627.55	145.03	420.00	2000	800	—
* ~~39 Ethanol~~	~~569.54~~	~~328.32~~	~~497.33~~	~~641.05~~	~~1160.40~~	~~721.07~~	~~599.91~~	~~403.71~~	~~443.84~~	~~596.13~~	~~244.55~~	~~708.23~~	~~2000~~	~~1000~~ 500	— MS 11/10/20

* Ethanol MDL included in 10ppbv spike

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	699.46	712.62	502.97	856.57	794.32	807.25	756.02	655.40	696.07	720.08	103.32	299.22
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	848.22	800.39	727.29	836.77	676.13	837.53	907.31	713.75	735.23	786.96	76.92	222.76
48 Carbon Disulfide	808.80	840.34	749.99	777.80	747.78	684.04	761.31	799.80	776.40	771.81	44.40	128.59
49 Iodomethane	457.35	451.01	440.43	437.13	459.33	452.25	478.66	430.79	399.77	445.19	22.11	64.02
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	666.68	704.84	695.32	785.79	731.69	795.25	734.79	809.37	796.47	746.69	51.78	149.96
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	852.23	979.94	823.74	485.40	620.09	771.94	735.72	607.16	820.37	744.06	150.57	436.06
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	731.86	716.27	660.84	656.65	700.17	610.38	801.87	579.31	812.61	696.66	79.25	229.52
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	740.42	784.24	698.11	749.56	863.98	769.73	738.29	787.50	724.28	761.79	47.82	138.48
63 Methyl tert-butyl ethe	732.79	675.63	767.02	757.40	730.51	793.25	764.89	693.44	732.19	738.57	37.05	107.30

ppbv RL(ppbv) SpRL(ppbv) Blank

42 2000 2000 —
47 5000 500 497.4
48 1000 800 195.8
49 2000 800 45 45 ms 11/03/20
52 2000 800 137.2
54 2000 800 —
57 2000 800 —
62 2000 800 —
63 2000 800 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL (ppbv)	SpRL (ppbv)	Blank
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
72 Isopropyl ether	682.23	642.03	666.75	695.31	656.63	696.37	661.77	656.86	696.19	672.68	20.37	58.98	2000	800	—
73 Vinyl Acetate	379.16	510.38	679.89	456.28	594.69	817.23	865.96	319.67	628.92	583.57	186.68	540.62	2000	800	—
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
79 Ethyl-tert-butyl ether	732.15	735.05	698.72	703.42	678.14	735.97	721.12	633.77	751.04	709.93	36.40	105.41	2000	800	—
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
84 2,2-Dichloropropane	856.50	766.31	748.03	737.62	810.23	833.08	893.06	935.10	891.13	830.12	69.98	202.65	2000	800	—
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
86 2-Butanone	494.27	680.84	630.20	636.77	695.03	636.19	496.57	833.87	704.79	645.39	104.97	303.98	2000	800	—

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
99 1,1-Dichloropropene	691.47	788.20	695.94	788.42	758.83	619.78	822.02	955.67	776.77	766.35	94.95	274.96	2000	800	—
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 104 1,2-Dichloroethane-d4	26542.98	25336.38	25035.81	26773.65	27060.55	27089.31	28110.69	28004.75	27657.60	26845.75	1081.60	3132.31			
105 tert-Amyl methyl ether	672.84	754.03	800.25	749.08	911.69	801.21	750.86	870.59	838.98	794.39	72.44	209.80	2000	2000	—
106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
110 n-Butanol	818.67	808.84	787.27	836.16	856.92	901.90	852.85	807.79	844.38	834.98	34.16	98.92	2000	800	68.07

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SP RL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	757.87	628.93	710.27	777.16	558.68	667.00	648.50	874.39	750.66	708.16	93.91	271.96	2000	800	—
117 1,4-Dioxane	765.97	849.41	952.34	642.09	797.15	771.61	800.61	642.99	673.24	766.16	101.84	294.93	2000	800	—
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24078.61	24335.63	24036.51	23516.55	23802.94	23773.37	23590.02	23613.19	24343.15	23898.89	313.75	908.62			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
151 1-Bromo-2-Chloroethane	657.71	773.71	721.48	656.34	733.70	677.29	720.22	717.61	692.34	705.60	38.30	110.92	2000	800	—
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
156 Nonane	649.99	615.89	662.19	649.94	671.72	581.89	713.24	665.35	674.53	653.86	37.29	108.00	2000	800	46.24
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(ppbv)	SPRL(ppbv)	Blank
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
169 Cyclohexanone	848.24	767.43	798.03	808.84	844.16	792.72	752.74	812.64	890.64	812.83	42.72	123.73	2000	800	—
$ 170 4-Bromofluorobenzene	26008.20	26019.99	26097.96	26091.99	26069.47	25566.33	25848.37	26700.26	25817.70	26024.47	306.72	888.26			
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
177 Bromobenzene	806.33	851.30	818.09	815.14	762.80	818.62	765.09	884.18	735.55	806.35	46.17	133.72	2000	800	—
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
181 trans-1,4-Dichloro-2-b	696.47	780.58	811.00	821.84	756.32	754.81	776.59	738.59	930.39	785.18	66.13	191.51	2000	800	
182 Decane	665.03	678.56	590.12	632.67	602.85	585.50	637.99	632.02	612.73	626.39	31.92	92.43	2000	800	(573.14)

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(ppbv)	SPRL(ppbv)	Blank
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
189 tert-Butylbenzene	777.35	746.78	784.01	732.15	775.27	697.75	724.53	721.59	728.65	743.12	29.77	86.20	2000	300	32.20
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
201 Undecane	543.26	526.15	549.31	522.63	565.63	525.07	573.32	541.49	521.46	540.92	19.10	55.32	2000	800	183.60
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL (ppbv)	RL(ppbv)	SpRL(ppbv)	Blank
206 1,2-Dibromo-3-chloropr	776.96	766.33	816.70	748.77	742.97	795.65	764.63	775.37	776.17	773.73	22.51	65.19	2000	800	—
207 Dodecane	669.70	747.33	708.32	688.30	749.03	735.59	633.57	674.71	655.94	695.83	41.64	120.59	2000	800	719.23
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
213 1,2,4-Trichlorobenzene	1024.36	1024.97	1115.91	982.45	1070.32	954.95	934.25	1004.44	1088.59	1022.25	60.90	176.36	2000	2000	65.11
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
215 Hexachlorobutadiene	1087.27	1049.68	989.99	1016.98	1194.77	1118.77	1104.49	1141.26	1112.79	1090.67	63.37	183.51	2000	2000	38.6
216 Naphthalene	96.82	117.03	115.70	96.98	95.10	96.49	94.23	93.62	93.19	99.91	9.44	27.33	1000	800	385.
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
222 1,2,3-Trichlorobenzene	1001.11	1201.96	1141.79	1103.14	1149.53	1158.53	1177.05	1141.75	1245.42	1146.70	68.02	196.98	2000	800	129.49
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

1.0mdl.rp

Chloroethane & Ethanol only

TO15 Quad MDL MSD-P
Standards: 3018-1674 & 3018-1682
40mL load volume
Spike concentration: 1.0ppbv (5.0ppbv)

Report Date : 12-NOV-2020 16:23 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/06NOV20.b/p20q1012a.m
Batch File: /chem/msdp.i/06NOV20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

Spiked ID(s) Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p110206	p110207	p110208	p110513	p110514	p110515	p110609	p110610	p110611
INJ.DATE:	02-NOV-2020	02-NOV-2020	02-NOV-2020	05-NOV-2020	05-NOV-2020	05-NOV-2020	06-NOV-2020	06-NOV-2020	06-NOV-2020
INJ.TIME:	14:13	14:41	15:09	20:32	21:00	21:28	14:11	14:39	15:06

ppbv PL Blar

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1 Chloroethane	949.12	1022.70	806.30	825.92	1224.10	964.54	1180.50	905.28	1303.10	1020.17	177.54	0.000000	2.00	1.98	514.16
2 Ethanol	794.28	1176.80	541.34	587.68	928.34	802.22	478.16	696.21	766.27	752.37	213.76	0.000000	2.00	1.22	619.05
* 3 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 4 1,2-Dichloroethane-d4	27635.00	26462.00	27301.00	26650.00	26719.00	27118.00	27404.00	26779.00	27199.00	27029.67	394.08	0.000000	0.400	23.68	1141.26
* 5 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 6 Toluene-d8	24478.00	23898.00	24046.00	24964.00	25032.00	24902.00	24547.00	25074.00	25358.00	24699.89	492.08	0.000000	0.400	17.33	1425.08
* 7 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 8 4-Bromofluorobenzene	26376.00	26376.00	25359.00	23859.00	24195.00	23898.00	24336.00	24526.00	24254.00	24797.67	995.84	0.000000	0.400	8.60	2883.95

Reviewer 1 _____ Date: 11/12/20
Reviewer 2 _____ Date: 11/12/20

The ratio of the mean recovered concentration & the MDL is b/w 1-20.

$\bar{x} = 566.60$

$2\bar{x} = 1133.21$

1112pca_mdl.rp

TO15 Quad MDL MSD-P
Standard 3018-1644 (5.0ppbv)

1,1,1,2-Tetrachloroethane only

16mL load volume
Spike Concentration 0.4ppbv

Report Date : 10-NOV-2020 15:36 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

Spiked ID(s) _____ Spiked Vol(s) _____

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102710	p102711	p102712	p102809	p102810	p102811	p102910	p102911	p102912
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	14:49	15:17	15:45	14:57	15:25	15:53	14:46	15:14	15:42

RTV RL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
* 1 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 2 1,2-Dichloroethane-d4	24573.00	24807.00	24616.00	25011.00	26208.00	26456.00	27161.00	26313.00	27385.00	25836.67	1102.74	0.000000	2.00	8.09	3193.55
* 3 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 4 Toluene-d8	24075.00	24304.00	24661.00	24305.00	23479.00	23880.00	24032.00	24417.00	23597.00	24083.33	385.46	0.000000	2.00	21.57	1116.30
* 5 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
6 1,1,1,2-Tetrachloroethane	379.06	447.57	427.78	423.52	384.11	446.89	435.94	349.79	387.48	409.13	34.82	0.000000	2.00	4.06	100.83
$ 7 4-Bromofluorobenzene	25482.00	25724.00	25783.00	26216.00	25959.00	25799.00	26068.00	25824.00	25833.00	25854.22	209.93	0.000000	2.00	42.53	607.95

80

Reviewer 1 _____ Date: 11/10/20
Reviewer 2 _____ Date: 11/12/20

The ratio of the mean recovered concentration & the MDL is b/w 1-20.

$\bar{x} = 100.83$

$2\bar{x} = 201.66$

$3\bar{x} = 302.49$

$4\bar{x} = 403.32$

blank_mdl.rp

MSD-P Blank MDL
can #s 33665 & 497

Report Date : 03-NOV-2020 17:44 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102707EPALB	p102708EPALB	p102709EPALB	p102806EPALB	p102807EPALB	p102808EPALB	p102907EPALB	p102908EPALB	p102909EPALB
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	13:05	13:52	14:22	12:51	14:00	14:29	12:51	13:49	14:18

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1	Freon 134a	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
2	Propylene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
3	1,1-Difluoroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
4	Freon 12	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
5	Chlorodifluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
6	Freon 114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
7	Isobutane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
8	Chloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
9	Butane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
10	Vinyl Chloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
11	1,3-Butadiene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
12	Bromomethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
13	Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
14	Isopentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
15	Vinyl Bromide	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
16	Freon 11	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
17	Dichlorofluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
18	Pentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
19	Ethanol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
20	Ethyl Ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
21	Acrolein	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000

Reviewer 1 _____ Date: 11/03/20

Reviewer 2 _____ Date: 11/11/20

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m

Batch File: /chem/msdp.i/29OCT20.b

Instrument Names: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
22 Freon 113	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
23 1,1-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
24 Acetone 497.49	331.00	354.71	246.63	201.44	376.96	233.77	173.33	355.39	249.83	280.34	74.98	0.000000	0.400	1.29	217.15	
25 Iodomethane 65.08	65.08	27.98	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	10.34	22.52	0.000000	2.00	0.159	65.21	Ratio 1 t
26 Carbon Disulfide 195.78	151.31	148.10	133.40	158.96	153.20	166.49	113.13	146.20	117.68	143.16	18.17	0.000000	0.400	2.72	52.62	
27 2-Propanol 137.20	69.67	88.64	14.84	42.56	56.13	41.38	31.21	93.32	82.38	57.79	27.42	0.000000	0.400	0.728	79.41	Ratio 1 t
28 3-Chloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
29 Acetonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
30 Methylene Chloride 60.72	0.000000	0.000000	0.000000	60.72	0.000000	0.000000	0.000000	0.000000	0.000000	6.75	20.24	0.000000	0.400	0.115	58.61	Rat
31 tert-Butyl alcohol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
32 Methyl tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
33 trans-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
34 Acrylonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
35 Hexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
36 Isopropyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
37 1,1-Dichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
38 Vinyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
39 Ethyl-tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
40 2,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
41 cis-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
42 2-Butanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
43 Ethyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 44 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	
45 Tetrahydrofuran	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
46 Chloroform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
47 Cyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
48 1,1,1-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
49 Carbon Tetrachloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	

Reviewer 1 _____ Date: _____

Reviewer 2 _____ Date: _____

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
50 1,1-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
51 2,2,4-Trimethylpentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
52 Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 53 1,2-Dichloroethane-d4	25449.00	26875.00	26033.00	28600.00	27056.00	27244.00	27238.00	27582.00	27588.00	27073.89	913.17	0.000000	0.400	10.24	2644.53	
54 tert-Amyl methyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
55 1,2-Dichloroethane 10.40	0.000000	0.000000	0.000000	0.000000	10.40	0.000000	0.000000	0.000000	0.000000	1.16	3.47	0.000000	0.400	0.115	10.04	Rati
56 Heptane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 57 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	
58 n-Butanol 68.07	52.43	0.000000	39.24	68.07	0.000000	0.000000	38.26	54.00	0.000000	28.00	27.94	0.000000	0.400	0.346	80.92	Rati
59 Trichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
60 Methylcyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
61 1,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
62 Methyl Methacrylate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
63 1,4-Dioxane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
64 Dibromomethane 76.07	0.000000	0.000000	50.85	30.83	0.000000	0.000000	76.07	28.33	20.27	22.93	26.94	0.000000	0.400	0.294	78.01	Ratio 1 t
65 Bromodichloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
66 1-Bromo-2-Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
67 cis-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
68 4-Methyl-2-pentanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 69 Toluene-d8	24332.00	24851.00	24110.00	24640.00	24909.00	24437.00	24430.00	24025.00	23792.00	24391.78	374.29	0.000000	0.400	22.50	1083.95	
70 Octane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
71 Toluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
72 trans-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
73 1,1,2-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
74 Tetrachloroethene 7.09	7.09	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.788	2.36	0.000000	0.400	0.115	6.85	Ratio 1 t
75 1,3-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
76 2-Hexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
77 Dibromochloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
78 1,2-Dibromoethane (EDB)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 79 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	

80	Chlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
81	Ethyl Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
82	Nonane 46.24	0.000000	0.000000	0.000000	46.24	0.000000	0.000000	0.000000	0.000000	0.000000	5.14	15.41	0.000000	0.400	0.115	44.64	Ratio 1 t	
83	1,1,1,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
84	m,p-Xylene 19.29	0.000000	0.000000	0.000000	19.29	0.000000	0.000000	0.000000	0.000000	0.000000	2.14	6.43	0.000000	0.400	0.115	18.62	Ratio 1 t	
85	o-Xylene 8.96	0.000000	0.000000	0.000000	8.96	0.000000	0.000000	0.000000	0.000000	0.000000	0.996	2.99	0.000000	0.400	0.115	8.65	Ratio 1 t	
86	Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
87	Bromoform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
88	Cumene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
89	Cyclohexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
$ 90	4-Bromofluorobenzene	26249.00	25487.00	25699.00	25494.00	25682.00	25924.00	26381.00	25900.00	26007.00	25869.22	312.25	0.000000	5.00	1.00	0.000000		
91	1,1,2,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	28.61	904.27			
92	Bromobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
93	Propylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000			
94	1,2,3-Trichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
95	trans-1,4-Dichloro-2-butene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000			
96	4-Ethyltoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
97	Decane 573.14	491.02	405.05	339.69	573.14	403.12	0.000000	563.04	396.70	325.06	388.54	170.65	0.000000	0.400	0.786	494.19	Rati	
98	2-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
99	1,3,5-Trimethylbenzene 11.91	7.14	11.91	0.000000	0.000000	0.000000	0.000000	10.79	0.000000	0.000000	3.32	5.13	0.000000	0.400	0.223	14.85	Rati	
100	alpha Methyl Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
101	tert-Butylbenzene 32.20	32.20	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.58	10.73	0.000000	0.400	0.115	31.09	Rati	
102	1,2,4-Trimethylbenzene 40.41	0.000000	11.59	3.17	40.41	0.000000	0.000000	0.000000	20.21	0.000000	8.38	13.94	0.000000	0.400	0.207	40.37	Rati	
103	sec-Butylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
104	p-Cymene 4.91	4.91	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.545	1.64	0.000000	0.400	0.115	4.74	Ratio 1 t	
105	1,3-Dichlorobenzene 6.61	0.000000	6.61	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.735	2.20	0.000000	0.400	0.115	6.38	Ratio 1 t	
106	1,4-Dichlorobenzene 10.61	0.000000	0.000000	0.000000	10.61	0.000000	0.000000	0.000000	0.000000	0.000000	1.18	3.54	0.000000	0.400	0.115	10.25	Ratio 1 t	
107	alpha-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
108	Undecane 183.60	0.000000	0.000000	106.80	130.26	91.15	137.17	174.19	146.33	183.60	107.72	67.57	0.000000	0.400	0.551	195.68	Ratio 1 t	
109	Butylbenzene 45.09	26.38	12.90	0.000000	45.09	0.000000	0.000000	14.12	0.000000	0.000000	10.94	15.88	0.000000	0.400	0.238	45.98	Ratio 1 t	
110	1,2-Dichlorobenzene 20.05	26.05	0.000000	0.000000	13.71	0.000000	0.000000	0.000000	0.000000	0.000000	4.42	9.29	0.000000	0.400	0.164	26.91	Ratio 1 t	
111	1,2-Dibromo-3-chloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000			
112	Dodecane 719.23	0.000000	66.26	60.12	719.23	236.24	131.75	184.35	143.99	116.87	184.31	212.46	0.000000	0.400	0.300	615.27	Ratio 1 t	
113	1,2,4-Trichlorobenzene 65.18	65.18	48.80	15.77	46.15	24.18	0.000000	13.22	59.47	0.000000	30.31	25.09	0.000000	0.400	0.417	72.67	Ratio 1 t	
114	Hexachlorobutadiene 38.61	0.000000	0.000000	0.000000	38.61	0.000000	0.000000	0.000000	0.000000	0.000000	4.29	12.87	0.000000	0.400	0.115	37.27	Ratio 1 t	
115	Naphthalene 385.24	42.99	32.63	22.36	385.24	178.02	96.40	0.000000	0.000000	34.33	88.00	124.65	0.000000	0.400	0.244	360.98	Ratio 1 t	
116	1,2,3-Trichlorobenzene 129.49	129.49	0.000000	0.000000	74.71	47.26	0.000000	0.000000	0.000000	0.000000	27.94	46.85	0.000000	0.400	0.206	135.67	Ratio 1 t	

Reviewer 1 _____ Date: 11/03/20

Reviewer 2 _____ Date: _____

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 2107241A-25A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072202**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 10:40 AM**

Compound	%Recovery
Freon 12	107
Freon 114	102
Chloromethane	114
Vinyl Chloride	96
1,3-Butadiene	114
Bromomethane	95
Chloroethane	94
Freon 11	105
Ethanol	104
Freon 113	97
1,1-Dichloroethene	92
Acetone	102
2-Propanol	108
Carbon Disulfide	95
3-Chloropropene	88
Methylene Chloride	118
Methyl tert-butyl ether	90
trans-1,2-Dichloroethene	96
Hexane	99
1,1-Dichloroethane	106
2-Butanone (Methyl Ethyl Ketone)	96
cis-1,2-Dichloroethene	101
Tetrahydrofuran	114
Chloroform	106
1,1,1-Trichloroethane	100
Cyclohexane	94
Carbon Tetrachloride	107
2,2,4-Trimethylpentane	103
Benzene	107
1,2-Dichloroethane	118
Heptane	101
Trichloroethene	108
1,2-Dichloropropane	108
1,4-Dioxane	106
Bromodichloromethane	115
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	108
Toluene	106
trans-1,3-Dichloropropene	107
1,1,2-Trichloroethane	107
Tetrachloroethene	106
2-Hexanone	114

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 2107241A-25A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 10:40 AM**	

Compound	%Recovery
Dibromochloromethane	110
1,2-Dibromoethane (EDB)	109
Chlorobenzene	105
Ethyl Benzene	102
m,p-Xylene	100
o-Xylene	100
Styrene	98
Bromoform	107
Cumene	100
1,1,2,2-Tetrachloroethane	107
Propylbenzene	103
4-Ethyltoluene	101
1,3,5-Trimethylbenzene	103
1,2,4-Trimethylbenzene	100
1,3-Dichlorobenzene	106
1,4-Dichlorobenzene	105
alpha-Chlorotoluene	102
1,2-Dichlorobenzene	103
1,2,4-Trichlorobenzene	97
Hexachlorobutadiene	100
Naphthalene	88
TPH ref. to Gasoline (MW=100)	100
Freon 134a	108
Acrolein	100
Acrylonitrile	107
tert-Amyl methyl ether	100
tert-Butyl alcohol	95
1,2-Dibromo-3-chloropropane	104
Dibromomethane	112
1,1-Difluoroethane	97
Isopropyl ether	110
Ethyl Acetate	116
Ethyl-tert-butyl ether	95
Hexachloroethane	116
Iodomethane	111
Propylene	109
1,1,1,2-Tetrachloroethane	104
1,2,3-Trichloropropane	105
Vinyl Acetate	94
Vinyl Bromide	94

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107241A-25A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 10:40 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	102	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072202.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 22-JUL-2021 10:40
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2125
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 12:28 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	159252	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	125254			48.23- 108.23	78.65
5.778	5.778 (1.000)	49	337426			150.57- 210.57	211.88
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	573285	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	86124			0.00- 45.71	15.02
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	571549	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	298530			23.78- 83.78	52.23
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	227549	25.0000	25.891	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	131569			27.21- 87.21	57.82
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	634381	25.0000	25.483	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	69311			0.00- 40.44	10.93

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	410243			34.95- 94.95	64.67
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	373553	25.0000	25.452	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	454419			95.92- 155.92	121.65
10.921	10.921 (1.154)	176	351479			66.89- 126.89	94.09
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	272306	50.0000	54.025	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	230735			59.44- 119.44	84.73
1.745	1.745 (0.302)	51	1347889			419.06- 479.06	494.99
5 Propylene					CAS #: 115-07-1		
1.689	1.689 (0.292)	41	395969	50.0000	54.335	80.00- 120.00	100.00
1.689	1.689 (0.292)	42	264550			35.28- 95.28	66.81
1.689	1.689 (0.292)	39	270981			38.35- 98.35	68.43
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	175405	50.0000	48.592	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1347889			597.63- 657.63	768.44
1.703	1.703 (0.295)	47	142068			33.72- 93.72	80.99
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	762355	50.0000	53.374	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	242922			2.37- 62.37	31.86
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.759 (0.304)	67	79151	50.0000	56.100	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1347889			1501.01-1561.01	1702.93
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	713465	50.0000	50.887	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	228454			2.30- 62.30	32.02
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	858814	50.0000	53.230	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	280324			2.44- 62.44	32.64
1.870	1.870 (0.324)	58	24676			0.00- 33.36	2.87
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	474185	50.0000	57.225	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	118041			0.00- 56.26	24.89
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.352)	58	89726	50.0000	46.744	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.352)	43	812760			823.29- 883.29	905.82
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	480815	50.0000	48.232	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	141405			0.00- 59.69	29.41
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	458664	50.0000	57.206	80.00- 120.00	100.00
2.096	2.096 (0.363)	39	422291			52.37- 112.37	92.07
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	303341	50.0000	47.324	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	284539			64.07- 124.07	93.80
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	168696	50.0000	47.061	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	46438			0.04- 60.04	27.53
2.612	2.612 (0.452)	49	68198			4.54- 64.54	40.43
31 Isopentane					CAS #: 78-78-4		
2.641	2.641 (0.457)	43	586819	50.0000	53.800	80.00- 120.00	100.00
2.641	2.641 (0.457)	57	344342			34.12- 94.12	58.68
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	277923	50.0000	46.909	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	275283			69.27- 129.27	99.05
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	793967	50.0000	52.309	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	518902			34.72- 94.72	65.36
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.503)	67	633733	50.0000	48.443	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	195685			0.84- 60.84	30.88
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	950938	50.0000	53.636	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	124193			0.00- 44.98	13.06
2.970	2.970 (0.514)	72	55167			0.00- 37.39	5.80
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	132742	50.0000	44.379	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	273284			163.46- 223.46	205.88
3.285	3.285 (0.569)	45	460138			250.40- 310.40	346.64

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	82140	50.0000	52.011	80.00- 120.00	100.00
3.285	3.285 (0.569)	45	460138			511.19- 571.19	560.18
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	137359	50.0000	50.123	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	189950			111.10- 171.10	138.29
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	546066	50.0000	48.423	80.00- 120.00	100.00
3.558	3.558 (0.616)	153	351035			33.56- 93.56	64.28
3.550	3.550 (0.614)	101	669720			89.21- 149.21	122.64
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.586 (0.621)	96	310788	50.0000	46.133	80.00- 120.00	100.00
3.586	3.586 (0.621)	98	191507			34.02- 94.02	61.62
3.579	3.579 (0.619)	61	653131			168.77- 228.77	210.15
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	211904	50.0000	50.756	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	778906			302.95- 362.95	367.57
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	841167	50.0000	47.394	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	654678	50.0000	55.488	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	300073			12.22- 72.22	45.84
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	907286	50.0000	53.920	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	175545			0.00- 47.19	19.35
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	130101	50.0000	43.878	80.00- 120.00	100.00
4.052	4.052 (0.701)	41	655070			396.19- 456.19	503.51
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	452670	50.0000	57.720	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	237702			20.95- 80.95	52.51
4.123	4.123 (0.714)	38	50715			0.00- 41.17	11.20
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	639590	50.0000	58.980	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	272781			22.03- 82.03	42.65
4.238	4.238 (0.733)	51	189637			0.18- 60.18	29.65

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	931247	50.0000	47.458	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	228784			0.00- 51.11	24.57
4.338	4.338 (0.751)	57	100857			0.00- 40.49	10.83
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	877234	50.0000	44.854	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	313875			3.10- 63.10	35.78
4.446	4.446 (0.769)	41	342145			1.28- 61.28	39.00
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.776)	98	215920	50.0000	47.968	80.00- 120.00	100.00
4.482	4.482 (0.776)	61	635248			255.84- 315.84	294.21
4.482	4.482 (0.776)	96	339900			127.59- 187.59	157.42
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	334367	50.0000	53.360	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	396162			88.05- 148.05	118.48
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.813)	57	778245	50.0000	49.607	80.00- 120.00	100.00
4.697	4.697 (0.813)	43	578272			37.52- 97.52	74.30
4.697	4.697 (0.813)	86	81408			0.00- 41.48	10.46
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	712991	50.0000	52.866	80.00- 120.00	100.00
4.969	4.969 (0.860)	65	206807			0.00- 59.70	29.01
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.857)	45	2013521	50.0000	55.185	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	304780			0.00- 48.18	15.14
4.954	4.954 (0.857)	59	187051			0.00- 40.15	9.29
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.865)	86	81842	50.0000	47.218	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2394134			2432.48-2492.48	2925.29
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1503853	50.0000	47.615	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	440647			1.00- 61.00	29.30
5.305	5.305 (0.918)	41	345774			0.00- 48.73	22.99
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	593405	50.0000	49.548	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	189241			2.28- 62.28	31.89
5.513	5.513 (0.954)	97	143205			0.00- 53.93	24.13

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.960)	98	235720	50.0000	50.461	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	364388			125.75- 185.75	154.58
5.549	5.549 (0.960)	61	882700			332.40- 392.40	374.47
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	172819	50.0000	48.012	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2593476			1214.50-1274.50	1500.69
5.556	5.556 (0.962)	57	83905			14.68- 74.68	48.55
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	208619	50.0000	58.268	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	882700			452.04- 512.04	423.11
5.578	5.578 (0.965)	70	82457			22.77- 82.77	39.53
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (1.000)	42	683098	50.0000	57.062	80.00- 120.00	100.00
5.778	5.778 (1.000)	71	146388			0.00- 55.82	21.43
5.778	5.778 (1.000)	72	159730			0.00- 57.59	23.38
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.011)	83	733366	50.0000	52.927	80.00- 120.00	100.00
5.843	5.843 (1.011)	85	474223			34.70- 94.70	64.66
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	468635	50.0000	46.781	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	873175			142.57- 202.57	186.32
5.957	5.957 (1.031)	41	514488			62.09- 122.09	109.78
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.033)	97	786160	50.0000	50.223	80.00- 120.00	100.00
5.972	5.972 (1.033)	99	492669			34.02- 94.02	62.67
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.055)	119	784391	50.0000	53.428	80.00- 120.00	100.00
6.093	6.093 (1.055)	117	775316			70.64- 130.64	98.84
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	200904	50.0000	51.483	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	516657			226.85- 286.85	257.17
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.287 (1.088)	57	2810966	50.0000	51.550	80.00- 120.00	100.00
6.287	6.287 (1.088)	56	936764			2.24- 62.24	33.33
6.287	6.287 (1.088)	41	745438			0.00- 54.39	26.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	1009351	50.0000	53.354	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	233424			0.00- 52.90	23.13
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	268042	50.0000	50.248	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1074928			372.79- 432.79	401.03
6.358	6.358 (0.954)	55	434466			112.09- 172.09	162.09
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	582783	50.0000	59.202	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	179925			0.79- 60.79	30.87
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	379366	50.0000	50.619	80.00- 120.00	100.00
6.451	6.451 (0.968)	43	1157304			226.53- 286.53	305.06
6.451	6.451 (0.968)	57	550308			100.85- 160.85	145.06
110 n-Butanol					CAS #: 71-36-3		
6.810	6.810 (1.021)	56	383661	50.0000	55.780	80.00- 120.00	100.00
6.810	6.810 (1.021)	41	298414			40.99- 100.99	77.78
6.810	6.810 (1.021)	43	241351			27.38- 87.38	62.91
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	497673	50.0000	54.213	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	531169			76.29- 136.29	106.73
6.867	6.867 (1.030)	97	319620			33.63- 93.63	64.22
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	524684	50.0000	54.098	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	375597			41.07- 101.07	71.59
7.096	7.096 (1.064)	41	358371			22.53- 82.53	68.30
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	403084	50.0000	51.327	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	909948			179.84- 239.84	225.75
7.139	7.139 (0.755)	100	149302			9.59- 69.59	37.04
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.076)	88	272046	50.0000	52.779	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	286771			68.28- 128.28	105.41
7.175	7.175 (1.076)	57	99469			2.68- 62.68	36.56
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	474304	50.0000	55.923	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	444416			60.09- 120.09	93.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.204	7.204 (0.761)	95	388566			48.38- 108.38	81.92
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	819527	50.0000	57.578	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	522946			35.24- 95.24	63.81
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	635619	50.0000	52.859	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	199286			2.42- 62.42	31.35
7.698	7.698 (1.155)	39	478569			37.16- 97.16	75.29
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	674344	50.0000	50.763	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	317059			15.78- 75.78	47.02
6.974	6.974 (1.046)	55	833822			84.64- 144.64	123.65
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	532156	50.0000	54.031	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1615299			242.35- 302.35	303.54
7.798	7.798 (1.170)	85	157594			3.24- 63.24	29.61
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1380733	50.0000	52.900	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	803974			28.38- 88.38	58.23
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.192)	57	597409	50.0000	53.680	80.00- 120.00	100.00
7.949	7.949 (1.192)	85	456651			56.00- 116.00	76.44
7.949	7.949 (1.192)	43	1652174			228.66- 288.66	276.56
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	604545	50.0000	53.749	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	190753			1.24- 61.24	31.55
8.214	8.214 (0.868)	39	439408			34.11- 94.11	72.68
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	498594	50.0000	53.632	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	312714			31.96- 91.96	62.72
8.400	8.400 (0.888)	83	415059			52.93- 112.93	83.25
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	692069	50.0000	53.130	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	541710			47.84- 107.84	78.27
8.464	8.464 (0.895)	131	521325			45.29- 105.29	75.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	757017	50.0000	56.995	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1598132			162.87- 222.87	211.11
8.586	8.586 (0.908)	100	106717			0.00- 45.94	14.10
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	692404	50.0000	55.862	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	976053			94.99- 154.99	140.97
8.579	8.579 (1.287)	78	221907			2.05- 62.05	32.05
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	960454	50.0000	55.294	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	750667			47.45- 107.45	78.16
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	809844	50.0000	54.314	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	766386			64.21- 124.21	94.63
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	991369	50.0000	55.709	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	291313			0.00- 59.64	29.38
7.612	7.612 (1.142)	144	96205			0.00- 39.63	9.70
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1190685	50.0000	52.464	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	376726			1.74- 61.74	31.64
9.496	9.496 (1.004)	77	627903			25.04- 85.04	52.73
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	605464	50.0000	51.019	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1827010			273.74- 333.74	301.75
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	1669214	50.0000	54.668	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1273465			54.16- 114.16	76.29
9.603	9.603 (1.015)	85	338413			0.00- 53.90	20.27
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	747467	50.0000	50.290	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1425610			163.73- 223.73	190.73
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	713378	50.0000	50.094	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1427106			177.45- 237.45	200.05
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1199033	50.0000	49.233	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
165 Styrene (continued)							
10.255	10.255 (1.084)	78	563306			17.88- 77.88	46.98
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	918381	50.0000	53.639	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	475504			21.25- 81.25	51.78
168 Cumene					CAS #: 98-82-8		
10.656	10.656 (1.126)	105	2245815	50.0000	50.203	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	651345			0.00- 58.52	29.00
10.649	10.649 (1.126)	51	341426			0.00- 43.00	15.20
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	924373	50.0000	57.779	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	261609			1.94- 61.94	28.30
10.871	10.871 (1.149)	42	649112			37.89- 97.89	70.22
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1172708	50.0000	53.709	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	776048			35.20- 95.20	66.18
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	720428	50.0000	52.951	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	697279			67.21- 127.21	96.79
11.179	11.179 (1.182)	77	412910			29.02- 89.02	57.31
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	686045	50.0000	51.721	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2688150			366.49- 426.49	391.83
11.150	11.150 (1.179)	105	99726			0.00- 44.85	14.54
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	364868	50.0000	52.430	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1046117			280.55- 340.55	286.71
11.107	11.107 (1.174)	61	176709			15.49- 75.49	48.43
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	205536	50.0000	45.053	80.00- 120.00	100.00
11.172	11.172 (1.181)	89	159157			49.11- 109.11	77.44
11.179	11.179 (1.182)	75	1046117			426.44- 486.44	508.97
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1725564	50.0000	49.590	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	452782			0.00- 57.66	26.24
11.258	11.258 (1.190)	142	62818			0.00- 34.09	3.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	730259	50.0000	50.624	80.00- 120.00	100.00
11.287	11.287 (1.193)	105	2251582			284.55- 344.55	308.33
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	593504	50.0000	52.550	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1990705			315.17- 375.17	335.42
11.301	11.301 (1.195)	65	296230			21.55- 81.55	49.91
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1027758	50.0000	51.749	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1958046			164.93- 224.93	190.52
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	977211	50.0000	49.530	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	539866			25.30- 85.30	55.25
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1914510	50.0000	51.540	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	468570			0.00- 54.25	24.47
11.745	11.745 (1.242)	91	1113654			31.27- 91.27	58.17
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1884369	50.0000	50.268	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	964354			19.05- 79.05	51.18
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	12.003 (1.269)	134	594368	50.0000	51.482	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2788660			437.55- 497.55	469.18
11.996	11.996 (1.268)	91	420816			40.76- 100.76	70.80
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2591036	50.0000	50.776	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	682891			0.00- 55.54	26.36
12.160	12.160 (1.285)	91	539817			0.00- 51.48	20.83
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1364006	50.0000	53.160	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	864099			33.21- 93.21	63.35
12.203	12.203 (1.290)	111	536372			11.31- 71.31	39.32
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1361250	50.0000	52.500	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	865142			33.90- 93.90	63.55
12.311	12.311 (1.301)	111	522587			9.45- 69.45	38.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1810502	50.0000	50.849	80.00- 120.00	100.00
12.468	12.468 (1.318)	126	417968			0.00- 53.26	23.09
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2162350	50.0000	53.798	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2113413			58.12- 118.12	97.74
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	663674	50.0000	51.208	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2300379			314.79- 374.79	346.61
12.626	12.626 (1.335)	92	1216170			154.29- 214.29	183.25
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1300911	50.0000	51.708	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	835832			33.84- 93.84	64.25
12.741	12.741 (1.347)	111	545235			12.73- 72.73	41.91
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	792764	50.0000	52.025	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	661786			52.48- 112.48	83.48
13.600	13.600 (1.438)	155	611103			47.41- 107.41	77.09
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2151097	61.8000	67.520	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1935948			52.87- 112.87	90.00
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1136575	63.0000	61.144	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1083427			65.33- 125.33	95.32
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	841984	64.4000	64.362	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	527723			33.17- 93.17	62.68
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	264358	6.35000	5.565	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	33102			0.00- 42.88	12.52
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1052433	66.6000	64.046	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	993932			65.75- 125.75	94.44
15.069	15.069 (1.593)	145	352740			5.23- 65.23	33.52

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-JUL-2021 10:40
Lab File ID: p072202.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/22JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.42886	0.010	-3.56407	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.10657	0.010	-1.93188	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.65358	0.010	-1.80847	30.00000	Averaged
4 Freon 134a	0.79126	0.85495	0.010	-8.04950	30.00000	Averaged
5 Propylene	1.14402	1.24321	0.010	-8.67042	30.00000	Averaged
7 1,1-Difluoroethane	0.56667	0.55071	0.010	2.81632	30.00000	Averaged
8 Freon 12	2.24223	2.39354	0.010	-6.74809	30.00000	Averaged
9 Chlorodifluoromethane	0.22149	0.24851	0.010	-12.20007	30.00000	Averaged
10 Freon 114	2.20100	2.24004	0.010	-1.77341	30.00000	Averaged
12 Isobutane	2.53275	2.69638	0.010	-6.46074	30.00000	Averaged
15 Chloromethane	1.30082	1.48878	0.010	-14.44938	30.00000	Averaged
18 Butane	0.30133	0.28171	0.010	6.51143	30.00000	Averaged
19 Vinyl Chloride	1.56492	1.50960	0.010	3.53495	30.00000	Averaged
20 1,3-Butadiene	1.25865	1.44005	0.010	-14.41264	30.00000	Averaged
24 Bromomethane	1.00624	0.95239	0.010	5.35148	30.00000	Averaged
30 Chloroethane	0.56273	0.52965	0.010	5.87835	30.00000	Averaged
31 Isopentane	1.71230	1.84241	0.010	-7.59905	30.00000	Averaged
32 Vinyl Bromide	0.93008	0.87259	0.010	6.18178	30.00000	Averaged
33 Freon 11	2.38274	2.49279	0.010	-4.61847	30.00000	Averaged
34 Dichlorofluoromethane	2.05367	1.98971	0.010	3.11456	30.00000	Averaged
35 Pentane	2.78321	2.98562	0.010	-7.27258	30.00000	Averaged
38 Ethyl Ether	0.46955	0.41677	0.010	11.24198	30.00000	Averaged
39 Ethanol	0.24792	0.25789	0.010	-4.02143	30.00000	Averaged
42 Acrolein	0.43020	0.43126	0.010	-0.24650	30.00000	Averaged
43 Freon 113	1.77031	1.71446	0.010	3.15430	30.00000	Averaged
44 1,1-Dichloroethene	1.05757	0.97577	0.010	7.73436	30.00000	Averaged
47 Acetone	0.65540	0.66531	0.010	-1.51157	30.00000	Averaged
48 Carbon Disulfide	2.78620	2.64098	0.010	5.21220	30.00000	Averaged
49 Iodomethane	1.85215	2.05547	0.010	-10.97717	30.00000	Averaged
52 2-Propanol	2.64148	2.84857	0.010	-7.84017	30.00000	Averaged
54 3-Chloropropene	0.46546	0.40847	0.010	12.24325	30.00000	Averaged
57 Acetonitrile	1.23114	1.42123	0.010	-15.44032	30.00000	Averaged
59 Methylene Chloride	1.70236	2.00810	0.010	-17.95939	30.00000	Averaged
62 tert-Butyl alcohol	3.08038	2.92380	0.010	5.08306	30.00000	Averaged
63 Methyl tert-butyl ether	3.07018	2.75422	0.010	10.29138	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-JUL-2021 10:40
Lab File ID: p072202.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/22JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.70664	0.67792	0.010	4.06494	30.00000	Averaged
66 Acrylonitrile	0.98368	1.04980	0.010	-6.72103	30.00000	Averaged
67 Hexane	2.46279	2.44343	0.010	0.78620	30.00000	Averaged
71 1,1-Dichloroethane	2.11721	2.23855	0.010	-5.73125	30.00000	Averaged
72 Isopropyl ether	5.72778	6.32177	0.010	-10.37030	30.00000	Averaged
73 Vinyl Acetate	0.27210	0.25696	0.010	5.56381	30.00000	Averaged
79 Ethyl-tert-butyl ether	4.95812	4.72159	0.010	4.77065	30.00000	Averaged
84 2,2-Dichloropropane	1.88008	1.86309	0.010	0.90384	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.73332	0.74008	0.010	-0.92187	30.00000	Averaged
86 2-Butanone	0.56506	0.54259	0.010	3.97668	30.00000	Averaged
87 Ethyl Acetate	0.56205	0.65500	0.010	-16.53665	30.00000	Averaged
89 Tetrahydrofuran	1.87928	2.14470	0.010	-14.12322	30.00000	Averaged
92 Chloroform	2.17519	2.30252	0.010	-5.85357	30.00000	Averaged
94 Cyclohexane	1.57260	1.47135	0.010	6.43796	30.00000	Averaged
96 1,1,1-Trichloroethane	2.45732	2.46828	0.010	-0.44600	30.00000	Averaged
97 Carbon Tetrachloride	2.30469	2.46272	0.010	-6.85689	30.00000	Averaged
99 1,1-Dichloropropene	0.17017	0.17522	0.010	-2.96665	30.00000	Averaged
101 2,2,4-Trimethylpentane	8.56002	8.82548	0.010	-3.10111	30.00000	Averaged
102 Benzene	0.82499	0.88032	0.010	-6.70709	30.00000	Averaged
105 tert-Amyl methyl ether	0.23262	0.23378	0.010	-0.49550	30.00000	Averaged
106 1,2-Dichloroethane	0.42928	0.50828	0.010	-18.40506	30.00000	Averaged
107 Heptane	0.32683	0.33087	0.010	-1.23760	30.00000	Averaged
110 n-Butanol	0.29994	0.33462	0.010	-11.56099	30.00000	Averaged
111 Trichloroethene	0.40032	0.43405	0.010	-8.42696	30.00000	Averaged
114 1,2-Dichloropropane	0.42295	0.45761	0.010	-8.19567	30.00000	Averaged
116 Methyl Methacrylate	0.34351	0.35262	0.010	-2.65447	30.00000	Averaged
117 1,4-Dioxane	0.22478	0.23727	0.010	-5.55854	30.00000	Averaged
118 Dibromomethane	0.37098	0.41493	0.010	-11.84609	30.00000	Averaged
122 Bromodichloromethane	0.62070	0.71476	0.010	-15.15502	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.52438	0.55437	0.010	-5.71749	30.00000	Averaged
127 Methylcyclohexane	0.57930	0.58814	0.010	-1.52678	30.00000	Averaged
131 4-Methyl-2-pentanone	0.42950	0.46413	0.010	-8.06181	30.00000	Averaged
137 Toluene	1.13821	1.20423	0.010	-5.80032	30.00000	Averaged
136 Octane	0.48532	0.52104	0.010	-7.36083	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.49197	0.52887	0.010	-7.49878	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-JUL-2021 10:40
Lab File ID: p072202.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/22JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.40664	0.43618	0.010	-7.26379	30.00000	Averaged
142 Tetrachloroethene	0.56977	0.60543	0.010	-6.25909	30.00000	Averaged
143 2-Hexanone	0.58097	0.66225	0.010	-13.99014	30.00000	Averaged
144 1,3-Dichloropropane	0.54052	0.60389	0.010	-11.72464	30.00000	Averaged
146 Dibromochloromethane	0.75978	0.84022	0.010	-10.58729	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.65220	0.70846	0.010	-8.62751	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.77603	0.86464	0.010	-11.41799	30.00000	Averaged
154 Chlorobenzene	0.99271	1.04163	0.010	-4.92814	30.00000	Averaged
155 Ethyl Benzene	0.51909	0.52967	0.010	-2.03812	30.00000	Averaged
156 Nonane	1.33556	1.46025	0.010	-9.33670	30.00000	Averaged
158 m,p-Xylene	0.65013	0.65390	0.010	-0.57933	30.00000	Averaged
164 o-Xylene	0.62290	0.62407	0.010	-0.18886	30.00000	Averaged
165 Styrene	1.06528	1.04893	0.010	1.53415	30.00000	Averaged
167 Bromoform	0.74891	0.80341	0.010	-7.27797	30.00000	Averaged
168 Cumene	1.95673	1.96467	0.010	-0.40595	30.00000	Averaged
169 Cyclohexanone	0.69978	0.80866	0.010	-15.55837	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.95505	1.02590	0.010	-7.41878	30.00000	Averaged
177 Bromobenzene	0.59512	0.63024	0.010	-5.90177	30.00000	Averaged
178 Propylbenzene	0.58019	0.60016	0.010	-3.44210	30.00000	Averaged
179 1,2,3-Trichloropropane	0.30440	0.31919	0.010	-4.86043	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.19955	0.17981	0.010	9.89414	30.00000	Averaged
182 Decane	1.52203	1.50955	0.010	0.82021	30.00000	Averaged
183 4-Ethyltoluene	0.63096	0.63884	0.010	-1.24918	30.00000	Averaged
184 2-Chlorotoluene	0.49401	0.51921	0.010	-5.09954	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.86871	0.89910	0.010	-3.49841	30.00000	Averaged
188 alpha Methyl Styrene	0.86300	0.85488	0.010	0.94046	30.00000	Averaged
189 tert-Butylbenzene	1.62480	1.67484	0.010	-3.07979	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.63968	1.64847	0.010	-0.53627	30.00000	Averaged
192 sec-Butylbenzene	0.50500	0.51996	0.010	-2.96346	30.00000	Averaged
194 p-Cymene	2.23203	2.26668	0.010	-1.55226	30.00000	Averaged
195 1,3-Dichlorobenzene	1.12231	1.19325	0.010	-6.32102	30.00000	Averaged
196 1,4-Dichlorobenzene	1.13414	1.19084	0.010	-4.99939	30.00000	Averaged
199 alpha-Chlorotoluene	1.55742	1.58385	0.010	-1.69741	30.00000	Averaged
201 Undecane	1.75810	1.89166	0.010	-7.59693	30.00000	Averaged
202 Butylbenzene	0.56690	0.58059	0.010	-2.41616	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-JUL-2021 10:40
Lab File ID: p072202.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/22JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
204 1,2-Dichlorobenzene	1.10047	1.13806	0.010	-3.41514	30.00000	Averaged
206 1,2-Dibromo-3-chloropropane	0.66653	0.69352	0.010	-4.05025	30.00000	Averaged
207 Dodecane	1.39351	1.52250	0.010	-9.25633	30.00000	Averaged
213 1,2,4-Trichlorobenzene	0.81307	0.78912	0.010	2.94568	30.00000	Averaged
215 Hexachlorobutadiene	0.57222	0.57188	0.010	0.05895	30.00000	Averaged
216 Naphthalene	2.07796	1.82098	0.010	12.36704	30.00000	Averaged
222 1,2,3-Trichlorobenzene	0.71877	0.69120	0.010	3.83524	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072202.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 12:06
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	173971	104383	243559	159252	-8.46
108 1,4-Difluorobenze	620610	372366	868854	573285	-7.63
153 Chlorobenzene-d5	610185	366111	854259	571549	-6.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/22JUL21.b/p072202.d

Page 1

Date : 22-JUL-2021 10:40

Client ID: CCV

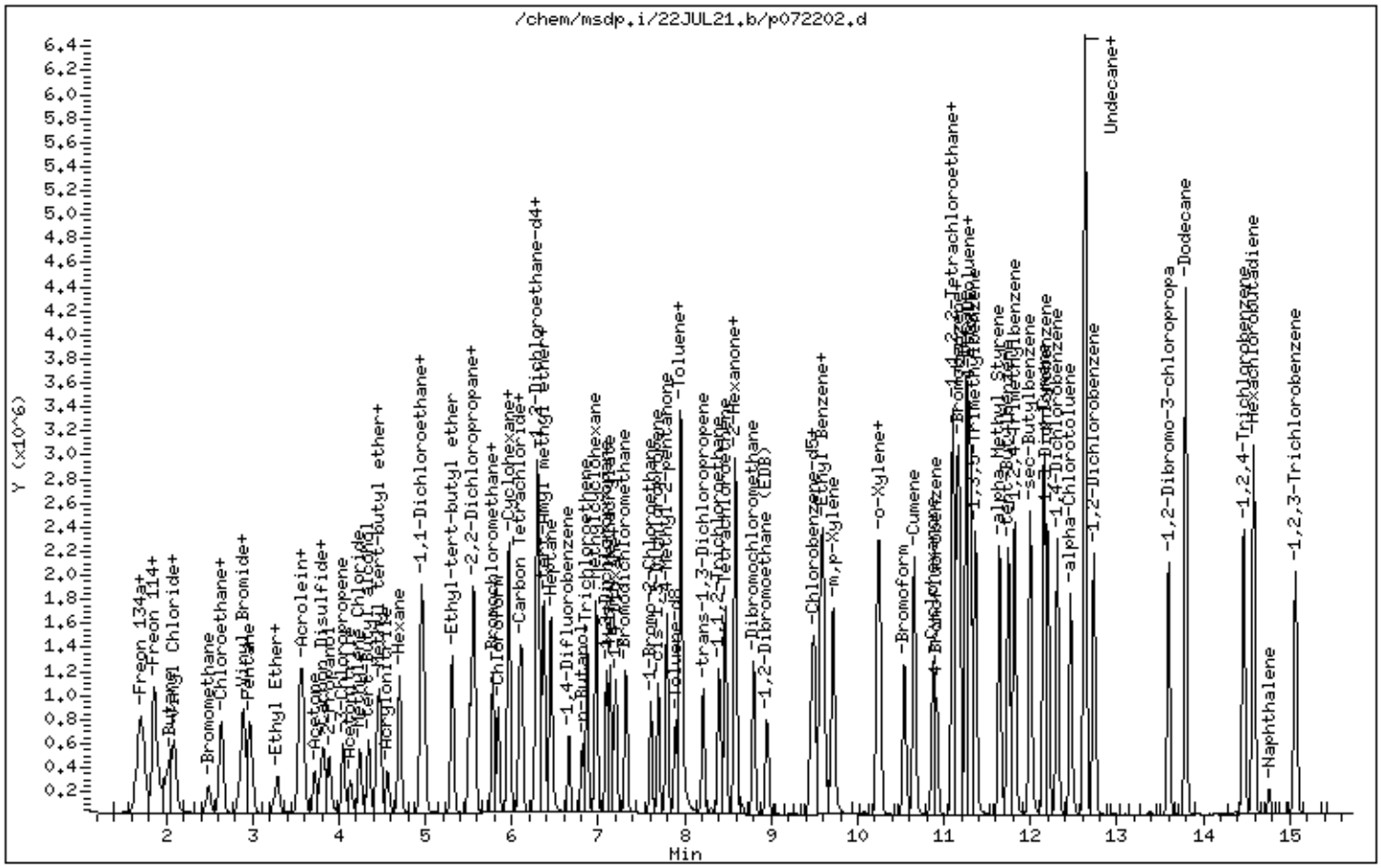
Instrument: msdp.i

Sample Info: 50mL 3018-2125

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: CCV

Lab ID#: 2107241A-25B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072206**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 12:28 PM**

Compound	%Recovery
Freon 12	107
Freon 114	106
Chloromethane	118
Vinyl Chloride	106
1,3-Butadiene	95
Bromomethane	102
Chloroethane	101
Freon 11	110
Ethanol	86
Freon 113	104
1,1-Dichloroethene	95
Acetone	100
2-Propanol	99
Carbon Disulfide	105
3-Chloropropene	95
Methylene Chloride	100
Methyl tert-butyl ether	96
trans-1,2-Dichloroethene	90
Hexane	94
1,1-Dichloroethane	96
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	90
Tetrahydrofuran	89
Chloroform	97
1,1,1-Trichloroethane	92
Cyclohexane	89
Carbon Tetrachloride	101
2,2,4-Trimethylpentane	91
Benzene	100
1,2-Dichloroethane	105
Heptane	92
Trichloroethene	99
1,2-Dichloropropane	80
1,4-Dioxane	99
Bromodichloromethane	98
cis-1,3-Dichloropropene	96
4-Methyl-2-pentanone	87
Toluene	98
trans-1,3-Dichloropropene	98
1,1,2-Trichloroethane	99
Tetrachloroethene	106
2-Hexanone	98

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Client Sample ID: CCV

Lab ID#: 2107241A-25B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072206**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 12:28 PM**	

Compound	%Recovery
Dibromochloromethane	107
1,2-Dibromoethane (EDB)	103
Chlorobenzene	100
Ethyl Benzene	100
m,p-Xylene	100
o-Xylene	100
Styrene	100
Bromoform	109
Cumene	103
1,1,2,2-Tetrachloroethane	101
Propylbenzene	104
4-Ethyltoluene	102
1,3,5-Trimethylbenzene	103
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	108
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	102
Hexachlorobutadiene	103
Naphthalene	76
TPH ref. to Gasoline (MW=100)	100
Freon 134a	110
Acrolein	101
Acrylonitrile	85
tert-Amyl methyl ether	98
tert-Butyl alcohol	96
1,2-Dibromo-3-chloropropane	105
Dibromomethane	109
1,1-Difluoroethane	101
Isopropyl ether	92
Ethyl Acetate	95
Ethyl-tert-butyl ether	92
Hexachloroethane	109
Iodomethane	117
Propylene	97
1,1,1,2-Tetrachloroethane	104
1,2,3-Trichloropropane	106
Vinyl Acetate	94
Vinyl Bromide	104

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107241A-25B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072206**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 12:28 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072206.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 22-JUL-2021 12:28
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2071
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 14:16 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	240594	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	185405			48.46- 108.46	77.06
5.284	5.284 (1.000)	49	339513			120.39- 180.39	141.11
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	805743	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	118749			0.00- 45.52	14.74
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	719477	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	380790			25.46- 85.46	52.93
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	324439	25.0000	24.504	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	164802			21.66- 81.66	50.80
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	801768	25.0000	24.159	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	88877			0.00- 41.47	11.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	534707			36.47- 96.47	66.69
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	490651	25.0000	25.782	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	576058			93.06- 153.06	117.41
9.601	9.601 (1.114)	176	460073			62.87- 122.87	93.77
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	314306	50.0000	54.902	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	253958			51.82- 111.82	80.80
1.479	1.479 (0.280)	51	678692			194.91- 254.91	215.93
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	280944	50.0000	48.343	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	187407			35.61- 95.61	66.71
1.423	1.423 (0.269)	39	212698			42.66- 102.66	75.71
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	191561	50.0000	50.567	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	678692			321.86- 381.86	354.29
1.451	1.451 (0.274)	47	151764			45.34- 105.34	79.23
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	893568	50.0000	53.315	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	289794			2.63- 62.63	32.43
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.479	1.479 (0.280)	67	93686	50.0000	50.861	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	678692			719.76- 779.76	724.43
10 Freon 114					CAS #: 76-14-2		
1.562	1.562 (0.296)	135	660772	50.0000	53.208	80.00- 120.00	100.00
1.562	1.562 (0.296)	137	215275			2.12- 62.12	32.58
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	651809	50.0000	49.902	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	211226			2.44- 62.44	32.41
1.576	1.576 (0.298)	58	22055			0.00- 33.26	3.38
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	411101	50.0000	59.015	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	130383			2.41- 62.41	31.72
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	88699	50.0000	53.917	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.702	1.702 (0.322)	43	631532			727.41- 787.41	711.99
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	396966	50.0000	53.253	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	119492			1.28- 61.28	30.10
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	323735	50.0000	47.388	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	310585			69.23- 129.23	95.94
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	301260	50.0000	51.100	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	286661			62.78- 122.78	95.15
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	177513	50.0000	50.729	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	54258			1.44- 61.44	30.57
2.206	2.206 (0.417)	49	56700			4.12- 64.12	31.94
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	432917	50.0000	48.380	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	310985			38.82- 98.82	71.83
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	332070	50.0000	51.806	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	310647			63.14- 123.14	93.55
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	974581	50.0000	54.958	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	629326			35.12- 95.12	64.57
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	771486	50.0000	54.422	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	237679			0.74- 60.74	30.81
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	694653	50.0000	48.726	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	113477			0.00- 45.97	16.34
2.500	2.500 (0.473)	72	60100			0.00- 38.10	8.65
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.794 (0.529)	74	151299	50.0000	47.335	80.00- 120.00	100.00
2.794	2.794 (0.529)	59	270603			147.68- 207.68	178.85
2.780	2.780 (0.526)	45	352120			206.40- 266.40	232.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	61962	50.0000	43.193	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	351228			523.01- 583.01	566.84
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	120667	50.0000	50.687	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	166897			110.33- 170.33	138.31
43 Freon 113					CAS #: 76-13-1		
3.046	3.046 (0.576)	151	631758	50.0000	52.114	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	398288			33.72- 93.72	63.04
3.032	3.032 (0.574)	101	760281			89.67- 149.67	120.34
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	347077	50.0000	47.534	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	218748			33.39- 93.39	63.03
3.074	3.074 (0.582)	61	683368			163.82- 223.82	196.89
47 Acetone					CAS #: 67-64-1		
3.213	3.213 (0.608)	58	200993	50.0000	49.822	80.00- 120.00	100.00
3.213	3.213 (0.608)	43	673708			299.66- 359.66	335.19
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.624)	76	951915	50.0000	52.399	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.619)	142	919540	50.0000	58.536	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	429939			14.58- 74.58	46.76
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	721275	50.0000	49.713	80.00- 120.00	100.00
3.409	3.409 (0.645)	43	143563			0.00- 48.61	19.90
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	148903	50.0000	47.608	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	515431			338.06- 398.06	346.15
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	309347	50.0000	48.696	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	162695			21.81- 81.81	52.59
3.633	3.633 (0.688)	38	37176			0.00- 41.86	12.02
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	484287	50.0000	50.159	80.00- 120.00	100.00
3.731	3.731 (0.706)	84	297537			30.77- 90.77	61.44
3.731	3.731 (0.706)	51	148071			1.39- 61.39	30.58

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	874257	50.0000	48.007	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	190424			0.00- 51.05	21.78
3.857	3.857 (0.730)	57	100296			0.00- 41.68	11.47
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	938626	50.0000	47.753	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	267991			0.00- 58.86	28.55
3.941	3.941 (0.746)	41	263109			0.00- 57.27	28.03
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	222446	50.0000	45.270	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	602824			244.59- 304.59	271.00
3.969	3.969 (0.751)	96	358325			129.84- 189.84	161.08
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	250365	50.0000	42.455	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	288968			88.50- 148.50	115.42
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	626344	50.0000	47.011	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	382934			32.99- 92.99	61.14
4.179	4.179 (0.791)	86	78410			0.00- 42.56	12.52
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	657259	50.0000	47.969	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	204664			0.76- 60.76	31.14
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1296578	50.0000	46.113	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	292241			0.00- 51.37	22.54
4.445	4.445 (0.841)	59	149559			0.00- 41.09	11.53
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	79014	50.0000	46.905	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1126729			1391.63-1451.63	1425.97
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1247583	50.0000	45.960	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	418551			3.22- 63.22	33.55
4.809	4.809 (0.910)	41	240451			0.00- 48.12	19.27
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.004	5.004 (0.947)	77	603983	50.0000	47.317	80.00- 120.00	100.00
5.004	5.004 (0.947)	79	192093			2.00- 62.00	31.80
5.004	5.004 (0.947)	97	140389			0.00- 53.36	23.24

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.046	5.046 (0.955)	98	220398	50.0000	45.248	80.00- 120.00	100.00
5.046	5.046 (0.955)	96	343985			127.22- 187.22	156.07
5.046	5.046 (0.955)	61	575050			283.85- 343.85	260.91
86 2-Butanone					CAS #: 78-93-3		
5.074	5.074 (0.960)	72	159178	50.0000	46.786	80.00- 120.00	100.00
5.074	5.074 (0.960)	43	1669494			1055.75-1115.75	1048.82
5.074	5.074 (0.960)	57	67051			10.59- 70.59	42.12
87 Ethyl Acetate					CAS #: 141-78-6		
5.088	5.088 (0.963)	45	132803	50.0000	47.348	80.00- 120.00	100.00
5.046	5.046 (0.955)	61	575050			450.31- 510.31	433.01
5.088	5.088 (0.963)	70	76601			30.42- 90.42	57.68
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	427750	50.0000	44.585	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	145539			2.92- 62.92	34.02
5.270	5.270 (0.997)	72	147918			3.54- 63.54	34.58
92 Chloroform					CAS #: 67-66-3		
5.354	5.354 (1.013)	83	734942	50.0000	48.721	80.00- 120.00	100.00
5.354	5.354 (1.013)	85	475323			34.71- 94.71	64.67
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	422785	50.0000	44.342	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	617023			120.40- 180.40	145.94
5.438	5.438 (1.029)	41	348147			54.20- 114.20	82.35
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	776796	50.0000	45.814	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	495553			33.76- 93.76	63.79
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	792154	50.0000	50.726	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	824472			73.68- 133.68	104.08
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.620	5.620 (0.909)	110	188499	50.0000	51.406	80.00- 120.00	100.00
5.620	5.620 (0.909)	75	484920			231.09- 291.09	257.25
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1897939	50.0000	45.552	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	597507			1.12- 61.12	31.48
5.774	5.774 (1.093)	41	538099			0.00- 57.49	28.35

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	923342	50.0000	50.217	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	222767			0.00- 53.80	24.13
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	240369	50.0000	49.029	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	950335			365.20- 425.20	395.36
5.858	5.858 (0.948)	55	302460			91.31- 151.31	125.83
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	554785	50.0000	52.408	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	175235			1.20- 61.20	31.59
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	334054	50.0000	46.126	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	657772			179.02- 239.02	196.91
5.942	5.942 (0.962)	57	377066			84.85- 144.85	112.88
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	282653	50.0000	47.960	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	199168			40.21- 100.21	70.46
6.348	6.348 (1.027)	43	152324			25.00- 85.00	53.89
111 Trichloroethene					CAS #: 79-01-6		
6.376	6.376 (1.032)	95	458212	50.0000	49.675	80.00- 120.00	100.00
6.376	6.376 (1.032)	130	488708			74.96- 134.96	106.66
6.376	6.376 (1.032)	97	294244			34.80- 94.80	64.22
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.621	6.621 (1.071)	63	171609	50.0000	40.264	80.00- 120.00	100.00
6.621	6.621 (1.071)	62	135329			52.03- 112.03	78.86
6.621	6.621 (1.071)	41	169432			79.97- 139.97	98.73
116 Methyl Methacrylate					CAS #: 80-62-6		
6.671	6.671 (0.774)	69	332943	50.0000	48.084	80.00- 120.00	100.00
6.671	6.671 (0.774)	41	522381			134.02- 194.02	156.90
6.671	6.671 (0.774)	100	134776			9.54- 69.54	40.48
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.699 (1.084)	88	230491	50.0000	49.486	80.00- 120.00	100.00
6.699	6.699 (1.084)	58	187511			55.80- 115.80	81.35
6.699	6.699 (1.084)	57	69664			8.68- 68.68	30.22
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	421136	50.0000	54.612	80.00- 120.00	100.00
6.721	6.721 (0.780)	93	410743			67.27- 127.27	97.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.721	6.721 (0.780)	95	339111			50.92- 110.92	80.52
122 Bromodichloromethane					CAS #: 75-27-4		
6.843	6.843 (1.107)	83	755630	50.0000	48.898	80.00- 120.00	100.00
6.843	6.843 (1.107)	85	483227			34.31- 94.31	63.95
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.215	7.215 (1.168)	75	552201	50.0000	48.077	80.00- 120.00	100.00
7.215	7.215 (1.168)	77	174888			1.42- 61.42	31.67
7.215	7.215 (1.168)	39	377808			38.56- 98.56	68.42
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	559098	50.0000	45.326	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	259462			15.60- 75.60	46.41
6.460	6.460 (1.045)	55	549862			78.53- 138.53	98.35
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	340245	50.0000	43.567	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	865218			231.30- 291.30	254.29
7.316	7.316 (1.184)	85	129045			8.94- 68.94	37.93
137 Toluene					CAS #: 108-88-3		
7.444	7.444 (1.205)	91	1203325	50.0000	48.774	80.00- 120.00	100.00
7.444	7.444 (1.205)	92	684046			28.30- 88.30	56.85
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	381316	50.0000	46.455	80.00- 120.00	100.00
7.452	7.452 (1.206)	85	367990			67.11- 127.11	96.51
7.444	7.444 (1.205)	43	871674			214.21- 274.21	228.60
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.695	7.695 (0.893)	75	521977	50.0000	49.258	80.00- 120.00	100.00
7.695	7.695 (0.893)	77	167981			2.15- 62.15	32.18
7.688	7.688 (0.892)	39	339808			36.09- 96.09	65.10
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	402435	50.0000	49.381	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	251247			31.62- 91.62	62.43
7.846	7.846 (0.910)	83	348382			56.35- 116.35	86.57
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	595572	50.0000	52.839	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	458236			48.71- 108.71	76.94
7.881	7.881 (0.914)	131	443097			46.55- 106.55	74.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	458271	50.0000	48.956	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	839079			157.91- 217.91	183.10
8.010	8.010 (0.929)	100	85032			0.00- 47.86	18.56
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	545042	50.0000	46.304	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	582598			82.96- 142.96	106.89
7.989	7.989 (1.293)	78	177842			2.55- 62.55	32.63
146 Dibromochloromethane					CAS #: 124-48-1		
8.161	8.161 (0.947)	129	827730	50.0000	53.538	80.00- 120.00	100.00
8.161	8.161 (0.947)	127	647379			47.77- 107.77	78.21
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.268 (0.959)	107	650476	50.0000	51.398	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	611508			64.60- 124.60	94.01
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.122	7.122 (1.152)	63	732073	50.0000	49.090	80.00- 120.00	100.00
7.122	7.122 (1.152)	65	225124			0.95- 60.95	30.75
7.122	7.122 (1.152)	144	81742			0.00- 40.45	11.17
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	984600	50.0000	50.071	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	315804			2.13- 62.13	32.07
8.641	8.641 (1.002)	77	522808			26.35- 86.35	53.10
155 Ethyl Benzene					CAS #: 100-41-4		
8.691	8.691 (1.008)	106	494185	50.0000	50.259	80.00- 120.00	100.00
8.691	8.691 (1.008)	91	1556444			282.48- 342.48	314.95
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	871593	50.0000	45.733	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	815940			59.52- 119.52	93.61
8.712	8.712 (1.011)	85	279759			0.00- 59.76	32.10
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	612856	50.0000	50.099	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1218604			171.36- 231.36	198.84
164 o-Xylene					CAS #: 95-47-6		
9.128	9.128 (1.059)	106	581436	50.0000	50.067	80.00- 120.00	100.00
9.128	9.128 (1.059)	91	1211239			179.99- 239.99	208.32
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	1007863	50.0000	50.092	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
165 Styrene (continued)							
9.149	9.149 (1.061)	78	480659			19.09- 79.09	47.69
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	797509	50.0000	54.400	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	411645			21.45- 81.45	51.62
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	1895548	50.0000	51.626	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	511721			0.00- 56.99	27.00
9.414	9.414 (1.092)	51	218735			0.00- 41.77	11.54
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	534890	50.0000	46.292	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	216402			9.22- 69.22	40.46
9.579	9.579 (1.111)	42	377706			42.60- 102.60	70.61
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	923076	50.0000	50.707	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	591502			34.35- 94.35	64.08
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.737 (1.130)	156	610525	50.0000	53.490	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	589887			67.29- 127.29	96.62
9.729	9.729 (1.129)	77	931214			132.41- 192.41	152.53
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2236258	50.0000	52.199	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	537355			0.00- 53.77	24.03
9.758	9.758 (1.132)	105	86635			0.00- 33.81	3.87
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	290220	50.0000	52.925	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	856993			285.00- 345.00	295.29
9.787	9.787 (1.135)	61	240177			54.06- 114.06	82.76
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	211839	50.0000	48.820	80.00- 120.00	100.00
9.787	9.787 (1.135)	89	93227			21.19- 81.19	44.01
9.787	9.787 (1.135)	75	856993			372.45- 432.45	404.55
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.138)	57	1055821	50.0000	47.662	80.00- 120.00	100.00
9.815	9.815 (1.139)	71	365802			4.13- 64.13	34.65
9.815	9.815 (1.139)	142	54505			0.00- 34.73	5.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	564932	50.0000	50.873	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1892480			296.79- 356.79	334.99
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	475015	50.0000	52.645	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1666381			336.29- 396.29	350.81
9.873	9.873 (1.145)	65	257579			38.83- 98.83	54.23
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	802817	50.0000	51.472	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1580981			176.40- 236.40	196.93
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.109	10.109 (1.173)	118	786935	50.0000	49.263	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	446825			26.64- 86.64	56.78
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1523528	50.0000	53.089	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	381191			0.00- 54.82	25.02
10.174	10.174 (1.180)	91	970374			36.92- 96.92	63.69
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1558202	50.0000	50.664	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	735764			16.58- 76.58	47.22
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	479252	50.0000	51.703	80.00- 120.00	100.00
10.360	10.360 (1.202)	105	2299275			451.53- 511.53	479.76
10.360	10.360 (1.202)	91	360151			46.48- 106.48	75.15
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	2016282	50.0000	51.942	80.00- 120.00	100.00
10.474	10.474 (1.215)	134	545942			0.00- 56.79	27.08
10.467	10.467 (1.214)	91	467544			0.00- 54.04	23.19
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.220)	146	1123309	50.0000	53.759	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	713685			33.53- 93.53	63.53
10.517	10.517 (1.220)	111	442021			11.05- 71.05	39.35
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.229)	146	1114953	50.0000	51.803	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	707664			33.47- 93.47	63.47
10.596	10.596 (1.229)	111	433172			9.65- 69.65	38.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1430137	50.0000	48.328	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	322916			0.00- 52.04	22.58
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1253575	50.0000	48.023	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1053966			55.86- 115.86	84.08
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	530584	50.0000	52.716	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	1912528			331.99- 391.99	360.46
10.818	10.818 (1.255)	92	984861			161.01- 221.01	185.62
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1078448	50.0000	53.410	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	683246			33.23- 93.23	63.35
10.926	10.926 (1.268)	111	438032			12.36- 72.36	40.62
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	617565	50.0000	52.747	80.00- 120.00	100.00
11.606	11.606 (1.347)	75	514529			58.96- 118.96	83.32
11.606	11.606 (1.347)	155	482510			47.82- 107.82	78.13
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1229615	61.8000	55.706	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	975981			50.85- 110.85	79.37
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	923232	62.9500	64.374	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	886324			65.40- 125.40	96.00
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	719831	64.3500	66.444	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	460325			33.70- 93.70	63.95
216 Naphthalene					CAS #: 91-20-3		
12.559	12.559 (1.457)	128	212918	6.35000	4.862	80.00- 120.00	100.00
12.559	12.559 (1.457)	127	28196			0.00- 43.10	13.24
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.810	12.810 (1.486)	180	852774	66.5500	64.979	80.00- 120.00	100.00
12.810	12.810 (1.486)	182	809672			65.67- 125.67	94.95
12.810	12.810 (1.486)	145	295997			6.02- 66.02	34.71

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 22-JUL-2021 12:28
Lab File ID: 3072206.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/22JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37578	1.34849	0.010	1.98337	30.00000	Averaged
$ 134 Toluene-d8	1.02971	0.99507	0.010	3.36417	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.66126	0.68196	0.010	-3.12938	30.00000	Averaged
4 Freon 134a	0.59487	0.65319	0.010	-9.80428	30.00000	Averaged
5 Propylene	0.60387	0.58385	0.010	3.31400	30.00000	Averaged
7 1,1-Difluoroethane	0.39363	0.39810	0.010	-1.13454	30.00000	Averaged
8 Freon 12	1.74153	1.85700	0.010	-6.63009	30.00000	Averaged
9 Chlorodifluoromethane	0.19140	0.19470	0.010	-1.72136	30.00000	Averaged
10 Freon 114	1.29040	1.37321	0.010	-6.41666	30.00000	Averaged
12 Isobutane	1.35725	1.35458	0.010	0.19643	30.00000	Averaged
15 Chloromethane	0.72383	0.85434	0.010	-18.03039	30.00000	Averaged
18 Butane	0.17094	0.18433	0.010	-7.83389	30.00000	Averaged
19 Vinyl Chloride	0.77458	0.82497	0.010	-6.50597	30.00000	Averaged
20 1,3-Butadiene	0.70987	0.67278	0.010	5.22485	30.00000	Averaged
24 Bromomethane	0.61260	0.62607	0.010	-2.20014	30.00000	Averaged
30 Chloroethane	0.36360	0.36890	0.010	-1.45894	30.00000	Averaged
31 Isopentane	0.92980	0.89968	0.010	3.23902	30.00000	Averaged
32 Vinyl Bromide	0.66605	0.69010	0.010	-3.61193	30.00000	Averaged
33 Freon 11	1.84264	2.02536	0.010	-9.91612	30.00000	Averaged
34 Dichlorofluoromethane	1.47301	1.60329	0.010	-8.84477	30.00000	Averaged
35 Pentane	1.48134	1.44362	0.010	2.54681	30.00000	Averaged
38 Ethyl Ether	0.33213	0.31443	0.010	5.32968	30.00000	Averaged
39 Ethanol	0.14907	0.12877	0.010	13.61465	30.00000	Averaged
42 Acrolein	0.24737	0.25077	0.010	-1.37406	30.00000	Averaged
43 Freon 113	1.25964	1.31291	0.010	-4.22911	30.00000	Averaged
44 1,1-Dichloroethene	0.75871	0.72129	0.010	4.93193	30.00000	Averaged
47 Acetone	0.41920	0.41770	0.010	0.35653	30.00000	Averaged
48 Carbon Disulfide	1.88768	1.97825	0.010	-4.79843	30.00000	Averaged
49 Iodomethane	1.63230	1.91097	0.010	-17.07221	30.00000	Averaged
52 2-Propanol	1.50759	1.49894	0.010	0.57342	30.00000	Averaged
54 3-Chloropropene	0.32499	0.30945	0.010	4.78306	30.00000	Averaged
57 Acetonitrile	0.66010	0.64288	0.010	2.60891	30.00000	Averaged
59 Methylene Chloride	1.00325	1.00644	0.010	-0.31792	30.00000	Averaged
62 tert-Butyl alcohol	1.89229	1.81687	0.010	3.98567	30.00000	Averaged
63 Methyl tert-butyl ether	2.04241	1.95064	0.010	4.49349	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 22-JUL-2021 12:28
Lab File ID: 3072206.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/22JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.51058	0.46229	0.010	9.45890	30.00000	Averaged
66 Acrylonitrile	0.61277	0.52031	0.010	15.08941	30.00000	Averaged
67 Hexane	1.38442	1.30166	0.010	5.97791	30.00000	Averaged
71 1,1-Dichloroethane	1.42374	1.36591	0.010	4.06224	30.00000	Averaged
72 Isopropyl ether	2.92166	2.69453	0.010	7.77415	30.00000	Averaged
73 Vinyl Acetate	0.17504	0.16421	0.010	6.18917	30.00000	Averaged
79 Ethyl-tert-butyl ether	2.82061	2.59271	0.010	8.08001	30.00000	Averaged
84 2,2-Dichloropropane	1.32635	1.25519	0.010	5.36515	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.50614	0.45803	0.010	9.50486	30.00000	Averaged
86 2-Butanone	0.35353	0.33080	0.010	6.42830	30.00000	Averaged
87 Ethyl Acetate	0.29145	0.27599	0.010	5.30405	30.00000	Averaged
89 Tetrahydrofuran	0.99690	0.88894	0.010	10.82956	30.00000	Averaged
92 Chloroform	1.56743	1.52734	0.010	2.55762	30.00000	Averaged
94 Cyclohexane	0.99074	0.87862	0.010	11.31643	30.00000	Averaged
96 1,1,1-Trichloroethane	1.76184	1.61432	0.010	8.37268	30.00000	Averaged
97 Carbon Tetrachloride	1.62268	1.64624	0.010	-1.45225	30.00000	Averaged
99 1,1-Dichloropropene	0.11377	0.11697	0.010	-2.81257	30.00000	Averaged
101 2,2,4-Trimethylpentane	4.32938	3.94427	0.010	8.89529	30.00000	Averaged
102 Benzene	0.57049	0.57298	0.010	-0.43487	30.00000	Averaged
105 tert-Amyl methyl ether	0.15212	0.14916	0.010	1.94255	30.00000	Averaged
106 1,2-Dichloroethane	0.32845	0.34427	0.010	-4.81653	30.00000	Averaged
107 Heptane	0.22471	0.20730	0.010	7.74789	30.00000	Averaged
110 n-Butanol	0.18286	0.17540	0.010	4.07934	30.00000	Averaged
111 Trichloroethene	0.28620	0.28434	0.010	0.65065	30.00000	Averaged
114 1,2-Dichloropropane	0.13224	0.10649	0.010	19.47098	30.00000	Averaged
116 Methyl Methacrylate	0.24060	0.23138	0.010	3.83191	30.00000	Averaged
117 1,4-Dioxane	0.14452	0.14303	0.010	1.02866	30.00000	Averaged
118 Dibromomethane	0.26795	0.29267	0.010	-9.22449	30.00000	Averaged
122 Bromodichloromethane	0.47947	0.46890	0.010	2.20368	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.35637	0.34267	0.010	3.84521	30.00000	Averaged
127 Methylcyclohexane	0.38272	0.34695	0.010	9.34687	30.00000	Averaged
131 4-Methyl-2-pentanone	0.24232	0.21114	0.010	12.86650	30.00000	Averaged
137 Toluene	0.76548	0.74672	0.010	2.45166	30.00000	Averaged
136 Octane	0.25468	0.23662	0.010	7.09024	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.36821	0.36275	0.010	1.48314	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 22-JUL-2021 12:28
Lab File ID: 3072206.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/22JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.28317	0.27967	0.010	1.23700	30.00000	Averaged
142 Tetrachloroethene	0.39165	0.41389	0.010	-5.67817	30.00000	Averaged
143 2-Hexanone	0.32527	0.31847	0.010	2.08802	30.00000	Averaged
144 1,3-Dichloropropane	0.36522	0.33822	0.010	7.39243	30.00000	Averaged
146 Dibromochloromethane	0.53722	0.57523	0.010	-7.07601	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.43975	0.45205	0.010	-2.79536	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.46270	0.45428	0.010	1.81896	30.00000	Averaged
154 Chlorobenzene	0.68328	0.68425	0.010	-0.14202	30.00000	Averaged
155 Ethyl Benzene	0.34167	0.34343	0.010	-0.51730	30.00000	Averaged
156 Nonane	0.66223	0.60571	0.010	8.53480	30.00000	Averaged
158 m,p-Xylene	0.42506	0.42590	0.010	-0.19850	30.00000	Averaged
164 o-Xylene	0.40353	0.40407	0.010	-0.13466	30.00000	Averaged
165 Styrene	0.69912	0.70041	0.010	-0.18466	30.00000	Averaged
167 Bromoform	0.50940	0.55423	0.010	-8.80026	30.00000	Averaged
168 Cumene	1.27581	1.31731	0.010	-3.25307	30.00000	Averaged
169 Cyclohexanone	0.40149	0.37172	0.010	7.41508	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.63254	0.64149	0.010	-1.41461	30.00000	Averaged
177 Bromobenzene	0.39660	0.42428	0.010	-6.97905	30.00000	Averaged
178 Propylbenzene	1.48863	1.55408	0.010	-4.39728	30.00000	Averaged
179 1,2,3-Trichloropropane	0.19054	0.20169	0.010	-5.84973	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.15077	0.14722	0.010	2.35943	30.00000	Averaged
182 Decane	0.76973	0.73374	0.010	4.67485	30.00000	Averaged
183 4-Ethyltoluene	0.38586	0.39260	0.010	-1.74605	30.00000	Averaged
184 2-Chlorotoluene	0.31353	0.33011	0.010	-5.28992	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.54196	0.55792	0.010	-2.94379	30.00000	Averaged
188 alpha Methyl Styrene	0.55506	0.54688	0.010	1.47358	30.00000	Averaged
189 tert-Butylbenzene	0.99718	1.05877	0.010	-6.17729	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.06868	1.08287	0.010	-1.32762	30.00000	Averaged
192 sec-Butylbenzene	0.32209	0.33306	0.010	-3.40603	30.00000	Averaged
194 p-Cymene	1.34882	1.40121	0.010	-3.88396	30.00000	Averaged
195 1,3-Dichlorobenzene	0.72606	0.78064	0.010	-7.51770	30.00000	Averaged
196 1,4-Dichlorobenzene	0.74787	0.77484	0.010	-3.60570	30.00000	Averaged
199 alpha-Chlorotoluene	1.02827	0.99387	0.010	3.34482	30.00000	Averaged
201 Undecane	0.90704	0.87117	0.010	3.95443	30.00000	Averaged
202 Butylbenzene	0.34973	0.36873	0.010	-5.43267	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 22-JUL-2021 12:28
Lab File ID: 3072206.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/22JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
204 1,2-Dichlorobenzene	0.70162	0.74947	0.010	-6.81993	30.00000	Averaged
206 1,2-Dibromo-3-chloropropane	0.40682	0.42918	0.010	-5.49413	30.00000	Averaged
207 Dodecane	0.76699	0.69136	0.010	9.86056	30.00000	Averaged
213 1,2,4-Trichlorobenzene	0.49834	0.50961	0.010	-2.26138	30.00000	Averaged
215 Hexachlorobutadiene	0.37644	0.38869	0.010	-3.25501	30.00000	Averaged
216 Naphthalene	1.52174	1.16510	0.010	23.43653	30.00000	Averaged
222 1,2,3-Trichlorobenzene	0.45602	0.44526	0.010	2.36019	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072206.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 13:58
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	275409	165245	385573	240594	-12.64
108 1,4-Difluorobenze	909596	545758	1273434	805743	-11.42
153 Chlorobenzene-d5	796450	477870	1115030	719477	-9.66

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	-0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUL21.b/3072206.d

Page 1

Date : 22-JUL-2021 12:28

Client ID: CCV

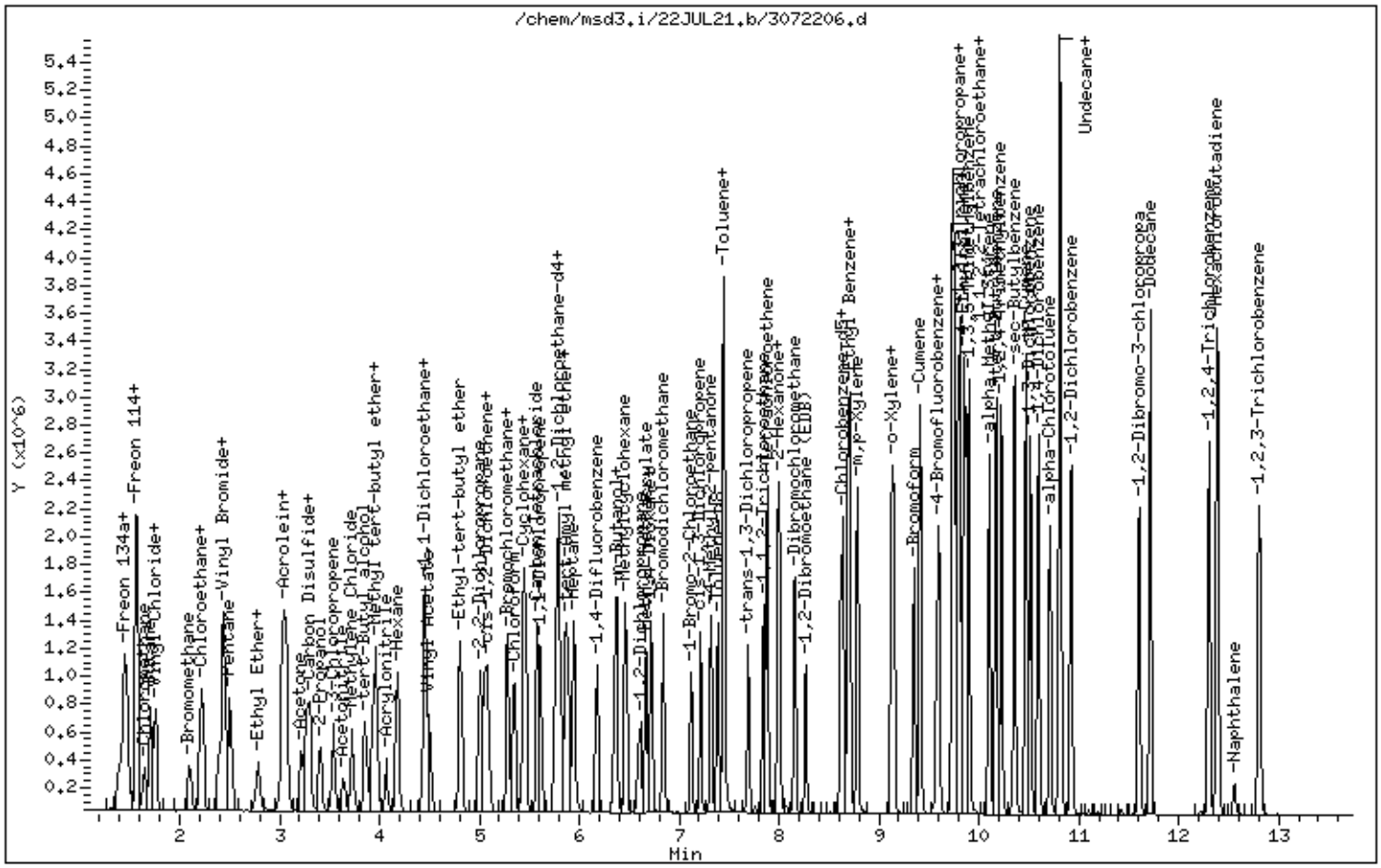
Instrument: msd3.i

Sample Info: 50mL 3018-2071

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107241A-26A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 11:09 AM**	

Compound	%Recovery	Method Limits
Freon 12	107	70-130
Freon 114	101	70-130
Chloromethane	108	70-130
Vinyl Chloride	93	70-130
1,3-Butadiene	115	70-130
Bromomethane	92	70-130
Chloroethane	94	70-130
Freon 11	106	70-130
Ethanol	90	70-130
Freon 113	99	70-130
1,1-Dichloroethene	97	70-130
Acetone	105	70-130
2-Propanol	111	70-130
Carbon Disulfide	95	70-130
3-Chloropropene	94	70-130
Methylene Chloride	116	70-130
Methyl tert-butyl ether	91	70-130
trans-1,2-Dichloroethene	98	70-130
Hexane	101	70-130
1,1-Dichloroethane	105	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	102	70-130
Tetrahydrofuran	114	70-130
Chloroform	106	70-130
1,1,1-Trichloroethane	100	70-130
Cyclohexane	95	70-130
Carbon Tetrachloride	108	70-130
2,2,4-Trimethylpentane	102	70-130
Benzene	105	70-130
1,2-Dichloroethane	117	70-130
Heptane	100	70-130
Trichloroethene	107	70-130
1,2-Dichloropropane	106	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	112	70-130
cis-1,3-Dichloropropene	106	70-130
4-Methyl-2-pentanone	103	70-130
Toluene	102	70-130
trans-1,3-Dichloropropene	107	70-130
1,1,2-Trichloroethane	106	70-130
Tetrachloroethene	108	70-130
2-Hexanone	105	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 2107241A-26A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 11:09 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	111	70-130
1,2-Dibromoethane (EDB)	110	70-130
Chlorobenzene	105	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	103	70-130
o-Xylene	100	70-130
Styrene	97	70-130
Bromoform	109	70-130
Cumene	99	70-130
1,1,2,2-Tetrachloroethane	107	70-130
Propylbenzene	103	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	102	70-130
1,2,4-Trimethylbenzene	102	70-130
1,3-Dichlorobenzene	106	70-130
1,4-Dichlorobenzene	106	70-130
alpha-Chlorotoluene	101	70-130
1,2-Dichlorobenzene	103	70-130
1,2,4-Trichlorobenzene	106	70-130
Hexachlorobutadiene	113	70-130
Naphthalene	92	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	
Freon 134a	Not Spiked	
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
1,2-Dibromo-3-chloropropane	Not Spiked	
Dibromomethane	Not Spiked	
1,1-Difluoroethane	Not Spiked	
Isopropyl ether	Not Spiked	
Ethyl Acetate	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Hexachloroethane	Not Spiked	
Iodomethane	Not Spiked	
Propylene	110	60-140
1,1,1,2-Tetrachloroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
Vinyl Acetate	94	70-130
Vinyl Bromide	Not Spiked	

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 2107241A-26A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 11:09 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072203.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 22-JUL-2021 11:09
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 12:28 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	160796	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	124448				48.23- 108.23	77.40
5.778	5.778 (1.000)	49	341750				150.57- 210.57	212.54
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	593115	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	88164				0.00- 45.71	14.86
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	581318	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	304009				23.78- 83.78	52.30
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	228967	25.8024	25.802		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	129449				27.21- 87.21	56.54
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	647048	25.1228	25.123		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	63102				0.00- 40.44	9.75

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	418698			34.95- 94.95	64.71
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	376136	25.1974	25.197	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	466170			95.92- 155.92	123.94
10.921	10.921 (1.154)	176	358648			66.89- 126.89	95.35
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	293271	57.6257	57.626	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	243009			59.44- 119.44	82.86
1.744	1.745 (0.302)	51	1351811			419.06- 479.06	460.94
5 Propylene					CAS #: 115-07-1		
1.689	1.689 (0.292)	41	403012	54.7708	54.771	80.00- 120.00	100.00
1.689	1.689 (0.292)	42	268000			35.28- 95.28	66.50
1.689	1.689 (0.292)	39	277939			38.35- 98.35	68.97
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.703 (0.294)	65	185109	50.7879	50.788	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	1351811			597.63- 657.63	730.28
1.702	1.703 (0.294)	47	143147			33.72- 93.72	77.33
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	770715	53.4414	53.441	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	251551			2.37- 62.37	32.64
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.759 (0.304)	67	79029	55.4761	55.476	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	1351811			1501.01-1561.01	1710.51
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	717800	50.7046	50.704	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	242734			2.30- 62.30	33.82
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	886472	54.4173	54.417	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	286759			2.44- 62.44	32.35
1.870	1.870 (0.323)	58	25275			0.00- 33.36	2.85
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	452790	54.1183	54.118	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	109688			0.00- 56.26	24.22
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.351)	58	95858	49.4596	49.460	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.351)	43	857694			823.29- 883.29	894.75
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	469263	46.6218	46.622	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	147223			0.00- 59.69	31.37
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	464914	57.4292	57.429	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	423794			52.37- 112.37	91.16
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	298758	46.1618	46.162	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	284437			64.07- 124.07	95.21
30 Chloroethane					CAS #: 75-00-3		
2.619	2.612 (0.453)	64	170501	47.1078	47.108	80.00- 120.00	100.00
2.612	2.612 (0.451)	66	51672			0.04- 60.04	30.31
2.619	2.612 (0.453)	49	68238			4.54- 64.54	40.02
31 Isopentane					CAS #: 78-78-4		
2.641	2.641 (0.456)	43	595715	54.0909	54.091	80.00- 120.00	100.00
2.641	2.641 (0.456)	57	347932			34.12- 94.12	58.41
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.492)	106	277346	46.3624	46.362	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	276139			69.27- 129.27	99.56
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	811371	52.9428	52.943	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	527254			34.72- 94.72	64.98
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	651964	49.3579	49.358	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	198514			0.84- 60.84	30.45
35 Pentane					CAS #: 109-66-0		
2.977	2.970 (0.515)	43	926542	51.7587	51.759	80.00- 120.00	100.00
2.977	2.970 (0.515)	57	125532			0.00- 44.98	13.55
2.977	2.970 (0.515)	72	57998			0.00- 37.39	6.26
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	143915	47.6527	47.653	80.00- 120.00	100.00
3.292	3.285 (0.569)	59	295182			163.46- 223.46	205.11
3.285	3.285 (0.568)	45	475912			250.40- 310.40	330.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.560)	46	83674	52.4732	52.473	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	473348			511.19- 571.19	565.70
42 Acrolein					CAS #: 107-02-8		
3.543	3.536 (0.612)	55	151232	54.6558	54.656	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	207638			111.10- 171.10	137.30
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	561709	49.3318	49.332	80.00- 120.00	100.00
3.558	3.558 (0.615)	153	357174			33.56- 93.56	63.59
3.558	3.550 (0.615)	101	681846			89.21- 149.21	121.39
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.586 (0.620)	96	329512	48.4426	48.443	80.00- 120.00	100.00
3.586	3.586 (0.620)	98	210395			34.02- 94.02	63.85
3.586	3.579 (0.620)	61	704281			168.77- 228.77	213.73
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	220827	52.3854	52.385	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	803997			302.95- 362.95	364.08
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	855308	47.7281	47.728	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	712995	59.8514	59.851	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	320814			12.22- 72.22	45.00
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	942396	55.4691	55.469	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	177843			0.00- 47.19	18.87
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	140035	46.7755	46.775	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	679978			396.19- 456.19	485.57
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	437963	55.3088	55.309	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	232568			20.95- 80.95	53.10
4.131	4.123 (0.714)	38	49202			0.00- 41.17	11.23
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	636159	58.1003	58.100	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	274832			22.03- 82.03	43.20
4.238	4.238 (0.733)	51	188426			0.18- 60.18	29.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	930352	46.9578	46.958	80.00- 120.00	100.00
4.345	4.338 (0.751)	41	231801			0.00- 51.11	24.92
4.345	4.338 (0.751)	57	101127			0.00- 40.49	10.87
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	896271	45.3878	45.388	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	325973			3.10- 63.10	36.37
4.446	4.446 (0.768)	41	338149			1.28- 61.28	37.73
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	221586	48.7537	48.754	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	644215			255.84- 315.84	290.73
4.482	4.482 (0.775)	96	343425			127.59- 187.59	154.98
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.789)	52	346080	54.6997	54.700	80.00- 120.00	100.00
4.568	4.560 (0.789)	53	408106			88.05- 148.05	117.92
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.812)	57	800447	50.5323	50.532	80.00- 120.00	100.00
4.696	4.697 (0.812)	43	598679			37.52- 97.52	74.79
4.704	4.697 (0.813)	86	87039			0.00- 41.48	10.87
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	716122	52.5881	52.588	80.00- 120.00	100.00
4.969	4.969 (0.859)	65	204205			0.00- 59.70	28.52
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.856)	45	2030204	55.1083	55.108	80.00- 120.00	100.00
4.954	4.954 (0.856)	87	303730			0.00- 48.18	14.96
4.954	4.954 (0.856)	59	184808			0.00- 40.15	9.10
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	82755	47.2862	47.286	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1860290			2432.48-2492.48	2247.95
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.312	5.305 (0.918)	59	1527840	47.9098	47.910	80.00- 120.00	100.00
5.312	5.305 (0.918)	87	444597			1.00- 61.00	29.10
5.305	5.305 (0.917)	41	351768			0.00- 48.73	23.02
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.953)	77	596274	49.3098	49.310	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	194854			2.28- 62.28	32.68
5.513	5.513 (0.953)	97	143041			0.00- 53.93	23.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	241317	51.1631	51.163	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	373138			125.75- 185.75	154.63
5.549	5.549 (0.959)	61	897197			332.40- 392.40	371.79
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	173083	47.6236	47.624	80.00- 120.00	100.00
5.570	5.563 (0.963)	43	2635225			1214.50-1274.50	1522.51
5.556	5.556 (0.960)	57	84953			14.68- 74.68	49.08
87 Ethyl Acetate					CAS #: 141-78-6		
5.578	5.570 (0.964)	45	214365	59.2985	59.298	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	897197			452.04- 512.04	418.54
5.578	5.578 (0.964)	70	88896			22.77- 82.77	41.47
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (0.999)	42	689005	57.0026	57.003	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	150700			0.00- 55.82	21.87
5.778	5.778 (0.999)	72	162717			0.00- 57.59	23.62
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	740696	52.9427	52.943	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	479002			34.70- 94.70	64.67
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	480400	47.4952	47.495	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	895196			142.57- 202.57	186.34
5.957	5.957 (1.030)	41	514831			62.09- 122.09	107.17
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.972 (1.032)	97	793470	50.2034	50.203	80.00- 120.00	100.00
5.971	5.972 (1.032)	99	505544			34.02- 94.02	63.71
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.053)	119	796967	53.7641	53.764	80.00- 120.00	100.00
6.093	6.093 (1.053)	117	795462			70.64- 130.64	99.81
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	207459	51.3856	51.386	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	515912			226.85- 286.85	248.68
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.287 (1.087)	57	2820598	51.2307	51.231	80.00- 120.00	100.00
6.287	6.287 (1.087)	56	947494			2.24- 62.24	33.59
6.287	6.287 (1.087)	41	752370			0.00- 54.39	26.67

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	1024562	52.3469	52.347	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	240810			0.00- 52.90	23.50
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	267170	48.4097	48.410	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1073244			372.79- 432.79	401.71
6.358	6.358 (0.954)	55	438830			112.09- 172.09	164.25
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	597693	58.6873	58.687	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	178339			0.79- 60.79	29.84
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	388235	50.0702	50.070	80.00- 120.00	100.00
6.451	6.451 (0.968)	43	1165919			226.53- 286.53	300.31
6.451	6.451 (0.968)	57	556403			100.85- 160.85	143.32
110 n-Butanol					CAS #: 71-36-3		
6.817	6.810 (1.023)	56	352031	49.4705	49.470	80.00- 120.00	100.00
6.810	6.810 (1.021)	41	269270			40.99- 100.99	76.49
6.817	6.810 (1.023)	43	216520			27.38- 87.38	61.51
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	508980	53.5915	53.591	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	551920			76.29- 136.29	108.44
6.867	6.867 (1.030)	97	331456			33.63- 93.63	65.12
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	533892	53.2068	53.207	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	382364			41.07- 101.07	71.62
7.096	7.096 (1.064)	41	349862			22.53- 82.53	65.53
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	405403	50.7551	50.755	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	927097			179.84- 239.84	228.69
7.139	7.139 (0.755)	100	156138			9.59- 69.59	38.51
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.077)	88	265865	49.8556	49.856	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	276325			68.28- 128.28	103.93
7.175	7.175 (1.076)	57	96412			2.68- 62.68	36.26
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	481568	55.8253	55.825	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	452064			60.09- 120.09	93.87

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.204	7.204 (0.761)	95	392957			48.38- 108.38	81.60
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	828450	56.2585	56.258	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	537786			35.24- 95.24	64.91
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	657382	52.8408	52.841	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	202452			2.42- 62.42	30.80
7.698	7.698 (1.155)	39	485973			37.16- 97.16	73.93
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	687210	50.0023	50.002	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	319130			15.78- 75.78	46.44
6.974	6.974 (1.046)	55	840619			84.64- 144.64	122.32
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	526776	51.6965	51.696	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1565830			242.35- 302.35	297.25
7.798	7.798 (1.170)	85	155069			3.24- 63.24	29.44
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1385112	51.2937	51.294	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	802218			28.38- 88.38	57.92
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.192)	57	611816	53.1370	53.137	80.00- 120.00	100.00
7.948	7.949 (1.192)	85	478047			56.00- 116.00	78.14
7.948	7.949 (1.192)	43	1687159			228.66- 288.66	275.76
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	611094	53.4186	53.419	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	193123			1.24- 61.24	31.60
8.214	8.214 (0.868)	39	444464			34.11- 94.11	72.73
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	501200	53.0062	53.006	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	310949			31.96- 91.96	62.04
8.400	8.400 (0.888)	83	425071			52.93- 112.93	84.81
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	714751	53.9487	53.949	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	547318			47.84- 107.84	76.57
8.464	8.464 (0.895)	131	530761			45.29- 105.29	74.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	707108	52.3428	52.343	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1506091			162.87- 222.87	212.99
8.586	8.586 (0.908)	100	98682			0.00- 45.94	13.96
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	680588	53.0732	53.073	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	948321			94.99- 154.99	139.34
8.579	8.579 (1.287)	78	217808			2.05- 62.05	32.00
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	978682	55.3961	55.396	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	763667			47.45- 107.45	78.03
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	833222	54.9426	54.942	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	789886			64.21- 124.21	94.80
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	995101	54.0492	54.049	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	291483			0.00- 59.64	29.29
7.612	7.612 (1.142)	144	95446			0.00- 39.63	9.59
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1211018	52.4633	52.463	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	385122			1.74- 61.74	31.80
9.496	9.496 (1.004)	77	644442			25.04- 85.04	53.21
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	622950	51.6104	51.610	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1863698			273.74- 333.74	299.17
156 Nonane					CAS #: 111-84-2		
9.603	9.596 (1.015)	43	1792013	57.7038	57.704	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1377258			54.16- 114.16	76.86
9.603	9.603 (1.015)	85	363234			0.00- 53.90	20.27
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	579809	44.8633	44.863	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	581318			57.42- 117.42	100.26
9.596	9.596 (1.014)	95	210581			5.70- 65.70	36.32
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	777172	51.4095	51.410	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1459830			163.73- 223.73	187.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	721656	49.8241	49.824	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1455211			177.45- 237.45	201.65
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1198533	48.3854	48.385	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	568398			17.88- 77.88	47.42
167 Bromoform					CAS #: 75-25-2		
10.541	10.542 (1.114)	173	946900	54.3753	54.375	80.00- 120.00	100.00
10.541	10.542 (1.114)	171	484490			21.25- 81.25	51.17
168 Cumene					CAS #: 98-82-8		
10.649	10.656 (1.126)	105	2249251	49.4348	49.435	80.00- 120.00	100.00
10.649	10.656 (1.126)	120	657251			0.00- 58.52	29.22
10.649	10.649 (1.126)	51	343350			0.00- 43.00	15.27
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	743277	45.6788	45.679	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	212984			1.94- 61.94	28.65
10.871	10.871 (1.149)	42	520981			37.89- 97.89	70.09
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.107 (1.173)	83	1185587	53.3868	53.387	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	765045			35.20- 95.20	64.53
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	735844	53.1750	53.175	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	721117			67.21- 127.21	98.00
11.179	11.179 (1.182)	77	455019			29.02- 89.02	61.84
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	694291	51.4631	51.463	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2732019			366.49- 426.49	393.50
11.150	11.150 (1.179)	105	102089			0.00- 44.85	14.70
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	364795	51.5389	51.539	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1182945			280.55- 340.55	324.28
11.100	11.107 (1.173)	61	178868			15.49- 75.49	49.03
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	354066	76.3060	76.306	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	229907			49.11- 109.11	64.93
11.179	11.179 (1.182)	75	1182945			426.44- 486.44	334.10

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.251	11.258 (1.189)	57	1840199	51.9956	51.996	80.00- 120.00	100.00
11.251	11.258 (1.189)	71	479210			0.00- 57.66	26.04
11.258	11.258 (1.190)	142	67327			0.00- 34.09	3.66
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	750472	51.1516	51.152	80.00- 120.00	100.00
11.286	11.287 (1.193)	105	2316418			284.55- 344.55	308.66
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	603027	52.4957	52.496	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2010798			315.17- 375.17	333.45
11.301	11.301 (1.195)	65	299260			21.55- 81.55	49.63
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1030882	51.0342	51.034	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1960149			164.93- 224.93	190.14
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	916367	45.6654	45.665	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	506224			25.30- 85.30	55.24
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1983365	52.4962	52.496	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	476861			0.00- 54.25	24.04
11.738	11.745 (1.241)	91	1150594			31.27- 91.27	58.01
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1950615	51.1609	51.161	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	977954			19.05- 79.05	50.14
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	12.003 (1.268)	134	615609	52.4255	52.425	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2847571			437.55- 497.55	462.56
11.996	11.996 (1.268)	91	434078			40.76- 100.76	70.51
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2650632	51.0711	51.071	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	689569			0.00- 55.54	26.02
12.160	12.160 (1.285)	91	552296			0.00- 51.48	20.84
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.203 (1.289)	146	1385267	53.0818	53.082	80.00- 120.00	100.00
12.196	12.203 (1.289)	148	880871			33.21- 93.21	63.59
12.196	12.203 (1.289)	111	561516			11.31- 71.31	40.53

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1393282	52.8320	52.832	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	888520			33.90- 93.90	63.77
12.311	12.311 (1.301)	111	534101			9.45- 69.45	38.33
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1821565	50.2997	50.300	80.00- 120.00	100.00
12.461	12.468 (1.317)	126	430175			0.00- 53.26	23.62
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2194193	53.6733	53.673	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2120830			58.12- 118.12	96.66
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	667056	50.6041	50.604	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2306751			314.79- 374.79	345.81
12.626	12.626 (1.335)	92	1221847			154.29- 214.29	183.17
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1314626	51.3746	51.375	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	841843			33.84- 93.84	64.04
12.741	12.741 (1.347)	111	546103			12.73- 72.73	41.54
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	804795	51.9271	51.927	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	666162			52.48- 112.48	82.77
13.600	13.600 (1.438)	155	623164			47.41- 107.41	77.43
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	1877426	57.9399	57.940	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1697356			52.87- 112.87	90.41
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1165136	61.6274	61.627	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1119227			65.33- 125.33	96.06
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	873777	65.6699	65.670	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	549829			33.17- 93.17	62.93
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	259338	5.36730	5.367	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	33440			0.00- 42.88	12.89
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1032424	61.7723	61.772	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.069	15.069 (1.593)	182	987154			65.75- 125.75	95.62
15.069	15.069 (1.593)	145	346447			5.23- 65.23	33.56

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072203.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	160796	0.97
108 1,4-Difluorobenze	573285	343971	802599	593115	3.46
153 Chlorobenzene-d5	571549	342929	800169	581318	1.71

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCS
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	57.626	115.25	70-130
5 Propylene	50.000	54.771	109.54	70-130
7 1,1-Difluoroethan	50.000	50.788	101.58	70-130
8 Freon 12	50.000	53.441	106.88	70-130
9 Chlorodifluoromet	50.000	55.476	110.95	70-130
10 Freon 114	50.000	50.704	101.41	70-130
12 Isobutane	50.000	54.417	108.83	70-130
15 Chloromethane	50.000	54.118	108.24	70-130
18 Butane	50.000	49.460	98.92	70-130
19 Vinyl Chloride	50.000	46.622	93.24	70-130
20 1,3-Butadiene	50.000	57.429	114.86	70-130
24 Bromomethane	50.000	46.162	92.32	70-130
30 Chloroethane	50.000	47.108	94.22	70-130
31 Isopentane	50.000	54.091	108.18	70-130
32 Vinyl Bromide	50.000	46.362	92.72	70-130
33 Freon 11	50.000	52.943	105.89	70-130
34 Dichlorofluoromet	50.000	49.358	98.72	70-130
35 Pentane	50.000	51.759	103.52	70-130
38 Ethyl Ether	50.000	47.653	95.31	70-130
39 Ethanol	58.000	52.473	90.47	70-130
42 Acrolein	58.000	54.656	94.23	70-130
43 Freon 113	50.000	49.332	98.66	70-130
44 1,1-Dichloroethen	50.000	48.443	96.89	70-130
47 Acetone	50.000	52.385	104.77	70-130
48 Carbon Disulfide	50.000	47.728	95.46	70-130
49 Iodomethane	50.000	59.851	119.70	70-130
52 2-Propanol	50.000	55.469	110.94	70-130
54 3-Chloropropene	50.000	46.775	93.55	70-130
57 Acetonitrile	50.000	55.309	110.62	70-130
59 Methylene Chlorid	50.000	58.100	116.20	70-130
62 tert-Butyl alcoho	50.000	46.958	93.92	70-130
63 Methyl tert-butyl	50.000	45.388	90.78	70-130
64 trans-1,2-Dichlor	50.000	48.754	97.51	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	54.700	109.40	70-130
67	Hexane	50.000	50.532	101.06	70-130
71	1,1-Dichloroethan	50.000	52.588	105.18	70-130
72	Isopropyl ether	50.000	55.108	110.22	70-130
73	Vinyl Acetate	50.000	47.286	94.57	70-130
79	Ethyl-tert-butyl	50.000	47.910	95.82	70-130
84	2,2-Dichloropropa	50.000	49.310	98.62	70-130
85	cis-1,2-Dichloroe	50.000	51.163	102.33	70-130
86	2-Butanone	50.000	47.624	95.25	70-130
87	Ethyl Acetate	50.000	59.298	118.60	70-130
89	Tetrahydrofuran	50.000	57.003	114.01	70-130
92	Chloroform	50.000	52.943	105.89	70-130
94	Cyclohexane	50.000	47.495	94.99	70-130
96	1,1,1-Trichloroet	50.000	50.203	100.41	70-130
99	1,1-Dichloroprope	50.000	51.386	102.77	70-130
97	Carbon Tetrachlor	50.000	53.764	107.53	70-130
101	2,2,4-Trimethylpe	50.000	51.231	102.46	70-130
102	Benzene	50.000	52.347	104.69	70-130
105	tert-Amyl methyl	50.000	48.410	96.82	70-130
106	1,2-Dichloroethan	50.000	58.687	117.37	70-130
107	Heptane	50.000	50.070	100.14	70-130
110	n-Butanol	50.000	49.470	98.94	70-130
111	Trichloroethene	50.000	53.591	107.18	70-130
118	Dibromomethane	50.000	55.825	111.65	70-130
127	Methylcyclohexane	50.000	50.002	100.00	70-130
114	1,2-Dichloropropa	50.000	53.207	106.41	70-130
116	Methyl Methacryla	50.000	50.755	101.51	70-130
117	1,4-Dioxane	50.000	49.856	99.71	70-130
122	Bromodichlorometh	50.000	56.258	112.52	70-130
126	cis-1,3-Dichlorop	50.000	52.841	105.68	70-130
131	4-Methyl-2-pentan	50.000	51.696	103.39	70-130
136	Octane	50.000	53.137	106.27	70-130
137	Toluene	50.000	51.294	102.59	70-130
139	trans-1,3-Dichlor	50.000	53.419	106.84	70-130
141	1,1,2-Trichloroet	50.000	53.006	106.01	70-130
142	Tetrachloroethene	50.000	53.949	107.90	70-130
143	2-Hexanone	50.000	52.343	104.69	70-130
144	1,3-Dichloropropa	50.000	53.073	106.15	70-130
146	Dibromochlorometh	50.000	55.396	110.79	70-130
148	1,2-Dibromoethane	50.000	54.942	109.89	70-130
151	1-Bromo-2-Chloroe	50.000	54.049	108.10	70-130
154	Chlorobenzene	50.000	52.463	104.93	70-130
155	Ethyl Benzene	50.000	51.610	103.22	70-130
156	Nonane	50.000	57.704	115.41	70-130
157	1,1,1,2-Tetrachlo	50.000	44.863	89.73	70-130
158	m,p-Xylene	50.000	51.410	102.82	70-130
164	o-Xylene	50.000	49.824	99.65	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165	Styrene	50.000	48.385	96.77	70-130
167	Bromoform	50.000	54.375	108.75	70-130
168	Cumene	50.000	49.435	98.87	70-130
169	Cyclohexanone	50.000	45.679	91.36	70-130
175	1,1,2,2-Tetrachlo	50.000	53.387	106.77	70-130
177	Bromobenzene	50.000	53.175	106.35	70-130
178	Propylbenzene	50.000	51.463	102.93	70-130
179	1,2,3-Trichloropr	50.000	51.539	103.08	70-130
181	trans-1,4-Dichlor	50.000	76.306	152.61*	70-130
182	Decane	50.000	51.996	103.99	70-130
183	4-Ethyltoluene	50.000	51.152	102.30	70-130
184	2-Chlorotoluene	50.000	52.496	104.99	70-130
185	1,3,5-Trimethylbe	50.000	51.034	102.07	70-130
188	alpha Methyl Styr	50.000	45.665	91.33	70-130
189	tert-Butylbenzene	50.000	52.496	104.99	70-130
190	1,2,4-Trimethylbe	50.000	51.161	102.32	70-130
192	sec-Butylbenzene	50.000	52.425	104.85	70-130
194	p-Cymene	50.000	51.071	102.14	70-130
195	1,3-Dichlorobenze	50.000	53.082	106.16	70-130
196	1,4-Dichlorobenze	50.000	52.832	105.66	70-130
199	alpha-Chlorotolue	50.000	50.300	100.60	70-130
201	Undecane	50.000	53.673	107.35	70-130
202	Butylbenzene	50.000	50.604	101.21	70-130
204	1,2-Dichlorobenze	50.000	51.375	102.75	70-130
206	1,2-Dibromo-3-chl	50.000	51.927	103.85	70-130
207	Dodecane	50.000	57.940	115.88	70-130
213	1,2,4-Trichlorobe	58.000	61.627	106.25	70-130
215	Hexachlorobutadie	58.000	65.670	113.22	70-130
216	Naphthalene	5.800	5.367	92.54	60-140
222	1,2,3-Trichlorobe	58.000	61.772	106.50	70-130

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104	1,2-Dichloroethan	25.000	25.802	103.21	70-130
$ 134	Toluene-d8	25.000	25.123	100.49	70-130
$ 170	4-Bromofluorobenz	25.000	25.197	100.79	70-130

Data File: /chem/msdp.i/22JUL21.b/p072203.d

Page 1

Date : 22-JUL-2021 11:09

Client ID: LCS

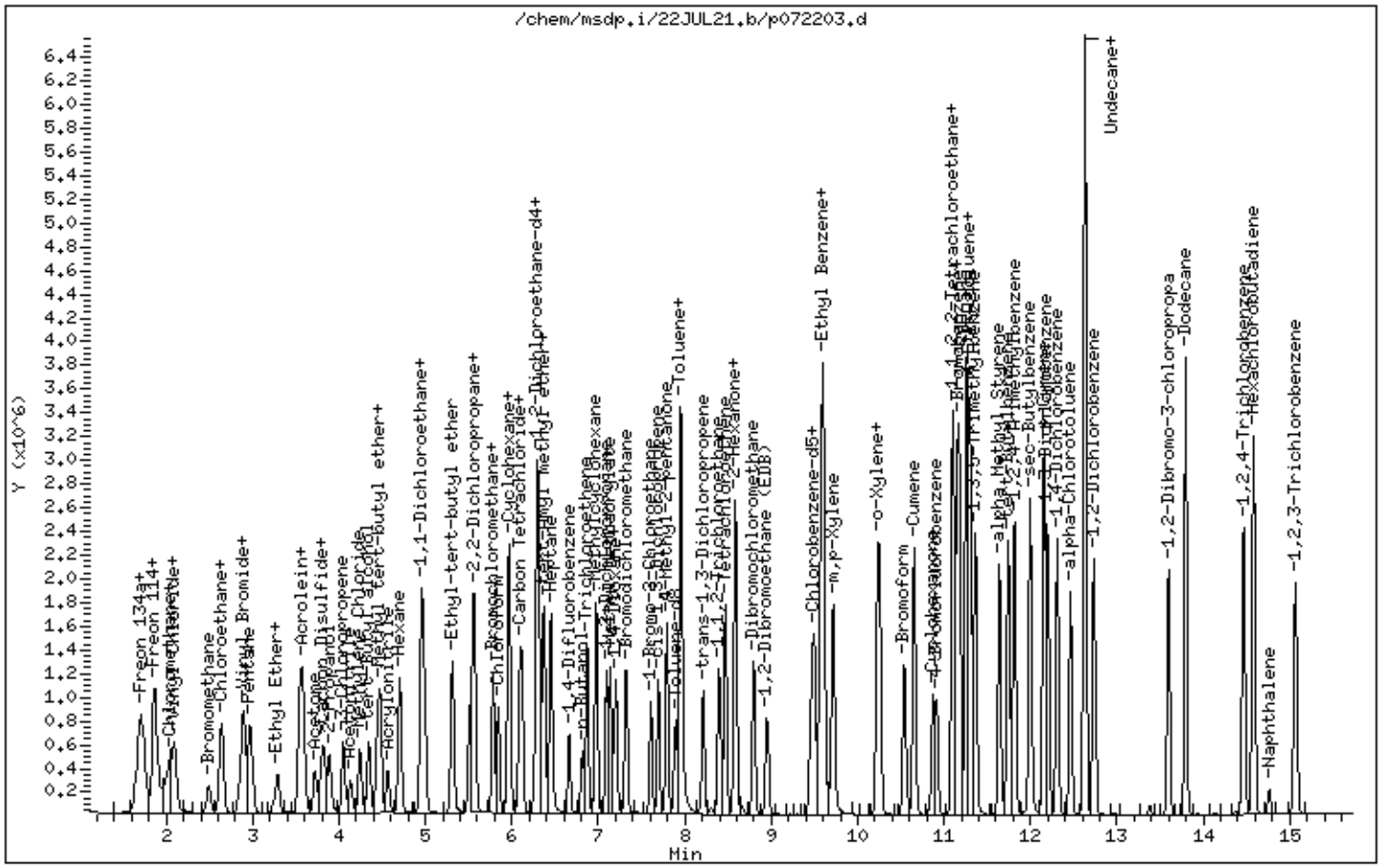
Instrument: msdp.i

Sample Info: 100mL 3018-2122A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCSD

Lab ID#: 2107241A-26AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 11:38 AM**	

Compound	%Recovery	Method Limits
Freon 12	110	70-130
Freon 114	101	70-130
Chloromethane	106	70-130
Vinyl Chloride	95	70-130
1,3-Butadiene	116	70-130
Bromomethane	92	70-130
Chloroethane	98	70-130
Freon 11	107	70-130
Ethanol	90	70-130
Freon 113	99	70-130
1,1-Dichloroethene	97	70-130
Acetone	104	70-130
2-Propanol	111	70-130
Carbon Disulfide	96	70-130
3-Chloropropene	96	70-130
Methylene Chloride	116	70-130
Methyl tert-butyl ether	92	70-130
trans-1,2-Dichloroethene	95	70-130
Hexane	101	70-130
1,1-Dichloroethane	106	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
cis-1,2-Dichloroethene	103	70-130
Tetrahydrofuran	116	70-130
Chloroform	107	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	95	70-130
Carbon Tetrachloride	110	70-130
2,2,4-Trimethylpentane	104	70-130
Benzene	106	70-130
1,2-Dichloroethane	118	70-130
Heptane	101	70-130
Trichloroethene	110	70-130
1,2-Dichloropropane	107	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	112	70-130
cis-1,3-Dichloropropene	106	70-130
4-Methyl-2-pentanone	102	70-130
Toluene	104	70-130
trans-1,3-Dichloropropene	111	70-130
1,1,2-Trichloroethane	108	70-130
Tetrachloroethene	108	70-130
2-Hexanone	106	70-130

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Client Sample ID: LCSD

Lab ID#: 2107241A-26AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 11:38 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	113	70-130
1,2-Dibromoethane (EDB)	112	70-130
Chlorobenzene	107	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	103	70-130
o-Xylene	100	70-130
Styrene	98	70-130
Bromoform	110	70-130
Cumene	101	70-130
1,1,2,2-Tetrachloroethane	108	70-130
Propylbenzene	105	70-130
4-Ethyltoluene	104	70-130
1,3,5-Trimethylbenzene	103	70-130
1,2,4-Trimethylbenzene	104	70-130
1,3-Dichlorobenzene	108	70-130
1,4-Dichlorobenzene	108	70-130
alpha-Chlorotoluene	102	70-130
1,2-Dichlorobenzene	105	70-130
1,2,4-Trichlorobenzene	122	70-130
Hexachlorobutadiene	128	70-130
Naphthalene	108	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	
Freon 134a	Not Spiked	
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
1,2-Dibromo-3-chloropropane	Not Spiked	
Dibromomethane	Not Spiked	
1,1-Difluoroethane	Not Spiked	
Isopropyl ether	Not Spiked	
Ethyl Acetate	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Hexachloroethane	Not Spiked	
Iodomethane	Not Spiked	
Propylene	110	60-140
1,1,1,2-Tetrachloroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
Vinyl Acetate	98	70-130
Vinyl Bromide	Not Spiked	

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2107241A-26AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 11:38 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072204.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 22-JUL-2021 11:38
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 12:28 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	165029	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	128424				48.23- 108.23	77.82
5.778	5.778 (1.000)	49	343517				150.57- 210.57	208.16
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	610054	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	89922				0.00- 45.71	14.74
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	592267	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	308796				23.78- 83.78	52.14
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	232685	25.5487	25.549		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	130159				27.21- 87.21	55.94
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	664117	25.0696	25.070		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	70232				0.00- 40.44	10.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	430807			34.95- 94.95	64.87
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	381928	25.1124	25.112	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	463422			95.92- 155.92	121.34
10.921	10.921 (1.154)	176	367923			66.89- 126.89	96.33
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	305108	58.4137	58.414	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	252793			59.44- 119.44	82.85
1.745	1.745 (0.302)	51	1396221			419.06- 479.06	457.62
5 Propylene					CAS #: 115-07-1		
1.689	1.689 (0.292)	41	414745	54.9196	54.920	80.00- 120.00	100.00
1.689	1.689 (0.292)	42	274111			35.28- 95.28	66.09
1.689	1.689 (0.292)	39	278222			38.35- 98.35	67.08
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	189455	50.6472	50.647	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1396221			597.63- 657.63	736.96
1.703	1.703 (0.294)	47	143263			33.72- 93.72	75.62
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	816829	55.1861	55.186	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	255937			2.37- 62.37	31.33
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.759 (0.304)	67	82096	56.1506	56.151	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1396221			1501.01-1561.01	1700.71
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	731060	50.3166	50.317	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	237290			2.30- 62.30	32.46
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	906863	54.2411	54.241	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	296053			2.44- 62.44	32.65
1.870	1.870 (0.323)	58	26229			0.00- 33.36	2.89
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	453045	52.7599	52.760	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	110546			0.00- 56.26	24.40
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.351)	58	93421	46.9658	46.966	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.351)	43	889767			823.29- 883.29	952.42
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	491832	47.6107	47.611	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	151572			0.00- 59.69	30.82
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	481953	58.0069	58.007	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	428025			52.37- 112.37	88.81
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	303935	45.7571	45.757	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	284385			64.07- 124.07	93.57
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	181919	48.9732	48.973	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	52004			0.04- 60.04	28.59
2.619	2.612 (0.453)	49	69208			4.54- 64.54	38.04
31 Isopentane					CAS #: 78-78-4		
2.641	2.641 (0.456)	43	608777	53.8590	53.859	80.00- 120.00	100.00
2.641	2.641 (0.456)	57	358786			34.12- 94.12	58.94
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.492)	106	289030	47.0762	47.076	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	286557			69.27- 129.27	99.14
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	839616	53.3805	53.380	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	541564			34.72- 94.72	64.50
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	673919	49.7114	49.711	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	204800			0.84- 60.84	30.39
35 Pentane					CAS #: 109-66-0		
2.977	2.970 (0.515)	43	959183	52.2077	52.208	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	125536			0.00- 44.98	13.09
2.977	2.970 (0.515)	72	61751			0.00- 37.39	6.44
38 Ethyl Ether					CAS #: 60-29-7		
3.293	3.285 (0.569)	74	148219	47.8187	47.819	80.00- 120.00	100.00
3.293	3.285 (0.569)	59	307166			163.46- 223.46	207.24
3.285	3.285 (0.568)	45	489627			250.40- 310.40	330.34

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.560)	46	85280	52.1087	52.109	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	489114			511.19- 571.19	573.54
42 Acrolein					CAS #: 107-02-8		
3.543	3.536 (0.612)	55	152458	53.6857	53.686	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	210731			111.10- 171.10	138.22
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	581102	49.7260	49.726	80.00- 120.00	100.00
3.558	3.558 (0.615)	153	375484			33.56- 93.56	64.62
3.558	3.550 (0.615)	101	710233			89.21- 149.21	122.22
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.586 (0.620)	96	339616	48.6475	48.647	80.00- 120.00	100.00
3.586	3.586 (0.620)	98	220449			34.02- 94.02	64.91
3.586	3.579 (0.620)	61	719666			168.77- 228.77	211.91
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	225753	52.1801	52.180	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	823177			302.95- 362.95	364.64
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	881890	47.9491	47.949	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.801	3.794 (0.657)	142	757075	61.9215	61.922	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	339776			12.22- 72.22	44.88
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	967218	55.4698	55.470	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	183944			0.00- 47.19	19.02
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	146978	47.8352	47.835	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	709712			396.19- 456.19	482.87
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	455126	56.0020	56.002	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	242593			20.95- 80.95	53.30
4.131	4.123 (0.714)	38	51208			0.00- 41.17	11.25
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	653512	58.1542	58.154	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	278982			22.03- 82.03	42.69
4.238	4.238 (0.733)	51	195961			0.18- 60.18	29.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.346	4.338 (0.751)	59	966504	47.5312	47.531	80.00- 120.00	100.00
4.346	4.338 (0.751)	41	230412			0.00- 51.11	23.84
4.346	4.338 (0.751)	57	99752			0.00- 40.49	10.32
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.453	4.446 (0.770)	73	932882	46.0301	46.030	80.00- 120.00	100.00
4.453	4.446 (0.770)	57	334114			3.10- 63.10	35.82
4.446	4.446 (0.768)	41	352766			1.28- 61.28	37.81
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	222584	47.7171	47.717	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	668937			255.84- 315.84	300.53
4.482	4.482 (0.775)	96	360783			127.59- 187.59	162.09
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.789)	52	360487	55.5154	55.515	80.00- 120.00	100.00
4.568	4.560 (0.789)	53	425302			88.05- 148.05	117.98
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.812)	57	824581	50.7207	50.721	80.00- 120.00	100.00
4.697	4.697 (0.812)	43	609146			37.52- 97.52	73.87
4.697	4.697 (0.812)	86	88989			0.00- 41.48	10.79
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	741411	53.0487	53.049	80.00- 120.00	100.00
4.969	4.969 (0.859)	65	214882			0.00- 59.70	28.98
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.856)	45	2098800	55.5090	55.509	80.00- 120.00	100.00
4.954	4.954 (0.856)	87	317795			0.00- 48.18	15.14
4.954	4.954 (0.856)	59	194779			0.00- 40.15	9.28
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	88413	49.2237	49.224	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1938551			2432.48-2492.48	2192.59
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.313	5.305 (0.918)	59	1588171	48.5243	48.524	80.00- 120.00	100.00
5.313	5.305 (0.918)	87	475251			1.00- 61.00	29.92
5.305	5.305 (0.917)	41	358592			0.00- 48.73	22.58
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.953)	77	625657	50.4125	50.412	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	200551			2.28- 62.28	32.05
5.513	5.513 (0.953)	97	147124			0.00- 53.93	23.52

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	248569	51.3489	51.349	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	385219			125.75- 185.75	154.97
5.549	5.549 (0.959)	61	931484			332.40- 392.40	374.74
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	179656	48.1640	48.164	80.00- 120.00	100.00
5.570	5.563 (0.963)	43	2725771			1214.50-1274.50	1517.22
5.556	5.556 (0.960)	57	92307			14.68- 74.68	51.38
87 Ethyl Acetate					CAS #: 141-78-6		
5.578	5.570 (0.964)	45	217767	58.6944	58.694	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	931484			452.04- 512.04	427.74
5.578	5.578 (0.964)	70	91260			22.77- 82.77	41.91
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (0.999)	42	717028	57.7994	57.799	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	156940			0.00- 55.82	21.89
5.778	5.778 (0.999)	72	168293			0.00- 57.59	23.47
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	765893	53.3395	53.340	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	500812			34.70- 94.70	65.39
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	494300	47.6160	47.616	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	923172			142.57- 202.57	186.76
5.964	5.957 (1.031)	41	525018			62.09- 122.09	106.21
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.032)	97	817550	50.4002	50.400	80.00- 120.00	100.00
5.972	5.972 (1.032)	99	524241			34.02- 94.02	64.12
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.053)	119	835118	54.8927	54.893	80.00- 120.00	100.00
6.093	6.093 (1.053)	117	835869			70.64- 130.64	100.09
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	219863	52.9461	52.946	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	546585			226.85- 286.85	248.60
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.287 (1.087)	57	2942260	52.0697	52.070	80.00- 120.00	100.00
6.287	6.287 (1.087)	56	975736			2.24- 62.24	33.16
6.287	6.287 (1.087)	41	770425			0.00- 54.39	26.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	1066722	52.9876	52.988	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	247094			0.00- 52.90	23.16
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	279524	49.2418	49.242	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1122012			372.79- 432.79	401.40
6.358	6.358 (0.954)	55	445326			112.09- 172.09	159.32
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	617912	58.9878	58.988	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	187443			0.79- 60.79	30.34
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	403024	50.5342	50.534	80.00- 120.00	100.00
6.451	6.451 (0.968)	43	1211343			226.53- 286.53	300.56
6.451	6.451 (0.968)	57	574342			100.85- 160.85	142.51
110 n-Butanol					CAS #: 71-36-3		
6.817	6.810 (1.023)	56	367359	50.1912	50.191	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	275406			40.99- 100.99	74.97
6.817	6.810 (1.023)	43	225386			27.38- 87.38	61.35
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	537779	55.0515	55.051	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	576049			76.29- 136.29	107.12
6.867	6.867 (1.030)	97	344477			33.63- 93.63	64.06
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	554192	53.6963	53.696	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	393410			41.07- 101.07	70.99
7.096	7.096 (1.064)	41	359334			22.53- 82.53	64.84
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	419193	51.5113	51.511	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	962599			179.84- 239.84	229.63
7.139	7.139 (0.755)	100	161221			9.59- 69.59	38.46
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.077)	88	275849	50.2915	50.291	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	286264			68.28- 128.28	103.78
7.182	7.175 (1.077)	57	98271			2.68- 62.68	35.63
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	502930	57.2239	57.224	80.00- 120.00	100.00
7.211	7.204 (0.762)	93	467014			60.09- 120.09	92.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.211	7.204 (0.762)	95	403001			48.38- 108.38	80.13
122 Bromodichloromethane					CAS #: 75-27-4		
7.325	7.318 (1.099)	83	852328	56.2728	56.273	80.00- 120.00	100.00
7.325	7.318 (1.099)	85	554249			35.24- 95.24	65.03
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	676186	52.8431	52.843	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	218523			2.42- 62.42	32.32
7.698	7.698 (1.155)	39	507162			37.16- 97.16	75.00
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	699508	49.4839	49.484	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	331823			15.78- 75.78	47.44
6.974	6.974 (1.046)	55	866544			84.64- 144.64	123.88
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	535547	51.0980	51.098	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1632755			242.35- 302.35	304.88
7.798	7.798 (1.170)	85	163059			3.24- 63.24	30.45
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1438378	51.7872	51.787	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	828907			28.38- 88.38	57.63
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.192)	57	627261	52.9657	52.966	80.00- 120.00	100.00
7.949	7.949 (1.192)	85	487056			56.00- 116.00	77.65
7.949	7.949 (1.192)	43	1764050			228.66- 288.66	281.23
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	645428	55.3769	55.377	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	196937			1.24- 61.24	30.51
8.214	8.214 (0.868)	39	459311			34.11- 94.11	71.16
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	520297	54.0086	54.008	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	319731			31.96- 91.96	61.45
8.400	8.400 (0.888)	83	434308			52.93- 112.93	83.47
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	731837	54.2172	54.217	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	570978			47.84- 107.84	78.02
8.471	8.464 (0.895)	131	554881			45.29- 105.29	75.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	729245	52.9836	52.984	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1551978			162.87- 222.87	212.82
8.586	8.586 (0.908)	100	104721			0.00- 45.94	14.36
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	698991	52.9948	52.995	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	972338			94.99- 154.99	139.11
8.579	8.579 (1.287)	78	227153			2.05- 62.05	32.50
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	1020016	56.6684	56.668	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	796190			47.45- 107.45	78.06
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	869428	56.2701	56.270	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	812115			64.21- 124.21	93.41
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	1033307	54.5659	54.566	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	300287			0.00- 59.64	29.06
7.612	7.612 (1.142)	144	99030			0.00- 39.63	9.58
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1262901	53.6995	53.699	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	400657			1.74- 61.74	31.73
9.496	9.496 (1.004)	77	655251			25.04- 85.04	51.88
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	638531	51.9233	51.923	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1932076			273.74- 333.74	302.58
156 Nonane					CAS #: 111-84-2		
9.603	9.596 (1.015)	43	1873796	59.2219	59.222	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1442096			54.16- 114.16	76.96
9.603	9.603 (1.015)	85	382128			0.00- 53.90	20.39
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	608105	46.1828	46.183	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	592267			57.42- 117.42	97.40
9.596	9.596 (1.014)	95	219986			5.70- 65.70	36.18
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	796676	51.7255	51.725	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1531627			163.73- 223.73	192.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	741887	50.2740	50.274	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1516706			177.45- 237.45	204.44
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1237152	49.0212	49.021	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	581207			17.88- 77.88	46.98
167 Bromoform					CAS #: 75-25-2		
10.549	10.542 (1.115)	173	980338	55.2547	55.255	80.00- 120.00	100.00
10.549	10.542 (1.115)	171	505247			21.25- 81.25	51.54
168 Cumene					CAS #: 98-82-8		
10.649	10.656 (1.126)	105	2344698	50.5799	50.580	80.00- 120.00	100.00
10.649	10.656 (1.126)	120	680718			0.00- 58.52	29.03
10.649	10.649 (1.126)	51	351717			0.00- 43.00	15.00
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	779293	47.0068	47.007	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	224190			1.94- 61.94	28.77
10.871	10.871 (1.149)	42	536878			37.89- 97.89	68.89
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1223482	54.0747	54.075	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	803432			35.20- 95.20	65.67
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	762467	54.0803	54.080	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	742431			67.21- 127.21	97.37
11.179	11.179 (1.182)	77	472974			29.02- 89.02	62.03
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	720808	52.4408	52.441	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2828140			366.49- 426.49	392.36
11.150	11.150 (1.179)	105	108267			0.00- 44.85	15.02
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	379658	52.6472	52.647	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1230919			280.55- 340.55	324.22
11.100	11.107 (1.173)	61	187843			15.49- 75.49	49.48
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	364177	77.0340	77.034	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	238123			49.11- 109.11	65.39
11.179	11.179 (1.182)	75	1230919			426.44- 486.44	338.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1922931	53.3288	53.329	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	495129			0.00- 57.66	25.75
11.258	11.258 (1.190)	142	71291			0.00- 34.09	3.71
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	778105	52.0545	52.054	80.00- 120.00	100.00
11.287	11.287 (1.193)	105	2387681			284.55- 344.55	306.86
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	625740	53.4659	53.466	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2069223			315.17- 375.17	330.68
11.301	11.301 (1.195)	65	313434			21.55- 81.55	50.09
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1060505	51.5302	51.530	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	2039337			164.93- 224.93	192.30
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	960394	46.9746	46.975	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	523358			25.30- 85.30	54.49
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.745 (1.241)	119	2031598	52.7788	52.779	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	496222			0.00- 54.25	24.43
11.738	11.745 (1.241)	91	1204436			31.27- 91.27	59.29
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	2025336	52.1386	52.139	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	1034586			19.05- 79.05	51.08
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	12.003 (1.268)	134	643029	53.7482	53.748	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2976365			437.55- 497.55	462.87
11.996	11.996 (1.268)	91	447399			40.76- 100.76	69.58
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2748075	51.9697	51.970	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	716644			0.00- 55.54	26.08
12.160	12.160 (1.285)	91	571612			0.00- 51.48	20.80
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1437592	54.0685	54.068	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	924367			33.21- 93.21	64.30
12.203	12.203 (1.290)	111	573174			11.31- 71.31	39.87

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1456079	54.1926	54.192	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	919418			33.90- 93.90	63.14
12.311	12.311 (1.301)	111	555709			9.45- 69.45	38.16
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1880791	50.9750	50.975	80.00- 120.00	100.00
12.468	12.468 (1.318)	126	439300			0.00- 53.26	23.36
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2336986	56.1094	56.109	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2257156			58.12- 118.12	96.58
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	699241	52.0651	52.065	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2402222			314.79- 374.79	343.55
12.626	12.626 (1.335)	92	1273498			154.29- 214.29	182.13
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1374466	52.7201	52.720	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	872068			33.84- 93.84	63.45
12.741	12.741 (1.347)	111	568553			12.73- 72.73	41.37
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	850500	53.8616	53.862	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	695711			52.48- 112.48	81.80
13.600	13.600 (1.438)	155	663550			47.41- 107.41	78.02
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2378809	72.0561	72.056	80.00- 120.00	100.00(R)
13.801	13.801 (1.459)	43	2137237			52.87- 112.87	89.84
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1368283	71.0345	71.034	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1313066			65.33- 125.33	95.96
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	1003786	74.0462	74.046	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	634313			33.17- 93.17	63.19
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	308656	6.26990	6.270	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	39361			0.00- 42.88	12.75
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1282042	75.2894	75.289	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.069	15.069 (1.593)	182	1227194			65.75- 125.75	95.72
15.069	15.069 (1.593)	145	437231			5.23- 65.23	34.10

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072204.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	165029	3.63
108 1,4-Difluorobenze	573285	343971	802599	610054	6.41
153 Chlorobenzene-d5	571549	342929	800169	592267	3.62

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	58.414	116.83	70-130
5 Propylene	50.000	54.920	109.84	70-130
7 1,1-Difluoroethan	50.000	50.647	101.29	70-130
8 Freon 12	50.000	55.186	110.37	70-130
9 Chlorodifluoromet	50.000	56.151	112.30	70-130
10 Freon 114	50.000	50.317	100.63	70-130
12 Isobutane	50.000	54.241	108.48	70-130
15 Chloromethane	50.000	52.760	105.52	70-130
18 Butane	50.000	46.966	93.93	70-130
19 Vinyl Chloride	50.000	47.611	95.22	70-130
20 1,3-Butadiene	50.000	58.007	116.01	70-130
24 Bromomethane	50.000	45.757	91.51	70-130
30 Chloroethane	50.000	48.973	97.95	70-130
31 Isopentane	50.000	53.859	107.72	70-130
32 Vinyl Bromide	50.000	47.076	94.15	70-130
33 Freon 11	50.000	53.380	106.76	70-130
34 Dichlorofluoromet	50.000	49.711	99.42	70-130
35 Pentane	50.000	52.208	104.42	70-130
38 Ethyl Ether	50.000	47.819	95.64	70-130
39 Ethanol	58.000	52.109	89.84	70-130
42 Acrolein	58.000	53.686	92.56	70-130
43 Freon 113	50.000	49.726	99.45	70-130
44 1,1-Dichloroethen	50.000	48.647	97.29	70-130
47 Acetone	50.000	52.180	104.36	70-130
48 Carbon Disulfide	50.000	47.949	95.90	70-130
49 Iodomethane	50.000	61.922	123.84	70-130
52 2-Propanol	50.000	55.470	110.94	70-130
54 3-Chloropropene	50.000	47.835	95.67	70-130
57 Acetonitrile	50.000	56.002	112.00	70-130
59 Methylene Chlorid	50.000	58.154	116.31	70-130
62 tert-Butyl alcoho	50.000	47.531	95.06	70-130
63 Methyl tert-butyl	50.000	46.030	92.06	70-130
64 trans-1,2-Dichlor	50.000	47.717	95.43	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	55.515	111.03	70-130
67	Hexane	50.000	50.721	101.44	70-130
71	1,1-Dichloroethan	50.000	53.049	106.10	70-130
72	Isopropyl ether	50.000	55.509	111.02	70-130
73	Vinyl Acetate	50.000	49.224	98.45	70-130
79	Ethyl-tert-butyl	50.000	48.524	97.05	70-130
84	2,2-Dichloropropa	50.000	50.412	100.82	70-130
85	cis-1,2-Dichloroe	50.000	51.349	102.70	70-130
86	2-Butanone	50.000	48.164	96.33	70-130
87	Ethyl Acetate	50.000	58.694	117.39	70-130
89	Tetrahydrofuran	50.000	57.799	115.60	70-130
92	Chloroform	50.000	53.340	106.68	70-130
94	Cyclohexane	50.000	47.616	95.23	70-130
96	1,1,1-Trichloroet	50.000	50.400	100.80	70-130
99	1,1-Dichloroprope	50.000	52.946	105.89	70-130
97	Carbon Tetrachlor	50.000	54.893	109.79	70-130
101	2,2,4-Trimethylpe	50.000	52.070	104.14	70-130
102	Benzene	50.000	52.988	105.98	70-130
105	tert-Amyl methyl	50.000	49.242	98.48	70-130
106	1,2-Dichloroethan	50.000	58.988	117.98	70-130
107	Heptane	50.000	50.534	101.07	70-130
110	n-Butanol	50.000	50.191	100.38	70-130
111	Trichloroethene	50.000	55.051	110.10	70-130
118	Dibromomethane	50.000	57.224	114.45	70-130
127	Methylcyclohexane	50.000	49.484	98.97	70-130
114	1,2-Dichloropropa	50.000	53.696	107.39	70-130
116	Methyl Methacryla	50.000	51.511	103.02	70-130
117	1,4-Dioxane	50.000	50.291	100.58	70-130
122	Bromodichlorometh	50.000	56.273	112.55	70-130
126	cis-1,3-Dichlorop	50.000	52.843	105.69	70-130
131	4-Methyl-2-pentan	50.000	51.098	102.20	70-130
136	Octane	50.000	52.966	105.93	70-130
137	Toluene	50.000	51.787	103.57	70-130
139	trans-1,3-Dichlor	50.000	55.377	110.75	70-130
141	1,1,2-Trichloroet	50.000	54.008	108.02	70-130
142	Tetrachloroethene	50.000	54.217	108.43	70-130
143	2-Hexanone	50.000	52.984	105.97	70-130
144	1,3-Dichloropropa	50.000	52.995	105.99	70-130
146	Dibromochlorometh	50.000	56.668	113.34	70-130
148	1,2-Dibromoethane	50.000	56.270	112.54	70-130
151	1-Bromo-2-Chloroe	50.000	54.566	109.13	70-130
154	Chlorobenzene	50.000	53.699	107.40	70-130
155	Ethyl Benzene	50.000	51.923	103.85	70-130
156	Nonane	50.000	59.222	118.44	70-130
157	1,1,1,2-Tetrachlo	50.000	46.183	92.37	70-130
158	m,p-Xylene	50.000	51.725	103.45	70-130
164	o-Xylene	50.000	50.274	100.55	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	49.021	98.04	70-130
167 Bromoform	50.000	55.255	110.51	70-130
168 Cumene	50.000	50.580	101.16	70-130
169 Cyclohexanone	50.000	47.007	94.01	70-130
175 1,1,2,2-Tetrachlo	50.000	54.075	108.15	70-130
177 Bromobenzene	50.000	54.080	108.16	70-130
178 Propylbenzene	50.000	52.441	104.88	70-130
179 1,2,3-Trichloropr	50.000	52.647	105.29	70-130
181 trans-1,4-Dichlor	50.000	77.034	154.07*	70-130
182 Decane	50.000	53.329	106.66	70-130
183 4-Ethyltoluene	50.000	52.054	104.11	70-130
184 2-Chlorotoluene	50.000	53.466	106.93	70-130
185 1,3,5-Trimethylbe	50.000	51.530	103.06	70-130
188 alpha Methyl Styr	50.000	46.975	93.95	70-130
189 tert-Butylbenzene	50.000	52.779	105.56	70-130
190 1,2,4-Trimethylbe	50.000	52.139	104.28	70-130
192 sec-Butylbenzene	50.000	53.748	107.50	70-130
194 p-Cymene	50.000	51.970	103.94	70-130
195 1,3-Dichlorobenze	50.000	54.068	108.14	70-130
196 1,4-Dichlorobenze	50.000	54.192	108.39	70-130
199 alpha-Chlorotolue	50.000	50.975	101.95	70-130
201 Undecane	50.000	56.109	112.22	70-130
202 Butylbenzene	50.000	52.065	104.13	70-130
204 1,2-Dichlorobenze	50.000	52.720	105.44	70-130
206 1,2-Dibromo-3-chl	50.000	53.862	107.72	70-130
207 Dodecane	50.000	72.056	144.11*	70-130
213 1,2,4-Trichlorobe	58.000	71.034	122.47	70-130
215 Hexachlorobutadie	58.000	74.046	127.67	70-130
216 Naphthalene	5.800	6.270	108.10	60-140
222 1,2,3-Trichlorobe	58.000	75.289	129.81	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.549	102.19	70-130
$ 134 Toluene-d8	25.000	25.070	100.28	70-130
$ 170 4-Bromofluorobenz	25.000	25.112	100.45	70-130

Data File: /chem/msdp.i/22JUL21.b/p072204.d

Page 1

Date : 22-JUL-2021 11:38

Client ID: LCSD

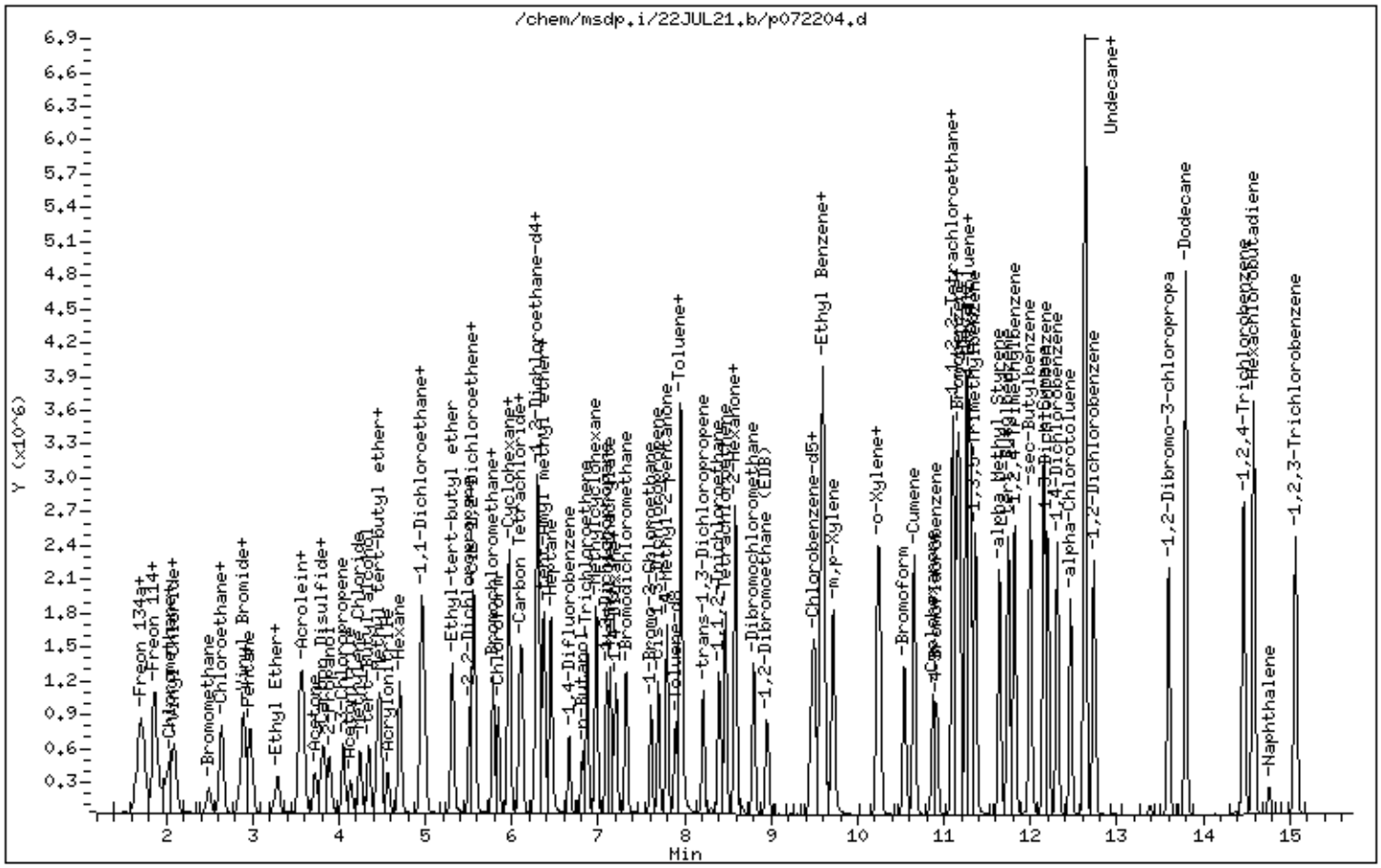
Instrument: msdp.i

Sample Info: 100mL 3018-2122A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107241A-26B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072207**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:03 PM**	

Compound	%Recovery	Method Limits
Freon 12	104	70-130
Freon 114	107	70-130
Chloromethane	110	70-130
Vinyl Chloride	102	70-130
1,3-Butadiene	92	70-130
Bromomethane	101	70-130
Chloroethane	100	70-130
Freon 11	107	70-130
Ethanol	73	70-130
Freon 113	103	70-130
1,1-Dichloroethene	97	70-130
Acetone	97	70-130
2-Propanol	100	70-130
Carbon Disulfide	104	70-130
3-Chloropropene	95	70-130
Methylene Chloride	96	70-130
Methyl tert-butyl ether	95	70-130
trans-1,2-Dichloroethene	90	70-130
Hexane	94	70-130
1,1-Dichloroethane	94	70-130
2-Butanone (Methyl Ethyl Ketone)	93	70-130
cis-1,2-Dichloroethene	89	70-130
Tetrahydrofuran	87	70-130
Chloroform	94	70-130
1,1,1-Trichloroethane	90	70-130
Cyclohexane	88	70-130
Carbon Tetrachloride	99	70-130
2,2,4-Trimethylpentane	89	70-130
Benzene	101	70-130
1,2-Dichloroethane	102	70-130
Heptane	91	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	80	70-130
1,4-Dioxane	97	70-130
Bromodichloromethane	95	70-130
cis-1,3-Dichloropropene	94	70-130
4-Methyl-2-pentanone	84	70-130
Toluene	94	70-130
trans-1,3-Dichloropropene	98	70-130
1,1,2-Trichloroethane	97	70-130
Tetrachloroethene	103	70-130
2-Hexanone	94	70-130

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Client Sample ID: LCS

Lab ID#: 2107241A-26B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072207**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:03 PM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	105	70-130
1,2-Dibromoethane (EDB)	101	70-130
Chlorobenzene	98	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	100	70-130
o-Xylene	96	70-130
Styrene	96	70-130
Bromoform	104	70-130
Cumene	97	70-130
1,1,2,2-Tetrachloroethane	97	70-130
Propylbenzene	100	70-130
4-Ethyltoluene	99	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	102	70-130
1,3-Dichlorobenzene	105	70-130
1,4-Dichlorobenzene	104	70-130
alpha-Chlorotoluene	96	70-130
1,2-Dichlorobenzene	103	70-130
1,2,4-Trichlorobenzene	112	70-130
Hexachlorobutadiene	114	70-130
Naphthalene	86	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	
Freon 134a	Not Spiked	
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
1,2-Dibromo-3-chloropropane	Not Spiked	
Dibromomethane	Not Spiked	
1,1-Difluoroethane	Not Spiked	
Isopropyl ether	Not Spiked	
Ethyl Acetate	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Hexachloroethane	Not Spiked	
Iodomethane	Not Spiked	
Propylene	96	60-140
1,1,1,2-Tetrachloroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
Vinyl Acetate	97	70-130
Vinyl Bromide	Not Spiked	

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2107241A-26B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072207**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:03 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	102	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072207.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 22-JUL-2021 13:03
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 14:16 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.284	5.284 (1.000)	130	259845	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	197225				48.46- 108.46	75.90
5.284	5.284 (1.000)	49	363341				120.39- 180.39	139.83
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	871680	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	129273				0.00- 45.52	14.83
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.619 (1.000)	117	776236	25.0000			80.00- 120.00	100.00
8.619	8.619 (1.000)	82	411359				25.46- 85.46	52.99
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	351661	24.5925	24.592		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	183298				21.66- 81.66	52.12
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	867892	24.1732	24.173		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	93097				0.00- 41.47	10.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	568382			36.47- 96.47	65.49
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	521280	25.3889	25.389	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	599341			93.06- 153.06	114.97
9.601	9.601 (1.114)	176	483268			62.87- 122.87	92.71
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	351408	56.8355	56.835	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	278886			51.82- 111.82	79.36
1.493	1.479 (0.282)	51	738282			194.91- 254.91	210.09
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	302209	48.1495	48.150	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	202875			35.61- 95.61	67.13
1.423	1.423 (0.269)	39	224563			42.66- 102.66	74.31
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	210155	51.3656	51.366	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	738282			321.86- 381.86	351.30
1.451	1.451 (0.275)	47	157964			45.34- 105.34	75.17
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	941243	51.9990	51.999	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	304180			2.63- 62.63	32.32
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	98901	49.7142	49.714	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	738282			719.76- 779.76	746.48
10 Freon 114					CAS #: 76-14-2		
1.562	1.562 (0.296)	135	714984	53.3084	53.308	80.00- 120.00	100.00
1.562	1.562 (0.296)	137	227303			2.12- 62.12	31.79
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	704610	49.9477	49.948	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	225370			2.44- 62.44	31.99
1.576	1.576 (0.298)	58	24356			0.00- 33.26	3.46
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	414593	55.1072	55.107	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	134736			2.41- 62.41	32.50
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	86749	48.8253	48.825	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.702	1.702 (0.322)	43	635250			727.41- 787.41	732.28
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	410645	51.0069	51.007	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	125173			1.28- 61.28	30.48
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	340143	46.1007	46.101	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	323459			69.23- 129.23	95.10
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	322990	50.7272	50.727	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	308682			62.78- 122.78	95.57
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	188885	49.9803	49.980	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	58884			1.44- 61.44	31.17
2.206	2.206 (0.417)	49	63114			4.12- 64.12	33.41
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	463894	48.0016	48.002	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	332600			38.82- 98.82	71.70
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	347611	50.2129	50.213	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	321373			63.14- 123.14	92.45
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	1029039	53.7300	53.730	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	669530			35.12- 95.12	65.06
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	806782	52.6959	52.696	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	248728			0.74- 60.74	30.83
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	717322	46.5890	46.589	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	116303			0.00- 45.97	16.21
2.500	2.500 (0.473)	72	63564			0.00- 38.10	8.86
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.794 (0.529)	74	172026	49.8327	49.833	80.00- 120.00	100.00
2.794	2.794 (0.529)	59	294752			147.68- 207.68	171.34
2.780	2.780 (0.526)	45	385910			206.40- 266.40	224.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	65638	42.3648	42.365	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	385398			523.01- 583.01	587.16
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	136684	53.1617	53.162	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	190270			110.33- 170.33	139.20
43 Freon 113					CAS #: 76-13-1		
3.046	3.046 (0.576)	151	672435	51.3605	51.360	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	428439			33.72- 93.72	63.71
3.032	3.032 (0.574)	101	808630			89.67- 149.67	120.25
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	382631	48.5210	48.521	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	239467			33.39- 93.39	62.58
3.074	3.074 (0.582)	61	733354			163.82- 223.82	191.66
47 Acetone					CAS #: 67-64-1		
3.214	3.213 (0.608)	58	211376	48.5137	48.514	80.00- 120.00	100.00
3.214	3.213 (0.608)	43	706171			299.66- 359.66	334.08
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.624)	76	1018791	51.9258	51.926	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.619)	142	982268	57.8968	57.897	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	455364			14.58- 74.58	46.36
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	782016	49.9066	49.907	80.00- 120.00	100.00
3.409	3.409 (0.645)	43	156017			0.00- 48.61	19.95
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	159822	47.3140	47.314	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	552337			338.06- 398.06	345.59
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	318386	46.4054	46.405	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	168942			21.81- 81.81	53.06
3.633	3.633 (0.688)	38	39882			0.00- 41.86	12.53
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	503583	48.2935	48.293	80.00- 120.00	100.00
3.731	3.731 (0.706)	84	314202			30.77- 90.77	62.39
3.731	3.731 (0.706)	51	154971			1.39- 61.39	30.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	918289	46.6893	46.689	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	204923			0.00- 51.05	22.32
3.857	3.857 (0.730)	57	104065			0.00- 41.68	11.33
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	1005250	47.3539	47.354	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	288025			0.00- 58.86	28.65
3.941	3.941 (0.746)	41	280847			0.00- 57.27	27.94
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	239369	45.1054	45.105	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	640535			244.59- 304.59	267.59
3.969	3.969 (0.751)	96	381053			129.84- 189.84	159.19
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	263575	41.3842	41.384	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	318572			88.50- 148.50	120.87
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	676452	47.0105	47.010	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	414710			32.99- 92.99	61.31
4.179	4.179 (0.791)	86	86319			0.00- 42.56	12.76
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	692829	46.8188	46.819	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	210097			0.76- 60.76	30.32
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1381601	45.4965	45.496	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	314082			0.00- 51.37	22.73
4.445	4.445 (0.841)	59	158732			0.00- 41.09	11.49
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	88123	48.4367	48.437	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1198571			1391.63-1451.63	1360.11
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1330984	45.3999	45.400	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	452840			3.22- 63.22	34.02
4.809	4.809 (0.910)	41	249097			0.00- 48.12	18.72
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.004	5.004 (0.947)	77	640972	46.4950	46.495	80.00- 120.00	100.00
5.004	5.004 (0.947)	79	208054			2.00- 62.00	32.46
5.004	5.004 (0.947)	97	152908			0.00- 53.36	23.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.046	5.046 (0.955)	98	233988	44.4788	44.479	80.00- 120.00	100.00
5.046	5.046 (0.955)	96	364812			127.22- 187.22	155.91
5.046	5.046 (0.955)	61	606843			283.85- 343.85	259.35
86 2-Butanone					CAS #: 78-93-3		
5.074	5.074 (0.960)	72	170511	46.4039	46.404	80.00- 120.00	100.00
5.074	5.074 (0.960)	43	1773511			1055.75-1115.75	1040.11
5.074	5.074 (0.960)	57	70920			10.59- 70.59	41.59
87 Ethyl Acetate					CAS #: 141-78-6		
5.088	5.088 (0.963)	45	139045	45.9010	45.901	80.00- 120.00	100.00
5.046	5.046 (0.955)	61	606843			450.31- 510.31	436.43
5.088	5.088 (0.963)	70	85846			30.42- 90.42	61.74
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	449250	43.3570	43.357	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	151935			2.92- 62.92	33.82
5.270	5.270 (0.997)	72	160208			3.54- 63.54	35.66
92 Chloroform					CAS #: 67-66-3		
5.340	5.354 (1.011)	83	767168	47.0898	47.090	80.00- 120.00	100.00
5.340	5.354 (1.011)	85	494571			34.71- 94.71	64.47
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	450538	43.7519	43.752	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	646617			120.40- 180.40	143.52
5.438	5.438 (1.029)	41	361706			54.20- 114.20	80.28
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	822892	44.9368	44.937	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	526560			33.76- 93.76	63.99
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	832943	49.3865	49.386	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	865061			73.68- 133.68	103.86
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.620	5.620 (0.909)	110	198642	50.0746	50.074	80.00- 120.00	100.00
5.620	5.620 (0.909)	75	514811			231.09- 291.09	259.16
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1996972	44.3784	44.378	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	629524			1.12- 61.12	31.52
5.774	5.774 (1.093)	41	550680			0.00- 57.49	27.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	1000940	50.3199	50.320	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	233963			0.00- 53.80	23.37
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	256450	48.3519	48.352	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	1015044			365.20- 425.20	395.81
5.858	5.858 (0.948)	55	319510			91.31- 151.31	124.59
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	585913	51.1620	51.162	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	183120			1.20- 61.20	31.25
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	356615	45.5165	45.516	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	704879			179.02- 239.02	197.66
5.942	5.942 (0.962)	57	400708			84.85- 144.85	112.36
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	308604	48.4026	48.403	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	215252			40.21- 100.21	69.75
6.348	6.348 (1.027)	43	165119			25.00- 85.00	53.51
111 Trichloroethene					CAS #: 79-01-6		
6.376	6.376 (1.032)	95	486824	48.7843	48.784	80.00- 120.00	100.00
6.376	6.376 (1.032)	130	524579			74.96- 134.96	107.76
6.376	6.376 (1.032)	97	319454			34.80- 94.80	65.62
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.621	6.621 (1.071)	63	184066	39.9203	39.920	80.00- 120.00	100.00
6.621	6.621 (1.071)	62	139468			52.03- 112.03	75.77
6.586	6.621 (1.066)	41	177078			79.97- 139.97	96.20
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.671 (0.773)	69	367328	49.1709	49.171	80.00- 120.00	100.00
6.664	6.671 (0.773)	41	570497			134.02- 194.02	155.31
6.671	6.671 (0.774)	100	144305			9.54- 69.54	39.29
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.699 (1.084)	88	245283	48.6780	48.678	80.00- 120.00	100.00
6.699	6.699 (1.084)	58	201866			55.80- 115.80	82.30
6.699	6.699 (1.084)	57	90720			8.68- 68.68	36.99
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	455147	54.7070	54.707	80.00- 120.00	100.00
6.721	6.721 (0.780)	93	439695			67.27- 127.27	96.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.721	6.721 (0.780)	95	364686			50.92- 110.92	80.12
122 Bromodichloromethane					CAS #: 75-27-4		
6.843	6.843 (1.107)	83	795753	47.5993	47.599	80.00- 120.00	100.00
6.843	6.843 (1.107)	85	516060			34.31- 94.31	64.85
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.215	7.215 (1.168)	75	583182	46.9339	46.934	80.00- 120.00	100.00
7.215	7.215 (1.168)	77	184217			1.42- 61.42	31.59
7.208	7.215 (1.166)	39	393181			38.56- 98.56	67.42
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	590927	44.2831	44.283	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	271187			15.60- 75.60	45.89
6.460	6.460 (1.045)	55	574564			78.53- 138.53	97.23
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	355320	42.0554	42.055	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	906320			231.30- 291.30	255.07
7.316	7.316 (1.184)	85	138047			8.94- 68.94	38.85
137 Toluene					CAS #: 108-88-3		
7.444	7.444 (1.205)	91	1256910	47.0924	47.092	80.00- 120.00	100.00
7.444	7.444 (1.205)	92	722950			28.30- 88.30	57.52
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	395954	44.5892	44.589	80.00- 120.00	100.00
7.444	7.452 (1.205)	85	390210			67.11- 127.11	98.55
7.444	7.444 (1.205)	43	922376			214.21- 274.21	232.95
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.695 (0.892)	75	558730	48.8713	48.871	80.00- 120.00	100.00
7.688	7.695 (0.892)	77	174840			2.15- 62.15	31.29
7.688	7.688 (0.892)	39	355959			36.09- 96.09	63.71
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	427150	48.5816	48.582	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	263413			31.62- 91.62	61.67
7.846	7.846 (0.910)	83	365541			56.35- 116.35	85.58
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	629111	51.7335	51.733	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	489448			48.71- 108.71	77.80
7.881	7.881 (0.914)	131	469291			46.55- 106.55	74.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	476835	47.2144	47.214	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	871186			157.91- 217.91	182.70
8.003	8.010 (0.929)	100	89634			0.00- 47.86	18.80
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	565738	44.4264	44.426	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	605201			82.96- 142.96	106.98
7.989	7.989 (1.293)	78	180764			2.55- 62.55	31.95
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.161 (0.946)	129	876583	52.5521	52.552	80.00- 120.00	100.00
8.154	8.161 (0.946)	127	679671			47.77- 107.77	77.54
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.268 (0.959)	107	687972	50.3856	50.386	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	649554			64.60- 124.60	94.42
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.122	7.122 (1.152)	63	768616	47.6423	47.642	80.00- 120.00	100.00
7.122	7.122 (1.152)	65	236116			0.95- 60.95	30.72
7.122	7.122 (1.152)	144	83858			0.00- 40.45	10.91
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	1038222	48.9373	48.937	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	335492			2.13- 62.13	32.31
8.641	8.641 (1.002)	77	562047			26.35- 86.35	54.14
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.691 (1.007)	106	531214	50.0742	50.074	80.00- 120.00	100.00
8.684	8.691 (1.007)	91	1651346			282.48- 342.48	310.86
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	933503	45.3995	45.399	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	870279			59.52- 119.52	93.23
8.705	8.712 (1.010)	85	304051			0.00- 59.76	32.57
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	533523	45.6942	45.694	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	354131			38.22- 98.22	66.38
8.712	8.712 (1.011)	95	194245			7.54- 67.54	36.41
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	656676	49.7562	49.756	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1302599			171.36- 231.36	198.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
9.128	9.128 (1.059)	106	602837	48.1144	48.114	80.00- 120.00	100.00
9.121	9.128 (1.058)	91	1263200			179.99- 239.99	209.54
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	1046292	48.1999	48.200	80.00- 120.00	100.00
9.149	9.149 (1.061)	78	503948			19.09- 79.09	48.17
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	827052	52.2902	52.290	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	427829			21.45- 81.45	51.73
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	1926030	48.6211	48.621	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	522834			0.00- 56.99	27.15
9.407	9.414 (1.091)	51	218646			0.00- 41.77	11.35
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	531685	42.6505	42.650	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	212077			9.22- 69.22	39.89
9.579	9.579 (1.111)	42	375375			42.60- 102.60	70.60
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	948928	48.3159	48.316	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	614921			34.35- 94.35	64.80
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.737 (1.130)	156	632051	51.3264	51.326	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	611133			67.29- 127.29	96.69
9.729	9.729 (1.129)	77	971804			132.41- 192.41	153.75
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2321734	50.2311	50.231	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	554252			0.00- 53.77	23.87
9.758	9.758 (1.132)	105	86397			0.00- 33.81	3.72
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	299038	50.5454	50.545	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	982995			285.00- 345.00	328.72
9.787	9.787 (1.135)	61	252317			54.06- 114.06	84.38
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	309183	66.0441	66.044	80.00- 120.00	100.00(R)
9.787	9.787 (1.135)	89	158286			21.19- 81.19	51.19
9.787	9.787 (1.135)	75	982995			372.45- 432.45	317.93

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.138)	57	1112489	46.5485	46.548	80.00- 120.00	100.00
9.808	9.815 (1.138)	71	389118			4.13- 64.13	34.98
9.815	9.815 (1.139)	142	56614			0.00- 34.73	5.09
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	595183	49.6782	49.678	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1944086			296.79- 356.79	326.64
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	498321	51.1896	51.190	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1746730			336.29- 396.29	350.52
9.873	9.873 (1.145)	65	323844			38.83- 98.83	64.99
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	835632	49.6583	49.658	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1692285			176.40- 236.40	202.52
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.109	10.109 (1.173)	118	806883	46.8185	46.818	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	450351			26.64- 86.64	55.81
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1570489	50.7235	50.724	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	391965			0.00- 54.82	24.96
10.174	10.174 (1.180)	91	1020568			36.92- 96.92	64.98
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1686810	50.8351	50.835	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	788769			16.58- 76.58	46.76
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	510068	51.0039	51.004	80.00- 120.00	100.00
10.360	10.360 (1.202)	105	2420493			451.53- 511.53	474.54
10.360	10.360 (1.202)	91	387061			46.48- 106.48	75.88
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	2148805	51.3083	51.308	80.00- 120.00	100.00
10.474	10.474 (1.215)	134	580371			0.00- 56.79	27.01
10.467	10.467 (1.214)	91	499810			0.00- 54.04	23.26
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.220)	146	1179262	52.3099	52.310	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	747207			33.53- 93.53	63.36
10.517	10.517 (1.220)	111	464559			11.05- 71.05	39.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.229)	146	1202402	51.7810	51.781	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	762170			33.47- 93.47	63.39
10.596	10.596 (1.229)	111	456671			9.65- 69.65	37.98
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1524696	47.7556	47.756	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	343471			0.00- 52.04	22.53
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1341320	47.6269	47.627	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1137183			55.86- 115.86	84.78
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	568482	52.3517	52.352	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	2031303			331.99- 391.99	357.32
10.818	10.818 (1.255)	92	1050504			161.01- 221.01	184.79
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1119875	51.4062	51.406	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	711461			33.23- 93.23	63.53
10.919	10.926 (1.267)	111	459732			12.36- 72.36	41.05
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	646990	51.2196	51.220	80.00- 120.00	100.00
11.606	11.606 (1.347)	75	538940			58.96- 118.96	83.30
11.606	11.606 (1.347)	155	503827			47.82- 107.82	77.87
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1253475	52.6348	52.635	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	991580			50.85- 110.85	79.11
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	1001927	64.7524	64.752	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	957464			65.40- 125.40	95.56
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	773967	66.2178	66.218	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	491082			33.70- 93.70	63.45
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.456)	128	237021	5.01641	5.016	80.00- 120.00	100.00
12.559	12.559 (1.457)	127	31104			0.00- 43.10	13.12
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.810 (1.485)	180	927504	65.5058	65.506	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
12.802	12.810 (1.485)	182	882616			65.67- 125.67	95.16
12.802	12.810 (1.485)	145	322124			6.02- 66.02	34.73

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072207.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	259845	8.00
108 1,4-Difluorobenze	805743	483446	1128040	871680	8.18
153 Chlorobenzene-d5	719477	431686	1007268	776236	7.89

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCS
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	56.835	113.67	70-130
5 Propylene	50.000	48.150	96.30	70-130
7 1,1-Difluoroethan	50.000	51.366	102.73	70-130
8 Freon 12	50.000	51.999	104.00	70-130
9 Chlorodifluoromet	50.000	49.714	99.43	70-130
10 Freon 114	50.000	53.308	106.62	70-130
12 Isobutane	50.000	49.948	99.90	70-130
15 Chloromethane	50.000	55.107	110.21	70-130
18 Butane	50.000	48.825	97.65	70-130
19 Vinyl Chloride	50.000	51.007	102.01	70-130
20 1,3-Butadiene	50.000	46.101	92.20	70-130
24 Bromomethane	50.000	50.727	101.45	70-130
30 Chloroethane	50.000	49.980	99.96	70-130
31 Isopentane	50.000	48.002	96.00	70-130
32 Vinyl Bromide	50.000	50.213	100.43	70-130
33 Freon 11	50.000	53.730	107.46	70-130
34 Dichlorofluoromet	50.000	52.696	105.39	70-130
35 Pentane	50.000	46.589	93.18	70-130
38 Ethyl Ether	50.000	49.833	99.67	70-130
39 Ethanol	58.000	42.365	73.04	70-130
42 Acrolein	58.000	53.162	91.66	70-130
43 Freon 113	50.000	51.360	102.72	70-130
44 1,1-Dichloroethen	50.000	48.521	97.04	70-130
47 Acetone	50.000	48.514	97.03	70-130
48 Carbon Disulfide	50.000	51.926	103.85	70-130
49 Iodomethane	50.000	57.897	115.79	70-130
52 2-Propanol	50.000	49.907	99.81	70-130
54 3-Chloropropene	50.000	47.314	94.63	70-130
57 Acetonitrile	50.000	46.405	92.81	70-130
59 Methylene Chlorid	50.000	48.293	96.59	70-130
62 tert-Butyl alcoho	50.000	46.689	93.38	70-130
63 Methyl tert-butyl	50.000	47.354	94.71	70-130
64 trans-1,2-Dichlor	50.000	45.105	90.21	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	41.384	82.77	70-130
67	Hexane	50.000	47.010	94.02	70-130
71	1,1-Dichloroethan	50.000	46.819	93.64	70-130
72	Isopropyl ether	50.000	45.496	90.99	70-130
73	Vinyl Acetate	50.000	48.437	96.87	70-130
79	Ethyl-tert-butyl	50.000	45.400	90.80	70-130
84	2,2-Dichloropropa	50.000	46.495	92.99	70-130
85	cis-1,2-Dichloroe	50.000	44.479	88.96	70-130
86	2-Butanone	50.000	46.404	92.81	70-130
87	Ethyl Acetate	50.000	45.901	91.80	70-130
89	Tetrahydrofuran	50.000	43.357	86.71	70-130
92	Chloroform	50.000	47.090	94.18	70-130
94	Cyclohexane	50.000	43.752	87.50	70-130
96	1,1,1-Trichloroet	50.000	44.937	89.87	70-130
99	1,1-Dichloroprope	50.000	50.074	100.15	70-130
97	Carbon Tetrachlor	50.000	49.386	98.77	70-130
101	2,2,4-Trimethylpe	50.000	44.378	88.76	70-130
102	Benzene	50.000	50.320	100.64	70-130
105	tert-Amyl methyl	50.000	48.352	96.70	70-130
106	1,2-Dichloroethan	50.000	51.162	102.32	70-130
107	Heptane	50.000	45.516	91.03	70-130
110	n-Butanol	50.000	48.403	96.81	70-130
111	Trichloroethene	50.000	48.784	97.57	70-130
118	Dibromomethane	50.000	54.707	109.41	70-130
127	Methylcyclohexane	50.000	44.283	88.57	70-130
114	1,2-Dichloropropa	50.000	39.920	79.84	70-130
116	Methyl Methacryla	50.000	49.171	98.34	70-130
117	1,4-Dioxane	50.000	48.678	97.36	70-130
122	Bromodichlorometh	50.000	47.599	95.20	70-130
126	cis-1,3-Dichlorop	50.000	46.934	93.87	70-130
131	4-Methyl-2-pentan	50.000	42.055	84.11	70-130
136	Octane	50.000	44.589	89.18	70-130
137	Toluene	50.000	47.092	94.18	70-130
139	trans-1,3-Dichlor	50.000	48.871	97.74	70-130
141	1,1,2-Trichloroet	50.000	48.582	97.16	70-130
142	Tetrachloroethene	50.000	51.733	103.47	70-130
143	2-Hexanone	50.000	47.214	94.43	70-130
144	1,3-Dichloropropa	50.000	44.426	88.85	70-130
146	Dibromochlorometh	50.000	52.552	105.10	70-130
148	1,2-Dibromoethane	50.000	50.386	100.77	70-130
151	1-Bromo-2-Chloroe	50.000	47.642	95.28	70-130
154	Chlorobenzene	50.000	48.937	97.87	70-130
155	Ethyl Benzene	50.000	50.074	100.15	70-130
156	Nonane	50.000	45.399	90.80	70-130
157	1,1,1,2-Tetrachlo	50.000	45.694	91.39	70-130
158	m,p-Xylene	50.000	49.756	99.51	70-130
164	o-Xylene	50.000	48.114	96.23	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	48.200	96.40	70-130
167 Bromoform	50.000	52.290	104.58	70-130
168 Cumene	50.000	48.621	97.24	70-130
169 Cyclohexanone	50.000	42.650	85.30	70-130
175 1,1,2,2-Tetrachlo	50.000	48.316	96.63	70-130
177 Bromobenzene	50.000	51.326	102.65	70-130
178 Propylbenzene	50.000	50.231	100.46	70-130
179 1,2,3-Trichloropr	50.000	50.545	101.09	70-130
181 trans-1,4-Dichlor	50.000	66.044	132.09*	70-130
182 Decane	50.000	46.548	93.10	70-130
183 4-Ethyltoluene	50.000	49.678	99.36	70-130
184 2-Chlorotoluene	50.000	51.190	102.38	70-130
185 1,3,5-Trimethylbe	50.000	49.658	99.32	70-130
188 alpha Methyl Styr	50.000	46.818	93.64	70-130
189 tert-Butylbenzene	50.000	50.724	101.45	70-130
190 1,2,4-Trimethylbe	50.000	50.835	101.67	70-130
192 sec-Butylbenzene	50.000	51.004	102.01	70-130
194 p-Cymene	50.000	51.308	102.62	70-130
195 1,3-Dichlorobenze	50.000	52.310	104.62	70-130
196 1,4-Dichlorobenze	50.000	51.781	103.56	70-130
199 alpha-Chlorotolue	50.000	47.756	95.51	70-130
201 Undecane	50.000	47.627	95.25	70-130
202 Butylbenzene	50.000	52.352	104.70	70-130
204 1,2-Dichlorobenze	50.000	51.406	102.81	70-130
206 1,2-Dibromo-3-chl	50.000	51.220	102.44	70-130
207 Dodecane	50.000	52.635	105.27	70-130
213 1,2,4-Trichlorobe	58.000	64.752	111.64	70-130
215 Hexachlorobutadie	58.000	66.218	114.17	70-130
216 Naphthalene	5.800	5.016	86.49	60-140
222 1,2,3-Trichlorobe	58.000	65.506	112.94	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.592	98.37	70-130
$ 134 Toluene-d8	25.000	24.173	96.69	70-130
$ 170 4-Bromofluorobenz	25.000	25.389	101.56	70-130

Data File: /chem/msd3.i/22JUL21.b/3072207.d

Page 1

Date : 22-JUL-2021 13:03

Client ID: LCS

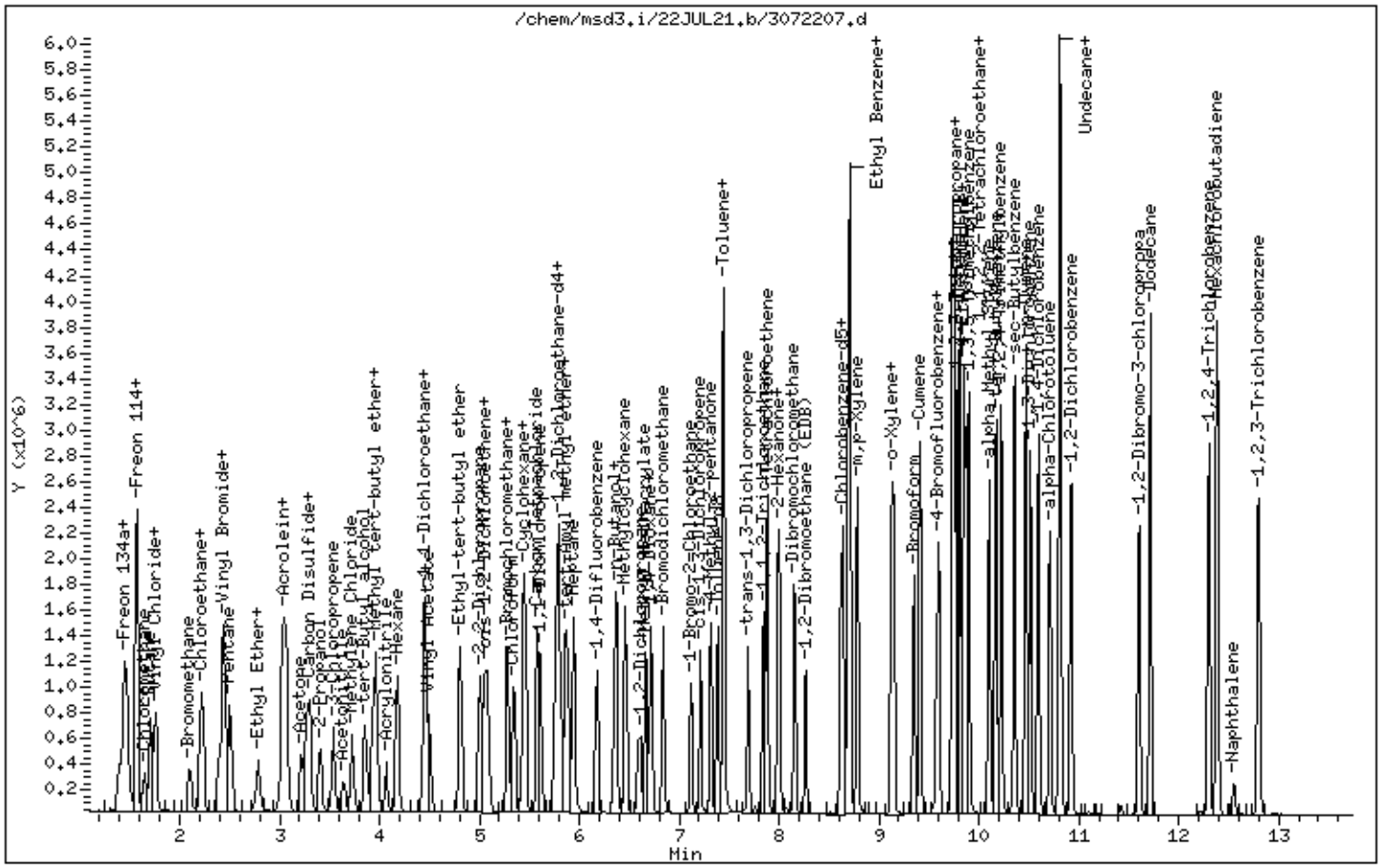
Instrument: msd3.i

Sample Info: 100mL 3018-2121A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCSD

Lab ID#: 2107241A-26BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072208**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:30 PM**	

Compound	%Recovery	Method Limits
Freon 12	104	70-130
Freon 114	107	70-130
Chloromethane	108	70-130
Vinyl Chloride	100	70-130
1,3-Butadiene	96	70-130
Bromomethane	101	70-130
Chloroethane	100	70-130
Freon 11	107	70-130
Ethanol	73	70-130
Freon 113	103	70-130
1,1-Dichloroethene	95	70-130
Acetone	97	70-130
2-Propanol	100	70-130
Carbon Disulfide	104	70-130
3-Chloropropene	94	70-130
Methylene Chloride	96	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	91	70-130
Hexane	95	70-130
1,1-Dichloroethane	95	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
cis-1,2-Dichloroethene	90	70-130
Tetrahydrofuran	87	70-130
Chloroform	94	70-130
1,1,1-Trichloroethane	91	70-130
Cyclohexane	89	70-130
Carbon Tetrachloride	100	70-130
2,2,4-Trimethylpentane	90	70-130
Benzene	99	70-130
1,2-Dichloroethane	101	70-130
Heptane	89	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	77	70-130
1,4-Dioxane	94	70-130
Bromodichloromethane	92	70-130
cis-1,3-Dichloropropene	92	70-130
4-Methyl-2-pentanone	84	70-130
Toluene	94	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	99	70-130
Tetrachloroethene	107	70-130
2-Hexanone	97	70-130

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Client Sample ID: LCSD

Lab ID#: 2107241A-26BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072208**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:30 PM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	107	70-130
1,2-Dibromoethane (EDB)	101	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	100	70-130
o-Xylene	98	70-130
Styrene	98	70-130
Bromoform	106	70-130
Cumene	97	70-130
1,1,2,2-Tetrachloroethane	98	70-130
Propylbenzene	100	70-130
4-Ethyltoluene	100	70-130
1,3,5-Trimethylbenzene	98	70-130
1,2,4-Trimethylbenzene	100	70-130
1,3-Dichlorobenzene	104	70-130
1,4-Dichlorobenzene	102	70-130
alpha-Chlorotoluene	97	70-130
1,2-Dichlorobenzene	103	70-130
1,2,4-Trichlorobenzene	117	70-130
Hexachlorobutadiene	119	70-130
Naphthalene	92	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	
Freon 134a	Not Spiked	
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
1,2-Dibromo-3-chloropropane	Not Spiked	
Dibromomethane	Not Spiked	
1,1-Difluoroethane	Not Spiked	
Isopropyl ether	Not Spiked	
Ethyl Acetate	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Hexachloroethane	Not Spiked	
Iodomethane	Not Spiked	
Propylene	96	60-140
1,1,1,2-Tetrachloroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
Vinyl Acetate	98	70-130
Vinyl Bromide	Not Spiked	

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2107241A-26BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072208**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/22/21 01:30 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072208.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 22-JUL-2021 13:30
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 14:16 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	300841	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	237012			48.46- 108.46	78.78
5.270	5.284 (1.000)	49	420208			120.39- 180.39	139.68
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	1028130	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	154036			0.00- 45.52	14.98
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	902259	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	472390			25.46- 85.46	52.36
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	402824	24.3316	24.332	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	213201			21.66- 81.66	52.93
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	1011715	23.8911	23.891	80.00- 120.00	100.00
7.387	7.387 (1.198)	70	111105			0.00- 41.47	10.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	668538			36.47- 96.47	66.08
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	599403	25.1163	25.116	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	689453			93.06- 153.06	115.02
9.601	9.601 (1.115)	176	556479			62.87- 122.87	92.84
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	409073	57.1459	57.146	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	322249			51.82- 111.82	78.78
1.493	1.479 (0.282)	51	888172			194.91- 254.91	217.12
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	350503	48.2341	48.234	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	228018			35.61- 95.61	65.05
1.437	1.423 (0.272)	39	260755			42.66- 102.66	74.39
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	244120	51.5365	51.536	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	888172			321.86- 381.86	363.83
1.451	1.451 (0.275)	47	181803			45.34- 105.34	74.47
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	1087040	51.8700	51.870	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	350542			2.63- 62.63	32.25
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	112448	48.8212	48.821	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	888172			719.76- 779.76	789.85
10 Freon 114					CAS #: 76-14-2		
1.576	1.562 (0.298)	135	828525	53.3560	53.356	80.00- 120.00	100.00
1.576	1.562 (0.298)	137	266400			2.12- 62.12	32.15
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	806940	49.4067	49.407	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	263790			2.44- 62.44	32.69
1.576	1.576 (0.298)	58	28011			0.00- 33.26	3.47
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	470125	53.9731	53.973	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	153512			2.41- 62.41	32.65
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	99559	48.3992	48.399	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.702	1.702 (0.322)	43	715828			727.41- 787.41	719.00
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	468170	50.2277	50.228	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	142093			1.28- 61.28	30.35
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	408294	47.7966	47.797	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	373206			69.23- 129.23	91.41
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	372892	50.5839	50.584	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	349812			62.78- 122.78	93.81
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	220074	50.2979	50.298	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	69454			1.44- 61.44	31.56
2.206	2.206 (0.417)	49	70767			4.12- 64.12	32.16
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	538505	48.1287	48.129	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	386605			38.82- 98.82	71.79
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	403590	50.3547	50.355	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	368463			63.14- 123.14	91.30
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	1190242	53.6782	53.678	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	773441			35.12- 95.12	64.98
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	939352	52.9940	52.994	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	286425			0.74- 60.74	30.49
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	824974	46.2794	46.279	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	137015			0.00- 45.97	16.61
2.500	2.500 (0.473)	72	69782			0.00- 38.10	8.46
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.794 (0.529)	74	198284	49.6117	49.612	80.00- 120.00	100.00
2.780	2.794 (0.526)	59	342197			147.68- 207.68	172.58
2.780	2.780 (0.526)	45	448041			206.40- 266.40	225.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	75683	42.1918	42.192	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	448041			523.01- 583.01	591.99
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	159841	53.6965	53.696	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	222023			110.33- 170.33	138.90
43 Freon 113					CAS #: 76-13-1		
3.032	3.046 (0.574)	151	778739	51.3747	51.375	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	500631			33.72- 93.72	64.29
3.032	3.032 (0.574)	101	940527			89.67- 149.67	120.78
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	435422	47.6911	47.691	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	277237			33.39- 93.39	63.67
3.074	3.074 (0.582)	61	855128			163.82- 223.82	196.39
47 Acetone					CAS #: 67-64-1		
3.214	3.213 (0.608)	58	244943	48.5569	48.557	80.00- 120.00	100.00
3.214	3.213 (0.608)	43	808504			299.66- 359.66	330.08
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.624)	76	1176164	51.7778	51.778	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.619)	142	1134703	57.7676	57.768	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	529068			14.58- 74.58	46.63
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	912113	50.2770	50.277	80.00- 120.00	100.00
3.409	3.409 (0.645)	43	180763			0.00- 48.61	19.82
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	183719	46.9769	46.977	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	632669			338.06- 398.06	344.37
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	368383	46.3759	46.376	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	195015			21.81- 81.81	52.94
3.633	3.633 (0.688)	38	45411			0.00- 41.86	12.33
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	582042	48.2114	48.211	80.00- 120.00	100.00
3.731	3.731 (0.706)	84	363360			30.77- 90.77	62.43
3.717	3.731 (0.703)	51	179950			1.39- 61.39	30.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	1074951	47.2068	47.207	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	237758			0.00- 51.05	22.12
3.857	3.857 (0.730)	57	113125			0.00- 41.68	10.52
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	1178168	47.9365	47.936	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	342377			0.00- 58.86	29.06
3.941	3.941 (0.746)	41	323428			0.00- 57.27	27.45
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	280011	45.5737	45.574	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	744589			244.59- 304.59	265.91
3.969	3.969 (0.751)	96	442250			129.84- 189.84	157.94
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	312267	42.3480	42.348	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	362229			88.50- 148.50	116.00
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	791714	47.5231	47.523	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	483215			32.99- 92.99	61.03
4.179	4.179 (0.791)	86	99435			0.00- 42.56	12.56
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	812075	47.3989	47.399	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	246584			0.76- 60.76	30.36
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1599052	45.4816	45.482	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	358699			0.00- 51.37	22.43
4.445	4.445 (0.841)	59	183199			0.00- 41.09	11.46
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	103765	49.2622	49.262	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1390309			1391.63-1451.63	1339.86
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1571945	46.3124	46.312	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	522673			3.22- 63.22	33.25
4.809	4.809 (0.910)	41	290844			0.00- 48.12	18.50
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.004	5.004 (0.947)	77	740561	46.3987	46.399	80.00- 120.00	100.00
5.004	5.004 (0.947)	79	239693			2.00- 62.00	32.37
5.004	5.004 (0.947)	97	176167			0.00- 53.36	23.79

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.046	5.046 (0.955)	98	274304	45.0369	45.037	80.00- 120.00	100.00
5.046	5.046 (0.955)	96	436650			127.22- 187.22	159.18
5.046	5.046 (0.955)	61	833341			283.85- 343.85	303.80
86 2-Butanone					CAS #: 78-93-3		
5.074	5.074 (0.960)	72	200221	47.0641	47.064	80.00- 120.00	100.00
5.074	5.074 (0.960)	43	2053973			1055.75-1115.75	1025.85
5.060	5.074 (0.958)	57	77856			10.59- 70.59	38.89
87 Ethyl Acetate					CAS #: 141-78-6		
5.088	5.088 (0.963)	45	164426	46.8828	46.883	80.00- 120.00	100.00
5.046	5.046 (0.955)	61	833341			450.31- 510.31	506.82
5.088	5.088 (0.963)	70	99939			30.42- 90.42	60.78
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	521596	43.4795	43.479	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	180651			2.92- 62.92	34.63
5.270	5.270 (0.997)	72	185326			3.54- 63.54	35.53
92 Chloroform					CAS #: 67-66-3		
5.340	5.354 (1.011)	83	883888	46.8609	46.861	80.00- 120.00	100.00
5.340	5.354 (1.011)	85	574880			34.71- 94.71	65.04
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	530933	44.5331	44.533	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	755487			120.40- 180.40	142.29
5.438	5.438 (1.029)	41	423668			54.20- 114.20	79.80
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.032)	97	961543	45.3530	45.353	80.00- 120.00	100.00
5.452	5.466 (1.032)	99	616145			33.76- 93.76	64.08
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	972032	49.7796	49.780	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	1009123			73.68- 133.68	103.82
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.620 (0.909)	110	231169	49.4066	49.406	80.00- 120.00	100.00
5.606	5.620 (0.909)	75	600849			231.09- 291.09	259.92
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2336678	44.8514	44.851	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	730853			1.12- 61.12	31.28
5.774	5.774 (1.093)	41	639884			0.00- 57.49	27.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	1156713	49.3022	49.302	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	274237			0.00- 53.80	23.71
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	300948	48.1074	48.107	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	1185347			365.20- 425.20	393.87
5.858	5.858 (0.950)	55	355900			91.31- 151.31	118.26
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	680674	50.3921	50.392	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	208422			1.20- 61.20	30.62
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	410112	44.3794	44.379	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	814776			179.02- 239.02	198.67
5.942	5.942 (0.964)	57	472970			84.85- 144.85	115.33
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.030)	56	365764	48.6382	48.638	80.00- 120.00	100.00
6.348	6.348 (1.030)	41	248769			40.21- 100.21	68.01
6.348	6.348 (1.030)	43	194302			25.00- 85.00	53.12
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.376 (1.032)	95	574300	48.7928	48.793	80.00- 120.00	100.00
6.362	6.376 (1.032)	130	608074			74.96- 134.96	105.88
6.362	6.376 (1.032)	97	365421			34.80- 94.80	63.63
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.621 (1.068)	63	210079	38.6289	38.629	80.00- 120.00	100.00
6.586	6.621 (1.068)	62	153873			52.03- 112.03	73.25
6.586	6.621 (1.068)	41	199259			79.97- 139.97	94.85
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.671 (0.774)	69	512894	59.0669	59.067	80.00- 120.00	100.00
6.664	6.671 (0.774)	41	644596			134.02- 194.02	125.68
6.664	6.671 (0.774)	100	165952			9.54- 69.54	32.36
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.699 (1.087)	88	278810	46.9118	46.912	80.00- 120.00	100.00
6.699	6.699 (1.087)	58	226775			55.80- 115.80	81.34
6.699	6.699 (1.087)	57	83368			8.68- 68.68	29.90
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	521133	53.8893	53.889	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	506367			67.27- 127.27	97.17

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.714	6.721 (0.780)	95	418564			50.92- 110.92	80.32
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.843 (1.109)	83	906127	45.9538	45.954	80.00- 120.00	100.00
6.836	6.843 (1.109)	85	587535			34.31- 94.31	64.84
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.215 (1.169)	75	676869	46.1846	46.185	80.00- 120.00	100.00
7.208	7.215 (1.169)	77	210727			1.42- 61.42	31.13
7.208	7.215 (1.169)	39	455003			38.56- 98.56	67.22
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	696665	44.2626	44.263	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	322659			15.60- 75.60	46.31
6.460	6.460 (1.048)	55	677817			78.53- 138.53	97.29
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	417375	41.8831	41.883	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	1067837			231.30- 291.30	255.85
7.316	7.316 (1.186)	85	160854			8.94- 68.94	38.54
137 Toluene					CAS #: 108-88-3		
7.437	7.444 (1.206)	91	1477111	46.9212	46.921	80.00- 120.00	100.00
7.437	7.444 (1.206)	92	852383			28.30- 88.30	57.71
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.207)	57	461282	44.0414	44.041	80.00- 120.00	100.00
7.444	7.452 (1.207)	85	459454			67.11- 127.11	99.60
7.444	7.444 (1.207)	43	1065686			214.21- 274.21	231.03
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.695 (0.893)	75	669641	50.3915	50.391	80.00- 120.00	100.00
7.688	7.695 (0.893)	77	210202			2.15- 62.15	31.39
7.688	7.688 (0.893)	39	421179			36.09- 96.09	62.90
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	505432	49.4558	49.456	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	318528			31.62- 91.62	63.02
7.846	7.846 (0.911)	83	438559			56.35- 116.35	86.77
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.915)	166	754721	53.3941	53.394	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	582508			48.71- 108.71	77.18
7.874	7.881 (0.914)	131	564150			46.55- 106.55	74.75

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	570593	48.6067	48.607	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	1046262			157.91- 217.91	183.36
8.003	8.010 (0.929)	100	105468			0.00- 47.86	18.48
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	674681	44.9193	44.919	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	721325			82.96- 142.96	106.91
7.989	7.989 (1.296)	78	218000			2.55- 62.55	32.31
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.161 (0.947)	129	1035094	53.3875	53.387	80.00- 120.00	100.00
8.154	8.161 (0.947)	127	804096			47.77- 107.77	77.68
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.261	8.268 (0.959)	107	803950	50.6556	50.656	80.00- 120.00	100.00
8.261	8.268 (0.959)	109	757051			64.60- 124.60	94.17
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.122 (1.154)	63	880122	46.2524	46.252	80.00- 120.00	100.00
7.115	7.122 (1.154)	65	272913			0.95- 60.95	31.01
7.115	7.122 (1.154)	144	95223			0.00- 40.45	10.82
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	1217912	49.3888	49.389	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	388666			2.13- 62.13	31.91
8.641	8.641 (1.003)	77	638818			26.35- 86.35	52.45
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.691 (1.008)	106	618813	50.1842	50.184	80.00- 120.00	100.00
8.684	8.691 (1.008)	91	1927865			282.48- 342.48	311.54
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	1088661	45.5502	45.550	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	1022392			59.52- 119.52	93.91
8.705	8.712 (1.011)	85	349668			0.00- 59.76	32.12
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.012)	131	615750	45.3706	45.371	80.00- 120.00	100.00
8.712	8.712 (1.012)	117	419629			38.22- 98.22	68.15
8.712	8.712 (1.012)	95	228417			7.54- 67.54	37.10
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	763420	49.7648	49.765	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	1517420			171.36- 231.36	198.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
9.121	9.128 (1.059)	106	712988	48.9577	48.958	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	1495768			179.99- 239.99	209.79
165 Styrene					CAS #: 100-42-5		
9.142	9.149 (1.062)	104	1237252	49.0359	49.036	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	591266			19.09- 79.09	47.79
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	971376	52.8369	52.837	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	500305			21.45- 81.45	51.50
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	2236983	48.5833	48.583	80.00- 120.00	100.00
9.407	9.414 (1.092)	120	613692			0.00- 56.99	27.43
9.407	9.414 (1.092)	51	255341			0.00- 41.77	11.41
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	629779	43.4630	43.463	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	255658			9.22- 69.22	40.60
9.579	9.579 (1.112)	42	441881			42.60- 102.60	70.16
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	1116642	48.9140	48.914	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	719120			34.35- 94.35	64.40
177 Bromobenzene					CAS #: 108-86-1		
9.729	9.737 (1.130)	156	740110	51.7068	51.707	80.00- 120.00	100.00
9.729	9.737 (1.130)	158	725863			67.29- 127.29	98.08
9.729	9.729 (1.130)	77	1143586			132.41- 192.41	154.52
178 Propylbenzene					CAS #: 103-65-1		
9.751	9.758 (1.132)	91	2695844	50.1785	50.178	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	638841			0.00- 53.77	23.70
9.758	9.758 (1.133)	105	103341			0.00- 33.81	3.83
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	345693	50.2701	50.270	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	1151995			285.00- 345.00	333.24
9.787	9.787 (1.136)	61	289910			54.06- 114.06	83.86
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	355450	65.3220	65.322	80.00- 120.00	100.00(R)
9.787	9.787 (1.136)	89	180845			21.19- 81.19	50.88
9.787	9.787 (1.136)	75	1151995			372.45- 432.45	324.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	1316843	47.4031	47.403	80.00- 120.00	100.00
9.808	9.815 (1.139)	71	447106			4.13- 64.13	33.95
9.808	9.815 (1.139)	142	67601			0.00- 34.73	5.13
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	695988	49.9780	49.978	80.00- 120.00	100.00
9.851	9.851 (1.144)	105	2264735			296.79- 356.79	325.40
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	574082	50.7352	50.735	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	2036922			336.29- 396.29	354.81
9.873	9.873 (1.146)	65	383433			38.83- 98.83	66.79
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.150)	120	959752	49.0681	49.068	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	1957982			176.40- 236.40	204.01
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.109 (1.173)	118	944898	47.1688	47.169	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	534949			26.64- 86.64	56.61
189 tert-Butylbenzene					CAS #: 98-06-6		
10.166	10.174 (1.180)	119	1810055	50.2955	50.295	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	451505			0.00- 54.82	24.94
10.166	10.174 (1.180)	91	1175787			36.92- 96.92	64.96
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	1938626	50.2637	50.264	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	904743			16.58- 76.58	46.67
192 sec-Butylbenzene					CAS #: 135-98-8		
10.353	10.360 (1.202)	134	592963	51.0112	51.011	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	2798136			451.53- 511.53	471.89
10.353	10.360 (1.202)	91	439881			46.48- 106.48	74.18
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	2486396	51.0768	51.077	80.00- 120.00	100.00
10.467	10.474 (1.215)	134	665039			0.00- 56.79	26.75
10.467	10.467 (1.215)	91	579109			0.00- 54.04	23.29
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.221)	146	1367166	52.1745	52.174	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	872763			33.53- 93.53	63.84
10.510	10.517 (1.220)	111	543090			11.05- 71.05	39.72

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	1376917	51.0142	51.014	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	882504			33.47- 93.47	64.09
10.596	10.596 (1.230)	111	530035			9.65- 69.65	38.49
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	1800140	48.5076	48.508	80.00- 120.00	100.00
10.711	10.711 (1.244)	126	402348			0.00- 52.04	22.35
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	1542543	47.1216	47.122	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	1307521			55.86- 115.86	84.76
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	651082	51.5837	51.584	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	2316244			331.99- 391.99	355.75
10.818	10.818 (1.256)	92	1197146			161.01- 221.01	183.87
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.919	10.926 (1.268)	146	1303047	51.4599	51.460	80.00- 120.00	100.00
10.919	10.926 (1.268)	148	824431			33.23- 93.23	63.27
10.919	10.926 (1.268)	111	533699			12.36- 72.36	40.96
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	768447	52.3378	52.338	80.00- 120.00	100.00
11.599	11.606 (1.347)	75	632500			58.96- 118.96	82.31
11.599	11.606 (1.347)	155	591961			47.82- 107.82	77.03
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	1599601	57.7873	57.787	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	1262436			50.85- 110.85	78.92
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	1219729	67.8181	67.818	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	1168042			65.40- 125.40	95.76
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	938033	69.0452	69.045	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	601549			33.70- 93.70	64.13
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.457)	128	291826	5.31365	5.314	80.00- 120.00	100.00
12.552	12.559 (1.457)	127	38868			0.00- 43.10	13.32
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.795	12.810 (1.486)	180	1154052	70.1217	70.122	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
12.795	12.810 (1.486)	182	1104903			65.67- 125.67	95.74
12.795	12.810 (1.486)	145	405930			6.02- 66.02	35.17

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072208.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	300841	25.04
108 1,4-Difluorobenze	805743	483446	1128040	1028130	27.60
153 Chlorobenzene-d5	719477	431686	1007268	902259	25.40

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.23
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	57.146	114.29	70-130
5 Propylene	50.000	48.234	96.47	70-130
7 1,1-Difluoroethan	50.000	51.536	103.07	70-130
8 Freon 12	50.000	51.870	103.74	70-130
9 Chlorodifluoromet	50.000	48.821	97.64	70-130
10 Freon 114	50.000	53.356	106.71	70-130
12 Isobutane	50.000	49.407	98.81	70-130
15 Chloromethane	50.000	53.973	107.95	70-130
18 Butane	50.000	48.399	96.80	70-130
19 Vinyl Chloride	50.000	50.228	100.46	70-130
20 1,3-Butadiene	50.000	47.797	95.59	70-130
24 Bromomethane	50.000	50.584	101.17	70-130
30 Chloroethane	50.000	50.298	100.60	70-130
31 Isopentane	50.000	48.129	96.26	70-130
32 Vinyl Bromide	50.000	50.355	100.71	70-130
33 Freon 11	50.000	53.678	107.36	70-130
34 Dichlorofluoromet	50.000	52.994	105.99	70-130
35 Pentane	50.000	46.279	92.56	70-130
38 Ethyl Ether	50.000	49.612	99.22	70-130
39 Ethanol	58.000	42.192	72.74	70-130
42 Acrolein	58.000	53.696	92.58	70-130
43 Freon 113	50.000	51.375	102.75	70-130
44 1,1-Dichloroethen	50.000	47.691	95.38	70-130
47 Acetone	50.000	48.557	97.11	70-130
48 Carbon Disulfide	50.000	51.778	103.56	70-130
49 Iodomethane	50.000	57.768	115.54	70-130
52 2-Propanol	50.000	50.277	100.55	70-130
54 3-Chloropropene	50.000	46.977	93.95	70-130
57 Acetonitrile	50.000	46.376	92.75	70-130
59 Methylene Chlorid	50.000	48.211	96.42	70-130
62 tert-Butyl alcoho	50.000	47.207	94.41	70-130
63 Methyl tert-butyl	50.000	47.936	95.87	70-130
64 trans-1,2-Dichlor	50.000	45.574	91.15	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	42.348	84.70	70-130
67	Hexane	50.000	47.523	95.05	70-130
71	1,1-Dichloroethan	50.000	47.399	94.80	70-130
72	Isopropyl ether	50.000	45.482	90.96	70-130
73	Vinyl Acetate	50.000	49.262	98.52	70-130
79	Ethyl-tert-butyl	50.000	46.312	92.62	70-130
84	2,2-Dichloropropa	50.000	46.399	92.80	70-130
85	cis-1,2-Dichloroe	50.000	45.037	90.07	70-130
86	2-Butanone	50.000	47.064	94.13	70-130
87	Ethyl Acetate	50.000	46.883	93.77	70-130
89	Tetrahydrofuran	50.000	43.479	86.96	70-130
92	Chloroform	50.000	46.861	93.72	70-130
94	Cyclohexane	50.000	44.533	89.07	70-130
96	1,1,1-Trichloroet	50.000	45.353	90.71	70-130
99	1,1-Dichloroprope	50.000	49.406	98.81	70-130
97	Carbon Tetrachlor	50.000	49.780	99.56	70-130
101	2,2,4-Trimethylpe	50.000	44.851	89.70	70-130
102	Benzene	50.000	49.302	98.60	70-130
105	tert-Amyl methyl	50.000	48.107	96.21	70-130
106	1,2-Dichloroethan	50.000	50.392	100.78	70-130
107	Heptane	50.000	44.379	88.76	70-130
110	n-Butanol	50.000	48.638	97.28	70-130
111	Trichloroethene	50.000	48.793	97.59	70-130
118	Dibromomethane	50.000	53.889	107.78	70-130
127	Methylcyclohexane	50.000	44.263	88.53	70-130
114	1,2-Dichloropropa	50.000	38.629	77.26	70-130
116	Methyl Methacryla	50.000	59.067	118.13	70-130
117	1,4-Dioxane	50.000	46.912	93.82	70-130
122	Bromodichlorometh	50.000	45.954	91.91	70-130
126	cis-1,3-Dichlorop	50.000	46.185	92.37	70-130
131	4-Methyl-2-pentan	50.000	41.883	83.77	70-130
136	Octane	50.000	44.041	88.08	70-130
137	Toluene	50.000	46.921	93.84	70-130
139	trans-1,3-Dichlor	50.000	50.391	100.78	70-130
141	1,1,2-Trichloroet	50.000	49.456	98.91	70-130
142	Tetrachloroethene	50.000	53.394	106.79	70-130
143	2-Hexanone	50.000	48.607	97.21	70-130
144	1,3-Dichloropropa	50.000	44.919	89.84	70-130
146	Dibromochlorometh	50.000	53.387	106.77	70-130
148	1,2-Dibromoethane	50.000	50.656	101.31	70-130
151	1-Bromo-2-Chloroe	50.000	46.252	92.50	70-130
154	Chlorobenzene	50.000	49.389	98.78	70-130
155	Ethyl Benzene	50.000	50.184	100.37	70-130
156	Nonane	50.000	45.550	91.10	70-130
157	1,1,1,2-Tetrachlo	50.000	45.371	90.74	70-130
158	m,p-Xylene	50.000	49.765	99.53	70-130
164	o-Xylene	50.000	48.958	97.92	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	49.036	98.07	70-130
167 Bromoform	50.000	52.837	105.67	70-130
168 Cumene	50.000	48.583	97.17	70-130
169 Cyclohexanone	50.000	43.463	86.93	70-130
175 1,1,2,2-Tetrachlo	50.000	48.914	97.83	70-130
177 Bromobenzene	50.000	51.707	103.41	70-130
178 Propylbenzene	50.000	50.178	100.36	70-130
179 1,2,3-Trichloropr	50.000	50.270	100.54	70-130
181 trans-1,4-Dichlor	50.000	65.322	130.64*	70-130
182 Decane	50.000	47.403	94.81	70-130
183 4-Ethyltoluene	50.000	49.978	99.96	70-130
184 2-Chlorotoluene	50.000	50.735	101.47	70-130
185 1,3,5-Trimethylbe	50.000	49.068	98.14	70-130
188 alpha Methyl Styr	50.000	47.169	94.34	70-130
189 tert-Butylbenzene	50.000	50.295	100.59	70-130
190 1,2,4-Trimethylbe	50.000	50.264	100.53	70-130
192 sec-Butylbenzene	50.000	51.011	102.02	70-130
194 p-Cymene	50.000	51.077	102.15	70-130
195 1,3-Dichlorobenze	50.000	52.174	104.35	70-130
196 1,4-Dichlorobenze	50.000	51.014	102.03	70-130
199 alpha-Chlorotolue	50.000	48.508	97.02	70-130
201 Undecane	50.000	47.122	94.24	70-130
202 Butylbenzene	50.000	51.584	103.17	70-130
204 1,2-Dichlorobenze	50.000	51.460	102.92	70-130
206 1,2-Dibromo-3-chl	50.000	52.338	104.68	70-130
207 Dodecane	50.000	57.787	115.57	70-130
213 1,2,4-Trichlorobe	58.000	67.818	116.93	70-130
215 Hexachlorobutadie	58.000	69.045	119.04	70-130
216 Naphthalene	5.800	5.314	91.61	60-140
222 1,2,3-Trichlorobe	58.000	70.122	120.90	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.332	97.33	70-130
$ 134 Toluene-d8	25.000	23.891	95.56	70-130
$ 170 4-Bromofluorobenz	25.000	25.116	100.47	70-130

Data File: /chem/msd3.i/22JUL21.b/3072208.d

Page 1

Date : 22-JUL-2021 13:30

Client ID: LCSD

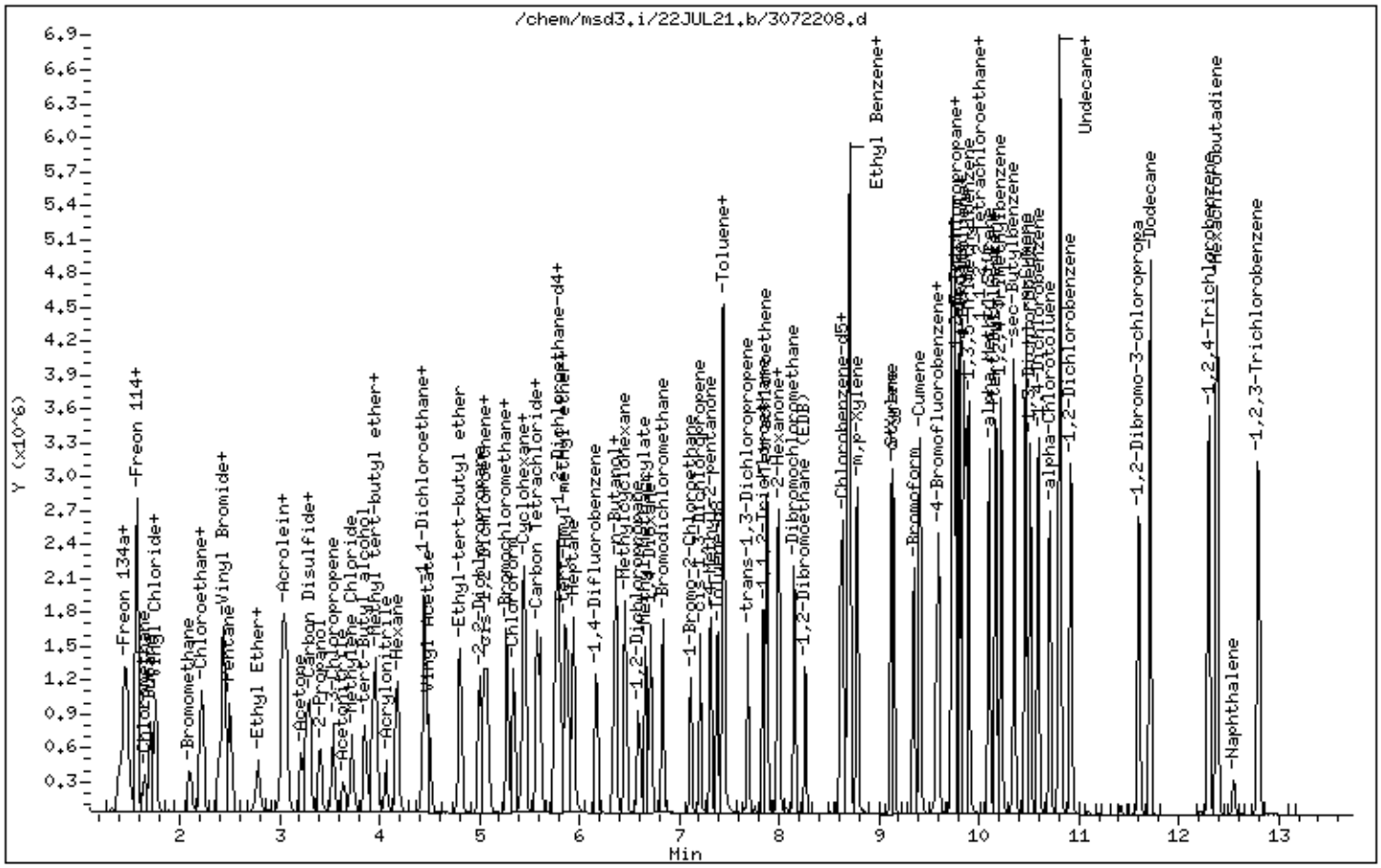
Instrument: msd3.i

Sample Info: 100mL 3018-2121A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



MSD3

BFB Tune Verification: (233344/250496) * 100 = 93.15%						Method TO-15/TO-14							
	3234-42	**Exp. Date:**	**9/22/2021**			SOP# 6							
BCM	**240594**			Surrogate # 3234-42		Vacuum:	NA						
1,4-DFB	**805743**			CCV	3018-2071	Exp Date:	9/22/2021			Exp Date			
CB-d5	**719477**			CCV SP 1 #	NA	Exp Date:	9/2/2021	LCS	3018-2121A	Exp Date	9/22/2021		
				CCV SP 2 #	NA	Exp Date:	NA	LCS Sp #1	NA	Exp Date	NA		
				CCV SP 3#	NA	Exp Date:	NA	LCS Sp #2	NA	Exp Date	NA		
Verified CCV vs. ICAL midpoint (-40%): LD				CCV SP 4#	NA	Exp Date:	NA	LCS Sp #3	NA	Exp Date	NA		
Method: 321q0622a.m													

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init.	Date Analyzed	Time	Review Init	Comments
√	3072205	BFB Tune Check	3234-42	1	36ng	200mL	1.00	LD	LD	7/22/21	1153	LD	Exp. 9/22/21;
√	3072206	CCV	3018-2071	13	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/22/21	1228	LD	Exp. 9/2/21; 0 out
√	3072207	LCS	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/22/21	1303	LD	Exp. 9/22/21; 1 out AT-20
√	3072208	LCSD	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/22/21	1330	LD	Exp. 9/22/21; RPD ok
√	3072209	CCVsp	3018-2013	11	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/22/21	1358	LD	Exp. 8/04/21; 0 out
√	3072210	TPHg Calib	3234-26	12	500ppbv (1250ppbv)	80mL	1.00	LD	LD	7/22/21	1425	LD	Exp. 9/3/21;
√	3072211	Lab Blank	34353	12	Humid	200mL	1.00	LD	LD	7/22/21	1515	LD	leg validation
X	3072212	2107369-01A	1L3934	11	5.1 Hg->9.9 psi	200mL	2.02	mb	LD	7/22/21	1627	mb	IS out
√	3072213	2107370-01A	N3435	12	4.9 Hg->9.8 psi	200mL	1.99	mb	LD	7/22/21	1656	mb	
√	3072214	2107241A-04A	N3130	1	8 Hg->10 psi	200mL	2.29	mb	LD	7/22/21	1726	mb	
√	3072215	2107241A-05A	1L3929	2	7.1 Hg->10 psi	200mL	2.20	mb	LD	7/22/21	1755	mb	
√	3072216	2107241A-06A	N1941	3	6.3 Hg->10 psi	200mL	2.13	mb	LD	7/22/21	1824	mb	
√	3072217	2107241A-07A	1L1600	4	7.8 Hg->10 psi	200mL	2.27	mb	LD	7/22/21	1854	mb	
√	3072218	2107241A-08A	O1021	5	8 Hg->10 psi	200mL	2.29	mb	LD	7/22/21	1923	mb	
√	3072219	2107241A-09A	S1081	6	6.9 Hg->10 psi	200mL	2.18	mb	LD	7/22/21	1952	mb	
√	3072220	2107369-01A	1L3934	11	5.1 Hg->9.9 psi	200mL	2.02	mb	mb	7/22/21	2037	mb	
√	3072221	2107241-10A	N1944	1	6.9 Hg->9.9 psi	200mL	2.17	mjs	mb	7/22/21	2231	mjs	
√	3072222	2107241-11A	S1315	2	7.1 Hg->9.8 psi	200mL	2.18	mjs	mb	7/22/21	2300	mjs	
√	3072223	2107241-12A	F1914	3	6.1 Hg->9.8 psi	200mL	2.09	mjs	mb	7/22/21	2329	mjs	
√	3072224	2107241-13A	N2662	4	6.5 Hg->9.8 psi	200mL	2.13	mjs	mb	7/23/21	2359	mjs	
√	3072225	2107364-01A	O0253	5	6.0 Hg->10 psi	200mL	2.10	mjs	mb	7/23/21	0028	mjs	
√	3072226	2107364-02A	N3466	6	4.0 Hg->10 psi	200mL	1.94	mjs	mb	7/23/21	0057	mjs	
√	3072227	2107364-03A	N5626	7	4.5 Hg->10 psi	200mL	1.98	mjs	mb	7/23/21	0126	mjs	
√	3072228	2107364-04A	N5531	8	5.0 Hg->10 psi	200mL	2.02	mjs	mb	7/23/21	0155	mjs	
√	3072229	2107364-05A	O0869	9	4.5 Hg->10 psi	200mL	1.98	mjs	mb	7/23/21	0225	mjs	
√	3072230	2107378-01A	N2011	10	7.0 Hg->10 psi	200mL	2.19	mjs	mb	7/23/21	0254	mjs	
√	3072231	2107378-02A	N2579	11	5.5 Hg->10 psi	200mL	2.06	mjs	mb	7/23/21	0323	mjs	
√	3072232	2107378-03A	N3849	12	6.5 Hg->10 psi	200mL	2.14	mjs	mb	7/23/21	0352	mjs	

mjb 07/23/21

MSDP

								Method TO-15/TO-14					
	BFB Verification of 176/174 ratio: (125880/130984) * 100 = 96.10%							SOP# 6					
		3234-10	Exp. Date:		8/17/21			Vacuum:	NA				
	BCM	159,252						Please check all standards					
	1,4-DFB	573,285				Surr.# 3234-10		Exp. Date:	8/17/21	Surrogate# NA		Exp. Date:	NA
	CB-d5	571,549				CCV: 3018-2125		Exp. Date:	9/28/21	LCS: 3018-2122A		Exp. Date:	9/23/21
						CCV sp1#		Exp. Date:		LCS sp1 #		Exp. Date:	
						CCV sp2#		Exp. Date:		LCS sp2 #		Exp. Date:	
	Verified CCV vs ICAL mid-point(-40%): LD					CCV sp3#		Exp. Date:		LCS sp3 #		Exp. Date:	
	Method: p21q0519a.m												

	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	mL	DF	Verify Load	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P072201	BFB Tune Check	3234-10	1	36ng	200mL	1.00	LD	LD	7/22/2021	0951	LD	Exp. 8/17/21.
√	P072202	CCV	3018-2125	13	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/22/2021	1040	LD	Exp. 9/28/21. 0 out
√	P072203	LCS	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/22/2021	1109	LD	Exp. 9/23/21. 1 out AT-20
√	P072204	LCSD	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/22/2021	1138	LD	Exp. 9/23/21. RPD ok
√	P072205	CCVsp	3018-2127	11	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/22/2021	1206	LD	Exp. 9/26/21; 0 out
√	P072206	TPHg Calib	3234-27	12	500ppbv (1250ppbv)	80mL	1.00	LD	LD	7/22/2021	1235	LD	Exp. 9/3/21.
√	P072207	Lab Blank	35157	12	Humid	200mL	1.00	LD	LD	7/22/2021	1323	LD	leg validation
√	P072208	2107444B-02A	1L1580	1	6.3 Hg->10 psi	200mL	2.13	DF	LD	7/22/2021	1450	DF	
√	P072209	2107444B-03A	O0700	2	1.8 Hg->9.6 psi	200mL	1.76	DF	LD	7/22/2021	1519	DF	
√	P072210	2107354-01A	N3074	3	7.8 Hg->10 psi	200mL	2.27	DF	LD	7/22/2021	1549	DF	
√	P072211	2107354-02A	A9761	4	7.8 Hg->10 psi	200mL	2.27	DF	LD	7/22/2021	1618	DF	
√	P072212	2107354-03A	N1933	5	6.3 Hg->10 psi	200mL	2.13	DF	LD	7/22/2021	1647	DF	
√	P072213	2107354-04A	S1467	6	8.4 Hg->9.9 psi	200mL	2.32	DF	LD	7/22/2021	1717	DF	
√	P072214	2107354-05A	1L1915	7	8.4 Hg->10 psi	200mL	2.33	DF	LD	7/22/2021	1746	DF	
√	P072215	2107241-01A	N3379	8	9.6 Hg->10 psi	200mL	2.47	DF	LD	7/22/2021	1815	DF	
√	P072216	2107241-02A	N1999	9	5.9 Hg->10 psi	160mL	2.61	DF	LD	7/22/2021	1845	DF	"E" flag chloro difluro < 400 dil NTC
√	P072217	2107241-03A	B2201	10	7.6 Hg->9.9 psi	200mL	2.24	DF	LD	7/22/2021	1915	DF	
√	P072218	2107241-14A	O0251	1	5.3 Hg->9.9 psi	200mL	2.03	mjs	DF	7/22/2021	2239	mjs	
√	P072219	2107241-15A	N3844	2	7.1 Hg->10 psi	200mL	2.20	mjs	DF	7/22/2021	2308	mjs	
√	P072220	2107241-16A	N5507	3	6.1 Hg->10 psi	200mL	2.11	mjs	DF	7/22/2021	2337	mjs	
X	P072221	2107241-17A	S0633	4	6.3 Hg->9.9 psi	100mL	4.24	mjs	DF	7/23/2021	0006	mjs	overdilute. rr@200ml
√	P072222	2107241-18A	N3815	5	7.1 Hg->9.9 psi	200mL	2.19	mjs	DF	7/23/2021	0036	mjs	
√	P072223	2107241-19A	O0876	6	8.2 Hg->9.7 psi	200mL	2.28	mjs	DF	7/23/2021	0105	mjs	
√	P072224	2107241-20A	LC405	7	7.6 Hg->10 psi	200mL	2.25	mjs	DF	7/23/2021	0134	mjs	
√	P072225	2107241-21A	1L1537	8	5.9 Hg->10.1 psi	200mL	2.10	mjs	DF	7/23/2021	0204	mjs	

	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	mL	DF	Verify Load	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P072226	2107241-22A	37431	9	6.3 Hg->9.9 psi	200mL	2.12	mjs	DF	7/23/2021	0233	mjs	
√	P072227	2107241-23A	1L1730	10	7.1 Hg->10 psi	200mL	2.20	mjs	DF	7/23/2021	0303	mjs	
√	P072228	2107241-17A	S0633	4	6.3 Hg->9.9 psi	200ml	2.12	LD	mjs	7/23/2021	0726	LD	

EA 7/23/21

US32TAR1

Data file : /chem/msd3.i/22JUN21.b/3062204.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 22-JUN-2021 14:28
Operator : LD Inst ID: msd3.i
Smp Info : 200mL #3234-42;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msd3.i/22JUN21.b/bfb30.m
Meth Date : 03-Sep-2019 11:54 u7js Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 3 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.601	9.729	-0.128	95	429760			100.00- 100.00	100.00
9.601	9.729	-0.128	50	101149			8.00- 40.00	23.54
9.601	9.729	-0.128	75	210688			30.00- 66.00	49.02
9.601	9.729	-0.128	96	28103			5.00- 9.00	6.54
9.601	9.729	-0.128	173	2948			0.00- 1.99	0.86
9.601	9.729	-0.128	174	343594			50.01- 120.00	79.95
9.601	9.729	-0.128	175	25293			4.00- 9.00	7.36
9.601	9.729	-0.128	176	322005			93.00- 101.00	93.72
9.601	9.729	-0.128	177	20616			5.00- 9.00	6.40

Data File: /chem/msd3.i/22JUN21.b/3062204.d

Date : 22-JUN-2021 14:28

Client ID: BFB

Instrument: msd3.i

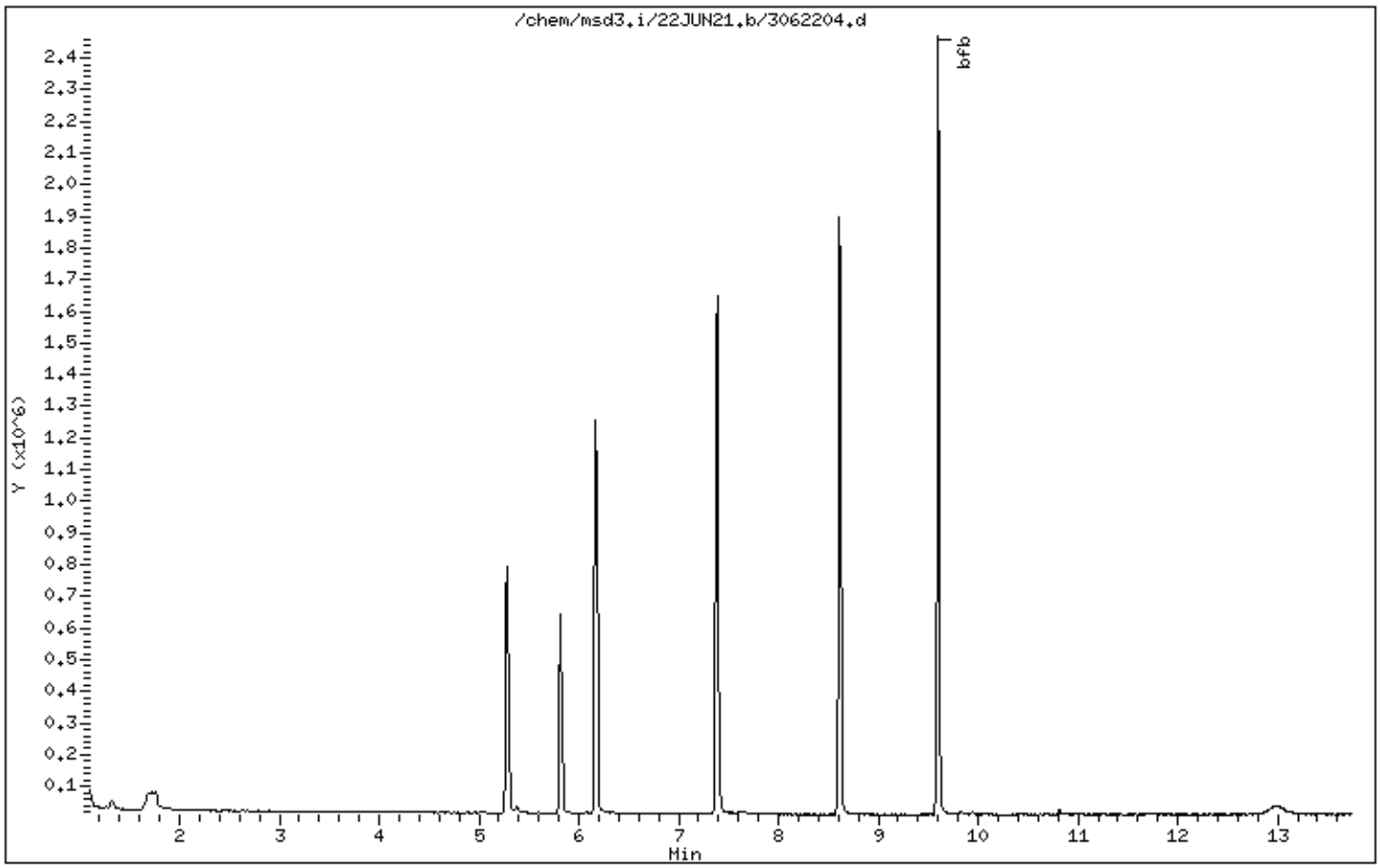
Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msd3.i/22JUN21.b/3062204.d

Date : 22-JUN-2021 14:28

Client ID: BFB

Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

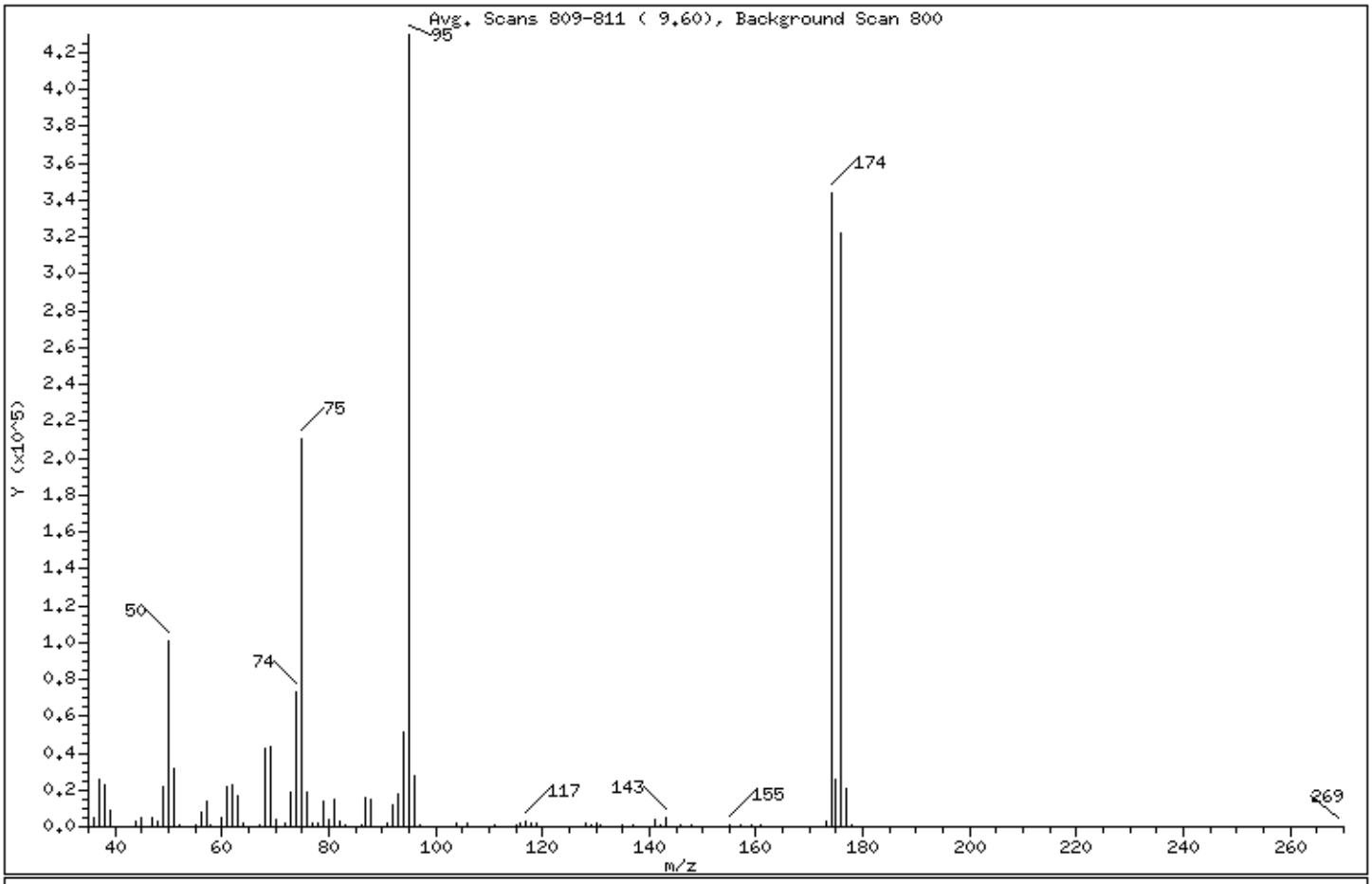
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.54
75	30.00 - 66.00% of mass 95	49.02
96	5.00 - 9.00% of mass 95	6.54
173	Less than 1.99% of mass 174	0.69 (0.86)
174	50.01 - 120.00% of mass 95	79.95
175	4.00 - 9.00% of mass 174	5.89 (7.36)
176	93.00 - 101.00% of mass 174	74.93 (93.72)
177	5.00 - 9.00% of mass 176	4.80 (6.40)

Date : 22-JUN-2021 14:28

Client ID: BFB Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: 3062204.d
Spectrum: Avg. Scans 809-811 (9.60), Background Scan 800
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4504	68.00	42848	103.00	330	141.00	4396
37.00	25512	69.00	43752	104.00	2056	142.00	523
38.00	22744	70.00	3773	105.00	469	143.00	4590
39.00	8447	71.00	269	106.00	2024	144.00	322
40.00	157	72.00	2366	107.00	483	145.00	433
41.00	69	73.00	18816	109.00	67	146.00	637
43.00	165	74.00	72928	110.00	353	147.00	396
44.00	2826	75.00	210688	111.00	572	148.00	1053
45.00	4597	76.00	18984	112.00	355	149.00	356
46.00	419	77.00	2253	113.00	447	150.00	452
47.00	5056	78.00	1535	115.00	628	152.00	327
48.00	3443	79.00	13872	116.00	1822	153.00	320
49.00	22064	80.00	4129	117.00	2804	154.00	254
50.00	101144	81.00	14515	118.00	1705	155.00	1016
51.00	31392	82.00	3092	119.00	2266	156.00	163
52.00	1423	83.00	528	122.00	76	157.00	761
54.00	251	84.00	226	124.00	368	159.00	512
55.00	1464	85.00	44	125.00	72	161.00	510
56.00	7902	86.00	505	126.00	144	170.00	139
57.00	14003	87.00	15958	127.00	236	171.00	290
58.00	781	88.00	14979	128.00	1617	173.00	2948
59.00	267	91.00	1747	129.00	757	174.00	343552
60.00	4525	92.00	12126	130.00	1780	175.00	25288
61.00	22168	93.00	17944	131.00	715	176.00	321984
62.00	22640	94.00	51824	135.00	920	177.00	20616
63.00	17000	95.00	429760	136.00	240	178.00	598
64.00	1668	96.00	28096	137.00	858	269.00	86
65.00	146	97.00	1066	139.00	79		
67.00	968	98.00	262	140.00	326		

US32TAR1

Data file : /chem/msd3.i/22JUL21.b/3072205.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 22-JUL-2021 11:53
Operator : LD Inst ID: msd3.i
Smp Info : 200mL #3234-42;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msd3.i/22JUL21.b/bfb30.m
Meth Date : 22-Jul-2021 11:36 lk8g Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.601	9.729	-0.128	95	291584			100.00- 100.00	100.00
9.601	9.729	-0.128	50	73189			8.00- 40.00	25.10
9.601	9.729	-0.128	75	151918			30.00- 66.00	52.10
9.601	9.729	-0.128	96	20168			5.00- 9.00	6.92
9.601	9.729	-0.128	173	3121			0.00- 1.99	1.25
9.601	9.729	-0.128	174	250538			50.01- 120.00	85.92
9.601	9.729	-0.128	175	18598			4.00- 9.00	7.42
9.601	9.729	-0.128	176	233344			93.00- 101.00	93.14
9.601	9.729	-0.128	177	15160			5.00- 9.00	6.50

Data File: /chem/msd3.i/22JUL21.b/3072205.d

Date : 22-JUL-2021 11:53

Client ID: BFB

Instrument: msd3.i

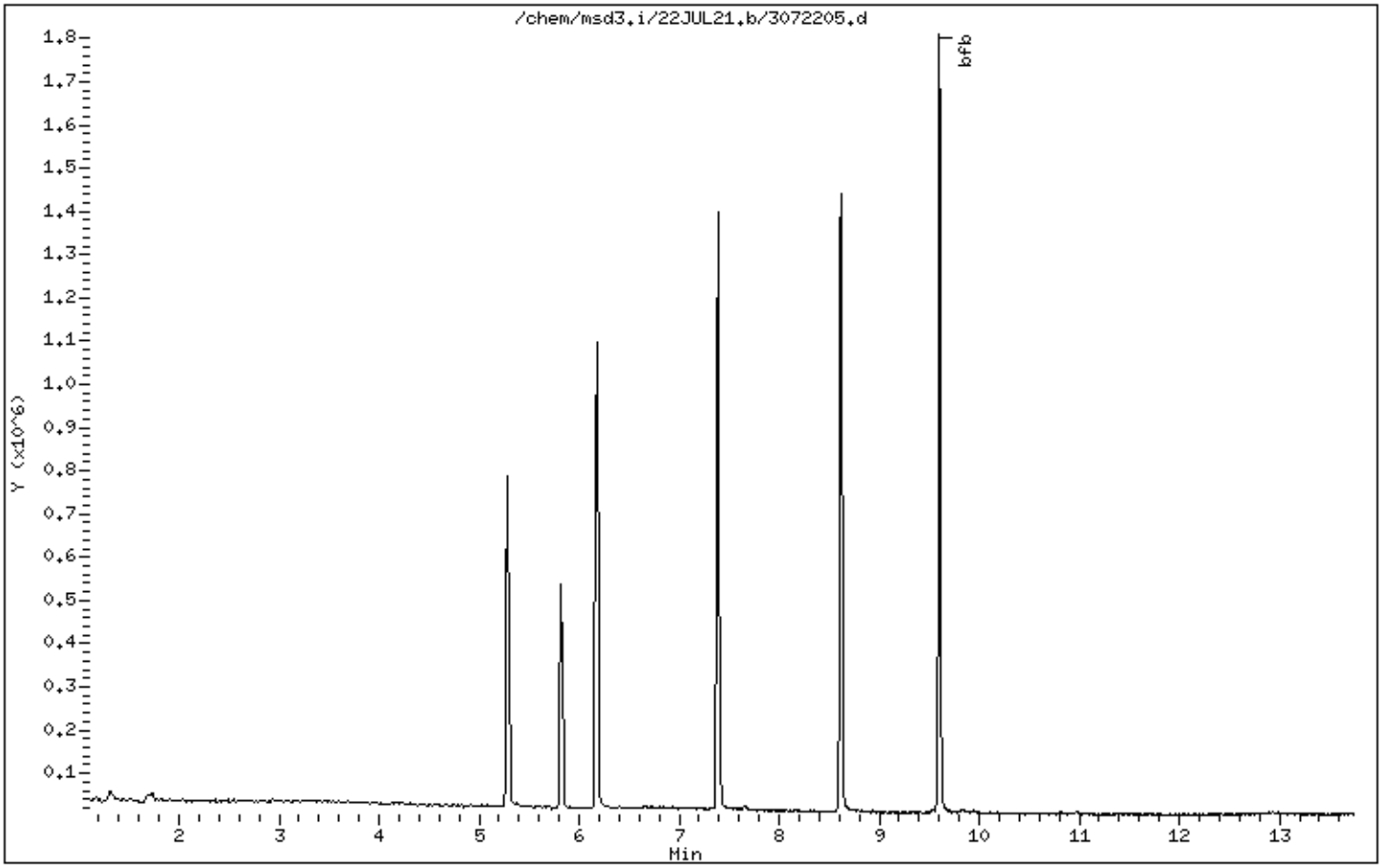
Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msd3.i/22JUL21.b/3072205.d

Date : 22-JUL-2021 11:53

Client ID: BFB

Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

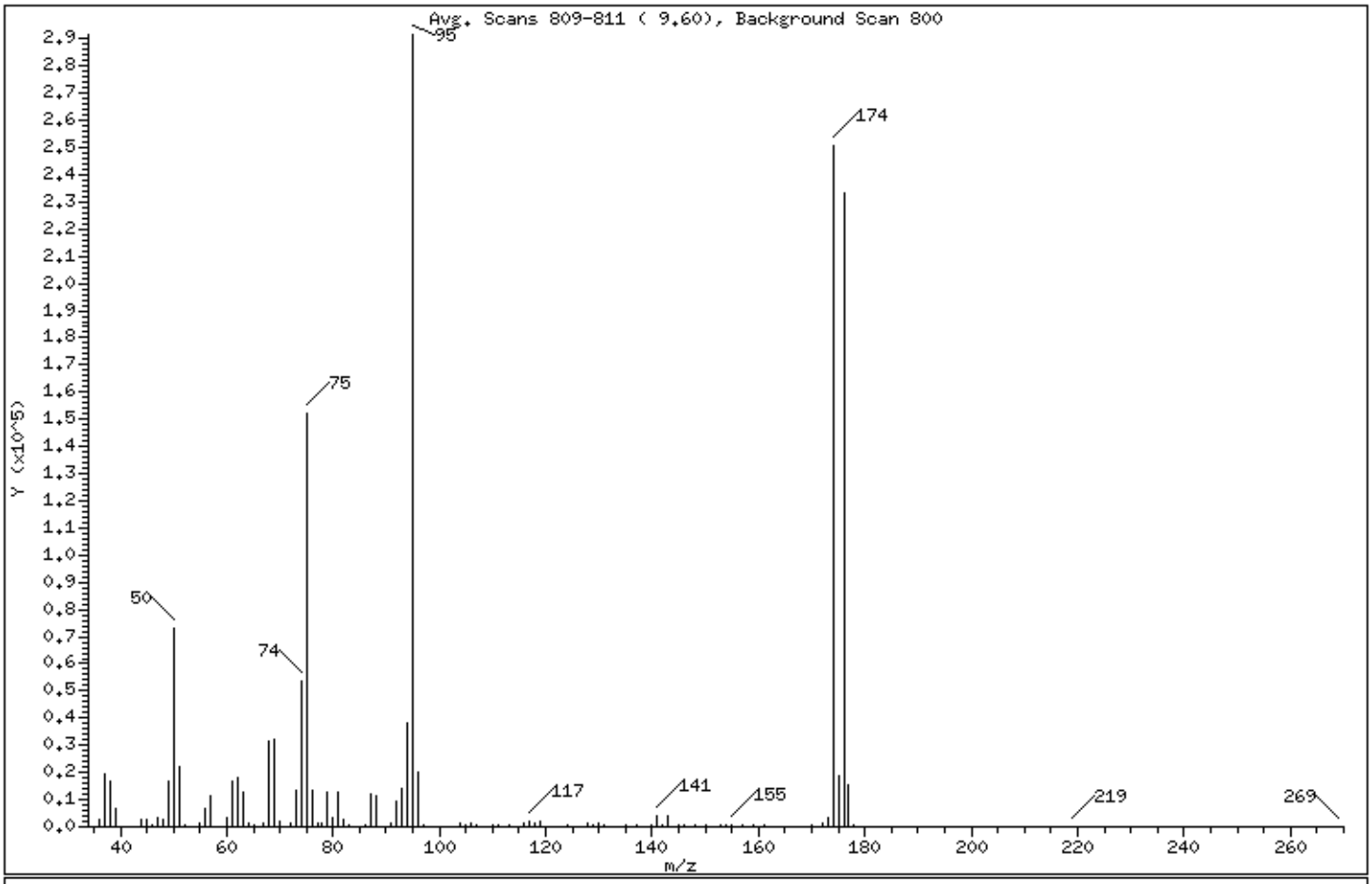
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	25.10
75	30.00 - 66.00% of mass 95	52.10
96	5.00 - 9.00% of mass 95	6.92
173	Less than 1.99% of mass 174	1.07 (1.25)
174	50.01 - 120.00% of mass 95	85.92
175	4.00 - 9.00% of mass 174	6.38 (7.42)
176	93.00 - 101.00% of mass 174	80.03 (93.14)
177	5.00 - 9.00% of mass 176	5.20 (6.50)

Date : 22-JUL-2021 11:53

Client ID: BFB Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: 3072205.d
Spectrum: Avg. Scans 809-811 (9.60), Background Scan 800
Location of Maximum: 95.00
Number of points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	139	69.00	31968	108.00	71	145.00	406
36.00	2934	70.00	2098	110.00	358	146.00	533
37.00	19424	72.00	1644	111.00	377	147.00	131
38.00	17048	73.00	13582	112.00	331	148.00	847
39.00	6565	74.00	53296	113.00	609	149.00	293
40.00	240	75.00	151872	115.00	211	150.00	337
42.00	44	76.00	13243	116.00	1417	152.00	218
43.00	216	77.00	1608	117.00	2301	153.00	362
44.00	2801	78.00	1124	118.00	1268	154.00	343
45.00	3001	79.00	12618	119.00	1979	155.00	973
46.00	439	80.00	3084	120.00	68	156.00	99
47.00	3404	81.00	12702	122.00	140	157.00	543
48.00	2395	82.00	2697	123.00	210	159.00	448
49.00	16464	83.00	481	124.00	371	160.00	86
50.00	73184	84.00	143	125.00	78	161.00	347
51.00	22208	85.00	142	126.00	234	167.00	71
52.00	636	86.00	476	127.00	150	168.00	76
54.00	72	87.00	12127	128.00	1177	169.00	90
55.00	1356	88.00	11333	129.00	684	170.00	456
56.00	6693	90.00	72	130.00	1237	171.00	215
57.00	11153	91.00	1459	131.00	529	172.00	1107
58.00	265	92.00	9475	132.00	72	173.00	3121
59.00	30	93.00	14295	134.00	71	174.00	250496
60.00	3480	94.00	38088	135.00	827	175.00	18592
61.00	16696	95.00	291584	136.00	182	176.00	233344
62.00	17768	96.00	20168	137.00	722	177.00	15160
63.00	12997	97.00	551	139.00	73	178.00	459
64.00	1142	103.00	180	140.00	373	219.00	76
65.00	536	104.00	1647	141.00	3877	269.00	93
66.00	101	105.00	642	142.00	546		
67.00	1110	106.00	1447	143.00	3772		
68.00	31592	107.00	455	144.00	90		

US32TAR1

Data file : /chem/msdp.i/19MAY21.b/p051901.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 19-MAY-2021 11:39
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/19MAY21.b/bfb30.m
Meth Date : 18-Nov-2019 14:14 ushn Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 4 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.921	10.993	-0.072	95	186911			100.00- 100.00	100.00
10.921	10.993	-0.072	50	42709			8.00- 40.00	22.85
10.921	10.993	-0.072	75	81216			30.00- 66.00	43.45
10.921	10.993	-0.072	96	12084			5.00- 9.00	6.47
10.921	10.993	-0.072	173	1196			0.00- 1.99	0.82
10.921	10.993	-0.072	174	146453			50.01- 120.00	78.35
10.921	10.993	-0.072	175	10521			4.00- 9.00	7.18
10.921	10.993	-0.072	176	142592			93.00- 101.00	97.36
10.921	10.993	-0.072	177	9138			5.00- 9.00	6.41

Data File: /chem/msdp.i/19MAY21.b/p051901.d

Date : 19-MAY-2021 11:39

Client ID: BFB

Instrument: msdp.i

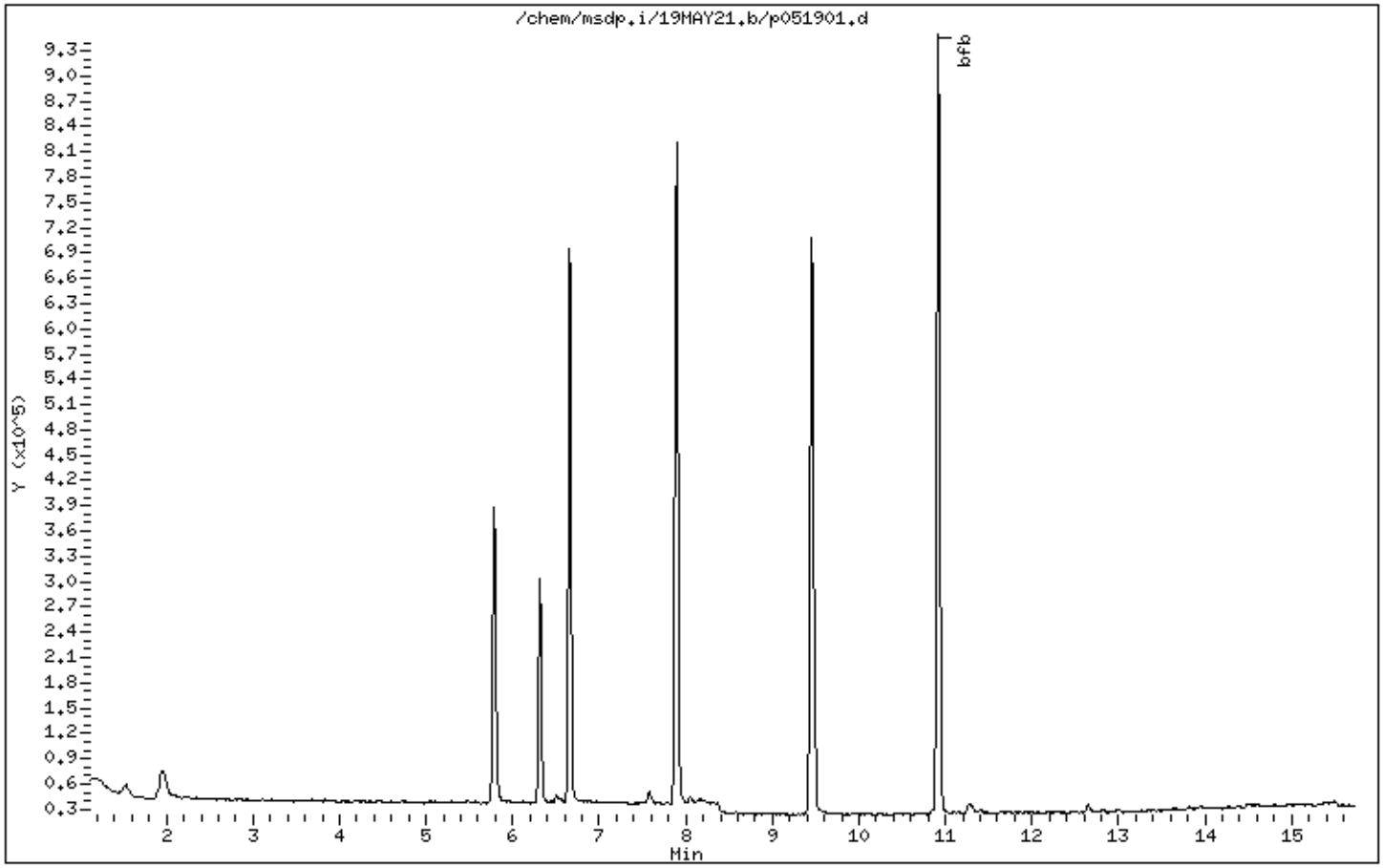
Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/19MAY21.b/p051901.d

Date : 19-MAY-2021 11:39

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

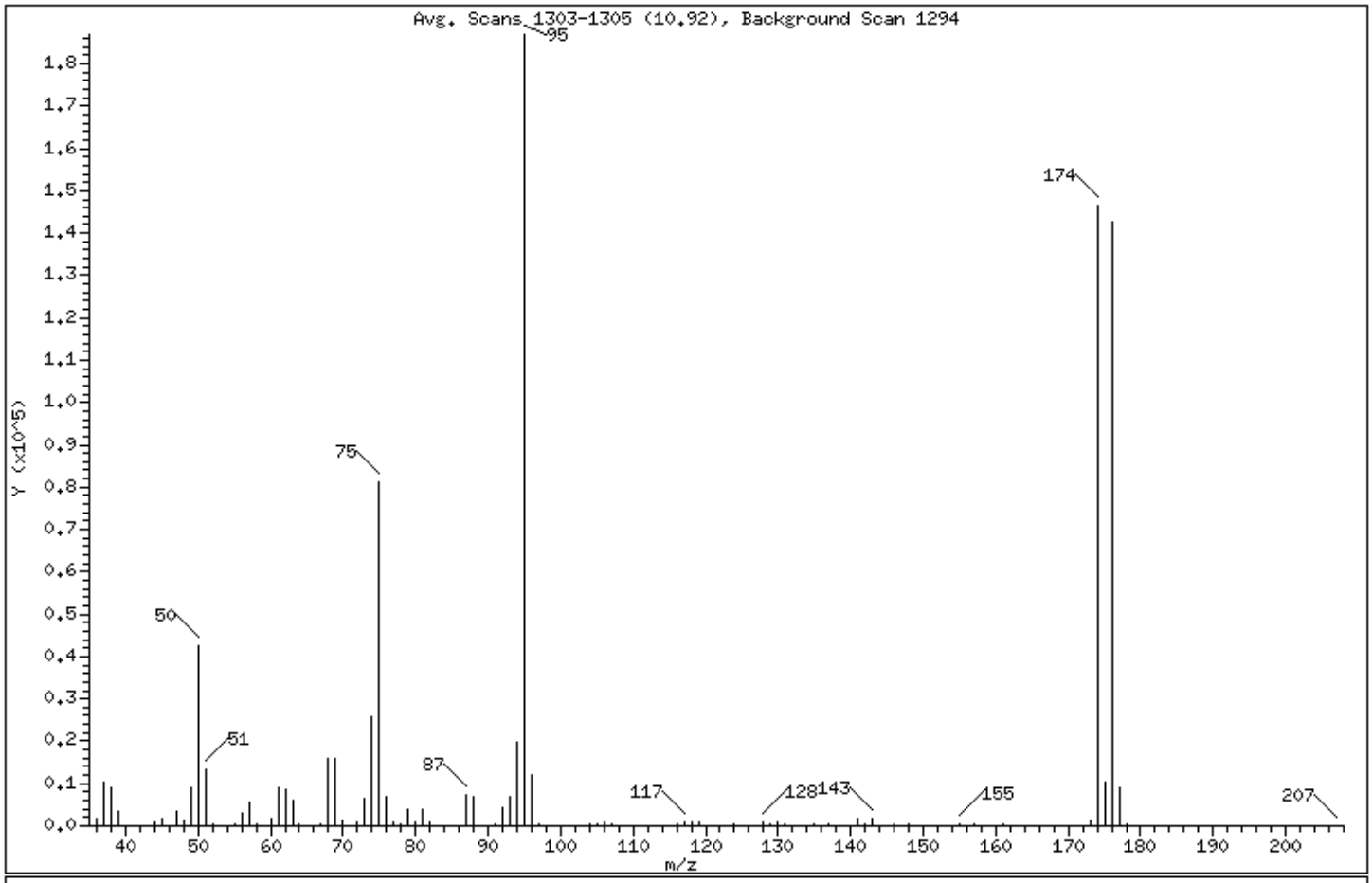
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.85
75	30.00 - 66.00% of mass 95	43.45
96	5.00 - 9.00% of mass 95	6.47
173	Less than 1.99% of mass 174	0.64 (0.82)
174	50.01 - 120.00% of mass 95	78.35
175	4.00 - 9.00% of mass 174	5.63 (7.18)
176	93.00 - 101.00% of mass 174	76.29 (97.36)
177	5.00 - 9.00% of mass 176	4.89 (6.41)

Date : 19-MAY-2021 11:39

Client ID: BFB Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: p051901.d
Spectrum: Avg. Scans 1303-1305 (10.92), Background Scan 1294
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1868	70.00	1283	104.00	572	144.00	34
37.00	10229	71.00	45	105.00	269	145.00	194
38.00	8812	72.00	868	106.00	645	146.00	291
39.00	3495	73.00	6642	107.00	260	147.00	74
40.00	164	74.00	25736	110.00	56	148.00	464
44.00	917	75.00	81216	111.00	52	149.00	159
45.00	1818	76.00	7007	112.00	153	150.00	194
46.00	106	77.00	923	113.00	102	152.00	130
47.00	3380	78.00	552	115.00	151	153.00	181
48.00	1430	79.00	3744	116.00	557	154.00	159
49.00	9200	80.00	918	117.00	965	155.00	433
50.00	42704	81.00	3849	118.00	686	157.00	324
51.00	13167	82.00	684	119.00	932	159.00	214
52.00	589	83.00	51	123.00	100	161.00	241
55.00	241	85.00	29	124.00	227	165.00	33
56.00	2844	86.00	166	126.00	88	172.00	143
57.00	5428	87.00	7358	127.00	87	173.00	1196
58.00	256	88.00	6801	128.00	774	174.00	146432
59.00	71	91.00	377	129.00	295	175.00	10521
60.00	1820	92.00	4204	130.00	668	176.00	142592
61.00	9042	93.00	6703	131.00	353	177.00	9138
62.00	8617	94.00	19944	135.00	237	178.00	285
63.00	5849	95.00	186880	137.00	246	207.00	79
64.00	483	96.00	12084	140.00	173		
67.00	360	97.00	281	141.00	1745		
68.00	16023	98.00	26	142.00	230		
69.00	15790	103.00	189	143.00	1755		

US32TAR1

Data file : /chem/msdp.i/22JUL21.b/p072201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 22-JUL-2021 09:51
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/22JUL21.b/bfb30.m
Meth Date : 18-Nov-2019 14:14 ushn Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.921	10.993	-0.072	95	159018			100.00- 100.00	100.00
10.921	10.993	-0.072	50	44128			8.00- 40.00	27.75
10.921	10.993	-0.072	75	73304			30.00- 66.00	46.10
10.921	10.993	-0.072	96	10184			5.00- 9.00	6.40
10.921	10.993	-0.072	173	1203			0.00- 1.99	0.92
10.921	10.993	-0.072	174	130986			50.01- 120.00	82.37
10.921	10.993	-0.072	175	9728			4.00- 9.00	7.43
10.921	10.993	-0.072	176	125885			93.00- 101.00	96.11
10.921	10.993	-0.072	177	8420			5.00- 9.00	6.69

Data File: /chem/msdp.i/22JUL21.b/p072201.d

Date : 22-JUL-2021 09:51

Client ID: BFB

Instrument: msdp.i

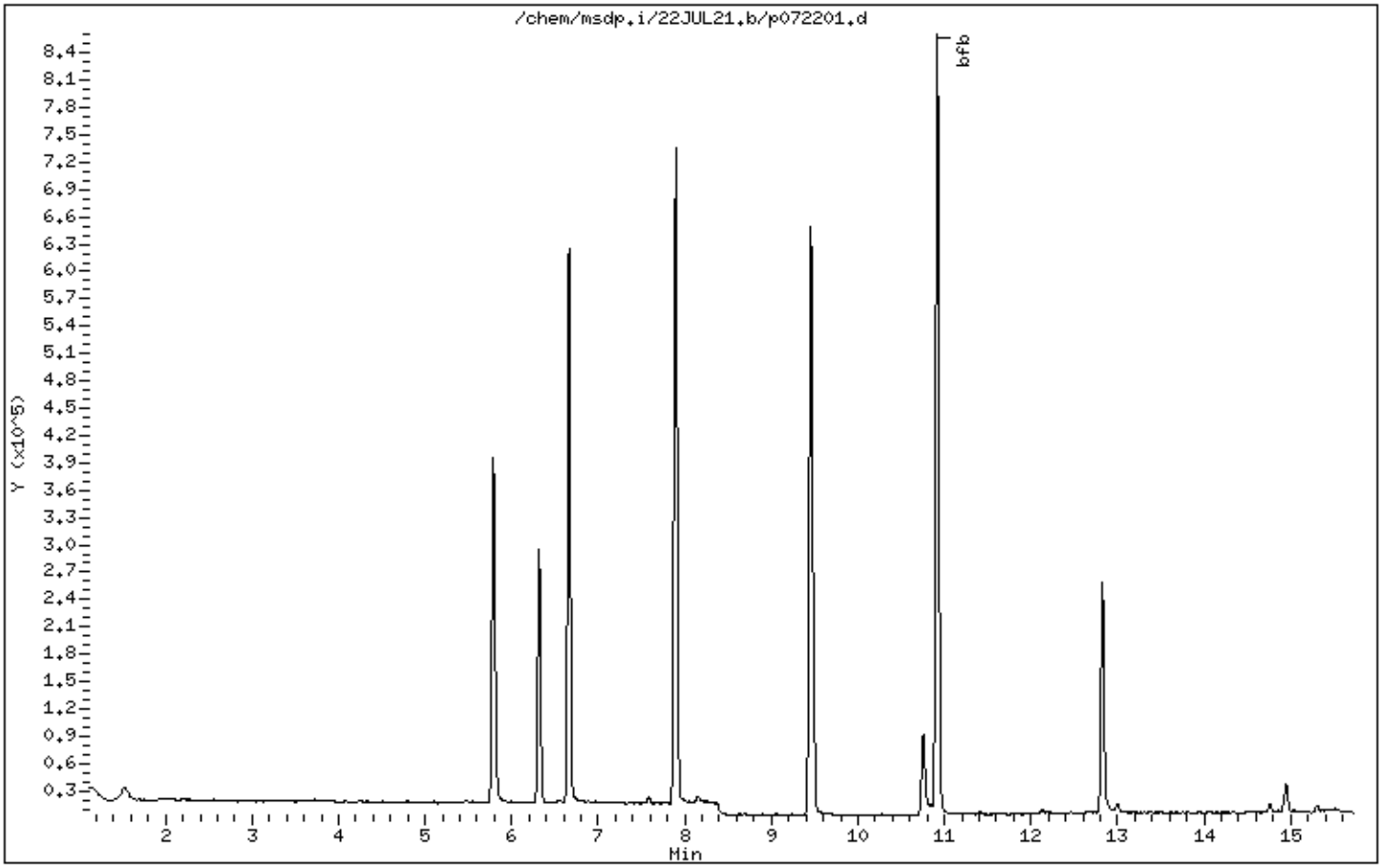
Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/22JUL21.b/p072201.d

Date : 22-JUL-2021 09:51

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

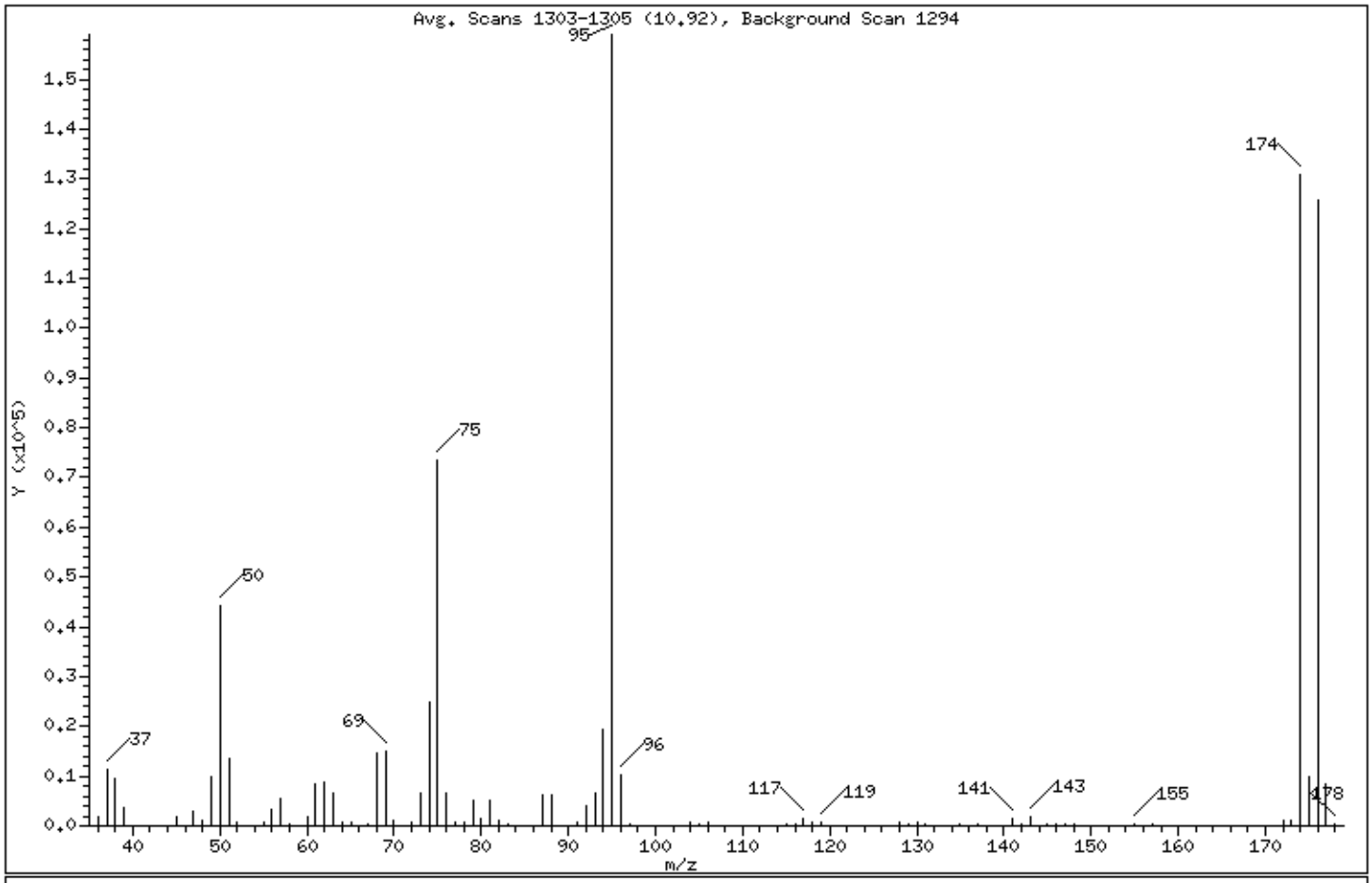
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	27.75
75	30.00 - 66.00% of mass 95	46.10
96	5.00 - 9.00% of mass 95	6.40
173	Less than 1.99% of mass 174	0.76 (0.92)
174	50.01 - 120.00% of mass 95	82.37
175	4.00 - 9.00% of mass 174	6.12 (7.43)
176	93.00 - 101.00% of mass 174	79.16 (96.11)
177	5.00 - 9.00% of mass 176	5.29 (6.69)

Date : 22-JUL-2021 09:51

Client ID: BFB Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: p072201.d
Spectrum: Avg. Scans 1303-1305 (10.92), Background Scan 1294
Location of Maximum: 95.00
Number of points: 94

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1934	67.00	461	96.00	10184	141.00	1551
37.00	11275	68.00	14450	97.00	297	142.00	236
38.00	9556	69.00	14990	104.00	697	143.00	1895
39.00	3819	70.00	1113	105.00	269	144.00	133
40.00	170	72.00	763	106.00	777	145.00	390
45.00	1679	73.00	6449	107.00	160	146.00	235
46.00	105	74.00	24800	110.00	89	147.00	212
47.00	2974	75.00	73304	111.00	91	148.00	446
48.00	1273	76.00	6702	112.00	38	150.00	155
49.00	9729	77.00	912	115.00	236	152.00	80
50.00	44128	78.00	585	116.00	547	154.00	40
51.00	13414	79.00	5213	117.00	1302	155.00	299
52.00	673	80.00	1581	118.00	780	157.00	248
53.00	108	81.00	5084	119.00	883	159.00	160
55.00	566	82.00	1115	124.00	70	161.00	142
56.00	3215	83.00	205	126.00	37	172.00	1046
57.00	5556	86.00	168	127.00	95	173.00	1203
58.00	249	87.00	6259	128.00	565	174.00	130984
60.00	1667	88.00	6057	129.00	281	175.00	9728
61.00	8563	91.00	595	130.00	577	176.00	125880
62.00	8654	92.00	4157	131.00	227	177.00	8420
63.00	6487	93.00	6567	135.00	291	178.00	258
64.00	743	94.00	19456	137.00	321		
65.00	817	95.00	158976	140.00	97		

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUL21.b/3072209.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 22-JUL-2021 13:58
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUL21.b/321q0622a.m
Meth Date : 22-Jul-2021 14:15 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spCCV.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane						CAS #: 74-97-5	
5.284	5.284 (1.000)	130	275409	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	215421			48.46- 108.46	78.22
5.270	5.270 (1.000)	49	376157			120.39- 180.39	136.58
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.180	6.180 (1.000)	114	909596	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	135913			0.00- 45.52	14.94
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.619	8.619 (1.000)	117	796450	25.0000		80.00- 120.00	100.00
8.612	8.612 (1.000)	82	419100			25.46- 85.46	52.62
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	374393	25.0000	24.702	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	177617			21.66- 81.66	47.44
$ 134 Toluene-d8						CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	894566	25.0000	23.878	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	101154			0.00- 41.47	11.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	591190			36.47- 96.47	66.09
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	527849	25.0000	25.056	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	594810			93.06- 153.06	112.69
9.601	9.601 (1.114)	176	487814			62.87- 122.87	92.42
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	263489	50.0000	57.194	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	618423			217.09- 277.09	234.71
1.353	1.353 (0.256)	64	64144			0.00- 55.87	24.34
6 Propane					CAS #: 74-98-6		
1.423	1.423 (0.269)	43	122592	50.0000	48.845	80.00- 120.00	100.00
1.423	1.423 (0.269)	39	88085			41.62- 101.62	71.85
1.423	1.423 (0.269)	41	67797			22.97- 82.97	55.30
13 Freon 142b					CAS #: 75-68-3		
1.605	1.605 (0.304)	65	856754	50.0000	58.481	80.00- 120.00	100.00
1.605	1.605 (0.304)	45	230442			0.00- 58.17	26.90
36 1-Pentene					CAS #: 109-67-1		
2.458	2.458 (0.465)	55	498089	50.0000	53.536	80.00- 120.00	100.00
2.444	2.444 (0.463)	42	613309			99.17- 159.17	123.13
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	615766	50.0000	56.839	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	797642			103.13- 163.13	129.54
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	870583	50.0000	54.790	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	198807			0.00- 51.81	22.84
2.976	2.976 (0.563)	85	591266			37.13- 97.13	67.92
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	893627	50.0000	52.836	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	335593			7.90- 67.90	37.55
3.549	3.549 (0.672)	53	221074			0.00- 54.87	24.74
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	866531	50.0000	49.714	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	154785			0.00- 47.15	17.86
74 Chloroprene					CAS #: 126-99-8		
4.515	4.515 (0.854)	53	728323	50.0000	49.344	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
74 Chloroprene (continued)							
4.515	4.515 (0.854)	88	313213			12.33- 72.33	43.00
4.515	4.515 (0.854)	50	211289			0.00- 57.62	29.01
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	96757	50.0000	42.402	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	75458			53.89- 113.89	77.99
4.613	4.613 (0.873)	41	50879			24.09- 84.09	52.58
88 Methyl Acrylate					CAS #: 96-33-3		
5.131	5.131 (0.971)	55	811008	50.0000	45.720	80.00- 120.00	100.00
5.131	5.131 (0.971)	85	110075			0.00- 43.24	13.57
5.131	5.131 (0.971)	58	72780			0.00- 38.83	8.97
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	120917	50.0000	37.093	80.00- 120.00	100.00
5.774	5.774 (1.093)	43	369917			327.69- 387.69	305.93
5.774	5.774 (1.093)	41	287430			237.56- 297.56	237.71
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	63983	50.0000	50.271	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	93460			124.67- 184.67	146.07
6.460	6.460 (0.749)	55	1039309			1601.30-1661.30	1624.34
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.558 (0.761)	43	1345397	50.0000	45.192	80.00- 120.00	100.00
6.558	6.558 (0.761)	58	120119			0.00- 37.25	8.93
6.558	6.558 (0.761)	86	241021			0.00- 45.08	17.91
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	495292	50.0000	41.306	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	181868			5.16- 65.16	36.72
8.068	8.068 (1.305)	43	1177149			214.00- 274.00	237.67
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	625069	50.0000	52.176	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	422680			38.22- 98.22	67.62
8.712	8.712 (1.011)	95	231065			7.54- 67.54	36.97
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	747790	50.0000	36.989	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	1162901			133.36- 193.36	155.51
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.209)	68	741557	50.0000	51.248	80.00- 120.00	100.00
10.417	10.417 (1.209)	93	544508			42.08- 102.08	73.43

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
186 4-Chlorotoluene					CAS #: 106-43-4		
9.966	9.966 (1.156)	126	544988	50.0000	52.259	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1781580			305.94- 365.94	326.90
9.966	9.966 (1.156)	63	249125			15.44- 75.44	45.71
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	762704	50.0000	53.355	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	1754202			206.43- 266.43	230.00
10.589	10.589 (1.229)	77	207957			0.00- 58.29	27.27
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.288)	201	477163	50.0000	54.678	80.00- 120.00	100.00
11.098	11.098 (1.288)	117	664132			109.77- 169.77	139.18
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.721 (1.360)	180	1023825	50.0000	53.806	80.00- 120.00	100.00
11.721	11.721 (1.360)	182	978260			65.79- 125.79	95.55
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	1252585	50.0000	50.861	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	380500			0.13- 60.13	30.38
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	969039	50.0000	50.105	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1781580			145.95- 205.95	183.85

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 22-JUL-2021 13:58
Lab File ID: 3072209.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/22JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37578	1.35941	0.010	1.18979	30.00000	Averaged
$ 134 Toluene-d8	1.02971	0.98348	0.010	4.48974	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.66126	0.66275	0.010	-0.22551	30.00000	Averaged
3 Freon 143a	0.41819	0.47836	0.010	-14.38707	30.00000	Averaged
6 Propane	0.22783	0.22256	0.010	2.30985	30.00000	Averaged
13 Freon 142b	1.32985	1.55542	0.010	-16.96175	30.00000	Averaged
36 1-Pentene	0.84453	0.90427	0.010	-7.07313	30.00000	Averaged
40 Freon 123a	0.98340	1.11791	0.010	-13.67775	30.00000	Averaged
41 Freon 123	1.44234	1.58052	0.010	-9.58087	30.00000	Averaged
55 Cyclopentene	1.53527	1.62236	0.010	-5.67234	30.00000	Averaged
56 Methyl Acetate	1.58221	1.57317	0.010	0.57159	30.00000	Averaged
74 Chloroprene	1.33982	1.32225	0.010	1.31127	30.00000	Averaged
75 1-Propanol	0.20714	0.17566	0.010	15.19536	30.00000	Averaged
88 Methyl Acrylate	1.61021	1.47237	0.010	8.56049	30.00000	Averaged
103 Isobutanol	0.29591	0.21952	0.010	25.81349	30.00000	Averaged
113 Ethyl acrylate	0.03995	0.04017	0.010	-0.54275	30.00000	Averaged
115 2-Pentanone	0.93447	0.84462	0.010	9.61490	30.00000	Averaged
145 Butyl Acetate	0.32956	0.27226	0.010	17.38750	30.00000	Averaged
157 1,1,1,2-Tetrachloroethane	0.37604	0.39241	0.010	-4.35201	30.00000	Averaged
166 2-Heptanone	1.83512	1.35760	0.010	26.02122	30.00000	Averaged
172 D-Limonene	0.45421	0.46554	0.010	-2.49507	30.00000	Averaged
186 4-Chlorotoluene	0.32734	0.34214	0.010	-4.51848	30.00000	Averaged
197 1,2,3-Trimethylbenzene	0.44871	0.47881	0.010	-6.70951	30.00000	Averaged
205 Hexachloroethane	0.27393	0.29956	0.010	-9.35529	30.00000	Averaged
208 1,3,5-Trichlorobenzene	0.59728	0.64274	0.010	-7.61124	30.00000	Averaged
210 alpha-Pinene	0.77304	0.78635	0.010	-1.72180	30.00000	Averaged
214 beta-Pinene	0.60708	0.60835	0.010	-0.20961	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072209.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUL21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 12:28
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240594	144356	336832	275409	14.47
108 1,4-Difluorobenze	805743	483446	1128040	909596	12.89
153 Chlorobenzene-d5	719477	431686	1007268	796450	10.70

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUL21.b/3072209.d

Page 1

Date : 22-JUL-2021 13:58

Client ID: CCV

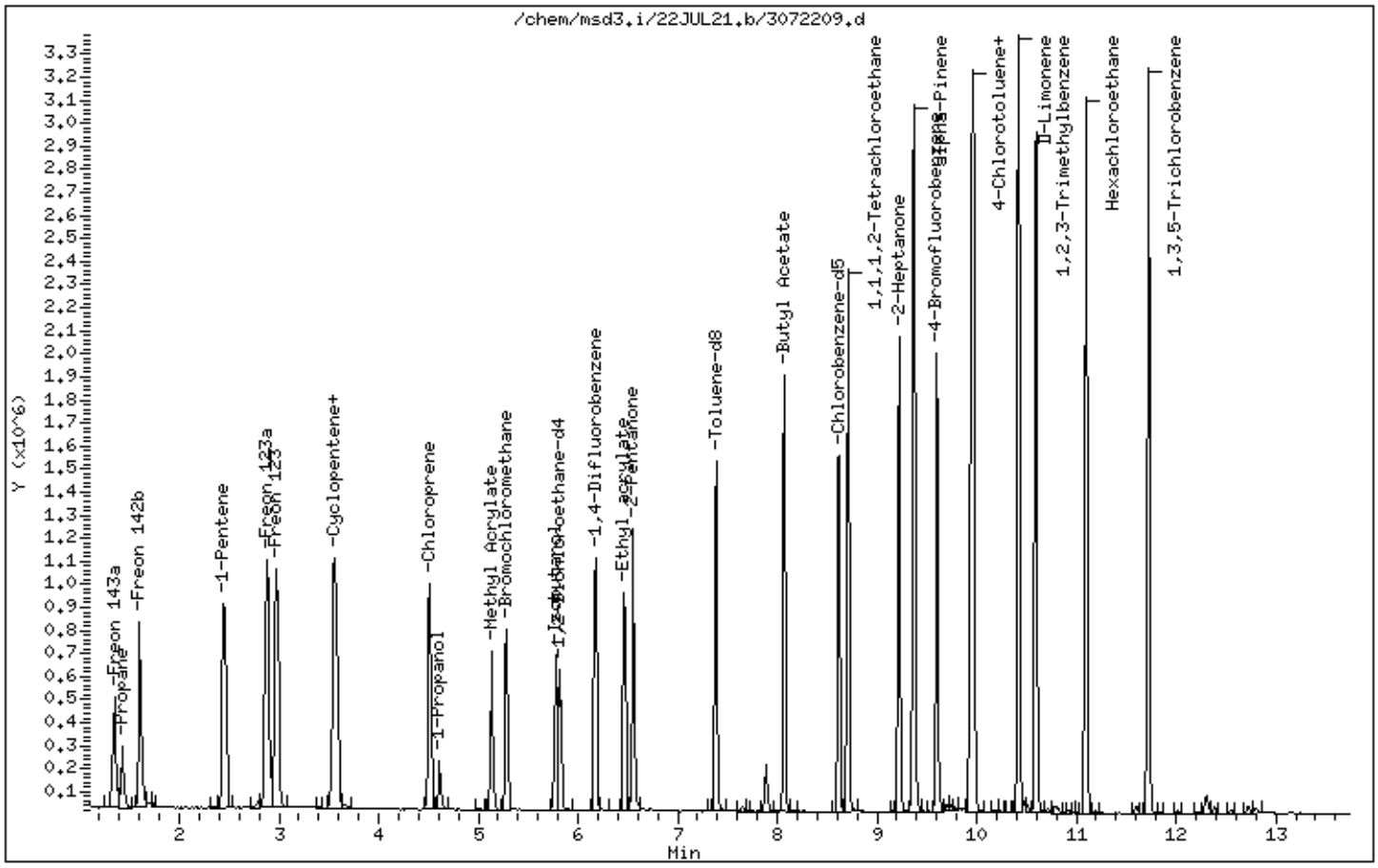
Instrument: msd3.i

Sample Info: 50mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22JUL21.b/p072205.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 22-JUL-2021 12:06
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2127
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22JUL21.b/p21q0519a.m
Meth Date : 22-Jul-2021 12:27 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spCCV.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	173971	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	136730			48.23- 108.23	78.59
5.778	5.778 (1.000)	49	361896			150.57- 210.57	208.02
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	620610	25.0000		80.00- 120.00	100.00
6.666	6.666 (1.000)	88	92816			0.00- 45.71	14.96
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	610185	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	318276			23.78- 83.78	52.16
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.315 (1.093)	65	239142	25.0000	24.908	80.00- 120.00	100.00
6.315	6.315 (1.093)	67	117980			27.21- 87.21	49.33
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	669318	25.0000	24.836	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68677			0.00- 40.44	10.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	435311			34.95- 94.95	65.04
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	391590	25.0000	24.992	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	480797			95.92- 155.92	122.78
10.921	10.921 (1.154)	176	371904			66.89- 126.89	94.97
3 Freon 143a					CAS #: 420-46-2		
1.591	1.591 (0.275)	65	197278	50.0000	58.685	80.00- 120.00	100.00
1.591	1.591 (0.275)	69	482278			243.50- 303.50	244.47
1.591	1.591 (0.275)	64	47182			0.00- 54.06	23.92
6 Propane					CAS #: 74-98-6		
1.675	1.675 (0.290)	43	149854	50.0000	48.659	80.00- 120.00	100.00
1.675	1.675 (0.290)	39	93999			34.98- 94.98	62.73
1.675	1.675 (0.290)	41	77129			25.22- 85.22	51.47
13 Freon 142b					CAS #: 75-68-3		
1.898	1.898 (0.329)	65	792619	50.0000	46.625	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	247370			0.00- 59.77	31.21
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	489294	50.0000	43.979	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	716268			105.17- 165.17	146.39
40 Freon 123a					CAS #: 354-23-4		
3.386	3.386 (0.586)	117	470108	50.0000	43.190	80.00- 120.00	100.00
3.386	3.386 (0.586)	67	619559			104.69- 164.69	131.79
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	691243	50.0000	44.696	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	153039			0.00- 50.87	22.14
3.479	3.479 (0.602)	85	462481			36.08- 96.08	66.91
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	715660	50.0000	43.008	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	257867			6.76- 66.76	36.03
4.073	4.073 (0.705)	53	230484			0.00- 57.54	32.21
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.080 (0.706)	43	1061846	50.0000	54.566	80.00- 120.00	100.00
4.080	4.080 (0.706)	74	123952			0.00- 44.13	11.67
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	779127	50.0000	50.125	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
74 Chloroprene (continued)							
5.019	5.019 (0.869)	88	273692			9.21- 69.21	35.13
5.019	5.019 (0.869)	50	195121			0.00- 54.25	25.04
75 1-Propanol					CAS #: 71-23-8		
5.090	5.090 (0.881)	59	100123	50.0000	43.566	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	102137			63.23- 123.23	102.01
5.083	5.083 (0.880)	41	62366			24.74- 84.74	62.29
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.628 (0.974)	55	1023508	50.0000	50.127	80.00- 120.00	100.00
5.628	5.628 (0.974)	85	103427			0.00- 41.28	10.11
5.628	5.628 (0.974)	58	79330			0.00- 38.22	7.75
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	125464	50.0000	50.931	80.00- 120.00	100.00
6.244	6.244 (1.081)	43	569697			448.18- 508.18	454.07
6.244	6.244 (1.081)	41	392998			299.99- 359.99	313.24
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.946 (0.734)	99	63748	50.0000	45.266	80.00- 120.00	100.00
6.939	6.939 (0.733)	45	136941			149.95- 209.95	214.81
6.939	6.939 (0.733)	55	1387192			1849.07-1909.07	2176.03
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.032 (0.743)	43	1753882	50.0000	56.614	80.00- 120.00	100.00
7.032	7.032 (0.743)	58	122771			0.00- 37.44	7.00
7.032	7.032 (0.743)	86	192920			0.00- 42.78	11.00
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.300)	56	791823	50.0000	50.653	80.00- 120.00	100.00
8.665	8.665 (1.300)	73	216603			0.00- 59.10	27.36
8.665	8.665 (1.300)	43	2102659			215.30- 275.30	265.55
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	706159	50.0000	52.055	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	610185			57.42- 117.42	86.41
9.596	9.596 (1.014)	95	249711			5.70- 65.70	35.36
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	1200705	50.0000	47.005	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	2132503			136.03- 196.03	177.60
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	863121	50.0000	62.639	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	602853			39.41- 99.41	69.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	654307	50.0000	52.361	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	2020196			295.02- 355.02	308.75
11.444	11.444 (1.210)	63	287751			11.82- 71.82	43.98
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	909810	50.0000	50.005	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	2004402			192.40- 252.40	220.31
12.318	12.318 (1.302)	77	225871			0.00- 54.69	24.83
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	413866	50.0000	57.860	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	575320			102.99- 162.99	139.01
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	1236205	50.0000	48.329	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	1183549			65.24- 125.24	95.74
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	1331917	50.0000	52.770	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	392691			0.00- 58.21	29.48
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.423 (1.207)	93	1034385	50.0000	62.595	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	2020196			153.57- 213.57	195.30

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-JUL-2021 12:06
Lab File ID: p072205.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/22JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.37461	0.010	0.36754	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.07849	0.010	0.65524	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.64176	0.010	0.03336	30.00000	Averaged
3 Freon 143a	0.48307	0.56699	0.010	-17.37090	30.00000	Averaged
6 Propane	0.44256	0.43069	0.010	2.68206	30.00000	Averaged
13 Freon 142b	2.44292	2.27802	0.010	6.75014	30.00000	Averaged
36 1-Pentene	1.59878	1.40625	0.010	12.04256	30.00000	Averaged
40 Freon 123a	1.56413	1.35111	0.010	13.61901	30.00000	Averaged
41 Freon 123	2.22241	1.98666	0.010	10.60769	30.00000	Averaged
55 Cyclopentene	2.39124	2.05684	0.010	13.98450	30.00000	Averaged
56 Methyl Acetate	2.79640	3.05179	0.010	-9.13273	30.00000	Averaged
74 Chloroprene	2.23364	2.23924	0.010	-0.25065	30.00000	Averaged
75 1-Propanol	0.33025	0.28776	0.010	12.86724	30.00000	Averaged
88 Methyl Acrylate	2.93415	2.94160	0.010	-0.25393	30.00000	Averaged
103 Isobutanol	0.35400	0.36059	0.010	-1.86140	30.00000	Averaged
113 Ethyl acrylate	0.05770	0.05224	0.010	9.46800	30.00000	Averaged
115 2-Pentanone	1.26926	1.43717	0.010	-13.22878	30.00000	Averaged
145 Butyl Acetate	0.62971	0.63794	0.010	-1.30629	30.00000	Averaged
157 1,1,1,2-Tetrachloroethane	0.55580	0.57864	0.010	-4.10962	30.00000	Averaged
166 2-Heptanone	3.67076	3.45087	0.010	5.99021	30.00000	Averaged
172 D-Limonene	0.56456	0.70726	0.010	-25.27749	30.00000	Averaged
186 4-Chlorotoluene	0.51198	0.53615	0.010	-4.72172	30.00000	Averaged
197 1,2,3-Trimethylbenzene	0.74544	0.74552	0.010	-0.01056	30.00000	Averaged
205 Hexachloroethane	0.29306	0.33913	0.010	-15.71939	30.00000	Averaged
208 1,3,5-Trichlorobenzene	1.04801	1.01298	0.010	3.34263	30.00000	Averaged
210 alpha-Pinene	1.03411	1.09140	0.010	-5.54027	30.00000	Averaged
214 beta-Pinene	0.67705	0.84760	0.010	-25.18987	30.00000	Averaged

Report Date: 22-Jul-2021 12:27

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072205.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/22JUL21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUL-2021
Calibration Time: 10:40
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	159252	95551	222953	173971	9.24
108 1,4-Difluorobenze	573285	343971	802599	620610	8.26
153 Chlorobenzene-d5	571549	342929	800169	610185	6.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/22JUL21.b/p072205.d

Date : 22-JUL-2021 12:06

Client ID: CCV

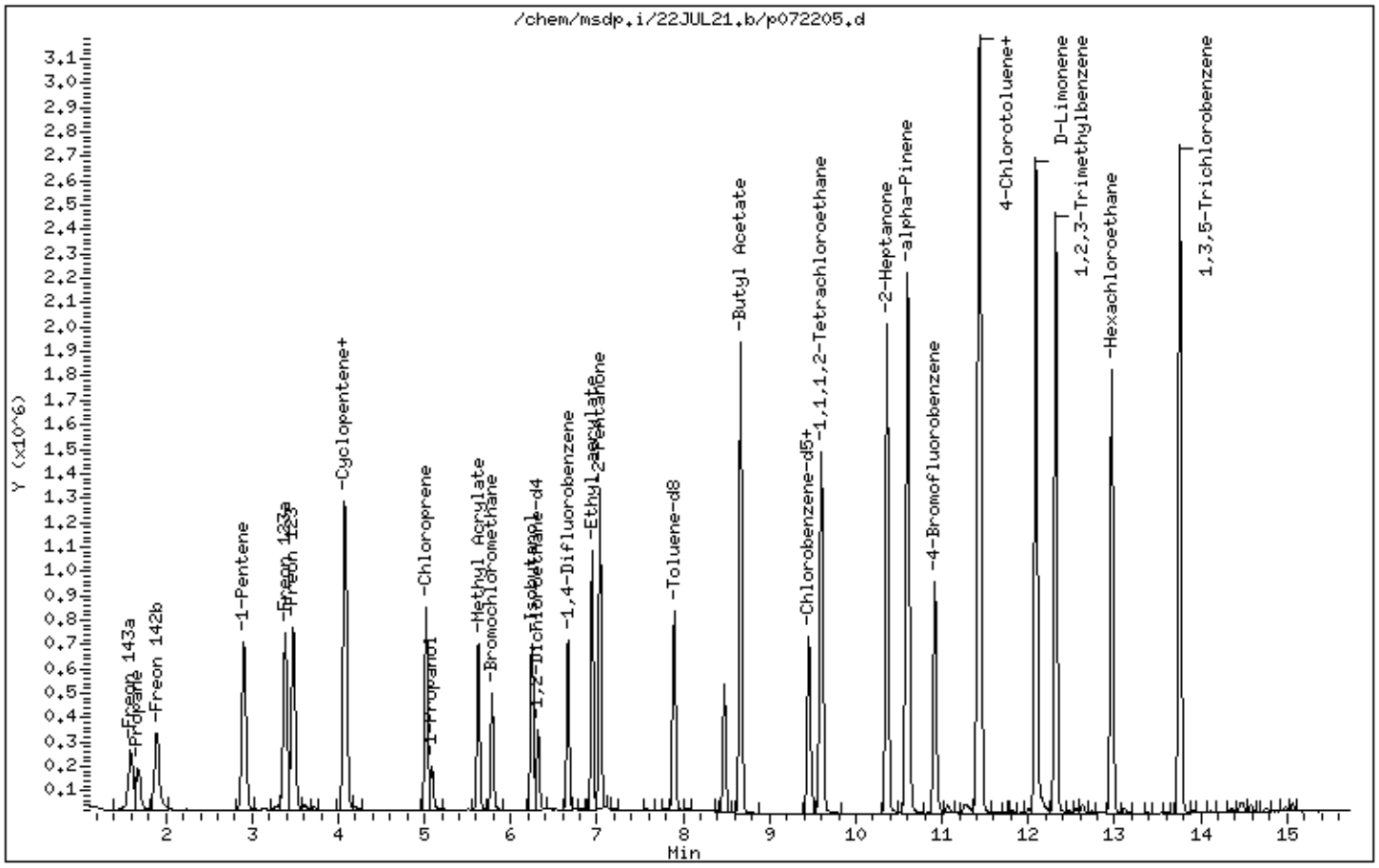
Instrument: msdp.i

Sample Info: 50mL 3018-2127

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Shipping/Receiving Documents

eurofins | Air Toxics

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Air Toxics, Ltd. at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

The following discrepancies have been observed:

The Chain of Custody (COC) information for sample SG-VW50B-02 did not match the information on the canister with regard to canister barcode. The sample labeled 1L1730 on the COC is labeled as LC1229 on the canister. Unless otherwise notified, Eurofins Air Toxics will proceed with the analysis using the information on the canister to process and report the sample.

The number of samples received did not match the information on the Chain of Custody (COC). Samples SG-VW35A-02 and SG-VW35B-02 was added to the analytical request.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2107241

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: AECOM
Project Name: SMUD 59TH ST.
Project Manager: ROBERT KOHLHARDT Project # 60632793.6
Sampler: CHRIS WOMACK
Site Name:

Special Instructions/Notes: REQUEST LEVEL III DATA
INVOICING TO:
SWPP QUEEN
REPORT EMAIL TO:
ROBERT.KOHLHARDT@AECOM.COM

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15	ASTM D1946 HELIUM		
01A	SG-VW43A-02	1L3134	25385	07/08/21	12:05	07/08/21	12:10	29	5			X	X		
02A	SG-VW43B-02	1L2654	24640	07/08/21	12:40	07/08/21	12:45	30	5			X	X		
03A	SG-VW45A-03	1L2084	21418	07/08/21	13:53	07/08/21	13:58	28	5			X	X		
04A	SG-VW45B-02	1L3084	25453	07/08/21	14:33	07/08/21	14:38	29	5			X	X		
05A	SG-VW46A-02	1L3929	40978	07/08/21	15:33	07/08/21	15:38	29	5			X	X		
06A	SG-VW46B-02	1L2576	100303	07/08/21	16:03	07/08/21	16:08	28	5			X	X		
07A	SG-VW44A-02	1L1600	25466	07/08/21	17:13	07/08/21	17:19	29	5			X			
08A	SG-VW44B-02	1L2535	21412	07/08/21	17:41	07/08/21	17:46	29	5			X			
09A	SG-VW47A-02	LC144	20107	07/08/21	18:38	07/08/21	18:54	28	5			X			
10A	SG-VW47A-03	1L2567	20107	07/08/21	18:38	07/08/21	18:54	28	5			X			
11A	SG-VW47B-02	1L2058	25371	07/08/21	19:20	07/08/21	19:27	28	5			X			
12A	SG-VW48A-03	LC544	25344	07/09/21	07:14	07/09/21	07:19	30	5			X			
13A	SG-VW48B-02	1L2964	21397	07/09/21	07:40	07/09/21	07:45	30	5			X			
14A	SG-VW49A-03	1L2773	22368	07/09/21	08:38	07/09/21	08:43	30	5			X			
15A	SG-VW49B-02	1L3821	30574	07/09/21	09:03	07/09/21	09:09	28	5			X			
16A	SG-VW50A-03	1L3330	25280	07/09/21	10:13	07/09/21	10:19	28	5			X			

	Date	Time		Date	Time
Relinquished by: (Signature/Affiliation) AECOM	07/10/21	12:54	Received by: (Signature/Affiliation)	7/10/21	1254
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		

Lab Use Only

Shipper Name: H/D | Custody Seals Intact? | Yes | No | None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

Analysis Request /Canister Chain of Custody

eurofins | Air Toxics

For Laboratory Use Only

PID: _____ Workorder #: 2107241

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: AECOM
Project Name: SMUD 59TH ST.
Project Manager: ROBERT KOHLHARDT Project # 60632793.6
Sampler: CHRIS WOMACK
Site Name:

Special Instructions/Notes: REQUEST LEVEL III DATA
INVOICING TO:
SWPP QUEEN
REPORT EMAIL TO:
ROBERT.KOHLHARDT@AECOM.COM

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15			
17A	SG-VW50B-02	1L1730	24583	07/09/21	12:11	07/09/21	12:17	29	5			X			
18A	SG-VW31A-02	1L3878	22621	07/09/21	13:28	07/09/21	13:34	29	5			X			
19A	SG-VW31B-02 7/10/21	1L2468	24886	07/09/21	13:55	07/09/21	14:06	30	5			X			
20A	SG-VW31B-03	LC405	24886	07/09/21	13:55	07/09/21	14:06	30	5			X			
21A	SG-VW26A-02	1L1537	29424	07/09/21	14:58	07/09/21	15:03	28	5			X			
	RETURNING (2) DUPLICATE "TEE" (USED)														

7/10/21

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
AECOM	07/10/21	12:54	ATL	7/10/21	1254
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: FED Custody Seals Intact? Yes No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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SAMPLE RECEIPT SUMMARY

WORKORDER 2107241A

Client

Mr. Robert Kohlhardt
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

Phone

916-679-2000

Fax

916-679-2900

Sales Rep: DaV

Date Promised: 07/23/21
Date Completed:
Date Received: 7/10/21
PO#:
Project#: 60632793.6 SMUD 59th ST.

Total $: $ 4,550.00
Logged By: JT

Fraction	Sample #	Analysis	Collected	Amount$
01A	SG-VW43A-02	TO-15	7/8/2021	$150.00
02A	SG-VW43B-02	TO-15	7/8/2021	$150.00
03A	SG-VW45A-03	TO-15	7/8/2021	$150.00
04A	SG-VW45B-02	TO-15	7/8/2021	$150.00
05A	SG-VW46A-02	TO-15	7/8/2021	$150.00
06A	SG-VW46B-02	TO-15	7/8/2021	$150.00
07A	SG-VW44A-02	TO-15	7/8/2021	$150.00
08A	SG-VW44B-02	TO-15	7/8/2021	$150.00
09A	SG-VW47A-02	TO-15	7/8/2021	$150.00
10A	SG-VW47A-03	TO-15	7/8/2021	$150.00
11A	SG-VW47B-02	TO-15	7/8/2021	$150.00
12A	SG-VW48A-03	TO-15	7/9/2021	$150.00
13A	SG-VW48B-02	TO-15	7/9/2021	$150.00
14A	SG-VW49A-03	TO-15	7/9/2021	$150.00
15A	SG-VW49B-02	TO-15	7/9/2021	$150.00
16A	SG-VW50A-03	TO-15	7/9/2021	$150.00
17A	SG-VW50B-02	TO-15	7/9/2021	$150.00
18A	SG-VW31A-02	TO-15	7/9/2021	$150.00
19A	SG-VW31B-02	TO-15	7/9/2021	$150.00
20A	SG-VW31B-03	TO-15	7/9/2021	$150.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: SMUD 59th Street Corporation Yard/25677

BILL TO: Mr. Jerry Montgomery
SWPPQueen
7202 Gloria Drive #25
Sacramento, CA 95831

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sp)-AECOM (SMUD 59th)

Other Records

Air Toxics Ltd.

Curve Response Factors
3072210.d

Compound	Ave. RF	% RSD
TPH	45877	0.00058

LD 7/22/21

Air Toxics Ltd.

File Response Factors

Data File: 3072210.d
Sample #: 3234-26
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	45876.734023020	

Air Toxics Ltd.

List of Selected Compounds

Data File: 3072210.d
Sample #: 3234-26
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 1.3247	0.14	1.325	49727	
✓	Unknown Peak 1.4367	0.05	1.437	16684	
✓	Unknown Peak 1.5766	0.11	1.577	41114	
✓	Butane	0.90	1.703	325416	
✓	Unknown Peak 1.8844	0.06	1.884	21897	
✓	Isopentane	3.34	2.220	1210052	
✓	Unknown Peak 2.5001	1.20	2.500	433648	
✓	Unknown Peak 2.668	0.26	2.668	93461	
✓	Ethanol	1.42	2.766	512861	
✓	Unknown Peak 2.8778	0.41	2.878	148329	
✓	Unknown Peak 3.0038	0.15	3.004	53785	
✓	Unknown Peak 3.5494	1.43	3.549	518586	
✓	Unknown Peak 3.5914	1.32	3.591	477761	
✓	Unknown Peak 3.6614	0.26	3.661	93718	
✓	Unknown Peak 3.8713	0.65	3.871	235734	
✓	Unknown Peak 4.0951	0.10	4.095	36185	
✓	Hexane	0.67	4.179	243145	
✓	Unknown Peak 4.3050	0.06	4.305	23172	
✓	Unknown Peak 4.3610	0.11	4.361	40444	
✓	Unknown Peak 4.4029	0.13	4.403	48215	
✓	Unknown Peak 4.5009	0.08	4.501	29498	
✓	Unknown Peak 4.5708	0.10	4.571	35471	
✓	Unknown Peak 4.7108	1.24	4.711	448483	
✓	Unknown Peak 4.8087	0.54	4.809	196518	
✓	Unknown Peak 4.8787	0.14	4.879	50938	
✓	Unknown Peak 5.2145	0.05	5.215	19145	
✓	Bromochloromethane	3.91	5.284	1417014	
✓	Tetrahydrofuran	0.60	5.382	215482	
✓	Cyclohexane	1.43	5.438	518333	
✓	Unknown Peak 5.5503	0.60	5.550	215607	
	2,2,4-Trimethylpentane	5.42	5.774	1963282	
	Benzene	0.09	5.802	32208	
✓	1,2-Dichloroethane-d4	15.00	5.816	5428037	
✓	Heptane	0.58	5.942	209617	
✓	Unknown Peak 6.096	0.22	6.096	78177	
✓	1,4-Difluorobenzene	5.54	6.180	2005439	
✓	Methylcyclohexane	1.32	6.460	479315	
✓	Unknown Peak 6.4877	1.77	6.488	642168	
✓	Unknown Peak 6.5437	0.60	6.544	216637	
✓	Unknown Peak 6.6351	0.15	6.635	53965	
✓	Unknown Peak 6.671	0.06	6.671	20038	
✓	Unknown Peak 6.8071	3.60	6.807	1302754	
✓	Unknown Peak 6.9145	5.44	6.915	1968083	
✓	Unknown Peak 7.0936	0.45	7.094	163387	
✓	Unknown Peak 7.2154	1.30	7.215	470435	
✓	Unknown Peak 7.2941	0.15	7.294	54970	
✓	Toluene-d8	6.16	7.387	2228767	
	4-Methyl-2-pentanone	0.03	7.387	9192	
✓	Toluene	3.76	7.445	1361689	
✓	Unknown Peak 7.5305	0.04	7.531	14750	
✓	Unknown Peak 7.6093	0.07	7.609	23599	
✓	Unknown Peak 7.6451	0.12	7.645	42036	

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List of Selected Compounds

Data File: 3072210.d
Sample #: 3234-26
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 7.7024	0.24	7.702	87280	
✓	Unknown Peak 7.8314	0.04	7.831	15834	
✓	Unknown Peak 7.9388	0.12	7.939	42631	
✓	Unknown Peak 8.0821	0.05	8.082	16770	
✓	Unknown Peak 8.1609	0.03	8.161	12061	
✓	Unknown Peak 8.2253	0.06	8.225	22913	
✓	Unknown Peak 8.2898	0.16	8.290	56183	
✓	Unknown Peak 8.3901	0.07	8.390	24029	
✓	Unknown Peak 8.4617	0.08	8.462	30184	
✓	Unknown Peak 8.5548	0.14	8.555	51208	
✓	Chlorobenzene-d5	6.63	8.619	2400690	
✓	Ethyl Benzene	0.87	8.691	315823	
✓	m,p-Xylene	2.51	8.784	907072	
✓	o-Xylene	0.92	9.128	333455	
✓	Cumene	0.23	9.414	83255	
✓	Unknown Peak 9.4574	0.33	9.457	117639	
✓	Unknown Peak 9.5218	0.05	9.522	19617	
✓	4-Bromofluorobenzene	8.00	9.601	2895881	
✓	Propylbenzene	0.17	9.758	63284	
✓	4-Ethyltoluene	1.10	9.830	398646	
✓	1,3,5-Trimethylbenzene	0.31	9.902	110729	
✓	Unknown Peak 10.080	0.50	10.081	181441	
✓	1,2,4-Trimethylbenzene	1.02	10.224	368461	
✓	Unknown Peak 10.302	0.36	10.303	130749	
✓	Unknown Peak 10.431	0.13	10.432	46918	
✓	Unknown Peak 10.517	0.50	10.518	180220	
✓	Unknown Peak 10.596	0.24	10.596	85419	
✓	Unknown Peak 10.689	0.21	10.689	76762	
✓	Unknown Peak 10.746	0.13	10.747	48731	
✓	Unknown Peak 10.789	0.43	10.790	154468	
✓	Unknown Peak 10.890	0.06	10.890	22883	
✓	Unknown Peak 10.975	0.08	10.976	27891	
✓	Unknown Peak 11.047	0.22	11.048	78049	
✓	Unknown Peak 11.126	0.11	11.126	38944	
✓	Unknown Peak 11.241	0.11	11.241	39402	
✓	Unknown Peak 11.391	0.04	11.391	16213	
✓	Unknown Peak 11.470	0.13	11.470	48620	
✓	Unknown Peak 11.520	0.06	11.520	22666	
✓	Unknown Peak 11.720	0.04	11.721	15634	
✓	Unknown Peak 11.771	0.05	11.771	18339	
✓	Unknown Peak 11.914	0.08	11.914	30148	
✓	Unknown Peak 12.322	0.06	12.323	19968	

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Curve Response Factors
p072206.d

Compound	Ave. RF	% RSD
TPH	63271	0.000096

LD 7/22/14

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File Response Factors

Data File: p072206.d
Sample #: 3234-27
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	63270.939033050	

Air Toxics Ltd.

List of Selected Compounds

Data File: p072206.d
Sample #: 3234-27
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 1.5346	0.22	1.535	96605	
☑	Unknown Peak 1.8704	0.05	1.870	23475	
☑	Butane	0.64	2.032	282315	
☑	Unknown Peak 2.2396	0.08	2.240	36756	
☑	Isopentane	3.41	2.641	1499607	
☑	Unknown Peak 2.9702	1.17	2.970	515802	
☑	Unknown Peak 3.1708	0.16	3.171	71587	
☑	Ethanol	1.49	3.242	655820	
☑	Unknown Peak 3.3928	0.37	3.393	162081	
☑	Unknown Peak 3.5361	0.15	3.536	66743	
☑	Unknown Peak 4.0805	1.57	4.080	689358	
☑	Unknown Peak 4.1091	1.48	4.109	648120	
☑	Unknown Peak 4.4028	0.68	4.403	299849	
☑	Unknown Peak 4.6177	0.10	4.618	44177	
☑	Hexane	0.76	4.697	331648	
☑	Unknown Peak 4.8183	0.06	4.818	26757	
☑	Unknown Peak 4.8827	0.09	4.883	38023	
☑	Unknown Peak 4.9257	0.10	4.926	41855	
☑	Unknown Peak 5.0117	0.04	5.012	17135	
☑	Unknown Peak 5.0833	0.07	5.083	28686	
☑	Unknown Peak 5.2265	1.44	5.227	631477	
☑	Unknown Peak 5.3268	0.62	5.327	272848	
☑	Unknown Peak 5.3841	0.10	5.384	44282	
☑	Bromochloromethane	2.64	5.778	1159215	
☑	Tetrahydrofuran	0.66	5.893	289582	
☑	Cyclohexane	1.59	5.964	696604	
☑	Unknown Peak 6.0575	0.69	6.058	301728	
☐	2,2,4-Trimethylpentane	6.84	6.287	3004430	
☐	Benzene	0.08	6.301	36513	
☑	1,2-Dichloroethane-d4	16.89	6.315	7419981	
☑	Heptane	0.73	6.451	319221	
☑	Unknown Peak 6.5875	0.18	6.588	80165	
☑	1,4-Difluorobenzene	3.56	6.666	1565346	
☑	Unknown Peak 6.7881	0.06	6.788	27375	
☑	Unknown Peak 6.8167	0.04	6.817	17277	
☑	Unknown Peak 6.9385	1.33	6.939	582789	
☑	Methylcyclohexane	2.18	6.974	957540	
☑	Unknown Peak 7.0531	0.79	7.053	346979	
☑	Unknown Peak 7.1248	0.10	7.125	44497	
☑	Unknown Peak 7.1749	0.06	7.175	28335	
☑	Unknown Peak 7.3038	4.68	7.304	2057107	
☑	Unknown Peak 7.4113	6.95	7.411	3052159	
☑	Unknown Peak 7.5760	0.64	7.576	281898	
☑	4-Methyl-2-pentanone	1.68	7.712	736993	
☑	Unknown Peak 7.7981	0.18	7.798	79452	
☑	Toluene-d8	4.18	7.891	1837531	
☑	Toluene	4.11	7.956	1805867	
☑	Unknown Peak 8.0345	0.04	8.034	17596	
☑	Unknown Peak 8.1491	0.36	8.149	160145	
☑	Unknown Peak 8.2422	0.71	8.242	313258	
☑	Unknown Peak 8.3926	0.17	8.393	74209	
☑	Unknown Peak 8.5215	0.13	8.522	57597	

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List of Selected Compounds

Data File: p072206.d
Sample #: 3234-27
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 8.7221	0.05	8.722	21979	
☑	Unknown Peak 8.8940	0.04	8.894	16906	
☑	Unknown Peak 8.9728	0.17	8.973	75339	
☑	Unknown Peak 9.1161	0.08	9.116	35941	
☑	Unknown Peak 9.2307	0.07	9.231	30896	
☑	Unknown Peak 9.3668	0.09	9.367	41713	
☑	Chlorobenzene-d5	4.54	9.460	1993936	
☑	Ethyl Benzene	0.85	9.567	371908	
☑	m,p-Xylene	2.73	9.718	1197051	
☑	Unknown Peak 9.9542	0.05	9.954	23268	
☑	Unknown Peak 10.061	0.03	10.062	14708	
☑	o-Xylene	0.97	10.226	423837	
☑	Cumene	0.27	10.649	118137	
☑	Unknown Peak 10.734	0.35	10.735	155858	
☑	Unknown Peak 10.835	0.17	10.835	72794	
☑	4-Bromofluorobenzene	5.56	10.921	2439724	
☑	Propylbenzene	0.19	11.150	84402	
☑	4-Ethyltoluene	1.33	11.258	582414	
☑	1,3,5-Trimethylbenzene	0.42	11.365	183204	
☑	Unknown Peak 11.630	0.58	11.630	256244	
☑	1,2,4-Trimethylbenzene	1.08	11.817	472270	
☑	Unknown Peak 11.945	0.44	11.946	192963	
☑	Unknown Peak 12.124	0.19	12.125	84769	
☑	Unknown Peak 12.239	0.51	12.239	221848	
☑	Unknown Peak 12.318	0.25	12.318	109868	
☑	Unknown Peak 12.482	0.22	12.483	94644	
☑	Unknown Peak 12.547	0.20	12.547	89462	
☑	Unknown Peak 12.597	0.25	12.597	111909	
☑	Unknown Peak 12.640	0.13	12.640	56146	
☑	Unknown Peak 12.740	0.07	12.741	30861	
☑	Unknown Peak 12.826	0.04	12.827	18000	
☑	Unknown Peak 12.919	0.09	12.920	38781	
☑	Unknown Peak 12.955	0.11	12.956	47167	
☑	Unknown Peak 13.034	0.11	13.034	48240	
☑	Unknown Peak 13.177	0.07	13.178	32668	
☑	Unknown Peak 13.378	0.04	13.378	15898	
☑	Unknown Peak 13.521	0.21	13.521	94346	
☑	Unknown Peak 13.772	0.03	13.772	14114	
☑	Unknown Peak 13.829	0.07	13.829	32343	
☑	Unknown Peak 14.015	0.10	14.016	44905	
☑	Unknown Peak 14.531	0.04	14.531	17370	
☑	Unknown Peak 14.653	0.03	14.653	11407	
☑	Unknown Peak 14.796	0.05	14.796	21681	

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File Results

Data File: File Information: p072215.d
Sample #: 2107241A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.47

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	110	(12169317.7269237 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072215.d
Sample #: 2107241A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.47

Compounds	RT	Peak Area	10
Unknown Peak 1.1709	1.171	226552	
Unknown Peak 1.5487	1.549	41227298	
Propylene	1.689	1127049	
Unknown Peak 2.0319	2.032	166907	
Unknown Peak 2.2468	2.247	310082	
Unknown Peak 2.4760	2.476	74543	
Unknown Peak 2.5476	2.548	13137	
Ethanol	3.271	33682	
Acetone	3.730	494808	
2-Propanol	3.901	390744	
Unknown Peak 4.3527	4.353	51782	
Unknown Peak 4.7180	4.718	10512	
Unknown Peak 4.9329	4.933	24254	
Unknown Peak 5.3770	5.377	31693	
Unknown Peak 5.4343	5.434	49589	
Unknown Peak 5.5633	5.563	27552	
Unknown Peak 5.6277	5.628	36624	
Bromochloromethane	5.785	1068244	
1,2-Dichloroethane-d4	6.315	676752	
Unknown Peak 6.4586	6.459	10697	
Unknown Peak 6.5159	6.516	11518	
1,4-Difluorobenzene	6.666	1436952	
Unknown Peak 6.8239	6.824	15163	
Unknown Peak 6.8526	6.853	12578	
Unknown Peak 7.1248	7.125	81536	
Unknown Peak 7.5761	7.576	49015	
Toluene-d8	7.891	1828526	
Unknown Peak 8.0488	8.049	47413	
Unknown Peak 8.1563	8.156	76192	
Unknown Peak 8.2136	8.214	99012	
Unknown Peak 8.3139	8.314	144222	
Tetrachloroethene	8.471	73544	
Unknown Peak 8.7007	8.701	201244	
Unknown Peak 8.9084	8.908	31699	
Unknown Peak 9.2236	9.224	15236	
Chlorobenzene-d5	9.460	1965189	
Unknown Peak 10.033	10.033	14281	
Unknown Peak 10.233	10.234	14963	
Unknown Peak 10.362	10.363	14425	
Unknown Peak 10.505	10.506	86876	
Unknown Peak 10.756	10.757	166263	
Unknown Peak 10.849	10.850	39074	
4-Bromofluorobenzene	10.921	2347104	
Unknown Peak 11.007	11.007	16869	
Unknown Peak 11.401	11.401	101923	
Unknown Peak 11.508	11.509	42968	
Unknown Peak 11.651	11.652	50715	
Unknown Peak 11.716	11.716	12462	
Unknown Peak 11.802	11.802	14554	
Unknown Peak 11.924	11.924	53013	
Unknown Peak 12.067	12.067	139574	
Unknown Peak 12.246	12.246	35050	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072215.d
Sample #: 2107241A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.47

	Compounds	RT	Peak Area	10
☐	Unknown Peak 12.461	12.461	44073	☐
☐	Unknown Peak 12.604	12.605	25111	☐
☐	Unknown Peak 12.819	12.819	125884	☐
☐	Unknown Peak 12.991	12.991	91299	☐
☐	Unknown Peak 13.041	13.041	40321	☐
☐	Unknown Peak 13.363	13.364	206977	☐
☐	Unknown Peak 13.535	13.536	69779	☐
☐	Unknown Peak 13.793	13.794	34458	☐
☐	Unknown Peak 13.944	13.944	14173	☐
☐	Unknown Peak 14.230	14.231	24334	☐
☐	Unknown Peak 14.388	14.388	10357	☐
☐	Unknown Peak 14.517	14.517	45318	☐
☑	Unknown Peak 14.903	14.904	49370	☐
☑	Unknown Peak 15.025	15.026	10825	☐
☐	Unknown Peak 15.269	15.269	28762	☐
☐	Unknown Peak 15.462	15.463	39911	☐

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File Results

Data File: File Information: p072216.d
Sample #: 2107241A-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.61

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	39	(10187116.0871438 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072216.d
Sample #: 2107241A-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.61

Compounds	RT	Peak Area
Unknown Peak 1.5065	1.507	13487663
1,1-Difluoroethane	1.716	6637106
Unknown Peak 2.2394	2.239	100889
Unknown Peak 2.4758	2.476	20616
Acetone	3.729	117372
2-Propanol	3.901	90671
Unknown Peak 4.3453	4.345	21893
Unknown Peak 4.9542	4.954	20278
Unknown Peak 5.3840	5.384	14159
Unknown Peak 5.4341	5.434	32972
Unknown Peak 5.5630	5.563	19157
Bromochloromethane	5.785	1144189
Chloroform	5.842	32517
1,2-Dichloroethane-d4	6.315	665168
Unknown Peak 6.5086	6.509	20132
1,4-Difluorobenzene	6.666	1404085
Unknown Peak 7.1317	7.132	19599
Unknown Peak 7.3251	7.325	10788
Unknown Peak 7.5759	7.576	32873
Unknown Peak 7.7907	7.791	12177
Toluene-d8	7.891	1763287
Unknown Peak 8.3853	8.385	23008
Tetrachloroethene	8.471	68291
Unknown Peak 8.7005	8.700	30024
Unknown Peak 8.7578	8.758	13934
Unknown Peak 8.9082	8.908	37288
Unknown Peak 9.2234	9.223	15885
Chlorobenzene-d5	9.460	1919587
Unknown Peak 9.7104	9.710	15148
Unknown Peak 10.362	10.362	10193
Unknown Peak 10.505	10.506	25038
Unknown Peak 10.777	10.778	11962
Unknown Peak 10.842	10.842	24450
4-Bromofluorobenzene	10.921	2249368
Unknown Peak 11.257	11.258	20133
Unknown Peak 11.400	11.401	32159
Unknown Peak 11.644	11.645	17294
Unknown Peak 11.931	11.931	25478
Unknown Peak 12.067	12.067	20100
Unknown Peak 12.246	12.246	18392
Unknown Peak 12.453	12.454	21253
Unknown Peak 12.640	12.640	35468
Unknown Peak 12.819	12.819	38423
Unknown Peak 12.984	12.984	59909
Unknown Peak 13.363	13.364	37088
Unknown Peak 13.528	13.528	33789
Unknown Peak 13.800	13.801	30180
Unknown Peak 14.509	14.510	23028
Unknown Peak 14.746	14.746	10180
Unknown Peak 14.903	14.904	50245
Unknown Peak 15.254	15.255	19530
Unknown Peak 15.448	15.448	16319

Air Toxics Ltd.

File Results

Data File: File Information: p072217.d
Sample #: 2107241A-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.24

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	50	(10644490.4254426 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072217.d
Sample #: 2107241A-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.24

Compounds	RT	Peak Area
Unknown Peak 1.1568	1.157	245876
Unknown Peak 1.5066	1.507	17433537
Propylene	1.688	408043
Unknown Peak 1.8983	1.898	75640
Unknown Peak 2.0246	2.025	38307
Unknown Peak 2.2466	2.247	52036
Unknown Peak 2.4759	2.476	80539
Unknown Peak 3.2638	3.264	12211
Unknown Peak 3.4357	3.436	26100
Acetone	3.729	279764
2-Propanol	3.901	141941
Unknown Peak 4.7251	4.725	15202
Unknown Peak 4.9471	4.947	10834
Unknown Peak 5.3841	5.384	11582
Unknown Peak 5.4342	5.434	66980
Unknown Peak 5.5631	5.563	24503
Bromochloromethane	5.785	1051821
1,2-Dichloroethane-d4	6.315	652302
1,4-Difluorobenzene	6.666	1381328
Trichloroethene	6.867	50495
Unknown Peak 7.1247	7.125	24677
Unknown Peak 7.2966	7.297	11992
Unknown Peak 7.5831	7.583	38815
Toluene-d8	7.891	1725180
Unknown Peak 8.0487	8.049	11573
Unknown Peak 8.1490	8.149	15425
Unknown Peak 8.2063	8.206	13879
Unknown Peak 8.3925	8.393	19314
Tetrachloroethene	8.464	68788
Unknown Peak 8.7005	8.701	24157
Unknown Peak 8.7507	8.751	12385
Unknown Peak 8.9011	8.901	28349
Unknown Peak 9.2234	9.223	25425
Chlorobenzene-d5	9.460	1918060
Unknown Peak 9.7249	9.725	22028
Unknown Peak 9.8681	9.868	26800
Unknown Peak 10.512	10.513	22969
Unknown Peak 10.756	10.756	73465
4-Bromofluorobenzene	10.921	2281370
Unknown Peak 11.264	11.265	11268
Unknown Peak 11.393	11.394	16775
Unknown Peak 11.637	11.637	11683
Unknown Peak 11.931	11.931	33328
Unknown Peak 12.067	12.067	17110
Unknown Peak 12.253	12.253	17804
Unknown Peak 12.325	12.325	11181
Unknown Peak 12.461	12.461	25662
Unknown Peak 12.826	12.826	62426
Unknown Peak 12.998	12.998	37894
Unknown Peak 13.385	13.385	36332
Unknown Peak 13.549	13.550	29942
Unknown Peak 13.822	13.822	14470

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072217.d
Sample #: 2107241A-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.24

	Compounds	RT	Peak Area	10
☑	Unknown Peak 14.545	14.546	14369	☐
☑	Unknown Peak 14.789	14.789	29395	☐
☑	Unknown Peak 14.946	14.947	38270	☐
☑	Unknown Peak 15.312	15.312	15629	☐
☑	Unknown Peak 15.505	15.505	17662	☐

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File Results

Data File: File Information: 3072214.d
Sample #: 2107241A-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.29 x 50 = 114

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	110	(13537793.3328336 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072214.d
Sample #: 2107241A-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.29

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3108	1.311	57530502	☐
☐	Unknown Peak 1.5206	1.521	1646306	☐
☐	Unknown Peak 1.7025	1.703	169094	☐
☐	Unknown Peak 1.8984	1.898	289473	☐
☐	Unknown Peak 2.0243	2.024	42296	☐
☐	Unknown Peak 2.1083	2.108	97300	☐
☐	Unknown Peak 2.1923	2.192	54657	☐
☐	Unknown Peak 2.4301	2.430	21369	☐
☐	Unknown Peak 2.696	2.696	34015	☐
☑	Ethanol	2.794	52284	☐
☐	Unknown Peak 2.8779	2.878	20018	☐
☐	Unknown Peak 3.0877	3.088	50533	☐
☐	Acetone	3.242	188449	☐
☐	2-Propanol	3.438	62928	☐
☐	tert-Butyl alcohol	3.871	100452	☐
☑	Unknown Peak 4.6688	4.669	21638	☐
☑	Unknown Peak 4.8927	4.893	26829	☐
☑	Unknown Peak 4.9486	4.949	27836	☐
☑	Unknown Peak 5.1165	5.117	22837	☐
☑	Bromochloromethane	5.284	1509422	☐
☐	Chloroform	5.340	441104	☐
☑	1,2-Dichloroethane-d4	5.816	1008987	☐
☑	Unknown Peak 6.0540	6.054	15225	☐
☑	1,4-Difluorobenzene	6.180	2213311	☐
☑	Unknown Peak 6.3618	6.362	20937	☐
☑	Unknown Peak 6.6567	6.657	28941	☐
☑	Toluene-d8	7.387	2474204	☐
☑	Toluene	7.437	54777	☐
☐	Unknown Peak 7.6523	7.652	213368	☐
☐	Unknown Peak 7.7526	7.753	18898	☐
☐	Unknown Peak 7.7956	7.796	14687	☐
☐	Tetrachloroethene	7.882	48145	☐
☐	Unknown Peak 8.0821	8.082	43679	☐
☐	Unknown Peak 8.1537	8.154	13232	☐
☐	Unknown Peak 8.2110	8.211	15792	☐
☐	Unknown Peak 8.2612	8.261	24697	☐
☐	Unknown Peak 8.4904	8.490	12789	☐
☑	Chlorobenzene-d5	8.619	2644111	☐
☑	Unknown Peak 8.7841	8.784	41005	☐
☑	Unknown Peak 9.2282	9.228	10996	☐
☐	Unknown Peak 9.3070	9.307	19331	☐
☐	Unknown Peak 9.3714	9.371	100212	☐
☐	Unknown Peak 9.5147	9.515	297070	☐
☑	4-Bromofluorobenzene	9.601	3158537	☐
☑	Unknown Peak 9.8299	9.830	33646	☐
☐	Unknown Peak 9.9445	9.945	62031	☐
☐	Unknown Peak 10.001	10.002	17222	☐
☐	Unknown Peak 10.102	10.102	24808	☐
☐	Unknown Peak 10.216	10.217	26620	☐
☐	Unknown Peak 10.324	10.324	47702	☐
☐	Unknown Peak 10.417	10.417	52213	☐
☐	Unknown Peak 10.517	10.518	36301	☐

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072214.d
Sample #: 2107241A-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.29

	Compounds	RT	Peak Area	10
☐	Unknown Peak 10.675	10.675	54344	☐
☐	Unknown Peak 10.804	10.804	19798	☐
☐	Unknown Peak 10.961	10.962	126977	☐
☐	Unknown Peak 11.054	11.055	46510	☐
☑	Unknown Peak 11.104	11.105	52650	☐
☐	Unknown Peak 11.205	11.205	13476	☐
☑	Unknown Peak 11.391	11.391	33238	☐
☐	Unknown Peak 11.534	11.535	41251	☐
☐	Unknown Peak 11.599	11.599	71364	☐
☑	Unknown Peak 11.713	11.714	40012	☐
☐	Unknown Peak 12.394	12.394	19163	☐
☑	Unknown Peak 12.616	12.616	46371	☐
☐	Unknown Peak 12.924	12.924	40368	☐
☐	Unknown Peak 13.361	13.361	13624	☐
☐	Unknown Peak 13.669	13.669	31658	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072215.d
Sample #: 2107241A-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	100	(13353306.4950696 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072215.d
Sample #: 2107241A-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2965	1.297	20675320	☐
☐	Unknown Peak 1.5623	1.562	25140	☐
☑	Unknown Peak 1.6882	1.688	101659	☐
☑	Unknown Peak 1.7722	1.772	38481	☐
☑	Unknown Peak 1.8841	1.884	223579	☐
☑	Unknown Peak 2.0660	2.066	15534	☐
☑	Unknown Peak 2.192	2.192	28871	☐
☑	Unknown Peak 2.4298	2.430	21558	☐
☑	Unknown Peak 2.8356	2.836	20227	☐
☑	Unknown Peak 3.0175	3.018	24807	☐
☑	Unknown Peak 3.1154	3.115	49128	☐
☐	Acetone	3.241	368768	☐
☐	2-Propanol	3.465	59247	☐
☑	Unknown Peak 4.9623	4.962	35788	☐
☑	Unknown Peak 5.0883	5.088	22051	☐
☑	Unknown Peak 5.1442	5.144	41679	☐
☑	Bromochloromethane	5.284	1456699	☐
☑	Unknown Peak 5.3681	5.368	38939	☐
☑	1,2-Dichloroethane-d4	5.816	913416	☐
☑	1,4-Difluorobenzene	6.166	2031711	☐
☑	Unknown Peak 6.2636	6.264	48240	☐
☑	Unknown Peak 6.3475	6.348	46686	☐
☑	Unknown Peak 6.6492	6.649	17905	☐
☑	Unknown Peak 6.7137	6.714	11528	☐
☑	Toluene-d8	7.387	2439414	☐
☐	Tetrachloroethene	7.881	110529	☐
☑	Unknown Peak 8.0102	8.010	11878	☐
☑	Unknown Peak 8.089	8.089	19383	☐
☑	Unknown Peak 8.2680	8.268	13249	☐
☑	Chlorobenzene-d5	8.619	2581994	☐
☑	Unknown Peak 9.1348	9.135	11976	☐
☑	Unknown Peak 9.3138	9.314	13498	☐
☑	4-Bromofluorobenzene	9.600	3002213	☐
☑	Unknown Peak 9.9370	9.937	13566	☐
☑	Unknown Peak 10.108	10.109	14139	☐
☑	Unknown Peak 10.331	10.331	16102	☐
☑	Unknown Peak 10.409	10.410	27409	☐
☐	Unknown Peak 10.610	10.610	56316	☐
☐	Unknown Peak 10.674	10.675	23579	☐
☐	Unknown Peak 10.961	10.961	28424	☐
☐	Unknown Peak 11.104	11.105	34168	☐
☐	Unknown Peak 11.391	11.391	11036	☐
☐	Unknown Peak 11.534	11.534	11101	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072216.d
Sample #: 2107241A-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	100	(13442751.6624878 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072216.d
Sample #: 2107241A-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compounds	RT	Peak Area	10
Unknown Peak 1.3106	1.311	19550603	
Unknown Peak 1.4645	1.465	361074	
Unknown Peak 1.7024	1.702	109732	
Unknown Peak 1.7584	1.758	46860	
Unknown Peak 1.8983	1.898	124375	
Unknown Peak 2.0942	2.094	18380	
Unknown Peak 2.5699	2.570	18191	
Unknown Peak 2.8357	2.836	19057	
Unknown Peak 2.9197	2.920	19950	
Unknown Peak 3.0036	3.004	17920	
Unknown Peak 3.2415	3.242	38034	
Carbon Disulfide	3.312	625367	
Unknown Peak 3.4234	3.423	46056	
Unknown Peak 3.8711	3.871	59914	
Unknown Peak 4.8645	4.865	22846	
Unknown Peak 4.9625	4.963	16945	
Unknown Peak 5.1304	5.130	23336	
Bromochloromethane	5.284	1439411	
Chloroform	5.354	139233	
1,2-Dichloroethane-d4	5.816	966900	
Unknown Peak 6.0818	6.082	16753	
1,4-Difluorobenzene	6.180	2074516	
Unknown Peak 6.6279	6.628	21931	
1,4-Dioxane	6.707	157492	
Unknown Peak 6.9717	6.972	13998	
Toluene-d8	7.387	2339748	
Unknown Peak 7.6307	7.631	73128	
Unknown Peak 7.6951	7.695	17246	
Unknown Peak 7.7954	7.795	14433	
Tetrachloroethene	7.881	70371	
Unknown Peak 8.0963	8.096	13337	
Chlorobenzene-d5	8.619	2491254	
Unknown Peak 8.7768	8.777	24590	
Unknown Peak 9.3856	9.386	181521	
Unknown Peak 9.5217	9.522	42226	
4-Bromofluorobenzene	9.601	2982293	
Unknown Peak 9.7796	9.780	183098	
Unknown Peak 9.9443	9.944	11959	
Unknown Peak 10.424	10.424	13660	
Unknown Peak 10.517	10.517	15499	
Unknown Peak 10.675	10.675	35378	
Unknown Peak 10.803	10.804	11907	
Unknown Peak 11.319	11.320	10802	
Unknown Peak 11.599	11.599	46877	
Unknown Peak 11.713	11.714	14834	
Unknown Peak 12.394	12.394	14844	
Unknown Peak 12.666	12.666	23232	

Air Toxics Ltd.

File Results

Data File: File Information: 3072217.d
Sample #: 2107241A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.27

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	340	(18208874.5960219 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072217.d
Sample #: 2107241A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.27

Compounds	RT	Peak Area	10
Unknown Peak 1.2967	1.297	16654291	
1,1-Difluoroethane	1.437	8541614	
Unknown Peak 1.6885	1.689	67313	
Unknown Peak 1.7585	1.759	72699	
Unknown Peak 1.8844	1.884	202484	
Unknown Peak 2.0663	2.066	67158	
Unknown Peak 2.2062	2.206	42590	
Unknown Peak 2.4161	2.416	27376	
Unknown Peak 2.4860	2.486	17608	
Unknown Peak 2.8079	2.808	20654	
Unknown Peak 2.8638	2.864	20064	
Unknown Peak 3.1157	3.116	38471	
Acetone	3.242	496206	
Carbon Disulfide	3.284	42383	
2-Propanol	3.466	135719	
Unknown Peak 3.5634	3.563	18999	
Unknown Peak 3.9132	3.913	38518	
Unknown Peak 4.1511	4.151	17460	
Unknown Peak 4.5428	4.543	19058	
Unknown Peak 4.7947	4.795	21395	
Unknown Peak 4.8926	4.893	40810	
Unknown Peak 4.9626	4.963	54368	
Unknown Peak 5.0885	5.089	26390	
Bromochloromethane	5.284	1415907	
Chloroform	5.340	275750	
Unknown Peak 5.4243	5.424	135134	
Unknown Peak 5.5363	5.536	51407	
1,2-Dichloroethane-d4	5.816	920507	
Unknown Peak 5.9420	5.942	46453	
1,4-Difluorobenzene	6.166	2042678	
Unknown Peak 6.3618	6.362	45575	
Unknown Peak 6.4457	6.446	135107	
Unknown Peak 6.6208	6.621	19081	
Unknown Peak 6.6638	6.664	55250	
Unknown Peak 6.7927	6.793	83438	
Unknown Peak 6.9145	6.915	27821	
Unknown Peak 6.9646	6.965	25749	
Unknown Peak 7.0792	7.079	32534	
Unknown Peak 7.287	7.287	99644	
Toluene-d8	7.387	2402665	
Toluene	7.437	186151	
Unknown Peak 7.5520	7.552	36159	
Unknown Peak 7.5950	7.595	48091	
Unknown Peak 7.6881	7.688	53082	
Unknown Peak 7.8242	7.824	24064	
Tetrachloroethene	7.874	49278	
Unknown Peak 8.0248	8.025	23112	
Unknown Peak 8.1179	8.118	331442	
Unknown Peak 8.2182	8.218	83361	
Unknown Peak 8.2826	8.283	59034	
Unknown Peak 8.3113	8.311	38235	
Unknown Peak 8.3829	8.383	41602	

List of Selected Compounds

Data File: File Information: 3072217.d
Sample #: 2107241A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.27

Compounds	RT	Peak Area	10
Unknown Peak 8.5477	8.548	28274	
Chlorobenzene-d5	8.612	2643967	
Unknown Peak 8.6837	8.684	113228	
m,p-Xylene	8.784	206014	
Unknown Peak 8.8485	8.849	47109	
Unknown Peak 8.9273	8.927	27303	
Unknown Peak 9.0132	9.013	157492	
Unknown Peak 9.1135	9.114	141317	
Unknown Peak 9.2281	9.228	301262	
Unknown Peak 9.3141	9.314	119521	
Unknown Peak 9.3642	9.364	96285	
Unknown Peak 9.4144	9.414	109354	
Unknown Peak 9.5218	9.522	43114	
4-Bromofluorobenzene	9.601	3067575	
Unknown Peak 9.6579	9.658	259891	
Unknown Peak 9.7510	9.751	121458	
Unknown Peak 9.8298	9.830	367504	
Unknown Peak 9.9373	9.937	64398	
Unknown Peak 9.9731	9.973	51750	
Unknown Peak 10.051	10.052	147602	
Unknown Peak 10.087	10.088	95273	
1,2,4-Trimethylbenzene	10.224	201178	
Unknown Peak 10.302	10.303	34131	
Unknown Peak 10.331	10.331	54171	
Unknown Peak 10.352	10.353	99748	
Unknown Peak 10.402	10.403	149442	
Unknown Peak 10.467	10.467	46678	
Unknown Peak 10.617	10.618	84895	
Unknown Peak 10.682	10.682	161823	
Unknown Peak 10.818	10.818	162752	
Unknown Peak 10.961	10.962	66598	
Unknown Peak 11.047	11.048	79182	
Unknown Peak 11.097	11.098	90620	
Unknown Peak 11.248	11.248	97489	
Unknown Peak 11.305	11.305	33926	
Unknown Peak 11.384	11.384	260915	
Unknown Peak 11.470	11.470	24111	
Unknown Peak 11.541	11.542	93075	
Unknown Peak 11.599	11.599	41675	
Unknown Peak 11.706	11.707	30584	
Unknown Peak 11.771	11.771	15645	
Unknown Peak 11.842	11.843	19684	
Unknown Peak 12.315	12.315	36668	
Unknown Peak 12.480	12.480	34327	
Unknown Peak 12.623	12.623	44529	
Unknown Peak 12.917	12.917	30506	
Unknown Peak 13.268	13.268	18752	
Unknown Peak 13.676	13.676	74171	

Air Toxics Ltd.

File Results

Data File: File Information: 3072218.d
Sample #: 2107241A-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.29 x 50 = 114

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	110	(13464315.8775412 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072218.d
Sample #: 2107241A-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.29

Compounds	RT	Peak Area
Unknown Peak 1.2968	1.297	22621756
Unknown Peak 1.4787	1.479	10510160
Unknown Peak 1.6745	1.675	69121
Unknown Peak 1.7305	1.731	69693
Acetaldehyde	1.884	272852
Unknown Peak 2.0803	2.080	19833
Unknown Peak 2.4021	2.402	29817
Unknown Peak 2.8079	2.808	79044
Unknown Peak 3.0318	3.032	40747
Unknown Peak 3.1157	3.116	44961
Acetone	3.242	301284
2-Propanol	3.466	141380
Unknown Peak 3.5355	3.535	16891
Unknown Peak 3.8992	3.899	29567
Unknown Peak 4.2211	4.221	27419
Unknown Peak 4.8927	4.893	52099
Unknown Peak 4.9626	4.963	28921
Unknown Peak 5.0886	5.089	32240
Bromochloromethane	5.284	1487111
Chloroform	5.340	326741
Unknown Peak 5.4104	5.410	97501
Unknown Peak 5.5503	5.550	39203
1,2-Dichloroethane-d4	5.816	965999
1,4-Difluorobenzene	6.166	2148376
Unknown Peak 6.2919	6.292	26721
Trichloroethene	6.362	38756
Unknown Peak 6.6566	6.657	73210
Unknown Peak 6.7068	6.707	17536
Unknown Peak 6.9145	6.915	20879
Toluene-d8	7.387	2455795
Unknown Peak 7.4446	7.445	37436
Tetrachloroethene	7.882	89058
Unknown Peak 8.0964	8.096	52792
Unknown Peak 8.1537	8.154	17940
Unknown Peak 8.1967	8.197	12103
Unknown Peak 8.2755	8.276	42151
Unknown Peak 8.3614	8.361	31560
Unknown Peak 8.4975	8.498	13214
Chlorobenzene-d5	8.612	2662818
Unknown Peak 8.6838	8.684	40294
Unknown Peak 8.7841	8.784	29488
Unknown Peak 9.2282	9.228	14387
Unknown Peak 9.3141	9.314	51063
Unknown Peak 9.4431	9.443	15269
Unknown Peak 9.5219	9.522	26883
4-Bromofluorobenzene	9.601	3108882
Unknown Peak 9.8299	9.830	48486
Unknown Peak 9.9230	9.923	29460
Unknown Peak 10.073	10.073	27307
Unknown Peak 10.309	10.310	74877
Unknown Peak 10.402	10.403	55277
Unknown Peak 10.510	10.510	92586

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072218.d
Sample #: 2107241A-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.29

Compounds	RT	Peak Area	10
Unknown Peak 10.682	10.682	74405	
Unknown Peak 10.875	10.876	20478	
Unknown Peak 10.968	10.969	47559	
Unknown Peak 11.018	11.019	15142	
Unknown Peak 11.054	11.055	33865	
Unknown Peak 11.097	11.098	96494	
Unknown Peak 11.219	11.220	21271	
Unknown Peak 11.384	11.384	48984	
Unknown Peak 11.420	11.420	38165	
Unknown Peak 11.470	11.470	48211	
Unknown Peak 11.534	11.535	77088	
Unknown Peak 11.713	11.714	23129	
Unknown Peak 12.322	12.323	28504	
Unknown Peak 12.372	12.373	16132	
Unknown Peak 12.616	12.616	27000	
Unknown Peak 12.924	12.924	14284	
Unknown Peak 13.669	13.669	24416	

Air Toxics Ltd.

File Results

Data File: File Information: 3072219.d
Sample #: 2107241A-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(11189035.5734672 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072219.d
Sample #: 2107241A-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

Compounds	RT	Peak Area	10
Unknown Peak 1.2966	1.297	28833712	
Unknown Peak 1.7023	1.702	231460	
Unknown Peak 1.8842	1.884	282042	
Unknown Peak 1.9962	1.996	45483	
Unknown Peak 2.0941	2.094	60525	
Unknown Peak 2.2060	2.206	30909	
Unknown Peak 2.3599	2.360	22801	
Unknown Peak 2.4299	2.430	33058	
Unknown Peak 2.8217	2.822	39823	
Unknown Peak 3.1155	3.116	39568	
Acetone	3.241	260464	
2-Propanol	3.465	138821	
Unknown Peak 3.5772	3.577	17681	
tert-Butyl alcohol	3.913	226014	
Unknown Peak 4.2209	4.221	26220	
Unknown Peak 4.8925	4.893	22125	
Unknown Peak 4.9624	4.962	45092	
Unknown Peak 5.0884	5.088	26112	
Unknown Peak 5.1303	5.130	26225	
Bromochloromethane	5.270	1549908	
Unknown Peak 5.4242	5.424	71111	
Unknown Peak 5.5641	5.564	17711	
1,2-Dichloroethane-d4	5.816	984820	
1,4-Difluorobenzene	6.166	2185713	
Unknown Peak 6.3336	6.334	36160	
Unknown Peak 6.3616	6.362	33237	
Unknown Peak 6.6564	6.656	22910	
Unknown Peak 6.7137	6.714	14636	
Toluene-d8	7.387	2550402	
Tetrachloroethene	7.881	151178	
Unknown Peak 7.9888	7.989	10445	
Unknown Peak 8.0890	8.089	47810	
Chlorobenzene-d5	8.612	2738529	
m,p-Xylene	8.784	56167	
Unknown Peak 9.1205	9.121	48645	
Unknown Peak 9.2280	9.228	16491	
Unknown Peak 9.3139	9.314	26107	
Unknown Peak 9.3712	9.371	78188	
Unknown Peak 9.5217	9.522	29555	
4-Bromofluorobenzene	9.601	3171285	
Unknown Peak 9.8297	9.830	49052	
Unknown Peak 9.9443	9.944	39143	
Unknown Peak 10.001	10.002	12973	
Unknown Peak 10.087	10.088	11956	
Unknown Peak 10.223	10.224	43646	
Unknown Peak 10.323	10.324	44950	
Unknown Peak 10.402	10.403	49598	
Unknown Peak 10.517	10.517	16330	
Unknown Peak 10.603	10.603	31433	
Unknown Peak 10.682	10.682	78746	
Unknown Peak 10.803	10.804	23284	
Unknown Peak 10.968	10.969	24675	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072219.d
Sample #: 2107241A-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

	Compounds	RT	Peak Area	10
☐	Unknown Peak 11.047	11.047	28513	☐
☐	Unknown Peak 11.384	11.384	40916	☐
☐	Unknown Peak 11.470	11.470	12420	☐
☐	Unknown Peak 11.527	11.527	13757	☐
☑	Unknown Peak 11.598	11.599	28076	☐
☑	Unknown Peak 11.699	11.699	15006	☐
☐	Unknown Peak 12.322	12.322	23517	☐
☐	Unknown Peak 12.401	12.401	12547	☐
☐	Unknown Peak 12.558	12.559	31914	☐
☐	Unknown Peak 12.623	12.623	15850	☐
☐	Unknown Peak 13.146	13.146	12376	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072221.d
Sample #: 2107241A-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

tA 7/23/21

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	150	(14471883.7383328 - 11253019.9996547 / 45877

ND- Due to high IS in the sample the calculation was incorrect -

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072221.d
Sample #: 2107241A-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3107	1.311	23072626	☐
☐	Unknown Peak 1.6745	1.675	22814	☐
☐	Unknown Peak 1.8983	1.898	91694	☐
☐	Unknown Peak 1.9823	1.982	26750	☐
☐	Unknown Peak 2.0802	2.080	32821	☐
☐	Unknown Peak 2.1222	2.122	66103	☐
☐	Unknown Peak 2.3601	2.360	17997	☐
☐	Unknown Peak 2.4300	2.430	20734	☐
☐	Unknown Peak 2.4720	2.472	19492	☐
☐	Unknown Peak 2.7099	2.710	17144	☐
☐	Unknown Peak 2.8078	2.808	33044	☐
☐	Unknown Peak 2.9057	2.906	26438	☐
☑	Unknown Peak 3.1436	3.144	68328	☐
☐	Acetone	3.256	259397	☐
☐	Unknown Peak 3.5074	3.507	49653	☐
☐	Unknown Peak 4.8646	4.865	21004	☐
☐	Unknown Peak 4.9765	4.977	29280	☐
☑	Bromochloromethane	5.284	1679153	☐
☐	Unknown Peak 5.4103	5.410	72394	☐
☐	Unknown Peak 5.5082	5.508	45912	☐
☑	1,2-Dichloroethane-d4	5.816	1081653	☐
☑	1,4-Difluorobenzene	6.180	2376833	☐
☐	Unknown Peak 6.2498	6.250	40001	☐
☐	Unknown Peak 6.6566	6.657	14107	☐
☑	Toluene-d8	7.387	2790703	☐
☐	Unknown Peak 7.6379	7.638	24611	☐
☐	Tetrachloroethene	7.874	173870	☐
☐	Unknown Peak 8.0677	8.068	12421	☐
☐	Unknown Peak 8.0963	8.096	13234	☐
☑	Chlorobenzene-d5	8.612	2984987	☐
☐	Unknown Peak 9.3212	9.321	10083	☐
☐	Unknown Peak 9.5289	9.529	115661	☐
☑	4-Bromofluorobenzene	9.601	3490226	☐
☐	Unknown Peak 9.9444	9.944	17064	☐
☐	Unknown Peak 10.961	10.962	46049	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072222.d
Sample #: 2107241A-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	110	(13488322.875916 - 11253019.9996547 / 45877)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072222.d
Sample #: 2107241A-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2966	1.297	19034322	☐
☐	Unknown	1.297	19034322	☐
☐	1,1-Difluoroethane	1.451	834182	☐
☐	Unknown Peak 1.6884	1.688	32042	☐
☐	Acetaldehyde	1.884	161176	☐
☐	Unknown Peak 2.0802	2.080	15391	☐
☐	Unknown Peak 2.2201	2.220	18026	☐
☐	Unknown Peak 2.3740	2.374	27057	☐
☐	Unknown Peak 2.416	2.416	26929	☐
☐	Unknown Peak 2.6258	2.626	17956	☐
☐	Unknown Peak 2.7937	2.794	19211	☐
☐	Acetone	3.242	113421	☐
☐	Unknown Peak 3.2974	3.297	24918	☐
☐	2-Propanol	3.437	67624	☐
☐	Unknown Peak 3.8571	3.857	20360	☐
☐	Unknown Peak 3.9830	3.983	21785	☐
☐	Unknown Peak 4.8925	4.893	17555	☐
☐	Unknown Peak 4.9625	4.963	26288	☐
☑	Bromochloromethane	5.284	1315211	☐
☐	Chloroform	5.340	1371558	☐
☐	Unknown Peak 5.5641	5.564	22691	☐
☑	1,2-Dichloroethane-d4	5.816	867095	☐
☑	1,4-Difluorobenzene	6.180	1889342	☐
☐	Unknown Peak 6.6565	6.657	31995	☐
☐	Unknown Peak 6.8427	6.843	48718	☐
☐	Unknown Peak 7.1722	7.172	17308	☐
☑	Toluene-d8	7.387	2137002	☐
☐	Unknown Peak 7.6521	7.652	44398	☐
☐	Tetrachloroethene	7.881	49329	☐
☐	Unknown Peak 8.0963	8.096	25395	☐
☑	Chlorobenzene-d5	8.619	4320011	☐
☐	Chlorobenzene	8.641	640176	☐
☑	Unknown Peak 8.7767	8.777	29357	☐
☐	Unknown Peak 9.3211	9.321	24823	☐
☐	Unknown Peak 9.5217	9.522	26185	☐
☑	4-Bromofluorobenzene	9.601	2930305	☐
☐	Unknown Peak 9.9443	9.944	16099	☐
☐	Unknown Peak 10.402	10.403	19639	☐
☐	Unknown Peak 10.596	10.596	18016	☐
☐	Unknown Peak 10.682	10.682	80648	☐
☐	Unknown Peak 10.925	10.926	16909	☐
☐	Unknown Peak 11.054	11.055	11065	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072222.d
Sample #: 2107241A-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	110	(13652877.383341 - 11253019.9996547 / 45877)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072222.d
Sample #: 2107241A-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2966	1.297	19034322	☐
☐	Unknown	1.297	19034322	☐
☐	1,1-Difluoroethane	1.451	834182	☐
☐	Unknown Peak 1.6884	1.688	32042	☐
☐	Acetaldehyde	1.884	161176	☐
☐	Unknown Peak 2.0802	2.080	15391	☐
☐	Unknown Peak 2.2201	2.220	18026	☐
☐	Unknown Peak 2.3740	2.374	27057	☐
☐	Unknown Peak 2.416	2.416	26929	☐
☐	Unknown Peak 2.6258	2.626	17956	☐
☐	Unknown Peak 2.7937	2.794	19211	☐
☐	Acetone	3.242	113421	☐
☐	Unknown Peak 3.2974	3.297	24918	☐
☐	2-Propanol	3.437	67624	☐
☐	Unknown Peak 3.8571	3.857	20360	☐
☐	Unknown Peak 3.9830	3.983	21785	☐
☑	Unknown Peak 4.8925	4.893	17555	☐
☑	Unknown Peak 4.9625	4.963	26288	☐
☑	Bromochloromethane	5.284	1315211	☐
☐	Chloroform	5.340	1371558	☐
☑	Unknown Peak 5.5641	5.564	22691	☐
☑	1,2-Dichloroethane-d4	5.816	867095	☐
☑	1,4-Difluorobenzene	6.180	1889342	☐
☑	Unknown Peak 6.6565	6.657	31995	☐
☑	Unknown Peak 6.8427	6.843	48718	☐
☑	Unknown Peak 7.1722	7.172	17308	☐
☑	Toluene-d8	7.387	2137002	☐
☐	Unknown Peak 7.6521	7.652	44398	☐
☐	Tetrachloroethene	7.881	49329	☐
☐	Unknown Peak 8.0963	8.096	25395	☐
☑	Chlorobenzene-d5	8.619	4320011	☐
☐	Chlorobenzene	8.641	640176	☐
☑	Unknown Peak 8.7767	8.777	29357	☐
☐	Unknown Peak 9.3211	9.321	24823	☐
☐	Unknown Peak 9.5217	9.522	26185	☐
☑	4-Bromofluorobenzene	9.601	2930305	☐
☐	Unknown Peak 9.9443	9.944	16099	☐
☐	Unknown Peak 10.402	10.403	19639	☐
☐	Unknown Peak 10.596	10.596	18016	☐
☐	Unknown Peak 10.682	10.682	80648	☐
☐	Unknown Peak 10.925	10.926	16909	☐
☐	Unknown Peak 11.054	11.055	11065	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072223.d
Sample #: 2107241A-12A
Client ID:
Spike Level: 0
Dilution Factor: 2.09

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(10837259.6030278 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072223.d
Sample #: 2107241A-12A
Client ID:
Spike Level: 0
Dilution Factor: 2.09

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2967	1.297	23366476	☐
☐	Unknown Peak 1.4366	1.437	273529	☐
☐	Unknown Peak 1.5765	1.577	50390	☐
☐	Unknown Peak 1.6885	1.689	119509	☐
☐	Unknown Peak 1.7584	1.758	36893	☐
☐	Unknown Peak 1.8983	1.898	172000	☐
☐	Unknown Peak 2.6399	2.640	15348	☐
☐	Unknown Peak 2.7798	2.780	45223	☐
☐	Unknown Peak 3.0317	3.032	16291	☐
☐	Unknown Peak 3.1156	3.116	28491	☐
☐	Acetone	3.228	278232	☐
☐	2-Propanol	3.410	238805	☐
☐	Unknown Peak 3.8712	3.871	62512	☐
☐	Unknown Peak 4.8926	4.893	16540	☐
☐	Unknown Peak 4.9626	4.963	32771	☐
☐	Unknown Peak 5.0885	5.089	28128	☐
☑	Bromochloromethane	5.284	1223563	☐
☐	Chloroform	5.354	9347	☐
☑	1,2-Dichloroethane-d4	5.816	807434	☐
☑	1,4-Difluorobenzene	6.180	1740189	☐
☑	Unknown Peak 6.3617	6.362	25912	☐
☑	Unknown Peak 6.6566	6.657	10170	☐
☑	Toluene-d8	7.387	1999700	☐
☐	Tetrachloroethene	7.882	473178	☐
☐	Unknown Peak 8.0963	8.096	12386	☐
☑	Chlorobenzene-d5	8.619	2139182	☐
☑	Unknown Peak 8.7052	8.705	38388	☐
☑	Unknown Peak 8.7912	8.791	11326	☐
☑	Unknown Peak 9.1135	9.114	23350	☐
☐	Unknown Peak 9.3714	9.371	34297	☐
☑	Unknown Peak 9.4143	9.414	74205	☐
☐	Unknown Peak 9.5218	9.522	45352	☐
☑	4-Bromofluorobenzene	9.608	2504172	☐
☑	Unknown Peak 9.8155	9.816	144997	☐
☐	Unknown Peak 9.9516	9.952	28464	☐
☑	Unknown Peak 10.051	10.052	28127	☐
☐	Unknown Peak 10.087	10.088	28075	☐
☑	Unknown Peak 10.223	10.224	35242	☐
☐	Unknown Peak 10.324	10.324	32367	☐
☐	Unknown Peak 10.352	10.353	14349	☐
☐	Unknown Peak 10.424	10.424	13510	☐
☑	Unknown Peak 10.517	10.518	31302	☐
☐	Unknown Peak 10.696	10.697	15622	☐
☐	Unknown Peak 10.811	10.811	27838	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072224.d
Sample #: 2107241A-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	64	(12627171.5484101 - 11253019.9996547 / 45877

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072224.d
Sample #: 2107241A-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compounds	RT	Peak Area	10
Unknown Peak 1.2966	1.297	23532583	
Propylene	1.437	737860	
1,1-Difluoroethane	1.451	15553	
Unknown Peak 1.7024	1.702	34425	
Unknown Peak 1.8983	1.898	234530	
Unknown Peak 2.0942	2.094	14617	
Unknown Peak 2.7798	2.780	27498	
Unknown Peak 2.9197	2.920	192727	
Acetone	3.228	1102906	
2-Propanol	3.423	257891	
Unknown Peak 3.6892	3.689	25666	
Unknown Peak 4.2209	4.221	45414	
Unknown Peak 4.6407	4.641	15469	
Unknown Peak 4.8925	4.893	32491	
Unknown Peak 4.9625	4.963	35711	
Unknown Peak 5.0884	5.088	23577	
Bromochloromethane	5.284	1281035	
Chloroform	5.354	666310	
Unknown Peak 5.6761	5.676	27912	
1,2-Dichloroethane-d4	5.816	867453	
Unknown Peak 6.0818	6.082	17859	
1,4-Difluorobenzene	6.180	1801371	
Unknown Peak 6.6637	6.664	56628	
Unknown Peak 6.8427	6.843	19904	
Toluene-d8	7.387	2060136	
Unknown Peak 7.6522	7.652	80943	
Tetrachloroethene	7.881	192825	
Unknown Peak 8.0963	8.096	39935	
Unknown Peak 8.2539	8.254	12281	
Unknown Peak 8.3685	8.369	12855	
Unknown Peak 8.4974	8.497	46597	
Chlorobenzene-d5	8.619	2204696	
Unknown Peak 9.3212	9.321	27747	
Unknown Peak 9.4143	9.414	16114	
Unknown Peak 9.5217	9.522	32229	
4-Bromofluorobenzene	9.601	2592504	
Unknown Peak 9.7868	9.787	11492	
Unknown Peak 10.101	10.102	17762	
Unknown Peak 10.324	10.324	29099	
Unknown Peak 10.402	10.403	29256	
Unknown Peak 10.682	10.682	21807	
Unknown Peak 11.104	11.105	51715	
Unknown Peak 11.391	11.391	19415	
Unknown Peak 11.427	11.427	12332	
Unknown Peak 11.534	11.535	19405	
Unknown Peak 12.623	12.623	12514	
Unknown Peak 12.931	12.931	17654	
Unknown Peak 13.131	13.132	15932	
Unknown Peak 13.368	13.368	11117	
Unknown Peak 13.669	13.669	13155	

Air Toxics Ltd.

File Results

Data File: File Information: p072218.d
Sample #: 2107241A-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.03

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	35	(10342538.8404209 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072218.d
Sample #: 2107241A-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.03

Compounds	RT	Peak Area
Unknown Peak 1.5065	1.507	12792482
Unknown Peak 2.0317	2.032	50693
Unknown Peak 2.2395	2.240	133021
Unknown Peak 3.2709	3.271	16632
Acetone	3.722	241889
2-Propanol	3.901	101271
Unknown Peak 4.1090	4.109	17879
Unknown Peak 4.3454	4.345	10314
Unknown Peak 5.1047	5.105	10013
Unknown Peak 5.3769	5.377	32091
Unknown Peak 5.4342	5.434	58437
Unknown Peak 5.556	5.556	29901
Unknown Peak 5.6276	5.628	12555
Bromochloromethane	5.785	1013242
Chloroform	5.835	8216
1,2-Dichloroethane-d4	6.308	628989
1,4-Difluorobenzene	6.659	1308646
Unknown Peak 6.8166	6.817	22860
Unknown Peak 7.0387	7.039	19108
Unknown Peak 7.1247	7.125	40210
Unknown Peak 7.5759	7.576	30911
Toluene-d8	7.891	1642348
Unknown Peak 8.0487	8.049	13414
Tetrachloroethene	8.464	792380
Unknown Peak 8.5859	8.586	13073
Unknown Peak 8.7005	8.701	50220
Chlorobenzene-d5	9.460	1773453
Unknown Peak 10.362	10.362	10147
Unknown Peak 10.505	10.506	36922
Cumene	10.649	64035
Unknown Peak 10.756	10.756	270248
4-Bromofluorobenzene	10.921	2100714
Unknown Peak 11.150	11.150	15607
Unknown Peak 11.393	11.394	31140
Unknown Peak 11.637	11.637	20324
Unknown Peak 11.923	11.924	71296
Unknown Peak 12.067	12.067	38558
Unknown Peak 12.239	12.239	20340
Unknown Peak 12.468	12.468	17304
Unknown Peak 12.812	12.812	426184
Unknown Peak 12.984	12.984	151837
Unknown Peak 13.105	13.106	11213
Unknown Peak 13.363	13.364	71150
Unknown Peak 13.535	13.536	34229
Unknown Peak 14.223	14.223	12062
Unknown Peak 14.516	14.517	20277
Unknown Peak 14.910	14.911	30189
Unknown Peak 15.462	15.462	11449

Air Toxics Ltd.

File Results

Data File: File Information: p072219.d
Sample #: 2107241A-15A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	47	(10587054.7133296 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072219.d
Sample #: 2107241A-15A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

Compounds	RT	Peak Area	10
Unknown Peak 1.4926	1.493	12251596	
Unknown Peak 1.9543	1.954	42080	
Unknown Peak 2.2252	2.225	123123	
Ethanol	3.235	25444	
Acetone	3.715	170136	
2-Propanol	3.894	95025	
tert-Butyl alcohol	4.338	113660	
Unknown Peak 5.3698	5.370	24041	
Unknown Peak 5.4271	5.427	38037	
Unknown Peak 5.4700	5.470	37458	
Unknown Peak 5.5560	5.556	24643	
Unknown Peak 5.6205	5.620	18071	
Bromochloromethane	5.778	1080463	
Chloroform	5.835	37861	
Unknown Peak 6.1577	6.158	12138	
Benzene	6.294	11297	
1,2-Dichloroethane-d4	6.308	652663	
1,4-Difluorobenzene	6.659	1311384	
Unknown Peak 6.8167	6.817	13681	
Unknown Peak 7.1247	7.125	23638	
Unknown Peak 7.5760	7.576	17990	
Toluene-d8	7.891	1678990	
Unknown Peak 8.0416	8.042	29463	
Unknown Peak 8.1490	8.149	142376	
Unknown Peak 8.2994	8.299	84814	
Tetrachloroethene	8.464	468825	
Unknown Peak 8.5931	8.593	26470	
Unknown Peak 8.7006	8.701	28726	
Unknown Peak 8.7579	8.758	35068	
Chlorobenzene-d5	9.460	1777669	
Unknown Peak 9.7106	9.711	10968	
Unknown Peak 10.240	10.241	10136	
Unknown Peak 10.505	10.506	15688	
Cumene	10.649	144718	
Unknown Peak 10.849	10.850	33042	
4-Bromofluorobenzene	10.921	2069003	
Unknown Peak 11.264	11.265	13403	
Unknown Peak 11.315	11.315	12427	
Unknown Peak 11.401	11.401	38766	
Unknown Peak 11.637	11.637	56853	
Unknown Peak 11.802	11.802	20107	
Unknown Peak 11.931	11.931	103301	
Unknown Peak 12.074	12.074	40867	
Unknown Peak 12.239	12.239	71960	
Unknown Peak 12.461	12.461	50372	
Unknown Peak 12.819	12.819	56007	
Unknown Peak 12.984	12.984	412868	
Unknown Peak 13.370	13.371	73617	
Unknown Peak 13.492	13.493	24434	
Unknown Peak 13.528	13.528	34348	
Unknown Peak 13.643	13.643	50416	
Unknown Peak 13.793	13.794	24385	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072219.d
Sample #: 2107241A-15A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

Compounds	RT	Peak Area	10
Unknown Peak 14.216	14.216	13403	
Unknown Peak 14.517	14.517	10532	
Unknown Peak 14.610	14.610	35528	
Unknown Peak 14.903	14.904	33403	
Unknown Peak 15.261	15.262	24441	
Unknown Peak 15.462	15.463	18837	

Air Toxics Ltd.

File Results

Data File: File Information: p072220.d
Sample #: 2107241A-16A
Client ID:
Spike Level: 0
Dilution Factor: 2.11

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9171435.6333406 - 9241904.3438285 / 63271) *

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072220.d
Sample #: 2107241A-16A
Client ID:
Spike Level: 0
Dilution Factor: 2.11

Compounds	RT	Peak Area	10
Unknown Peak 1.5065	1.506	9369325	
Unknown Peak 2.2322	2.232	30095	
Unknown Peak 3.7293	3.729	57191	
Unknown Peak 3.9084	3.908	17620	
Unknown Peak 4.9542	4.954	15373	
Unknown Peak 5.4341	5.434	21609	
Bromochloromethane	5.785	1003829	
1,2-Dichloroethane-d4	6.315	625668	
Unknown Peak 6.5157	6.516	18003	
1,4-Difluorobenzene	6.666	1321102	
Unknown Peak 7.0673	7.067	29173	
Unknown Peak 7.1174	7.117	40608	
Unknown Peak 7.1747	7.175	17215	
Unknown Peak 7.5758	7.576	23385	
Toluene-d8	7.891	1620264	
Unknown Peak 8.0414	8.041	10971	
Unknown Peak 8.3709	8.371	15375	
Tetrachloroethene	8.464	1628799	
Unknown Peak 8.6002	8.600	11640	
Chlorobenzene-d5	9.460	1780575	
Unknown Peak 10.756	10.756	136586	
4-Bromofluorobenzene	10.921	2108936	
Unknown Peak 11.400	11.401	19824	
Unknown Peak 11.938	11.938	10992	
Unknown Peak 12.267	12.268	10929	
Unknown Peak 12.819	12.819	186967	
Unknown Peak 12.983	12.984	12363	
Unknown Peak 13.363	13.364	12612	
Unknown Peak 14.910	14.911	24358	
Unknown Peak 15.462	15.462	18267	

Air Toxics Ltd.

File Results

Data File: File Information: p072228.d
Sample #: 2107241A-17A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	7.6	(9469517.27596993 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072228.d
Sample #: 2107241A-17A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compounds	RT	Peak Area	10
Unknown Peak 1.2408	1.241	80679	
Unknown Peak 1.5066	1.507	6714655	
1,1-Difluoroethane	1.703	1718386	
Unknown Peak 2.2324	2.232	111791	
Unknown Peak 3.2424	3.242	13063	
Unknown Peak 3.2639	3.264	15561	
Unknown Peak 3.7223	3.722	97923	
Unknown Peak 3.9085	3.909	31180	
Unknown Peak 4.7108	4.711	28055	
Unknown Peak 4.9400	4.940	11401	
Unknown Peak 5.0904	5.090	17048	
Unknown Peak 5.377	5.377	13846	
Unknown Peak 5.5560	5.556	38968	
Unknown Peak 5.7136	5.714	15182	
Bromochloromethane	5.785	1053120	
Chloroform	5.835	21521	
1,2-Dichloroethane-d4	6.308	624218	
Unknown Peak 6.4586	6.459	32132	
Unknown Peak 6.5803	6.580	13732	
1,4-Difluorobenzene	6.659	1303928	
Unknown Peak 6.8167	6.817	27945	
Unknown Peak 6.8597	6.860	12953	
Unknown Peak 7.1247	7.125	13509	
Unknown Peak 7.5760	7.576	20919	
Toluene-d8	7.891	1631926	
Unknown Peak 8.0416	8.042	26988	
Unknown Peak 8.1419	8.142	10554	
Unknown Peak 8.3138	8.314	74107	
Tetrachloroethene	8.464	1209262	
Unknown Peak 8.6003	8.600	11358	
Unknown Peak 8.7006	8.701	19446	
Chlorobenzene-d5	9.460	1742810	
Unknown Peak 9.7106	9.711	35147	
Unknown Peak 10.505	10.506	10944	
Unknown Peak 10.677	10.678	12809	
4-Bromofluorobenzene	10.921	2002725	
Unknown Peak 11.257	11.258	57611	
Unknown Peak 11.365	11.365	39243	
Unknown Peak 11.616	11.616	25107	
Unknown Peak 11.816	11.817	35383	
Unknown Peak 11.931	11.931	53697	
Unknown Peak 12.067	12.067	13815	
Unknown Peak 12.253	12.254	18395	
Unknown Peak 12.317	12.318	41065	
Unknown Peak 12.461	12.461	10889	
Unknown Peak 12.604	12.604	49215	
Unknown Peak 12.826	12.827	20172	
Unknown Peak 13.027	13.027	23244	
Unknown Peak 13.177	13.178	13097	
Unknown Peak 13.385	13.385	25370	
Unknown Peak 13.528	13.529	14222	
Unknown Peak 14.552	14.553	10493	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072228.d
Sample #: 2107241A-17A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compounds	RT	Peak Area	10
Unknown Peak 14.939	14.940	29506	
Unknown Peak 15.498	15.498	11630	

Air Toxics Ltd.

File Results

Data File: File Information: p072222.d
Sample #: 2107241A-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	72	(11323229.0745885 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072222.d
Sample #: 2107241A-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

Compounds	RT	Peak Area	10
Unknown Peak 1.5064	1.506	19935412	
Unknown Peak 1.8982	1.898	96720	
Unknown Peak 2.0245	2.025	41973	
Unknown Peak 2.2394	2.239	114230	
Unknown Peak 2.4901	2.490	62925	
Unknown Peak 3.2494	3.249	11579	
Unknown Peak 3.3783	3.378	13630	
Unknown Peak 3.6003	3.600	10711	
Acetone	3.729	144911	
Unknown Peak 3.9084	3.908	47499	
Unknown Peak 4.3668	4.367	12754	
Unknown Peak 5.3839	5.384	22091	
Unknown Peak 5.4341	5.434	51121	
Unknown Peak 5.4771	5.477	26616	
Unknown Peak 5.5630	5.563	17981	
Bromochloromethane	5.785	1069278	
Unknown Peak 6.1647	6.165	14048	
1,2-Dichloroethane-d4	6.315	639599	
1,4-Difluorobenzene	6.666	1363651	
Unknown Peak 6.7449	6.745	24267	
Unknown Peak 7.1246	7.125	29970	
Unknown Peak 7.2392	7.239	11231	
Unknown Peak 7.5758	7.576	34727	
Toluene-d8	7.898	1752712	
Unknown Peak 8.0271	8.027	14041	
Unknown Peak 8.1560	8.156	146664	
Tetrachloroethene	8.471	953006	
Unknown Peak 8.7004	8.700	55224	
Unknown Peak 8.7577	8.758	44903	
Unknown Peak 8.9082	8.908	88005	
Unknown Peak 9.2162	9.216	59022	
Chlorobenzene-d5	9.460	1932323	
Unknown Peak 9.6674	9.667	19162	
Unknown Peak 9.7319	9.732	20963	
Unknown Peak 10.226	10.226	29688	
Unknown Peak 10.412	10.412	45201	
Unknown Peak 10.541	10.541	96087	
Unknown Peak 10.849	10.849	53688	
4-Bromofluorobenzene	10.921	2200638	
Unknown Peak 11.006	11.007	60253	
Unknown Peak 11.150	11.150	13136	
Unknown Peak 11.264	11.265	38268	
Unknown Peak 11.400	11.401	20706	
Unknown Peak 11.601	11.601	81765	
Unknown Peak 11.794	11.795	28739	
Unknown Peak 11.923	11.924	19325	
Unknown Peak 12.016	12.017	53575	
Unknown Peak 12.067	12.067	43818	
Unknown Peak 12.246	12.246	22555	
Unknown Peak 12.317	12.318	68201	
Unknown Peak 12.453	12.454	21903	
Unknown Peak 12.482	12.483	14025	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072222.d
Sample #: 2107241A-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

	Compounds	RT	Peak Area	10
☑	Unknown Peak 12.618	12.619	112042	☐
☑	Unknown Peak 12.812	12.812	32339	☐
☐	Unknown Peak 12.991	12.991	170244	☐
☑	Unknown Peak 13.098	13.099	18086	☐
☑	Unknown Peak 13.170	13.170	82059	☐
☑	Unknown Peak 13.306	13.306	22870	☐
☑	Unknown Peak 13.363	13.364	118304	☐
☑	Unknown Peak 13.521	13.521	154583	☐
☑	Unknown Peak 13.743	13.743	25387	☐
☑	Unknown Peak 13.807	13.808	25295	☐
☑	Unknown Peak 13.972	13.972	67403	☐
☑	Unknown Peak 14.387	14.388	10201	☐
☑	Unknown Peak 14.516	14.517	33274	☐
☑	Unknown Peak 14.731	14.732	20305	☐
☑	Unknown Peak 14.917	14.918	22583	☐
☑	Unknown Peak 15.261	15.262	27027	☐
☑	Unknown Peak 15.462	15.462	33665	☐

Air Toxics Ltd.

File Results

Data File: File Information: p072223.d
Sample #: 2107241A-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	110	(12423121.1373949 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072223.d
Sample #: 2107241A-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compounds	RT	Peak Area	10
Unknown Peak 1.5066	1.507	15641299	
1,1-Difluoroethane	1.716	652276	
Unknown Peak 1.8984	1.898	117050	
Unknown Peak 2.0246	2.025	59274	
Unknown Peak 2.2395	2.240	156330	
Unknown Peak 2.4759	2.476	76120	
Unknown Peak 3.3713	3.371	15659	
Unknown Peak 3.4357	3.436	11647	
Acetone	3.729	564425	
Carbon Disulfide	3.837	88222	
2-Propanol	3.909	139984	
Unknown Peak 4.2093	4.209	13734	
Unknown Peak 4.3598	4.360	45277	
Unknown Peak 4.4027	4.403	30915	
Unknown Peak 4.7179	4.718	18232	
Unknown Peak 5.3841	5.384	71897	
Unknown Peak 5.4342	5.434	69428	
Unknown Peak 5.4772	5.477	18564	
Unknown Peak 5.5632	5.563	46475	
Unknown Peak 5.6276	5.628	21800	
Bromochloromethane	5.785	1043378	
Unknown Peak 5.8568	5.857	191671	
Unknown Peak 5.9571	5.957	62158	
Unknown Peak 6.0574	6.057	57384	
Unknown Peak 6.2293	6.229	32053	
1,2-Dichloroethane-d4	6.315	734239	
Unknown Peak 6.4585	6.459	20716	
1,4-Difluorobenzene	6.666	1387013	
Unknown Peak 6.7451	6.745	25121	
Unknown Peak 6.8238	6.824	44450	
Unknown Peak 6.9743	6.974	22597	
Unknown Peak 7.0387	7.039	12253	
Unknown Peak 7.1247	7.125	98927	
Unknown Peak 7.2465	7.247	11213	
Unknown Peak 7.3038	7.304	14010	
Unknown Peak 7.4112	7.411	13440	
Unknown Peak 7.4470	7.447	17725	
Unknown Peak 7.576	7.576	92179	
Unknown Peak 7.7980	7.798	14761	
Toluene-d8	7.891	1741214	
Toluene	7.956	213331	
Unknown Peak 8.1562	8.156	49960	
Unknown Peak 8.1920	8.192	54117	
Unknown Peak 8.3782	8.378	19614	
Tetrachloroethene	8.471	445203	
Unknown Peak 8.7006	8.701	224279	
Unknown Peak 8.7579	8.758	80738	
Unknown Peak 8.8223	8.822	20877	
Unknown Peak 8.9083	8.908	104637	
Unknown Peak 9.2235	9.223	82775	
Chlorobenzene-d5	9.460	1958479	
Unknown Peak 9.7249	9.725	40290	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072223.d
Sample #: 2107241A-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compounds	RT	Peak Area	10
Unknown Peak 10.226	10.226	26154	
Unknown Peak 10.369	10.370	11627	
Unknown Peak 10.505	10.506	91632	
Unknown Peak 10.756	10.756	13547	
4-Bromofluorobenzene	10.921	2374236	
Unknown Peak 11.401	11.401	41890	
Unknown Peak 11.515	11.516	23333	
Unknown Peak 11.637	11.637	45713	
Unknown Peak 11.931	11.931	56866	
Unknown Peak 12.067	12.067	73185	
Unknown Peak 12.239	12.239	28015	
Unknown Peak 12.454	12.454	41059	
Unknown Peak 12.625	12.626	21708	
Unknown Peak 12.819	12.819	19076	
Unknown Peak 12.984	12.984	70822	
Unknown Peak 13.363	13.364	107847	
Unknown Peak 13.492	13.493	18017	
Unknown Peak 13.535	13.536	14849	
Unknown Peak 13.800	13.801	11627	
Unknown Peak 14.516	14.517	20880	
Unknown Peak 14.903	14.904	34544	
Unknown Peak 15.462	15.463	18491	

Air Toxics Ltd.

File Results

Data File: File Information: p072224.d
Sample #: 2107241A-20A
Client ID:
Spike Level: 0
Dilution Factor: 2.25

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	84	(11598757.1779308 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072224.d
Sample #: 2107241A-20A
Client ID:
Spike Level: 0
Dilution Factor: 2.25

Compounds	RT	Peak Area	10
Unknown Peak 1.5067	1.507	15424549	
Unknown Peak 2.0247	2.025	56805	
Unknown Peak 2.2396	2.240	203042	
Unknown Peak 3.2568	3.257	13961	
Unknown Peak 3.3714	3.371	20350	
Unknown Peak 3.5648	3.565	19083	
Acetone	3.730	291227	
2-Propanol	3.901	213211	
Unknown Peak 4.0948	4.095	17510	
Unknown Peak 4.1235	4.124	18336	
Unknown Peak 4.3527	4.353	17250	
Unknown Peak 4.7252	4.725	20303	
Unknown Peak 4.7753	4.775	13798	
Unknown Peak 4.9258	4.926	14718	
Unknown Peak 5.3842	5.384	62387	
Unknown Peak 5.4343	5.434	88241	
Unknown Peak 5.4773	5.477	44156	
Unknown Peak 5.5704	5.570	97419	
Bromochloromethane	5.785	1042274	
Unknown Peak 5.8498	5.850	169712	
Unknown Peak 5.9501	5.950	45686	
Unknown Peak 6.0790	6.079	17510	
Unknown Peak 6.2366	6.237	22838	
1,2-Dichloroethane-d4	6.315	652099	
Unknown Peak 6.5088	6.509	46266	
1,4-Difluorobenzene	6.666	1386968	
Unknown Peak 6.8168	6.817	53805	
Unknown Peak 7.0388	7.039	20615	
Unknown Peak 7.1248	7.125	58422	
Unknown Peak 7.2466	7.247	18428	
Unknown Peak 7.2967	7.297	131767	
Unknown Peak 7.4471	7.447	17644	
Unknown Peak 7.5832	7.583	58708	
Toluene-d8	7.891	1892593	
Toluene	7.956	220479	
Unknown Peak 8.0417	8.042	63578	
Unknown Peak 8.1634	8.163	65570	
Unknown Peak 8.2064	8.206	76957	
Unknown Peak 8.3210	8.321	97081	
Tetrachloroethene	8.472	448814	
Unknown Peak 8.5861	8.586	45329	
Unknown Peak 8.7007	8.701	84710	
Unknown Peak 8.7508	8.751	47159	
Unknown Peak 8.9084	8.908	52787	
Unknown Peak 9.2236	9.224	36596	
Chlorobenzene-d5	9.460	1919151	
Unknown Peak 9.7250	9.725	12437	
Unknown Peak 10.233	10.234	23675	
Unknown Peak 10.362	10.363	23871	
Unknown Peak 10.505	10.506	68623	
Unknown Peak 10.684	10.685	43187	
Unknown Peak 10.763	10.764	25027	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072224.d
Sample #: 2107241A-20A
Client ID:
Spike Level: 0
Dilution Factor: 2.25

Compounds	RT	Peak Area	10
4-Bromofluorobenzene	10.921	2238615	
Unknown Peak 11.164	11.165	13499	
Unknown Peak 11.236	11.236	12508	
Unknown Peak 11.401	11.401	18782	
Unknown Peak 11.601	11.602	30540	
Unknown Peak 11.630	11.630	30416	
Unknown Peak 11.809	11.809	12899	
Unknown Peak 11.931	11.931	32531	
Unknown Peak 12.067	12.067	67176	
Unknown Peak 12.282	12.282	43637	
Unknown Peak 12.454	12.454	42074	
Unknown Peak 12.604	12.605	12659	
Unknown Peak 12.797	12.798	60706	
Unknown Peak 12.876	12.877	15586	
Unknown Peak 12.984	12.984	27568	
Unknown Peak 13.242	13.242	15085	
Unknown Peak 13.363	13.364	66695	
Unknown Peak 14.517	14.517	31313	
Unknown Peak 15.469	15.470	22818	
Unknown Peak 15.613	15.613	12602	

Air Toxics Ltd.

File Results

Data File: File Information: p072225.d
Sample #: 2107241A-21A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	98	(12181715.1899011 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072225.d
Sample #: 2107241A-21A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compounds	RT	Peak Area	10
Unknown Peak 1.1706	1.171	249458	
Unknown Peak 1.5064	1.506	13908040	
1,1-Difluoroethane	1.716	370473	
Unknown Peak 1.8982	1.898	141488	
Unknown Peak 2.2393	2.239	111647	
Unknown Peak 2.4757	2.476	52119	
Unknown Peak 3.7293	3.729	96222	
2-Propanol	3.908	61078	
Unknown Peak 4.4169	4.417	14801	
Unknown Peak 4.7178	4.718	17988	
Unknown Peak 5.3839	5.384	12705	
Unknown Peak 5.4341	5.434	35927	
Unknown Peak 5.5702	5.570	22567	
Bromochloromethane	5.785	1046284	
Unknown Peak 5.8638	5.864	100345	
Unknown Peak 6.2220	6.222	10711	
1,2-Dichloroethane-d4	6.315	669022	
Unknown Peak 6.3796	6.380	20996	
Unknown Peak 6.5228	6.523	33376	
1,4-Difluorobenzene	6.666	1374403	
Unknown Peak 6.9741	6.974	30512	
Unknown Peak 7.1245	7.125	19740	
Unknown Peak 7.2463	7.246	14790	
Unknown Peak 7.2965	7.297	23253	
Unknown Peak 7.4397	7.440	15305	
Unknown Peak 7.5758	7.576	50133	
Unknown Peak 7.8050	7.805	12924	
Toluene-d8	7.891	1691807	
Toluene	7.955	161838	
Unknown Peak 8.1489	8.149	40928	
Unknown Peak 8.1990	8.199	36370	
Tetrachloroethene	8.471	333150	
Unknown Peak 8.6789	8.679	62385	
Unknown Peak 8.7505	8.751	66540	
Unknown Peak 8.9081	8.908	89313	
Unknown Peak 9.0371	9.037	11257	
Unknown Peak 9.2233	9.223	50675	
Chlorobenzene-d5	9.460	2046316	
Unknown Peak 9.5671	9.567	58018	
m,p-Xylene	9.718	121867	
Unknown Peak 10.082	10.083	27858	
o-Xylene	10.226	65029	
Unknown Peak 10.398	10.398	32715	
Unknown Peak 10.505	10.506	29087	
Unknown Peak 10.541	10.541	17044	
Unknown Peak 10.763	10.763	42189	
Unknown Peak 10.849	10.849	24989	
4-Bromofluorobenzene	10.921	2215974	
Unknown Peak 11.035	11.036	85255	
Unknown Peak 11.150	11.150	36408	
4-Ethyltoluene	11.258	110547	
Unknown Peak 11.365	11.365	75691	

List of Selected Compounds

Data File: File Information: p072225.d
Sample #: 2107241A-21A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compounds	RT	Peak Area	10
Unknown Peak 11.622	11.623	63618	
Unknown Peak 11.816	11.816	102211	
Unknown Peak 11.952	11.952	49573	
Unknown Peak 11.988	11.988	35482	
Unknown Peak 12.067	12.067	45715	
Unknown Peak 12.246	12.246	31996	
Unknown Peak 12.317	12.318	39054	
Unknown Peak 12.475	12.475	23080	
Unknown Peak 12.604	12.604	78634	
Unknown Peak 12.812	12.812	38039	
Unknown Peak 12.905	12.905	10638	
Unknown Peak 12.991	12.991	178400	
Unknown Peak 13.112	13.113	11864	
Unknown Peak 13.170	13.170	19901	
Unknown Peak 13.306	13.306	20830	
Unknown Peak 13.363	13.364	79308	
Unknown Peak 13.528	13.528	81728	
Unknown Peak 13.943	13.944	20821	
Unknown Peak 14.122	14.123	28120	
Unknown Peak 14.230	14.230	13812	
Unknown Peak 14.373	14.374	13331	
Unknown Peak 14.509	14.510	30980	
Unknown Peak 15.154	15.154	11530	
Unknown Peak 15.469	15.470	25693	

Air Toxics Ltd.

File Results

Data File: File Information: p072226.d
Sample #: 2107241A-22A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	53	(10815815.9427145 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072226.d
Sample #: 2107241A-22A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compounds	RT	Peak Area	10
Unknown Peak 1.5066	1.507	22653060	
1,1-Difluoroethane	1.717	1937003	
Unknown Peak 1.8844	1.884	120017	
Unknown Peak 2.2467	2.247	152501	
Unknown Peak 2.4759	2.476	40831	
Unknown Peak 2.7768	2.777	10717	
Unknown Peak 2.8771	2.877	15786	
Ethanol	3.257	27566	
Unknown Peak 3.3641	3.364	10971	
Unknown Peak 3.6005	3.601	12142	
Acetone	3.737	155596	
2-Propanol	3.909	56211	
Unknown Peak 4.4028	4.403	44247	
Unknown Peak 5.3841	5.384	51523	
Unknown Peak 5.4343	5.434	64115	
Unknown Peak 5.5632	5.563	43616	
Unknown Peak 5.6277	5.628	14076	
Bromochloromethane	5.785	1017243	
Unknown Peak 5.8569	5.857	86906	
Unknown Peak 5.9643	5.964	31233	
Unknown Peak 6.2222	6.222	42195	
1,2-Dichloroethane-d4	6.315	656162	
Unknown Peak 6.5230	6.523	11606	
1,4-Difluorobenzene	6.666	1341070	
Unknown Peak 6.7451	6.745	14896	
Unknown Peak 6.8167	6.817	11430	
Unknown Peak 7.0388	7.039	15535	
Unknown Peak 7.1319	7.132	35502	
Unknown Peak 7.2465	7.247	11763	
Unknown Peak 7.5760	7.576	50527	
Toluene-d8	7.891	1717585	
Unknown Peak 8.1562	8.156	30845	
Unknown Peak 8.2064	8.206	29226	
Tetrachloroethene	8.471	2548490	
Unknown Peak 8.5860	8.586	16771	
Unknown Peak 8.7006	8.701	65132	
Unknown Peak 8.7579	8.758	57566	
Unknown Peak 8.9012	8.901	65955	
Unknown Peak 9.2235	9.224	46215	
Chlorobenzene-d5	9.460	1903309	
Unknown Peak 9.7249	9.725	18802	
Unknown Peak 10.362	10.362	14707	
Unknown Peak 10.505	10.506	45933	
Unknown Peak 10.684	10.685	10910	
Unknown Peak 10.770	10.771	21918	
Unknown Peak 10.849	10.850	26671	
4-Bromofluorobenzene	10.921	2174734	
Unknown Peak 11.393	11.394	44521	
Unknown Peak 11.644	11.645	21489	
Unknown Peak 11.931	11.931	63918	
Unknown Peak 11.981	11.981	19647	
Unknown Peak 12.067	12.067	55978	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072226.d
Sample #: 2107241A-22A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compounds	RT	Peak Area	10
Unknown Peak 12.253	12.254	13217	
Unknown Peak 12.461	12.461	29742	
Unknown Peak 12.640	12.640	28819	
Unknown Peak 12.769	12.769	28454	
Unknown Peak 12.812	12.812	48458	
Unknown Peak 12.991	12.991	83700	
Unknown Peak 13.363	13.364	64498	
Unknown Peak 13.535	13.536	43263	
Unknown Peak 13.643	13.643	12328	
Unknown Peak 13.793	13.794	15978	
Unknown Peak 14.517	14.517	15453	
Unknown Peak 14.903	14.904	12976	
Unknown Peak 15.261	15.262	20175	
Unknown Peak 15.455	15.455	12744	

Air Toxics Ltd.

File Results

Data File: File Information: p072227.d
Sample #: 2107241A-23A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	100	(12245479.7121638 - 9241904.3438285 / 63271)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072227.d
Sample #: 2107241A-23A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.1566	1.157	285717	☐
☐	Unknown Peak 1.5064	1.506	17249294	☐
☐	1,1-Difluoroethane	1.716	626493	☐
☑	Unknown Peak 1.8982	1.898	296769	☐
☑	Unknown Peak 2.1104	2.110	27155	☐
☐	Unknown Peak 2.2394	2.239	313566	☐
☑	Unknown Peak 2.4757	2.476	34493	☐
☑	Unknown Peak 2.5330	2.533	12590	☐
☐	Unknown Peak 2.8482	2.848	123470	☐
☑	Ethanol	3.257	36882	☐
☑	Unknown Peak 3.3711	3.371	41267	☐
☑	Unknown Peak 3.4284	3.428	42495	☐
☑	Unknown Peak 3.5932	3.593	15260	☐
☐	Acetone	3.729	255733	☐
☐	2-Propanol	3.908	81522	☐
☐	tert-Butyl alcohol	4.345	196291	☐
☑	Unknown Peak 4.4026	4.403	69391	☐
☑	Unknown Peak 4.9112	4.911	18564	☐
☑	Unknown Peak 5.3768	5.377	55908	☐
☑	Unknown Peak 5.4770	5.477	15912	☐
☑	Unknown Peak 5.5630	5.563	30235	☐
☑	Unknown Peak 5.6275	5.628	19270	☐
☑	Bromochloromethane	5.785	1205570	☐
☐	Chloroform	5.842	28330	☐
☑	Unknown Peak 6.1647	6.165	25142	☐
☑	Unknown Peak 6.2292	6.229	78540	☐
☑	1,2-Dichloroethane-d4	6.315	690330	☐
☑	Unknown Peak 6.4584	6.458	12748	☐
☑	1,4-Difluorobenzene	6.666	1349817	☐
☑	Unknown Peak 6.7521	6.752	15696	☐
☑	Unknown Peak 6.8165	6.817	36632	☐
☑	Unknown Peak 7.1245	7.125	32380	☐
☑	Unknown Peak 7.2463	7.246	21218	☐
☑	Unknown Peak 7.5758	7.576	63226	☐
☑	Unknown Peak 7.7907	7.791	11728	☐
☑	Toluene-d8	7.891	1749740	☐
☑	Unknown Peak 8.2062	8.206	44937	☐
☑	Unknown Peak 8.3136	8.314	47722	☐
☐	Tetrachloroethene	8.471	1086827	☐
☑	Unknown Peak 8.7004	8.700	95288	☐
☑	Unknown Peak 8.7577	8.758	95872	☐
☑	Unknown Peak 8.9010	8.901	130589	☐
☑	Unknown Peak 9.2162	9.216	94030	☐
☑	Chlorobenzene-d5	9.460	1916370	☐
☑	Unknown Peak 9.6603	9.660	22934	☐
☑	Unknown Peak 9.7247	9.725	55833	☐
☑	Unknown Peak 10.197	10.198	10032	☐
☑	Unknown Peak 10.233	10.233	27821	☐
☑	Unknown Peak 10.419	10.420	36441	☐
☑	Unknown Peak 10.534	10.534	74445	☐
☑	Unknown Peak 10.598	10.599	115690	☐
☑	Unknown Peak 10.763	10.763	29520	☐

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072227.d
Sample #: 2107241A-23A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

Compounds	RT	Peak Area	10
4-Bromofluorobenzene	10.921	2187851	
Unknown Peak 10.992	10.993	27879	
Unknown Peak 11.257	11.258	29592	
Unknown Peak 11.415	11.415	77185	
Unknown Peak 11.508	11.508	12969	
Unknown Peak 11.637	11.637	28809	
Unknown Peak 11.809	11.809	34022	
Unknown Peak 11.930	11.931	96086	
Unknown Peak 12.074	12.074	84465	
Unknown Peak 12.239	12.239	86856	
Unknown Peak 12.317	12.318	37479	
Unknown Peak 12.461	12.461	95140	
Unknown Peak 12.647	12.647	40668	
Unknown Peak 12.740	12.740	13920	
Unknown Peak 12.826	12.826	29620	
Unknown Peak 12.998	12.998	55606	
Unknown Peak 13.377	13.378	157897	
Unknown Peak 13.514	13.514	32151	
Unknown Peak 13.542	13.543	31013	
Unknown Peak 13.664	13.664	114049	
Unknown Peak 13.807	13.808	69715	
Unknown Peak 13.943	13.944	13948	
Unknown Peak 14.409	14.409	10732	
Unknown Peak 14.545	14.546	60154	
Unknown Peak 14.652	14.653	31122	
Unknown Peak 14.946	14.947	117988	
Unknown Peak 15.512	15.512	19976	

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi –[Init. Pressure (“Hg))*(14.7psi/30”Hg)]}}$

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi +Initial Pressure (psi)}}$

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
0.0	**1.14**	1.34	**1.68**	2.02
0.2	**1.14**	1.35	**1.69**	2.03
0.4	**1.15**	1.36	**1.70**	2.05
0.5	**1.16**	1.36	**1.71**	2.05
0.6	**1.16**	1.37	**1.71**	2.06
0.8	**1.17**	1.38	**1.73**	2.08
1.0	**1.18**	1.39	**1.74**	2.09
1.2	**1.18**	1.40	**1.75**	2.10
1.4	**1.19**	1.40	**1.76**	2.12
1.5	**1.20**	1.41	**1.77**	2.13
1.6	**1.20**	1.42	**1.77**	2.13
1.8	**1.21**	1.42	**1.79**	2.15
2.0	**1.22**	1.44	**1.80**	2.16
2.2	**1.23**	1.45	**1.81**	2.18
2.4	**1.23**	1.46	**1.83**	2.20
2.5	**1.24**	1.46	**1.83**	2.20
2.6	**1.24**	1.47	**1.84**	2.21
2.8	**1.25**	1.48	**1.85**	2.23
3.0	**1.26**	1.49	**1.87**	2.24
3.2	**1.27**	1.50	**1.88**	2.26
3.4	**1.28**	1.51	**1.90**	2.28
3.5	**1.29**	1.52	**1.90**	2.29
3.6	**1.29**	1.52	**1.91**	2.30
3.8	**1.30**	1.53	**1.92**	2.31
4.0	**1.31**	1.55	**1.94**	2.33
4.2	**1.32**	1.56	**1.95**	2.35
4.4	**1.33**	1.57	**1.97**	2.37
4.5	**1.34**	1.58	**1.98**	2.38
4.6	**1.34**	1.58	**1.98**	2.39
4.8	**1.35**	1.60	**2.00**	2.40
5.0	**1.36**	1.61	**2.02**	2.42
5.2	**1.37**	1.62	**2.03**	2.44
5.4	**1.39**	1.63	**2.05**	2.46
5.5	**1.39**	1.64	**2.06**	2.47
5.6	**1.40**	1.65	**2.07**	2.48
5.8	**1.41**	1.66	**2.08**	2.50
6.0	**1.42**	1.68	**2.10**	2.52
6.2	**1.43**	1.69	**2.12**	2.55
6.4	**1.44**	1.70	**2.14**	2.57
6.5	**1.45**	1.71	**2.15**	2.58
6.6	**1.46**	1.72	**2.15**	2.59
6.8	**1.47**	1.73	**2.17**	2.61
7.0	**1.48**	1.75	**2.19**	2.64
7.2	**1.49**	1.76	**2.21**	2.66
7.4	**1.51**	1.78	**2.23**	2.68
7.5	**1.51**	1.79	**2.24**	2.69
7.6	**1.52**	1.79	**2.25**	2.70

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
7.7	**1.53**	1.80	**2.26**	2.72
7.8	**1.54**	1.81	**2.27**	2.73
8.0	**1.55**	1.83	**2.29**	2.76
8.2	**1.56**	1.84	**2.31**	2.78
8.4	**1.58**	1.86	**2.33**	2.81
8.5	**1.59**	1.87	**2.34**	2.82
8.6	**1.59**	1.88	**2.36**	2.83
8.8	**1.61**	1.90	**2.38**	2.86
9.0	**1.62**	1.91	**2.40**	2.89
9.2	**1.64**	1.93	**2.42**	2.91
9.4	**1.65**	1.95	**2.45**	2.94
9.5	**1.66**	1.96	**2.46**	2.96
9.6	**1.67**	1.97	**2.47**	2.97
9.8	**1.69**	1.99	**2.50**	3.00
10.0	**1.70**	2.01	**2.52**	3.03
10.2	**1.72**	2.03	**2.55**	3.06
10.4	**1.74**	2.05	**2.57**	3.09
10.5	**1.75**	2.06	**2.59**	3.11
10.6	**1.76**	2.07	**2.60**	3.12
10.8	**1.78**	2.09	**2.63**	3.16
11.0	**1.79**	2.12	**2.65**	3.19
11.2	**1.81**	2.14	**2.68**	3.22
11.4	**1.83**	2.16	**2.71**	3.26
11.5	**1.84**	2.17	**2.72**	3.28
11.6	**1.85**	2.18	**2.74**	3.29
11.8	**1.87**	2.21	**2.77**	3.33
12.0	**1.89**	2.23	**2.80**	3.37
12.2	**1.91**	2.26	**2.83**	3.40
12.4	**1.94**	2.28	**2.86**	3.44
12.5	**1.95**	2.30	**2.88**	3.46
12.6	**1.96**	2.31	**2.90**	3.48
12.8	**1.98**	2.34	**2.93**	3.52
13.0	**2.00**	2.36	**2.97**	3.56
13.2	**2.03**	2.39	**3.00**	3.61
13.4	**2.05**	2.42	**3.04**	3.65
13.5	**2.07**	2.44	**3.06**	3.67
13.6	**2.08**	2.45	**3.07**	3.70
13.8	**2.10**	2.48	**3.11**	3.74
14.0	**2.13**	2.51	**3.15**	3.79
14.2	**2.16**	2.54	**3.19**	3.84
14.4	**2.18**	2.58	**3.23**	3.88
14.5	**2.20**	2.59	**3.25**	3.91
14.6	**2.21**	2.61	**3.27**	3.94
14.8	**2.24**	2.64	**3.32**	3.99
15.0	**2.27**	2.68	**3.36**	4.04
15.2	**2.30**	2.72	**3.41**	4.10
15.4	**2.33**	2.75	**3.45**	4.15

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
15.5	**2.35**	2.77	**3.48**	4.18
15.6	**2.37**	2.79	**3.50**	4.21
15.8	**2.40**	2.83	**3.55**	4.27
16.0	**2.43**	2.87	**3.60**	4.33
16.2	**2.47**	2.91	**3.65**	4.39
16.4	**2.51**	2.96	**3.71**	4.46
16.5	**2.52**	2.98	**3.73**	4.49
16.6	**2.54**	3.00	**3.76**	4.52
16.8	**2.58**	3.05	**3.82**	4.59
17.0	**2.62**	3.09	**3.88**	4.66
17.2	**2.66**	3.14	**3.94**	4.74
17.4	**2.70**	3.19	**4.00**	4.81
17.5	**2.73**	3.22	**4.03**	4.85
17.6	**2.75**	3.24	**4.07**	4.89
17.8	**2.79**	3.30	**4.13**	4.97
18.0	**2.84**	3.35	**4.20**	5.05
18.2	**2.89**	3.41	**4.27**	5.14
18.4	**2.94**	3.47	**4.35**	5.22
18.5	**2.96**	3.50	**4.38**	5.27
18.6	**2.99**	3.53	**4.42**	5.32
18.8	**3.04**	3.59	**4.50**	5.41
19.0	**3.10**	3.65	**4.58**	5.51
19.2	**3.16**	3.72	**4.67**	5.61
19.4	**3.22**	3.79	**4.76**	5.72
19.5	**3.25**	3.83	**4.80**	5.77
19.6	**3.28**	3.87	**4.85**	5.83
19.8	**3.34**	3.94	**4.94**	5.94
20.0	**3.41**	4.02	**5.04**	6.06
20.2	**3.48**	4.10	**5.14**	6.18
20.4	**3.55**	4.19	**5.25**	6.31
20.5	**3.59**	4.23	**5.31**	6.38
20.6	**3.63**	4.28	**5.36**	6.45
20.8	**3.70**	4.37	**5.48**	6.59
21.0	**3.79**	4.47	**5.60**	6.73
21.2	**3.87**	4.57	**5.73**	6.89
21.4	**3.96**	4.67	**5.86**	7.05
21.5	**4.01**	4.73	**5.93**	7.13
21.6	**4.06**	4.79	**6.00**	7.22
21.8	**4.16**	4.90	**6.15**	7.39
22.0	**4.26**	5.03	**6.30**	7.58
22.4	**4.48**	5.29	**6.63**	7.98

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
22.5	**4.54**	5.36	**6.72**	8.08
22.6	**4.61**	5.43	**6.81**	8.19
22.8	**4.73**	5.58	**7.00**	8.42
23.0	**4.87**	5.74	**7.20**	8.66
23.2	**5.01**	5.91	**7.41**	8.91
23.4	**5.16**	6.09	**7.64**	9.18
23.5	**5.24**	6.19	**7.76**	9.32
23.6	**5.33**	6.28	**7.88**	9.47
23.8	**5.50**	6.48	**8.13**	9.78
24.0	**5.68**	6.70	**8.40**	10.10
24.2	**5.88**	6.93	**8.69**	10.45
24.4	**6.09**	7.18	**9.00**	10.82
24.5	**6.20**	7.31	**9.17**	11.02
24.6	**6.31**	7.45	**9.33**	11.22
24.8	**6.55**	7.73	**9.69**	11.66
25.0	**6.82**	8.04	**10.08**	12.12
25.2	**7.10**	8.38	**10.50**	12.63
25.4	**7.41**	8.74	**10.96**	13.18
25.5	**7.57**	8.93	**11.20**	13.47
25.6	**7.75**	9.14	**11.46**	13.78
25.8	**8.11**	9.57	**12.00**	14.43
26.0	**8.52**	10.05	**12.60**	15.15
26.2	**8.97**	10.58	**13.27**	15.95
26.4	**9.47**	11.17	**14.00**	16.84
26.5	**9.74**	11.49	**14.40**	17.32
26.6	**10.02**	11.82	**14.83**	17.83
26.8	**10.65**	12.56	**15.75**	18.94
27.0	**11.36**	13.40	**16.80**	20.20
27.2	**12.17**	14.36	**18.00**	21.65
27.4	**13.11**	15.46	**19.39**	23.31
27.5	**13.63**	16.08	**20.16**	24.24
27.6	**14.20**	16.75	**21.00**	25.26
27.8	**15.49**	18.27	**22.91**	27.55
28.0	**17.04**	20.10	**25.20**	30.31
28.2	**18.93**	22.34	**28.00**	33.67
28.4	**21.30**	25.13	**31.51**	37.88
28.5	**22.72**	26.80	**33.61**	40.41
28.6	**24.34**	28.72	**36.01**	43.29
28.8	**28.40**	33.50	**42.01**	50.51
29.0	**34.08**	40.20	**50.41**	60.61

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Method:TO-15 (Sp)-AECOM (SMUD 59th)

CAS Number	Compound	Rpt. Limit(ppbv)
630-20-6	1,1,1,2-Tetrachloroethane	2.0
71-55-6	1,1,1-Trichloroethane	0.5
79-34-5	1,1,2,2-Tetrachloroethane	0.5
79-00-5	1,1,2-Trichloroethane	0.5
75-34-3	1,1-Dichloroethane	0.5
75-35-4	1,1-Dichloroethene	0.5
75-37-6	1,1-Difluoroethane	2.0
96-18-4	1,2,3-Trichloropropane	2.0
120-82-1	1,2,4-Trichlorobenzene	2.0
95-63-6	1,2,4-Trimethylbenzene	0.5
96-12-8	1,2-Dibromo-3-chloropropane	2.0
106-93-4	1,2-Dibromoethane (EDB)	0.5
95-50-1	1,2-Dichlorobenzene	0.5
107-06-2	1,2-Dichloroethane	0.5
78-87-5	1,2-Dichloropropane	0.5
108-67-8	1,3,5-Trimethylbenzene	0.5
106-99-0	1,3-Butadiene	0.5
541-73-1	1,3-Dichlorobenzene	0.5
106-46-7	1,4-Dichlorobenzene	0.5
123-91-1	1,4-Dioxane	2.0
540-84-1	2,2,4-Trimethylpentane	0.5
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2.0
591-78-6	2-Hexanone	2.0
67-63-0	2-Propanol	2.0
107-05-1	3-Chloropropene	2.0
622-96-8	4-Ethyltoluene	0.5
108-10-1	4-Methyl-2-pentanone	0.5
67-64-1	Acetone	5.0
107-02-8	Acrolein	2.0
107-13-1	Acrylonitrile	2.0
100-44-7	alpha-Chlorotoluene	0.5
71-43-2	Benzene	0.5

75-27-4	Bromodichloromethane	0.5
	Method:TO-15 (Sp)-AECOM (SMUD 59th)	

CAS Number	Compound	Rpt. Limit(ppbv)
75-25-2	Bromoform	0.5
74-83-9	Bromomethane	5.0
75-15-0	Carbon Disulfide	2.0
56-23-5	Carbon Tetrachloride	0.5
108-90-7	Chlorobenzene	0.5
75-00-3	Chloroethane	2.0
67-66-3	Chloroform	0.5
74-87-3	Chloromethane	5.0
156-59-2	cis-1,2-Dichloroethene	0.5
10061-01-5	cis-1,3-Dichloropropene	0.5
98-82-8	Cumene	0.5
110-82-7	Cyclohexane	0.5
124-48-1	Dibromochloromethane	0.5
74-95-3	Dibromomethane	2.0
64-17-5	Ethanol	5.0
141-78-6	Ethyl Acetate	2.0
100-41-4	Ethyl Benzene	0.5
637-92-3	Ethyl-tert-butyl ether	2.0
75-69-4	Freon 11	0.5
76-13-1	Freon 113	0.5
76-14-2	Freon 114	0.5
75-71-8	Freon 12	0.5
811-97-2	Freon 134a	2.0
142-82-5	Heptane	0.5
87-68-3	Hexachlorobutadiene	2.0
67-72-1	Hexachloroethane	2.0
110-54-3	Hexane	0.5
74-88-4	Iodomethane	5.0
108-20-3	Isopropyl ether	2.0
108-38-3	m,p-Xylene	0.5
1634-04-4	Methyl tert-butyl ether	2.0
75-09-2	Methylene Chloride	5.0
91-20-3	Naphthalene	1.0
95-47-6	o-Xylene	0.5
103-65-1	Propylbenzene	0.5

115-07-1	Propylene	2.0
100-42-5	Styrene	0.5
994-05-8	tert-Amyl methyl ether	2.0
75-65-0	tert-Butyl alcohol	2.0
127-18-4	Tetrachloroethene	0.5
109-99-9	Tetrahydrofuran	0.5
108-88-3	Toluene	0.5
9999-9999-038	TPH ref. to Gasoline (MW=100)	50.0
156-60-5	trans-1,2-Dichloroethene	0.5
10061-02-6	trans-1,3-Dichloropropene	0.5
79-01-6	Trichloroethene	0.5
108-05-4	Vinyl Acetate	2.0
593-60-2	Vinyl Bromide	2.0
75-01-4	Vinyl Chloride	0.5

	Surrogate	Method Limits
17060-07-0	1,2-Dichloroethane-d4	70-130
460-00-4	4-Bromofluorobenzene	70-130
2037-26-5	Toluene-d8	70-130

Eurofins Air Toxics	Data Review Checklist			Release Date: 10/22/19
Workorder # 2107241A	Form F1.27	Revision #17	Revision Date: 10/22/19	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: MSD3 7/22/21 LD	S2: MSDP 7/22/21 LD	S3:	S4:
✓	✓				Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
✓	✓				Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
N/A					Manual Integrations included and approved				
✓	✓			✓	Chain of Custody verified for special comments/notes and analyses requested (add comments below)				
✓	✓				Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				
✓	✓				Verified standard expiration dates				

Profile, analyses, reporting, special notes and unusual circumstances: S1: QC - 1 out ICAL, 0 out daily. LB-11a. S2: QC-0 out. LB-0 TC.

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: MM 07/22/21	A2: MF 7/24/21	A3: MB 7/23/21	A4: LD 7/23/21
✓	✓	✓	✓		IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, Canister #s Verified and dilution ranges are met per SOP (ex. Over-ranged/overdiluted)				
✓	✓	N/A	✓		a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
✓	✓	N/A	✓		Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓	✓	✓	✓		12/24 Hr clock time & Hold Time met for all samples				
✓	✓	N/A	✓		Re-analysis of sample(s) has been evaluated for comparability and/or sample(s) has/have been checked for trends (Inf/Eff), field dups/trip blanks, samples following bad loads on auto samplers have been verified (system blks, confirmation runs)				
✓	✓	✓	✓		All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes: A1: 04A-09A, full loads A2: 01A, 03A full loads, 02A dil NR
A2: 14A-16A, 18A-23A = full loads, 19A, 20A FD OK. 10A-13A = full loads, 09A, 10A FD OK.
A4: 17A - Full load.

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/Date	D1: LD 7/23/21	D2:	D3:	D4:
N/A						CAR # (if applicable)				
						Spectra Verified *(documentation of spectral defense included if applicable)*				
N/A						TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
						Lab Narrative is correct				
						TPH/NMOC calculations complete and included in folder				

Special notes: 10A mthg tPHg hits - CAN released 11A manually calculated <RL
10A incorrect calculation

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: LA 7/27/21	3rd Tier: *(needed only for DOD or per client request)*	
VOID		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
		Manually entered results are checked		
		At least one result per sample is verified against Target quant sheets		
		Appropriate data qualifier flags are applied		
		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) *3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects*

Not Applicable

Electronic Comprehensive Validation Package (eCVP)

Vera Belitsky Vera Belitsky 07-26-2021

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WORK ORDER #: 2107241B

Work Order Summary

CLIENT:	Mr. Robert Kohlhardt AECOM 2020 L Street, Suite 400 Sacramento, CA 95811	**BILL TO:**	Mr. Jerry Montgomery SWPPQueen 7202 Gloria Drive #25 Sacramento, CA 95831
PHONE:	916-679-2000	**P.O. #**	
FAX:	916-679-2900	**PROJECT #**	60632793.6 SMUD 59th ST.
DATE RECEIVED:	07/10/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/24/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-VW43A-02	Modified ASTM D-1946	9.6 "Hg	10 psi
02A	SG-VW43B-02	Modified ASTM D-1946	5.9 "Hg	10 psi
03A	SG-VW45A-03	Modified ASTM D-1946	7.6 "Hg	9.9 psi
04A	SG-VW45B-02	Modified ASTM D-1946	8 "Hg	10 psi
05A	SG-VW46A-02	Modified ASTM D-1946	7.1 "Hg	10 psi
06A	SG-VW46B-02	Modified ASTM D-1946	6.3 "Hg	10 psi
07A	Lab Blank	Modified ASTM D-1946	NA	NA
08A	CCV	Modified ASTM D-1946	NA	NA
09A	LCS	Modified ASTM D-1946	NA	NA
09AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/24/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
Modified ASTM D-1946
AECOM
Workorder# 2107241B

Six 1 Liter Summa Canister samples were received on July 10, 2021. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1								
Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
SG-VW43A-02	2107241B-01A	07/08/2021	07/10/2021	NA	12	07/20/2021	NA	GOOD
SG-VW43B-02	2107241B-02A	07/08/2021	07/10/2021	NA	12	07/20/2021	NA	GOOD
SG-VW45A-03	2107241B-03A	07/08/2021	07/10/2021	NA	12	07/20/2021	NA	GOOD
SG-VW45B-02	2107241B-04A	07/08/2021	07/10/2021	NA	12	07/20/2021	NA	GOOD
SG-VW46A-02	2107241B-05A	07/08/2021	07/10/2021	NA	12	07/20/2021	NA	GOOD
SG-VW46B-02	2107241B-06A	07/08/2021	07/10/2021	NA	12	07/20/2021	NA	GOOD
Lab Blank	2107241B-07A	NA	NA	NA	NA	07/20/2021	NA	GOOD
CCV	2107241B-08A	NA	NA	NA	NA	07/20/2021	NA	GOOD
LCS	2107241B-09A	NA	NA	NA	NA	07/20/2021	NA	GOOD
LCSD	2107241B-09AA	NA	NA	NA	NA	07/20/2021	NA	GOOD

Sample Results and Raw Data

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Client Sample ID: SG-VW43A-02

Lab ID#: 2107241B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072014c**	**Date of Collection: 7/8/21 12:10:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 7/20/21 05:17 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister

US32TAR1

Modified ASTM D-1945/1946

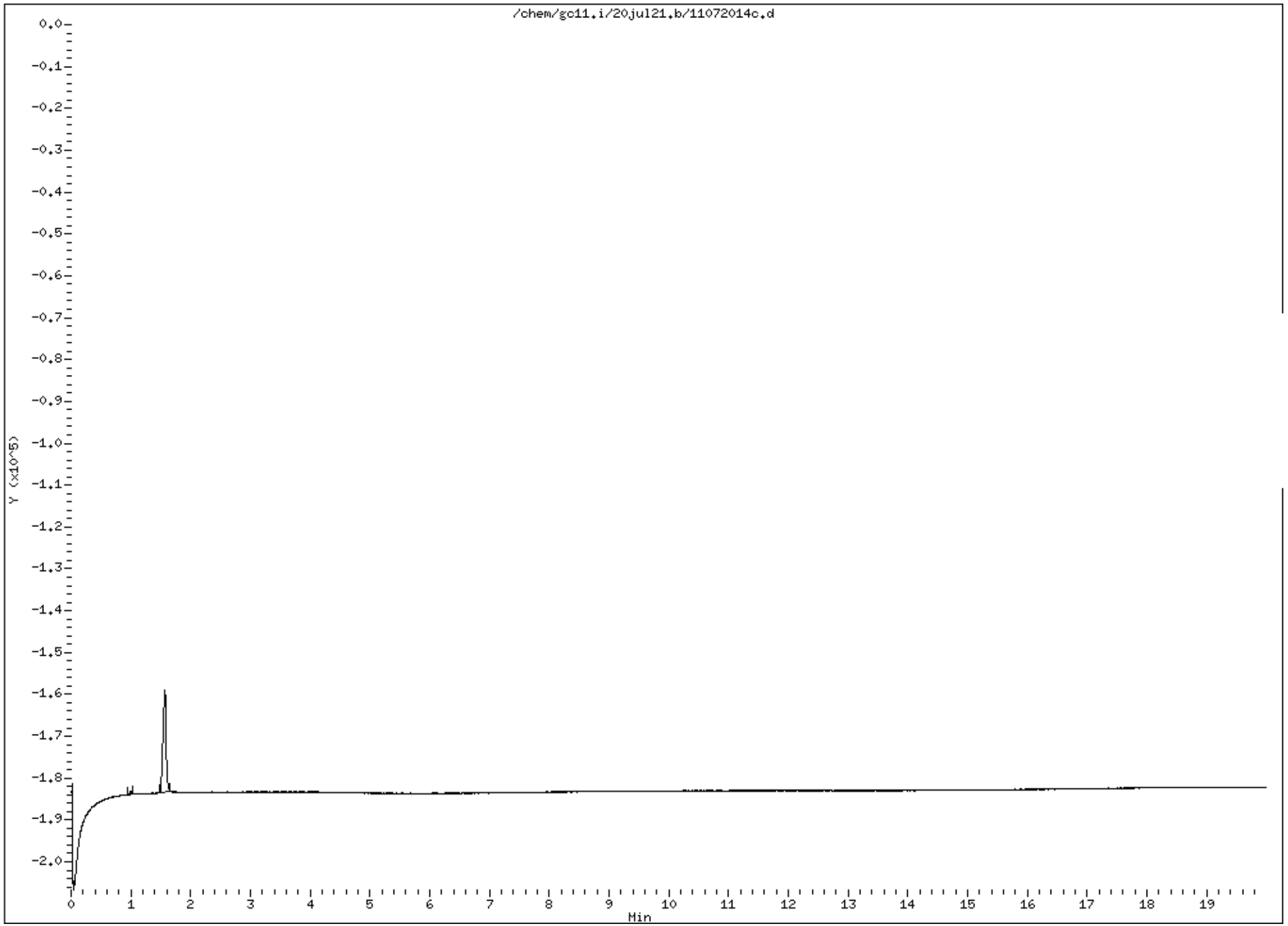
Data file : /chem/gc11.i/20jul21.b/11072014c.d
Lab Smp Id: 2107241B-01A Client Smp ID: 2107241B-01A
Inj Date : 20-JUL-2021 17:17
Operator : mb Inst ID: gc11.i
Smp Info : 1.0ml,N3379
Misc Info : 9.6"Hg->10psi
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1
Dil Factor: 2.47000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

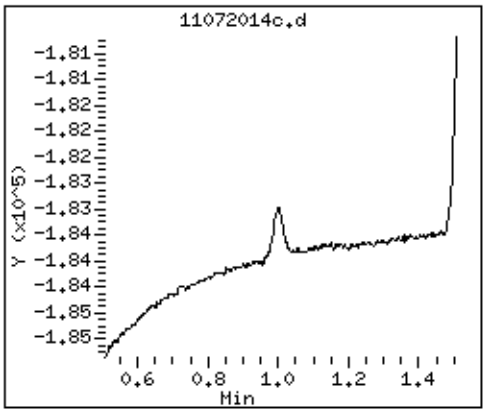
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS	
				ON-COLUMN	FINAL
Compounds	RT	EXP RT DLT RT	RESPONSE	(%)	(%)
==========	==	====== ======	========	=======	=======
1 Helium	Compound Not Detected.				


/chem/gc11.i/20jul21.b/11072014c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium (Undetected)



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Client Sample ID: SG-VW43B-02

Lab ID#: 2107241B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072015c**	**Date of Collection: 7/8/21 12:45:00 PM**	
Dil. Factor:	**2.09**	**Date of Analysis: 7/20/21 05:53 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.10	Not Detected

Container Type: 1 Liter Summa Canister

US32TAR1

Modified ASTM D-1945/1946

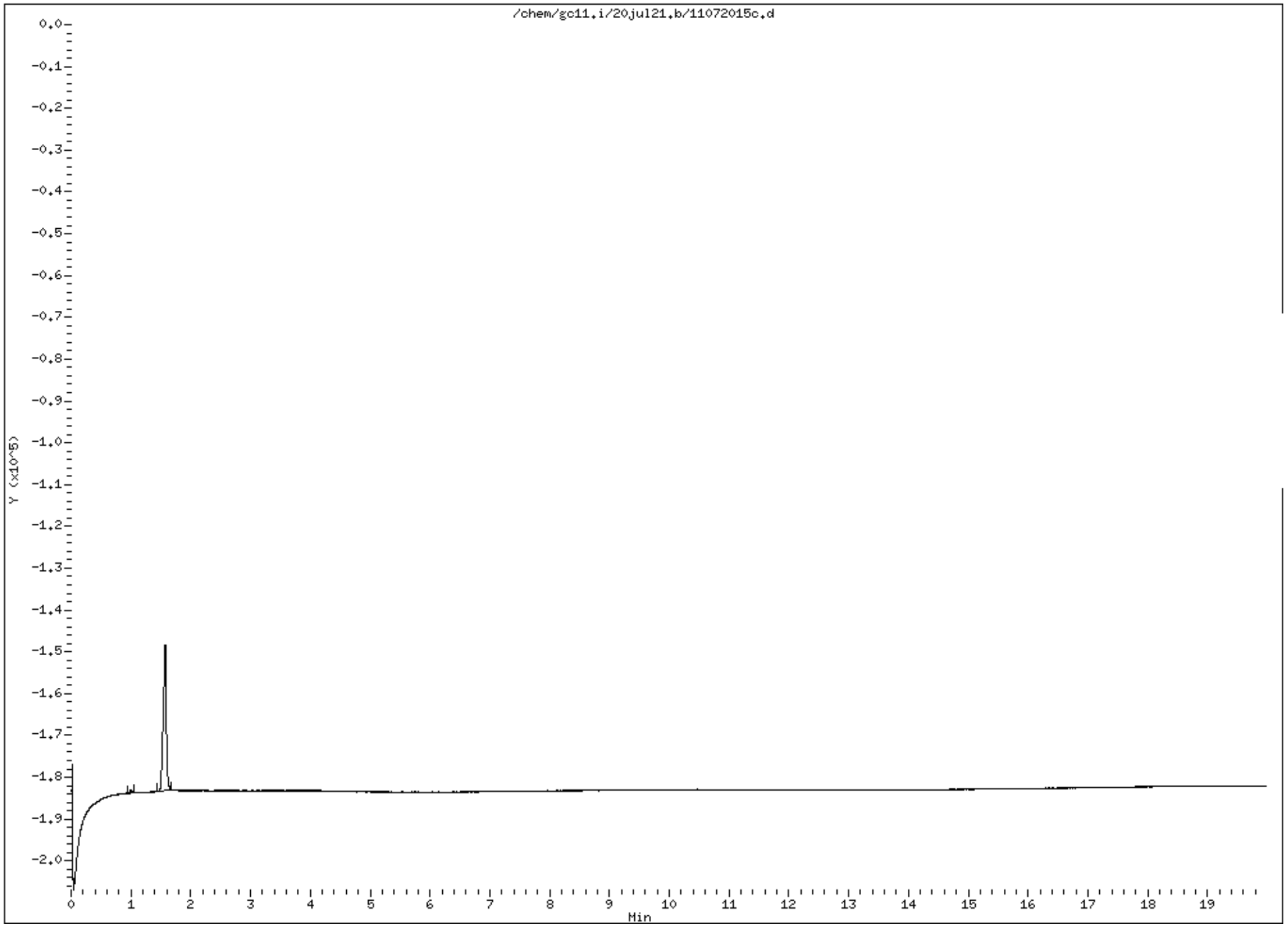
Data file : /chem/gc11.i/20jul21.b/11072015c.d
Lab Smp Id: 2107241B-02A Client Smp ID: 2107241B-02A
Inj Date : 20-JUL-2021 17:53
Operator : mb Inst ID: gc11.i
Smp Info : 1.0ml,N1999
Misc Info : 5.9"Hg->10psi
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1
Dil Factor: 2.09000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

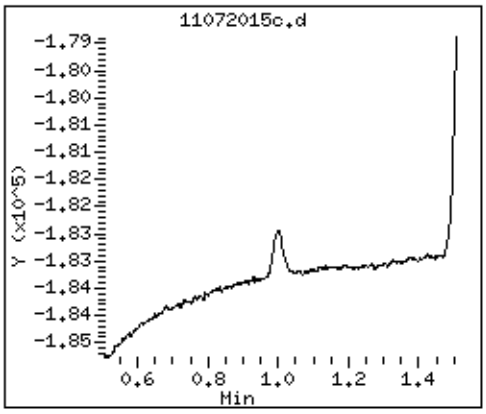
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS	
				ON-COLUMN	FINAL
Compounds	RT	EXP RT DLT RT	RESPONSE	(%)	(%)
1 Helium	Compound Not Detected.				


/chem/gc11.i/20jul21.b/11072015c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium (Undetected)



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Client Sample ID: SG-VW45A-03

Lab ID#: 2107241B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072016c**	**Date of Collection: 7/8/21 1:58:00 PM**	
Dil. Factor:	**2.24**	**Date of Analysis: 7/20/21 06:18 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister

US32TAR1

Modified ASTM D-1945/1946

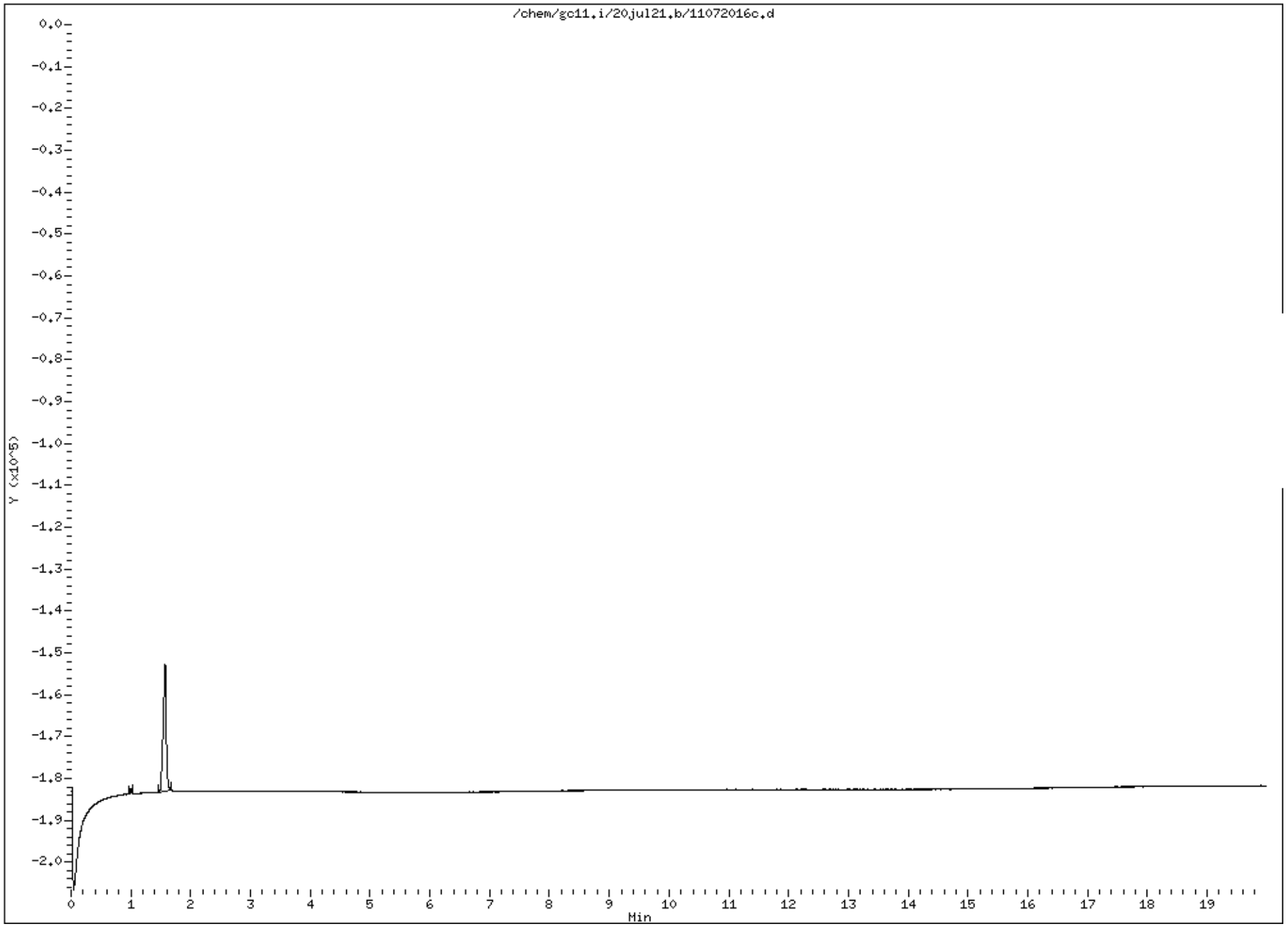
Data file : /chem/gc11.i/20jul21.b/11072016c.d
Lab Smp Id: 2107241B-03A Client Smp ID: 2107241B-03A
Inj Date : 20-JUL-2021 18:18
Operator : mb Inst ID: gc11.i
Smp Info : 1.0ml,B2201
Misc Info : 7.6"Hg->9.9psi
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1
Dil Factor: 2.24000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS	
				ON-COLUMN	FINAL
Compounds	RT	EXP RT DLT RT	RESPONSE	(%)	(%)
1 Helium	Compound Not Detected.				


/chem/gc11.i/20jul21.b/11072016c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
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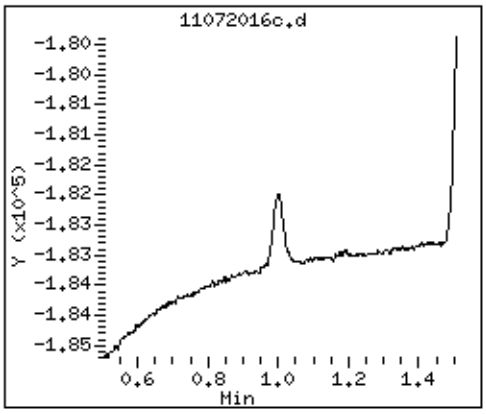
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium (Undetected)



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Client Sample ID: SG-VW45B-02

Lab ID#: 2107241B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072017c**	**Date of Collection: 7/8/21 2:38:00 PM**	
Dil. Factor:	**2.29**	**Date of Analysis: 7/20/21 06:43 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister

US32TAR1

Modified ASTM D-1945/1946

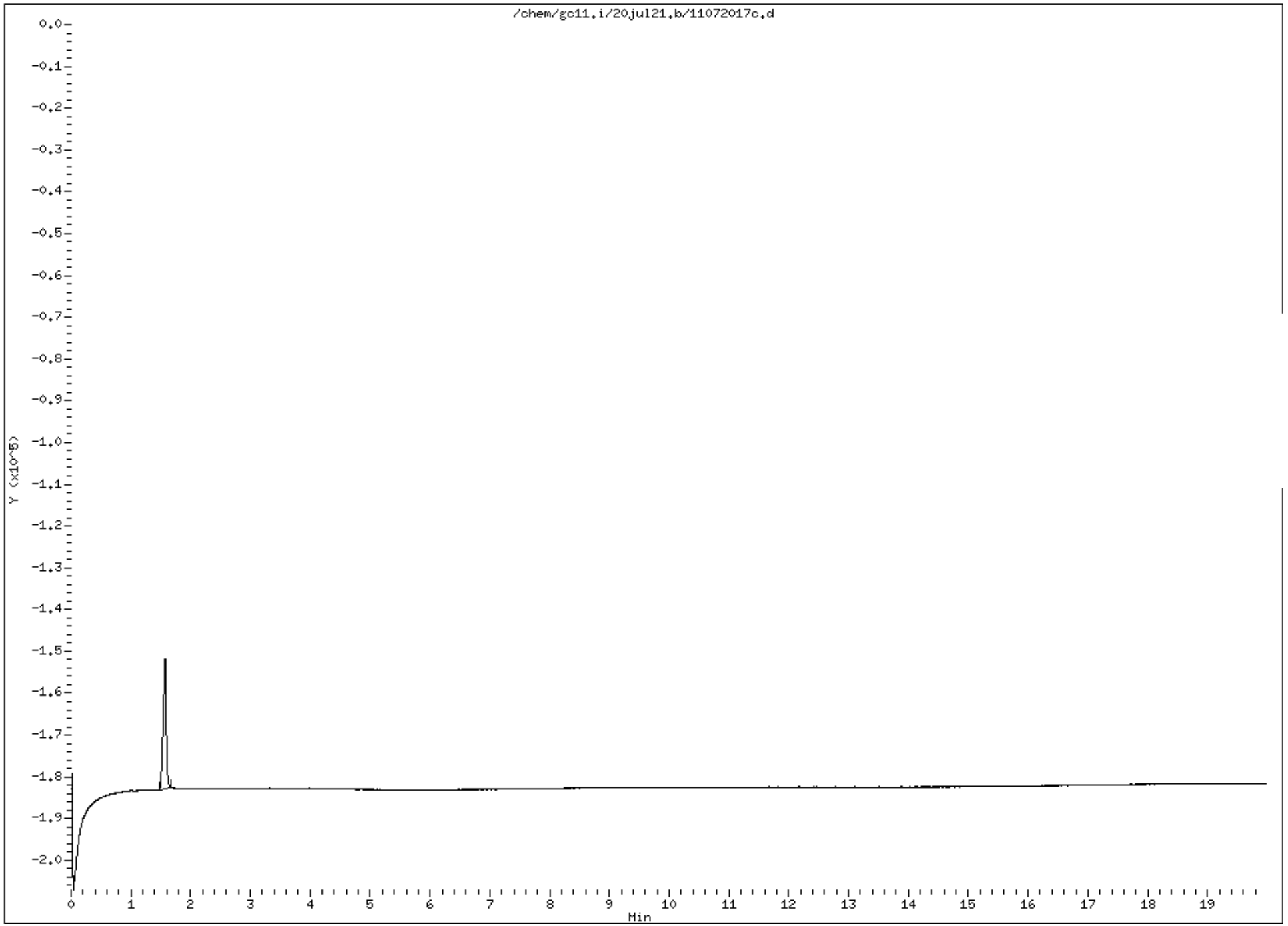
Data file : /chem/gc11.i/20jul21.b/11072017c.d
Lab Smp Id: 2107241B-04A Client Smp ID: 2107241B-04A
Inj Date : 20-JUL-2021 18:43
Operator : mb Inst ID: gc11.i
Smp Info : 1.0ml,N3130
Misc Info : 8"Hg->10psi
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1
Dil Factor: 2.29000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS	
				ON-COLUMN	FINAL
Compounds	RT	EXP RT DLT RT	RESPONSE	(%)	(%)
1 Helium	Compound Not Detected.				


/chem/gc11.i/20jul21.b/11072017c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
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8
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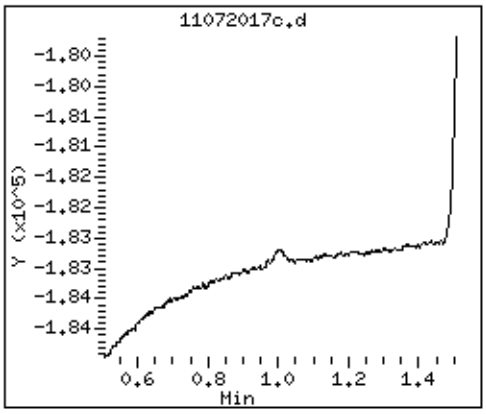
10
11
12
13
14
15
16
17
18
19
Min

1 Helium (Undetected)



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Client Sample ID: SG-VW46A-02

Lab ID#: 2107241B-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072018c**	**Date of Collection: 7/8/21 3:38:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 7/20/21 07:08 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister

US32TAR1

Modified ASTM D-1945/1946

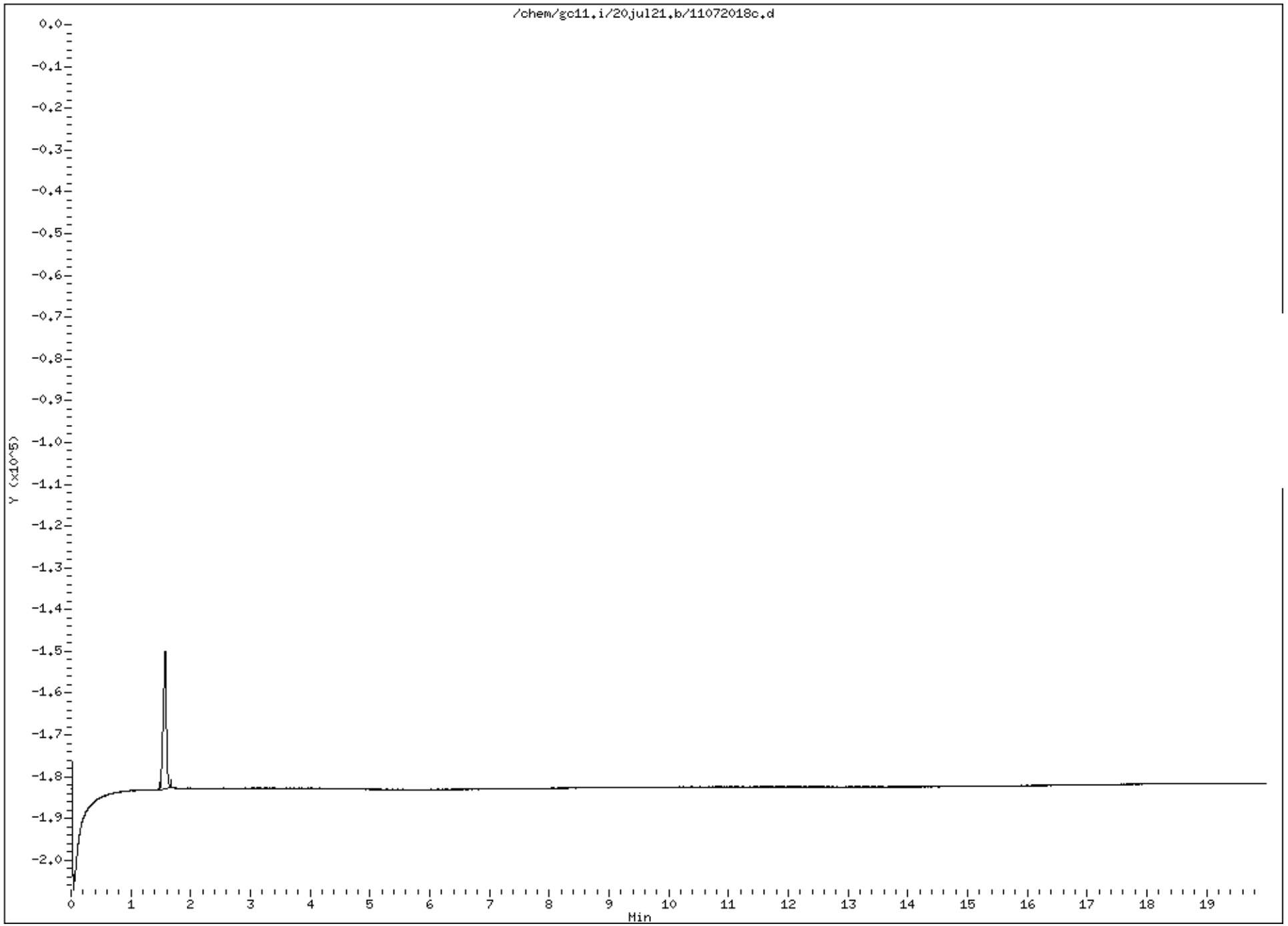
Data file : /chem/gc11.i/20jul21.b/11072018c.d
Lab Smp Id: 2107241B-05A Client Smp ID: 2107241B-05A
Inj Date : 20-JUL-2021 19:08
Operator : mb Inst ID: gc11.i
Smp Info : 1.0ml,1L3929
Misc Info : 7.1"Hg->10psi
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1
Dil Factor: 2.20000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

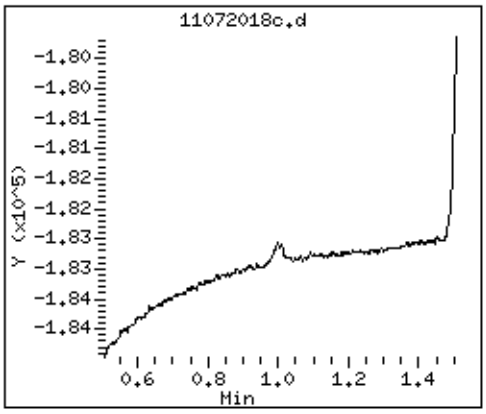
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS	
				ON-COLUMN	FINAL
Compounds	RT	EXP RT DLT RT	RESPONSE	(%)	(%)
==========	==	====== ======	========	=======	=======
1 Helium	Compound Not Detected.				


/chem/gc11.i/20jul21.b/11072018c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium (Undetected)



eurofins | Air Toxics

Client Sample ID: SG-VW46B-02

Lab ID#: 2107241B-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072019c**	**Date of Collection: 7/8/21 4:08:00 PM**	
Dil. Factor:	**2.13**	**Date of Analysis: 7/20/21 07:48 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister

US32TAR1

Modified ASTM D-1945/1946

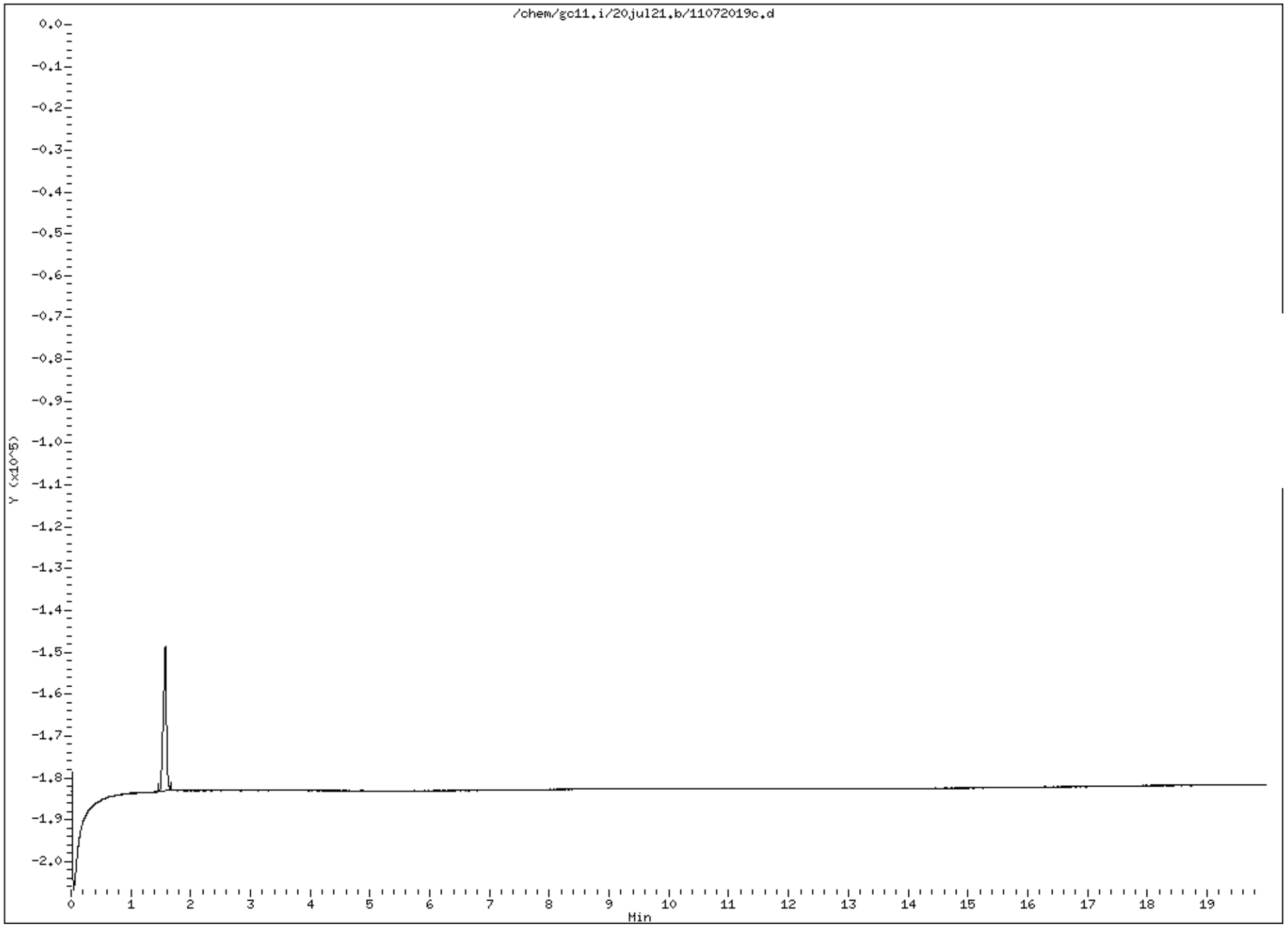
Data file : /chem/gc11.i/20jul21.b/11072019c.d
Lab Smp Id: 2107241B-06A Client Smp ID: 2107241B-06A
Inj Date : 20-JUL-2021 19:48
Operator : mb Inst ID: gc11.i
Smp Info : 1.0ml,N1941
Misc Info : 6.3"Hg->10psi
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1
Dil Factor: 2.13000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

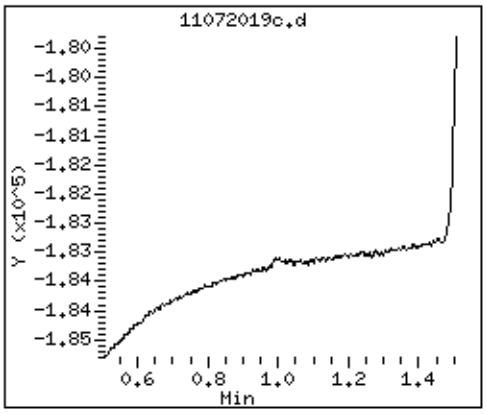
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS	
				ON-COLUMN	FINAL
Compounds	RT	EXP RT DLT RT	RESPONSE	(%)	(%)
==========	==	====== ======	========	=======	=======
1 Helium	Compound Not Detected.				


/chem/gc11.i/20jul21.b/11072019c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium (Undetected)



QC Results and Raw Data

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2107241B-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072003c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/20/21 10:39 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

US32TAR1

Modified ASTM D-1945/1946

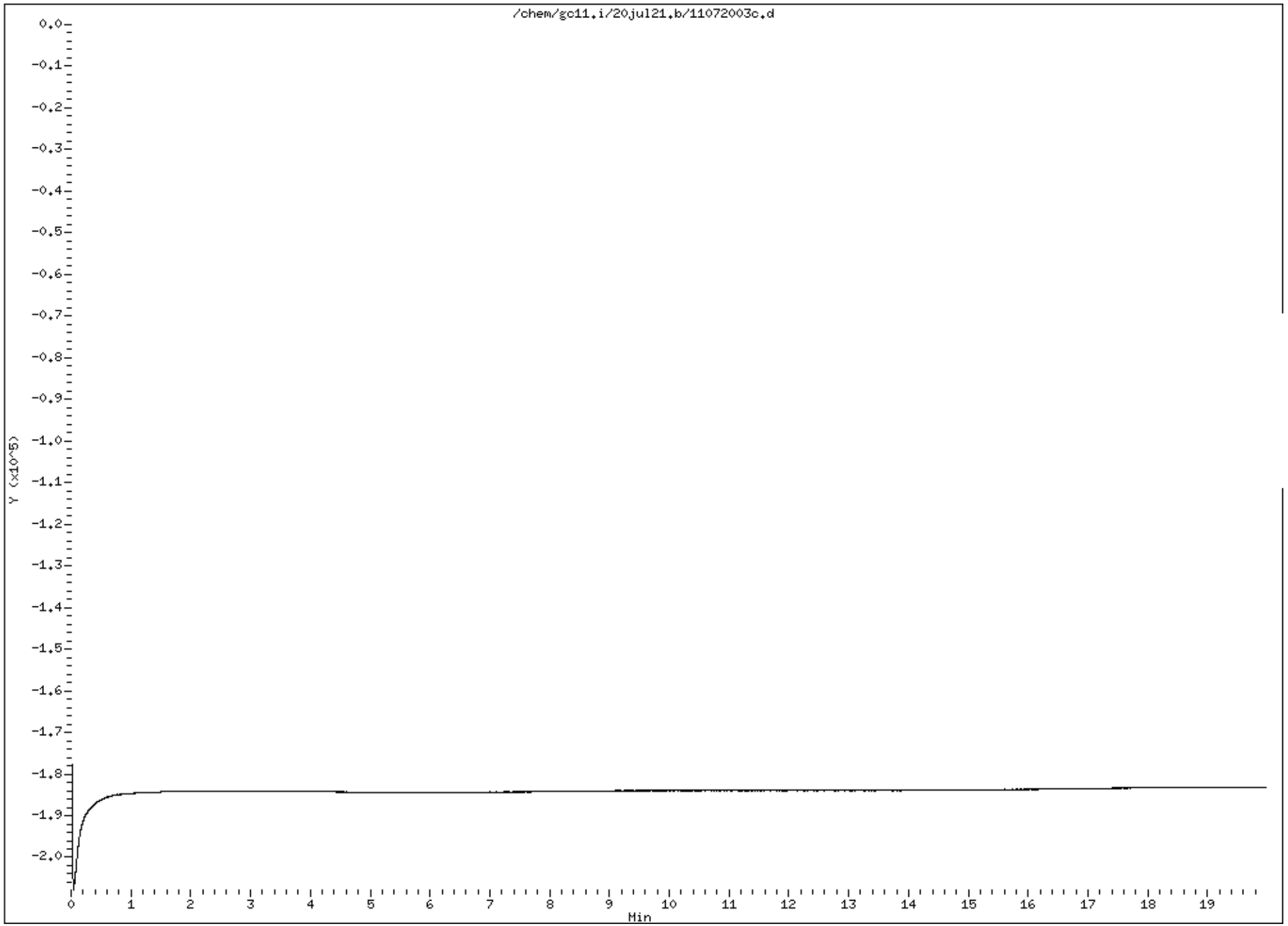
Data file : /chem/gc11.i/20jul21.b/11072003c.d
Lab Smp Id: N2 Lab Blank Client Smp ID: Lab Blank
Inj Date : 20-JUL-2021 10:39
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml,34341
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

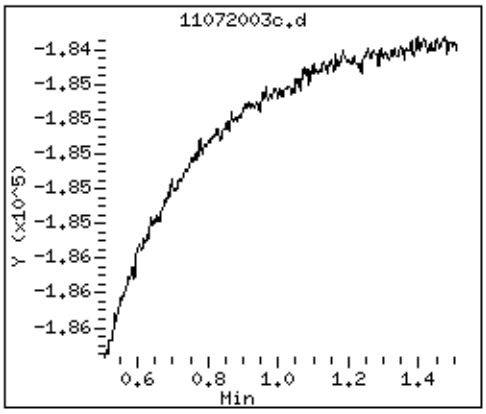
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS	
				ON-COLUMN	FINAL
Compounds	RT	EXP RT DLT RT	RESPONSE	(%)	(%)
==========	==	====== ======	========	=======	=======
1 Helium	Compound Not Detected.				


/chem/gc11.i/20jul21.b/11072003c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium (Undetected)



SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab File ID: 11072002c.d & 11072025c.d

Lab Sample ID: 09A & 09AA

CAS Number	Compound	Original Amount	Duplicate Amount	RPD	Result Less Than 5X RL
7440-59-7	Helium	103	103	0	

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 09-OCT-2020 11:20
End Cal Date : 09-OCT-2020 16:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.60
Integrator : HP Genie
Method file : /chem/gc11.i/09oct20.b/112C1009.m
Cal Date : 28-Oct-2020 16:44 ulyo
Curve Type : Average

Calibration File Names:
Level 1: /chem/gc11.i/09oct20.b/11100902c.d
Level 2: /chem/gc11.i/09oct20.b/11100903c.d
Level 3: /chem/gc11.i/09oct20.b/11100904c.d
Level 4: /chem/gc11.i/09oct20.b/11100906c.d
Level 5: /chem/gc11.i/09oct20.b/11100909c.d

	0.000e+00	0.000e+00	0.000e+00	0.000e+00	0.000e+00	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 Helium	6589939	6207511	5888356	6475766	7227014	6477717	7.697
2 Hydrogen	10658987	10347576	9897438	10335290	9917161	10231290	3.157

Report Date: 28-Oct-2020 16:44

Calibration History

Method : /chem/gc11.i/09oct20.b/112C1009.m
Start Cal Date: 09-OCT-2020 11:20
End Cal Date : 09-OCT-2020 16:23

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.00000		
09-OCT-2020 11:20	ngas	/chem/gc11.i/09oct20.b/11100902c.d
Cal Level: 2 , Cal Amount: 0.00000		
09-OCT-2020 12:13	ngas	/chem/gc11.i/09oct20.b/11100903c.d
Cal Level: 3 , Cal Amount: 0.00000		
09-OCT-2020 12:42	ngas	/chem/gc11.i/09oct20.b/11100904c.d
Cal Level: 4 , Cal Amount: 0.00000		
09-OCT-2020 14:33	he	/chem/gc11.i/09oct20.b/11100906c.d
09-OCT-2020 13:07	h2	/chem/gc11.i/09oct20.b/11100905c.d
Cal Level: 5 , Cal Amount: 0.00000		
09-OCT-2020 16:23	he	/chem/gc11.i/09oct20.b/11100909c.d
09-OCT-2020 15:55	h2	/chem/gc11.i/09oct20.b/11100908c.d

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 09-OCT-2020 11:20
End Cal Date : 09-OCT-2020 16:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.60
Integrator : HP Genie
Method file : /chem/gc11.i/09oct20.b/112C1009.m
Cal Date : 28-Oct-2020 16:39 ulyo
Curve Type : Average

Calibration File Names:
Level 1: /chem/gc11.i/09oct20.b/11100902c.d
Level 2: /chem/gc11.i/09oct20.b/11100903c.d
Level 3: /chem/gc11.i/09oct20.b/11100904c.d
Level 4: /chem/gc11.i/09oct20.b/11100906c.d
Level 5: /chem/gc11.i/09oct20.b/11100909c.d

Please see Calibration History page(s) for all the calibration files.

Compound	0.000e+00 Level 1	0.000e+00 Level 2	0.000e+00 Level 3	0.000e+00 Level 4	0.000e+00 Level 5	RRF	% RSD
1 Helium	6589939	6207511	5888356	6475766	7227014	6477717	7.697
2 Hydrogen	10658987	10347576	9897438	10335290	9917161	10231290	3.157

8 10/28/20

Initial Calibration Narrative

A five point calibration curve was analyzed on October 09, 2020 for Helium and Hydrogen on instrument GC-11. As noted on the accompanying analytical run log, Level 5 for Hydrogen was reanalyzed due to incorrect loading.
The calibration curve features the following:

1.) ICAL is named as 112C1009.m
2.) Units: %
3.) The ICAL is based on 1.0 mL loop load
4.) The second source file numbers are 11100912c for Helium and 11100911c for Hydrogen
5.) Following are the levels for the ICAL:

Compounds	Level-1	Level-2	Level-3	Level-4	Level-5
Helium	0.0495	0.495	2.475	10.0	100.0
Hydrogen	0.0101	0.099	0.495	2.00	25.0

Eurofins Air Toxics
Method: **ASTM D-1945/1946**

GC-11

Logbook #3170
Leak Test Y

	USE	File #	Sample Name/Client ID	Can #	Verified Pressure >2psi	Pressure	Amt	DF	Date	Time	Review Init.	Comments
1	/	11100901	System Blank	9288	NA	NA	1.0 mL	1.00	10/9/20	1024	Y	
2	/	02	3119-97	32116		He H_2	↓			1120		Level-1
3	/	03	3119-98	37686			(10:50) 1.0 mL			1213		-2
4	/	04	"	↓			1.0 mL			1242		-3
5	/	05	2810-1368 H_2	NA		H_2	"			1307		-4
6	/	06	3119-95 He	Bag		He	(5:50) 1.0 mL			1433		↓ -4
7	X	07	3119-96 H_2	Bag		H_2	(12:48) 1.0 mL			1505		Bad Load
8	/	08	"	"		"	"			1555		Level-5
9	/	09	3119-95 He			He				1623		↓ -5
10	/	10	System Blank	9288		NA				1651		
11	/	11	2810-1264 H_2	NA						1715		
12	/	12	2810-1460 N_2 gas	NA	↓	↓				1746	↓	ICV
13												
14												
15												Y 10/10/20

Calculation check : File ID: 11100912C Compound: He Initials: Y

Sample Amt= $\frac{\text{Area Count Sample}}{\text{RF}}$ x Dilution Factor = $\frac{(16702554)}{(16477717)}$ x (1.00) = 1.03%

Reported Result= 1.03 %

Reviewed by/Date SU 11/4/20
*Must be an independent reviewer

US32TAR1

Modified ASTM D-1945/1946

Data file : /chem/gc11.i/09oct20.b/11100902c.d
Lab Smp Id: 3119-HeH2 Client Smp ID: Level-1
Inj Date : 09-OCT-2020 11:20
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml,32116;3119-HeH2;Level-1
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 28-Oct-2020 16:39 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 11:20 Cal File: 11100902c.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

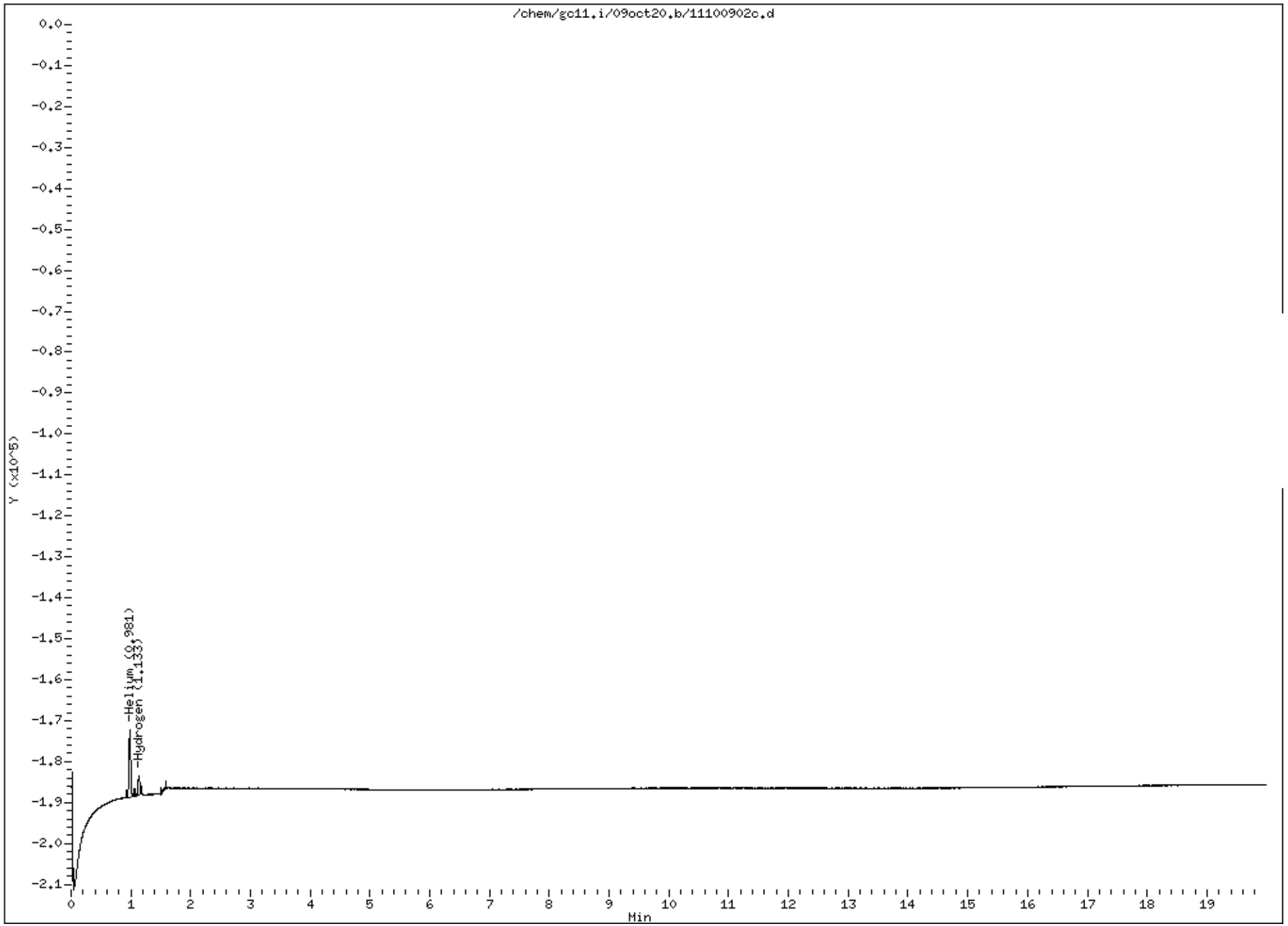
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

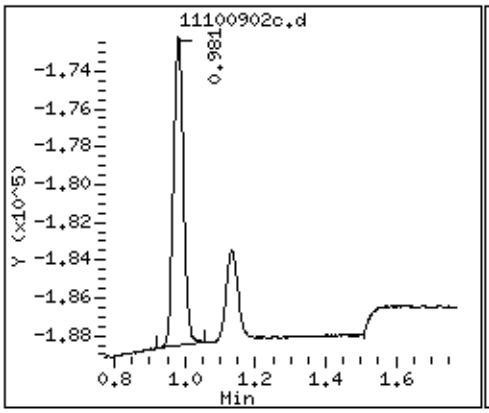
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
1 Helium	0.981	1.273	-0.292	326202	0.04950	0.0495(a)
2 Hydrogen	1.133	1.284	-0.151	107336	0.01007	0.0101

QC Flag Legend

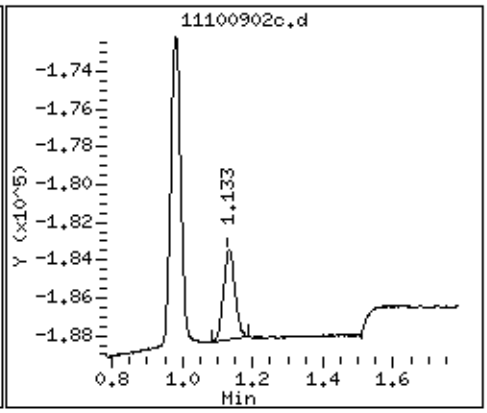
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


/chem/gc11.i/09oct20.b/11100902c.d
Y (x10^5)
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
-2.1
Helium (0.981)
Hydrogen (1.133)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium



2 Hydrogen



US32TAR1

Modified ASTM D-1945/1946

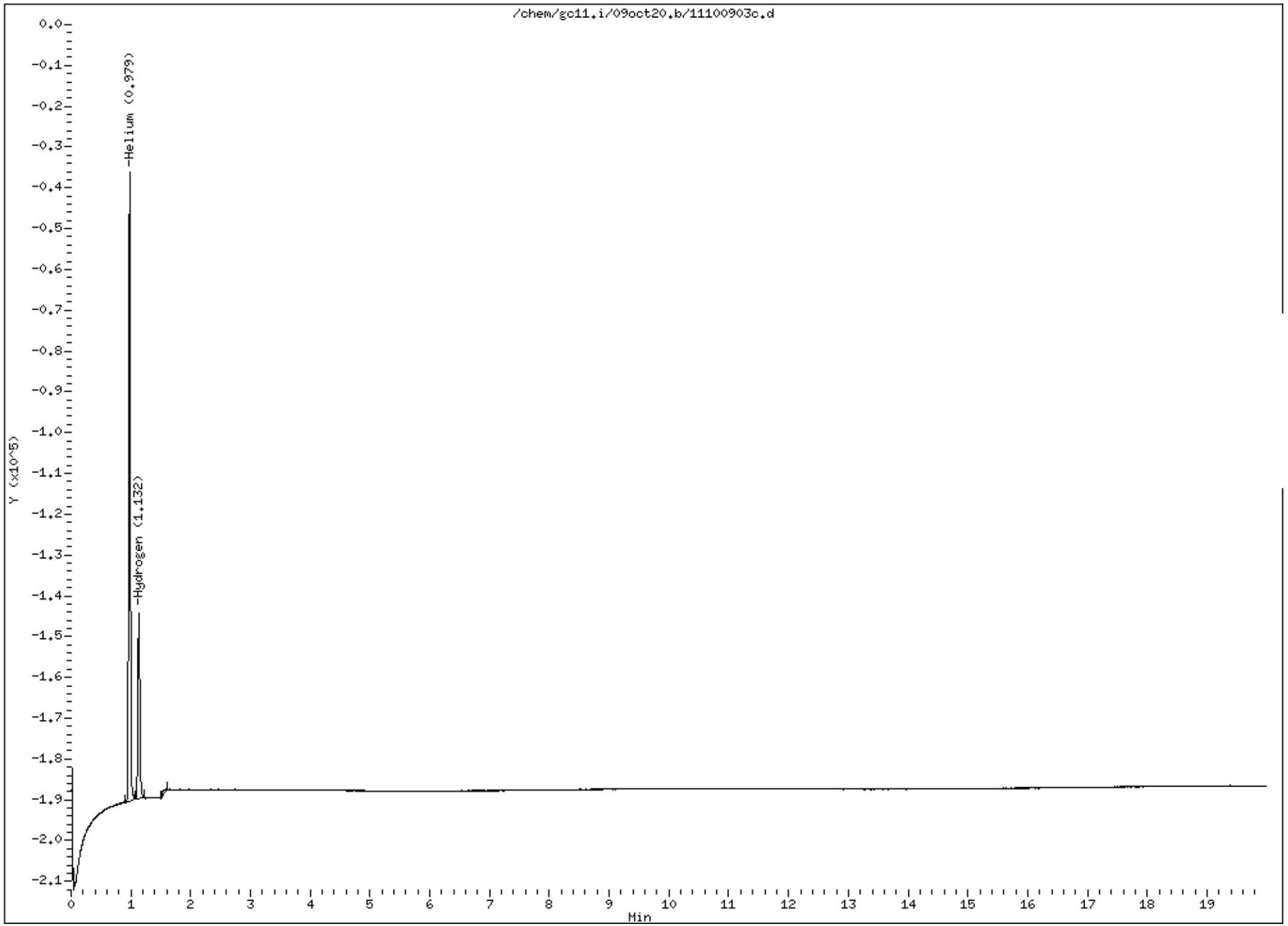
Data file : /chem/gc11.i/09oct20.b/11100903c.d
Lab Smp Id: 3119-HeH2 Client Smp ID: Level-2
Inj Date : 09-OCT-2020 12:13
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml(10:50),37686;3119-HeH2;Level-2
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 28-Oct-2020 16:39 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 12:13 Cal File: 11100903c.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

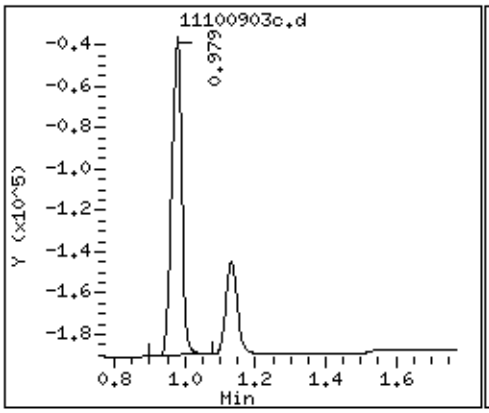
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

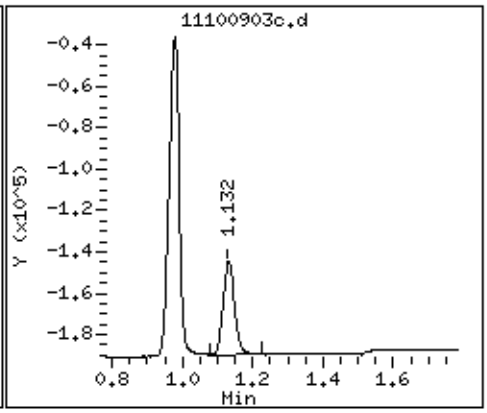
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
1 Helium	0.979	1.273	-0.294	3072718	0.49500	0.480
2 Hydrogen	1.132	1.284	-0.152	1024410	0.09900	0.0975


/chem/gc11.i/09oct20.b/11100903c.d
Helium (0.979)
Hydrogen (1.132)
Y (x10^5)
Min

1 Helium



2 Hydrogen



US32TAR1

Modified ASTM D-1945/1946

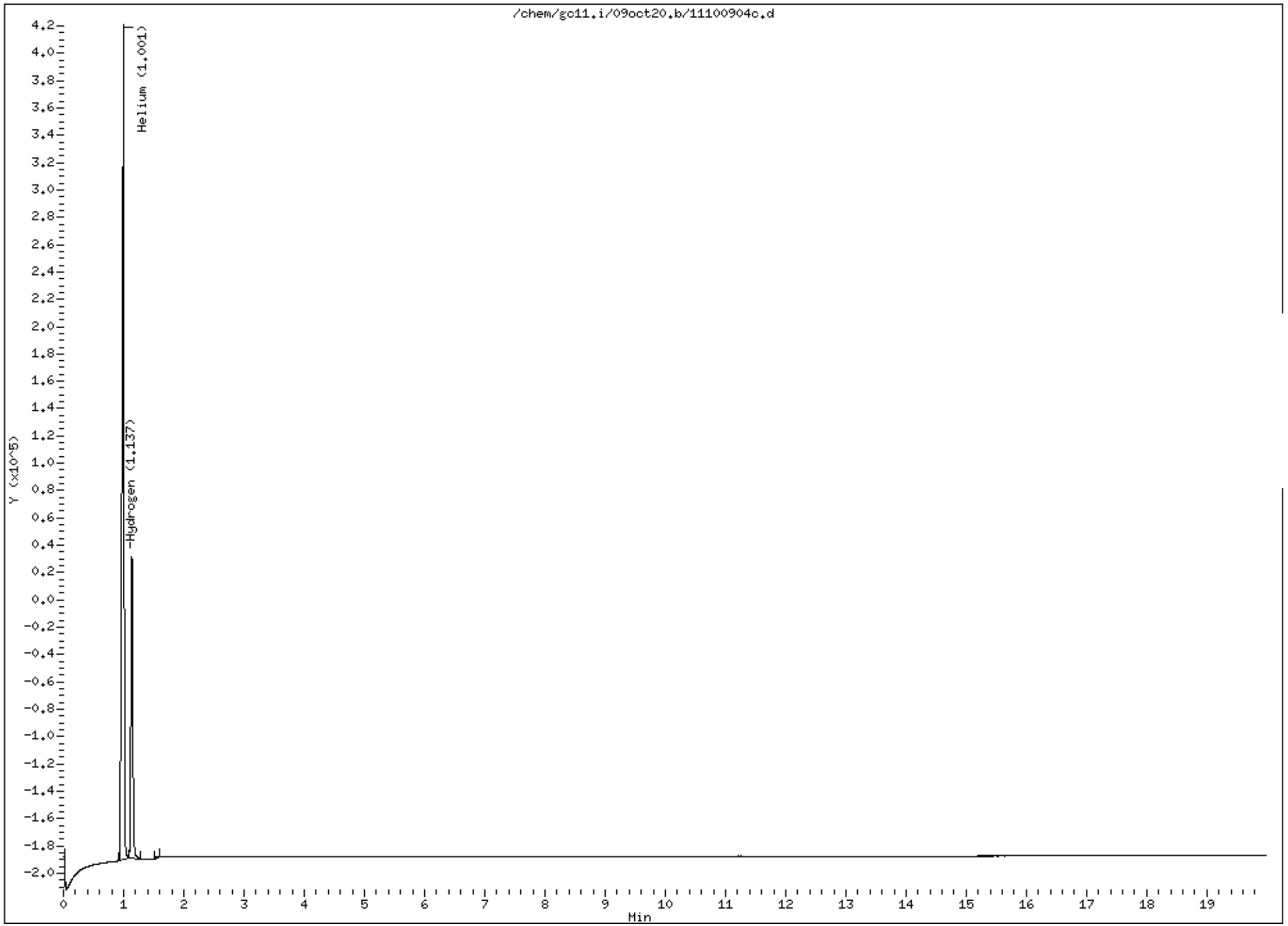
Data file : /chem/gc11.i/09oct20.b/11100904c.d
Lab Smp Id: 3119-HeH2 Client Smp ID: Level-3
Inj Date : 09-OCT-2020 12:42
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml,37686;3119-HeH2;Level-3
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 28-Oct-2020 16:39 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 12:42 Cal File: 11100904c.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

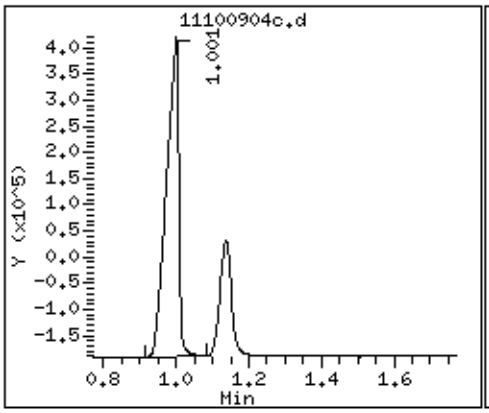
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

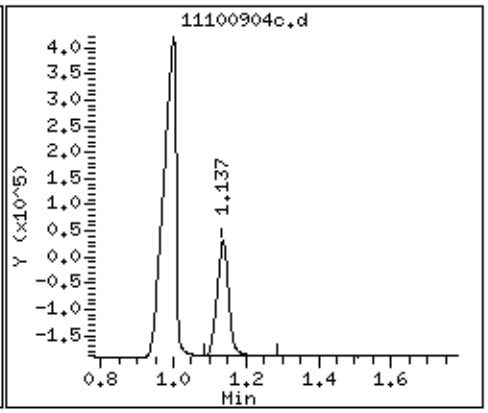
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
1 Helium	1.001	1.273	-0.272	14573681	2.47500	2.34
2 Hydrogen	1.137	1.284	-0.147	4899232	0.49500	0.476


/chem/gc11.i/09oct20.b/11100904c.d
Helium (1.001)
Hydrogen (1.137)
Y (x10^5)
Min

1 Helium



2 Hydrogen



US32TAR1

Modified ASTM D-1945/1946

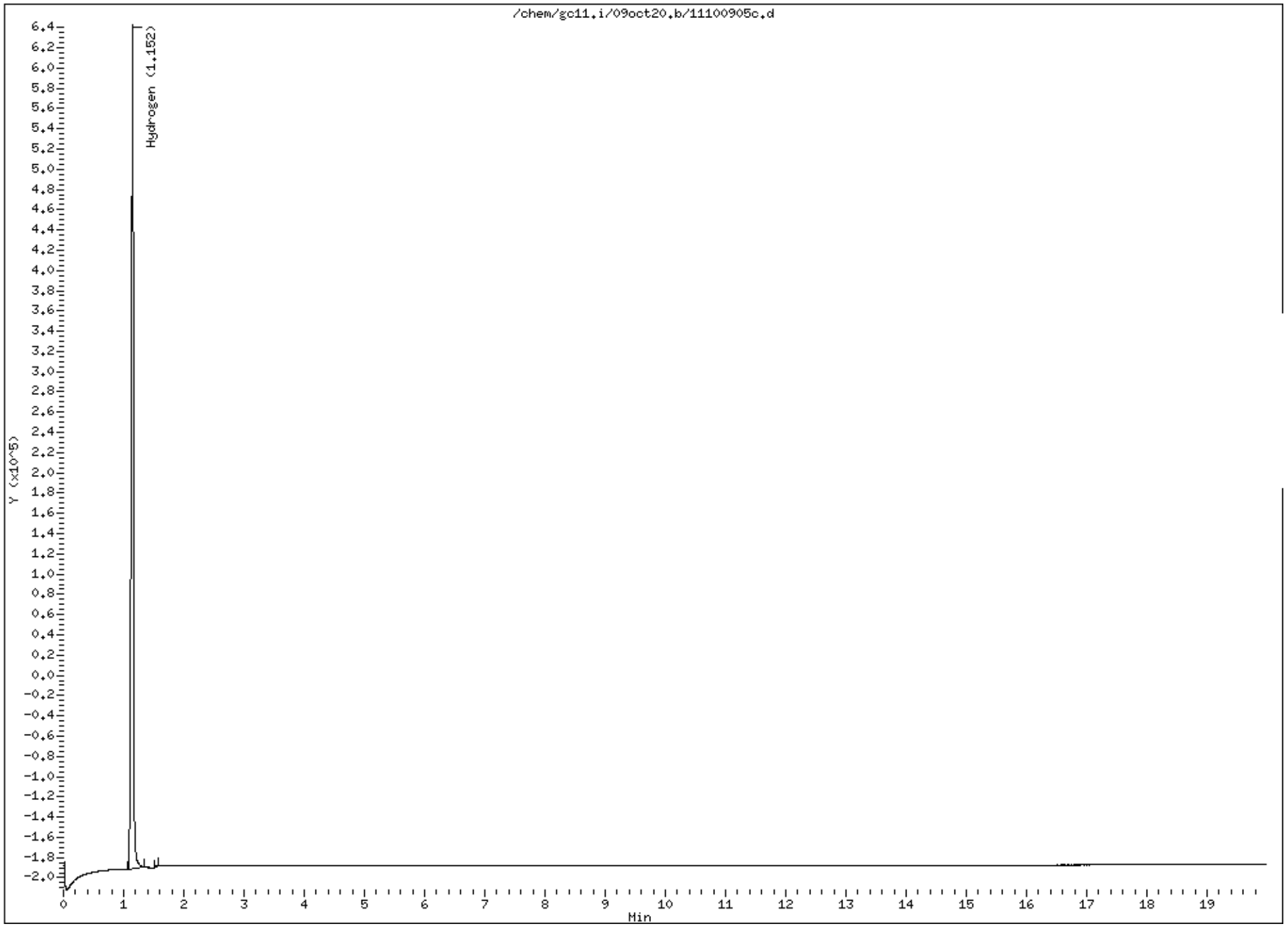
Data file : /chem/gc11.i/09oct20.b/11100905c.d
Lab Smp Id: 2810-1368 H2 Client Smp ID: Level-4
Inj Date : 09-OCT-2020 13:07
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml,;2810-1368 H2;;Level-4
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 28-Oct-2020 16:39 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 13:07 Cal File: 11100905c.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: h2.sub

Processing Host: us32tar1

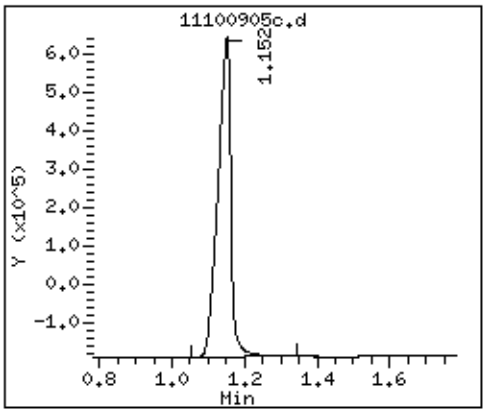
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
2 Hydrogen	1.152	1.284	-0.132	20670579	2.00000	2.00


/chem/gc11.i/09oct20.b/11100905c.d
Hydrogen (1.152)
Y (x10^5)
Min

2 Hydrogen



US32TAR1

Modified ASTM D-1945/1946

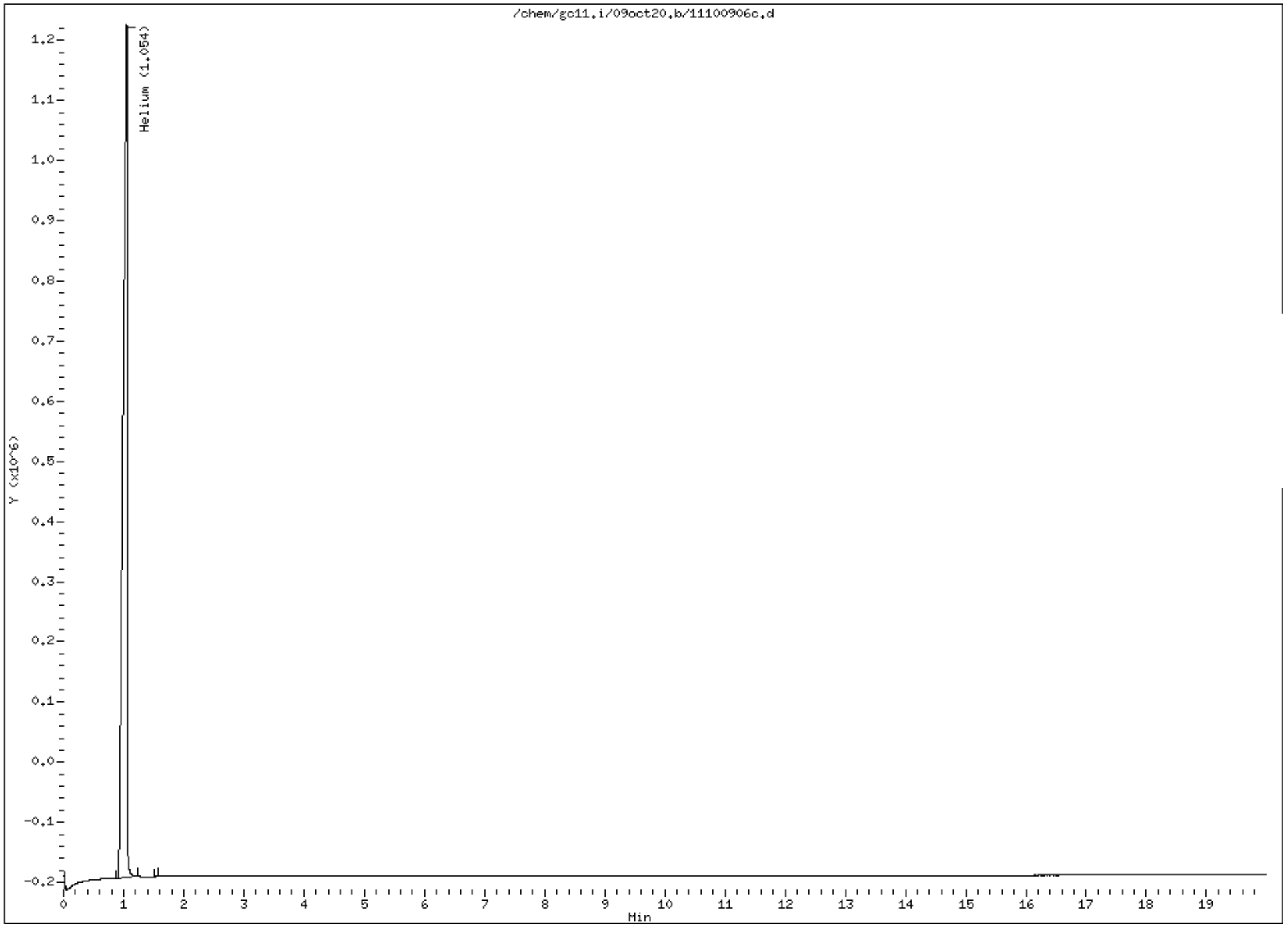
Data file : /chem/gc11.i/09oct20.b/11100906c.d
Lab Smp Id: 3119-He Client Smp ID: Level-4
Inj Date : 09-OCT-2020 14:33
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml(5:50),;3119-He;;Level-4
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 28-Oct-2020 16:39 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 14:33 Cal File: 11100906c.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: he.sub

Processing Host: us32tar1

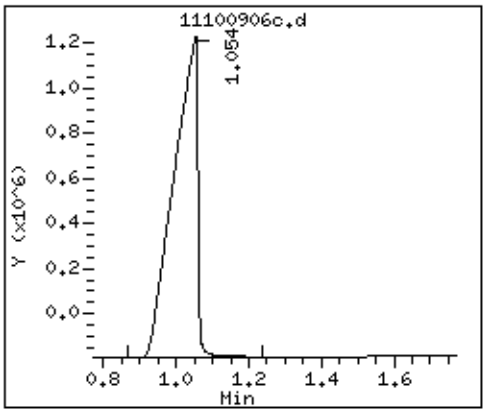
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
1 Helium	1.054	1.273	-0.219	64757660	10.0000	10.3


/chem/gc11.i/09oct20.b/11100906c.d
Helium (1.054)
Y (x10^6)
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium



US32TAR1

Modified ASTM D-1945/1946

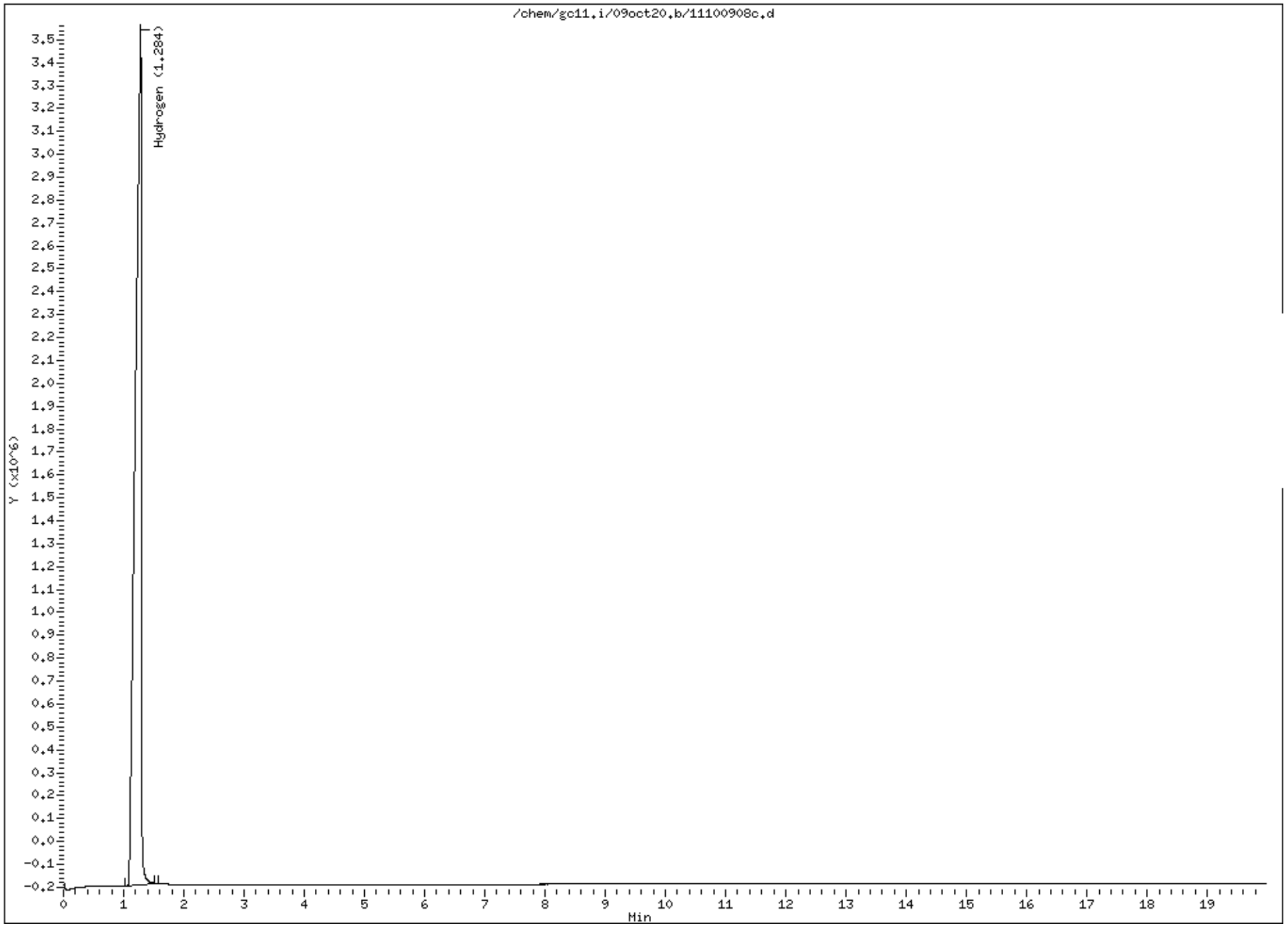
Data file : /chem/gc11.i/09oct20.b/11100908c.d
Lab Smp Id: 3119-H2 Client Smp ID: Level-5
Inj Date : 09-OCT-2020 15:55
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml(12:48),;3119-H2;;Level-5
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 28-Oct-2020 16:39 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 15:55 Cal File: 11100908c.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: h2.sub

Processing Host: us32tar1

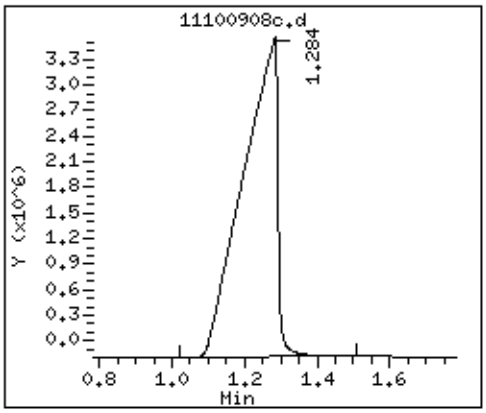
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
2 Hydrogen	1.284	1.284	0.000	247929023	25.0000	24.2


/chem/gc11.i/09oct20.b/11100908c.d
Hydrogen (1.284)
Y (x10^6)
Min

2 Hydrogen


11100908c.d
1.284
Y (x10^6)
3.3
3.0
2.7
2.4
2.1
1.8
1.5
1.2
0.9
0.6
0.3
0.0
0.8
1.0
1.2
1.4
1.6
Min

US32TAR1

Modified ASTM D-1945/1946

Data file : /chem/gc11.i/09oct20.b/11100909c.d
Lab Smp Id: 3119-He Client Smp ID: Level-5
Inj Date : 09-OCT-2020 16:23
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml,;3119-He;;Level-5
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 28-Oct-2020 16:39 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: he.sub

Processing Host: us32tar1

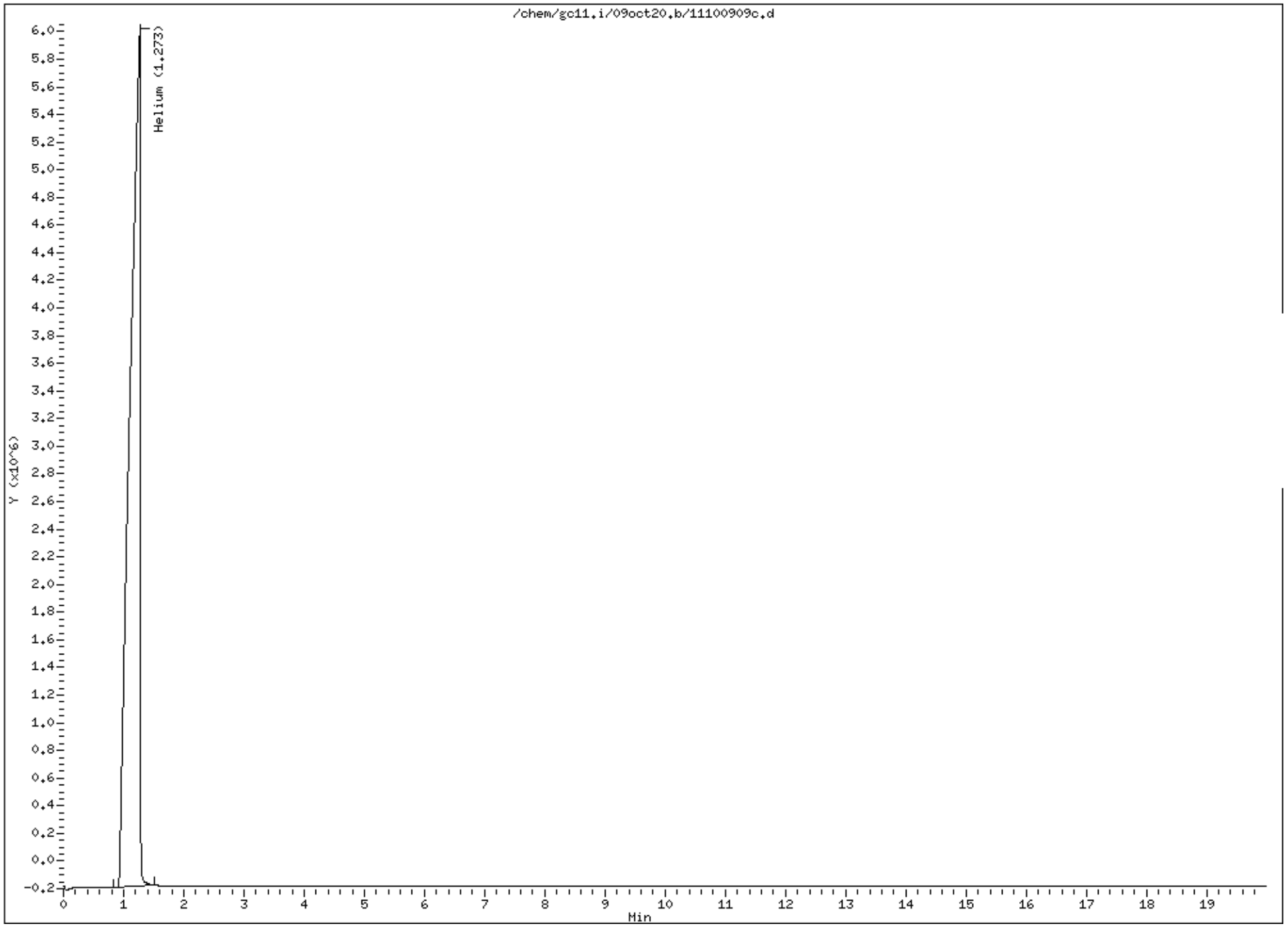
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

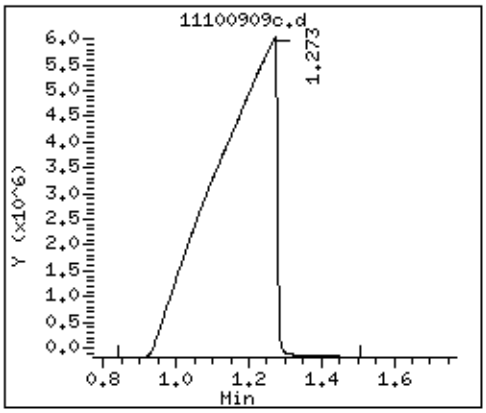
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
1 Helium	1.273	1.273	0.000	722701352	100.000	112(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.


/chem/gc11.i/09oct20.b/11100909c.d
Helium (1.273)
Y (x10^6)
Min

1 Helium


11100909c.d
1.273
Y (x10^6)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.8
1.0
1.2
1.4
1.6
Min

US32TAR1

Modified ASTM D-1945/1946

Data file : /chem/gc11.i/09oct20.b/11100912c.d
Lab Smp Id: 2810-1460 Ngas Client Smp ID: ICV
Inj Date : 09-OCT-2020 17:46
Operator : kk Inst ID: gc11.i
Smp Info : 1.0ml;;2810-1460 Ngas;ICV
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 04-Nov-2020 12:02 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: he.sub

Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
1 Helium	1.014	1.273	-0.259	6702554	1.03471	1.03

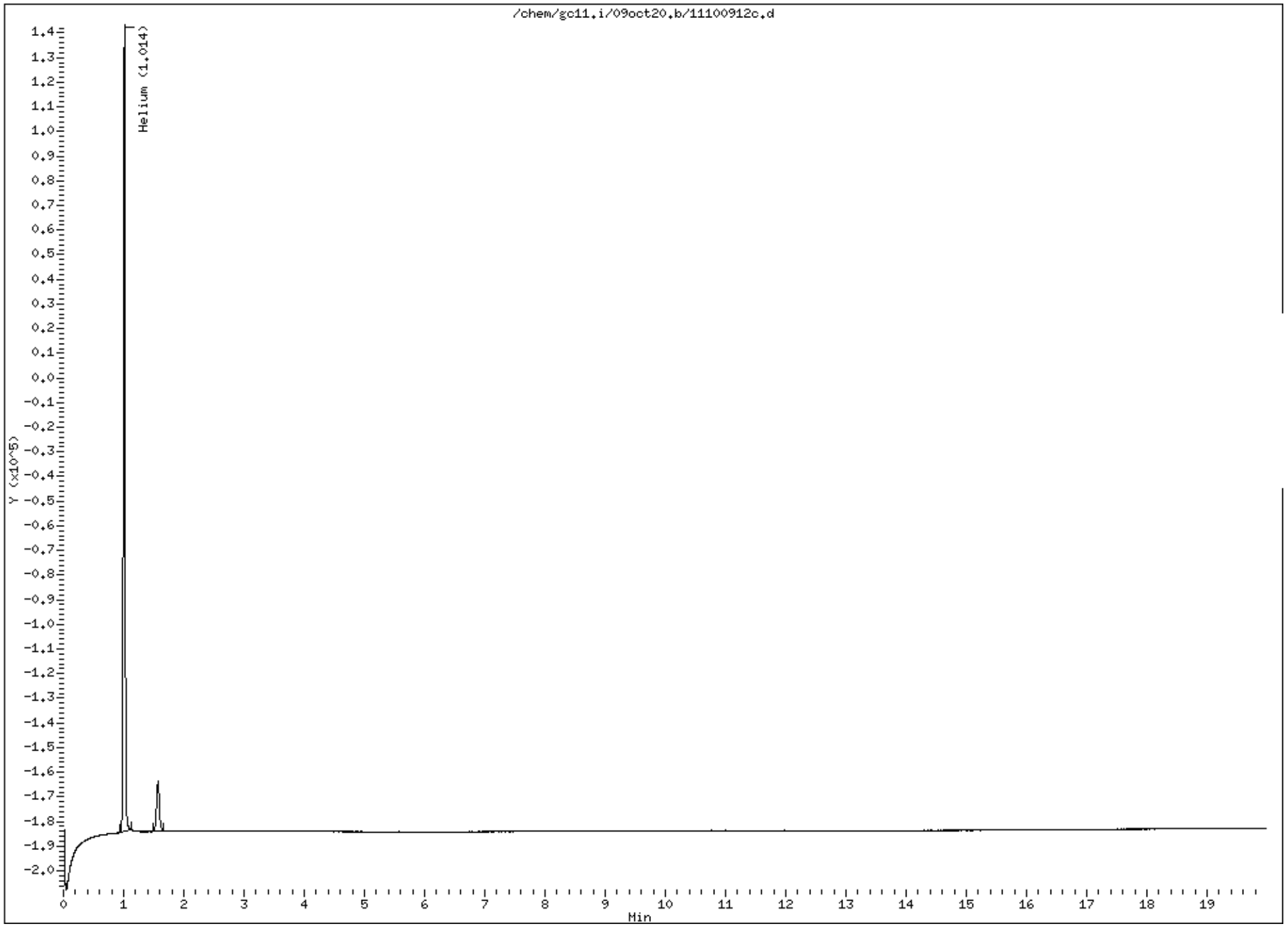
Report Date: 04-Nov-2020 12:05

US32TAR1

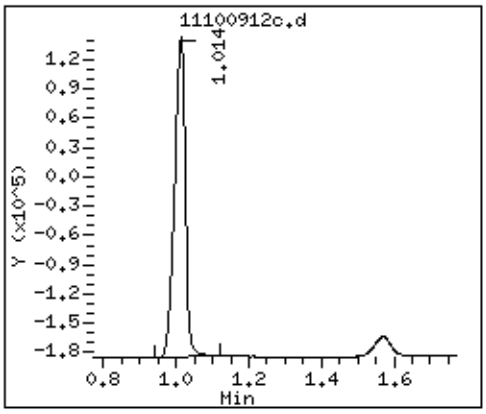
RECOVERY REPORT

Client Name: Client SDG: 09oct20
Sample Matrix: GAS Fraction: Atm Gas
Lab Smp Id: 2810-1460 Ngas Client Smp ID: ICV
Level: LOW Operator: kk
Data Type: GC DATA SampleType: METHSPIKE
SpikeList File: 2810-1460he.spk Quant Type: ESTD
Sublist File: he.sub
Method File: /chem/gc11.i/09oct20.b/112C1009.m
Misc Info:

SPIKE COMPOUND	CONC ADDED %	CONC RECOVERED %	% RECOVERED	LIMITS
1 Helium	1.00	1.03	103.47	85-115


/chem/gc11.i/09oct20.b/11100912c.d
Helium (1.014)
Y (x10^5)
Min

1 Helium


11100912c.d
1.014
1.2
0.9
0.6
0.3
0.0
-0.3
-0.6
-0.9
-1.2
-1.5
-1.8
Y (x10^5)
0.8
1.0
1.2
1.4
1.6
Min

US32TAR1

Modified ASTM D-1945/1946

Data file : /chem/gc11.i/09oct20.b/11100911c.d
Lab Smp Id: 2810-1264 H2 Client Smp ID: ICV
Inj Date : 09-OCT-2020 17:15
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml;;2810-1264 H2;ICV
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/09oct20.b/112C1009.m
Meth Date : 04-Nov-2020 12:02 ulyo Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: h2.sub

Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
2 Hydrogen	1.156	1.284	-0.128	21901072	2.14060	2.14

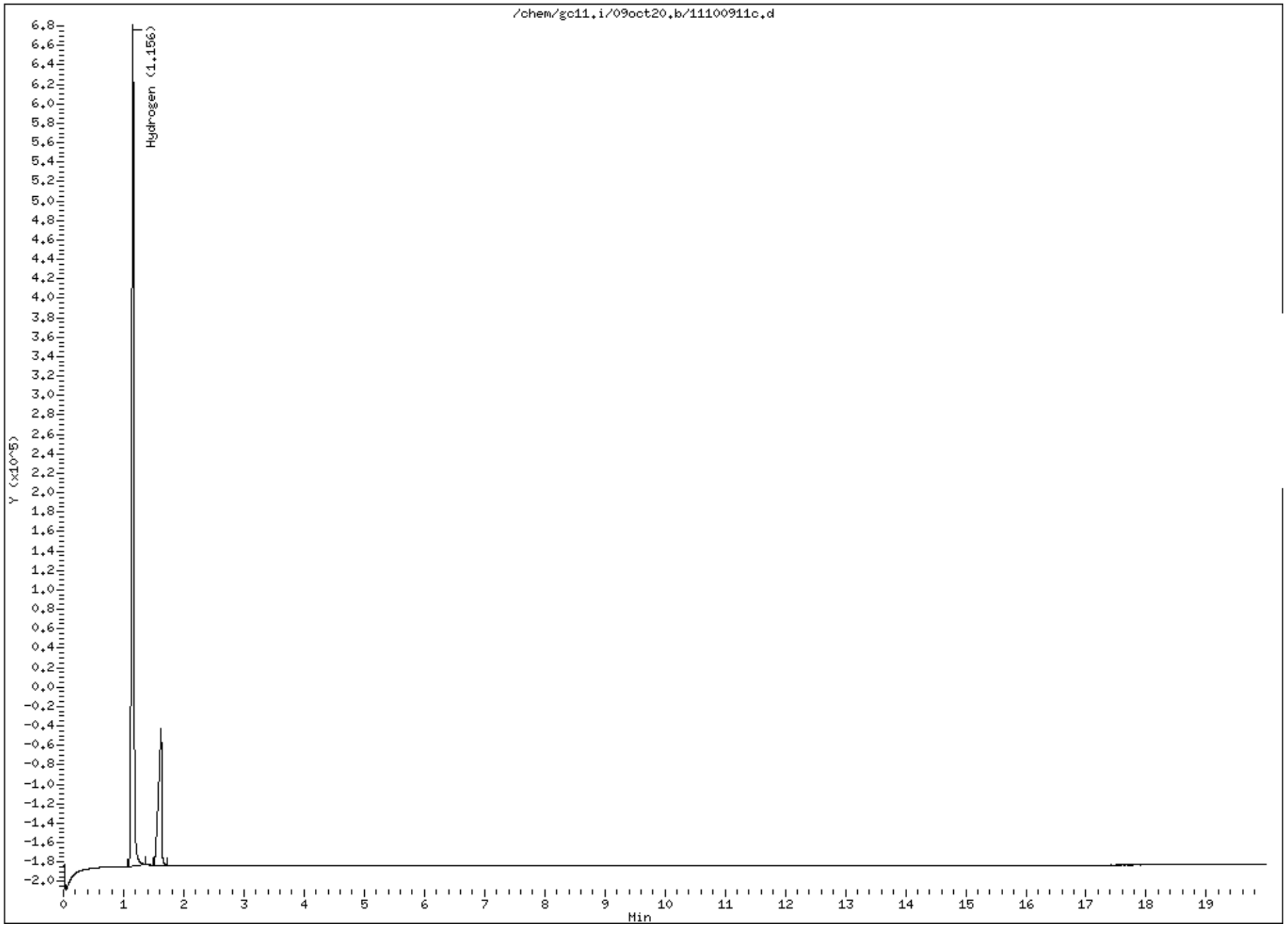
Report Date: 04-Nov-2020 12:05

US32TAR1

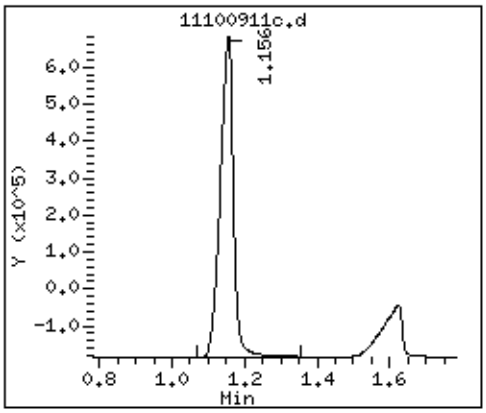
RECOVERY REPORT

Client Name: Client SDG: 09oct20
Sample Matrix: GAS Fraction: Atm Gas
Lab Smp Id: 2810-1264 H2 Client Smp ID: ICV
Level: LOW Operator: ly
Data Type: GC DATA SampleType: METHSPIKE
SpikeList File: 2.01%H2.spk Quant Type: ESTD
Sublist File: h2.sub
Method File: /chem/gc11.i/09oct20.b/112C1009.m
Misc Info:

SPIKE COMPOUND	CONC ADDED %	CONC RECOVERED %	% RECOVERED	LIMITS
2 Hydrogen	2.01	2.14	106.50	85-115


/chem/gc11.i/09oct20.b/11100911c.d
Hydrogen (1.156)
Y (x10^5)
Min

2 Hydrogen



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Client Sample ID: CCV

Lab ID#: 2107241B-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072001c**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/20/21 09:45 AM**

Compound	%Recovery
Helium	105

Container Type: NA - Not Applicable

US32TAR1

Modified ASTM D-1945/1946

Data file : /chem/gc11.i/20jul21.b/11072001c.d
Lab Smp Id: 2810-1656Ngas Client Smp ID: CCV
Inj Date : 20-JUL-2021 09:45
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml,
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

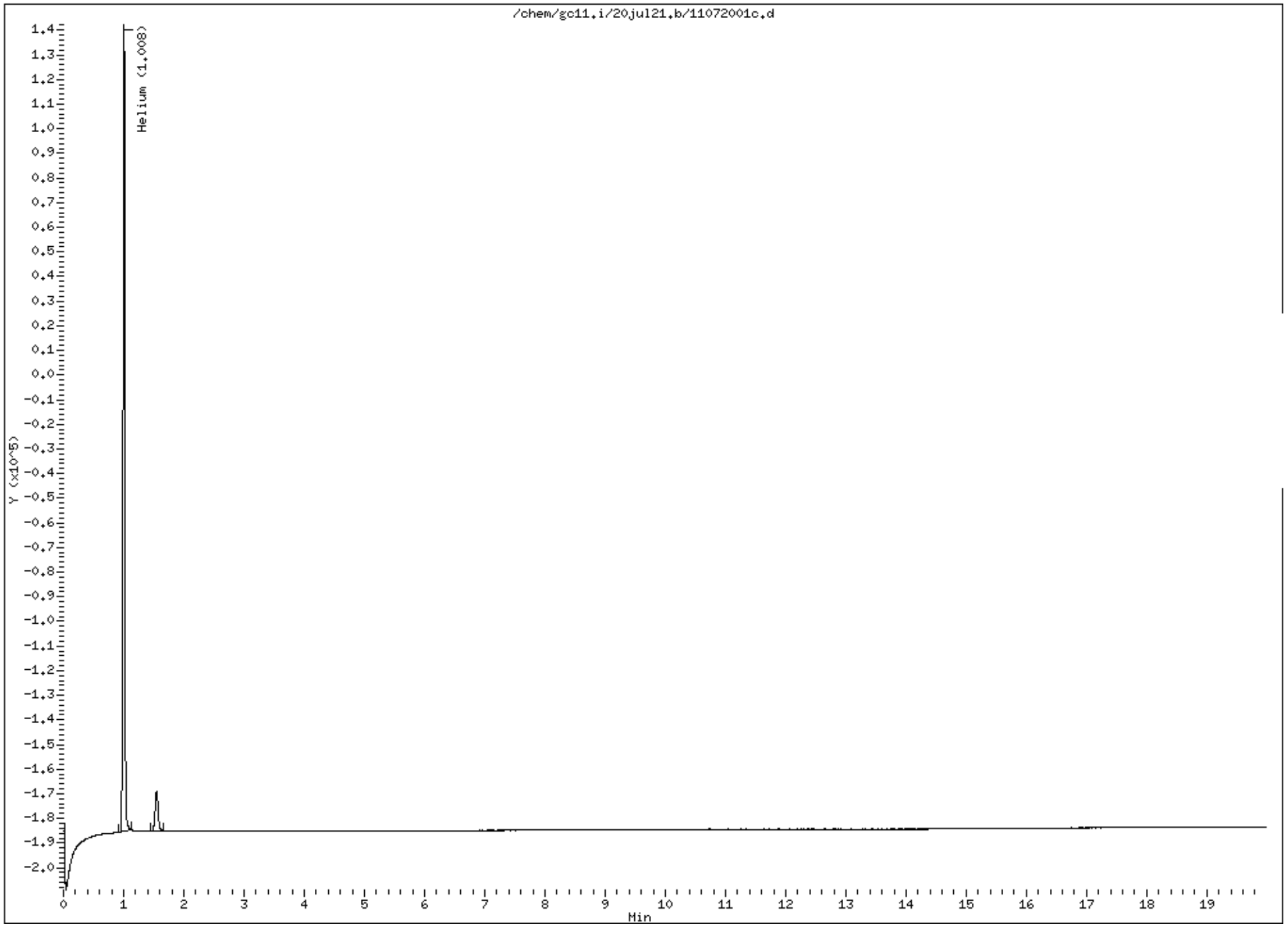
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
1 Helium	1.008	1.008	0.000	6795544	1.00000	1.05

US32TAR1

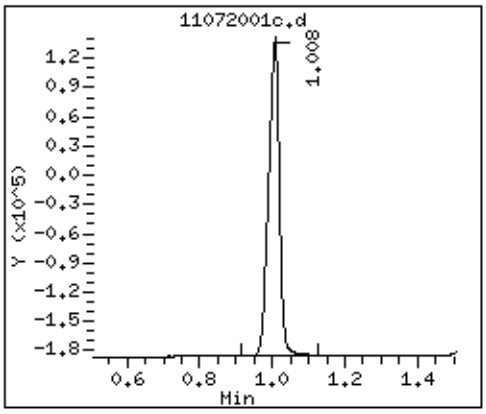
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc11.i Injection Date: 20-JUL-2021 09:45
Lab File ID: 11072001c.d Init. Cal. Date(s): 09-OCT-2020 09-OCT-2020
Analysis Type: AIR Init. Cal. Times: 11:20 16:23
Lab Sample ID: 2810-1656Ngas Quant Type: ESTD
Method: /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m

COMPOUND	RRF / AMOUNT	RF0.000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Helium	6477717	6795545	0.010	-4.90648	15.00000	Averaged


/chem/gc11.i/20jul21.b/11072001c.d
Helium (1.008)
Y (x10^5)
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium


11072001c.d
1.008
Y (x10^5)
1.2
0.9
0.6
0.3
0.0
-0.3
-0.6
-0.9
-1.2
-1.5
-1.8
0.6
0.8
1.0
1.2
1.4
Min

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Client Sample ID: LCS

Lab ID#: 2107241B-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072002c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/20/21 10:11 AM**	

Compound	%Recovery	Method Limits
Helium	103	85-115

Container Type: NA - Not Applicable

US32TAR1

Modified ASTM D-1945/1946

Data file : /chem/gc11.i/20jul21.b/11072002c.d
Lab Smp Id: 2810-1460 Ngas Client Smp ID: LCS
Inj Date : 20-JUL-2021 10:11
Operator : ly Inst ID: gc11.i
Smp Info : 1.0ml
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

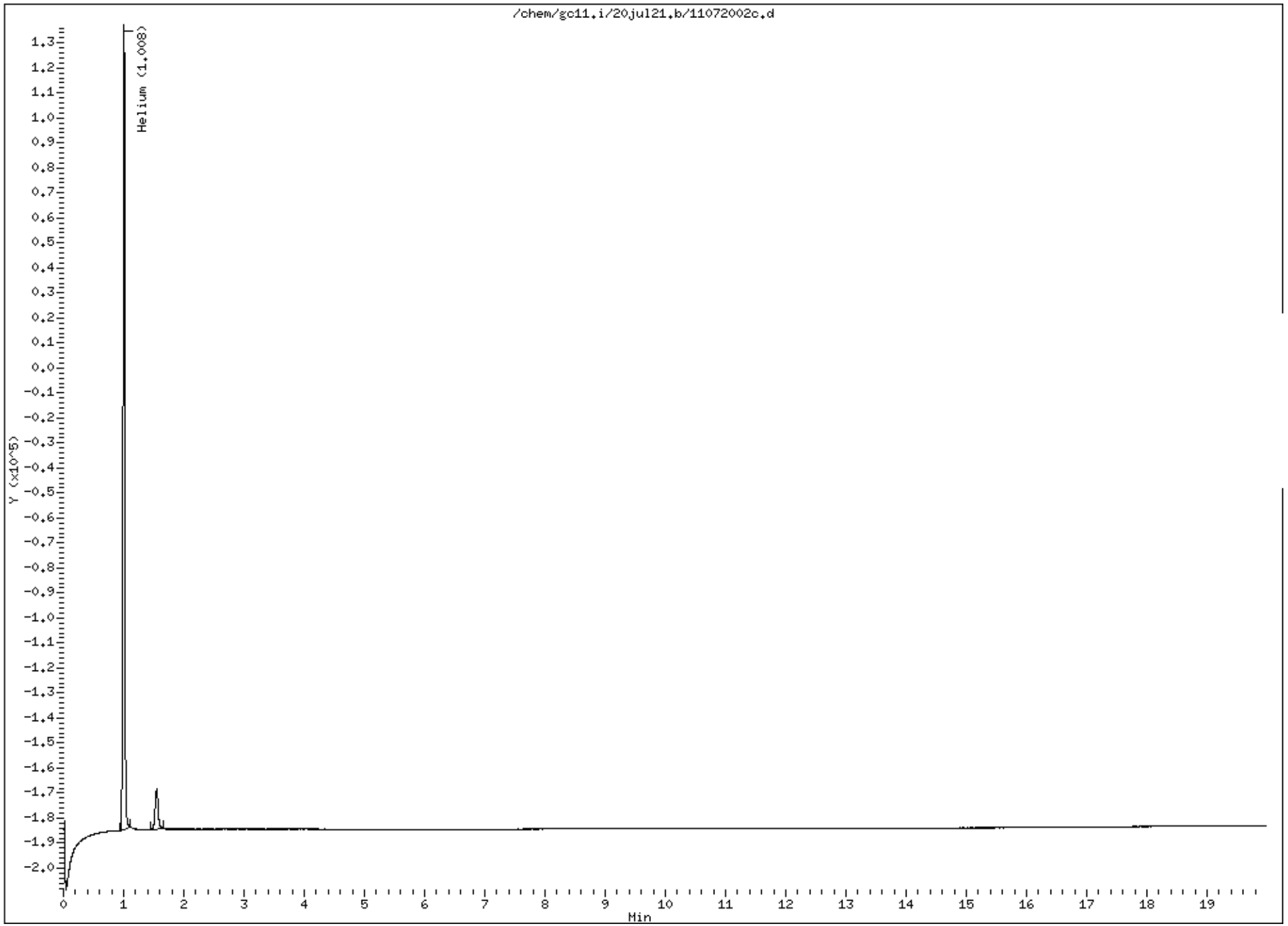
					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
1 Helium	1.008	1.008	0.000	6676374	1.03067	1.03

US32TAR1

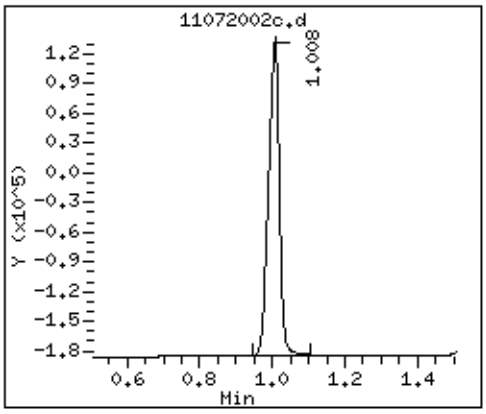
RECOVERY REPORT

Client Name: Client SDG: 20jul20
Sample Matrix: GAS Fraction: Atm Gas
Lab Smp Id: 2810-1460 Ngas Client Smp ID: LCS
Level: LOW Operator: ly
Data Type: GC DATA SampleType: LCS
SpikeList File: 2810-1460he.spk Quant Type: ESTD
Sublist File: ngas.sub
Method File: /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Misc Info:

SPIKE COMPOUND	CONC ADDED %	CONC RECOVERED %	% RECOVERED	LIMITS
1 Helium	1.00	1.03	103.07	85-115


/chem/gc11.i/20jul21.b/11072002c.d
Helium (1.008)
Y (x10^5)
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Min

1 Helium


11072002c.d
1.008
Y (x10^5)
1.2
0.9
0.6
0.3
0.0
-0.3
-0.6
-0.9
-1.2
-1.5
-1.8
0.6
0.8
1.0
1.2
1.4
Min

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Client Sample ID: LCSD

Lab ID#: 2107241B-09AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11072025c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/20/21 11:10 PM**	

Compound	%Recovery	Method Limits
Helium	103	85-115

Container Type: NA - Not Applicable

US32TAR1

Modified ASTM D-1945/1946

Data file : /chem/gc11.i/20jul21.b/11072025c.d
Lab Smp Id: 2810-1460Ngas Client Smp ID: LCSD
Inj Date : 20-JUL-2021 23:10
Operator : mb Inst ID: gc11.i
Smp Info : 1.0ml,;;2810-1460Ngas;LCSD
Misc Info :
Comment : GC/TCD
Method : /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Meth Date : 20-Jul-2021 18:48 ol6p Quant Type: ESTD
Cal Date : 09-OCT-2020 16:23 Cal File: 11100909c.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ngas.sub

Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(%)	(%)
==========	==	======	======	========	=======	=======
1 Helium	1.010	1.008	0.002	6682345	1.03159	1.03

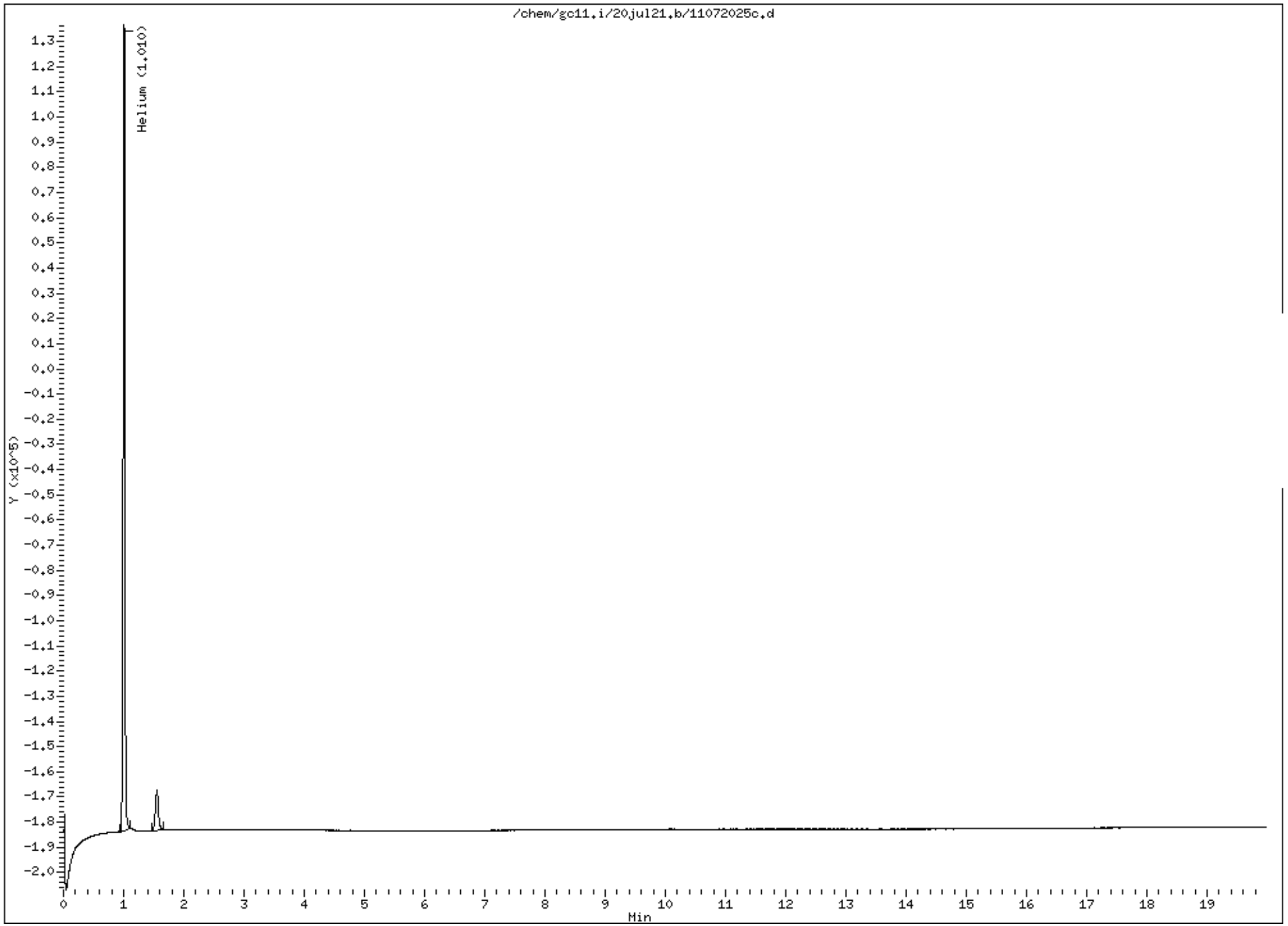
Report Date: 21-Jul-2021 13:29

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 20jul21
Sample Matrix: GAS Fraction: Atm Gas
Lab Smp Id: 2810-1460Ngas Client Smp ID: LCSD
Level: LOW Operator: mb
Data Type: GC DATA SampleType: LCSD
SpikeList File: 2810-1460he.spk Quant Type: ESTD
Sublist File: ngas.sub
Method File: /chem/gc11.i/20jul21.b/112n1007.m/112C1002.m/112C1009.m
Misc Info:

SPIKE COMPOUND	CONC ADDED %	CONC RECOVERED %	% RECOVERED	LIMITS
1 Helium	1.00	1.03	103.16	85-115


/chem/gc11.i/20jul21.b/11072025c.d
Helium (1.010)
Y (x10^5)
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2.0
0
1
2
3
4
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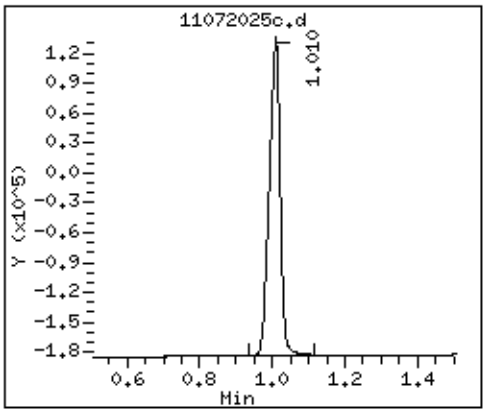
16
17
18
19
Min

1 Helium


11072025c.d
1.010
Y (x10^5)
1.2
0.9
0.6
0.3
0.0
-0.3
-0.6
-0.9
-1.2
-1.5
-1.8
0.6
0.8
1.0
1.2
1.4
Min

Eurofins Air Toxics
Method: **ASTM D-1945/1946**

GC-11

Logbook #3170
Leak Test Y

	USE	File #	Sample Name/Client ID	Can #	Verified Pressure >2psi	Pressure	Amt	DF	Date	Time	Review Init.	Comments
1	✓	11072001	2810 - 1656 Ngas	NA	NA	NA	1.0mL	1.00	7/20/21	0945	Y	CW
2	✓	02	2810 - 1460 Ngas	↓	↓	↓	↓		↓	1011	↓	LCS
3	✓	03	N_2 Lab Blank	34341	↓	↓	↓		↓	1039	↓	
4	✓	04	21073608-03A	N0601	✓	6.3"Hg→9.8psi	↓	2.11	↓	1110	MM	
5	✓	05	-04A	LC089	✓	6.3"Hg→10psi	↓	2.13	↓	1154	MM	
6	✓	06	-05A	00793	✓	8.0"Hg→10psi	↓	2.29	↓	1223	MM	
7	✓	07	-06A	IL1635	✓	8.0"Hg→9.8psi	↓	2.27	↓	1306	MM	
8	✓	08	-07A	01029	✓	6.7"Hg→9.9psi	1.0mL	2.16	↓	1446	MF/MM	
9	✓	09	-08A	00752	✓	5.5"Hg→9.9psi	1.0mL	2.05	↓	1530	MF/MM	
10	✓	10	-09A	IL1502	✓	7.6"Hg→9.9psi	1.0mL	2.24	↓	1531	MF/MM	
11	✓	11	-10A	N1974	✓	7.8"Hg→9.9psi	1.0mL	2.26	↓	1600	MF/MM	
12	✓	12	-11A	N2484	✓	7.3"Hg→9.8psi	1.0mL	2.21	↓	1626	MF/MM	
13	✓	13	-12A	N3164	✓	7.3"Hg→9.9psi	1.0mL	2.22	↓	1653	MM	
14	✓	14	21072413-01A	N3379	✓	9.6"Hg→10psi	↓	2.47	↓	1717	MM	
15	✓	15	-02A	N1999	✓	5.9"Hg→10psi	↓	2.09	↓	1753	MM	

Calculation check : File ID: 10072002 Compound: He Initials: MM

Sample Amt= Area Count Sample x / RF Dilution Factor = (16676374) x / (6477717) (1.00) = 1.03%

Reported Result= 1.03%

Reviewed by/Date Sy 7/21/21
*Must be an independent reviewer

Eurofins Air Toxics
Method: **ASTM D-1945/1946**

GC-11

Logbook #3170
Leak Test MM

	USE	File #	Sample Name/Client ID	Can #	Verified Pressure >2psi	Pressure	Amt	DF	Date	Time	Review Init.	Comments
1	✓	11072016	2107241B-03A	B2201	✓	7.6"Hg>9.9psi	1.0mL	2.24	07/20/21	1818	MM	
2	✓	17	-04A	N3130	✓	8"Hg>10psi		2.29		1843	MM	
3	✓	18	-05A	IL3929	✓	7.1"Hg>10psi		2.20		1908	MM	
4	✓	19	-06A	N1941	✓	6.3"Hg>10psi		2.13		1948	MM	
5	C	20	-06C	↓	✓	↓		2.13		2038	MM	confirmation
6	✓	21	2107400B-03A	N4441	✓	4.3"Hg>1.9psi		1.32		2128	MM	2128
7	✓	22	2107359B05A	N1938	✓	8.8"Hg>9.8psi		2.36		2153	MM	
8	✓	23	-07A	N5114	✓	8.4"Hg>9.8psi		2.31		2219	MM	
9	C	24	2107360B-03A	N6071	✓	6.3"Hg>9.8psi		2.11		2244	MM	confirmation
10	✓	25	2810-1460 Ngas	NA	NA	NA		1.00		2310	y	LCSD
11												
12												
13												
14												
15												y 7/21/21

Calculation check : File ID: Compound: Initials:

Sample Amt= Area Count Sample x / RF Dilution Factor = ( ) x ( )= y 7/21/21

Reported Result=

Reviewed by/Date SM 7/21/21
*Must be an independent reviewer

Shipping/Receiving Documents

eurofins | Air Toxics

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Air Toxics, Ltd. at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2107241

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: AECOM
Project Name: SMUD 59TH ST.
Project Manager: ROBERT KOHLHARDT Project # 60632793.6
Sampler: CHRIS WOMACK
Site Name:

Special Instructions/Notes: REQUEST LEVEL III DATA
INVOICING TO:
SWPP QUEEN
REPORT EMAIL TO:
ROBERT.KOHLHARDT@AECOM.COM

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____(specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15	ASTM D1946 HELIUM	C 7/10/21	
01A	SG-VW43A-02	1L3134	25385	07/08/21	12:05	07/08/21	12:10	29	5			X	X		
02A	SG-VW43B-02	1L2654	24640	07/08/21	12:40	07/08/21	12:45	30	5			X	X		
03A	SG-VW45A-03	1L2084	21418	07/08/21	13:53	07/08/21	13:58	28	5			X	X		
04A	SG-VW45B-02	1L3084	25453	07/08/21	14:33	07/08/21	14:38	29	5			X	X		
05A	SG-VW46A-02	1L3929	40978	07/08/21	15:33	07/08/21	15:38	29	5			X	X		
06A	SG-VW46B-02	1L2576	100303	07/08/21	16:03	07/08/21	16:08	28	5			X	X		
	SG-VW44A-02	1L1600	25466	07/08/21	17:13	07/08/21	17:19	29	5			X			
	SG-VW44B-02	1L2535	21412	07/08/21	17:41	07/08/21	17:46	29	5			X			
	SG-VW47A-02	LC144	20107	07/08/21	18:38	07/08/21	18:54	28	5			X			
	SG-VW47A-03	1L2567	20107	07/08/21	18:38	07/08/21	18:54	28	5			X			
	SG-VW47B-02	1L2058	25371	07/08/21	19:20	07/08/21	19:27	28	5			X			
	SG-VW48A-03	LC544	25344	07/09/21	07:14	07/09/21	07:19	30	5			X			
	SG-VW48B-02	1L2964	21397	07/09/21	07:40	07/09/21	07:45	30	5			X			
	SG-VW49A-03	1L2773	22368	07/09/21	08:38	07/09/21	08:43	30	5			X			
	SG-VW49B-02	1L3821	30574	07/09/21	09:03	07/09/21	09:09	28	5			X			
	SG-VW50A-03	1L3330	25280	07/09/21	10:13	07/09/21	10:19	28	5			X			

	Date	Time		Date	Time
Relinquished by: (Signature/Affiliation) AECOM	07/10/21	12:54	Received by: (Signature/Affiliation) FEDEX	7/10/21	1254
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		

Lab Use Only

Shipper Name: H/D | Custody Seals Intact? | Yes | No | None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 2107241B

Client

Mr. Robert Kohlhardt
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

Phone

916-679-2000

Fax

916-679-2900

Sales Rep: DaV

Date Promised: 07/26/21
Date Completed: 7/24/21
Date Received: 7/10/21
PO#:
Project#: 60632793.6 SMUD 59th ST.

Total $: $ 318.00
Logged By: JT

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	SG-VW43A-02	Modified ASTM D-1946	7/8/2021	9.6 "Hg	$50.00
02A	SG-VW43B-02	Modified ASTM D-1946	7/8/2021	5.9 "Hg	$50.00
03A	SG-VW45A-03	Modified ASTM D-1946	7/8/2021	7.6 "Hg	$50.00
04A	SG-VW45B-02	Modified ASTM D-1946	7/8/2021	8 "Hg	$50.00
05A	SG-VW46A-02	Modified ASTM D-1946	7/8/2021	7.1 "Hg	$50.00
06A	SG-VW46B-02	Modified ASTM D-1946	7/8/2021	6.3 "Hg	$50.00
07A	Lab Blank	Modified ASTM D-1946	NA	NA	$0.00
08A	CCV	Modified ASTM D-1946	NA	NA	$0.00
09A	LCS	Modified ASTM D-1946	NA	NA	$0.00
09AA	LCSD	Modified ASTM D-1946	NA	NA	$0.00

Misc. Charges eCVP (6) @ $3.00 each. $18.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: SMUD 59th Street Corporation Yard/25677

BILL TO: Mr. Jerry Montgomery
SWPPQueen
7202 Gloria Drive #25
Sacramento, CA 95831

Analysis Code: ASTM

TERMS:

Reporting Method: Modified ASTM D-1946 (Sh)-He only

Other Records

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi –[Init. Pressure (“Hg))*(14.7psi/30”Hg)]}}$

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi +Initial Pressure (psi)}}$

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
0.0	**1.14**	1.34	**1.68**	2.02
0.2	**1.14**	1.35	**1.69**	2.03
0.4	**1.15**	1.36	**1.70**	2.05
0.5	**1.16**	1.36	**1.71**	2.05
0.6	**1.16**	1.37	**1.71**	2.06
0.8	**1.17**	1.38	**1.73**	2.08
1.0	**1.18**	1.39	**1.74**	2.09
1.2	**1.18**	1.40	**1.75**	2.10
1.4	**1.19**	1.40	**1.76**	2.12
1.5	**1.20**	1.41	**1.77**	2.13
1.6	**1.20**	1.42	**1.77**	2.13
1.8	**1.21**	1.42	**1.79**	2.15
2.0	**1.22**	1.44	**1.80**	2.16
2.2	**1.23**	1.45	**1.81**	2.18
2.4	**1.23**	1.46	**1.83**	2.20
2.5	**1.24**	1.46	**1.83**	2.20
2.6	**1.24**	1.47	**1.84**	2.21
2.8	**1.25**	1.48	**1.85**	2.23
3.0	**1.26**	1.49	**1.87**	2.24
3.2	**1.27**	1.50	**1.88**	2.26
3.4	**1.28**	1.51	**1.90**	2.28
3.5	**1.29**	1.52	**1.90**	2.29
3.6	**1.29**	1.52	**1.91**	2.30
3.8	**1.30**	1.53	**1.92**	2.31
4.0	**1.31**	1.55	**1.94**	2.33
4.2	**1.32**	1.56	**1.95**	2.35
4.4	**1.33**	1.57	**1.97**	2.37
4.5	**1.34**	1.58	**1.98**	2.38
4.6	**1.34**	1.58	**1.98**	2.39
4.8	**1.35**	1.60	**2.00**	2.40
5.0	**1.36**	1.61	**2.02**	2.42
5.2	**1.37**	1.62	**2.03**	2.44
5.4	**1.39**	1.63	**2.05**	2.46
5.5	**1.39**	1.64	**2.06**	2.47
5.6	**1.40**	1.65	**2.07**	2.48
5.8	**1.41**	1.66	**2.08**	2.50
6.0	**1.42**	1.68	**2.10**	2.52
6.2	**1.43**	1.69	**2.12**	2.55
6.4	**1.44**	1.70	**2.14**	2.57
6.5	**1.45**	1.71	**2.15**	2.58
6.6	**1.46**	1.72	**2.15**	2.59
6.8	**1.47**	1.73	**2.17**	2.61
7.0	**1.48**	1.75	**2.19**	2.64
7.2	**1.49**	1.76	**2.21**	2.66
7.4	**1.51**	1.78	**2.23**	2.68
7.5	**1.51**	1.79	**2.24**	2.69
7.6	**1.52**	1.79	**2.25**	2.70

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
7.7	**1.53**	1.80	**2.26**	2.72
7.8	**1.54**	1.81	**2.27**	2.73
8.0	**1.55**	1.83	**2.29**	2.76
8.2	**1.56**	1.84	**2.31**	2.78
8.4	**1.58**	1.86	**2.33**	2.81
8.5	**1.59**	1.87	**2.34**	2.82
8.6	**1.59**	1.88	**2.36**	2.83
8.8	**1.61**	1.90	**2.38**	2.86
9.0	**1.62**	1.91	**2.40**	2.89
9.2	**1.64**	1.93	**2.42**	2.91
9.4	**1.65**	1.95	**2.45**	2.94
9.5	**1.66**	1.96	**2.46**	2.96
9.6	**1.67**	1.97	**2.47**	2.97
9.8	**1.69**	1.99	**2.50**	3.00
10.0	**1.70**	2.01	**2.52**	3.03
10.2	**1.72**	2.03	**2.55**	3.06
10.4	**1.74**	2.05	**2.57**	3.09
10.5	**1.75**	2.06	**2.59**	3.11
10.6	**1.76**	2.07	**2.60**	3.12
10.8	**1.78**	2.09	**2.63**	3.16
11.0	**1.79**	2.12	**2.65**	3.19
11.2	**1.81**	2.14	**2.68**	3.22
11.4	**1.83**	2.16	**2.71**	3.26
11.5	**1.84**	2.17	**2.72**	3.28
11.6	**1.85**	2.18	**2.74**	3.29
11.8	**1.87**	2.21	**2.77**	3.33
12.0	**1.89**	2.23	**2.80**	3.37
12.2	**1.91**	2.26	**2.83**	3.40
12.4	**1.94**	2.28	**2.86**	3.44
12.5	**1.95**	2.30	**2.88**	3.46
12.6	**1.96**	2.31	**2.90**	3.48
12.8	**1.98**	2.34	**2.93**	3.52
13.0	**2.00**	2.36	**2.97**	3.56
13.2	**2.03**	2.39	**3.00**	3.61
13.4	**2.05**	2.42	**3.04**	3.65
13.5	**2.07**	2.44	**3.06**	3.67
13.6	**2.08**	2.45	**3.07**	3.70
13.8	**2.10**	2.48	**3.11**	3.74
14.0	**2.13**	2.51	**3.15**	3.79
14.2	**2.16**	2.54	**3.19**	3.84
14.4	**2.18**	2.58	**3.23**	3.88
14.5	**2.20**	2.59	**3.25**	3.91
14.6	**2.21**	2.61	**3.27**	3.94
14.8	**2.24**	2.64	**3.32**	3.99
15.0	**2.27**	2.68	**3.36**	4.04
15.2	**2.30**	2.72	**3.41**	4.10
15.4	**2.33**	2.75	**3.45**	4.15

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
15.5	**2.35**	2.77	**3.48**	4.18
15.6	**2.37**	2.79	**3.50**	4.21
15.8	**2.40**	2.83	**3.55**	4.27
16.0	**2.43**	2.87	**3.60**	4.33
16.2	**2.47**	2.91	**3.65**	4.39
16.4	**2.51**	2.96	**3.71**	4.46
16.5	**2.52**	2.98	**3.73**	4.49
16.6	**2.54**	3.00	**3.76**	4.52
16.8	**2.58**	3.05	**3.82**	4.59
17.0	**2.62**	3.09	**3.88**	4.66
17.2	**2.66**	3.14	**3.94**	4.74
17.4	**2.70**	3.19	**4.00**	4.81
17.5	**2.73**	3.22	**4.03**	4.85
17.6	**2.75**	3.24	**4.07**	4.89
17.8	**2.79**	3.30	**4.13**	4.97
18.0	**2.84**	3.35	**4.20**	5.05
18.2	**2.89**	3.41	**4.27**	5.14
18.4	**2.94**	3.47	**4.35**	5.22
18.5	**2.96**	3.50	**4.38**	5.27
18.6	**2.99**	3.53	**4.42**	5.32
18.8	**3.04**	3.59	**4.50**	5.41
19.0	**3.10**	3.65	**4.58**	5.51
19.2	**3.16**	3.72	**4.67**	5.61
19.4	**3.22**	3.79	**4.76**	5.72
19.5	**3.25**	3.83	**4.80**	5.77
19.6	**3.28**	3.87	**4.85**	5.83
19.8	**3.34**	3.94	**4.94**	5.94
20.0	**3.41**	4.02	**5.04**	6.06
20.2	**3.48**	4.10	**5.14**	6.18
20.4	**3.55**	4.19	**5.25**	6.31
20.5	**3.59**	4.23	**5.31**	6.38
20.6	**3.63**	4.28	**5.36**	6.45
20.8	**3.70**	4.37	**5.48**	6.59
21.0	**3.79**	4.47	**5.60**	6.73
21.2	**3.87**	4.57	**5.73**	6.89
21.4	**3.96**	4.67	**5.86**	7.05
21.5	**4.01**	4.73	**5.93**	7.13
21.6	**4.06**	4.79	**6.00**	7.22
21.8	**4.16**	4.90	**6.15**	7.39
22.0	**4.26**	5.03	**6.30**	7.58
22.4	**4.48**	5.29	**6.63**	7.98

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
22.5	**4.54**	5.36	**6.72**	8.08
22.6	**4.61**	5.43	**6.81**	8.19
22.8	**4.73**	5.58	**7.00**	8.42
23.0	**4.87**	5.74	**7.20**	8.66
23.2	**5.01**	5.91	**7.41**	8.91
23.4	**5.16**	6.09	**7.64**	9.18
23.5	**5.24**	6.19	**7.76**	9.32
23.6	**5.33**	6.28	**7.88**	9.47
23.8	**5.50**	6.48	**8.13**	9.78
24.0	**5.68**	6.70	**8.40**	10.10
24.2	**5.88**	6.93	**8.69**	10.45
24.4	**6.09**	7.18	**9.00**	10.82
24.5	**6.20**	7.31	**9.17**	11.02
24.6	**6.31**	7.45	**9.33**	11.22
24.8	**6.55**	7.73	**9.69**	11.66
25.0	**6.82**	8.04	**10.08**	12.12
25.2	**7.10**	8.38	**10.50**	12.63
25.4	**7.41**	8.74	**10.96**	13.18
25.5	**7.57**	8.93	**11.20**	13.47
25.6	**7.75**	9.14	**11.46**	13.78
25.8	**8.11**	9.57	**12.00**	14.43
26.0	**8.52**	10.05	**12.60**	15.15
26.2	**8.97**	10.58	**13.27**	15.95
26.4	**9.47**	11.17	**14.00**	16.84
26.5	**9.74**	11.49	**14.40**	17.32
26.6	**10.02**	11.82	**14.83**	17.83
26.8	**10.65**	12.56	**15.75**	18.94
27.0	**11.36**	13.40	**16.80**	20.20
27.2	**12.17**	14.36	**18.00**	21.65
27.4	**13.11**	15.46	**19.39**	23.31
27.5	**13.63**	16.08	**20.16**	24.24
27.6	**14.20**	16.75	**21.00**	25.26
27.8	**15.49**	18.27	**22.91**	27.55
28.0	**17.04**	20.10	**25.20**	30.31
28.2	**18.93**	22.34	**28.00**	33.67
28.4	**21.30**	25.13	**31.51**	37.88
28.5	**22.72**	26.80	**33.61**	40.41
28.6	**24.34**	28.72	**36.01**	43.29
28.8	**28.40**	33.50	**42.01**	50.51
29.0	**34.08**	40.20	**50.41**	60.61

Method:ASTM D-1946 (Sh)-He only

CAS Number	Compound	Rpt. Limit(%)
7440-59-7	Helium	0.05

Eurofins Air Toxics	Data Review Checklist			Release Date: 10/22/19
Workorder # 2107416	Form F1.27	Revision #17	Revision Date: 10/22/19	Page 1 of 2

S1	S2	S3	S4	D	*Section 1* – Spec Out				
					Initials/Instrument/Date JS GC-11	S1: 7/20/21	S2:	S3:	S4:
✓				■	Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
NA				■	Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
				■	Manual Integrations included and approved				
✓				✓	Chain of Custody verified for special comments/notes and analyses requested (add comments below)				
✓				■	Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				
✓				■	Verified standard expiration dates				

Profile, analyses, reporting, special notes and unusual circumstances:

A1	A2	A3	A4	D	*Section 2* – Sample Analysis				
					Initials/Date	A1: MM 07/20/21	A2:	A3:	A4:
✓				✓	IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, Canister #s Verified and dilution ranges are met per SOP (ex. Over-ranged/overdiluted)				
NA				NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
NA					Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓				■	12/24 Hr clock time & Hold Time met for all samples				
NA				NA	Re-analysis of sample(s) has been evaluated for comparability and/or sample(s) has/have been checked for trends (Inf/Eff), field dups/trip blanks, samples following bad loads on auto samplers have been verified (system blks, confirmation runs)				
✓				✓	All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes: Aj: DIA Deaj ok

D1	D2	D3	D4	T	3T	*Section 3* – Target Data Reduction	Technical Review Needed? Circle one: Yes/(No)		T:	
						Initials/Instrument/ Date JS GC-11	D1: 7/24/21	D2:	D3:	D4:
NA					■	CAR # (if applicable)				
✓					■	Spectra Verified *(documentation of spectral defense included if applicable)*				
NA					■	TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
NA					■	TPH/NMOC calculations complete and included in folder				

Special notes:

A	3T	*Section 4*- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date JS 7/24/21	3rd Tier: *(needed only for DOD or per client request)*	
NA		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
NA		Appropriate data qualifier flags are applied		
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) *3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects*

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable

Electronic Comprehensive Validation Package (eCVP)

Vera Belitsky Vera Belitsky 07-29-2021

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WORK ORDER #: 2107260A

Work Order Summary

CLIENT:	Mr. Robert Kohlhardt AECOM 2020 L Street, Suite 400 Sacramento, CA 95811	**BILL TO:**	Mr. Jerry Montgomery SWPPQueen 7202 Gloria Drive #25 Sacramento, CA 95831
PHONE:	916-679-2000	**P.O. #**	
FAX:	916-679-2900	**PROJECT #**	60632793.6 SMUD 59th ST.
DATE RECEIVED:	07/13/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/27/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-VW32B-02	TO-15	6.9 "Hg	9.9 psi
02A	SG-VW32A-03	TO-15	12.6 "Hg	9.8 psi
03A	SG-VW36B-02	TO-15	8.6 "Hg	9.9 psi
04A	SG-VW36B-03	TO-15	8.6 "Hg	9.9 psi
05A	SG-VW36A-02	TO-15	8 "Hg	9.9 psi
06A	SG-VW51B-02	TO-15	6.9 "Hg	10 psi
07A	SG-VW51A-02	TO-15	8.4 "Hg	9.9 psi
13A	SG-VW40B-02	TO-15	6.1 "Hg	9.9 psi
14A	SG-VW40A-02	TO-15	4.9 "Hg	10 psi
15A	SG-VW37B-03	TO-15	5.3 "Hg	9.9 psi
16A	SG-VW37B-04	TO-15	5.5 "Hg	9.9 psi
17A	SG-VW37A-02	TO-15	5.5 "Hg	10 psi
18A	SG-VW41B-02	TO-15	5.9 "Hg	9.9 psi
19A	SG-VW41A-03	TO-15	5.1 "Hg	10 psi
20A	SG-VW42B-02	TO-15	6.9 "Hg	9.9 psi
21A	SG-VW42A-03	TO-15	6.3 "Hg	10 psi
22A	SG-VW42A-04	TO-15	6.3 "Hg	9.9 psi
23A	SG-VW57B-04	TO-15	8.4 "Hg	10 psi
24A	SG-VW57B-05	TO-15	7.8 "Hg	9.9 psi
25A	Lab Blank	TO-15	NA	NA
25B	Lab Blank	TO-15	NA	NA
26A	CCV	TO-15	NA	NA
26B	CCV	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 2107260A

Work Order Summary

CLIENT:	Mr. Robert Kohlhardt AECOM 2020 L Street, Suite 400 Sacramento, CA 95811	**BILL TO:**	Mr. Jerry Montgomery SWPPQueen 7202 Gloria Drive #25 Sacramento, CA 95831
PHONE:	916-679-2000	**P.O. #**	
FAX:	916-679-2900	**PROJECT #**	60632793.6 SMUD 59th ST.
DATE RECEIVED:	07/13/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/27/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
27A	LCS	TO-15	NA	NA
27AA	LCSD	TO-15	NA	NA
27B	LCS	TO-15	NA	NA
27BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/27/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
AECOM
Workorder# 2107260A

Nineteen 1 Liter Summa Canister samples were received on July 13, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

A revised Chain of Custody (COC) was provided by the client on 07/14/21.

Analytical Notes

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

The US EPA released a document on December 17, 2010 outlining possible data quality concerns for Acrolein measured by EPA Method TO-15. As a result, Acrolein is reported as estimated. Please refer to EPA document tilted "Data Quality Evaluation Guidelines for Ambient Air Acrolein Measurements December 17, 2010" located on-line at www.epa.gov/ttn/amtic/airtox.html for complete details.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1								
Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
SG-VW32B-02	2107260A-01A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW32A-03	2107260A-02A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW36B-02	2107260A-03A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW36B-03	2107260A-04A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW36A-02	2107260A-05A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW51B-02	2107260A-06A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW51A-02	2107260A-07A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW40B-02	2107260A-13A	07/13/2021	07/13/2021	NA	12	07/25/2021	NA	GOOD
SG-VW40A-02	2107260A-14A	07/13/2021	07/13/2021	NA	12	07/25/2021	NA	GOOD
SG-VW37B-03	2107260A-15A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW37B-04	2107260A-16A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW37A-02	2107260A-17A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW41B-02	2107260A-18A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW41A-03	2107260A-19A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW42B-02	2107260A-20A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW42A-03	2107260A-21A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW42A-04	2107260A-22A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW57B-04	2107260A-23A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW57B-05	2107260A-24A	07/13/2021	07/13/2021	NA	12	07/25/2021	NA	GOOD
Lab Blank	2107260A-25A	NA	NA	NA	NA	07/25/2021	NA	GOOD
Lab Blank	2107260A-25B	NA	NA	NA	NA	07/25/2021	NA	GOOD
CCV	2107260A-26A	NA	NA	NA	NA	07/25/2021	NA	GOOD
CCV	2107260A-26B	NA	NA	NA	NA	07/25/2021	NA	GOOD
LCS	2107260A-27A	NA	NA	NA	NA	07/25/2021	NA	GOOD
LCSD	2107260A-27AA	NA	NA	NA	NA	07/25/2021	NA	GOOD
LCS	2107260A-27B	NA	NA	NA	NA	07/25/2021	NA	GOOD
LCSD	2107260A-27BB	NA	NA	NA	NA	07/25/2021	NA	GOOD

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW32B-02

Lab ID#: 2107260A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.3	51	12	140
1,2,4-Trimethylbenzene	1.1	13	5.3	66
1,3,5-Trimethylbenzene	1.1	5.8	5.3	29
2,2,4-Trimethylpentane	1.1	4.4	5.1	20
2-Propanol	4.3	7.3	11	18
4-Ethyltoluene	1.1	16	5.3	80
Acetone	11	21	26	50
Benzene	1.1	6.9	3.5	22
Cyclohexane	1.1	2.2	3.7	7.7
Ethyl Benzene	1.1	15	4.7	65
Heptane	1.1	3.8	4.4	16
Hexane	1.1	5.5	3.8	19
m,p-Xylene	1.1	46	4.7	200
o-Xylene	1.1	15	4.7	64
Propylbenzene	1.1	3.5	5.3	17
Tetrachloroethene	1.1	8.8	7.4	60
Toluene	1.1	14	4.1	51
TPH ref. to Gasoline (MW=100)	110	1100	440	4500

Client Sample ID: SG-VW32A-03

Lab ID#: 2107260A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	1.4	4.4	5.0	16
Tetrachloroethene	1.4	19	9.7	130

Client Sample ID: SG-VW36B-02

Lab ID#: 2107260A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.7	8.2	12	20
Acetone	12	24	28	56
Hexane	1.2	2.2	4.1	7.9

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW36B-02

Lab ID#: 2107260A-03A

Propylene	4.7	8.6	8.0	15
Tetrachloroethene	1.2	28	7.9	190

Client Sample ID: SG-VW36B-03

Lab ID#: 2107260A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.7	6.8	12	17
Tetrachloroethene	1.2	24	7.9	170
Trichloroethene	1.2	1.7	6.3	9.2

Client Sample ID: SG-VW36A-02

Lab ID#: 2107260A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	11	27	27
Carbon Disulfide	4.6	12	14	37
Tetrachloroethene	1.1	34	7.7	230

Client Sample ID: SG-VW51B-02

Lab ID#: 2107260A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	13	26	30
Tetrachloroethene	1.1	12	7.4	78

Client Sample ID: SG-VW51A-02

Lab ID#: 2107260A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.6	4.7	11	12
Tetrachloroethene	1.2	18	7.9	120

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW40B-02

Lab ID#: 2107260A-13A

No Detections Were Found.

Client Sample ID: SG-VW40A-02

Lab ID#: 2107260A-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.0	2.1	6.8	14

Client Sample ID: SG-VW37B-03

Lab ID#: 2107260A-15A

No Detections Were Found.

Client Sample ID: SG-VW37B-04

Lab ID#: 2107260A-16A

No Detections Were Found.

Client Sample ID: SG-VW37A-02

Lab ID#: 2107260A-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2,4-Trimethylbenzene	1.0	6.0	5.1	30
1,3,5-Trimethylbenzene	1.0	2.4	5.1	12
2,2,4-Trimethylpentane	1.0	16	4.8	73
4-Ethyltoluene	1.0	8.7	5.1	43
Benzene	1.0	3.9	3.3	12
Cyclohexane	1.0	9.8	3.5	34
Ethyl Benzene	1.0	11	4.5	49
Heptane	1.0	8.3	4.2	34
Hexane	1.0	7.3	3.6	26
m,p-Xylene	1.0	40	4.5	170
Methyl tert-butyl ether	4.1	10	15	38
o-Xylene	1.0	11	4.5	49
Propylbenzene	1.0	1.8	5.1	8.8
Toluene	1.0	24	3.9	92

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW37A-02

Lab ID#: 2107260A-17A

TPH ref. to Gasoline (MW=100)	100	770	420	3100

Client Sample ID: SG-VW41B-02

Lab ID#: 2107260A-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.0	1.2	7.0	8.5

Client Sample ID: SG-VW41A-03

Lab ID#: 2107260A-19A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.0	5.5	6.8	37

Client Sample ID: SG-VW42B-02

Lab ID#: 2107260A-20A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.3	11	11	27
Carbon Disulfide	4.3	24	14	75
Tetrachloroethene	1.1	1.3	7.4	8.8

Client Sample ID: SG-VW42A-03

Lab ID#: 2107260A-21A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	11	12	20	23
Hexane	1.1	1.2	3.8	4.0
Tetrachloroethene	1.1	4.6	7.2	31

Client Sample ID: SG-VW42A-04

Lab ID#: 2107260A-22A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW42A-04

Lab ID#: 2107260A-22A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.1	4.6	7.2	31

Client Sample ID: SG-VW57B-04

Lab ID#: 2107260A-23A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.7	5.7	12	15
Tetrachloroethene	1.2	3.1	7.9	21

Client Sample ID: SG-VW57B-05

Lab ID#: 2107260A-24A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.1	3.1	7.7	21

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Client Sample ID: SG-VW32B-02

Lab ID#: 2107260A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072508**	**Date of Collection:**	**7/12/21 10:31:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/25/21 03:09 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.3	Not Detected	30	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.4	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
1,1-Difluoroethane	4.3	51	12	140
1,2,3-Trichloropropane	4.3	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
1,2,4-Trimethylbenzene	1.1	13	5.3	66
1,2-Dibromo-3-chloropropane	4.3	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.3	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.1	5.8	5.3	29
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	4.4	5.1	20
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	13	Not Detected
2-Hexanone	4.3	Not Detected	18	Not Detected
2-Propanol	4.3	7.3	11	18
3-Chloropropene	4.3	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	16	5.3	80
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Acetone	11	21	26	50
Acrolein	4.3	Not Detected	10	Not Detected
Acrylonitrile	4.3	Not Detected	9.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	6.9	3.5	22
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.3	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected

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Client Sample ID: SG-VW32B-02

Lab ID#: 2107260A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072508**	**Date of Collection:**	**7/12/21 10:31:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/25/21 03:09 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Cumene	1.1	Not Detected	5.3	Not Detected
Cyclohexane	1.1	2.2	3.7	7.7
Dibromochloromethane	1.1	Not Detected	9.2	Not Detected
Dibromomethane	4.3	Not Detected	31	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.3	Not Detected	16	Not Detected
Ethyl Benzene	1.1	15	4.7	65
Ethyl-tert-butyl ether	4.3	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 113	1.1	Not Detected	8.3	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Heptane	1.1	3.8	4.4	16
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected
Hexachloroethane	4.3	Not Detected	42	Not Detected
Hexane	1.1	5.5	3.8	19
Iodomethane	11	Not Detected	63	Not Detected
Isopropyl ether	4.3	Not Detected	18	Not Detected
m,p-Xylene	1.1	46	4.7	200
Methyl tert-butyl ether	4.3	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
o-Xylene	1.1	15	4.7	64
Propylbenzene	1.1	3.5	5.3	17
Propylene	4.3	Not Detected	7.5	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
tert-Amyl methyl ether	4.3	Not Detected	18	Not Detected
tert-Butyl alcohol	4.3	Not Detected	13	Not Detected
Tetrachloroethene	1.1	8.8	7.4	60
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	14	4.1	51
TPH ref. to Gasoline (MW=100)	110	1100	440	4500
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
Vinyl Acetate	4.3	Not Detected	15	Not Detected
Vinyl Bromide	4.3	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW32B-02

Lab ID#: 2107260A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072508**	**Date of Collection:**	**7/12/21 10:31:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/25/21 03:09 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	101	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072508.d
Lab Smp Id: 2107260A-01A
Inj Date : 25-JUL-2021 15:09
Operator : LD Inst ID: msd3.i
Smp Info : 200ml LC559
Misc Info : 6.9 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 1
Dil Factor: 2.17000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	302984	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	233487				48.46- 108.46	77.06
5.284	5.270 (1.000)	49	425874				120.39- 180.39	140.56
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.166 (1.000)	114	1026651	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	150732				0.00- 45.52	14.68
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	906842	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	476373				25.46- 85.46	52.53
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	423501	25.3996	25.400		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	209192				21.66- 81.66	49.40
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	988168	23.3687	23.369		80.00- 120.00	100.00
7.387	7.387 (1.198)	70	111858				0.00- 41.47	11.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	661316			36.47- 96.47	66.92
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	608433	25.3658	25.366	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	694130			93.06- 153.06	114.08
9.601	9.601 (1.115)	176	561541			62.87- 122.87	92.29
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	112544	23.5912	51.193	80.00- 120.00	100.00
1.451	1.479 (0.275)	51	270816			321.86- 381.86	240.63
1.465	1.451 (0.277)	47	64580			45.34- 105.34	57.38
47 Acetone					CAS #: 67-64-1		
3.228	3.214 (0.611)	58	49688	9.78034	21.223	80.00- 120.00	100.00
3.228	3.214 (0.611)	43	171008			299.66- 359.66	344.16
52 2-Propanol					CAS #: 67-63-0		
3.409	3.396 (0.645)	45	61144	3.34651	7.262	80.00- 120.00	100.00
3.423	3.396 (0.648)	43	12572			0.00- 48.61	20.56
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	42750	2.54794	5.529	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	30602			32.99- 92.99	71.58
4.179	4.179 (0.791)	86	6859			0.00- 42.56	16.05
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	12430	1.03522	2.246	80.00- 120.00	100.00
5.452	5.438 (1.032)	56	48427			120.40- 180.40	389.58
5.452	5.438 (1.032)	41	36450			54.20- 114.20	293.24
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	106615	2.03195	4.409	80.00- 120.00	100.00
5.760	5.774 (1.090)	56	46450			1.12- 61.12	43.57
5.760	5.774 (1.090)	41	44034			0.00- 57.49	41.30
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	74847	3.19478	6.933	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	20072			0.00- 53.80	26.82
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	16315	1.76803	3.837	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	28562			179.02- 239.02	175.06
5.942	5.942 (0.964)	57	16855			84.85- 144.85	103.31
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	197139	6.27124	13.608	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
137 Toluene (continued)							
7.437	7.437 (1.206)	92	112020			28.30- 88.30	56.82
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.882 (0.915)	166	57904	4.07582	8.844	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	45411			48.71- 108.71	78.43
7.881	7.874 (0.915)	131	46022			46.55- 106.55	79.48
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	85510	6.89960	14.972	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	260973			282.48- 342.48	305.20
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	329569	21.3749	46.384	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	652410			171.36- 231.36	197.96
164 o-Xylene					CAS #: 95-47-6		
9.121	9.121 (1.059)	106	98768	6.74767	14.642	80.00- 120.00	100.00
9.121	9.121 (1.059)	91	205262			179.99- 239.99	207.82
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	87828	1.62651	3.530	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	21711			0.00- 53.77	24.72
9.758	9.758 (1.133)	105	3992			0.00- 33.81	4.55
183 4-Ethyltoluene					CAS #: 622-96-8		
9.830	9.851 (1.141)	120	104943	7.49774	16.270	80.00- 120.00	100.00
9.830	9.851 (1.141)	105	329625			296.79- 356.79	314.10
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.902 (1.150)	120	53033	2.69765	5.854	80.00- 120.00	100.00
9.901	9.902 (1.150)	105	105991			176.40- 236.40	199.86
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	240681	6.20871	13.473	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	109630			16.58- 76.58	45.55

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072508.d
Lab Smp Id: 2107260A-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	302984	13.79
108 1,4-Difluorobenze	910055	546033	1274077	1026651	12.81
153 Chlorobenzene-d5	785948	471569	1100327	906842	15.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	-0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:45

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-01A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.400	101.60	70-130
$ 134 Toluene-d8	25.000	23.369	93.47	70-130
$ 170 4-Bromofluorobenz	25.000	25.366	101.46	70-130

Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

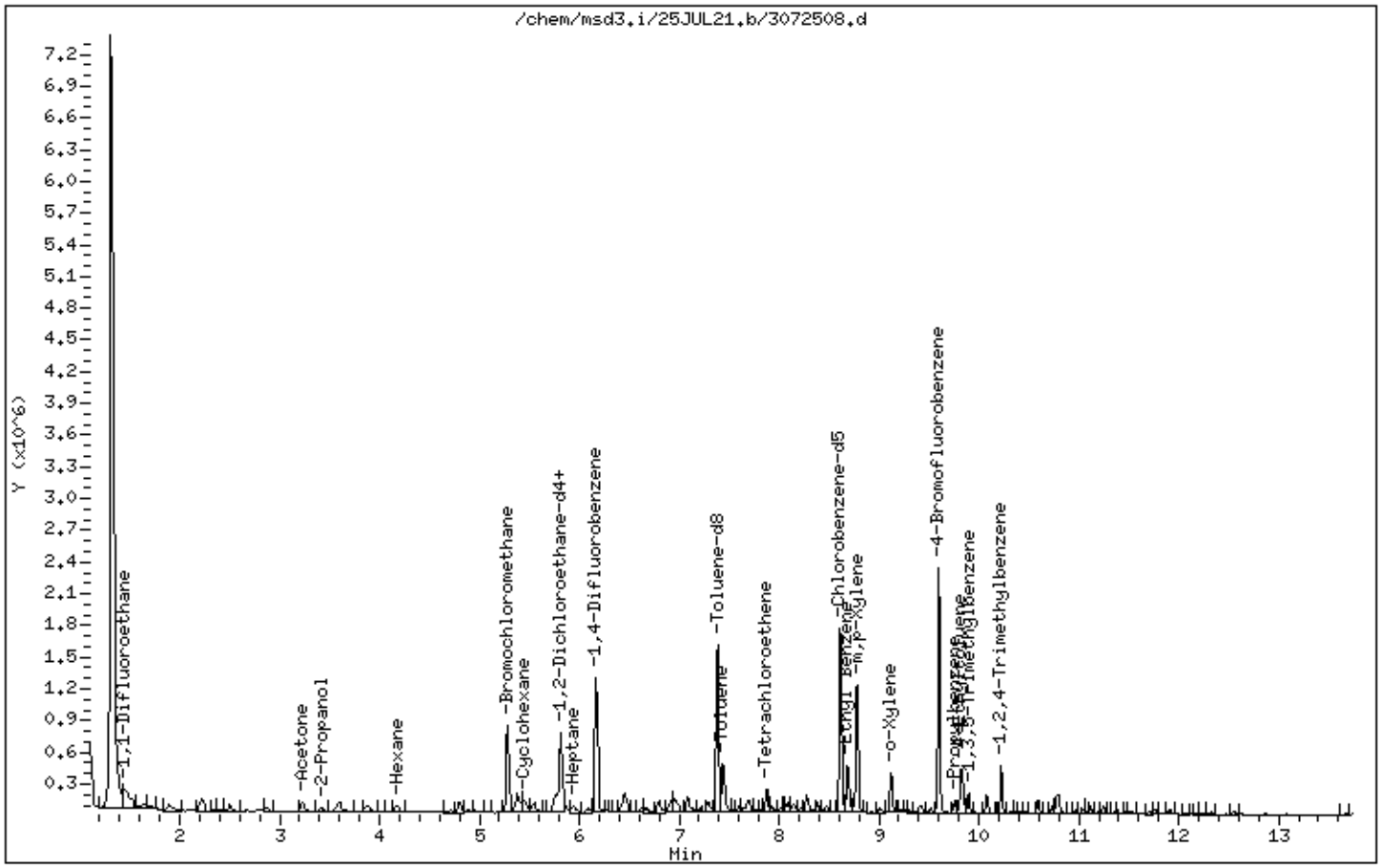
Instrument: msd3.i

Sample Info: 200ml LC559

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

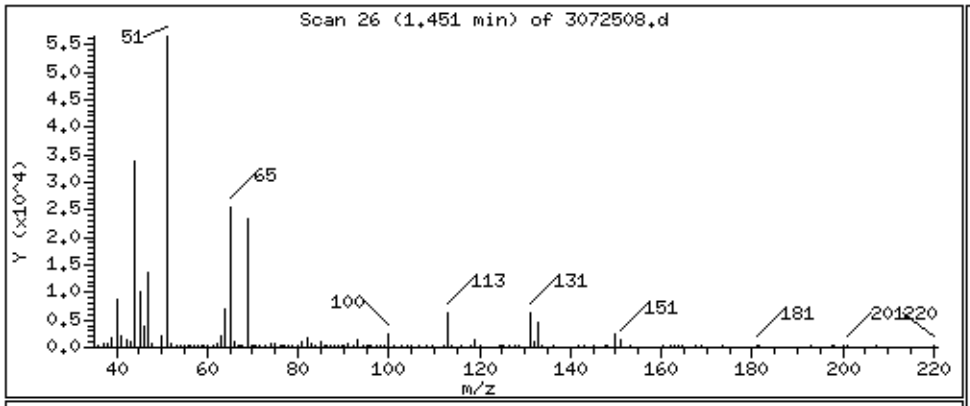
Operator: LD

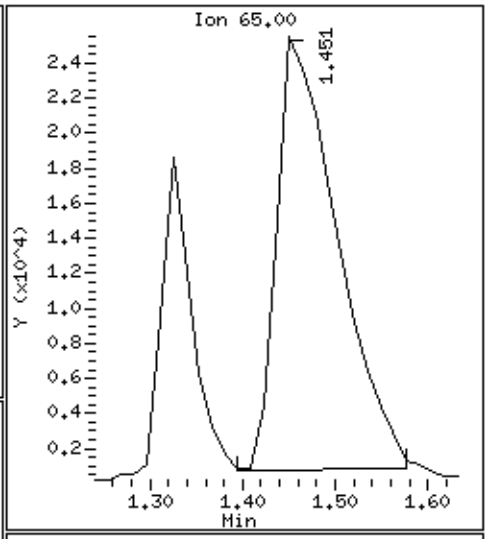
Column phase: RTX-624

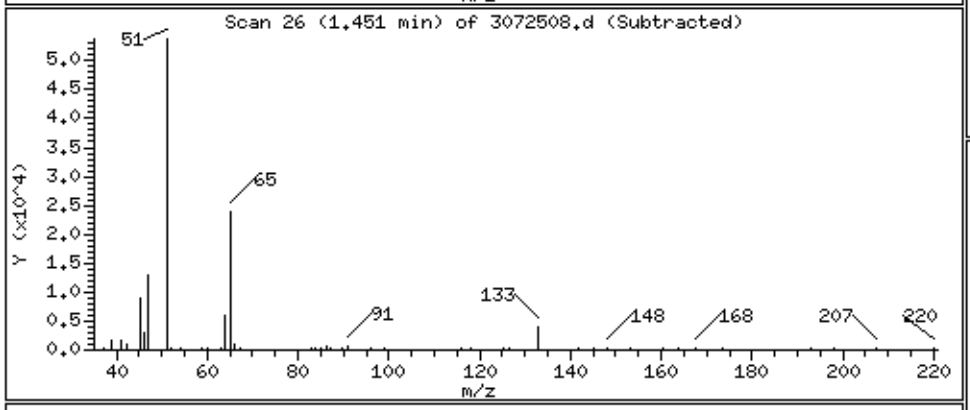
Column diameter: 0.25

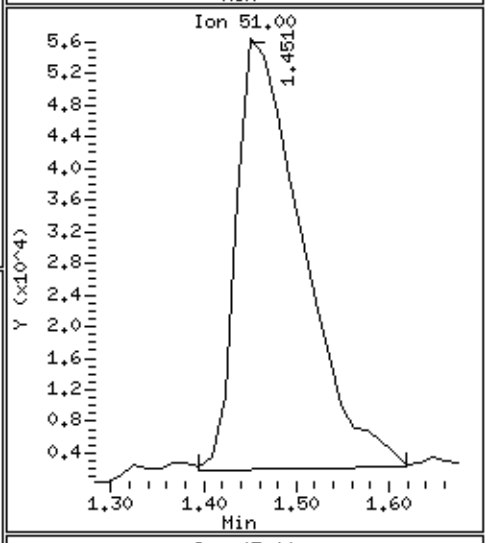
7 1,1-Difluoroethane

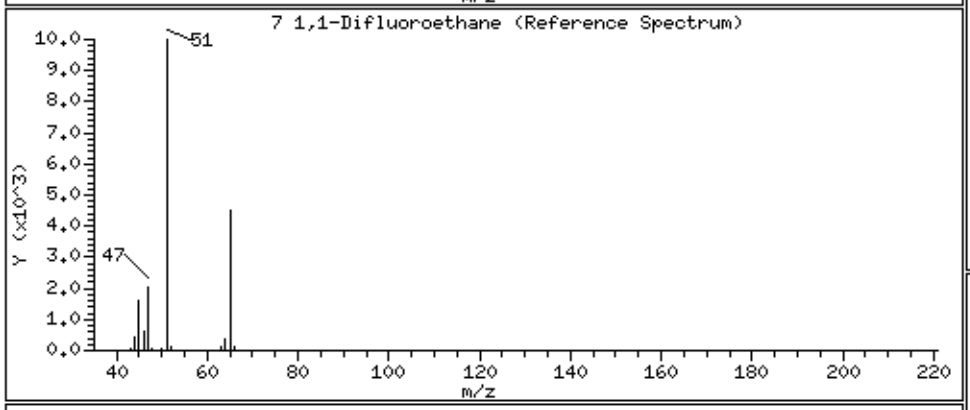
Concentration: 51.193 PPBV

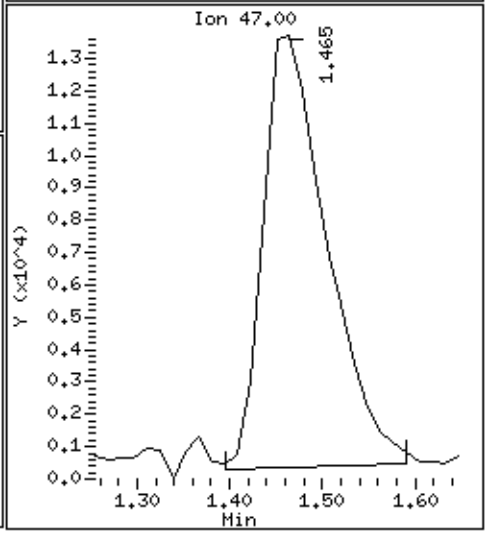


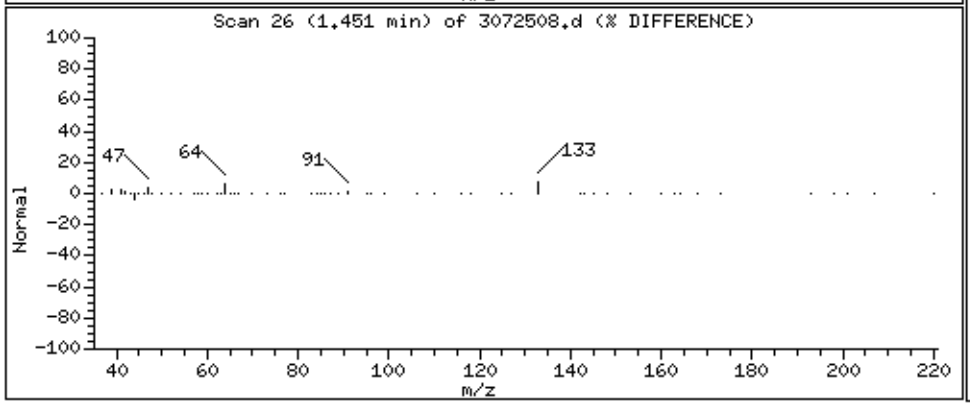












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

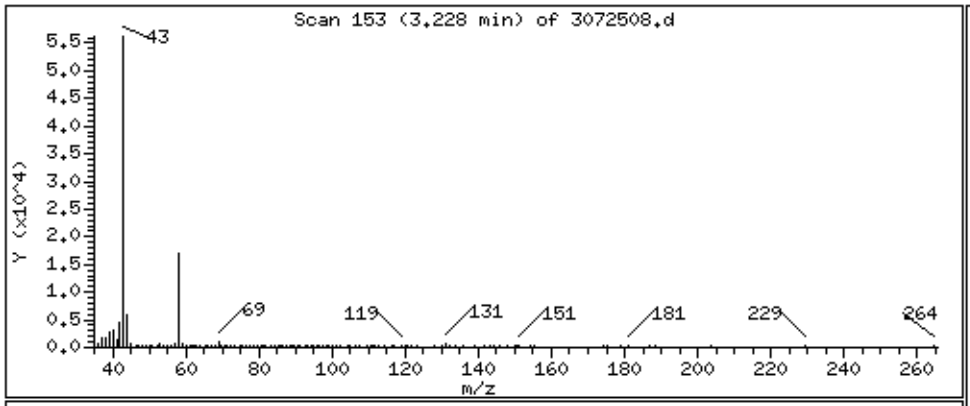
Operator: LD

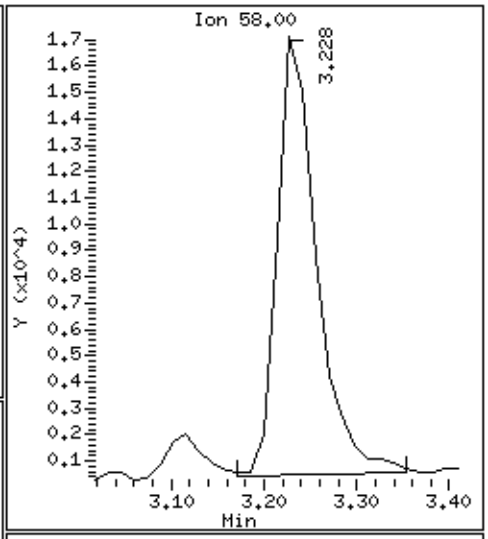
Column phase: RTX-624

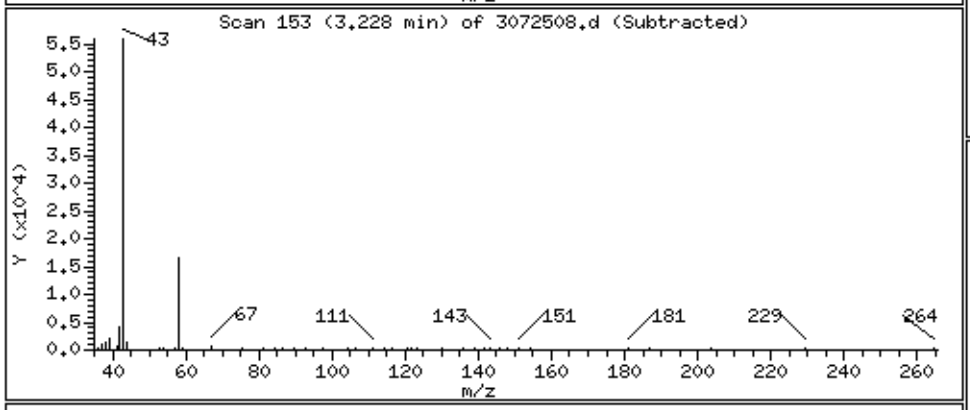
Column diameter: 0.25

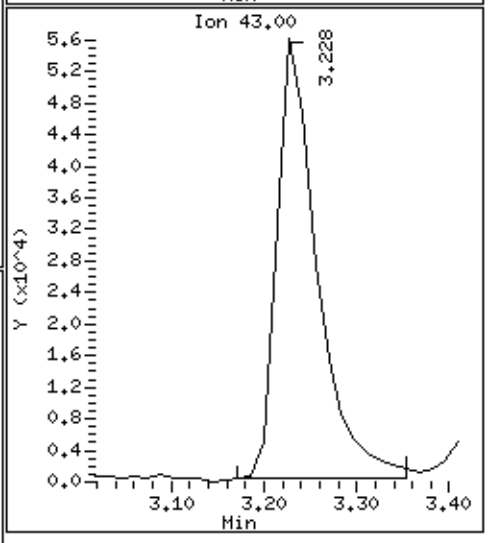
47 Acetone

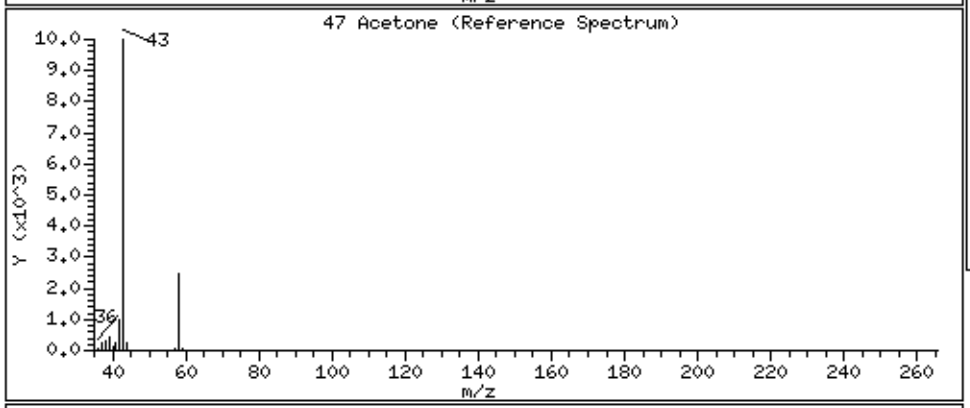
Concentration: 21.223 PPBV

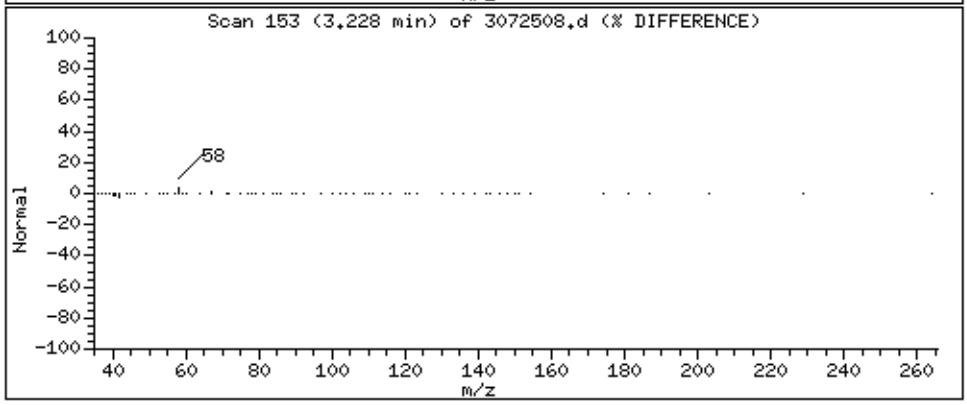












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

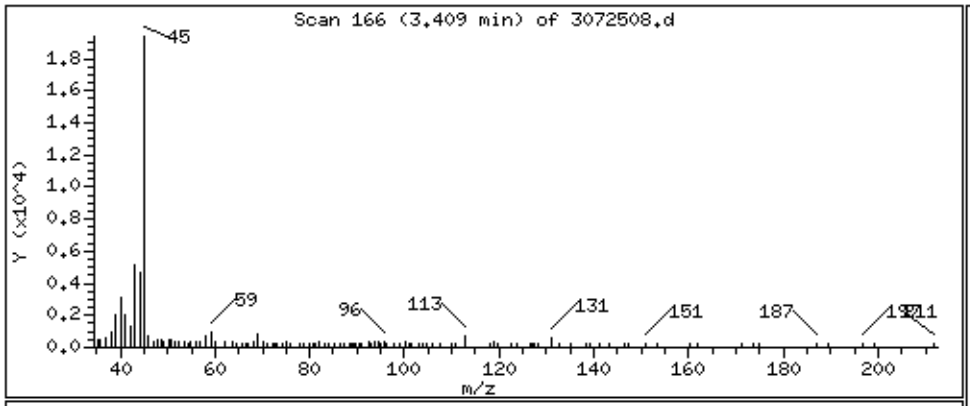
Operator: LD

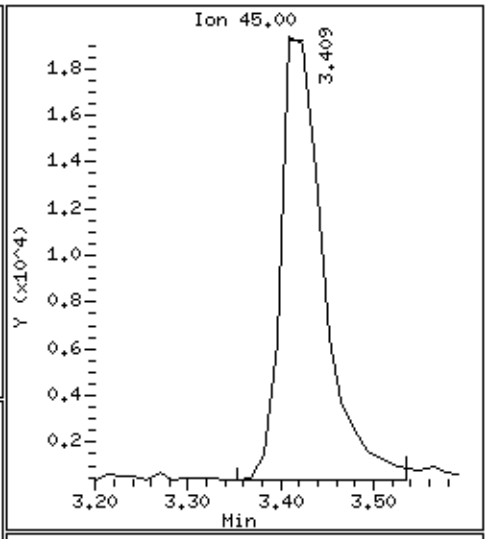
Column phase: RTX-624

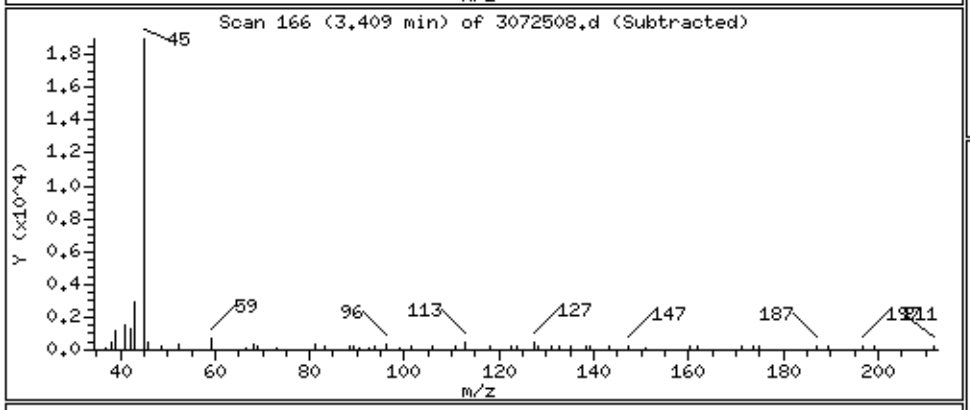
Column diameter: 0.25

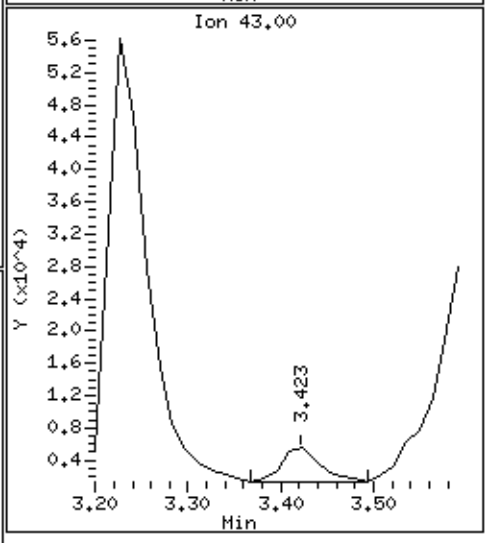
52 2-Propanol

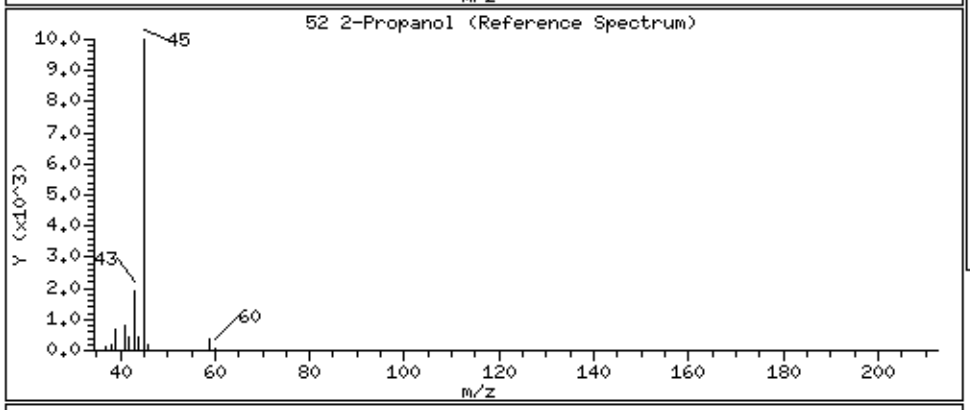
Concentration: 7.262 PPBV

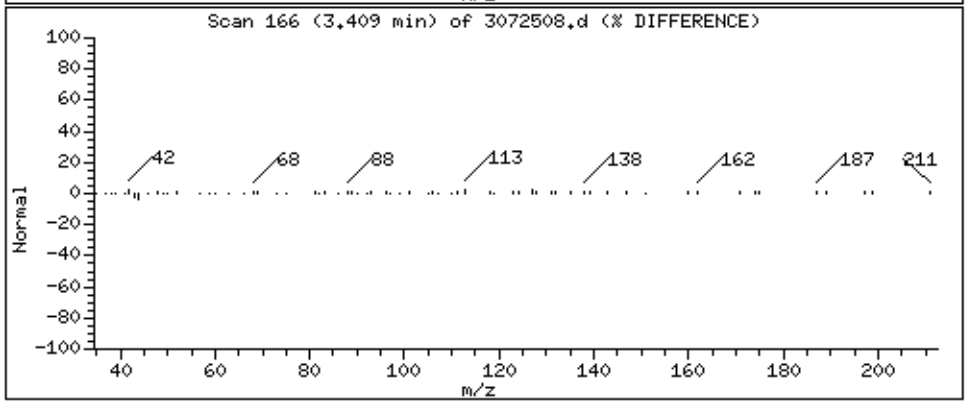












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

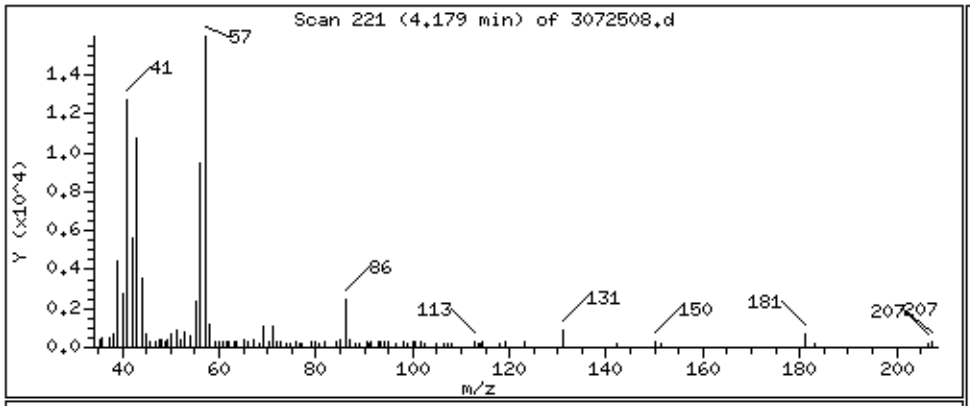
Operator: LD

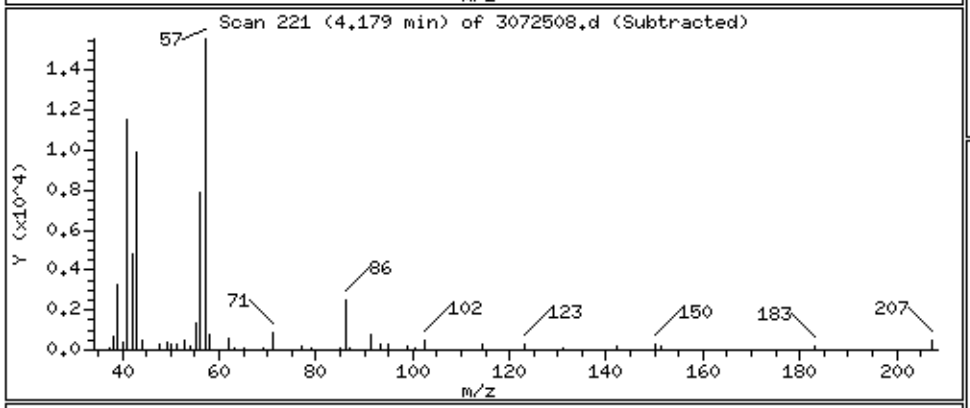
Column phase: RTX-624

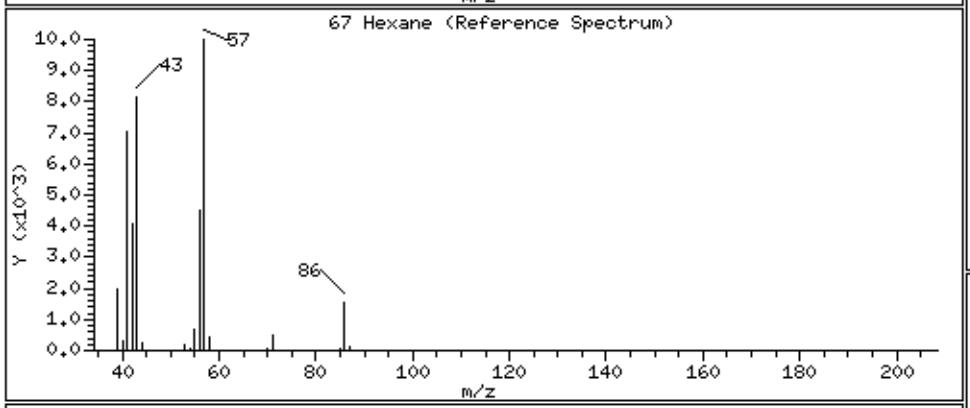
Column diameter: 0.25

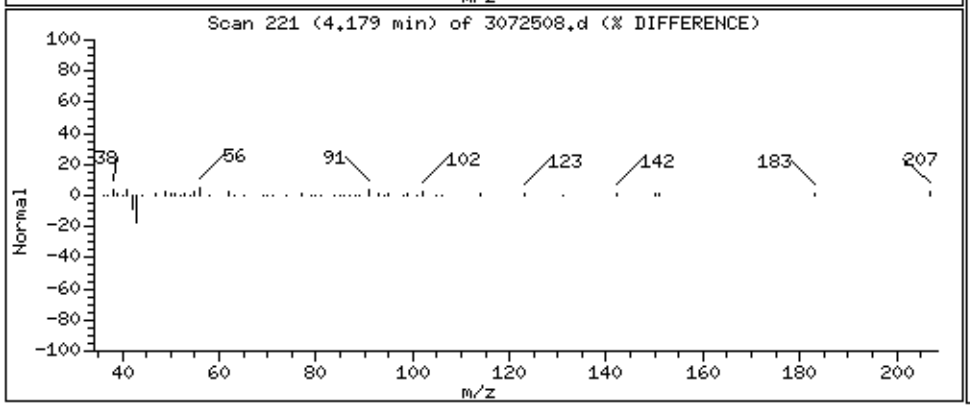
67 Hexane

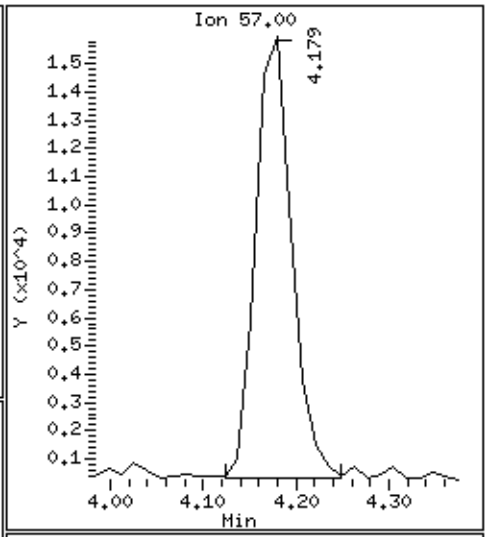
Concentration: 5.529 PPBV

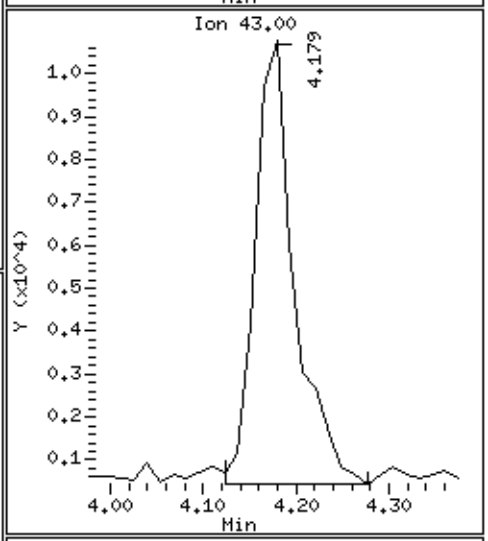


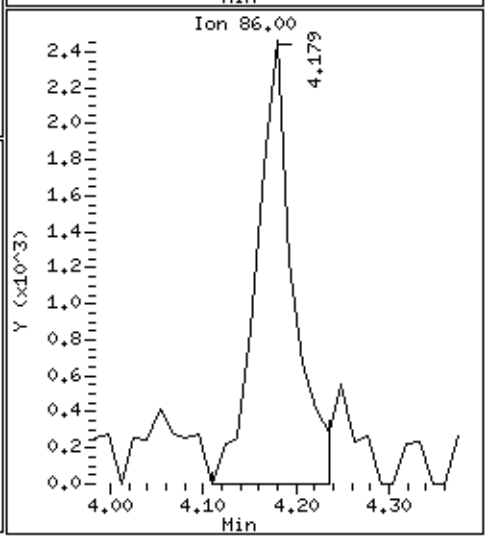












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

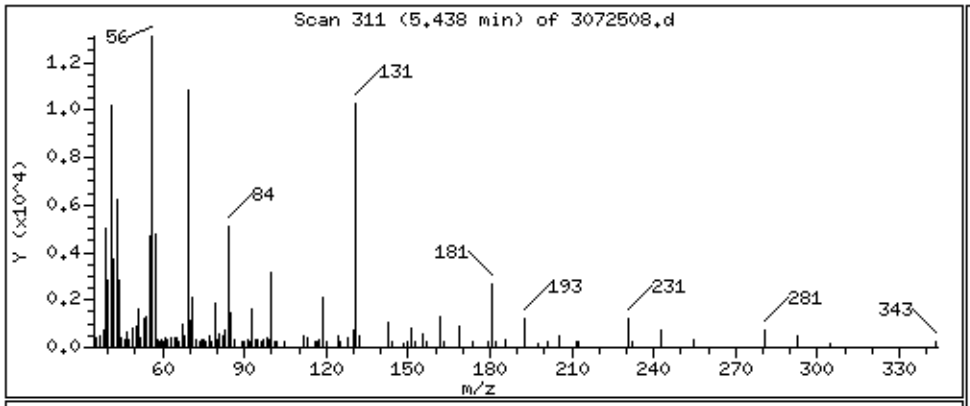
Operator: LD

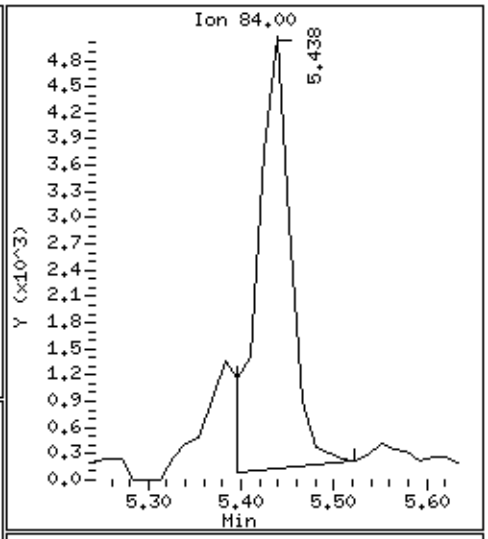
Column phase: RTX-624

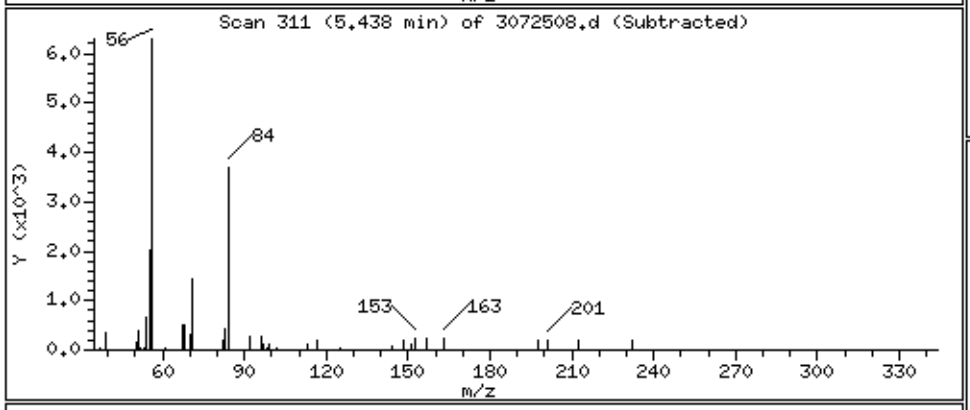
Column diameter: 0.25

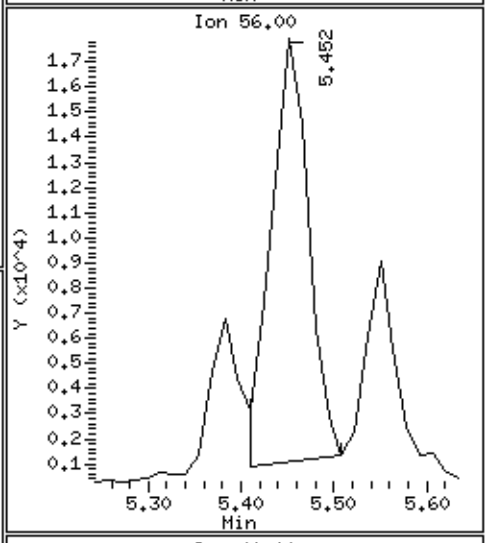
94 Cyclohexane

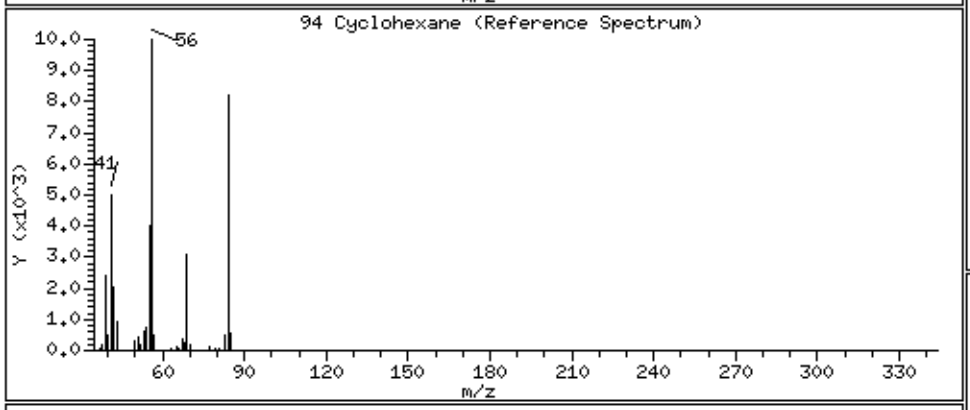
Concentration: 2.246 PPBV

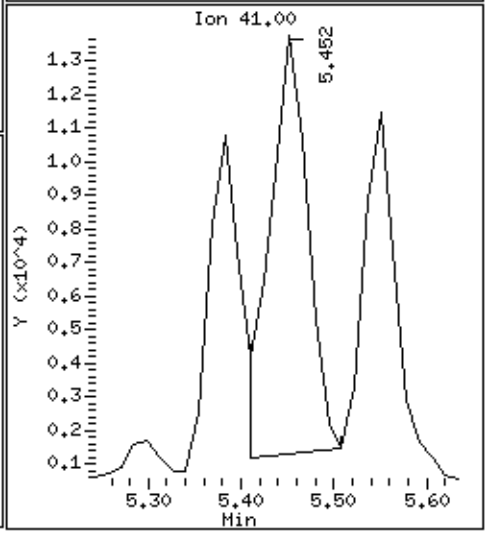


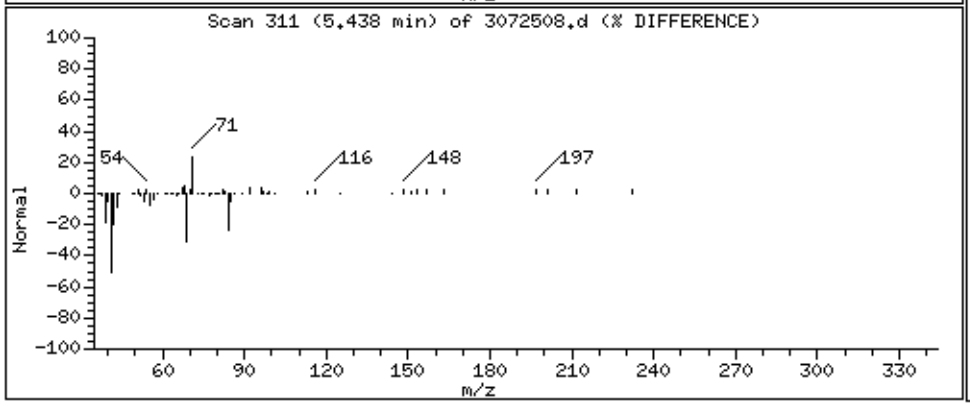












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

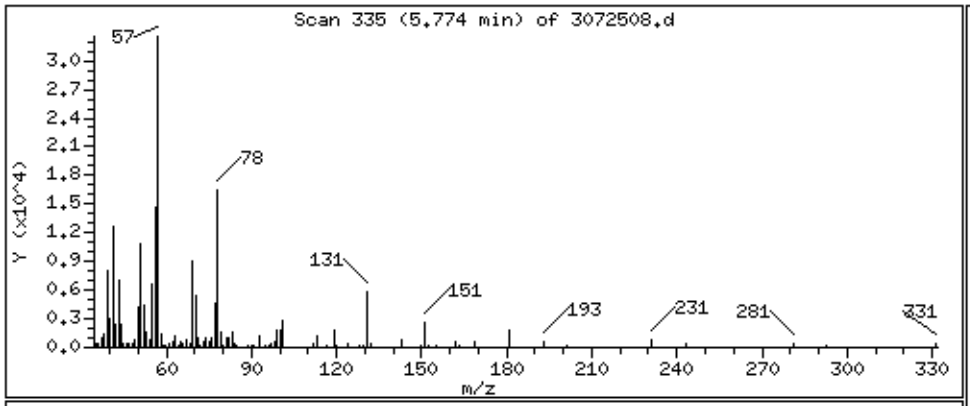
Operator: LD

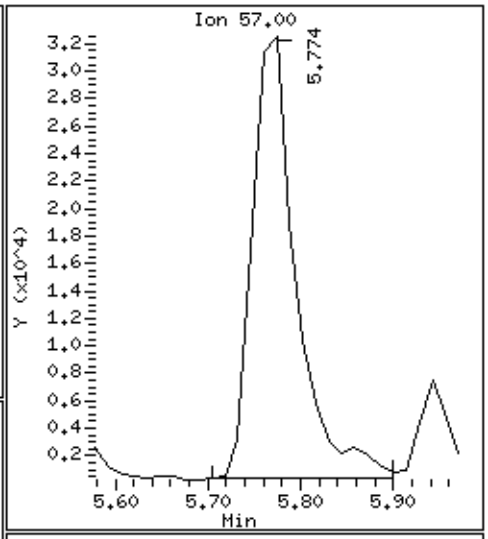
Column phase: RTX-624

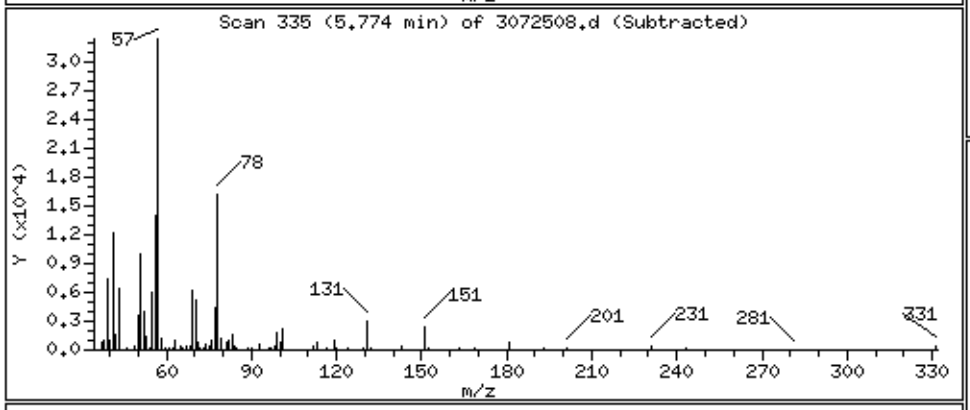
Column diameter: 0.25

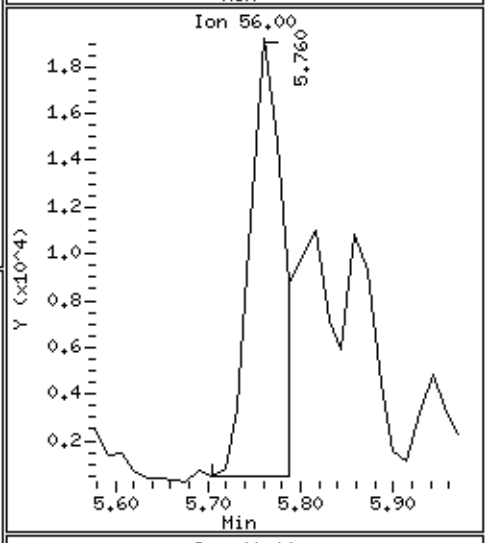
101 2,2,4-Trimethylpentane

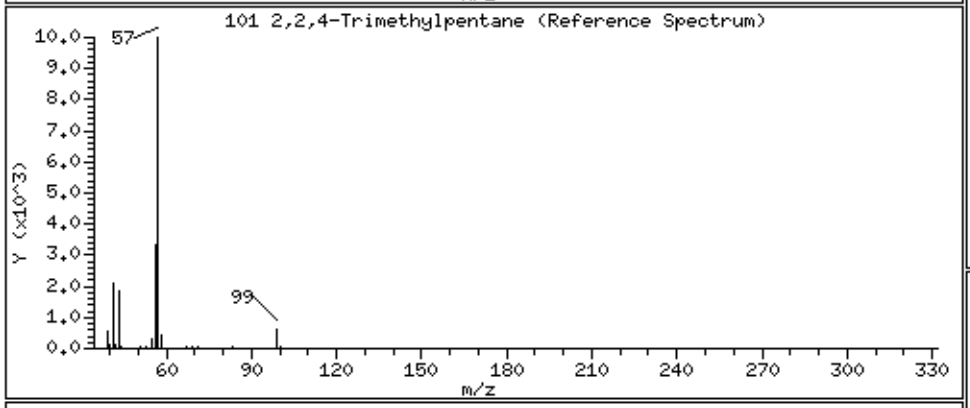
Concentration: 4.409 PPBV

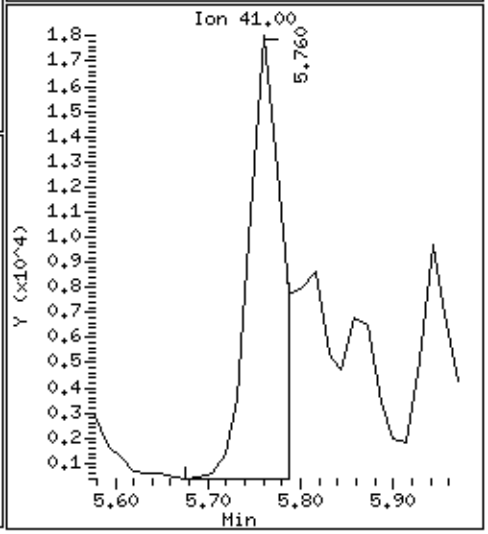


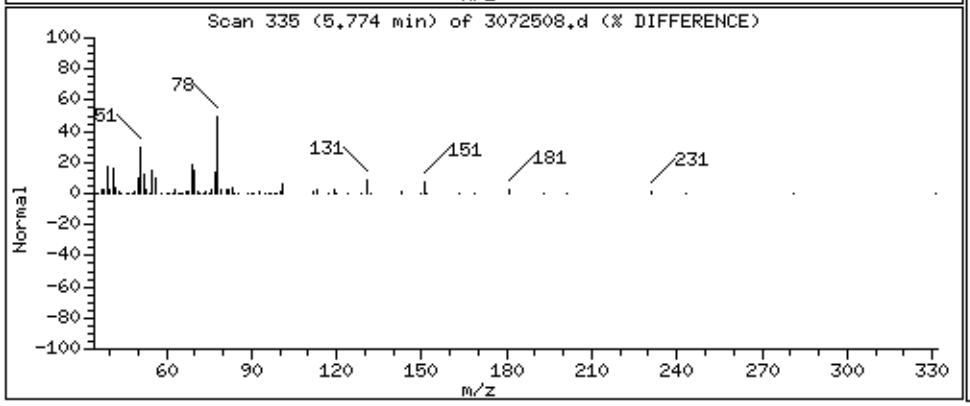












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

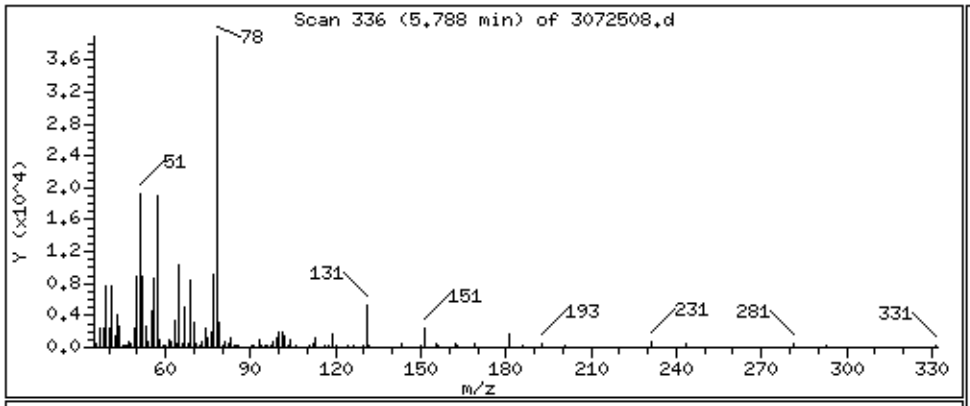
Operator: LD

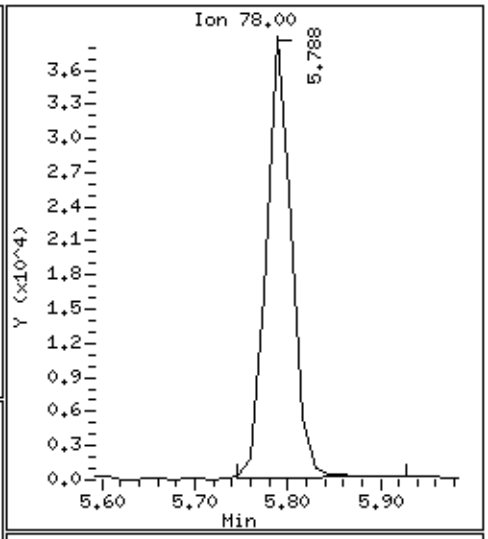
Column phase: RTX-624

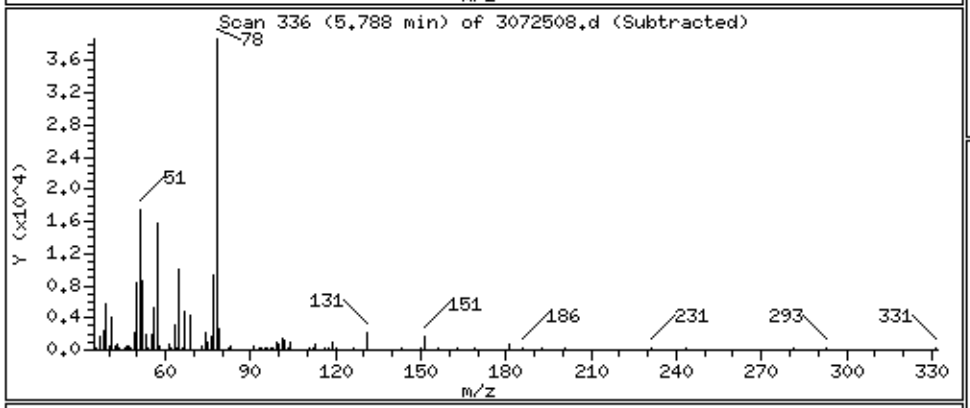
Column diameter: 0.25

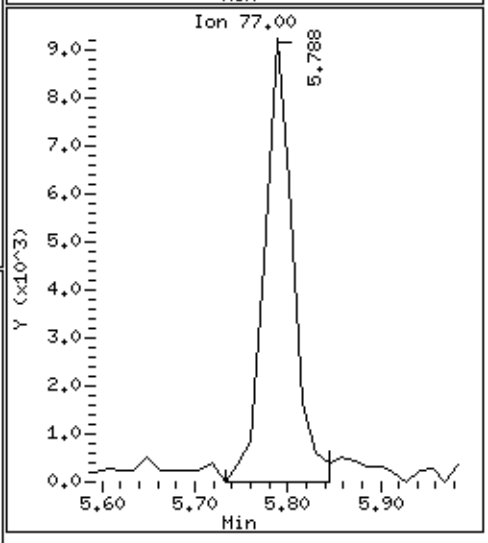
102 Benzene

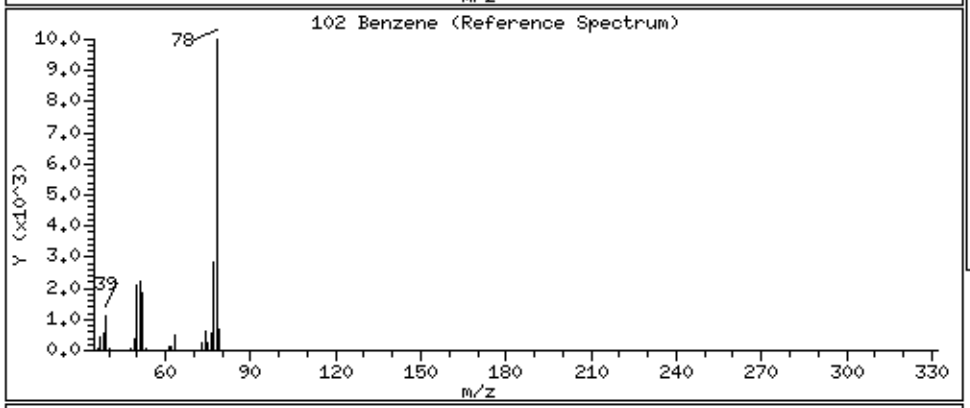
Concentration: 6.933 PPBV

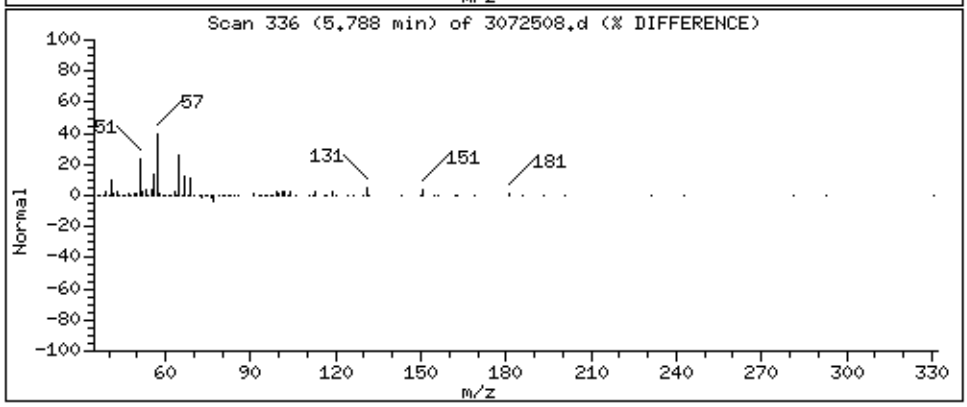












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

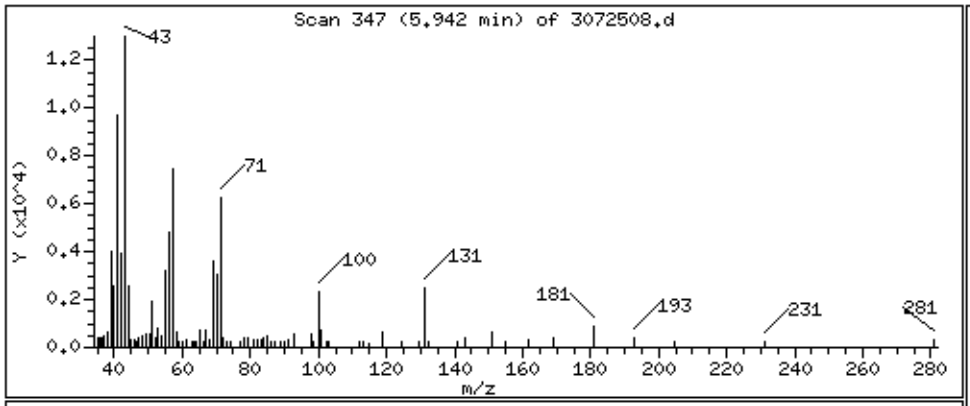
Operator: LD

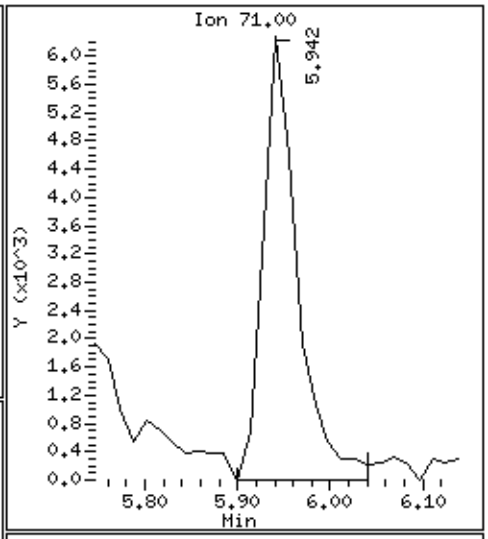
Column phase: RTX-624

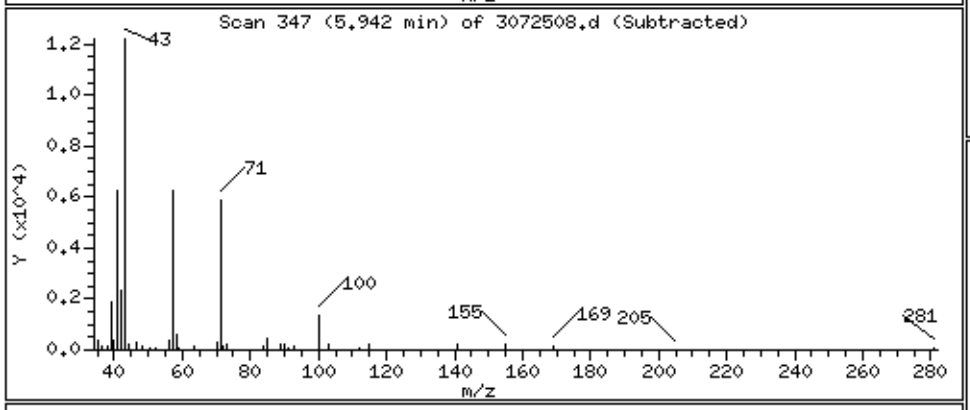
Column diameter: 0.25

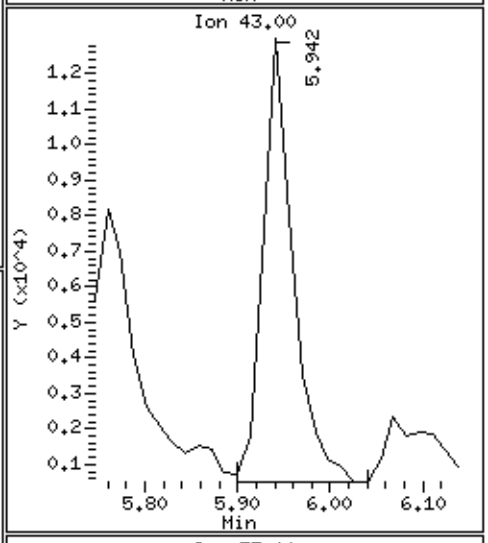
107 Heptane

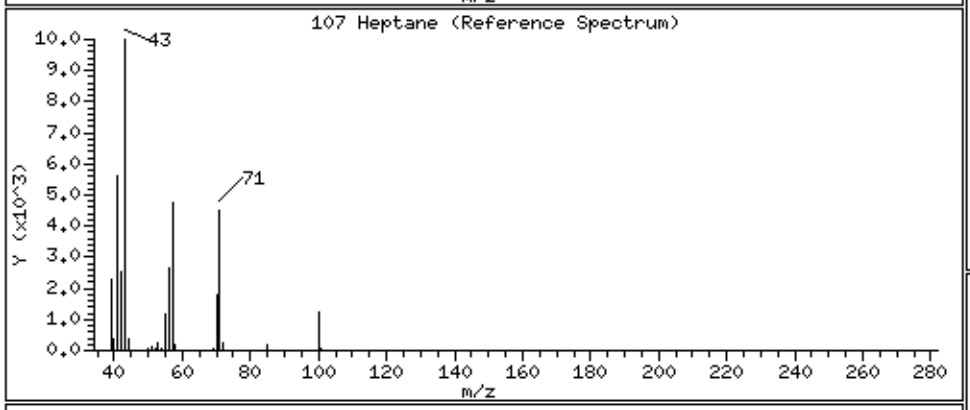
Concentration: 3.837 PPBV

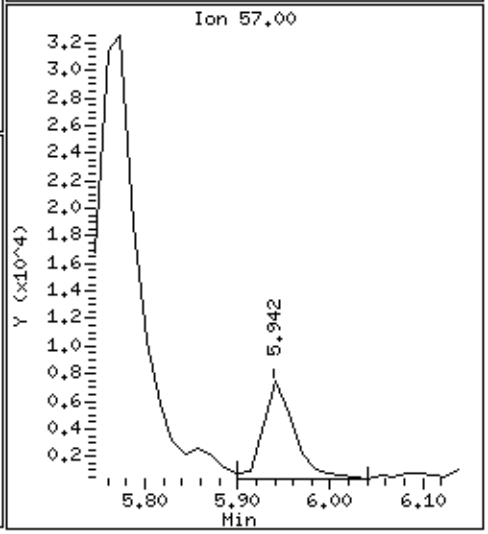


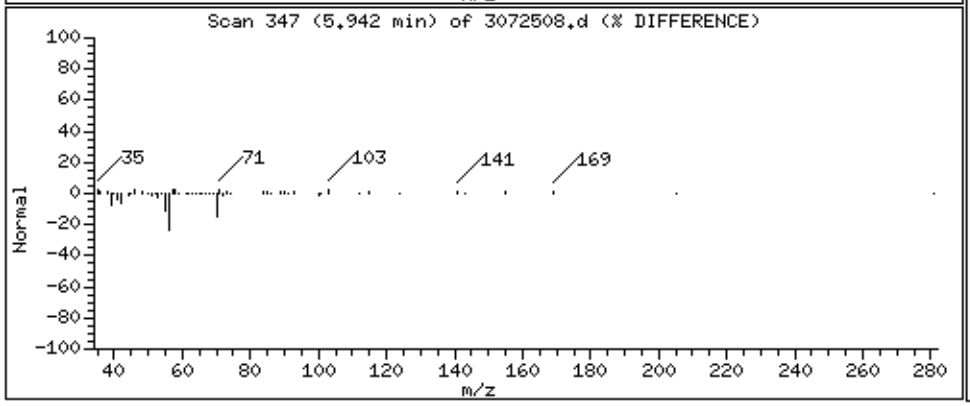












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

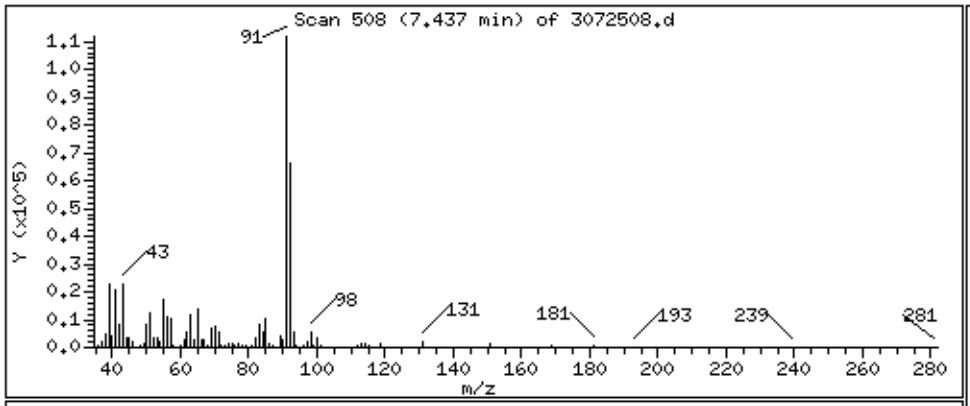
Operator: LD

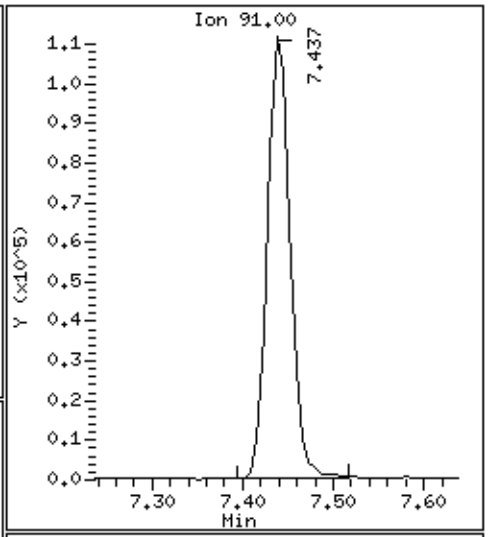
Column phase: RTX-624

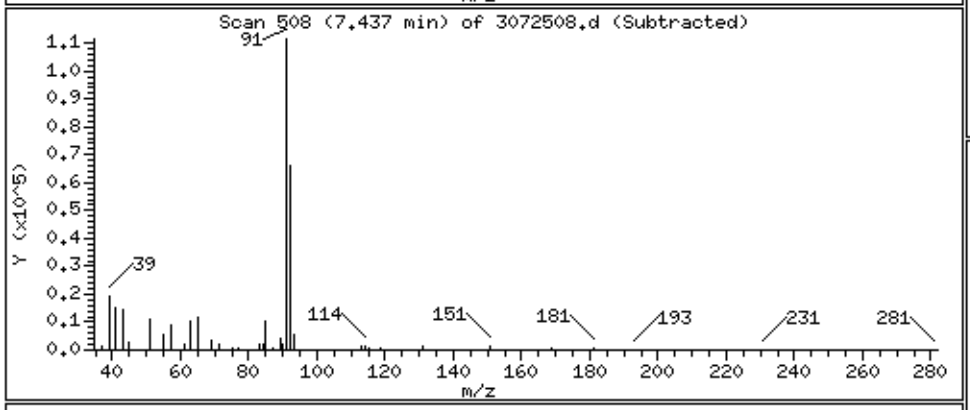
Column diameter: 0.25

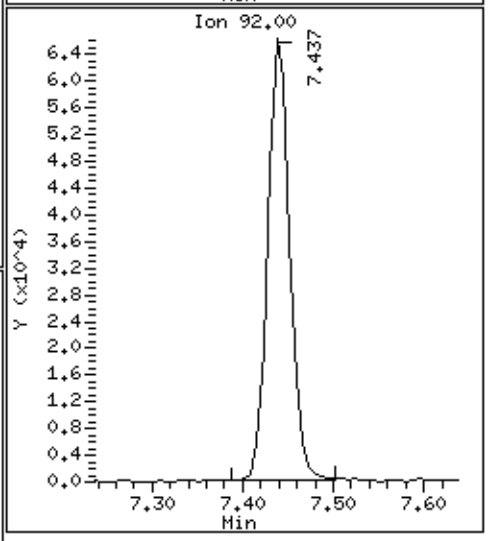
137 Toluene

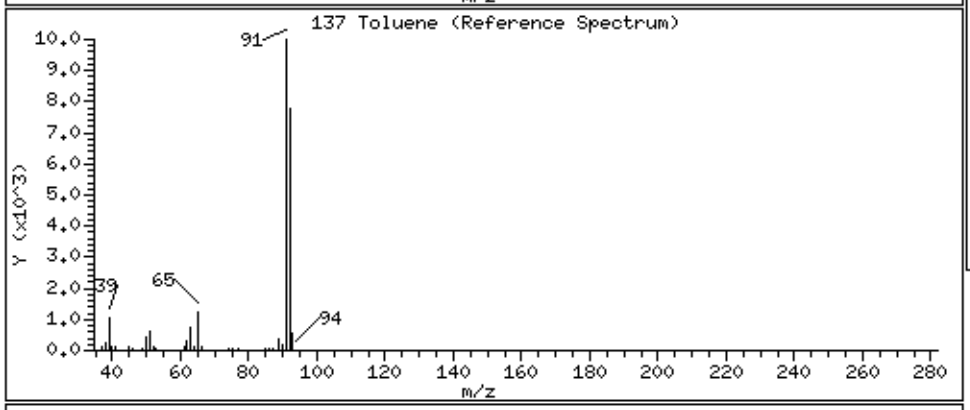
Concentration: 13.608 PPBV

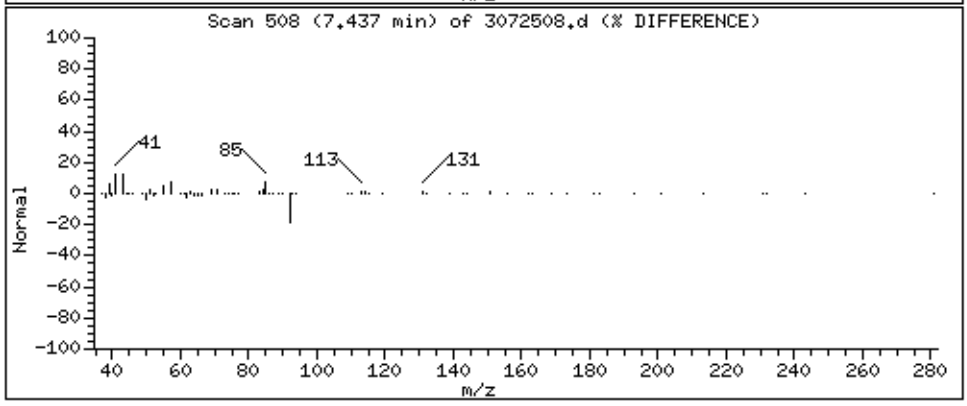












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Page 11

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

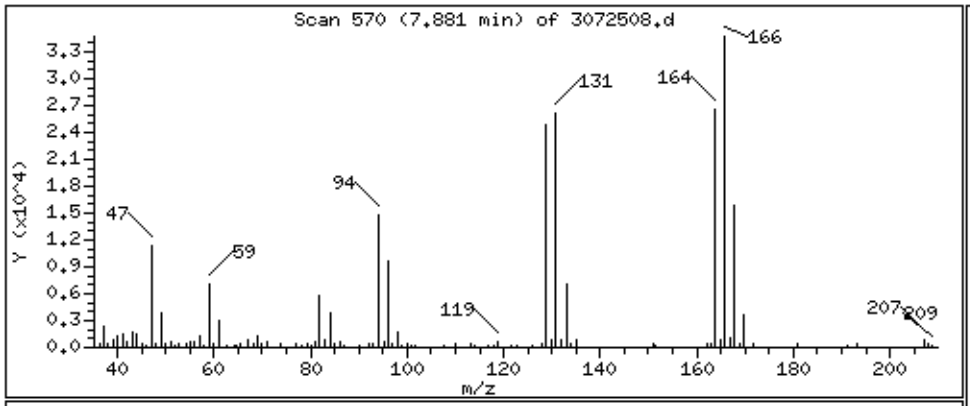
Operator: LD

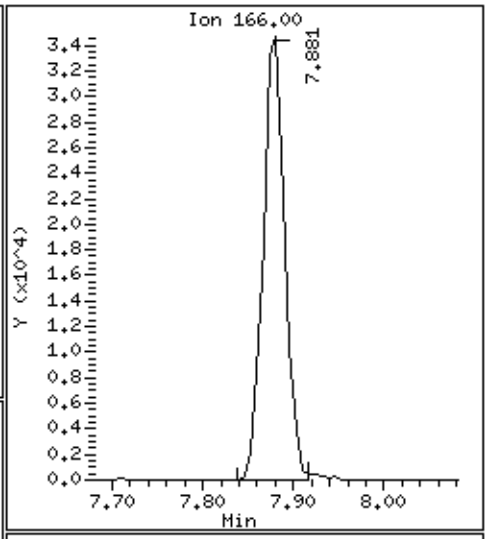
Column phase: RTX-624

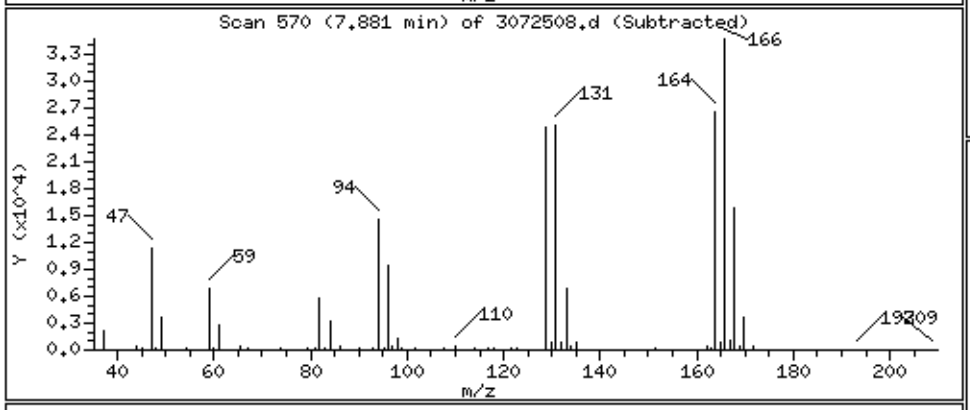
Column diameter: 0.25

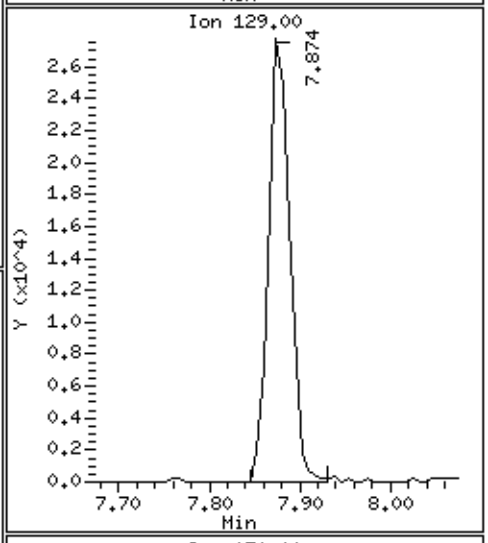
142 Tetrachloroethene

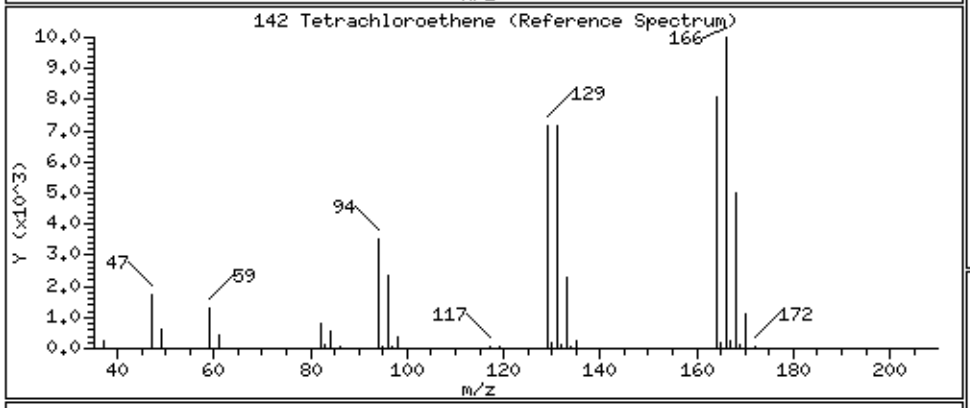
Concentration: 8.844 PPBV

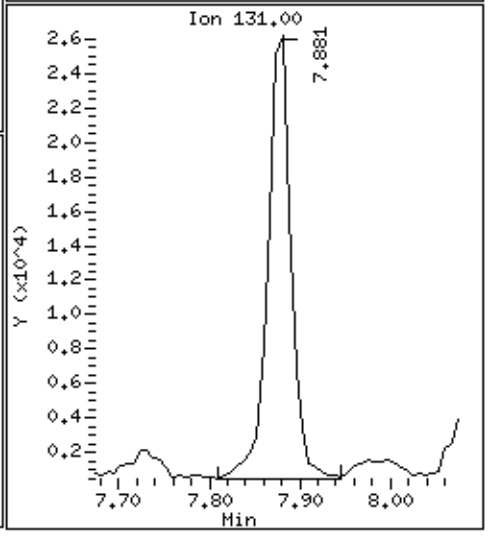


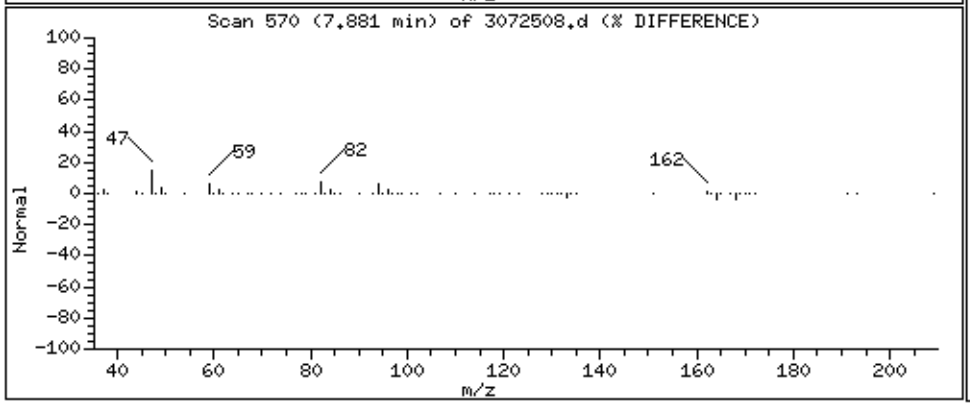












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

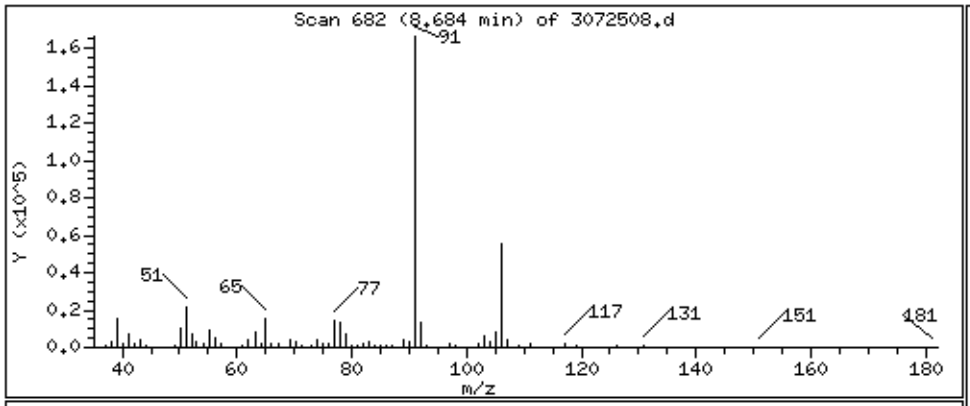
Operator: LD

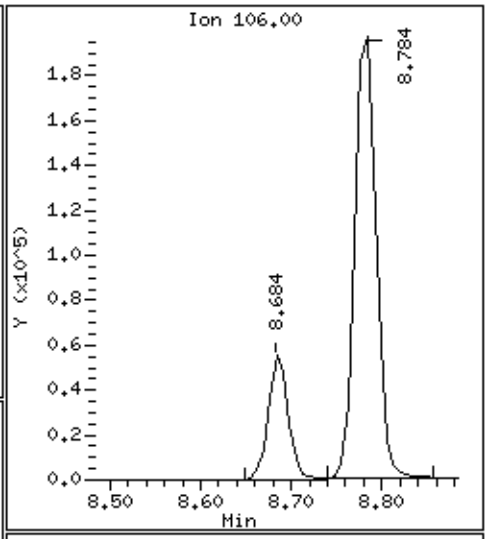
Column phase: RTX-624

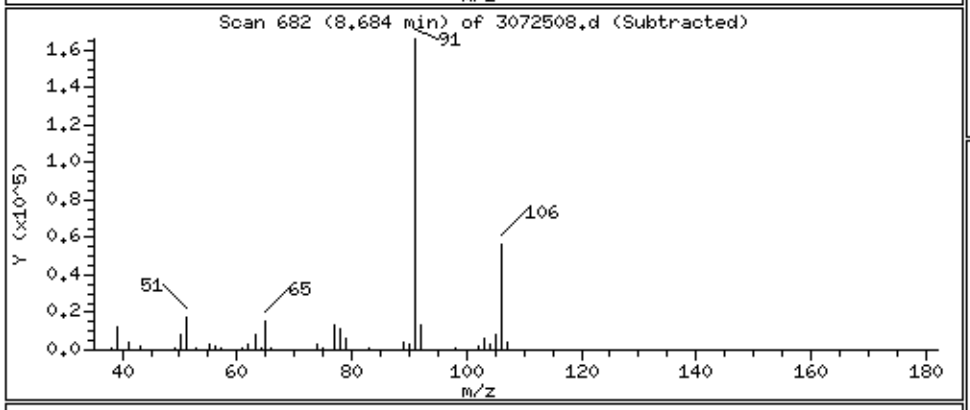
Column diameter: 0.25

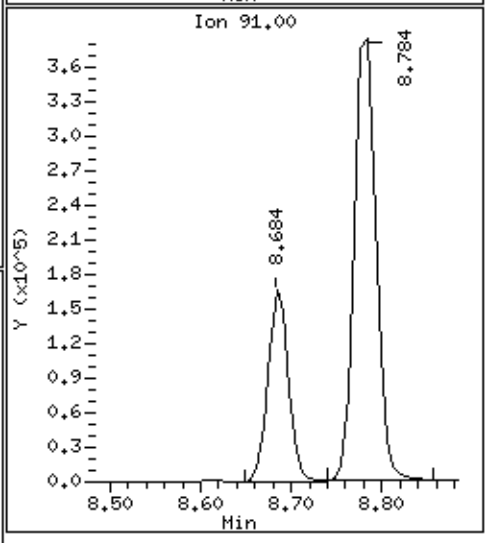
155 Ethyl Benzene

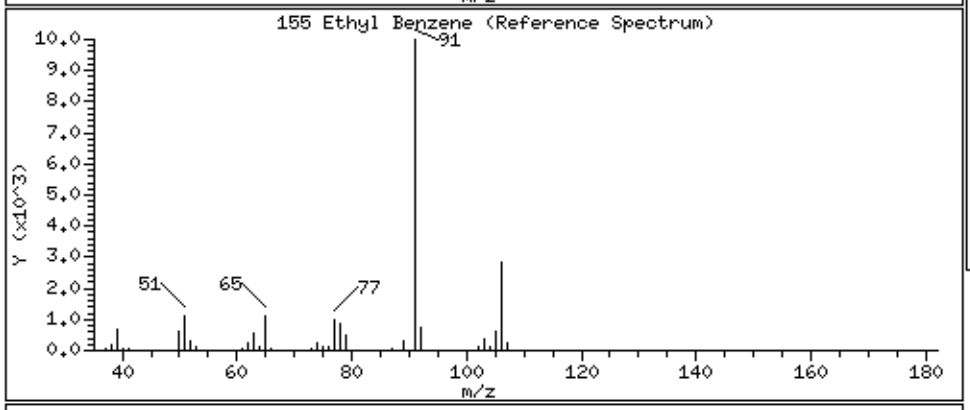
Concentration: 14.972 PPBV

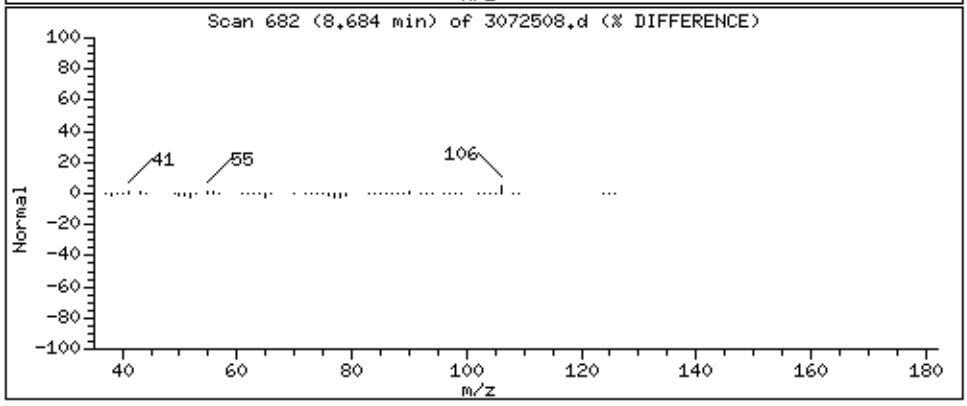












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

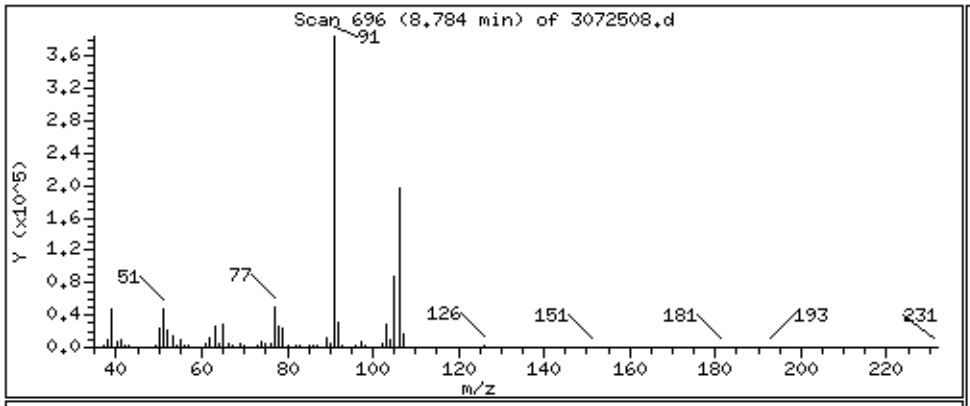
Operator: LD

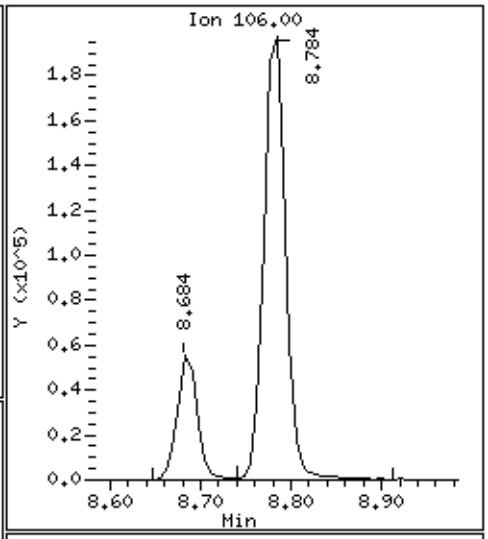
Column phase: RTX-624

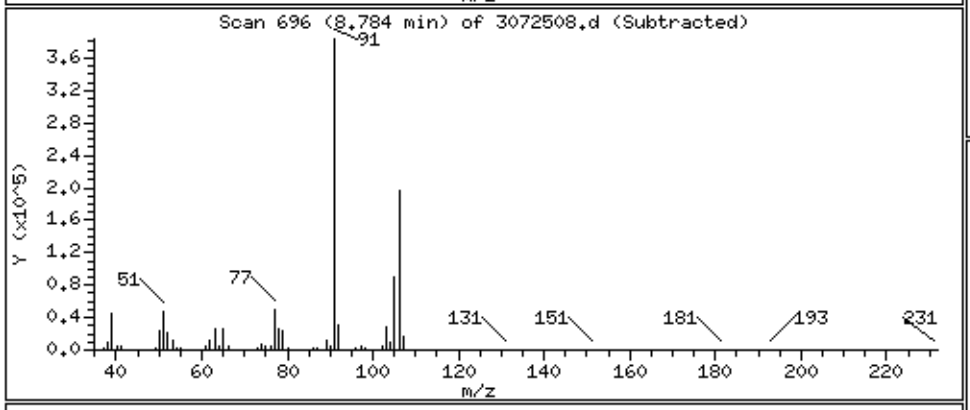
Column diameter: 0.25

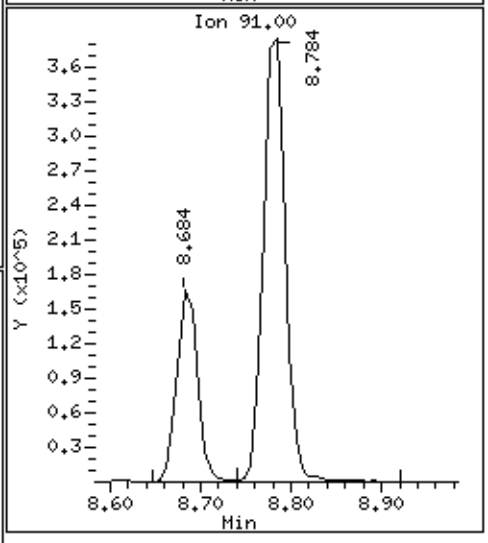
158 m,p-Xylene

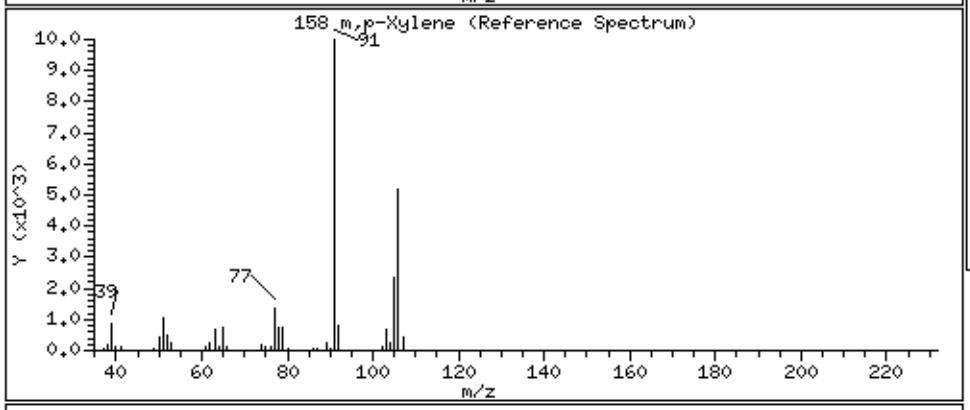
Concentration: 46.384 PPBV

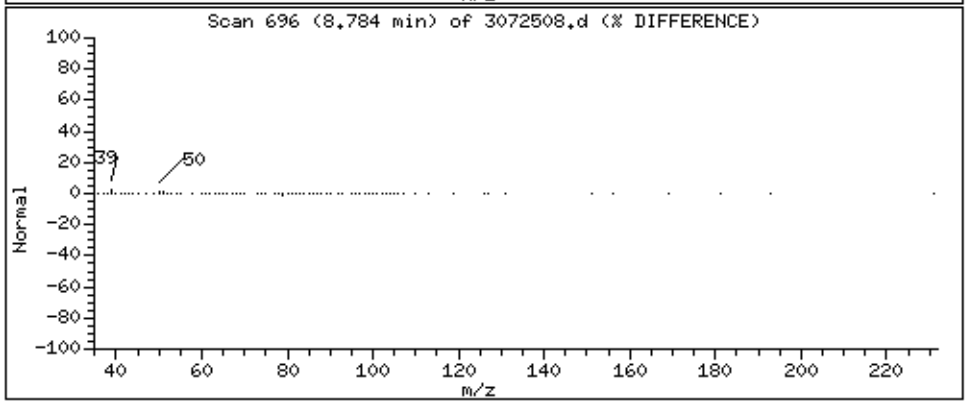












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

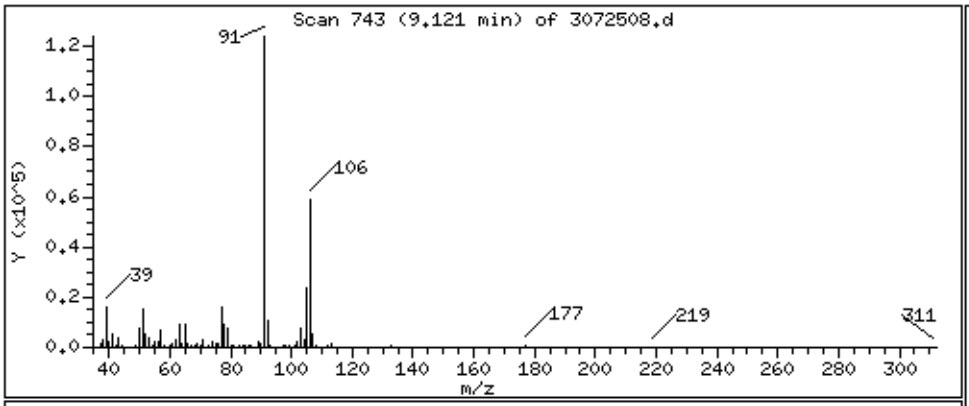
Operator: LD

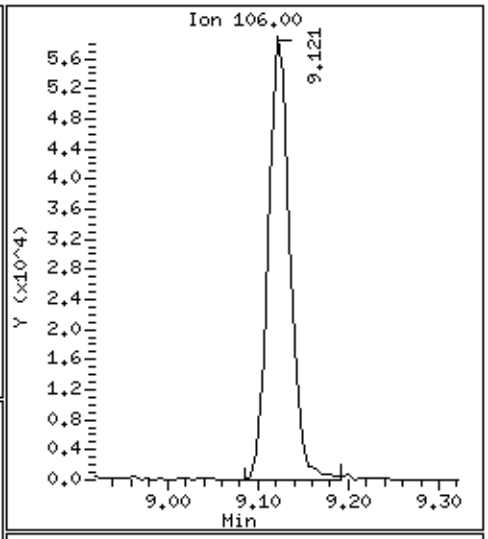
Column phase: RTX-624

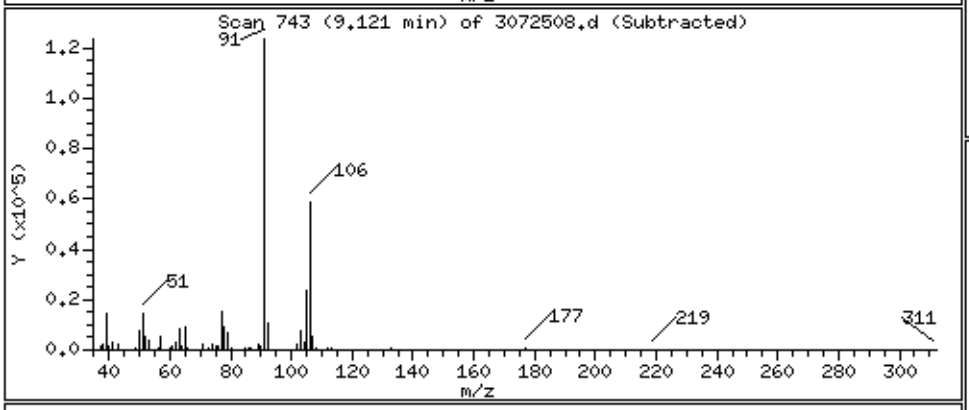
Column diameter: 0.25

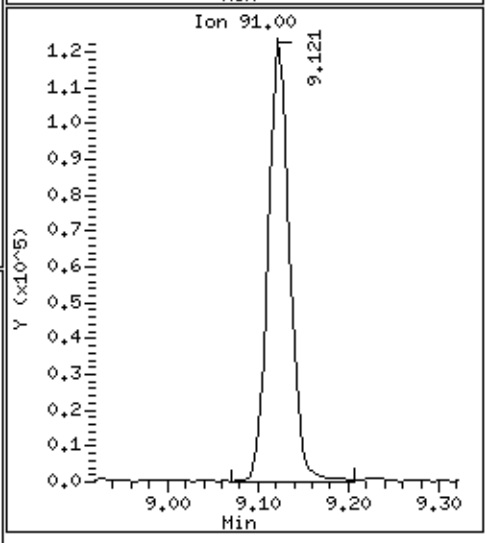
164 o-Xylene

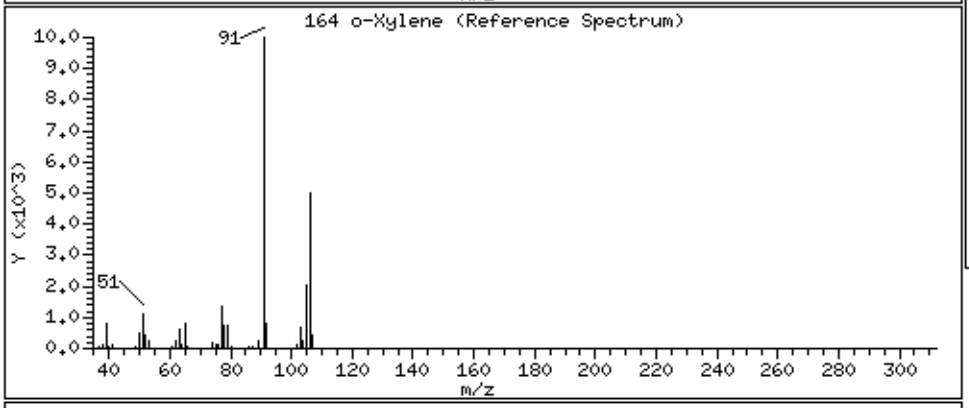
Concentration: 14.642 PPBV

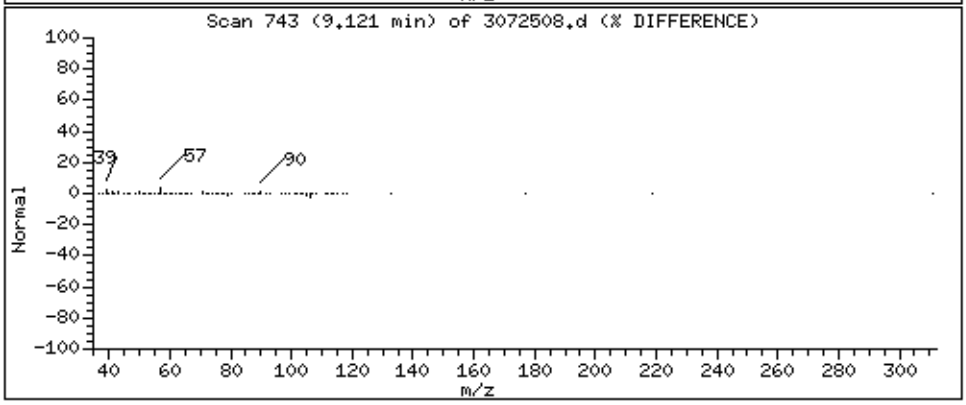












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

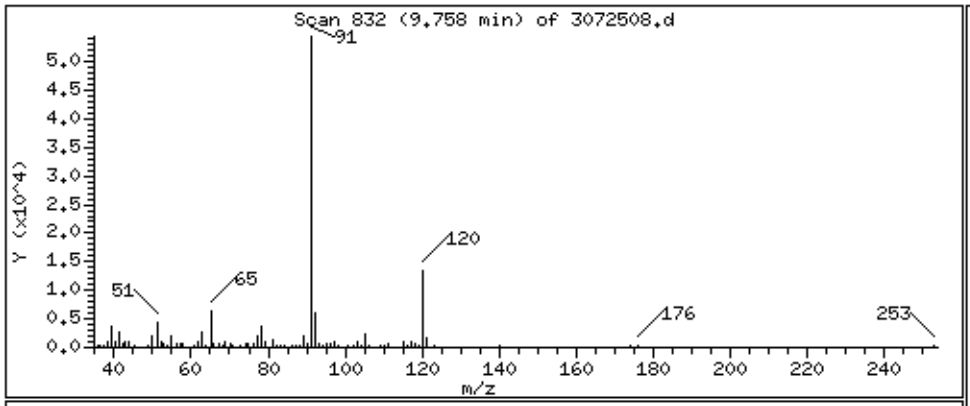
Operator: LD

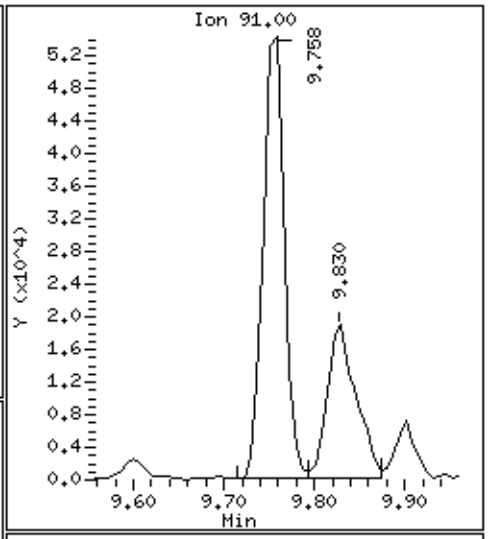
Column phase: RTX-624

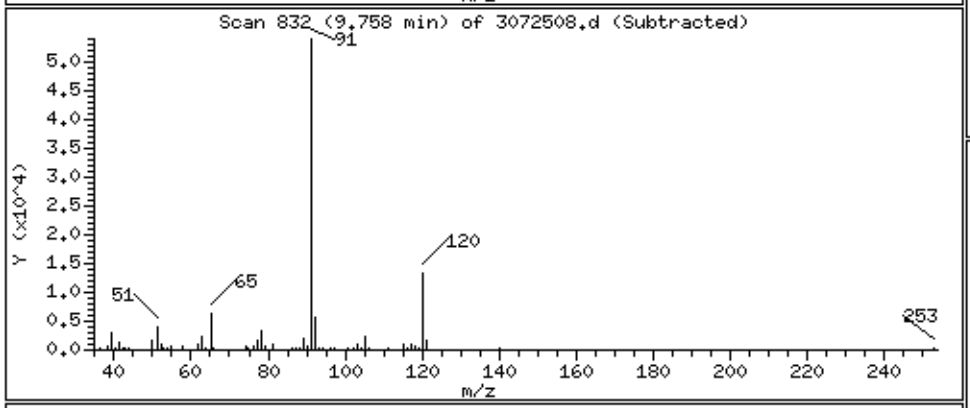
Column diameter: 0.25

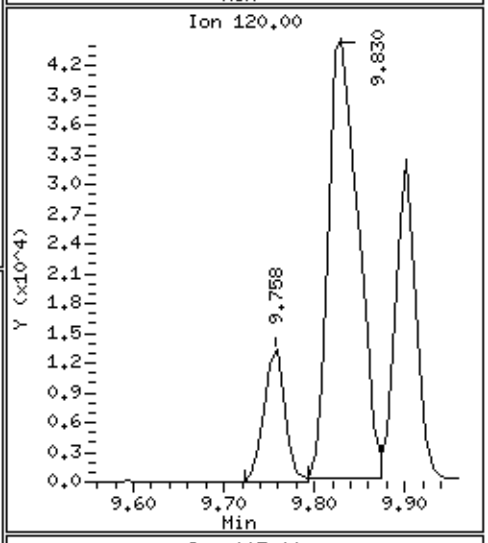
178 Propylbenzene

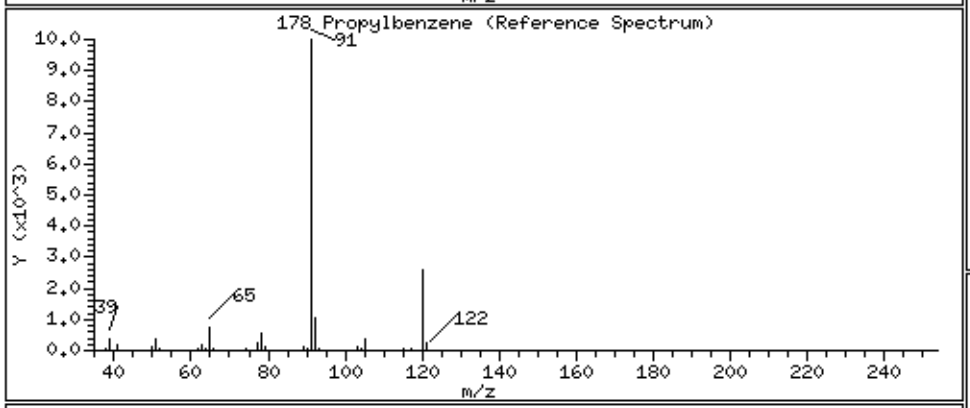
Concentration: 3.530 PPBV

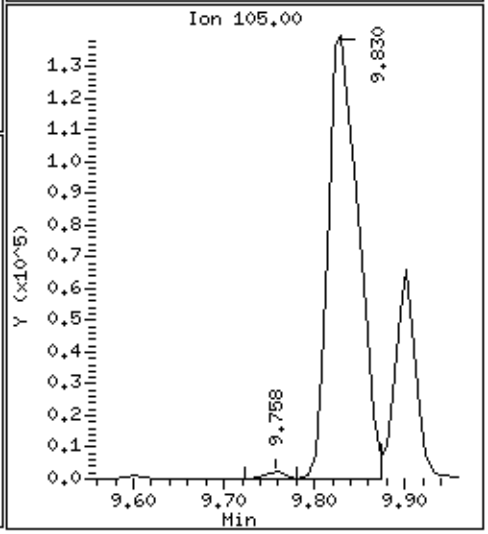


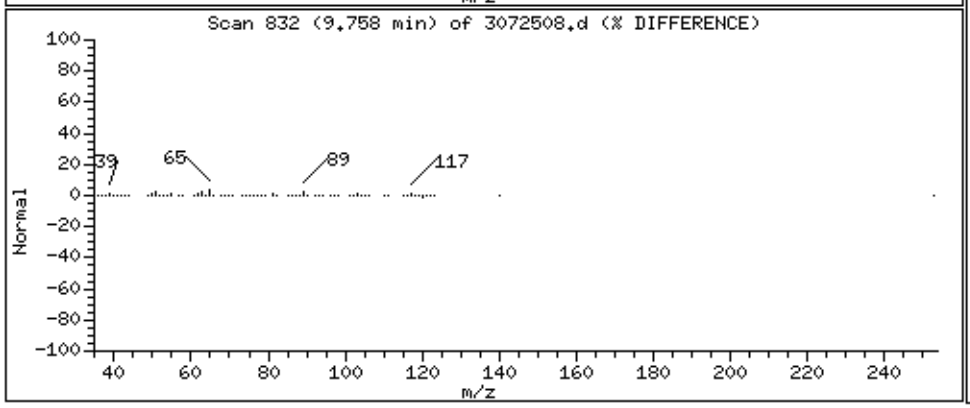












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

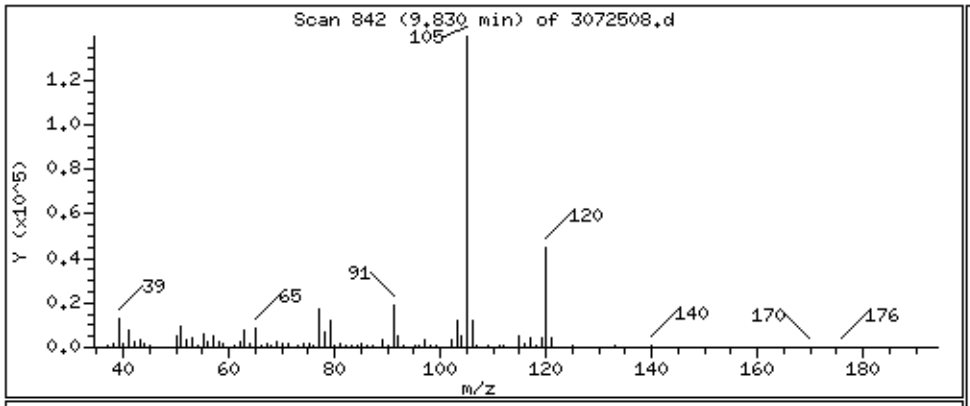
Operator: LD

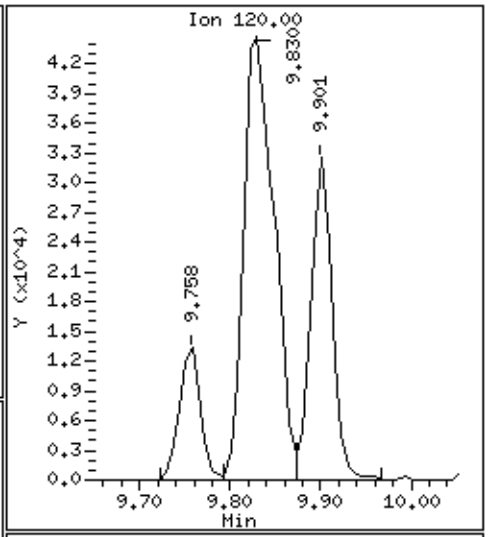
Column phase: RTX-624

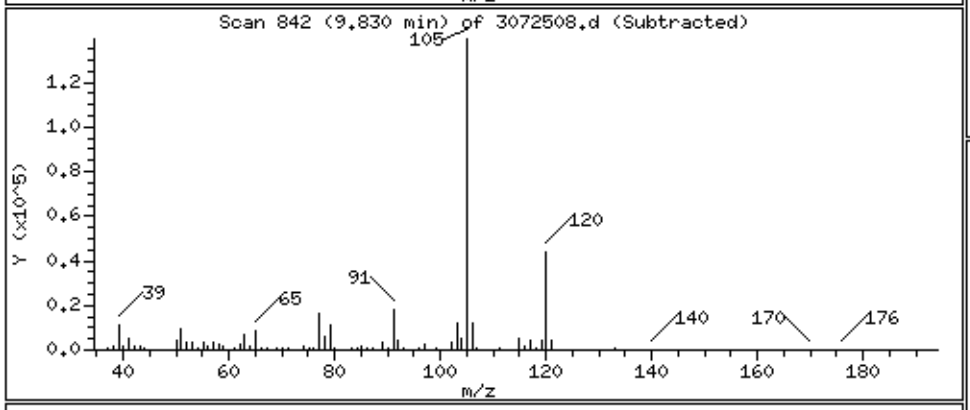
Column diameter: 0.25

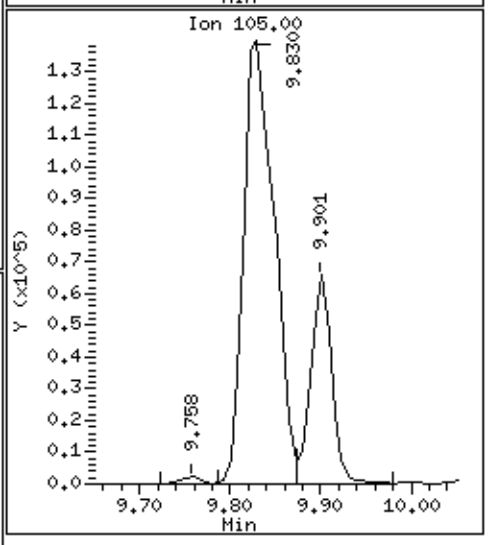
183 4-Ethyltoluene

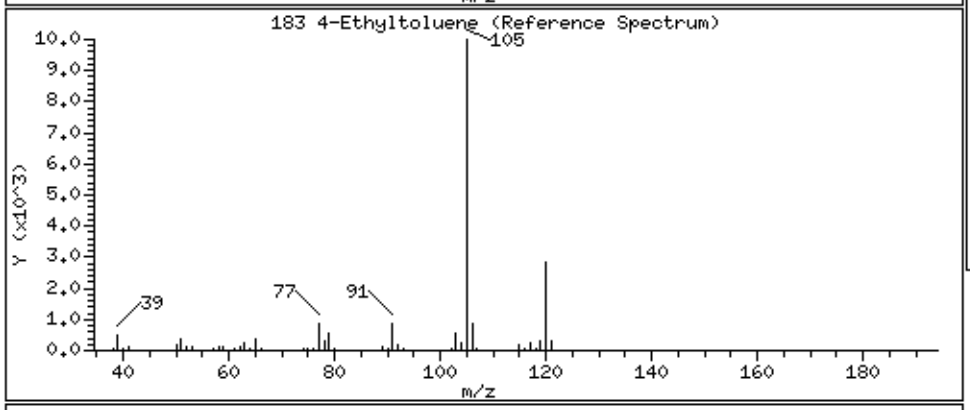
Concentration: 16.270 PPBV

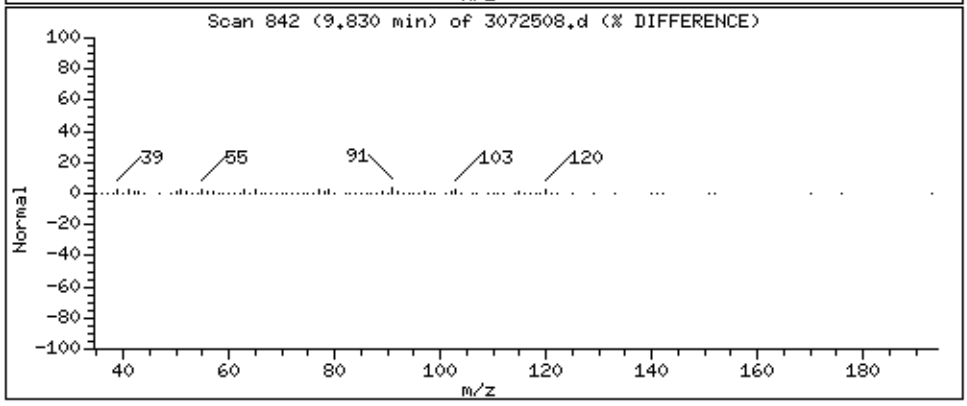












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

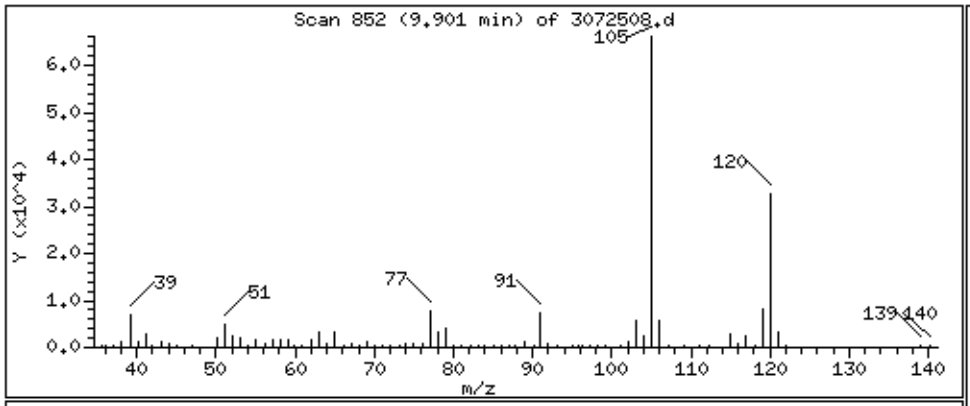
Operator: LD

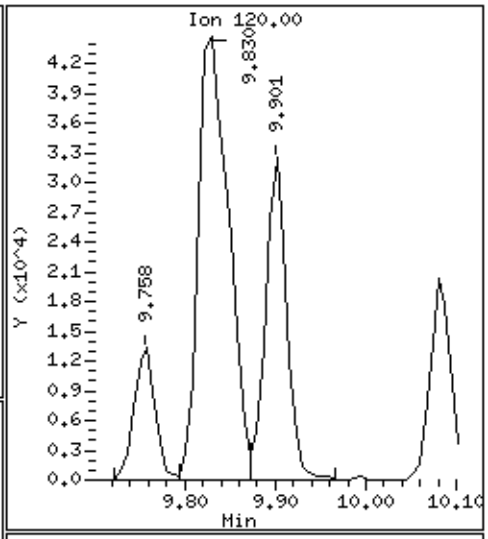
Column phase: RTX-624

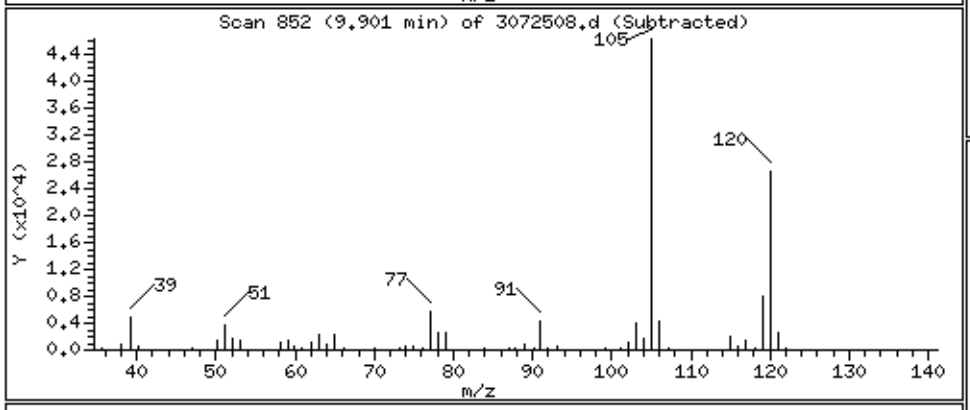
Column diameter: 0.25

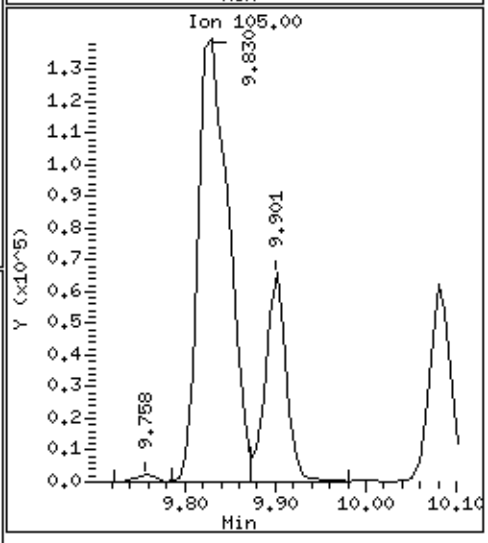
185 1,3,5-Trimethylbenzene

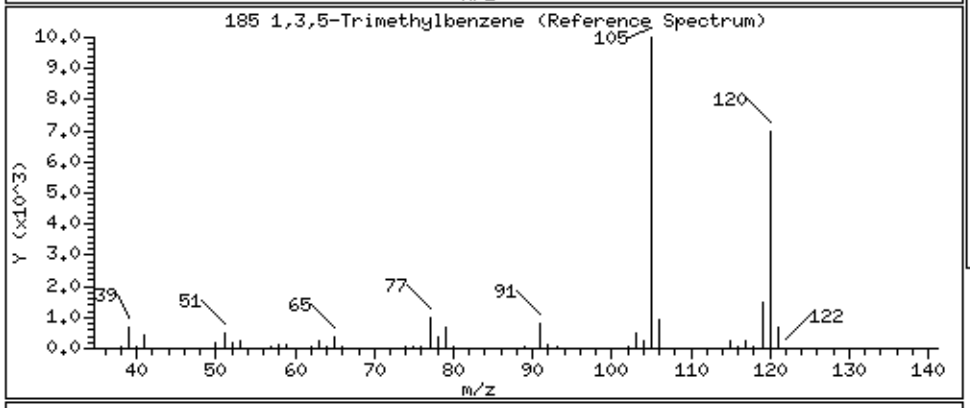
Concentration: 5.854 PPBV

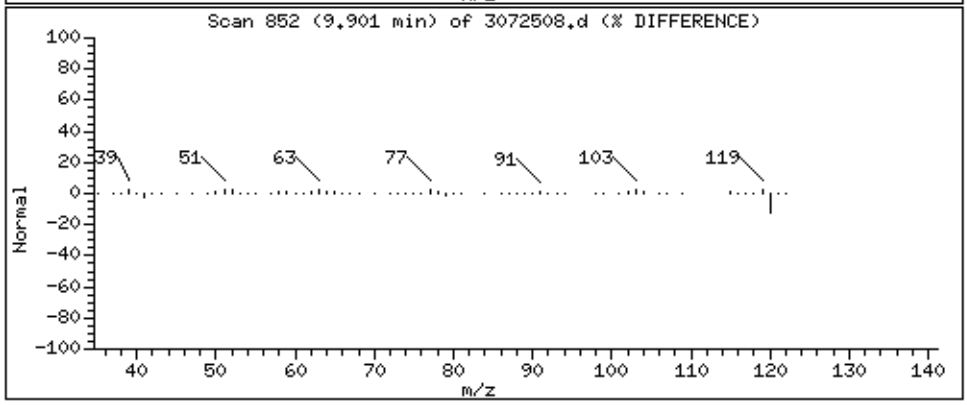












Data File: /chem/msd3.i/25JUL21.b/3072508.d

Date : 25-JUL-2021 15:09

Client ID:

Instrument: msd3.i

Sample Info: 200ml LC559

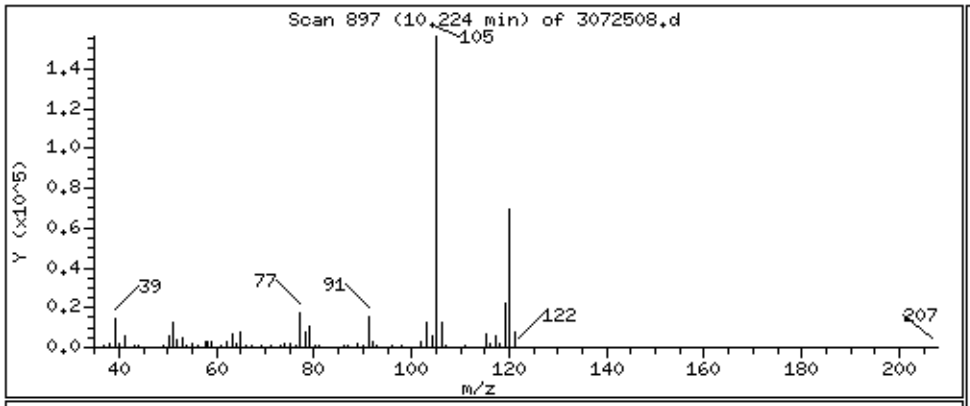
Operator: LD

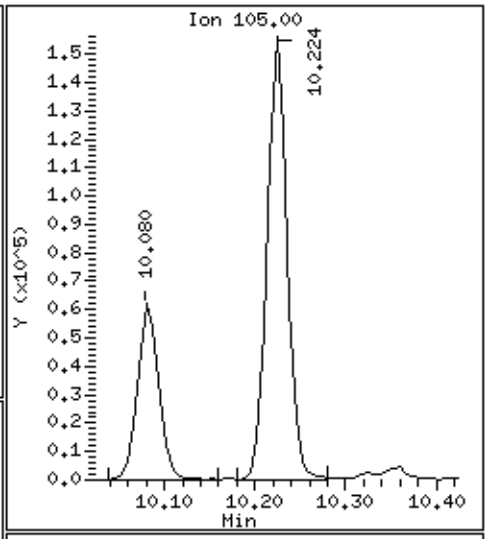
Column phase: RTX-624

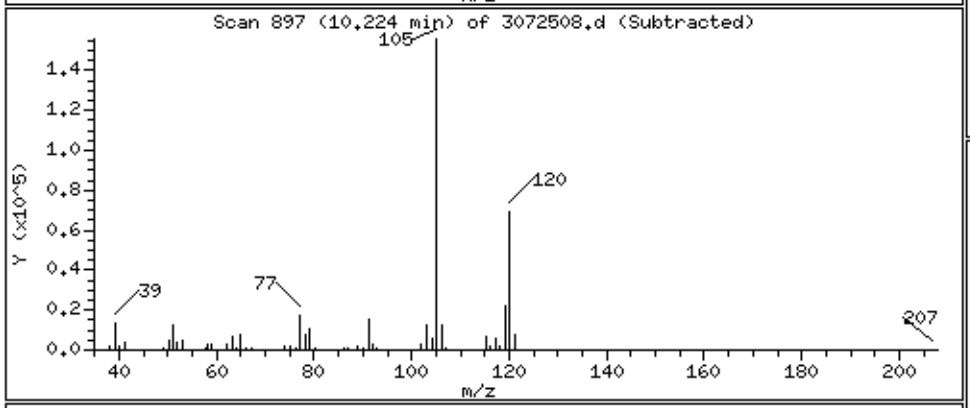
Column diameter: 0.25

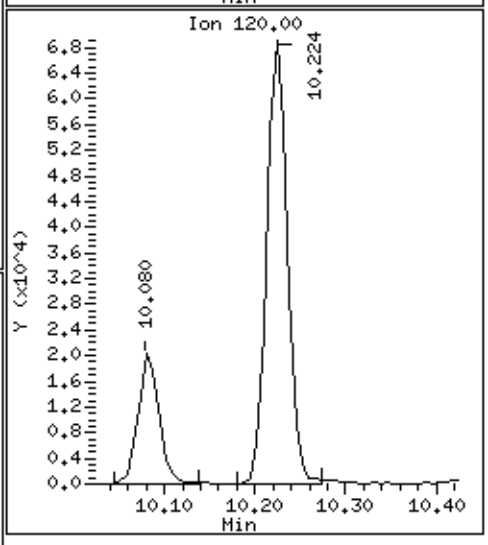
190 1,2,4-Trimethylbenzene

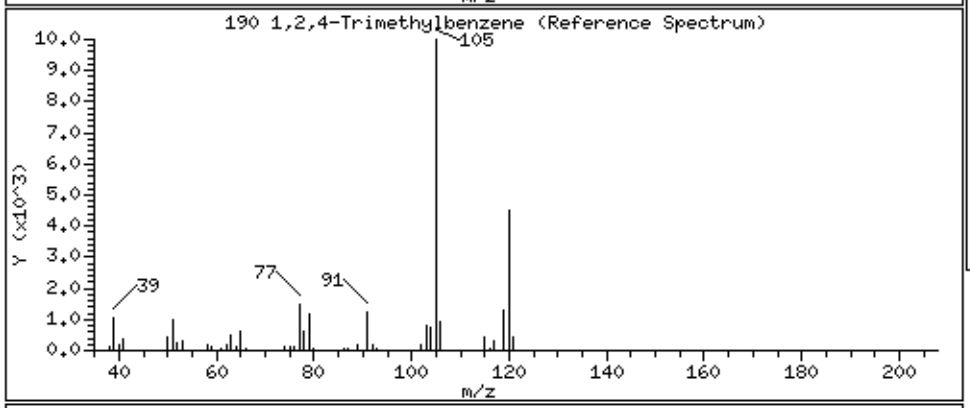
Concentration: 13.473 PPBV

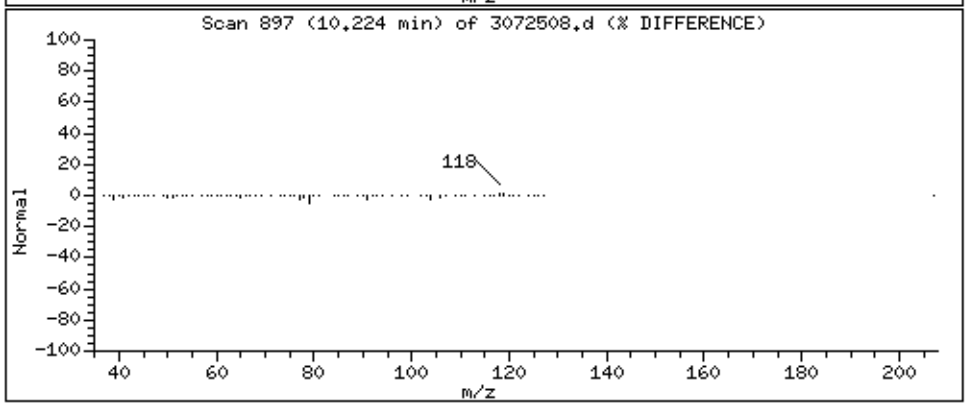












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Client Sample ID: SG-VW32A-03

Lab ID#: 2107260A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072509**	**Date of Collection:**	**7/12/21 11:26:00 AM**
Dil. Factor:	**2.87**	**Date of Analysis:**	**7/25/21 03:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	5.7	Not Detected	39	Not Detected
1,1,1-Trichloroethane	1.4	Not Detected	7.8	Not Detected
1,1,2,2-Tetrachloroethane	1.4	Not Detected	9.8	Not Detected
1,1,2-Trichloroethane	1.4	Not Detected	7.8	Not Detected
1,1-Dichloroethane	1.4	Not Detected	5.8	Not Detected
1,1-Dichloroethene	1.4	Not Detected	5.7	Not Detected
1,1-Difluoroethane	5.7	Not Detected	16	Not Detected
1,2,3-Trichloropropane	5.7	Not Detected	35	Not Detected
1,2,4-Trichlorobenzene	5.7	Not Detected	43	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	7.0	Not Detected
1,2-Dibromo-3-chloropropane	5.7	Not Detected	55	Not Detected
1,2-Dibromoethane (EDB)	1.4	Not Detected	11	Not Detected
1,2-Dichlorobenzene	1.4	Not Detected	8.6	Not Detected
1,2-Dichloroethane	1.4	Not Detected	5.8	Not Detected
1,2-Dichloropropane	1.4	Not Detected	6.6	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	7.0	Not Detected
1,3-Butadiene	1.4	Not Detected	3.2	Not Detected
1,3-Dichlorobenzene	1.4	Not Detected	8.6	Not Detected
1,4-Dichlorobenzene	1.4	Not Detected	8.6	Not Detected
1,4-Dioxane	5.7	Not Detected	21	Not Detected
2,2,4-Trimethylpentane	1.4	Not Detected	6.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.7	Not Detected	17	Not Detected
2-Hexanone	5.7	Not Detected	24	Not Detected
2-Propanol	5.7	Not Detected	14	Not Detected
3-Chloropropene	5.7	Not Detected	18	Not Detected
4-Ethyltoluene	1.4	Not Detected	7.0	Not Detected
4-Methyl-2-pentanone	1.4	Not Detected	5.9	Not Detected
Acetone	14	Not Detected	34	Not Detected
Acrolein	5.7	Not Detected	13	Not Detected
Acrylonitrile	5.7	Not Detected	12	Not Detected
alpha-Chlorotoluene	1.4	Not Detected	7.4	Not Detected
Benzene	1.4	Not Detected	4.6	Not Detected
Bromodichloromethane	1.4	Not Detected	9.6	Not Detected
Bromoform	1.4	Not Detected	15	Not Detected
Bromomethane	14	Not Detected	56	Not Detected
Carbon Disulfide	5.7	Not Detected	18	Not Detected
Carbon Tetrachloride	1.4	Not Detected	9.0	Not Detected
Chlorobenzene	1.4	Not Detected	6.6	Not Detected
Chloroethane	5.7	Not Detected	15	Not Detected
Chloroform	1.4	Not Detected	7.0	Not Detected
Chloromethane	14	Not Detected	30	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.7	Not Detected

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Client Sample ID: SG-VW32A-03

Lab ID#: 2107260A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072509**	**Date of Collection:**	**7/12/21 11:26:00 AM**
Dil. Factor:	**2.87**	**Date of Analysis:**	**7/25/21 03:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.4	Not Detected	6.5	Not Detected
Cumene	1.4	Not Detected	7.0	Not Detected
Cyclohexane	1.4	Not Detected	4.9	Not Detected
Dibromochloromethane	1.4	Not Detected	12	Not Detected
Dibromomethane	5.7	Not Detected	41	Not Detected
Ethanol	14	Not Detected	27	Not Detected
Ethyl Acetate	5.7	Not Detected	21	Not Detected
Ethyl Benzene	1.4	Not Detected	6.2	Not Detected
Ethyl-tert-butyl ether	5.7	Not Detected	24	Not Detected
Freon 11	1.4	Not Detected	8.1	Not Detected
Freon 12	1.4	Not Detected	7.1	Not Detected
Freon 113	1.4	Not Detected	11	Not Detected
Freon 114	1.4	Not Detected	10	Not Detected
Freon 134a	5.7	Not Detected	24	Not Detected
Heptane	1.4	Not Detected	5.9	Not Detected
Hexachlorobutadiene	5.7	Not Detected	61	Not Detected
Hexachloroethane	5.7	Not Detected	56	Not Detected
Hexane	1.4	4.4	5.0	16
Iodomethane	14	Not Detected	83	Not Detected
Isopropyl ether	5.7	Not Detected	24	Not Detected
m,p-Xylene	1.4	Not Detected	6.2	Not Detected
Methyl tert-butyl ether	5.7	Not Detected	21	Not Detected
Methylene Chloride	14	Not Detected	50	Not Detected
Naphthalene	2.9	Not Detected	15	Not Detected
o-Xylene	1.4	Not Detected	6.2	Not Detected
Propylbenzene	1.4	Not Detected	7.0	Not Detected
Propylene	5.7	Not Detected	9.9	Not Detected
Styrene	1.4	Not Detected	6.1	Not Detected
tert-Amyl methyl ether	5.7	Not Detected	24	Not Detected
tert-Butyl alcohol	5.7	Not Detected	17	Not Detected
Tetrachloroethene	1.4	19	9.7	130
Tetrahydrofuran	1.4	Not Detected	4.2	Not Detected
Toluene	1.4	Not Detected	5.4	Not Detected
TPH ref. to Gasoline (MW=100)	140	Not Detected	590	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.7	Not Detected
trans-1,3-Dichloropropene	1.4	Not Detected	6.5	Not Detected
Trichloroethene	1.4	Not Detected	7.7	Not Detected
Vinyl Acetate	5.7	Not Detected	20	Not Detected
Vinyl Bromide	5.7	Not Detected	25	Not Detected
Vinyl Chloride	1.4	Not Detected	3.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW32A-03

Lab ID#: 2107260A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072509**	**Date of Collection:**	**7/12/21 11:26:00 AM**
Dil. Factor:	**2.87**	**Date of Analysis:**	**7/25/21 03:39 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	88	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072509.d
Lab Smp Id: 2107260A-02A
Inj Date : 25-JUL-2021 15:39
Operator : LD Inst ID: msd3.i
Smp Info : 200ml N3077
Misc Info : 12.6 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2
Dil Factor: 2.87000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	250947	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	192221				48.46- 108.46	76.60
5.284	5.270 (1.000)	49	352623				120.39- 180.39	140.52
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	830113	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	123782				0.00- 45.52	14.91
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	806303	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	426420				25.46- 85.46	52.89
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	340045	24.6233	24.623		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	165303				21.66- 81.66	48.61
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	808379	23.6431	23.643		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	90373				0.00- 41.47	11.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	534634			36.47- 96.47	66.14
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	471759	22.1202	22.120	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	534057			93.06- 153.06	113.21
9.608	9.601 (1.115)	176	436052			62.87- 122.87	92.43
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	21306	1.53318	4.400	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	16405			32.99- 92.99	77.00
4.179	4.179 (0.791)	86	3868			0.00- 42.56	18.16
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.882 (0.914)	166	85642	6.77995	19.458	80.00- 120.00	100.00
7.882	7.874 (0.914)	129	66379			48.71- 108.71	77.51
7.882	7.874 (0.914)	131	66034			46.55- 106.55	77.10

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072509.d
Lab Smp Id: 2107260A-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 12.6 Hg->9.8 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	250947	-5.75
108 1,4-Difluorobenze	910055	546033	1274077	830113	-8.78
153 Chlorobenzene-d5	785948	471569	1100327	806303	2.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:50

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-02A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 12.6 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.623	98.49	70-130
$ 134 Toluene-d8	25.000	23.643	94.57	70-130
$ 170 4-Bromofluorobenz	25.000	22.120	88.48	70-130

Data File: /chem/msd3.i/25JUL21.b/3072509.d

Date : 25-JUL-2021 15:39

Client ID:

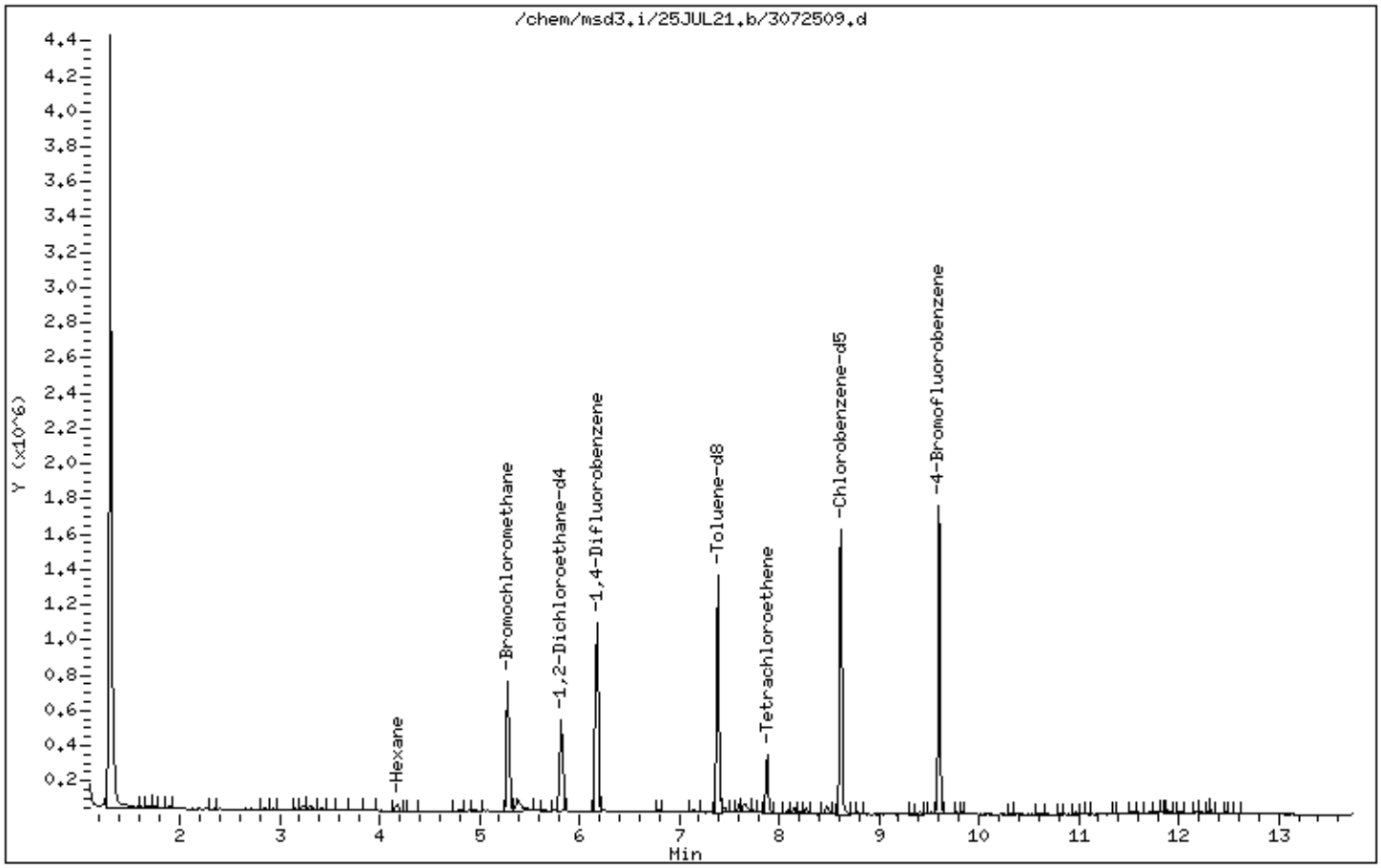
Instrument: msd3.i

Sample Info: 200ml N3077

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072509.d

Date : 25-JUL-2021 15:39

Client ID:

Instrument: msd3.i

Sample Info: 200ml N3077

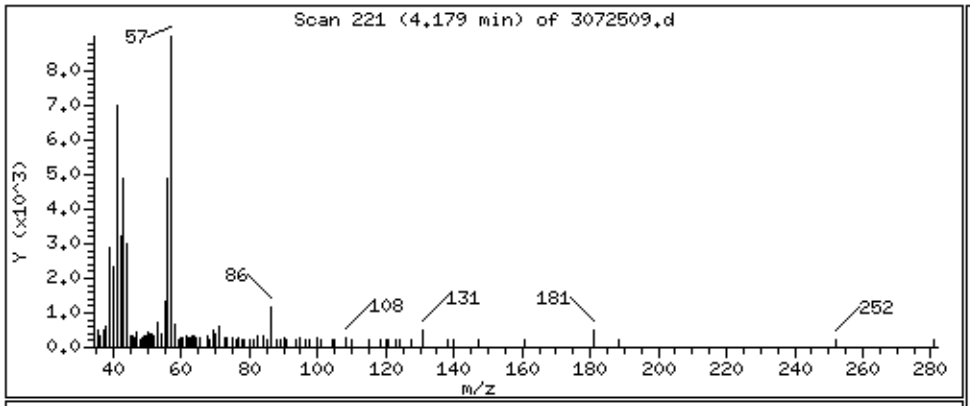
Operator: LD

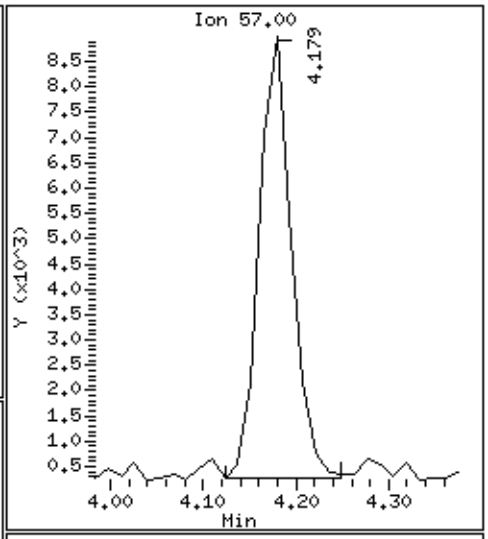
Column phase: RTX-624

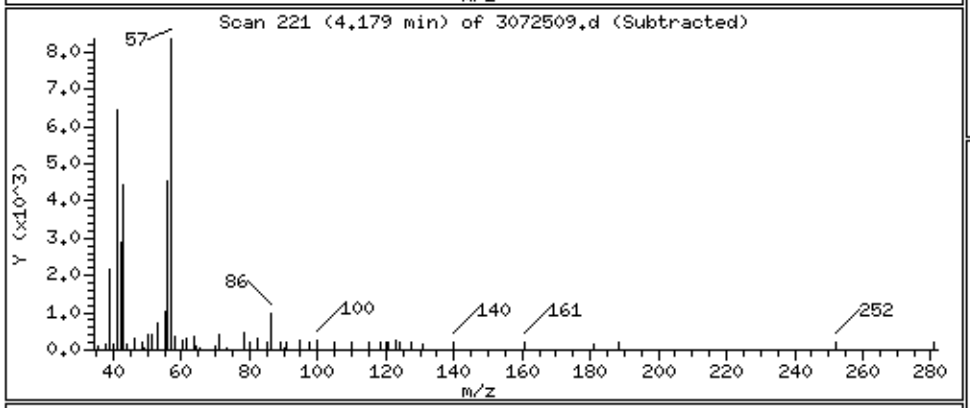
Column diameter: 0.25

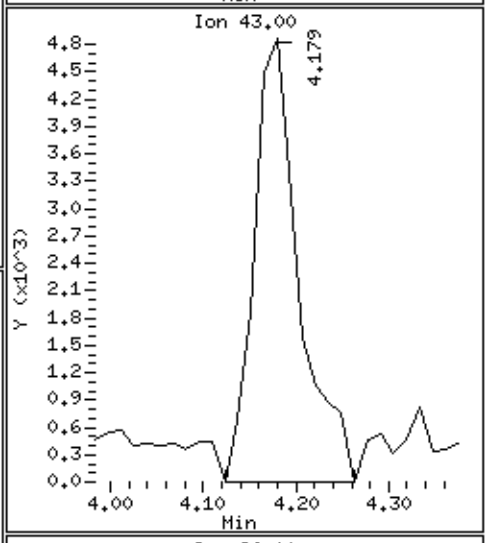
67 Hexane

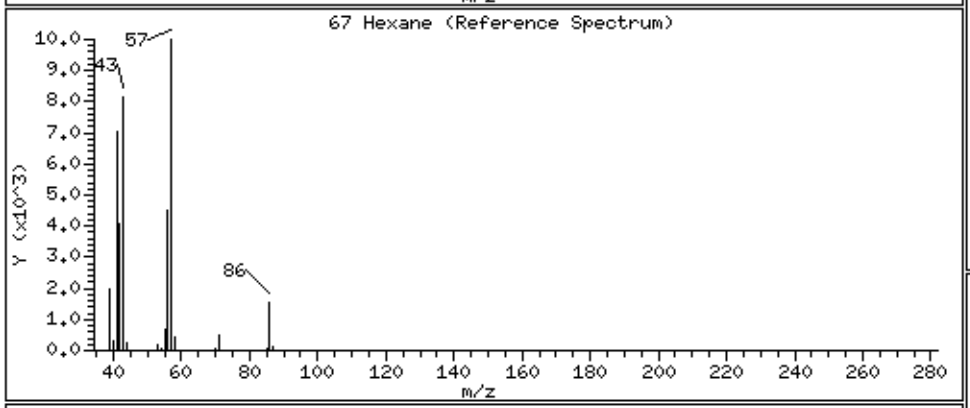
Concentration: 4.400 PPBV

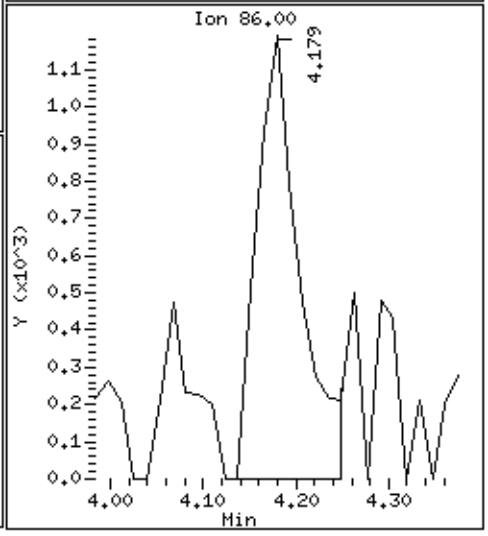


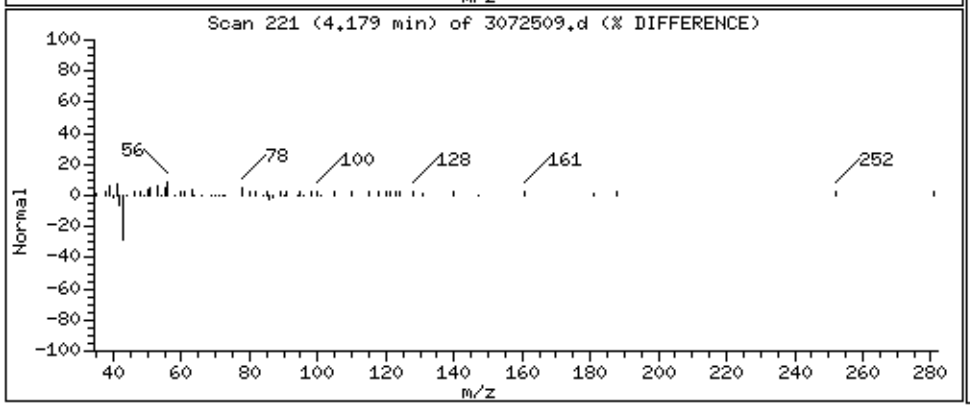












Data File: /chem/msd3.i/25JUL21.b/3072509.d

Date : 25-JUL-2021 15:39

Client ID:

Instrument: msd3.i

Sample Info: 200ml N3077

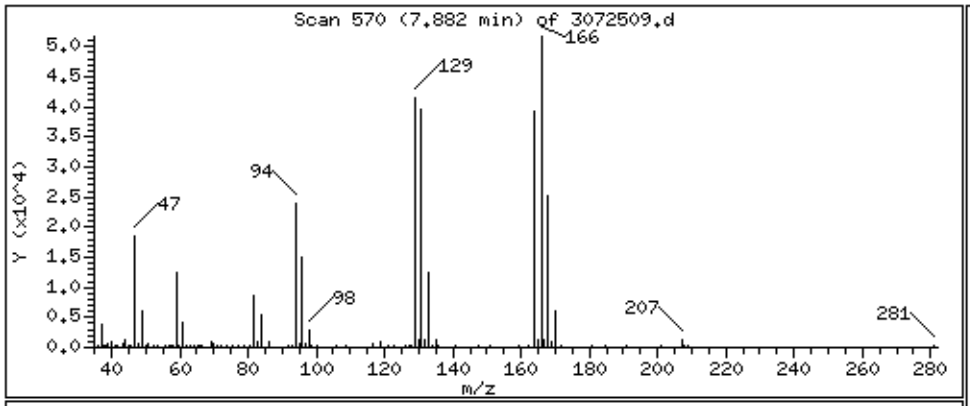
Operator: LD

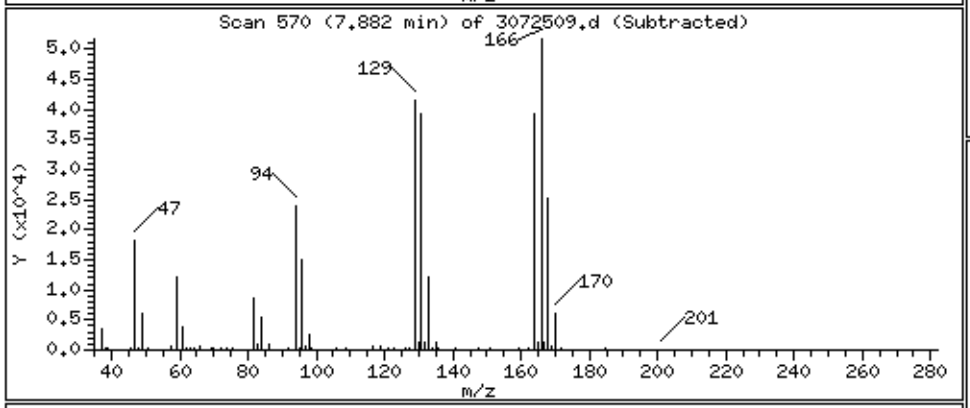
Column phase: RTX-624

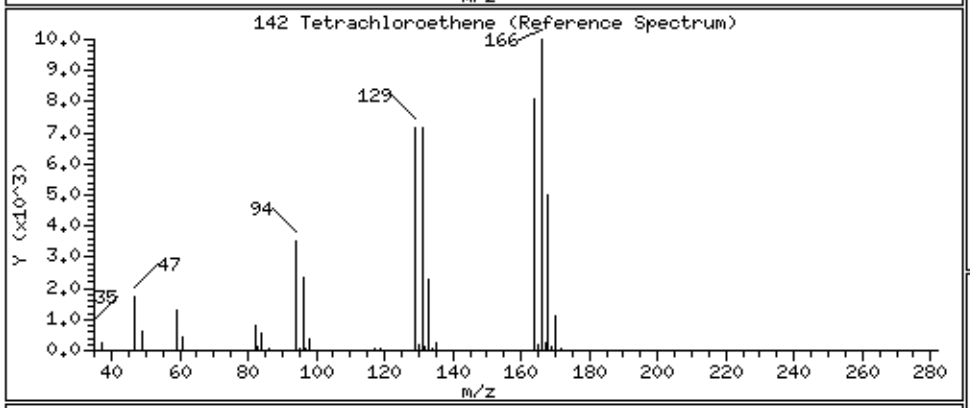
Column diameter: 0.25

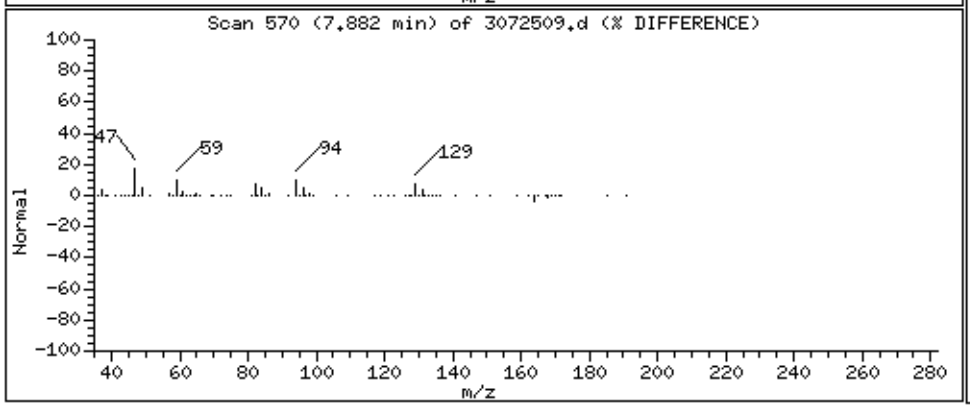
142 Tetrachloroethene

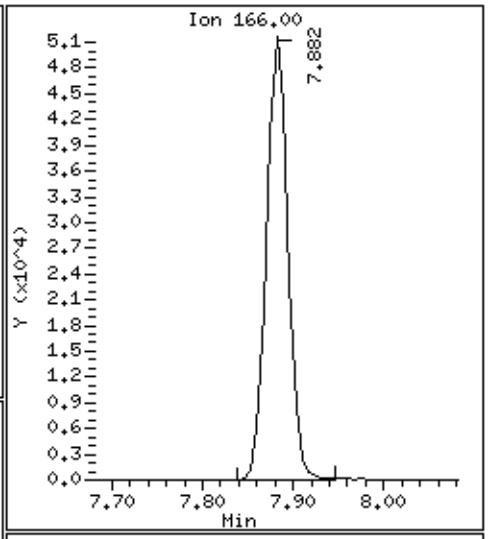
Concentration: 19.458 PPBV

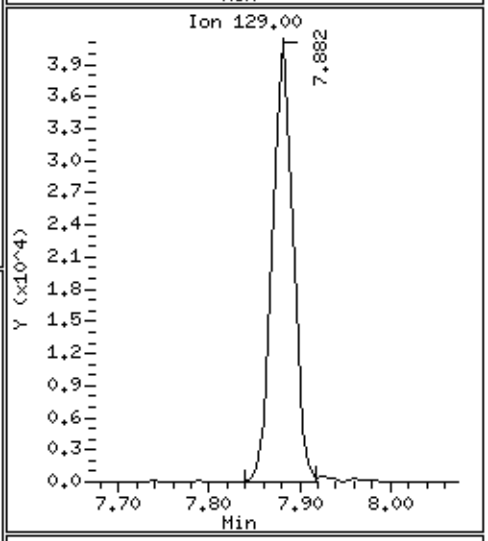


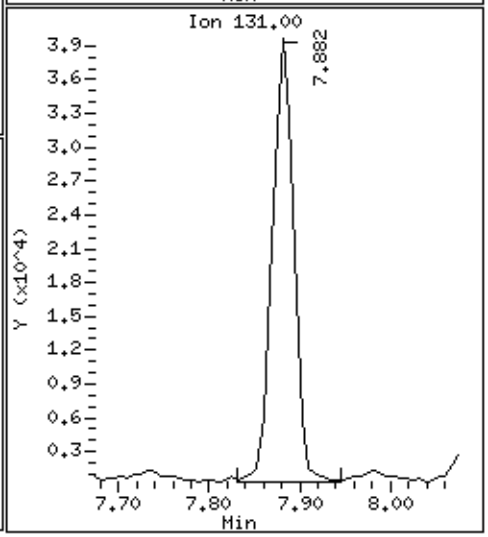












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Client Sample ID: SG-VW36B-02

Lab ID#: 2107260A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072510**	**Date of Collection:**	**7/12/21 12:18:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/25/21 04:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.7	Not Detected	32	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.4	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
1,1-Difluoroethane	4.7	Not Detected	13	Not Detected
1,2,3-Trichloropropane	4.7	Not Detected	28	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	35	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,2-Dibromo-3-chloropropane	4.7	Not Detected	45	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
2-Hexanone	4.7	Not Detected	19	Not Detected
2-Propanol	4.7	8.2	12	20
3-Chloropropene	4.7	Not Detected	15	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.8	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Acetone	12	24	28	56
Acrolein	4.7	Not Detected	11	Not Detected
Acrylonitrile	4.7	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Bromomethane	12	Not Detected	45	Not Detected
Carbon Disulfide	4.7	Not Detected	14	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.4	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Chloromethane	12	Not Detected	24	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected

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Client Sample ID: SG-VW36B-02

Lab ID#: 2107260A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072510**	**Date of Collection:**	**7/12/21 12:18:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/25/21 04:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Cumene	1.2	Not Detected	5.8	Not Detected
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Dibromochloromethane	1.2	Not Detected	10	Not Detected
Dibromomethane	4.7	Not Detected	33	Not Detected
Ethanol	12	Not Detected	22	Not Detected
Ethyl Acetate	4.7	Not Detected	17	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
Ethyl-tert-butyl ether	4.7	Not Detected	20	Not Detected
Freon 11	1.2	Not Detected	6.6	Not Detected
Freon 12	1.2	Not Detected	5.8	Not Detected
Freon 113	1.2	Not Detected	9.0	Not Detected
Freon 114	1.2	Not Detected	8.2	Not Detected
Freon 134a	4.7	Not Detected	20	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected
Hexachloroethane	4.7	Not Detected	45	Not Detected
Hexane	1.2	2.2	4.1	7.9
Iodomethane	12	Not Detected	68	Not Detected
Isopropyl ether	4.7	Not Detected	20	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
Methyl tert-butyl ether	4.7	Not Detected	17	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
Propylbenzene	1.2	Not Detected	5.8	Not Detected
Propylene	4.7	8.6	8.0	15
Styrene	1.2	Not Detected	5.0	Not Detected
tert-Amyl methyl ether	4.7	Not Detected	20	Not Detected
tert-Butyl alcohol	4.7	Not Detected	14	Not Detected
Tetrachloroethene	1.2	28	7.9	190
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	480	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Vinyl Acetate	4.7	Not Detected	16	Not Detected
Vinyl Bromide	4.7	Not Detected	20	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW36B-02

Lab ID#: 2107260A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072510**	**Date of Collection:**	**7/12/21 12:18:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/25/21 04:08 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072510.d
Lab Smp Id: 2107260A-03A
Inj Date : 25-JUL-2021 16:08
Operator : LD Inst ID: msd3.i
Smp Info : 200ml 1L2720
Misc Info : 8.6 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 4
Dil Factor: 2.34000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	262991	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	208866				48.46- 108.46	79.42
5.284	5.270 (1.000)	49	373718				120.39- 180.39	142.10
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	877911	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	129792				0.00- 45.52	14.78
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	786378	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	413007				25.46- 85.46	52.52
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	361246	24.9606	24.960		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	174282				21.66- 81.66	48.24
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	847121	23.4272	23.427		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	96613				0.00- 41.47	11.40

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	562288			36.47- 96.47	66.38
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	498129	23.9484	23.948	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	567523			93.06- 153.06	113.93
9.601	9.601 (1.114)	176	459314			62.87- 122.87	92.21
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	23214	3.65433	8.551	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	13845			35.61- 95.61	59.64
1.437	1.423 (0.272)	39	16211			42.66- 102.66	69.83
47 Acetone					CAS #: 67-64-1		
3.228	3.214 (0.611)	58	44811	10.1617	23.778	80.00- 120.00	100.00
3.228	3.214 (0.611)	43	158141			299.66- 359.66	352.91
52 2-Propanol					CAS #: 67-63-0		
3.424	3.396 (0.648)	45	55673	3.51044	8.214	80.00- 120.00	100.00
3.424	3.396 (0.648)	43	13416			0.00- 48.61	24.10
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	13910	0.95512	2.235	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	12475			32.99- 92.99	89.69
4.179	4.179 (0.791)	86	2347			0.00- 42.56	16.88
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.882 (0.914)	166	147165	11.9457	27.953	80.00- 120.00	100.00
7.881	7.874 (0.914)	129	113055			48.71- 108.71	76.82
7.881	7.874 (0.914)	131	114089			46.55- 106.55	77.52

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072510.d
Lab Smp Id: 2107260A-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.6 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	262991	-1.23
108 1,4-Difluorobenze	910055	546033	1274077	877911	-3.53
153 Chlorobenzene-d5	785948	471569	1100327	786378	0.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:55

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-03A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.6 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.960	99.84	70-130
$ 134 Toluene-d8	25.000	23.427	93.71	70-130
$ 170 4-Bromofluorobenz	25.000	23.948	95.79	70-130

Data File: /chem/msd3.i/25JUL21.b/3072510.d

Date : 25-JUL-2021 16:08

Client ID:

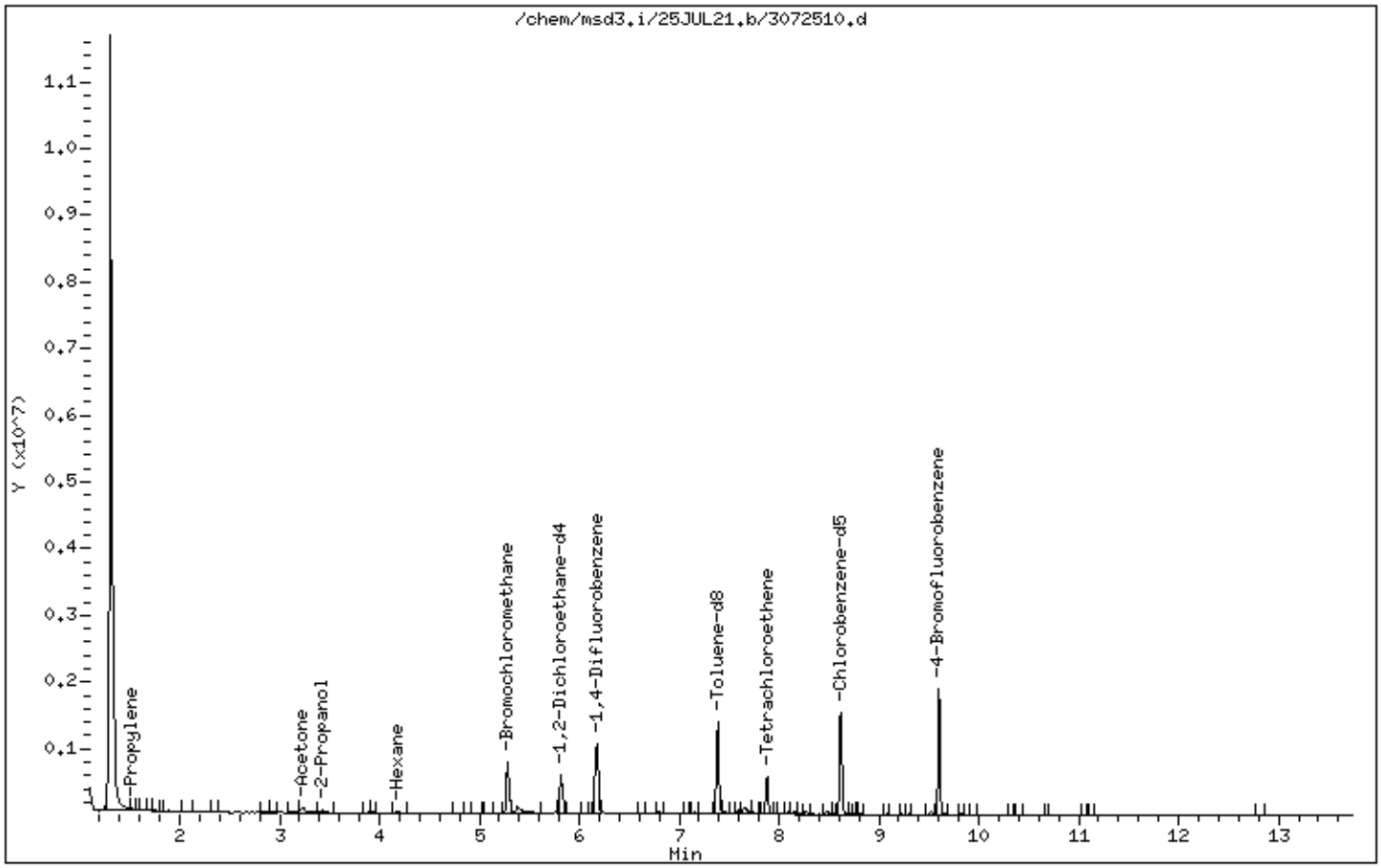
Instrument: msd3.i

Sample Info: 200ml 1L2720

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072510.d

Date : 25-JUL-2021 16:08

Client ID:

Instrument: msd3.i

Sample Info: 200ml 1L2720

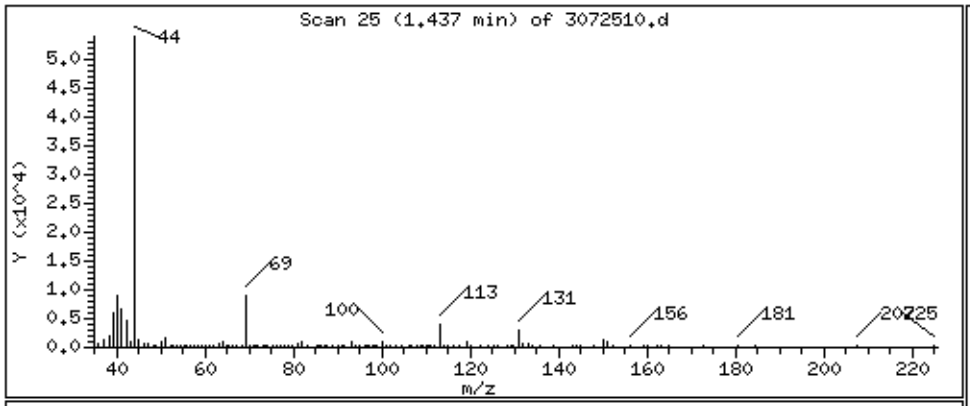
Operator: LD

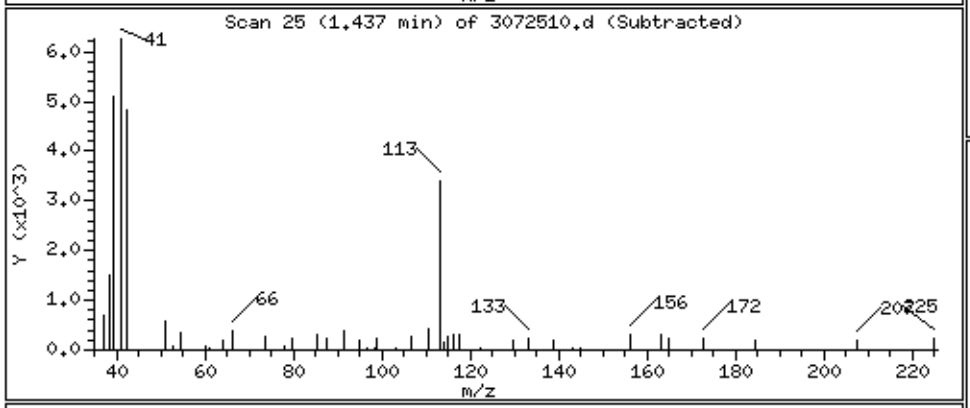
Column phase: RTX-624

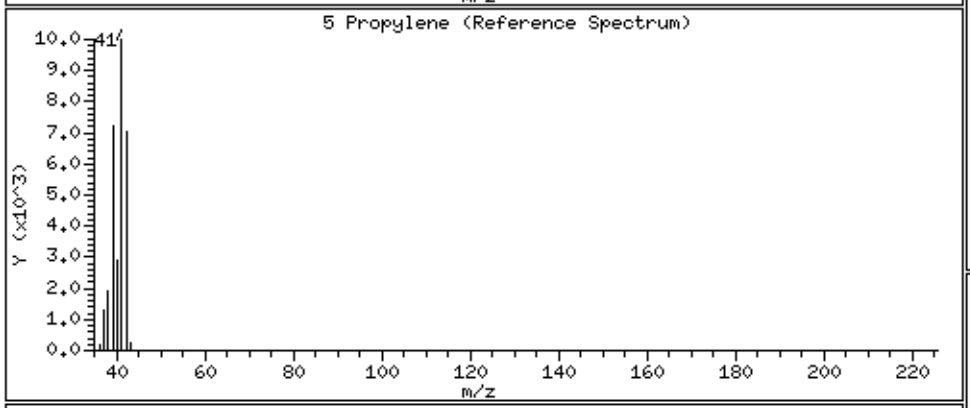
Column diameter: 0.25

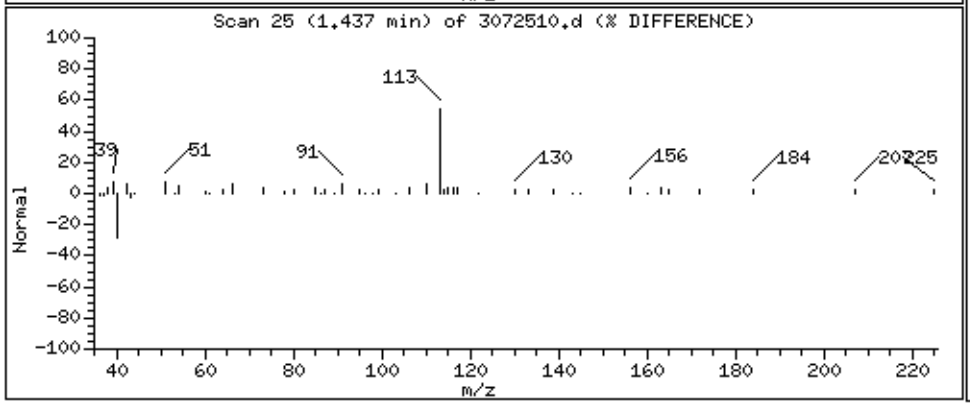
5 Propylene

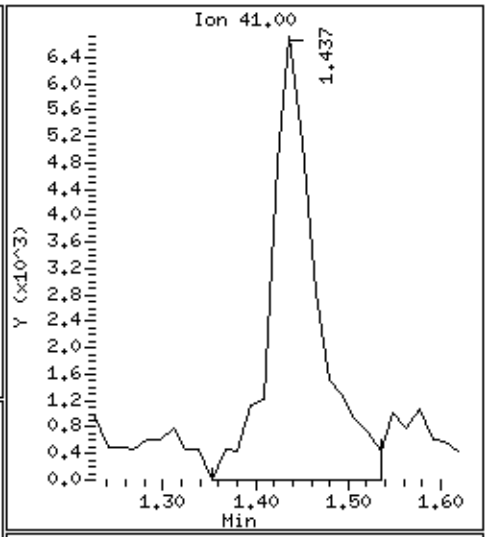
Concentration: 8.551 PPBV

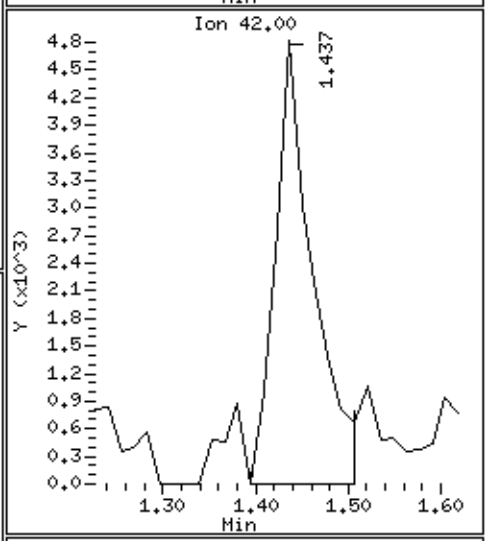


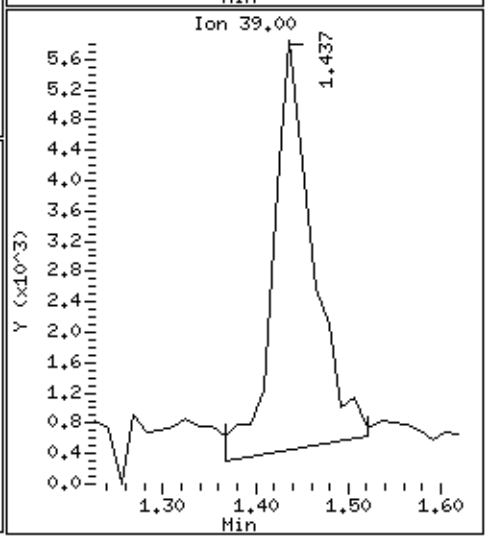












Data File: /chem/msd3.i/25JUL21.b/3072510.d

Date : 25-JUL-2021 16:08

Client ID:

Instrument: msd3.i

Sample Info: 200ml 1L2720

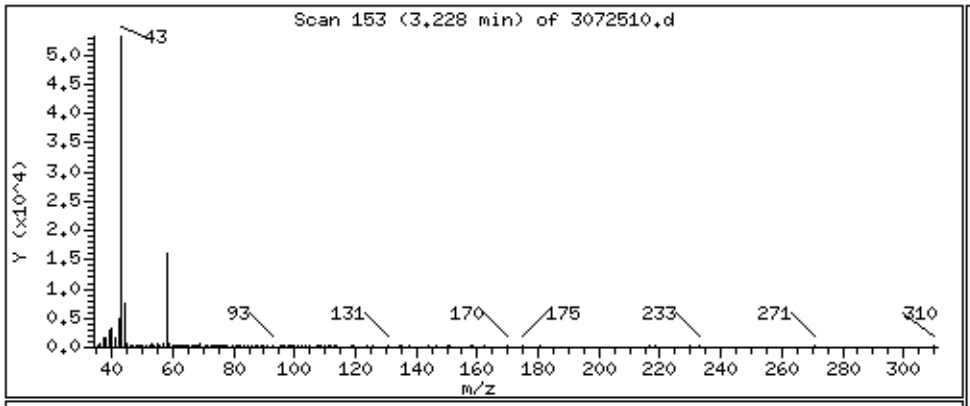
Operator: LD

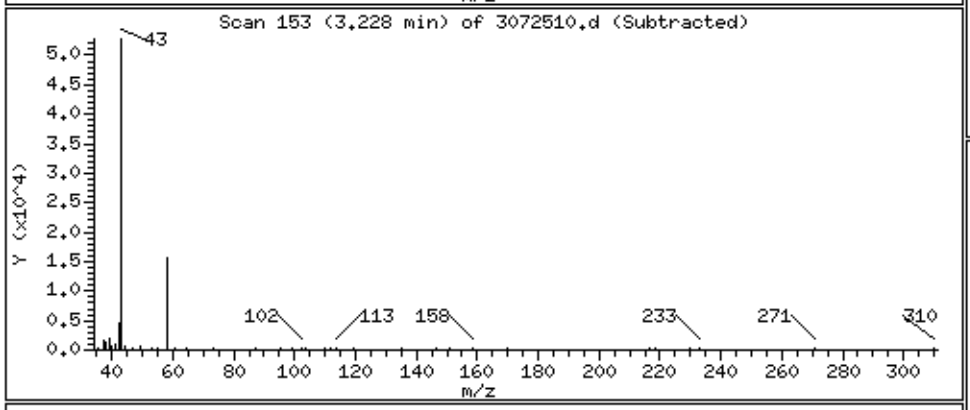
Column phase: RTX-624

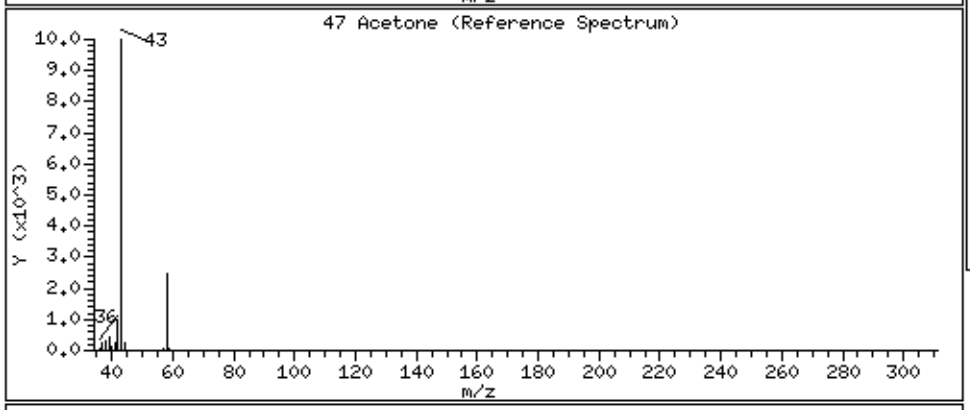
Column diameter: 0.25

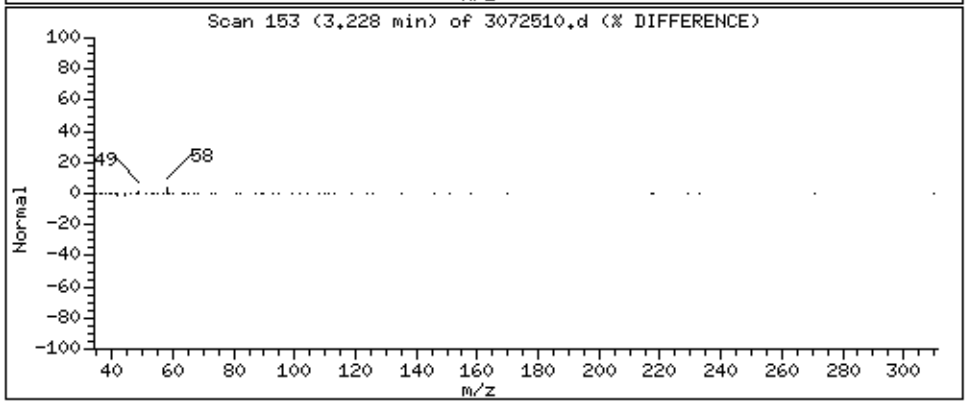
47 Acetone

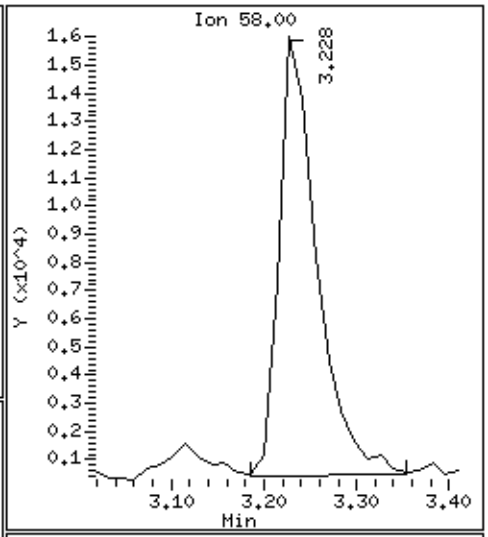
Concentration: 23.778 PPBV

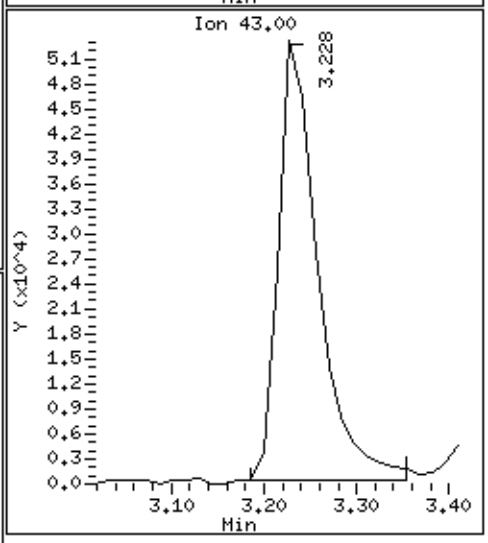












Data File: /chem/msd3.i/25JUL21.b/3072510.d

Date : 25-JUL-2021 16:08

Client ID:

Instrument: msd3.i

Sample Info: 200ml 1L2720

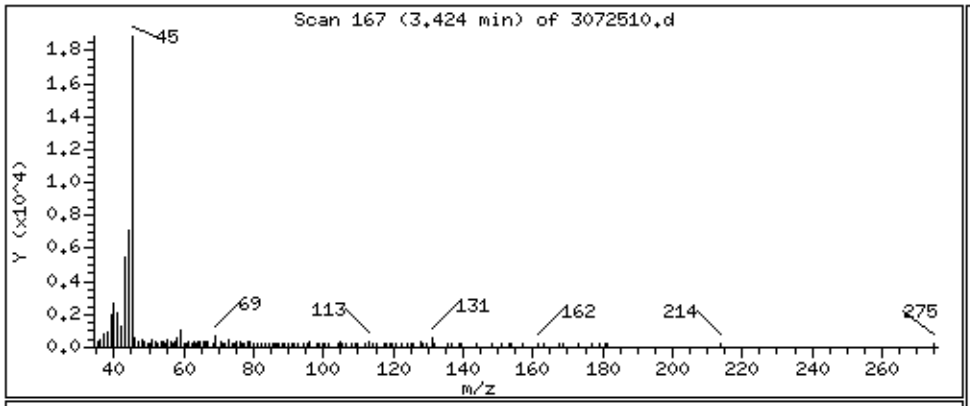
Operator: LD

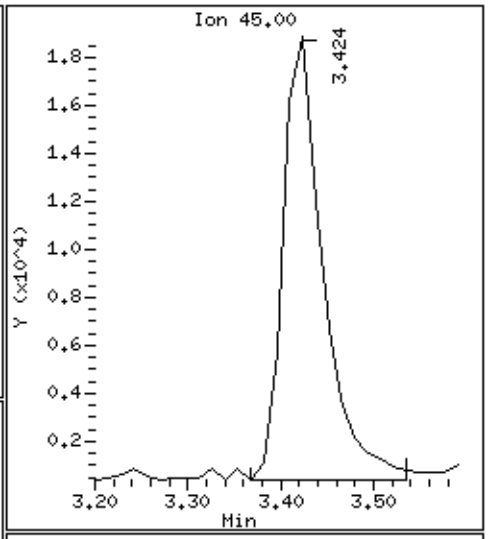
Column phase: RTX-624

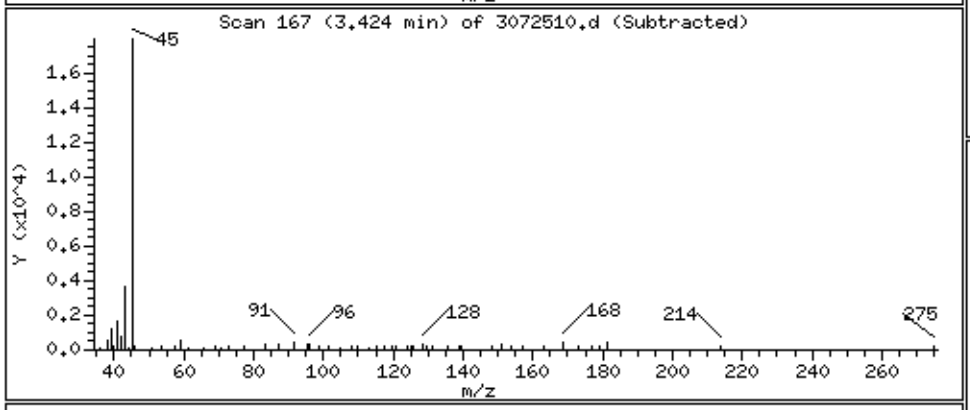
Column diameter: 0.25

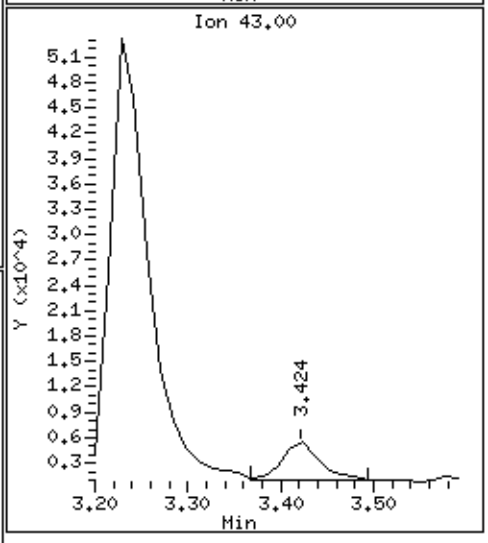
52 2-Propanol

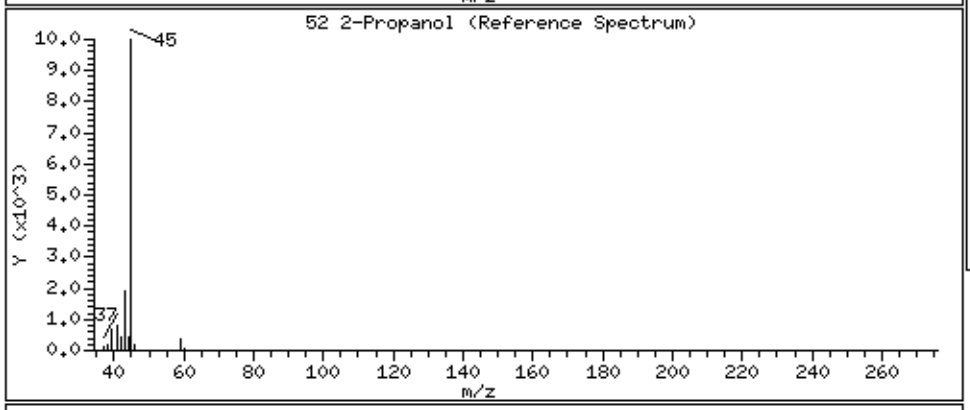
Concentration: 8.214 PPBV

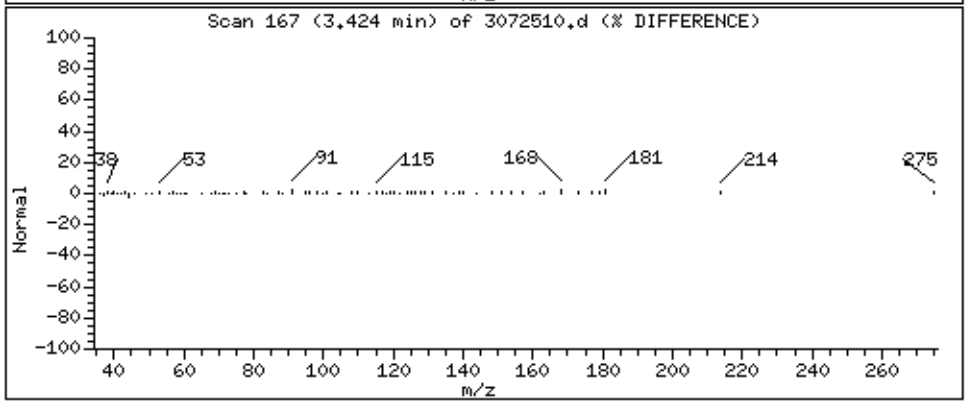












Data File: /chem/msd3.i/25JUL21.b/3072510.d

Date : 25-JUL-2021 16:08

Client ID:

Instrument: msd3.i

Sample Info: 200ml 1L2720

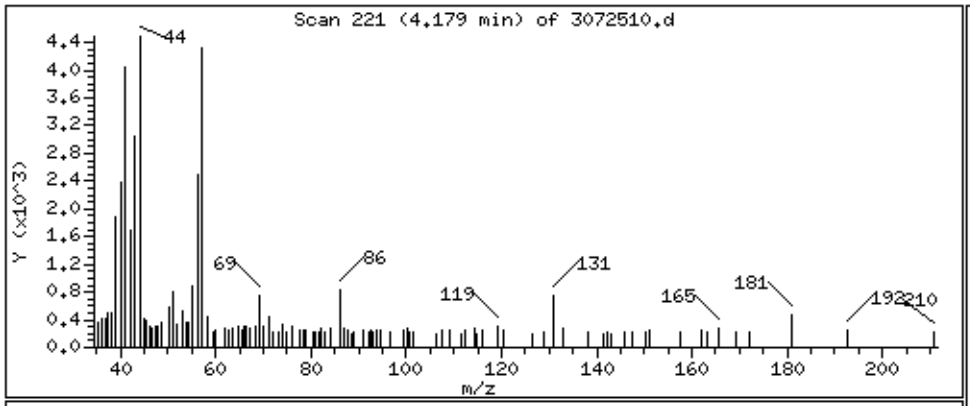
Operator: LD

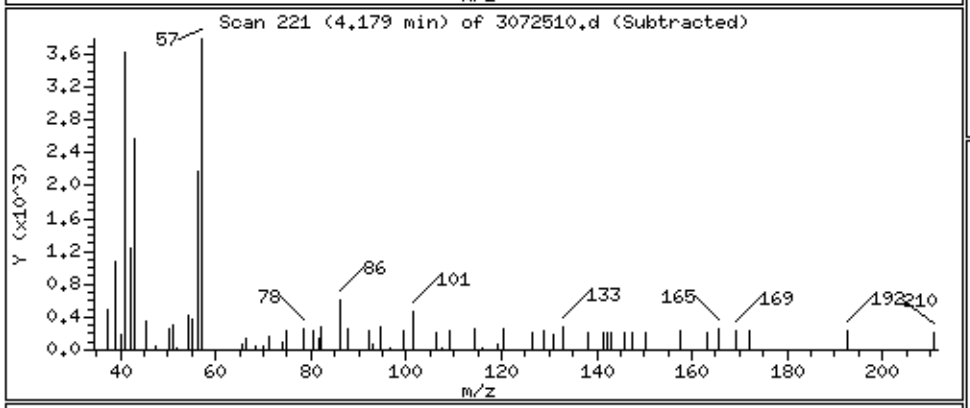
Column phase: RTX-624

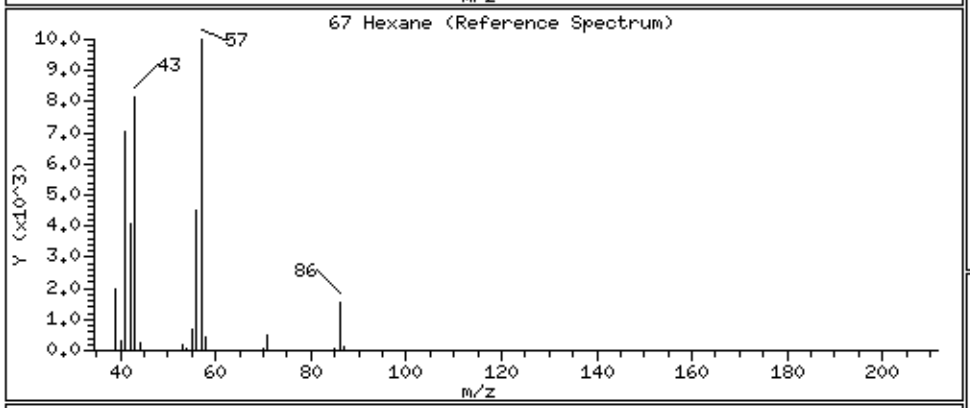
Column diameter: 0.25

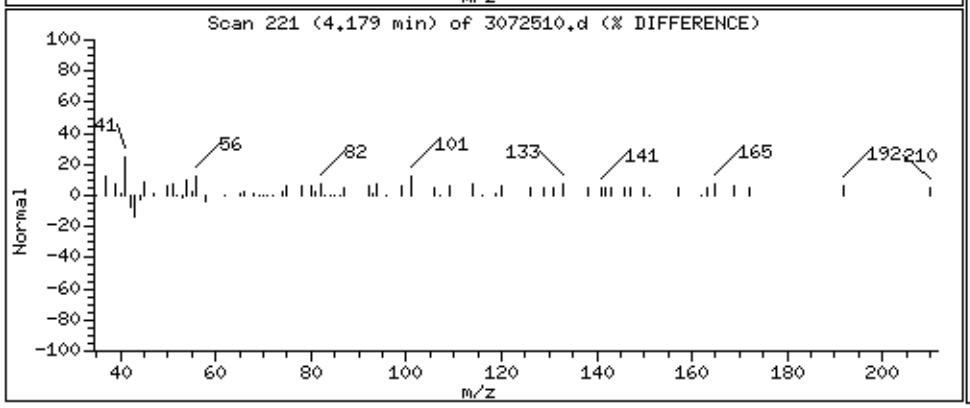
67 Hexane

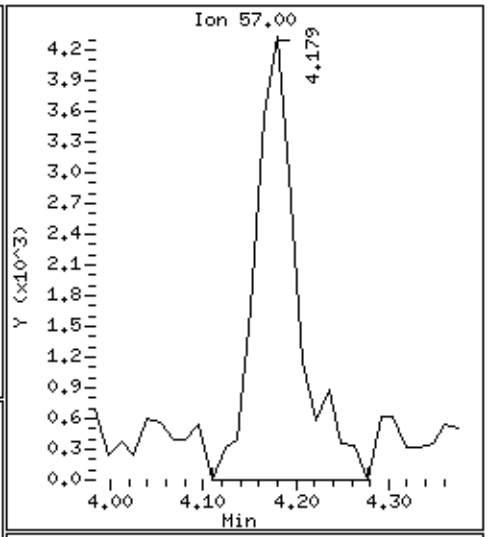
Concentration: 2.235 PPBV

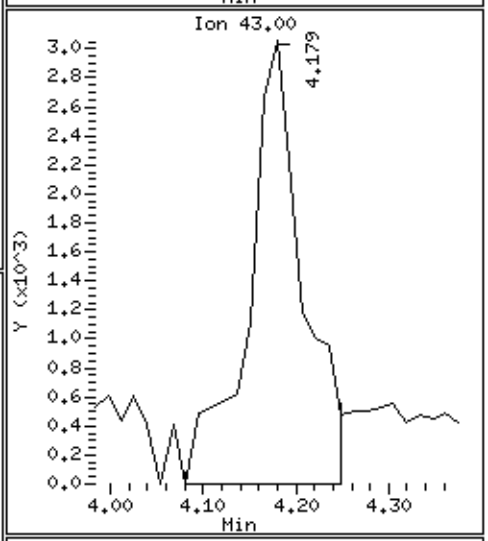


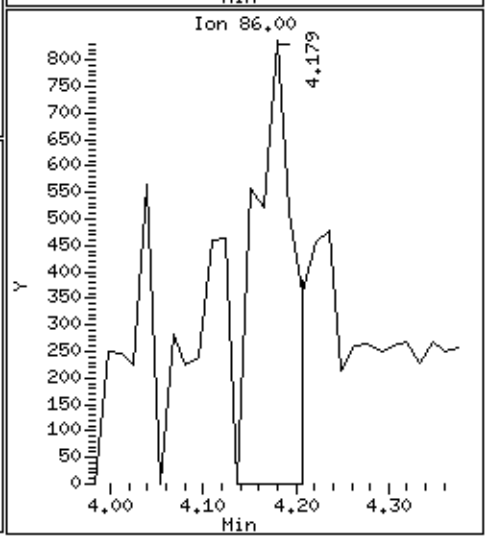












Data File: /chem/msd3.i/25JUL21.b/3072510.d

Date : 25-JUL-2021 16:08

Client ID:

Instrument: msd3.i

Sample Info: 200ml 1L2720

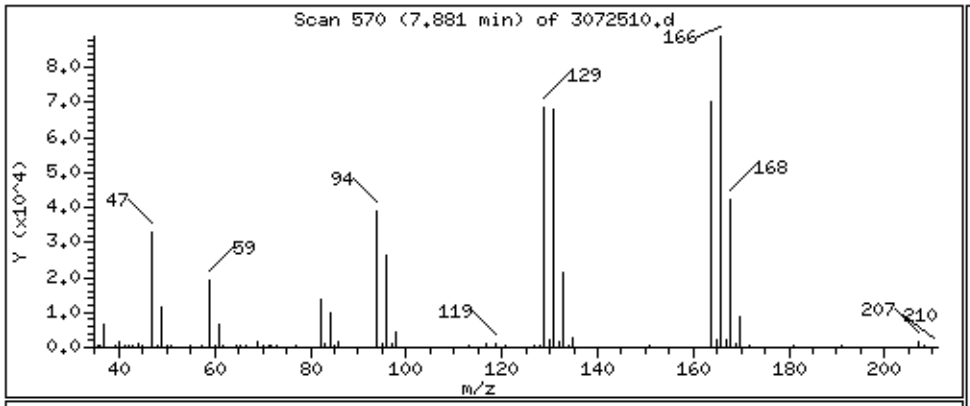
Operator: LD

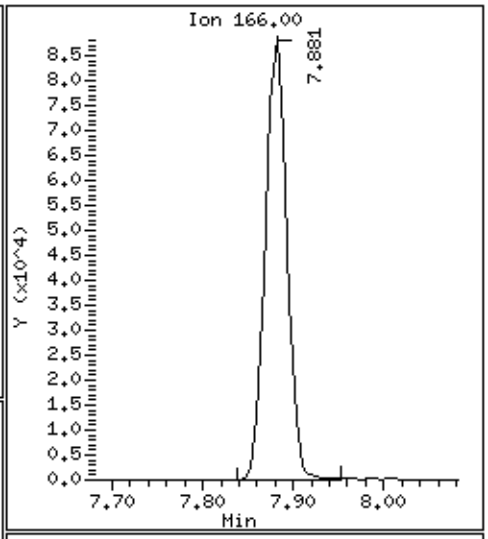
Column phase: RTX-624

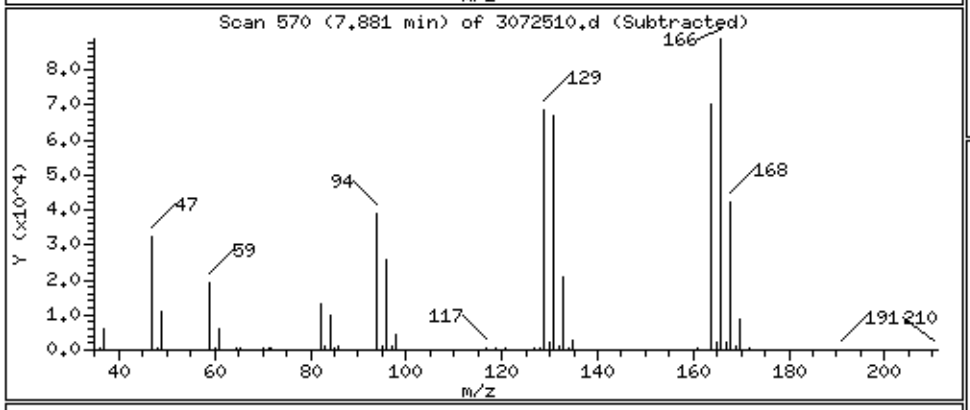
Column diameter: 0.25

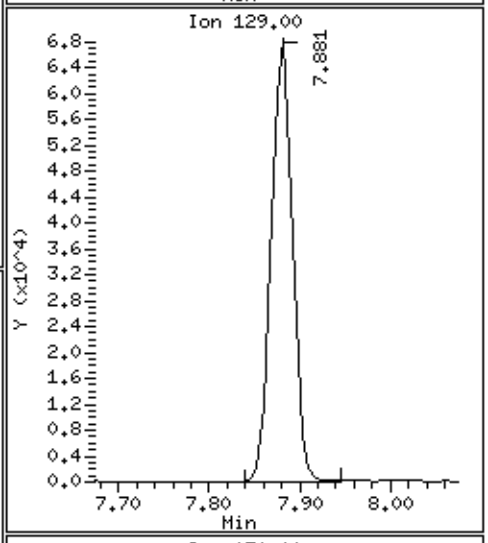
142 Tetrachloroethene

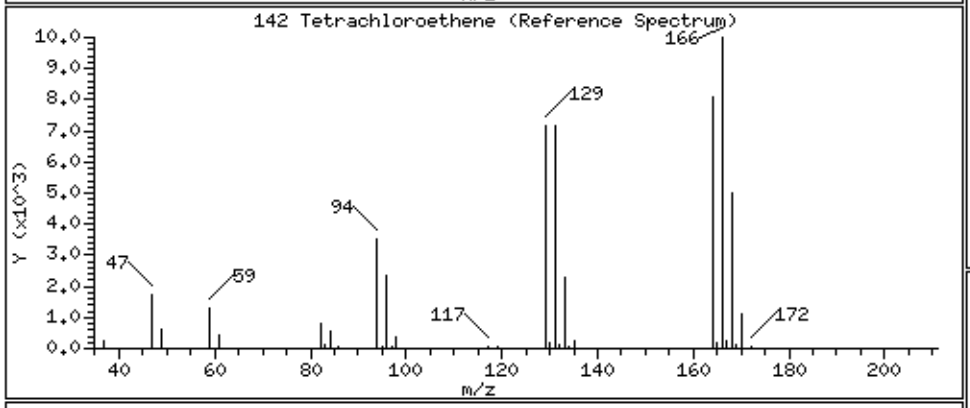
Concentration: 27.953 PPBV

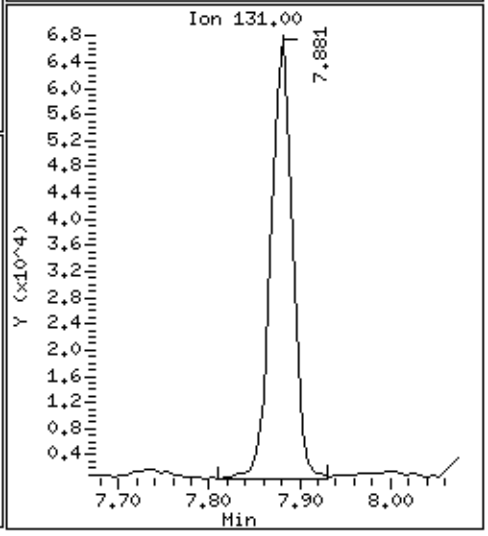


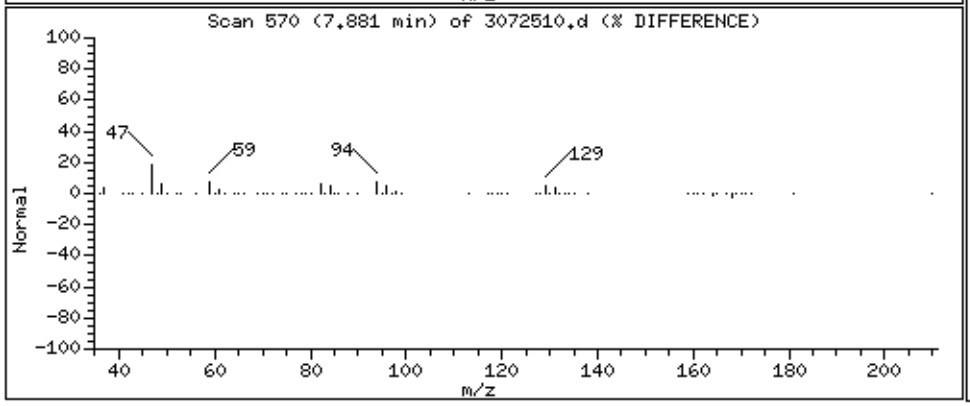












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Client Sample ID: SG-VW36B-03

Lab ID#: 2107260A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072511**	**Date of Collection:**	**7/12/21 12:18:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/25/21 04:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.7	Not Detected	32	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.4	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
1,1-Difluoroethane	4.7	Not Detected	13	Not Detected
1,2,3-Trichloropropane	4.7	Not Detected	28	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	35	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,2-Dibromo-3-chloropropane	4.7	Not Detected	45	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
2-Hexanone	4.7	Not Detected	19	Not Detected
2-Propanol	4.7	6.8	12	17
3-Chloropropene	4.7	Not Detected	15	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.8	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	28	Not Detected
Acrolein	4.7	Not Detected	11	Not Detected
Acrylonitrile	4.7	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Bromomethane	12	Not Detected	45	Not Detected
Carbon Disulfide	4.7	Not Detected	14	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.4	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Chloromethane	12	Not Detected	24	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected

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Client Sample ID: SG-VW36B-03

Lab ID#: 2107260A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072511**	**Date of Collection:**	**7/12/21 12:18:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/25/21 04:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Cumene	1.2	Not Detected	5.8	Not Detected
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Dibromochloromethane	1.2	Not Detected	10	Not Detected
Dibromomethane	4.7	Not Detected	33	Not Detected
Ethanol	12	Not Detected	22	Not Detected
Ethyl Acetate	4.7	Not Detected	17	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
Ethyl-tert-butyl ether	4.7	Not Detected	20	Not Detected
Freon 11	1.2	Not Detected	6.6	Not Detected
Freon 12	1.2	Not Detected	5.8	Not Detected
Freon 113	1.2	Not Detected	9.0	Not Detected
Freon 114	1.2	Not Detected	8.2	Not Detected
Freon 134a	4.7	Not Detected	20	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected
Hexachloroethane	4.7	Not Detected	45	Not Detected
Hexane	1.2	Not Detected	4.1	Not Detected
Iodomethane	12	Not Detected	68	Not Detected
Isopropyl ether	4.7	Not Detected	20	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
Methyl tert-butyl ether	4.7	Not Detected	17	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
Propylbenzene	1.2	Not Detected	5.8	Not Detected
Propylene	4.7	Not Detected	8.0	Not Detected
Styrene	1.2	Not Detected	5.0	Not Detected
tert-Amyl methyl ether	4.7	Not Detected	20	Not Detected
tert-Butyl alcohol	4.7	Not Detected	14	Not Detected
Tetrachloroethene	1.2	24	7.9	170
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	480	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Trichloroethene	1.2	1.7	6.3	9.2
Vinyl Acetate	4.7	Not Detected	16	Not Detected
Vinyl Bromide	4.7	Not Detected	20	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW36B-03

Lab ID#: 2107260A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072511**	**Date of Collection:**	**7/12/21 12:18:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/25/21 04:37 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	89	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072511.d
Lab Smp Id: 2107260A-04A
Inj Date : 25-JUL-2021 16:37
Operator : LD Inst ID: msd3.i
Smp Info : 200ml 34000667
Misc Info : 8.6 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 5
Dil Factor: 2.34000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	272172	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	212091				48.46- 108.46	77.93
5.284	5.270 (1.000)	49	381533				120.39- 180.39	140.18
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	878765	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	128199				0.00- 45.52	14.59
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	831853	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	435868				25.46- 85.46	52.40
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	352792	23.5542	23.554		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	170210				21.66- 81.66	48.25
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	851503	23.5255	23.526		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	97762				0.00- 41.47	11.48

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	563141			36.47- 96.47	66.13
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	491814	22.3522	22.352	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	560965			93.06- 153.06	114.06
9.601	9.601 (1.114)	176	456886			62.87- 122.87	92.90
52 2-Propanol					CAS #: 67-63-0		
3.424	3.396 (0.648)	45	47611	2.90082	6.788	80.00- 120.00	100.00
3.424	3.396 (0.648)	43	12444			0.00- 48.61	26.14
111 Trichloroethene					CAS #: 79-01-6		
6.376	6.362 (1.032)	95	7328	0.72841	1.704	80.00- 120.00	100.00
6.376	6.362 (1.032)	130	7340			74.96- 134.96	100.16
6.376	6.362 (1.032)	97	4553			34.80- 94.80	62.13
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.882 (0.914)	166	136477	10.4725	24.506	80.00- 120.00	100.00
7.882	7.874 (0.914)	129	107183			48.71- 108.71	78.54
7.882	7.874 (0.914)	131	103889			46.55- 106.55	76.12

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072511.d
Lab Smp Id: 2107260A-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.6 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	272172	2.22
108 1,4-Difluorobenze	910055	546033	1274077	878765	-3.44
153 Chlorobenzene-d5	785948	471569	1100327	831853	5.84

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:56

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-04A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.6 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.554	94.22	70-130
$ 134 Toluene-d8	25.000	23.526	94.10	70-130
$ 170 4-Bromofluorobenz	25.000	22.352	89.41	70-130

Data File: /chem/msd3.i/25JUL21.b/3072511.d

Date : 25-JUL-2021 16:37

Client ID:

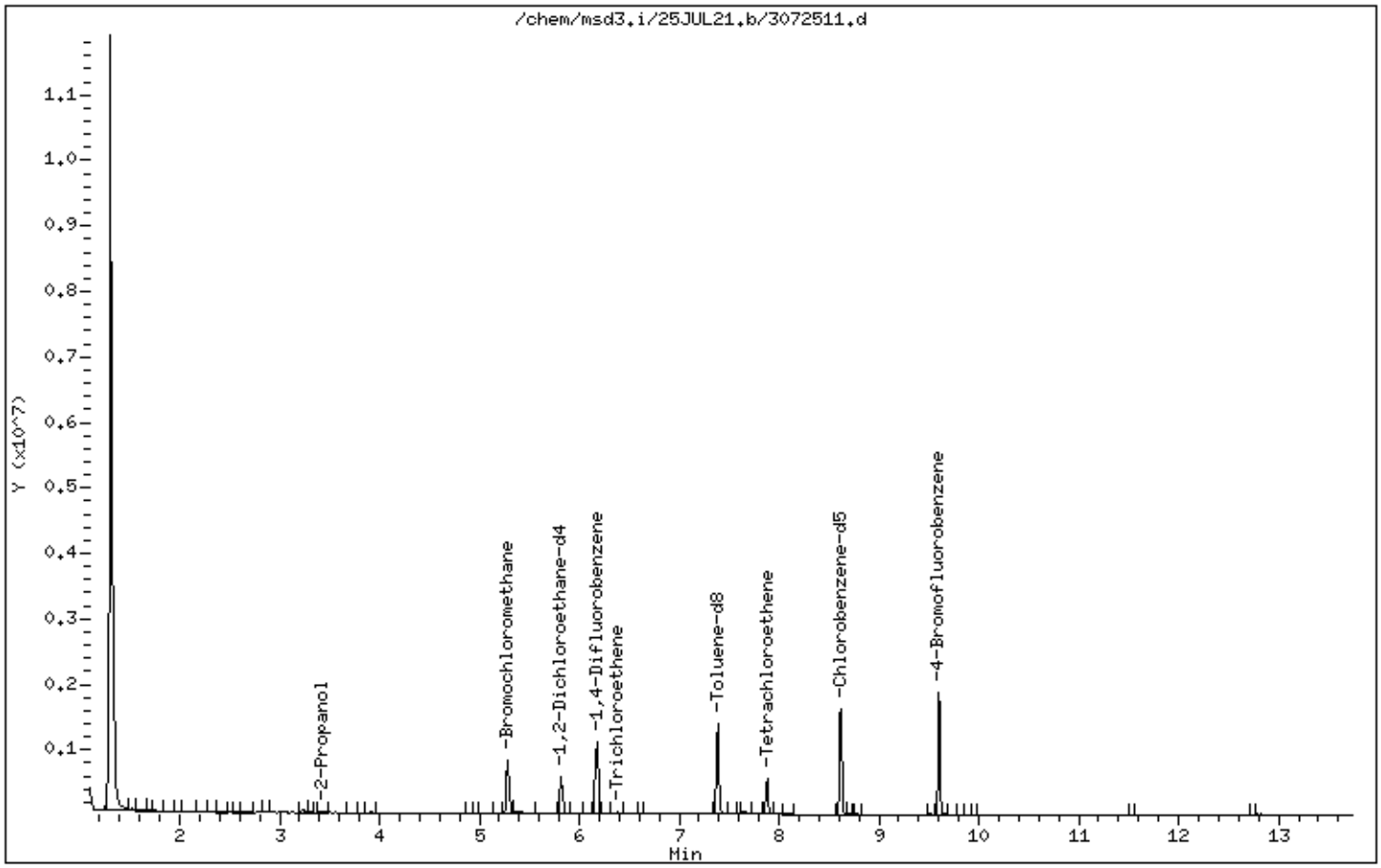
Instrument: msd3.i

Sample Info: 200ml 34000667

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072511.d

Date : 25-JUL-2021 16:37

Client ID:

Instrument: msd3.i

Sample Info: 200ml 34000667

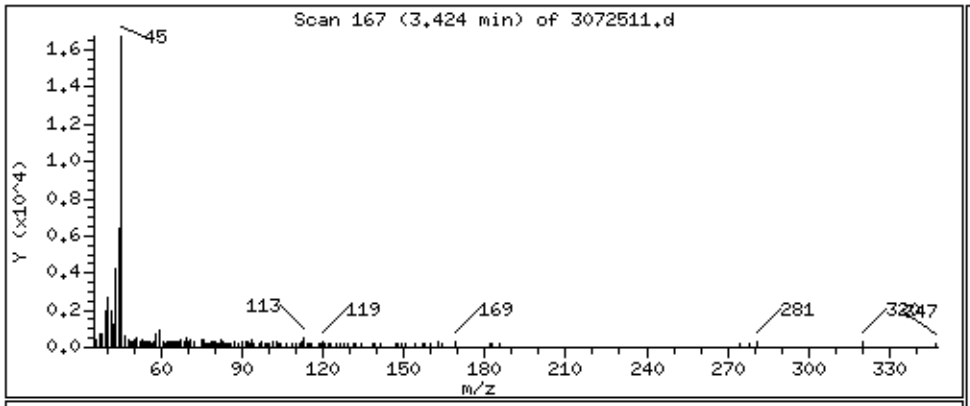
Operator: LD

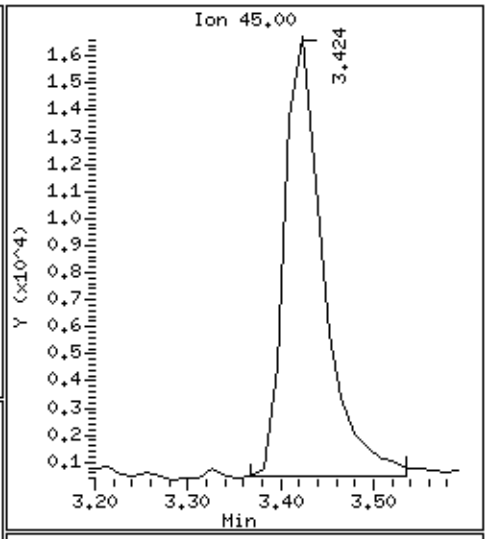
Column phase: RTX-624

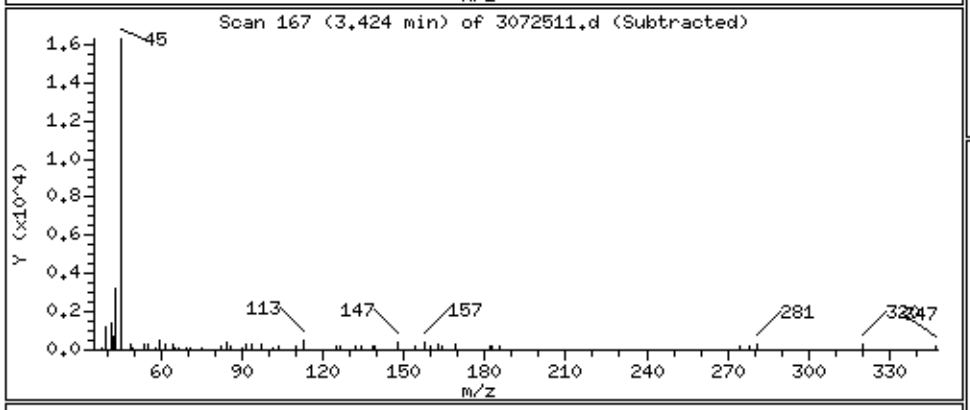
Column diameter: 0.25

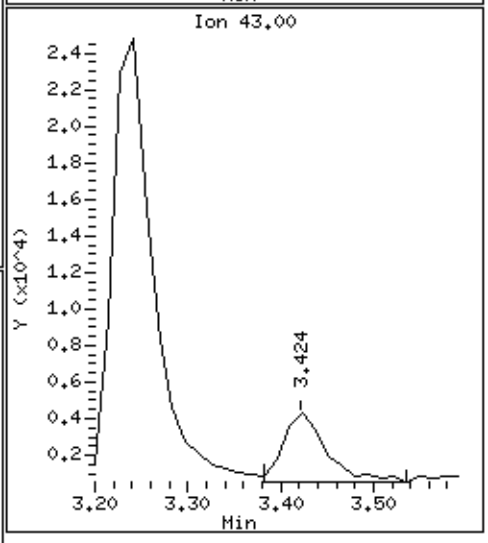
52 2-Propanol

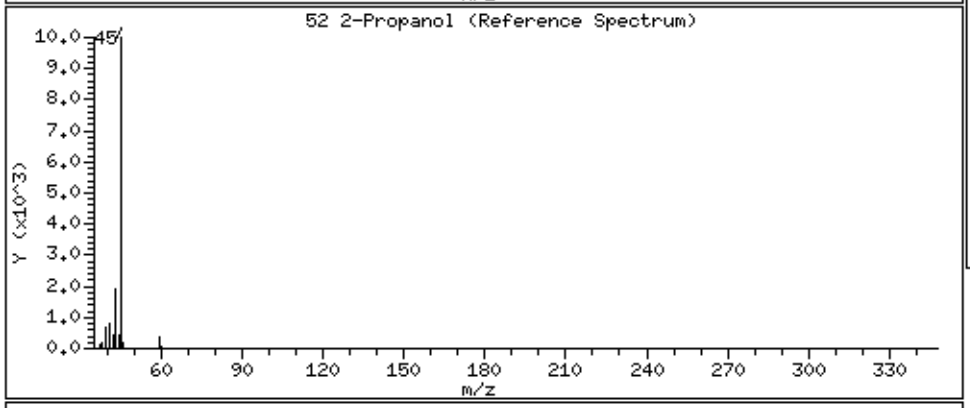
Concentration: 6.788 PPBV

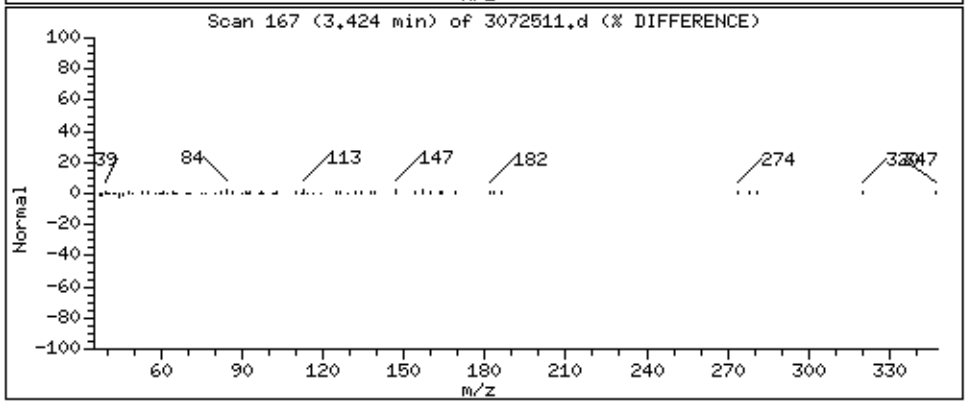












Data File: /chem/msd3.i/25JUL21.b/3072511.d

Date : 25-JUL-2021 16:37

Client ID:

Instrument: msd3.i

Sample Info: 200ml 34000667

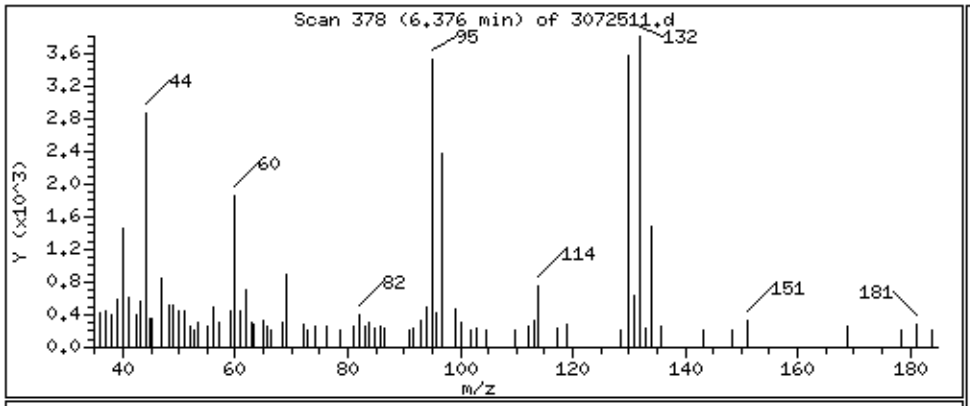
Operator: LD

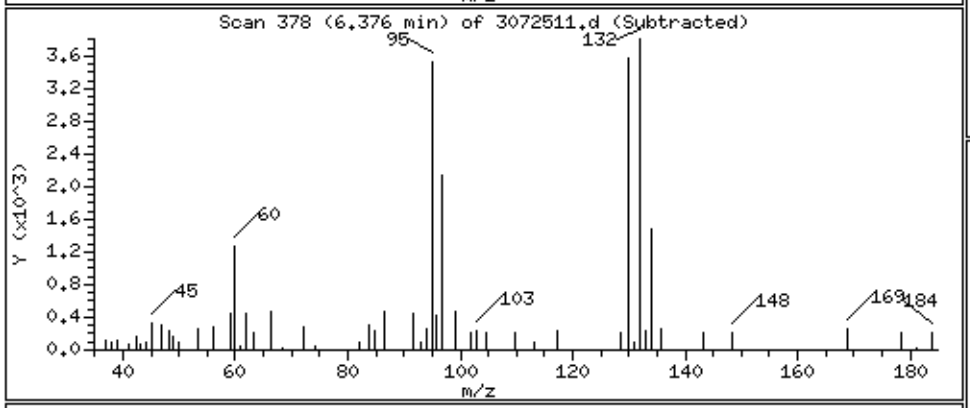
Column phase: RTX-624

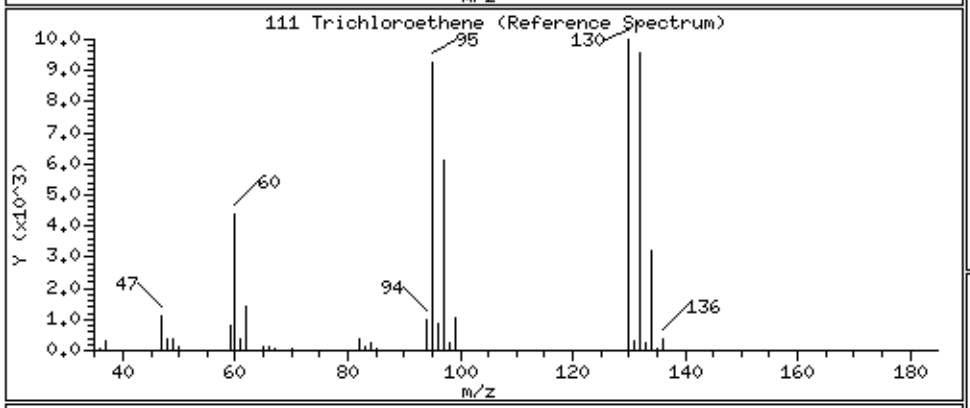
Column diameter: 0.25

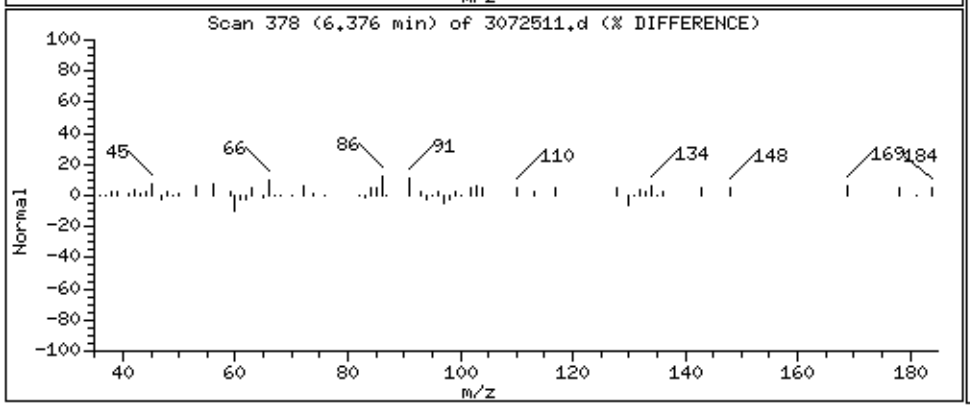
111 Trichloroethene

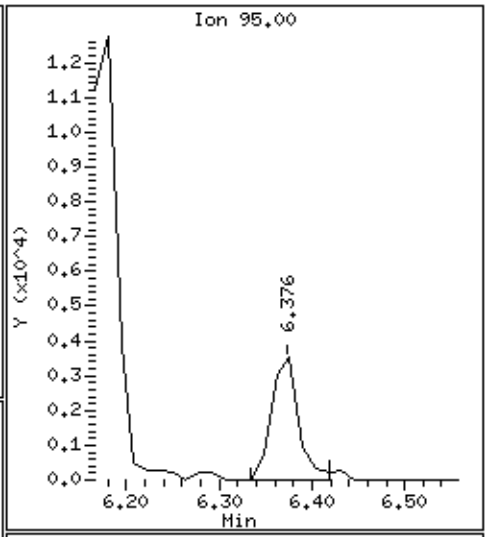
Concentration: 1.704 PPBV

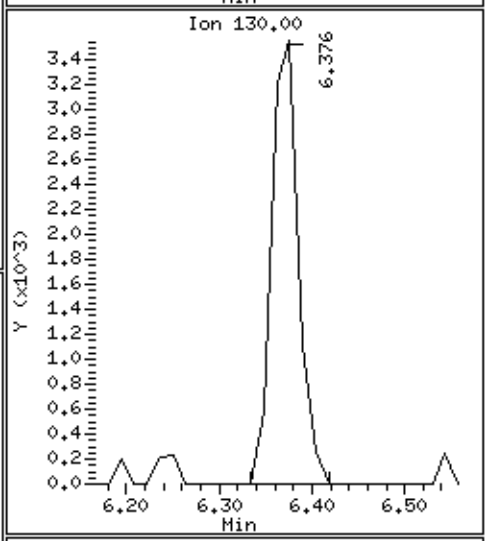


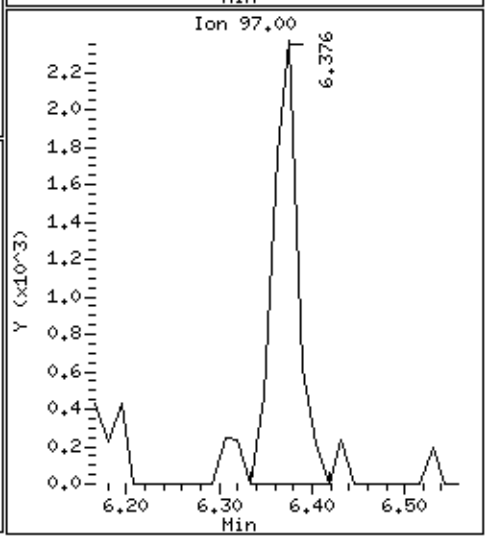












Data File: /chem/msd3.i/25JUL21.b/3072511.d

Date : 25-JUL-2021 16:37

Client ID:

Instrument: msd3.i

Sample Info: 200ml 34000667

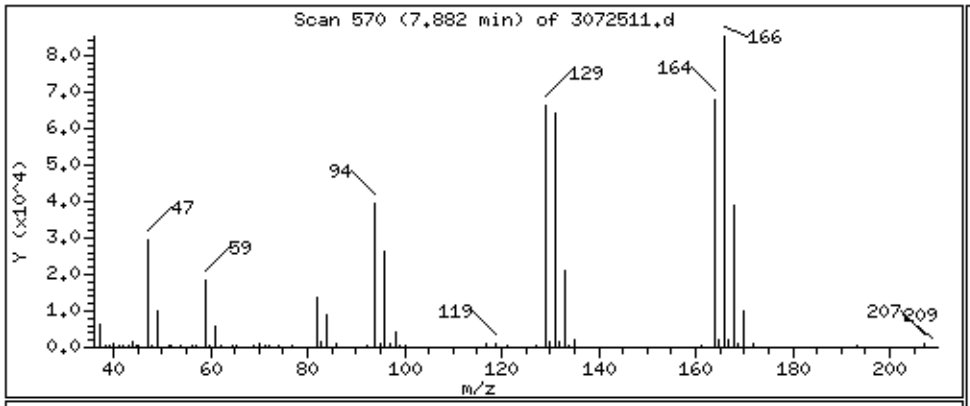
Operator: LD

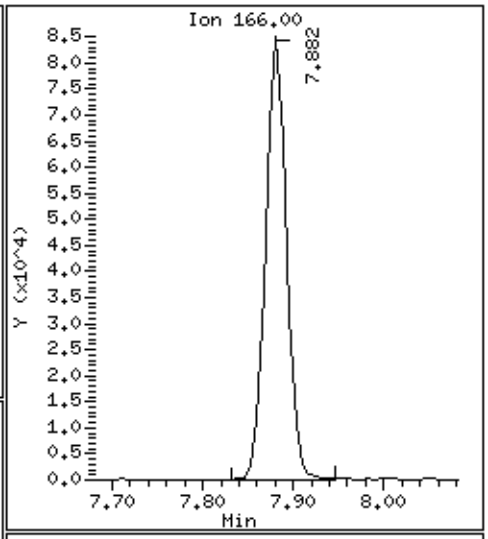
Column phase: RTX-624

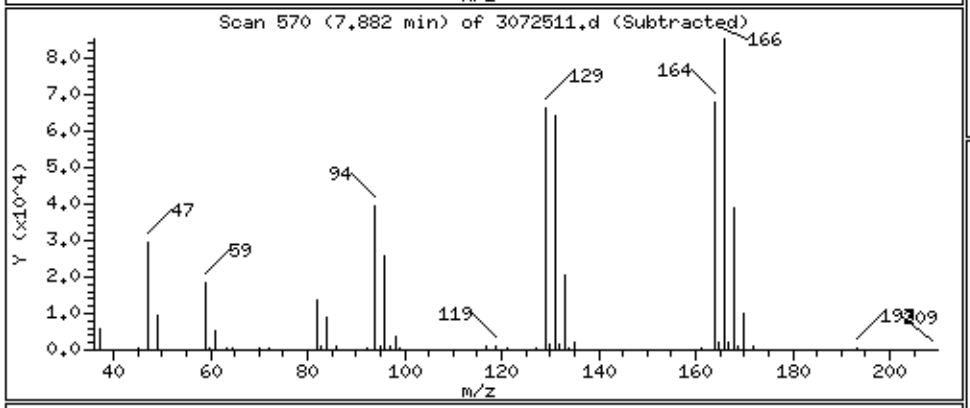
Column diameter: 0.25

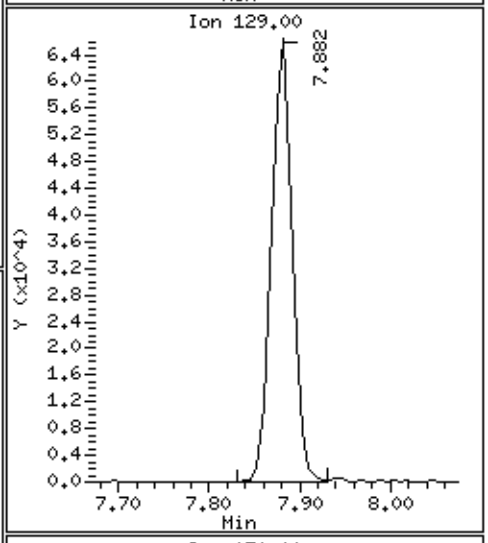
142 Tetrachloroethene

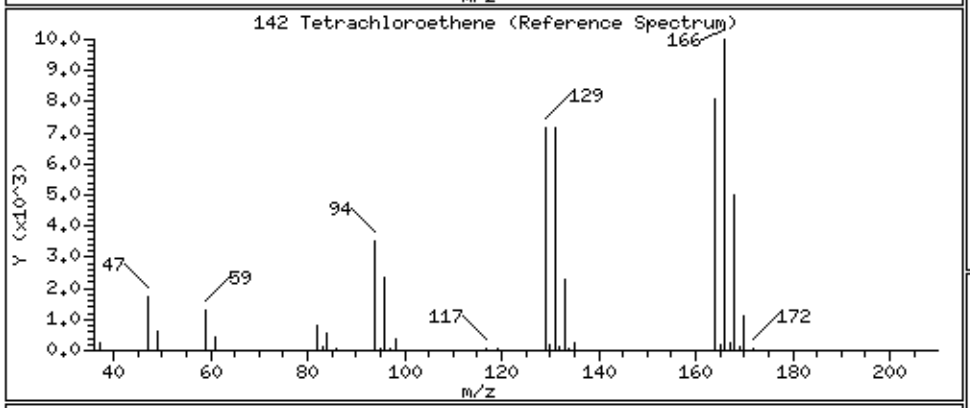
Concentration: 24.506 PPBV

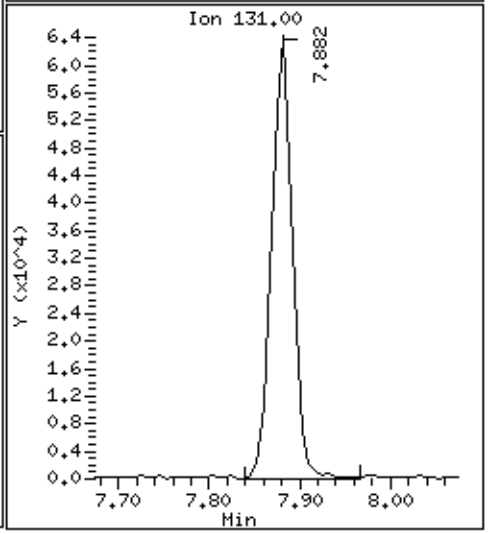


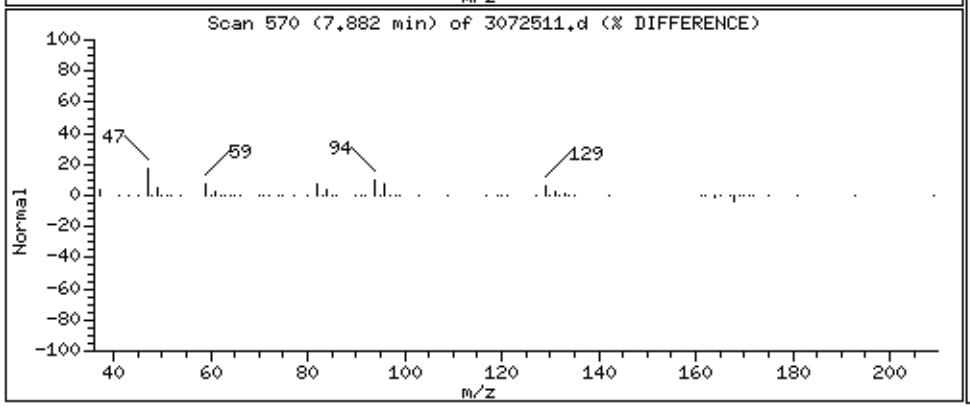












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Client Sample ID: SG-VW36A-02

Lab ID#: 2107260A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072512**	**Date of Collection: 7/12/21 1:03:00 PM**	
Dil. Factor:	**2.28**	**Date of Analysis: 7/25/21 05:06 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.6	Not Detected	31	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
1,1-Difluoroethane	4.6	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.6	Not Detected	27	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2-Dibromo-3-chloropropane	4.6	Not Detected	44	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	13	Not Detected
2-Hexanone	4.6	Not Detected	19	Not Detected
2-Propanol	4.6	Not Detected	11	Not Detected
3-Chloropropene	4.6	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Acetone	11	11	27	27
Acrolein	4.6	Not Detected	10	Not Detected
Acrylonitrile	4.6	Not Detected	9.9	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Carbon Disulfide	4.6	12	14	37
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
Chloromethane	11	Not Detected	24	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected

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Client Sample ID: SG-VW36A-02

Lab ID#: 2107260A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072512**	**Date of Collection: 7/12/21 1:03:00 PM**	
Dil. Factor:	**2.28**	**Date of Analysis: 7/25/21 05:06 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Dibromochloromethane	1.1	Not Detected	9.7	Not Detected
Dibromomethane	4.6	Not Detected	32	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Ethyl Acetate	4.6	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
Ethyl-tert-butyl ether	4.6	Not Detected	19	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Freon 12	1.1	Not Detected	5.6	Not Detected
Freon 113	1.1	Not Detected	8.7	Not Detected
Freon 114	1.1	Not Detected	8.0	Not Detected
Freon 134a	4.6	Not Detected	19	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected
Hexachloroethane	4.6	Not Detected	44	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Isopropyl ether	4.6	Not Detected	19	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
Methyl tert-butyl ether	4.6	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
Propylene	4.6	Not Detected	7.8	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
tert-Amyl methyl ether	4.6	Not Detected	19	Not Detected
tert-Butyl alcohol	4.6	Not Detected	14	Not Detected
Tetrachloroethene	1.1	34	7.7	230
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	470	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Vinyl Acetate	4.6	Not Detected	16	Not Detected
Vinyl Bromide	4.6	Not Detected	20	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW36A-02

Lab ID#: 2107260A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072512**	**Date of Collection:**	**7/12/21 1:03:00 PM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**7/25/21 05:06 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072512.d
Lab Smp Id: 2107260A-05A
Inj Date : 25-JUL-2021 17:06
Operator : LD Inst ID: msd3.i
Smp Info : 200ml N2576
Misc Info : 8 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 6
Dil Factor: 2.28000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.270	5.284 (1.000)	130	313066	25.0000			80.00- 120.00	100.00
5.270	5.284 (1.000)	128	250460				48.46- 108.46	80.00
5.270	5.270 (1.000)	49	448960				120.39- 180.39	143.41
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.166	6.166 (1.000)	114	1057878	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	152407				0.00- 45.52	14.41
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.612 (1.000)	117	949911	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	492853				25.46- 85.46	51.88
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.104)	65	415017	24.0892	24.089		80.00- 120.00	100.00
5.816	5.816 (1.104)	67	197466				21.66- 81.66	47.58
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.380	7.387 (1.197)	98	1051703	24.1370	24.137		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	115905				0.00- 41.47	11.02

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.380	7.387 (1.197)	100	689946			36.47- 96.47	65.60
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	591387	23.5372	23.537	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	672161			93.06- 153.06	113.66
9.601	9.601 (1.115)	176	548474			62.87- 122.87	92.74
47 Acetone					CAS #: 67-64-1		
3.242	3.214 (0.615)	58	26187	4.98852	11.374	80.00- 120.00	100.00(a)
3.242	3.214 (0.615)	43	81401			299.66- 359.66	310.84
48 Carbon Disulfide					CAS #: 75-15-0		
3.284	3.298 (0.623)	76	124223	5.25507	11.982	80.00- 120.00	100.00
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.882 (0.914)	166	220415	14.8114	33.770	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	168559			48.71- 108.71	76.47
7.874	7.874 (0.914)	131	161611			46.55- 106.55	73.32

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072512.d
Lab Smp Id: 2107260A-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	313066	17.58
108 1,4-Difluorobenze	910055	546033	1274077	1057878	16.24
153 Chlorobenzene-d5	785948	471569	1100327	949911	20.86

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.27
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	-0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:58

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-05A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.089	96.36	70-130
$ 134 Toluene-d8	25.000	24.137	96.55	70-130
$ 170 4-Bromofluorobenz	25.000	23.537	94.15	70-130

Data File: /chem/msd3.i/25JUL21.b/3072512.d

Date : 25-JUL-2021 17:06

Client ID:

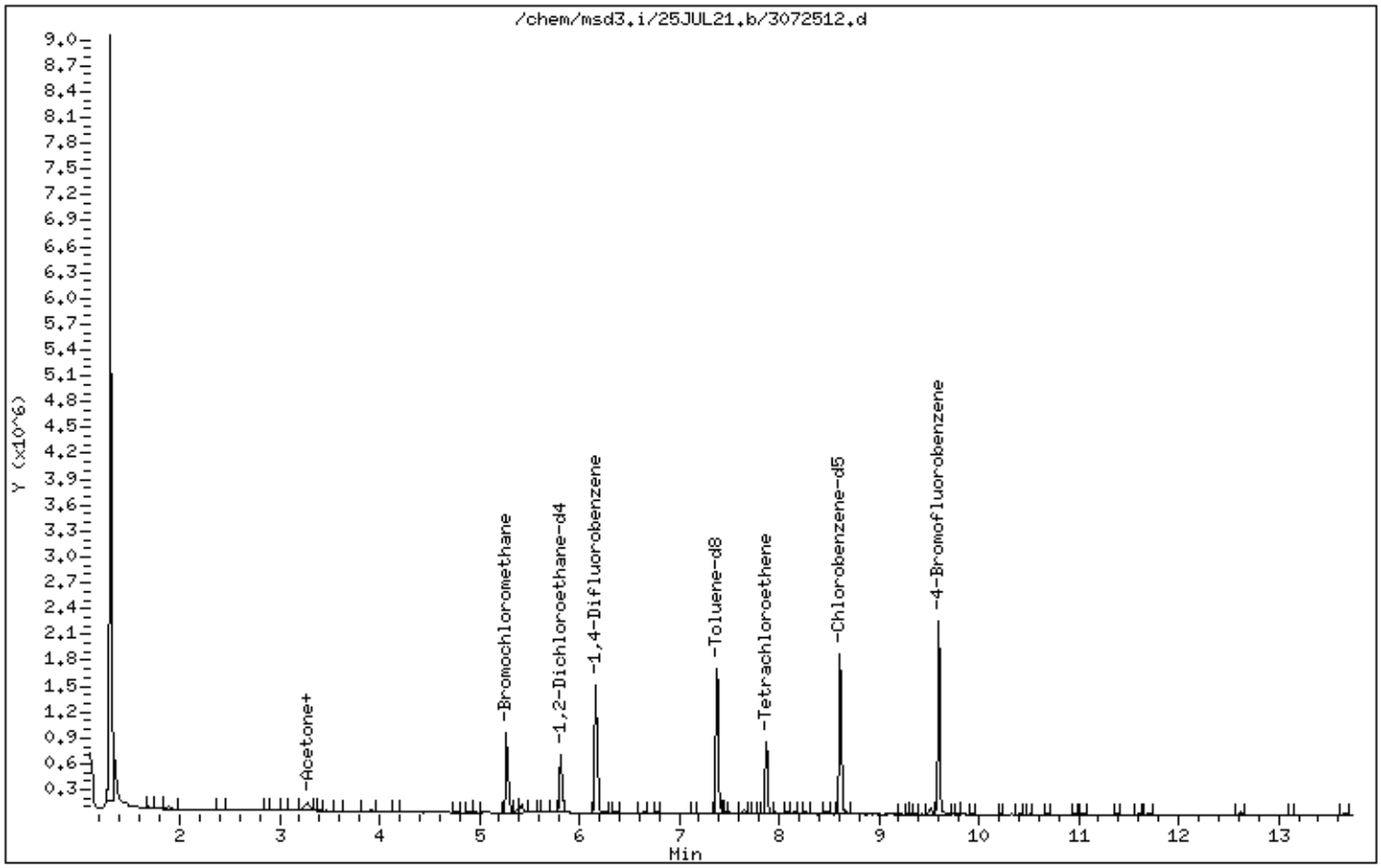
Instrument: msd3.i

Sample Info: 200ml N2576

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072512.d

Date : 25-JUL-2021 17:06

Client ID:

Instrument: msd3.i

Sample Info: 200ml N2576

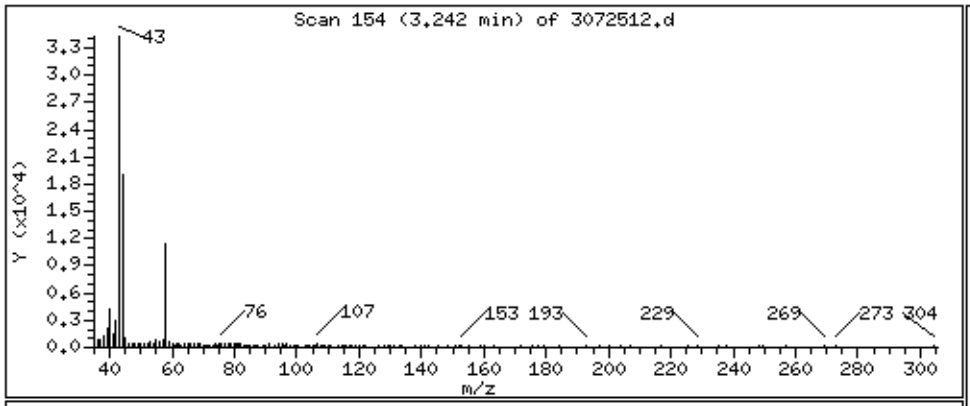
Operator: LD

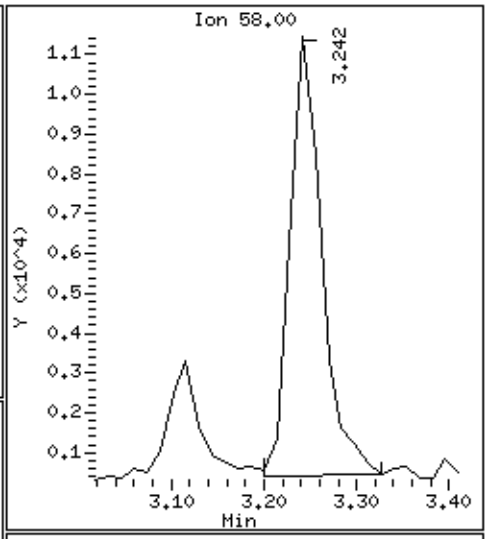
Column phase: RTX-624

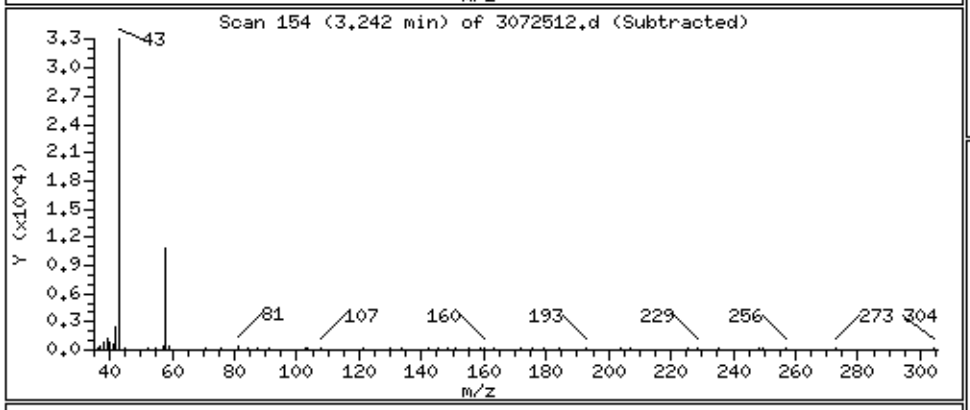
Column diameter: 0.25

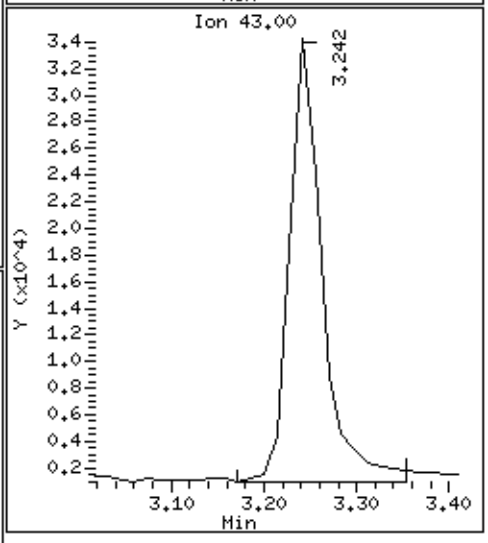
47 Acetone

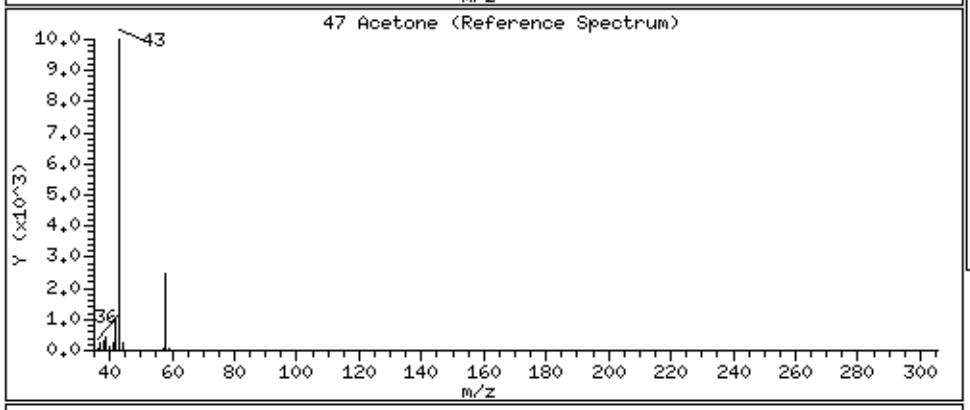
Concentration: 11.374 PPBV

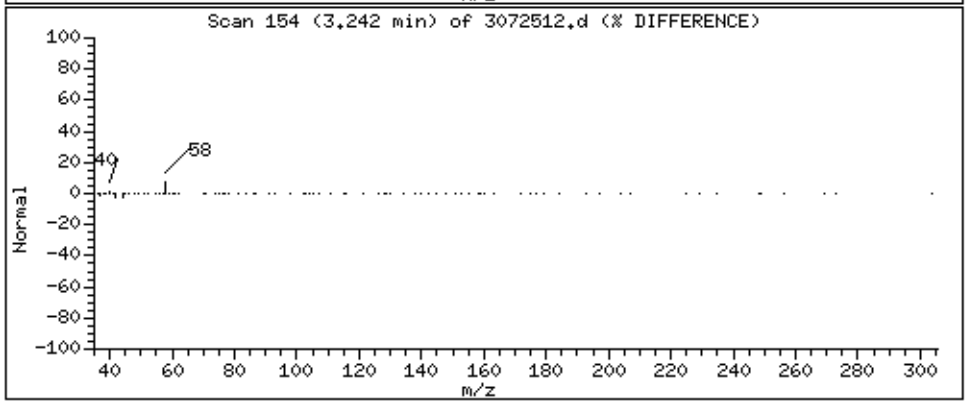












Data File: /chem/msd3.i/25JUL21.b/3072512.d

Date : 25-JUL-2021 17:06

Client ID:

Instrument: msd3.i

Sample Info: 200ml N2576

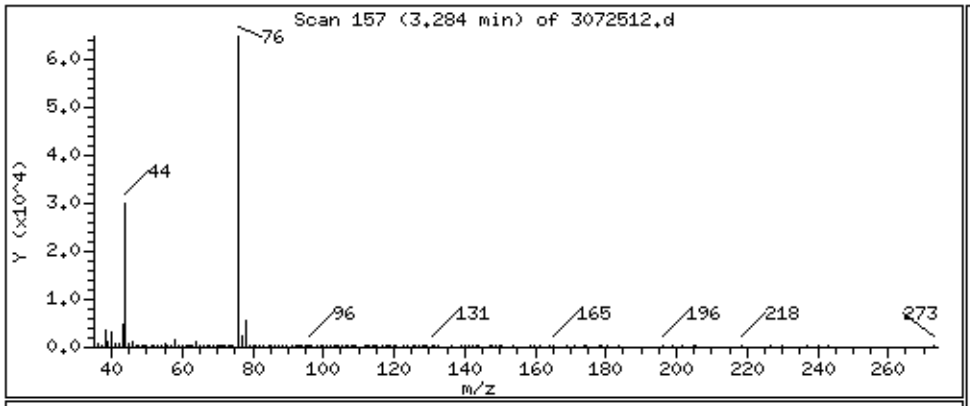
Operator: LD

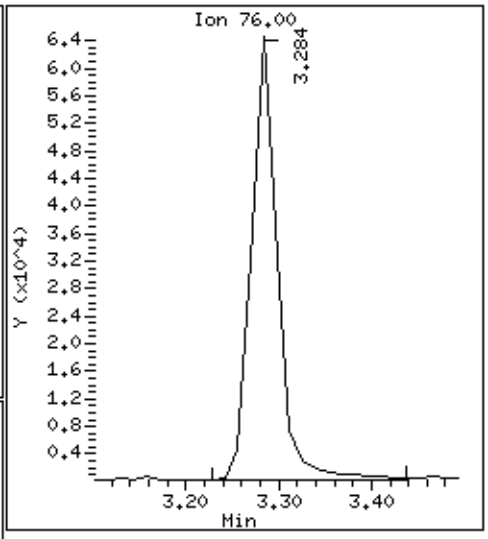
Column phase: RTX-624

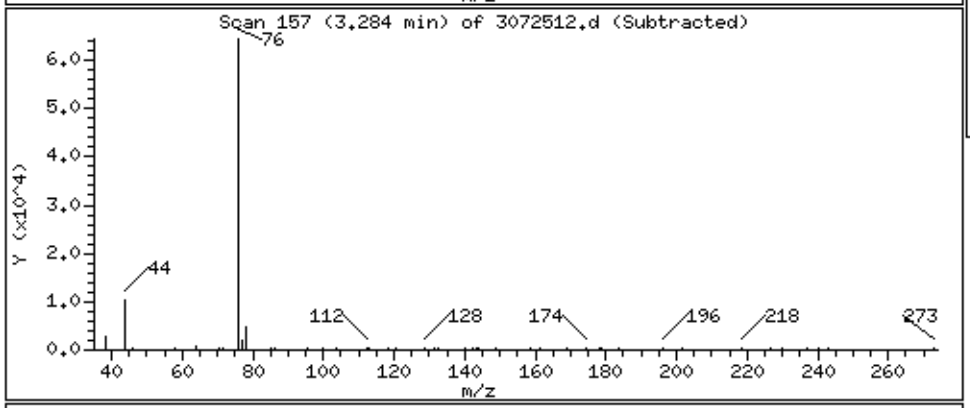
Column diameter: 0.25

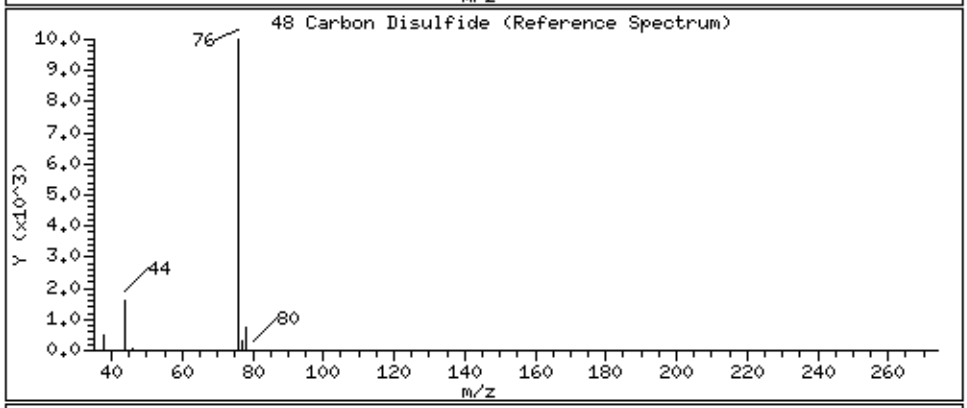
48 Carbon Disulfide

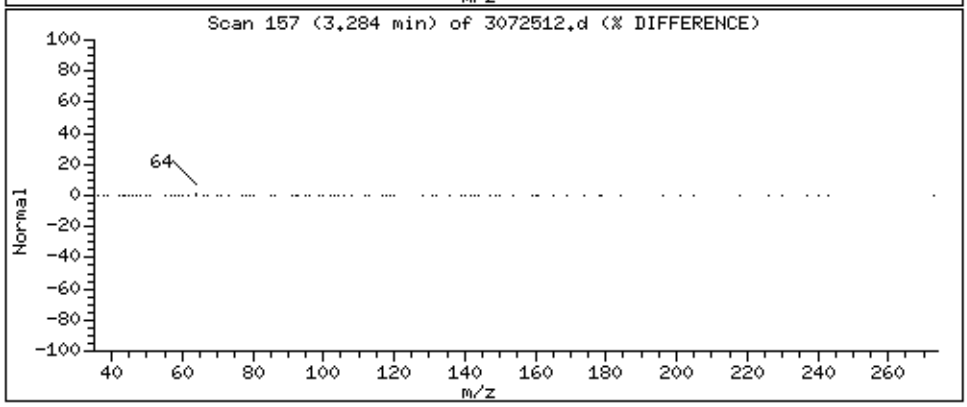
Concentration: 11.982 PPBV











Data File: /chem/msd3.i/25JUL21.b/3072512.d

Date : 25-JUL-2021 17:06

Client ID:

Instrument: msd3.i

Sample Info: 200ml N2576

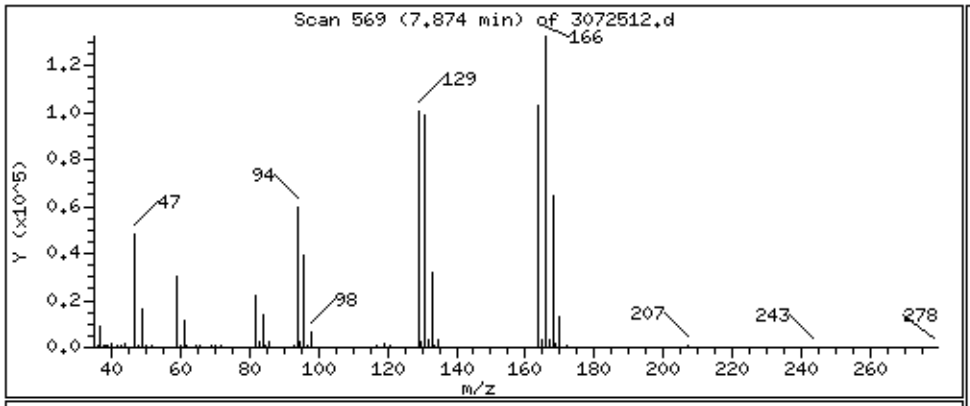
Operator: LD

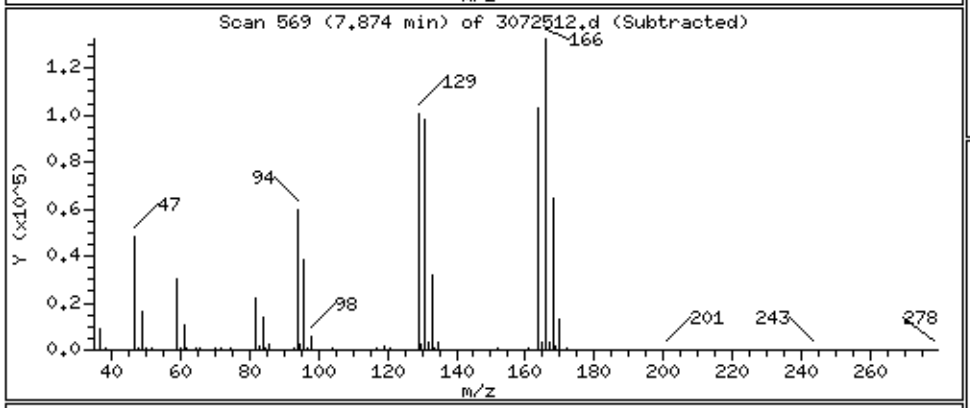
Column phase: RTX-624

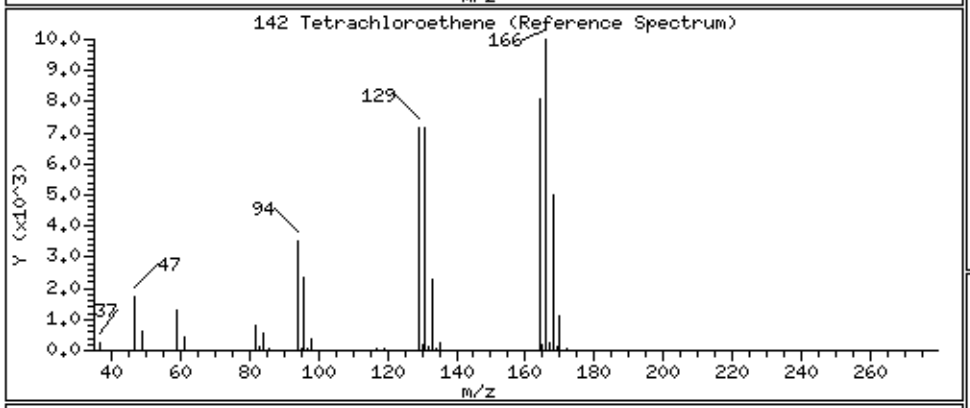
Column diameter: 0.25

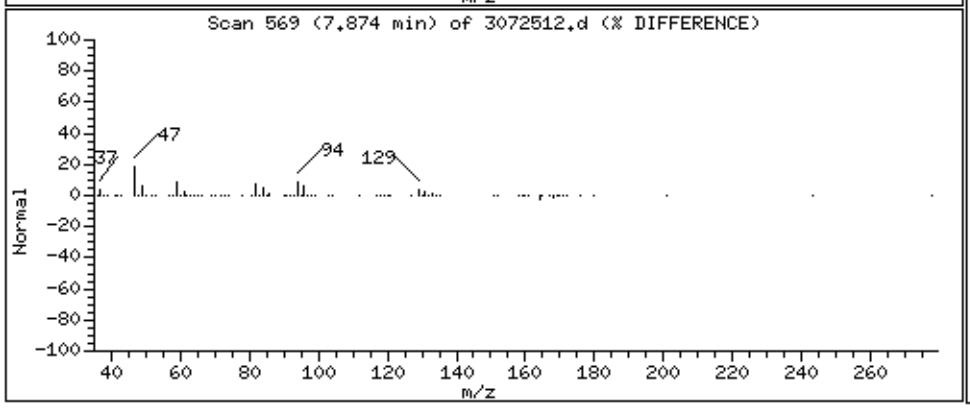
142 Tetrachloroethene

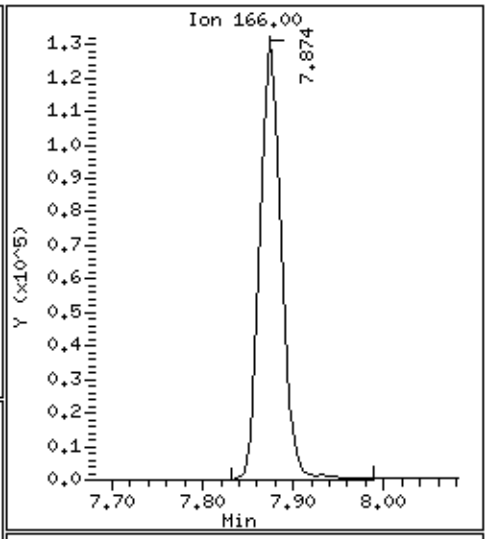
Concentration: 33.770 PPBV

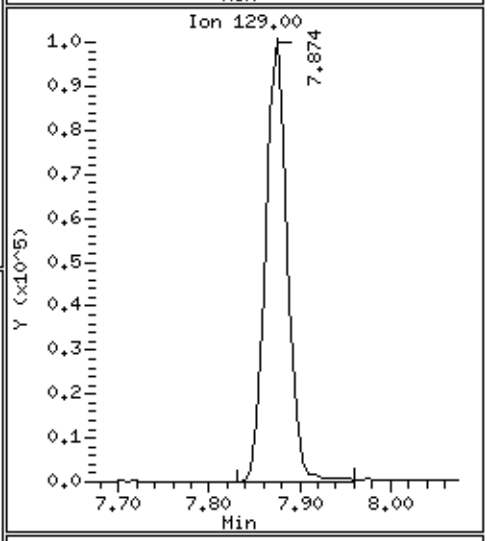


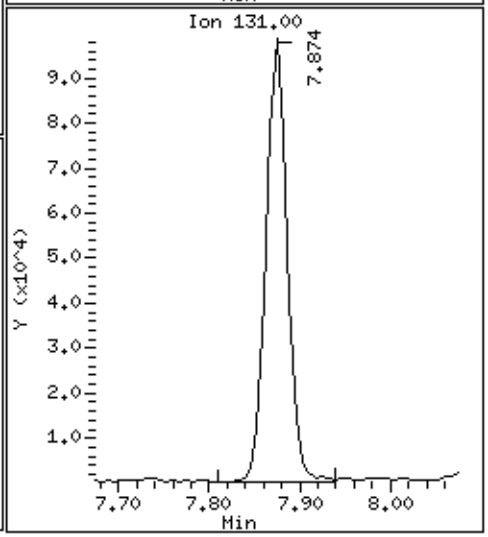












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Client Sample ID: SG-VW51B-02

Lab ID#: 2107260A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072513**	**Date of Collection:**	**7/12/21 1:42:00 PM**
Dil. Factor:	**2.18**	**Date of Analysis:**	**7/25/21 05:36 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.5	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	32	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
2-Hexanone	4.4	Not Detected	18	Not Detected
2-Propanol	4.4	Not Detected	11	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Acetone	11	13	26	30
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected

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Client Sample ID: SG-VW51B-02

Lab ID#: 2107260A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072513**	**Date of Collection:**	**7/12/21 1:42:00 PM**
Dil. Factor:	**2.18**	**Date of Analysis:**	**7/25/21 05:36 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Dibromochloromethane	1.1	Not Detected	9.3	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Hexachlorobutadiene	4.4	Not Detected	46	Not Detected
Hexachloroethane	4.4	Not Detected	42	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
Iodomethane	11	Not Detected	63	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
Propylene	4.4	Not Detected	7.5	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected
Tetrachloroethene	1.1	12	7.4	78
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW51B-02

Lab ID#: 2107260A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072513**	**Date of Collection:**	**7/12/21 1:42:00 PM**
Dil. Factor:	**2.18**	**Date of Analysis:**	**7/25/21 05:36 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072513.d
Lab Smp Id: 2107260A-06A
Inj Date : 25-JUL-2021 17:36
Operator : LD Inst ID: msd3.i
Smp Info : 200ml 1358
Misc Info : 6.9 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 7
Dil Factor: 2.18000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	287693	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	225808				48.46- 108.46	78.49
5.284	5.270 (1.000)	49	411379				120.39- 180.39	142.99
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	948127	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	141282				0.00- 45.52	14.90
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	852244	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	441950				25.46- 85.46	51.86
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	386227	24.3953	24.395		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	185118				21.66- 81.66	47.93
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	923587	23.6503	23.650		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	103935				0.00- 41.47	11.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	614078			36.47- 96.47	66.49
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	527748	23.4115	23.411	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	603452			93.06- 153.06	114.34
9.601	9.601 (1.114)	176	493671			62.87- 122.87	93.54
47 Acetone					CAS #: 67-64-1		
3.228	3.214 (0.611)	58	28122	5.82961	12.708	80.00- 120.00	100.00
3.228	3.214 (0.611)	43	97281			299.66- 359.66	345.92
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.882 (0.914)	166	70752	5.29923	11.552	80.00- 120.00	100.00
7.882	7.874 (0.914)	129	54581			48.71- 108.71	77.14
7.882	7.874 (0.914)	131	52792			46.55- 106.55	74.62

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072513.d
Lab Smp Id: 2107260A-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	287693	8.05
108 1,4-Difluorobenze	910055	546033	1274077	948127	4.18
153 Chlorobenzene-d5	785948	471569	1100327	852244	8.44

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:09

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-06A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.395	97.58	70-130
$ 134 Toluene-d8	25.000	23.650	94.60	70-130
$ 170 4-Bromofluorobenz	25.000	23.411	93.65	70-130

Data File: /chem/msd3.i/25JUL21.b/3072513.d

Date : 25-JUL-2021 17:36

Client ID:

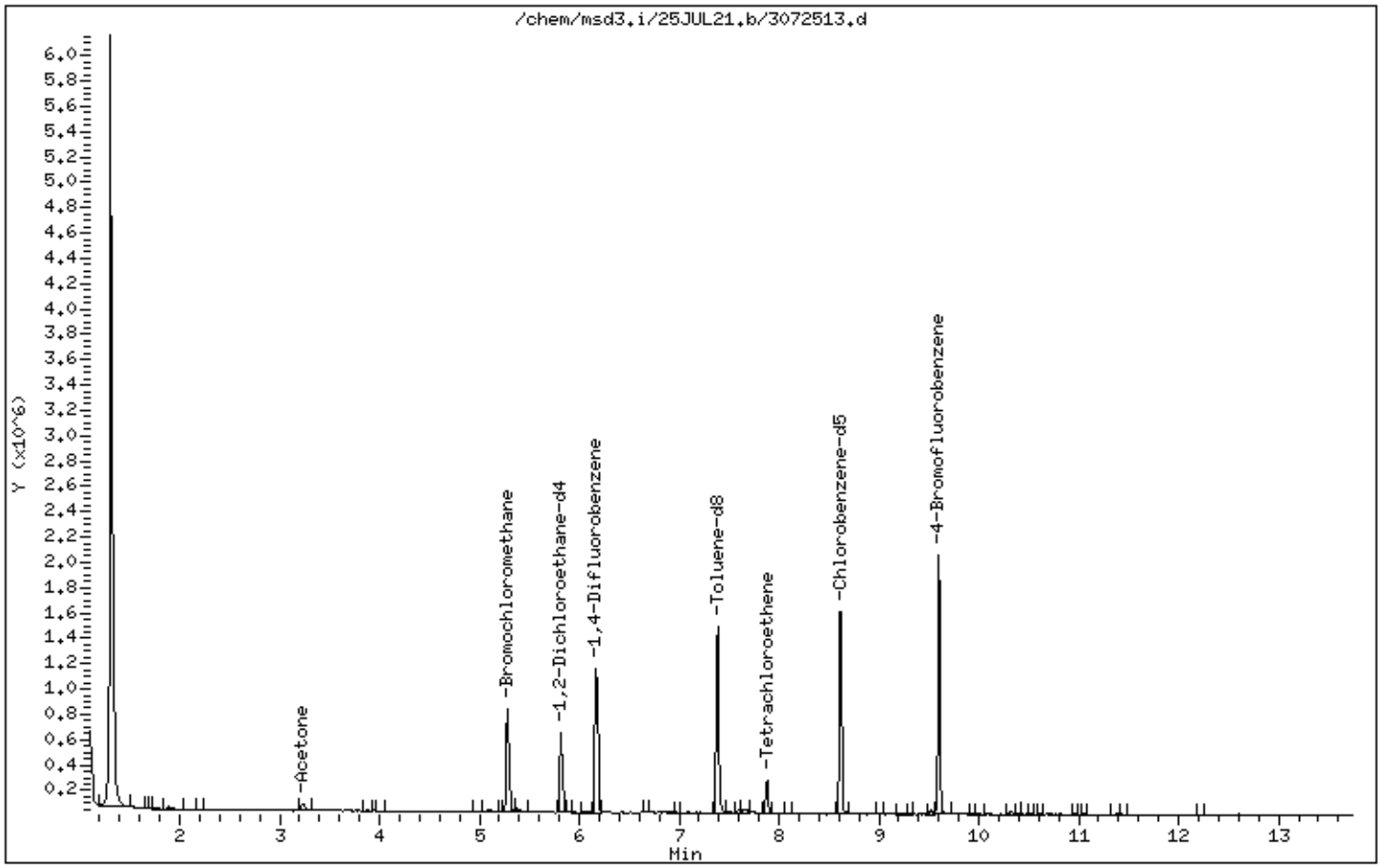
Instrument: msd3.i

Sample Info: 200ml 1358

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072513.d

Date : 25-JUL-2021 17:36

Client ID:

Instrument: msd3.i

Sample Info: 200ml 1358

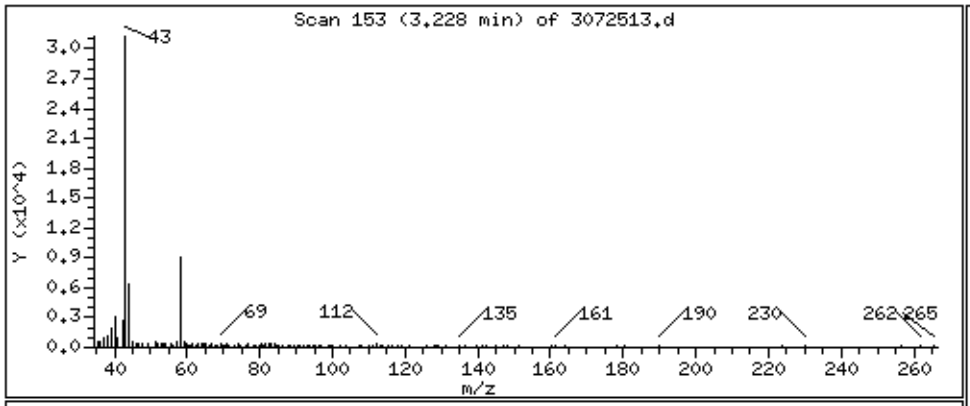
Operator: LD

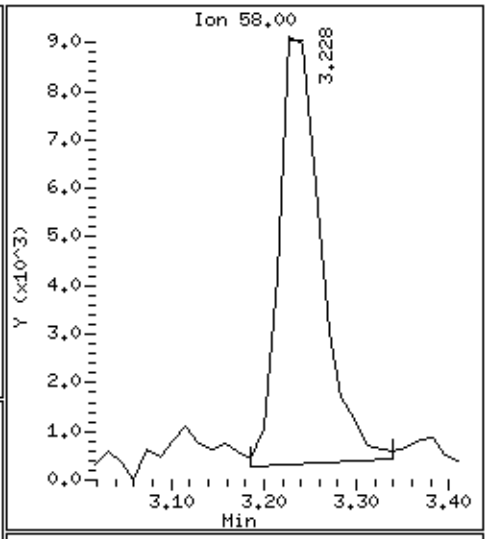
Column phase: RTX-624

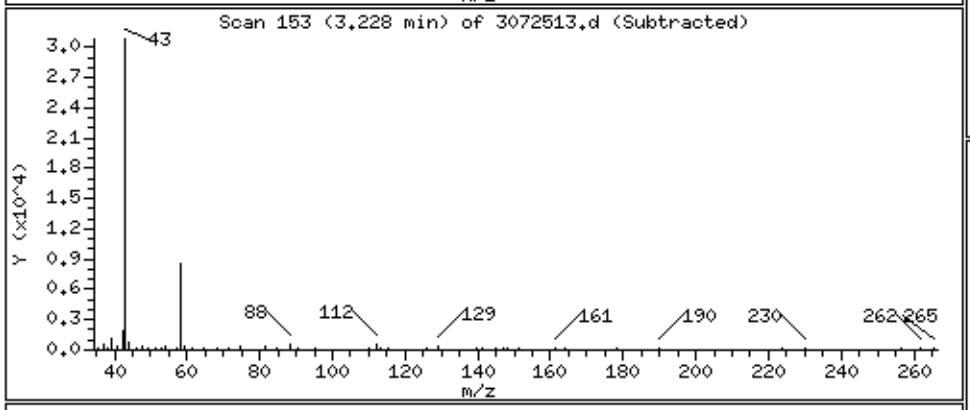
Column diameter: 0.25

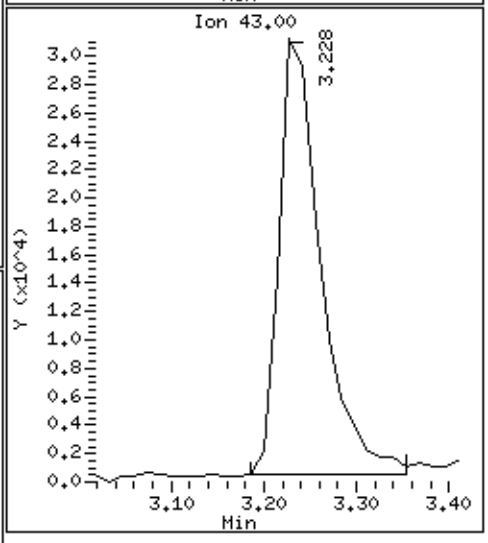
47 Acetone

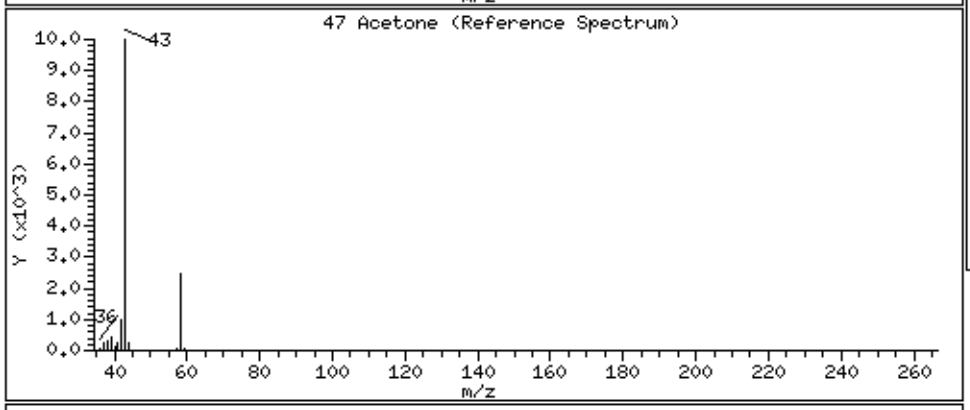
Concentration: 12.708 PPBV

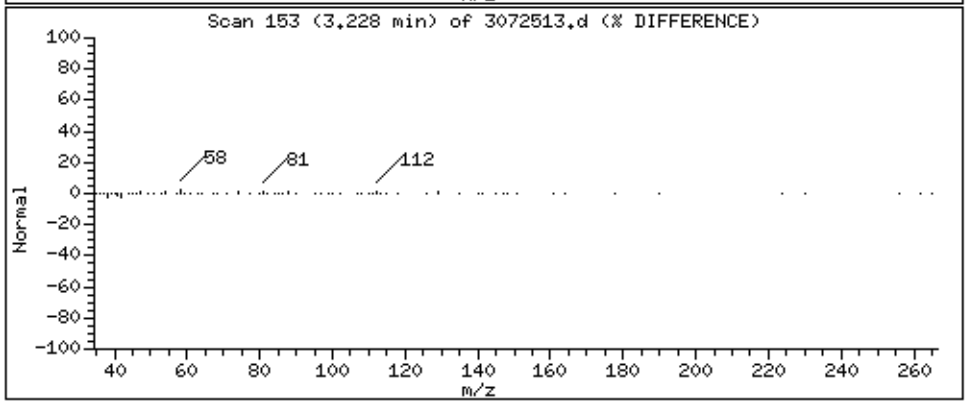












Data File: /chem/msd3.i/25JUL21.b/3072513.d

Date : 25-JUL-2021 17:36

Client ID:

Instrument: msd3.i

Sample Info: 200ml 1358

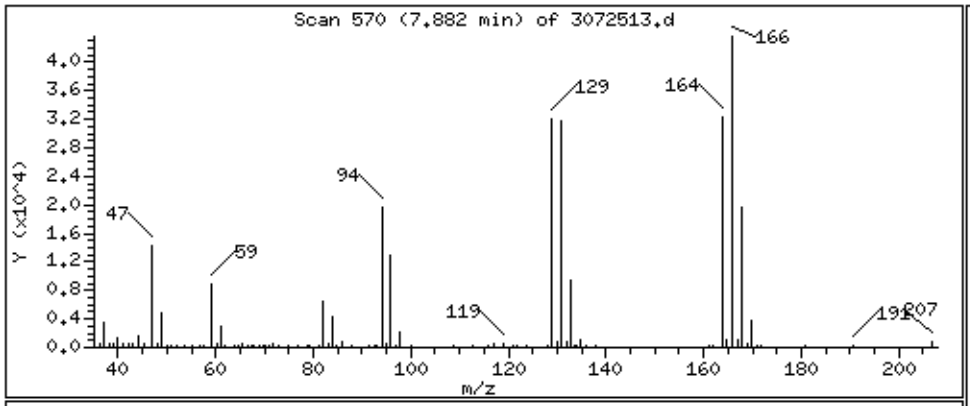
Operator: LD

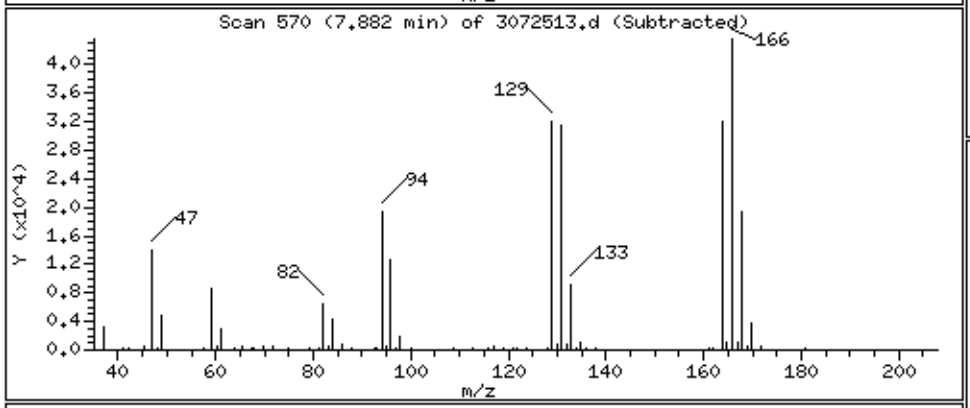
Column phase: RTX-624

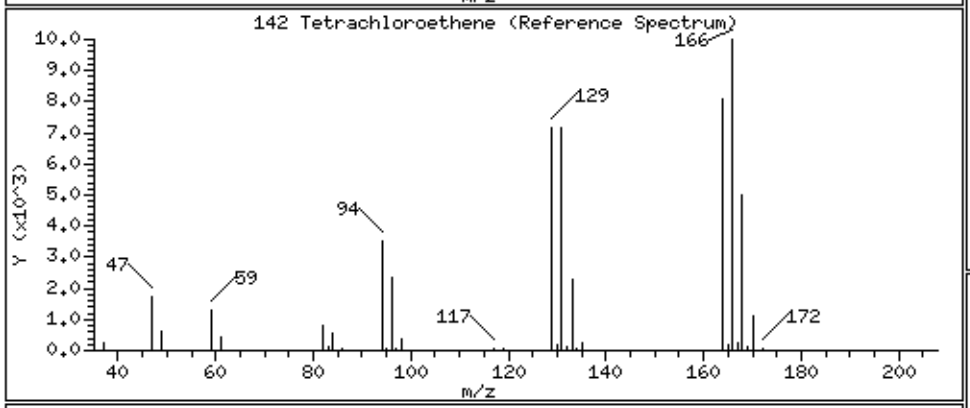
Column diameter: 0.25

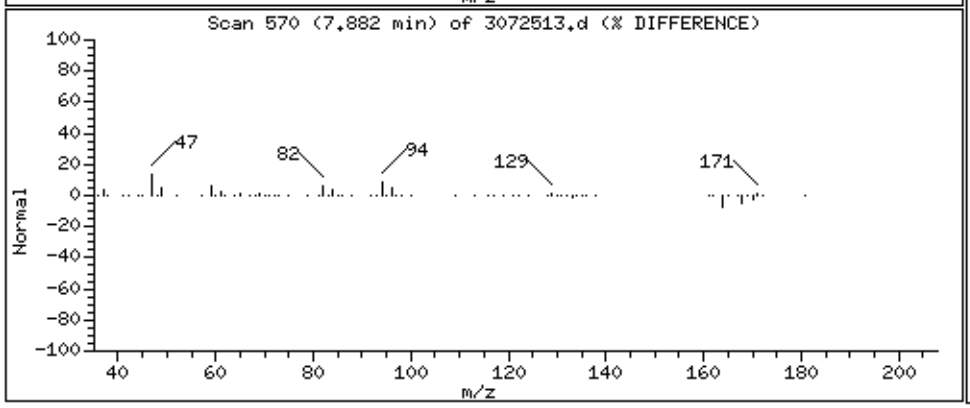
142 Tetrachloroethene

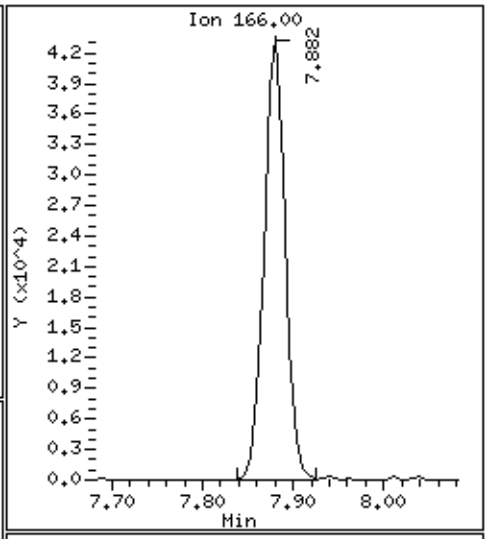
Concentration: 11.552 PPBV

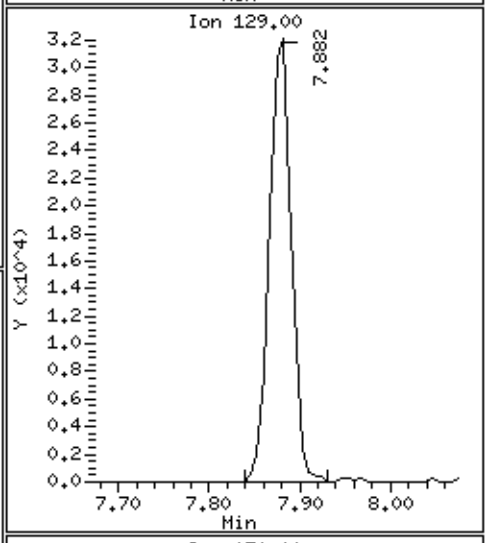


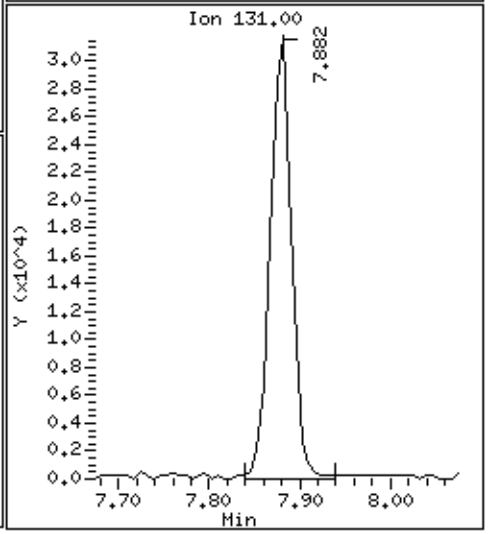












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Client Sample ID: SG-VW51A-02

Lab ID#: 2107260A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072514**	**Date of Collection: 7/12/21 2:28:00 PM**	
Dil. Factor:	**2.32**	**Date of Analysis: 7/25/21 06:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.6	Not Detected	32	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.3	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
1,1-Difluoroethane	4.6	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.6	Not Detected	28	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,2-Dibromo-3-chloropropane	4.6	Not Detected	45	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	8.9	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dioxane	4.6	Not Detected	17	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	14	Not Detected
2-Hexanone	4.6	Not Detected	19	Not Detected
2-Propanol	4.6	4.7	11	12
3-Chloropropene	4.6	Not Detected	14	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.7	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	28	Not Detected
Acrolein	4.6	Not Detected	11	Not Detected
Acrylonitrile	4.6	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Bromomethane	12	Not Detected	45	Not Detected
Carbon Disulfide	4.6	Not Detected	14	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.3	Not Detected
Chlorobenzene	1.2	Not Detected	5.3	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Chloromethane	12	Not Detected	24	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected

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Client Sample ID: SG-VW51A-02

Lab ID#: 2107260A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072514**	**Date of Collection: 7/12/21 2:28:00 PM**	
Dil. Factor:	**2.32**	**Date of Analysis: 7/25/21 06:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Cumene	1.2	Not Detected	5.7	Not Detected
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Dibromochloromethane	1.2	Not Detected	9.9	Not Detected
Dibromomethane	4.6	Not Detected	33	Not Detected
Ethanol	12	Not Detected	22	Not Detected
Ethyl Acetate	4.6	Not Detected	17	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
Ethyl-tert-butyl ether	4.6	Not Detected	19	Not Detected
Freon 11	1.2	Not Detected	6.5	Not Detected
Freon 12	1.2	Not Detected	5.7	Not Detected
Freon 113	1.2	Not Detected	8.9	Not Detected
Freon 114	1.2	Not Detected	8.1	Not Detected
Freon 134a	4.6	Not Detected	19	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected
Hexachloroethane	4.6	Not Detected	45	Not Detected
Hexane	1.2	Not Detected	4.1	Not Detected
Iodomethane	12	Not Detected	67	Not Detected
Isopropyl ether	4.6	Not Detected	19	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
Methyl tert-butyl ether	4.6	Not Detected	17	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
Propylbenzene	1.2	Not Detected	5.7	Not Detected
Propylene	4.6	Not Detected	8.0	Not Detected
Styrene	1.2	Not Detected	4.9	Not Detected
tert-Amyl methyl ether	4.6	Not Detected	19	Not Detected
tert-Butyl alcohol	4.6	Not Detected	14	Not Detected
Tetrachloroethene	1.2	18	7.9	120
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	470	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
Vinyl Acetate	4.6	Not Detected	16	Not Detected
Vinyl Bromide	4.6	Not Detected	20	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW51A-02

Lab ID#: 2107260A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072514**	**Date of Collection:**	**7/12/21 2:28:00 PM**
Dil. Factor:	**2.32**	**Date of Analysis:**	**7/25/21 06:05 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	92	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072514.d
Lab Smp Id: 2107260A-07A
Inj Date : 25-JUL-2021 18:05
Operator : LD Inst ID: msd3.i
Smp Info : 200ml N5539
Misc Info : 8.4 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 9
Dil Factor: 2.32000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	254697	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	198067				48.46- 108.46	77.77
5.270	5.270 (1.000)	49	348090				120.39- 180.39	136.67
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.166 (1.000)	114	802650	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	117054				0.00- 45.52	14.58
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	752503	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	388363				25.46- 85.46	51.61
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	325290	23.2081	23.208		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	156764				21.66- 81.66	48.19
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	830148	25.1105	25.110		80.00- 120.00	100.00
7.387	7.387 (1.198)	70	91588				0.00- 41.47	11.03

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	541486			36.47- 96.47	65.23
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	460252	23.1235	23.124	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	521978			93.06- 153.06	113.41
9.601	9.601 (1.114)	176	424659			62.87- 122.87	92.27
52 2-Propanol					CAS #: 67-63-0		
3.465	3.396 (0.656)	45	30996	2.01808	4.682	80.00- 120.00	100.00
3.465	3.396 (0.656)	43	6573			0.00- 48.61	21.21
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.882 (0.914)	166	89929	7.62833	17.698	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	72391			48.71- 108.71	80.50
7.874	7.874 (0.914)	131	68634			46.55- 106.55	76.32

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072514.d
Lab Smp Id: 2107260A-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.4 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	254697	-4.34
108 1,4-Difluorobenze	910055	546033	1274077	802650	-11.80
153 Chlorobenzene-d5	785948	471569	1100327	752503	-4.26

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	-0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:07

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-07A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.4 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.208	92.83	70-130
$ 134 Toluene-d8	25.000	25.110	100.44	70-130
$ 170 4-Bromofluorobenz	25.000	23.124	92.49	70-130

Data File: /chem/msd3.i/25JUL21.b/3072514.d

Date : 25-JUL-2021 18:05

Client ID:

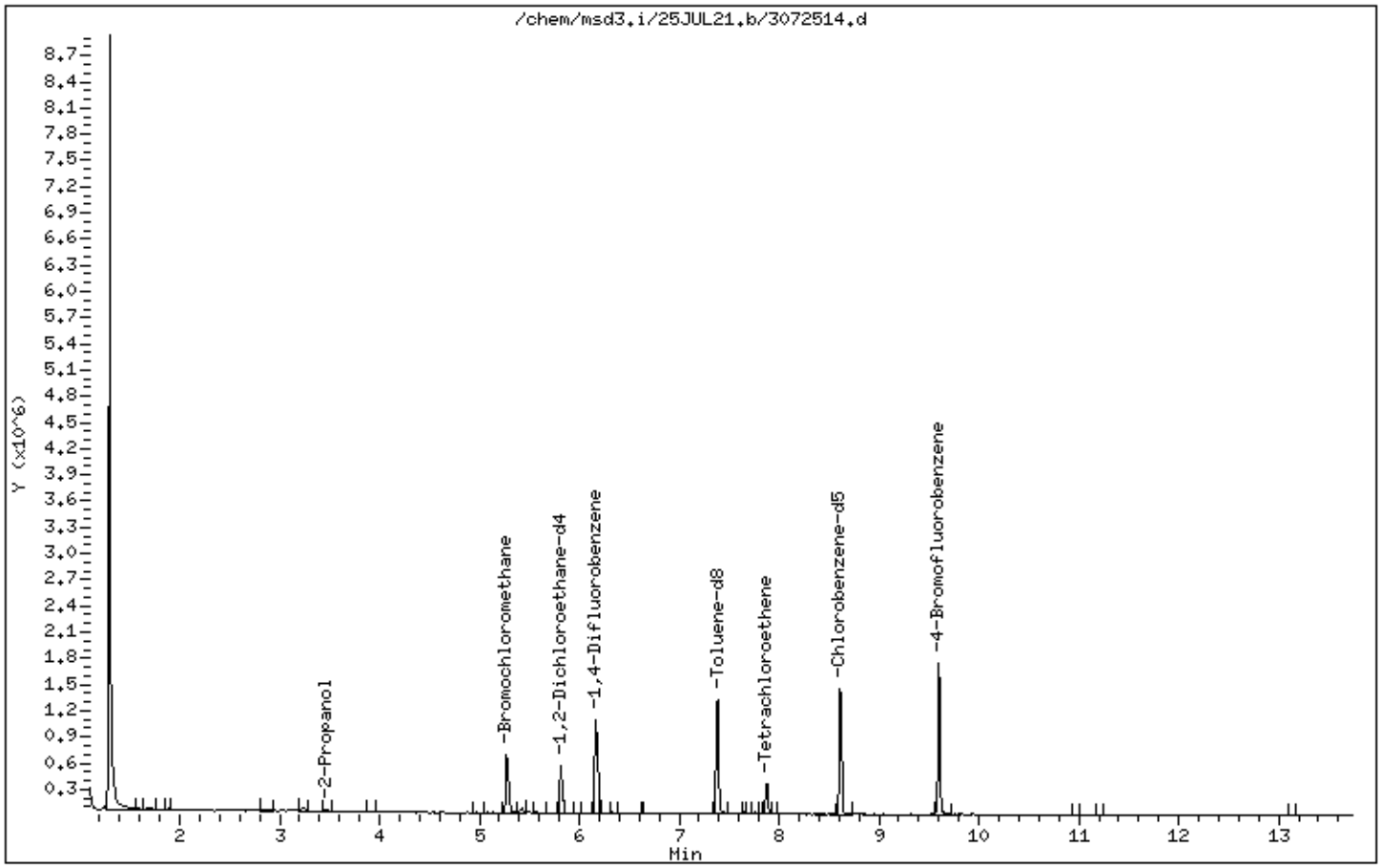
Instrument: msd3.i

Sample Info: 200ml N5539

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072514.d

Date : 25-JUL-2021 18:05

Client ID:

Instrument: msd3.i

Sample Info: 200ml N5539

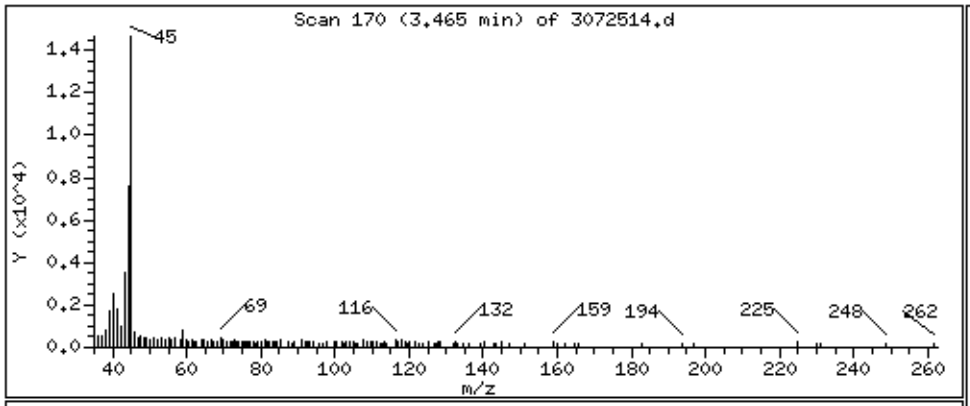
Operator: LD

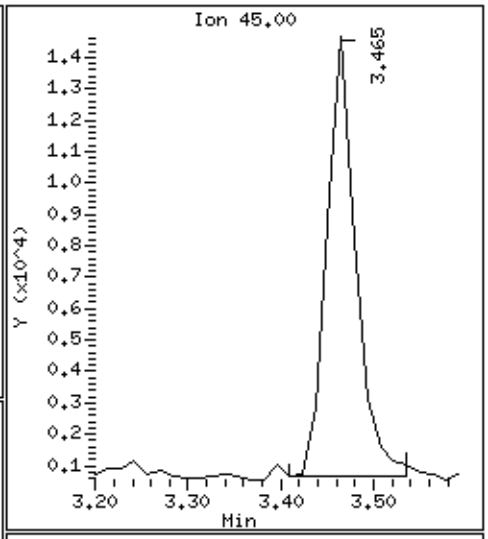
Column phase: RTX-624

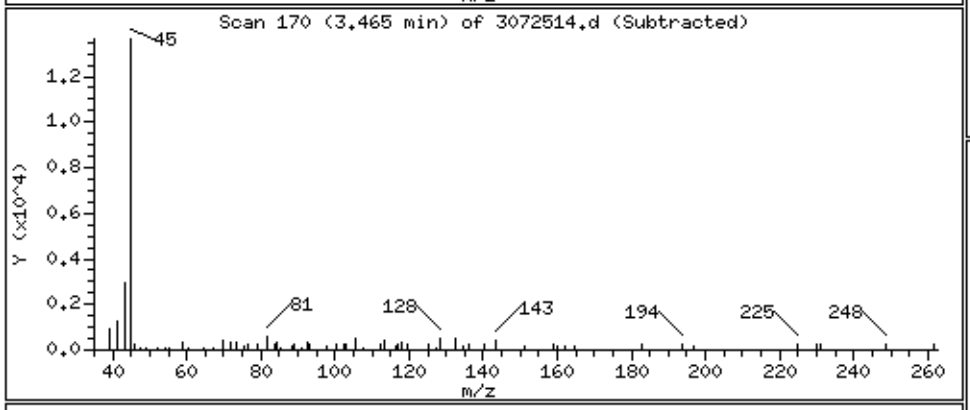
Column diameter: 0.25

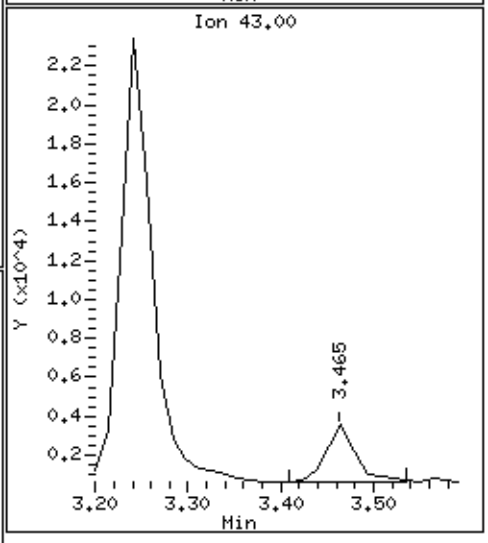
52 2-Propanol

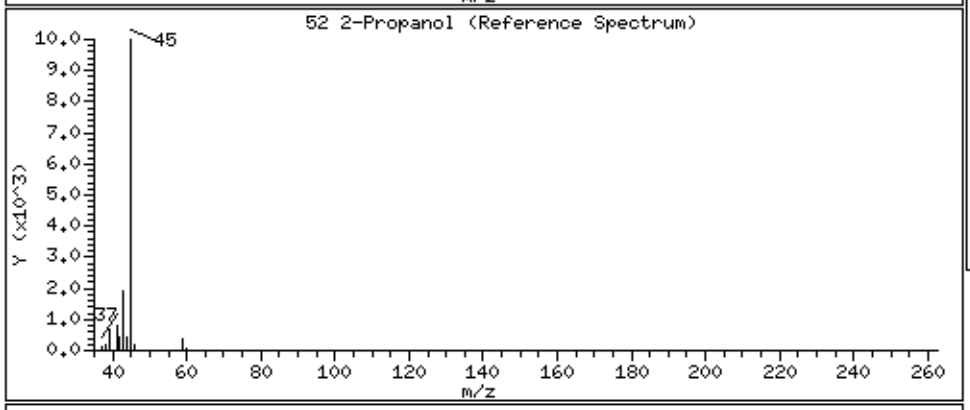
Concentration: 4.682 PPBV

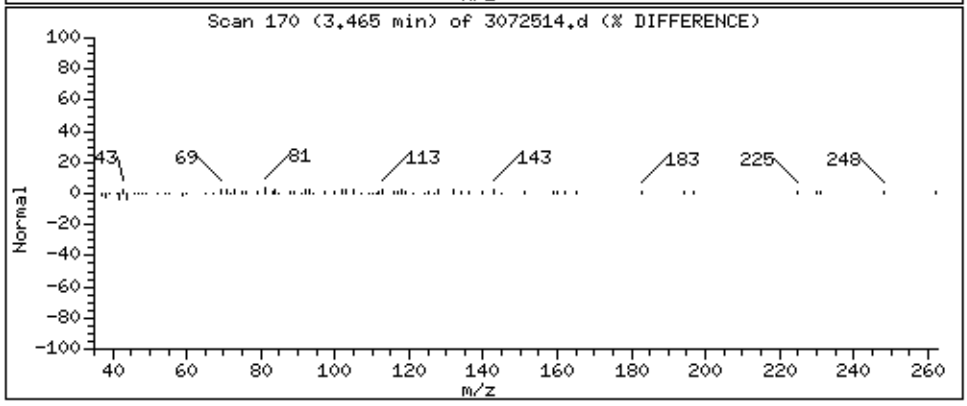












Data File: /chem/msd3.i/25JUL21.b/3072514.d

Date : 25-JUL-2021 18:05

Client ID:

Instrument: msd3.i

Sample Info: 200ml N5539

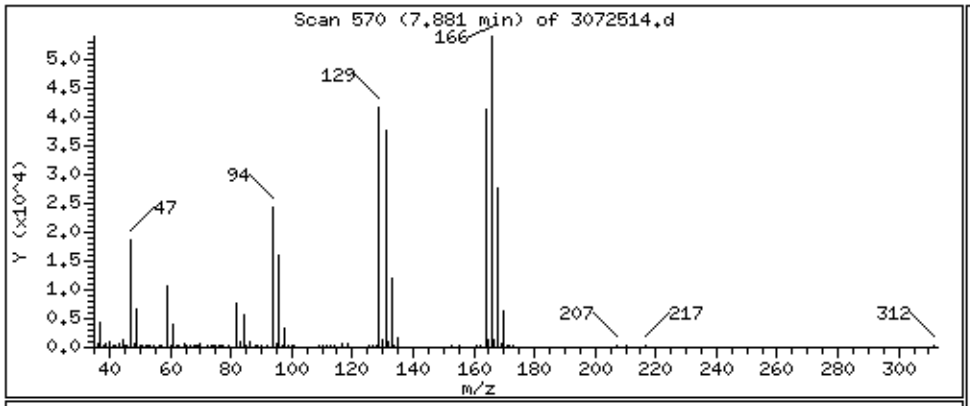
Operator: LD

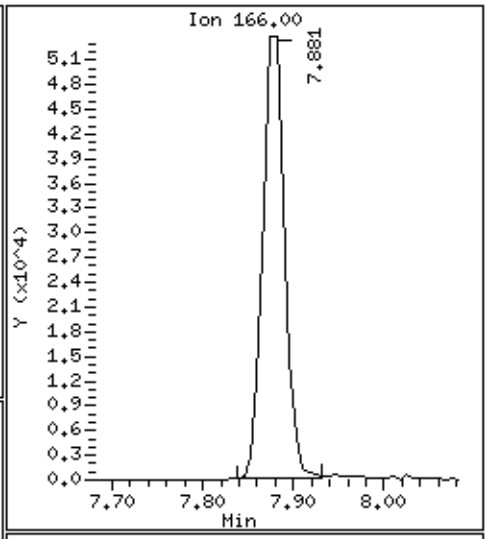
Column phase: RTX-624

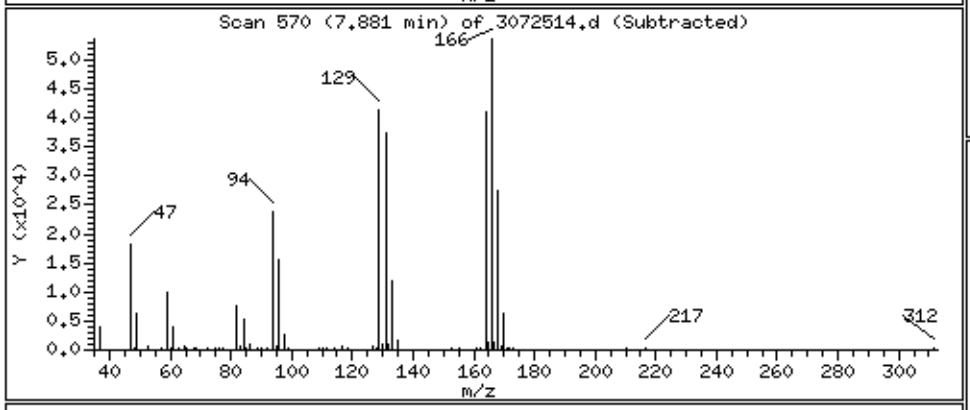
Column diameter: 0.25

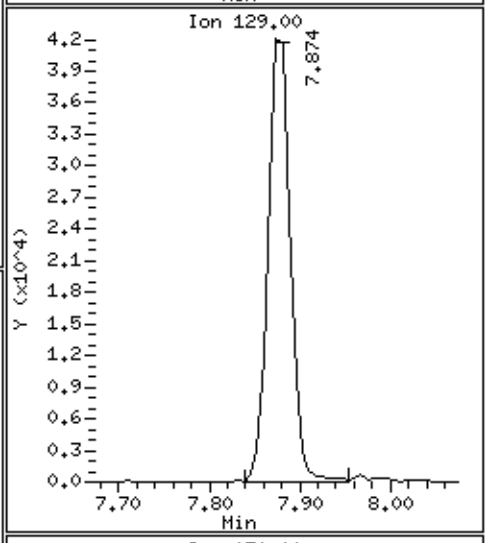
142 Tetrachloroethene

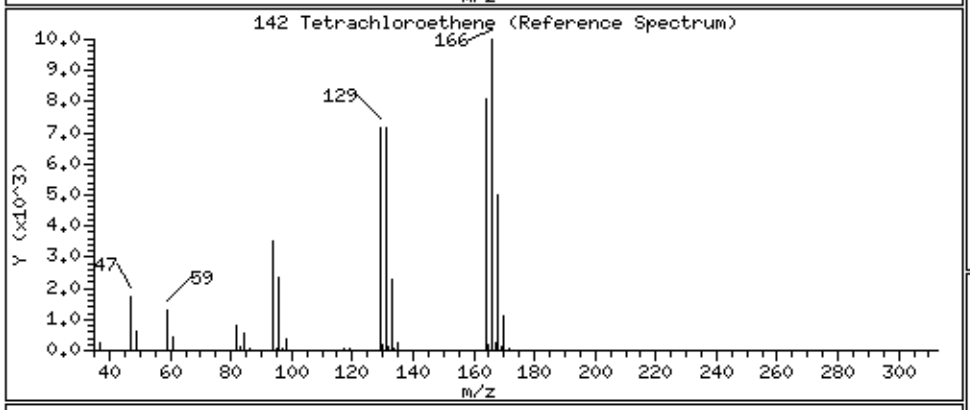
Concentration: 17.698 PPBV

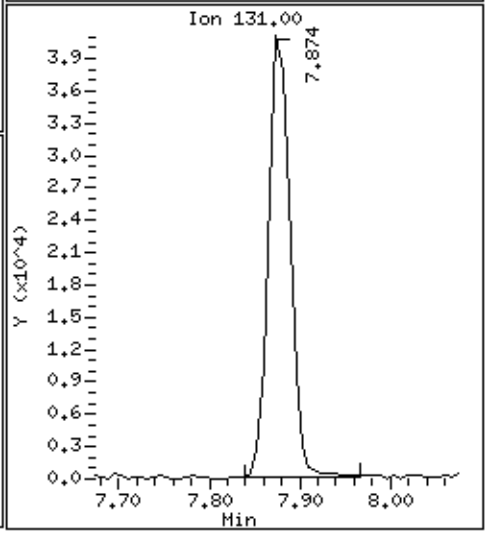


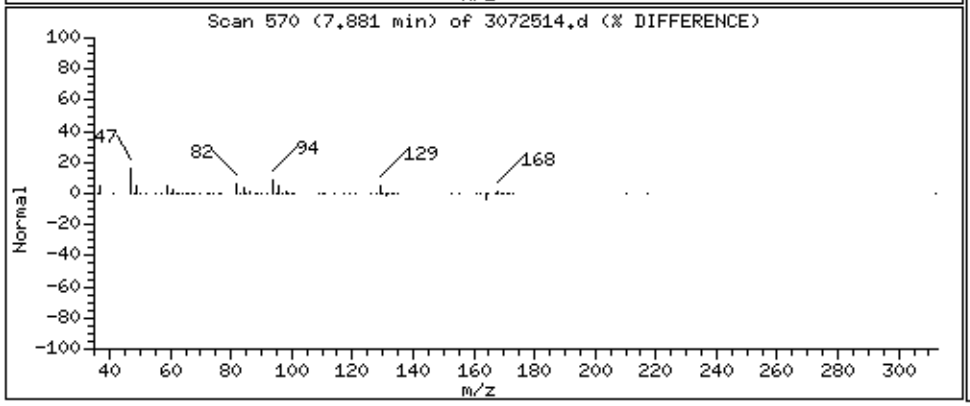












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Client Sample ID: SG-VW40B-02

Lab ID#: 2107260A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072515**	**Date of Collection:**	**7/13/21 7:05:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/25/21 06:34 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.7	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.2	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.2	Not Detected
1,1-Difluoroethane	4.2	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	25	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	40	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.1	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
2-Hexanone	4.2	Not Detected	17	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Acetone	10	Not Detected	25	Not Detected
Acrolein	4.2	Not Detected	9.6	Not Detected
Acrylonitrile	4.2	Not Detected	9.1	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
Benzene	1.0	Not Detected	3.4	Not Detected
Bromodichloromethane	1.0	Not Detected	7.0	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Bromomethane	10	Not Detected	41	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.6	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Chloroform	1.0	Not Detected	5.1	Not Detected
Chloromethane	10	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected

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Client Sample ID: SG-VW40B-02

Lab ID#: 2107260A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072515**	**Date of Collection:**	**7/13/21 7:05:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/25/21 06:34 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
Cumene	1.0	Not Detected	5.2	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Dibromochloromethane	1.0	Not Detected	8.9	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
Ethanol	10	Not Detected	20	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl Benzene	1.0	Not Detected	4.6	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	18	Not Detected
Freon 11	1.0	Not Detected	5.9	Not Detected
Freon 12	1.0	Not Detected	5.2	Not Detected
Freon 113	1.0	Not Detected	8.0	Not Detected
Freon 114	1.0	Not Detected	7.3	Not Detected
Freon 134a	4.2	Not Detected	18	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
Iodomethane	10	Not Detected	61	Not Detected
Isopropyl ether	4.2	Not Detected	18	Not Detected
m,p-Xylene	1.0	Not Detected	4.6	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
o-Xylene	1.0	Not Detected	4.6	Not Detected
Propylbenzene	1.0	Not Detected	5.2	Not Detected
Propylene	4.2	Not Detected	7.2	Not Detected
Styrene	1.0	Not Detected	4.5	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	18	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
Tetrachloroethene	1.0	Not Detected	7.1	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Toluene	1.0	Not Detected	4.0	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	430	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW40B-02

Lab ID#: 2107260A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072515**	**Date of Collection:**	**7/13/21 7:05:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/25/21 06:34 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	93	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072515.d
Lab Smp Id: 2107260A-13A
Inj Date : 25-JUL-2021 18:34
Operator : LD Inst ID: msd3.i
Smp Info : 200ml 3030
Misc Info : 6.1 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 10
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	272502	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	212398				48.46- 108.46	77.94
5.284	5.270 (1.000)	49	380727				120.39- 180.39	139.72
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	894957	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	130935				0.00- 45.52	14.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	809167	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	420637				25.46- 85.46	51.98
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	367335	24.4954	24.495		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	175798				21.66- 81.66	47.86
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	883926	23.9795	23.979		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	94503				0.00- 41.47	10.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	577747			36.47- 96.47	65.36
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	499538	23.3398	23.340	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	564555			93.06- 153.06	113.02
9.601	9.601 (1.114)	176	461184			62.87- 122.87	92.32

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072515.d
Lab Smp Id: 2107260A-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.1 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	272502	2.34
108 1,4-Difluorobenze	910055	546033	1274077	894957	-1.66
153 Chlorobenzene-d5	785948	471569	1100327	809167	2.95

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.22
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:10

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-13A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.1 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.495	97.98	70-130
$ 134 Toluene-d8	25.000	23.979	95.92	70-130
$ 170 4-Bromofluorobenz	25.000	23.340	93.36	70-130

Data File: /chem/msd3.i/25JUL21.b/3072515.d

Date : 25-JUL-2021 18:34

Client ID:

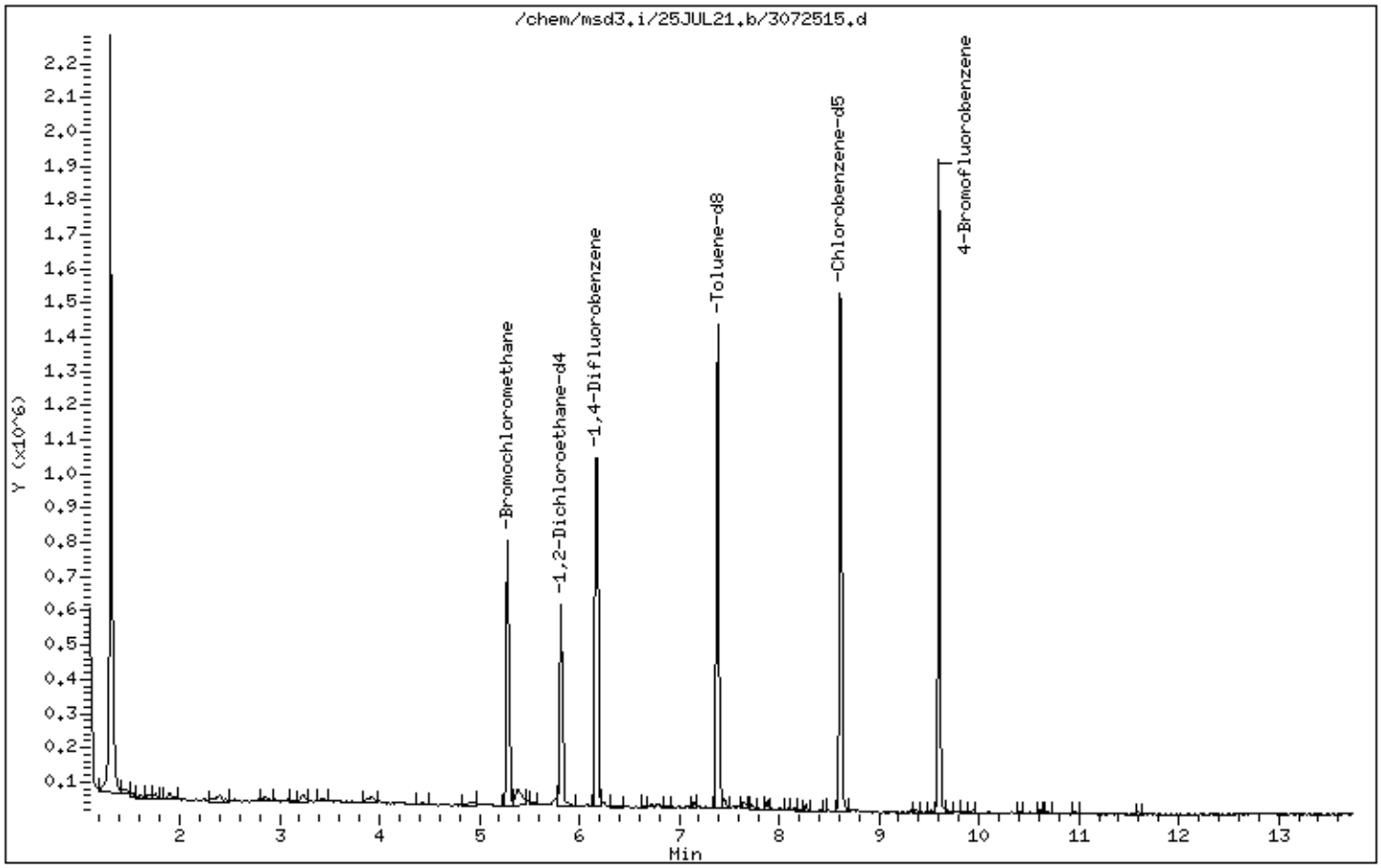
Instrument: msd3.i

Sample Info: 200ml 3030

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: SG-VW40A-02

Lab ID#: 2107260A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072522**	**Date of Collection:**	**7/13/21 7:46:00 AM**
Dil. Factor:	**2.01**	**Date of Analysis:**	**7/25/21 11:47 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.0	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	6.9	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
1,1-Difluoroethane	4.0	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.0	Not Detected	24	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected	30	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,2-Dibromo-3-chloropropane	4.0	Not Detected	39	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.7	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.6	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.0	Not Detected	12	Not Detected
2-Hexanone	4.0	Not Detected	16	Not Detected
2-Propanol	4.0	Not Detected	9.9	Not Detected
3-Chloropropene	4.0	Not Detected	12	Not Detected
4-Ethyltoluene	1.0	Not Detected	4.9	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Acetone	10	Not Detected	24	Not Detected
Acrolein	4.0	Not Detected	9.2	Not Detected
Acrylonitrile	4.0	Not Detected	8.7	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
Benzene	1.0	Not Detected	3.2	Not Detected
Bromodichloromethane	1.0	Not Detected	6.7	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Carbon Disulfide	4.0	Not Detected	12	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.3	Not Detected
Chlorobenzene	1.0	Not Detected	4.6	Not Detected
Chloroethane	4.0	Not Detected	11	Not Detected
Chloroform	1.0	Not Detected	4.9	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected

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Client Sample ID: SG-VW40A-02

Lab ID#: 2107260A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072522**	**Date of Collection:**	**7/13/21 7:46:00 AM**
Dil. Factor:	**2.01**	**Date of Analysis:**	**7/25/21 11:47 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Cumene	1.0	Not Detected	4.9	Not Detected
Cyclohexane	1.0	Not Detected	3.4	Not Detected
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
Dibromomethane	4.0	Not Detected	28	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Ethyl Acetate	4.0	Not Detected	14	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
Ethyl-tert-butyl ether	4.0	Not Detected	17	Not Detected
Freon 11	1.0	Not Detected	5.6	Not Detected
Freon 12	1.0	Not Detected	5.0	Not Detected
Freon 113	1.0	Not Detected	7.7	Not Detected
Freon 114	1.0	Not Detected	7.0	Not Detected
Freon 134a	4.0	Not Detected	17	Not Detected
Heptane	1.0	Not Detected	4.1	Not Detected
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected
Hexachloroethane	4.0	Not Detected	39	Not Detected
Hexane	1.0	Not Detected	3.5	Not Detected
Iodomethane	10	Not Detected	58	Not Detected
Isopropyl ether	4.0	Not Detected	17	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
Methyl tert-butyl ether	4.0	Not Detected	14	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Propylbenzene	1.0	Not Detected	4.9	Not Detected
Propylene	4.0	Not Detected	6.9	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
tert-Amyl methyl ether	4.0	Not Detected	17	Not Detected
tert-Butyl alcohol	4.0	Not Detected	12	Not Detected
Tetrachloroethene	1.0	2.1	6.8	14
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	410	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Trichloroethene	1.0	Not Detected	5.4	Not Detected
Vinyl Acetate	4.0	Not Detected	14	Not Detected
Vinyl Bromide	4.0	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW40A-02

Lab ID#: 2107260A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072522**	**Date of Collection:**	**7/13/21 7:46:00 AM**
Dil. Factor:	**2.01**	**Date of Analysis:**	**7/25/21 11:47 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	89	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072522.d
Lab Smp Id: 2107260A-14A
Inj Date : 25-JUL-2021 23:47
Operator : AB Inst ID: msd3.i
Smp Info : 200mL N5151
Misc Info : 4.9 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 1
Dil Factor: 2.01000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.285	5.284 (1.000)	130	299208	25.0000			80.00- 120.00	100.00
5.285	5.284 (1.000)	128	231285				48.46- 108.46	77.30
5.285	5.270 (1.000)	49	422289				120.39- 180.39	141.14
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.166	6.166 (1.000)	114	1045148	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	151378				0.00- 45.52	14.48
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.612 (1.000)	117	955487	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	502411				25.46- 85.46	52.58
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	403325	24.4948	24.495		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	190472				21.66- 81.66	47.23
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.198)	98	1063107	24.6959	24.696		80.00- 120.00	100.00
7.387	7.387 (1.198)	70	119556				0.00- 41.47	11.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	701049			36.47- 96.47	65.94
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	562857	22.2710	22.271	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	636102			93.06- 153.06	113.01
9.601	9.601 (1.115)	176	519502			62.87- 122.87	92.30
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.882 (0.915)	166	15867	1.06001	2.131	80.00- 120.00	100.00
7.882	7.874 (0.915)	129	12918			48.71- 108.71	81.42
7.874	7.874 (0.914)	131	13432			46.55- 106.55	84.66

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072522.d
Lab Smp Id: 2107260A-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 4.9 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	299208	12.37
108 1,4-Difluorobenze	910055	546033	1274077	1045148	14.84
153 Chlorobenzene-d5	785948	471569	1100327	955487	21.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:13

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-14A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 4.9 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.495	97.98	70-130
$ 134 Toluene-d8	25.000	24.696	98.78	70-130
$ 170 4-Bromofluorobenz	25.000	22.271	89.08	70-130

Data File: /chem/msd3.i/25JUL21.b/3072522.d

Date : 25-JUL-2021 23:47

Client ID:

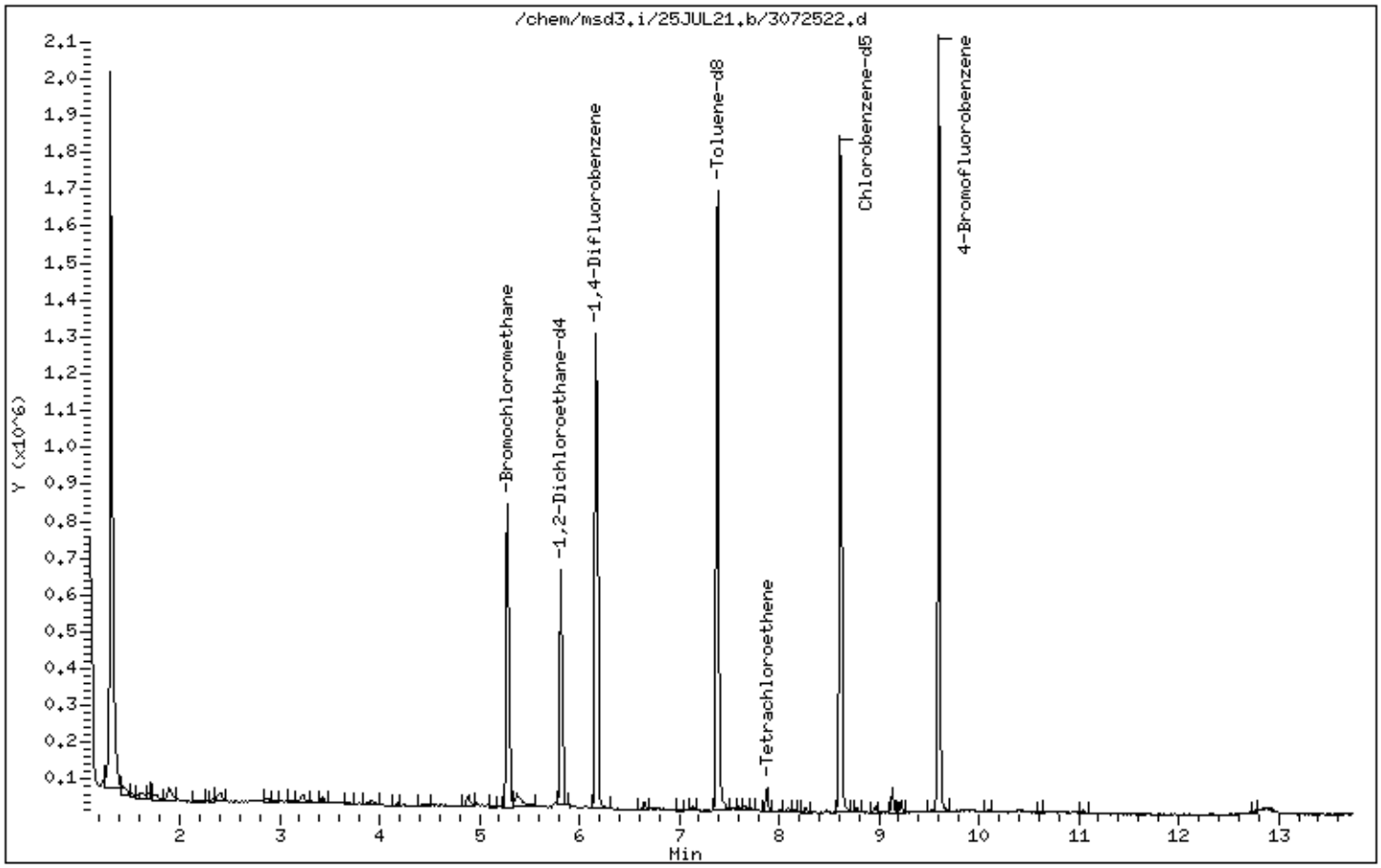
Instrument: msd3.i

Sample Info: 200mL N5151

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072522.d

Date : 25-JUL-2021 23:47

Client ID:

Instrument: msd3.i

Sample Info: 200mL N5151

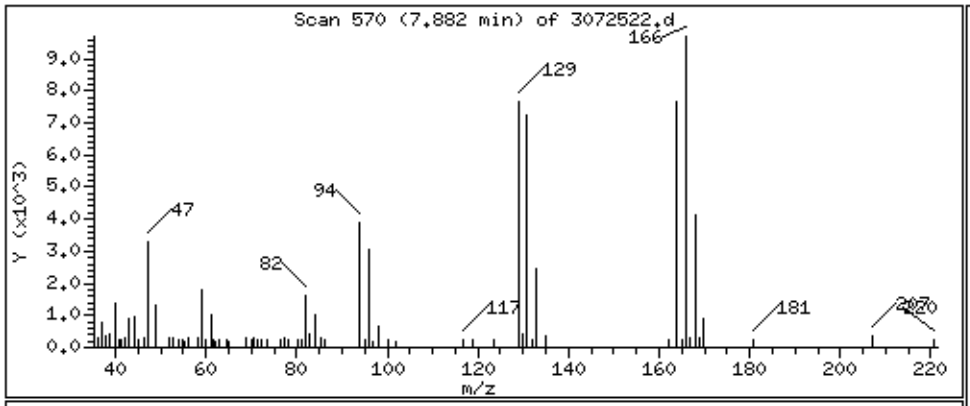
Operator: AB

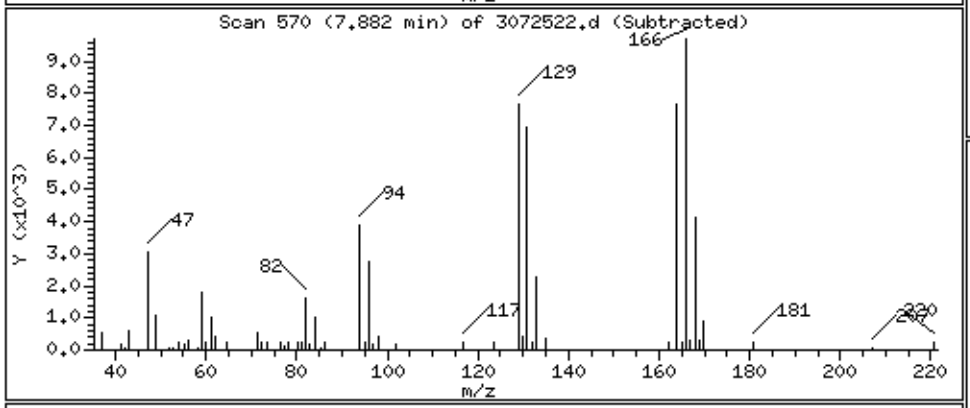
Column phase: RTX-624

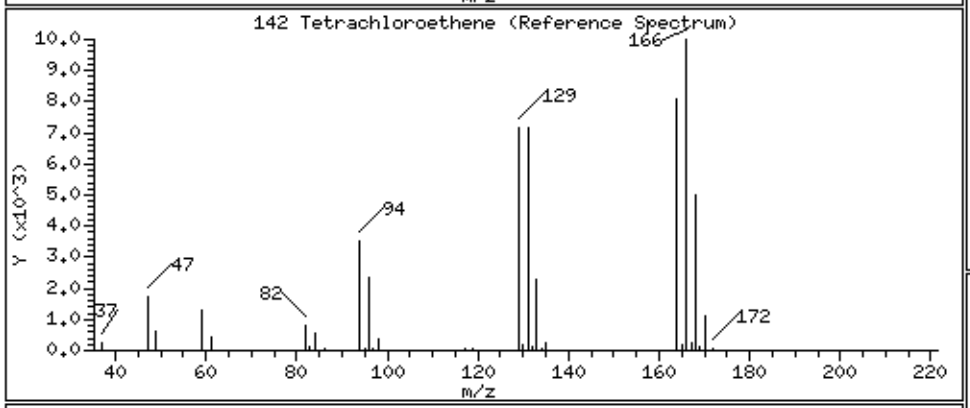
Column diameter: 0.25

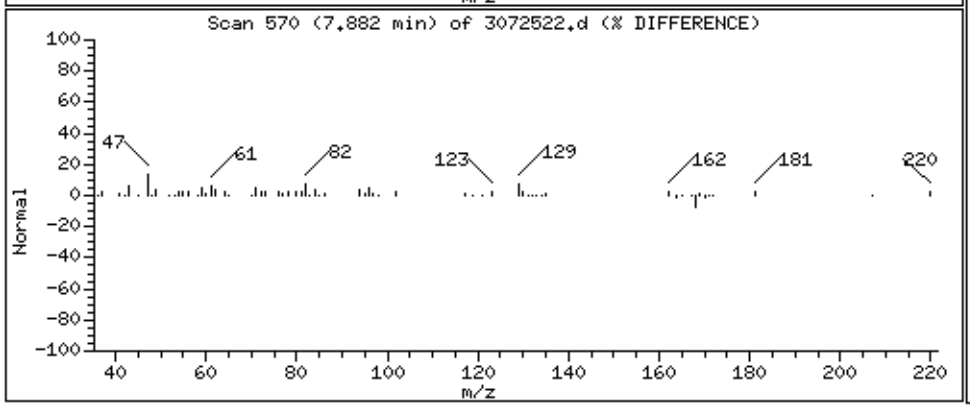
142 Tetrachloroethene

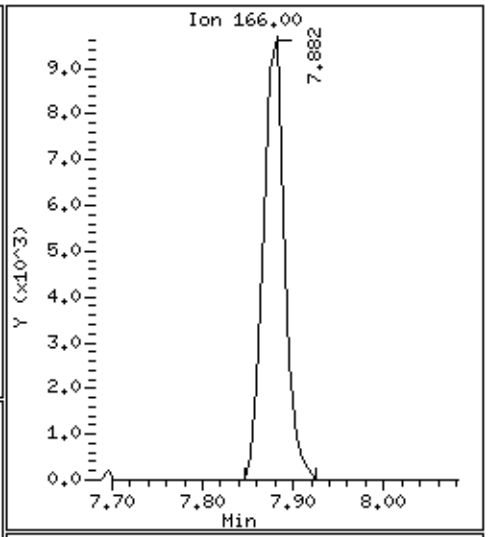
Concentration: 2.131 PPBV

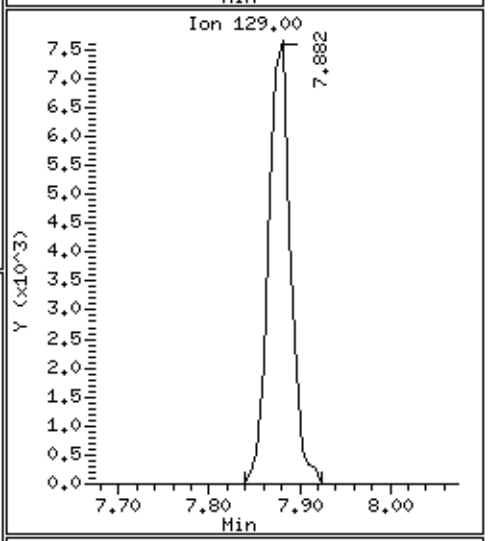


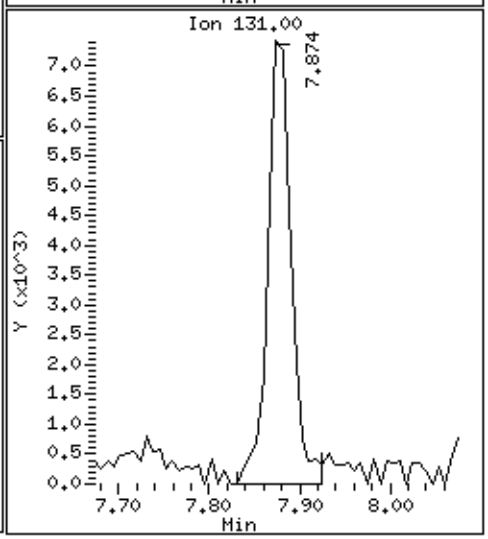












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Client Sample ID: SG-VW37B-03

Lab ID#: 2107260A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072523**	**Date of Collection:**	**7/13/21 8:26:00 AM**
Dil. Factor:	**2.03**	**Date of Analysis:**	**7/26/21 12:17 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.1	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.0	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
1,1-Difluoroethane	4.1	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.1	Not Detected	24	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,2-Dibromo-3-chloropropane	4.1	Not Detected	39	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.8	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected
2-Propanol	4.1	Not Detected	10	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Acetone	10	Not Detected	24	Not Detected
Acrolein	4.1	Not Detected	9.3	Not Detected
Acrylonitrile	4.1	Not Detected	8.8	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
Benzene	1.0	Not Detected	3.2	Not Detected
Bromodichloromethane	1.0	Not Detected	6.8	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Carbon Disulfide	4.1	Not Detected	13	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.4	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Chloroform	1.0	Not Detected	5.0	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected

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Client Sample ID: SG-VW37B-03

Lab ID#: 2107260A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072523**	**Date of Collection:**	**7/13/21 8:26:00 AM**
Dil. Factor:	**2.03**	**Date of Analysis:**	**7/26/21 12:17 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Cumene	1.0	Not Detected	5.0	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
Dibromomethane	4.1	Not Detected	29	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Ethyl Acetate	4.1	Not Detected	15	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
Ethyl-tert-butyl ether	4.1	Not Detected	17	Not Detected
Freon 11	1.0	Not Detected	5.7	Not Detected
Freon 12	1.0	Not Detected	5.0	Not Detected
Freon 113	1.0	Not Detected	7.8	Not Detected
Freon 114	1.0	Not Detected	7.1	Not Detected
Freon 134a	4.1	Not Detected	17	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Hexachlorobutadiene	4.1	Not Detected	43	Not Detected
Hexachloroethane	4.1	Not Detected	39	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
Iodomethane	10	Not Detected	59	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Naphthalene	2.0	Not Detected	11	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Propylbenzene	1.0	Not Detected	5.0	Not Detected
Propylene	4.1	Not Detected	7.0	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
tert-Amyl methyl ether	4.1	Not Detected	17	Not Detected
tert-Butyl alcohol	4.1	Not Detected	12	Not Detected
Tetrachloroethene	1.0	Not Detected	6.9	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	420	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Trichloroethene	1.0	Not Detected	5.4	Not Detected
Vinyl Acetate	4.1	Not Detected	14	Not Detected
Vinyl Bromide	4.1	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW37B-03

Lab ID#: 2107260A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072523**	**Date of Collection:**	**7/13/21 8:26:00 AM**
Dil. Factor:	**2.03**	**Date of Analysis:**	**7/26/21 12:17 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	98	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072523.d
Lab Smp Id: 2107260A-15A
Inj Date : 26-JUL-2021 00:17
Operator : AB Inst ID: msd3.i
Smp Info : 200mL N3109
Misc Info : 5.3 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2
Dil Factor: 2.03000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.284	5.284 (1.000)	130	271269	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	209519				48.46- 108.46	77.24
5.284	5.270 (1.000)	49	376192				120.39- 180.39	138.68
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.166 (1.000)	114	895314	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	132139				0.00- 45.52	14.76
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	798226	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	414932				25.46- 85.46	51.98
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.830	5.816 (1.103)	65	357604	23.9549	23.955		80.00- 120.00	100.00
5.830	5.816 (1.103)	67	175235				21.66- 81.66	49.00
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	875008	23.7281	23.728		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	98465				0.00- 41.47	11.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	575273			36.47- 96.47	65.74
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.600	9.601 (1.114)	174	519321	24.5967	24.597	80.00- 120.00	100.00
9.600	9.601 (1.114)	95	591211			93.06- 153.06	113.84
9.600	9.601 (1.114)	176	486868			62.87- 122.87	93.75

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072523.d
Lab Smp Id: 2107260A-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.3 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	271269	1.88
108 1,4-Difluorobenze	910055	546033	1274077	895314	-1.62
153 Chlorobenzene-d5	785948	471569	1100327	798226	1.56

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.22
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:16

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-15A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.3 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.955	95.82	70-130
$ 134 Toluene-d8	25.000	23.728	94.91	70-130
$ 170 4-Bromofluorobenz	25.000	24.597	98.39	70-130

Data File: /chem/msd3.i/25JUL21.b/3072523.d

Date : 26-JUL-2021 00:17

Client ID:

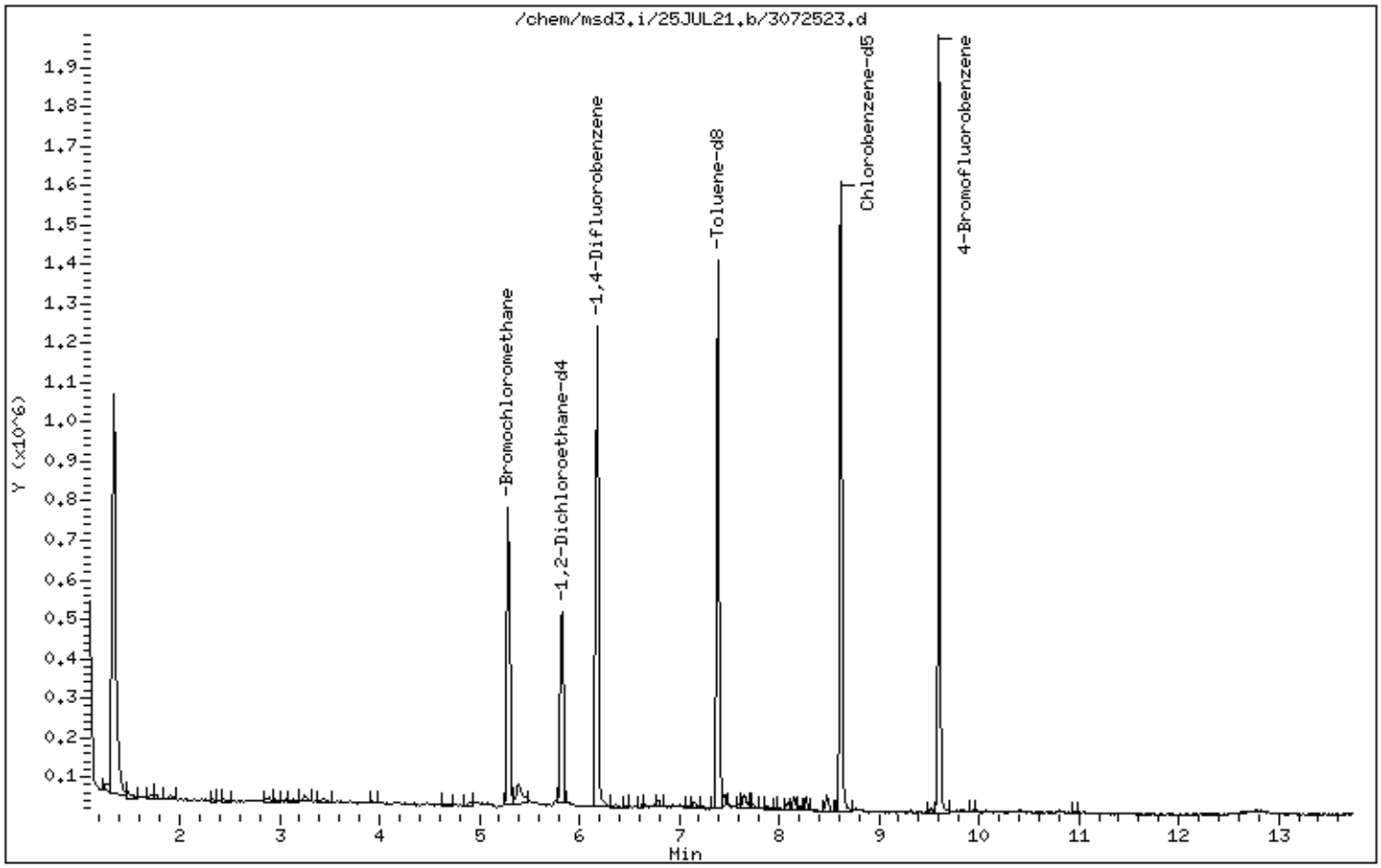
Instrument: msd3.i

Sample Info: 200mL N3109

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: SG-VW37B-04

Lab ID#: 2107260A-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072524**	**Date of Collection:**	**7/13/21 8:26:00 AM**
Dil. Factor:	**2.05**	**Date of Analysis:**	**7/26/21 12:46 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.1	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.0	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
1,1-Difluoroethane	4.1	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.1	Not Detected	25	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,2-Dibromo-3-chloropropane	4.1	Not Detected	40	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.9	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected
2-Propanol	4.1	Not Detected	10	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Acetone	10	Not Detected	24	Not Detected
Acrolein	4.1	Not Detected	9.4	Not Detected
Acrylonitrile	4.1	Not Detected	8.9	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Carbon Disulfide	4.1	Not Detected	13	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.4	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Chloroform	1.0	Not Detected	5.0	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected

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Client Sample ID: SG-VW37B-04

Lab ID#: 2107260A-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072524**	**Date of Collection:**	**7/13/21 8:26:00 AM**
Dil. Factor:	**2.05**	**Date of Analysis:**	**7/26/21 12:46 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Cumene	1.0	Not Detected	5.0	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Dibromochloromethane	1.0	Not Detected	8.7	Not Detected
Dibromomethane	4.1	Not Detected	29	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Ethyl Acetate	4.1	Not Detected	15	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
Ethyl-tert-butyl ether	4.1	Not Detected	17	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 113	1.0	Not Detected	7.8	Not Detected
Freon 114	1.0	Not Detected	7.2	Not Detected
Freon 134a	4.1	Not Detected	17	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Hexachloroethane	4.1	Not Detected	40	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
Iodomethane	10	Not Detected	60	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Naphthalene	2.0	Not Detected	11	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Propylbenzene	1.0	Not Detected	5.0	Not Detected
Propylene	4.1	Not Detected	7.0	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
tert-Amyl methyl ether	4.1	Not Detected	17	Not Detected
tert-Butyl alcohol	4.1	Not Detected	12	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	420	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
Vinyl Acetate	4.1	Not Detected	14	Not Detected
Vinyl Bromide	4.1	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW37B-04

Lab ID#: 2107260A-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072524**	**Date of Collection: 7/13/21 8:26:00 AM**	
Dil. Factor:	**2.05**	**Date of Analysis: 7/26/21 12:46 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072524.d
Lab Smp Id: 2107260A-16A
Inj Date : 26-JUL-2021 00:46
Operator : AB Inst ID: msd3.i
Smp Info : 200mL sh3031
Misc Info : 5.5 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 4
Dil Factor: 2.05000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	256638	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	197797				48.46- 108.46	77.07
5.284	5.270 (1.000)	49	357203				120.39- 180.39	139.19
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	840947	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	124838				0.00- 45.52	14.84
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	749036	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	390815				25.46- 85.46	52.18
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	348546	24.6792	24.679		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	166963				21.66- 81.66	47.90
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	825037	23.8194	23.819		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	91353				0.00- 41.47	11.07

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	537697			36.47- 96.47	65.17
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	490182	24.7412	24.741	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	562703			93.06- 153.06	114.79
9.601	9.601 (1.114)	176	453440			62.87- 122.87	92.50

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072524.d
Lab Smp Id: 2107260A-16A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.5 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	256638	-3.62
108 1,4-Difluorobenze	910055	546033	1274077	840947	-7.59
153 Chlorobenzene-d5	785948	471569	1100327	749036	-4.70

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.22
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:18

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-16A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.5 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.679	98.72	70-130
$ 134 Toluene-d8	25.000	23.819	95.28	70-130
$ 170 4-Bromofluorobenz	25.000	24.741	98.96	70-130

Data File: /chem/msd3.i/25JUL21.b/3072524.d

Date : 26-JUL-2021 00:46

Client ID:

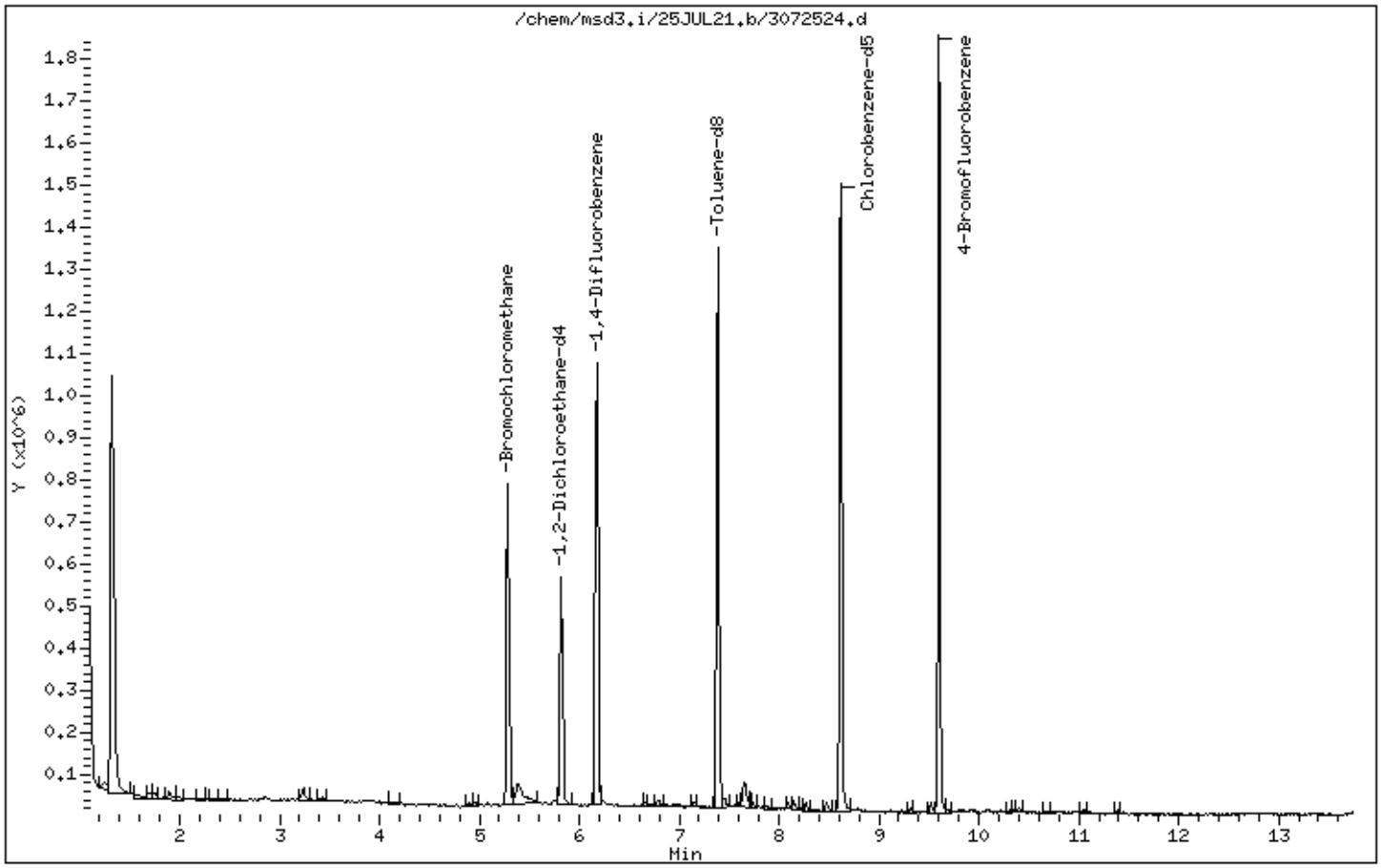
Instrument: msd3.i

Sample Info: 200mL sh3031

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: SG-VW37A-02

Lab ID#: 2107260A-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072525**	**Date of Collection:**	**7/13/21 9:12:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/26/21 01:15 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.1	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
1,1-Difluoroethane	4.1	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.1	Not Detected	25	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
1,2,4-Trimethylbenzene	1.0	6.0	5.1	30
1,2-Dibromo-3-chloropropane	4.1	Not Detected	40	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.9	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	1.0	2.4	5.1	12
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.0	16	4.8	73
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected
2-Propanol	4.1	Not Detected	10	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	8.7	5.1	43
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Acetone	10	Not Detected	24	Not Detected
Acrolein	4.1	Not Detected	9.4	Not Detected
Acrylonitrile	4.1	Not Detected	8.9	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
Benzene	1.0	3.9	3.3	12
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Carbon Disulfide	4.1	Not Detected	13	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Chloroform	1.0	Not Detected	5.0	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected

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Client Sample ID: SG-VW37A-02

Lab ID#: 2107260A-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072525**	**Date of Collection:**	**7/13/21 9:12:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/26/21 01:15 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
Cyclohexane	1.0	9.8	3.5	34
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
Dibromomethane	4.1	Not Detected	29	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Ethyl Acetate	4.1	Not Detected	15	Not Detected
Ethyl Benzene	1.0	11	4.5	49
Ethyl-tert-butyl ether	4.1	Not Detected	17	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 113	1.0	Not Detected	7.9	Not Detected
Freon 114	1.0	Not Detected	7.2	Not Detected
Freon 134a	4.1	Not Detected	17	Not Detected
Heptane	1.0	8.3	4.2	34
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Hexachloroethane	4.1	Not Detected	40	Not Detected
Hexane	1.0	7.3	3.6	26
Iodomethane	10	Not Detected	60	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
m,p-Xylene	1.0	40	4.5	170
Methyl tert-butyl ether	4.1	10	15	38
Methylene Chloride	10	Not Detected	36	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
o-Xylene	1.0	11	4.5	49
Propylbenzene	1.0	1.8	5.1	8.8
Propylene	4.1	Not Detected	7.1	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
tert-Amyl methyl ether	4.1	Not Detected	17	Not Detected
tert-Butyl alcohol	4.1	Not Detected	12	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	24	3.9	92
TPH ref. to Gasoline (MW=100)	100	770	420	3100
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
Vinyl Acetate	4.1	Not Detected	14	Not Detected
Vinyl Bromide	4.1	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW37A-02

Lab ID#: 2107260A-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072525**	**Date of Collection:**	**7/13/21 9:12:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/26/21 01:15 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072525.d
Lab Smp Id: 2107260A-17A
Inj Date : 26-JUL-2021 01:15
Operator : AB Inst ID: msd3.i
Smp Info : 200mL O0877
Misc Info : 5.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 5
Dil Factor: 2.06000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	280504	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	220563				48.46- 108.46	78.63
5.284	5.270 (1.000)	49	398553				120.39- 180.39	142.08
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	958744	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	140115				0.00- 45.52	14.61
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	852400	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	443516				25.46- 85.46	52.03
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	386786	25.0567	25.057		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	193626				21.66- 81.66	50.06
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	930628	23.5667	23.567		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	105360				0.00- 41.47	11.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	614020			36.47- 96.47	65.98
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	535462	23.7494	23.749	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	608392			93.06- 153.06	113.62
9.601	9.601 (1.114)	176	496048			62.87- 122.87	92.64
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	117606	5.13200	10.572	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	37808			0.00- 58.86	32.15
3.941	3.941 (0.746)	41	37915			0.00- 57.27	32.24
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	55211	3.55434	7.322	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	37648			32.99- 92.99	68.19
4.179	4.179 (0.791)	86	8448			0.00- 42.56	15.30
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	52858	4.75501	9.795	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	123432			120.40- 180.40	233.51
5.438	5.438 (1.029)	41	81532			54.20- 114.20	154.25
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	368576	7.58757	15.630	80.00- 120.00	100.00
5.760	5.774 (1.090)	56	182296			1.12- 61.12	49.46
5.760	5.774 (1.090)	41	155947			0.00- 57.49	42.31
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	41088	1.87802	3.869	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	14195			0.00- 53.80	34.55
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	34704	4.02720	8.296	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	60200			179.02- 239.02	173.46
5.942	5.942 (0.962)	57	39520			84.85- 144.85	113.88
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	347775	11.8468	24.404	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	201668			28.30- 88.30	57.99
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	64415	5.52945	11.391	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	199491			282.48- 342.48	309.70
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	280863	19.3794	39.922	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
158 m,p-Xylene (continued)							
8.784	8.784 (1.019)	91	553126			171.36- 231.36	196.94
164 o-Xylene					CAS #: 95-47-6		
9.128	9.121 (1.059)	106	74919	5.44525	11.217	80.00- 120.00	100.00
9.121	9.121 (1.058)	91	156267			179.99- 239.99	208.58
178 Propylbenzene					CAS #: 103-65-1		
9.751	9.758 (1.131)	91	44019	0.86726	1.786	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	11685			0.00- 53.77	26.55
9.758	9.758 (1.132)	105	2248			0.00- 33.81	5.11
183 4-Ethyltoluene					CAS #: 622-96-8		
9.823	9.851 (1.140)	120	55394	4.21044	8.674	80.00- 120.00	100.00
9.823	9.851 (1.140)	105	174446			296.79- 356.79	314.92
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.902 (1.149)	120	21764	1.17779	2.426	80.00- 120.00	100.00
9.901	9.902 (1.149)	105	44893			176.40- 236.40	206.27
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	106815	2.93143	6.039	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	48511			16.58- 76.58	45.42

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072525.d
Lab Smp Id: 2107260A-17A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.5 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	280504	5.35
108 1,4-Difluorobenze	910055	546033	1274077	958744	5.35
153 Chlorobenzene-d5	785948	471569	1100327	852400	8.46

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:18

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-17A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.057	100.23	70-130
$ 134 Toluene-d8	25.000	23.567	94.27	70-130
$ 170 4-Bromofluorobenz	25.000	23.749	95.00	70-130

Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

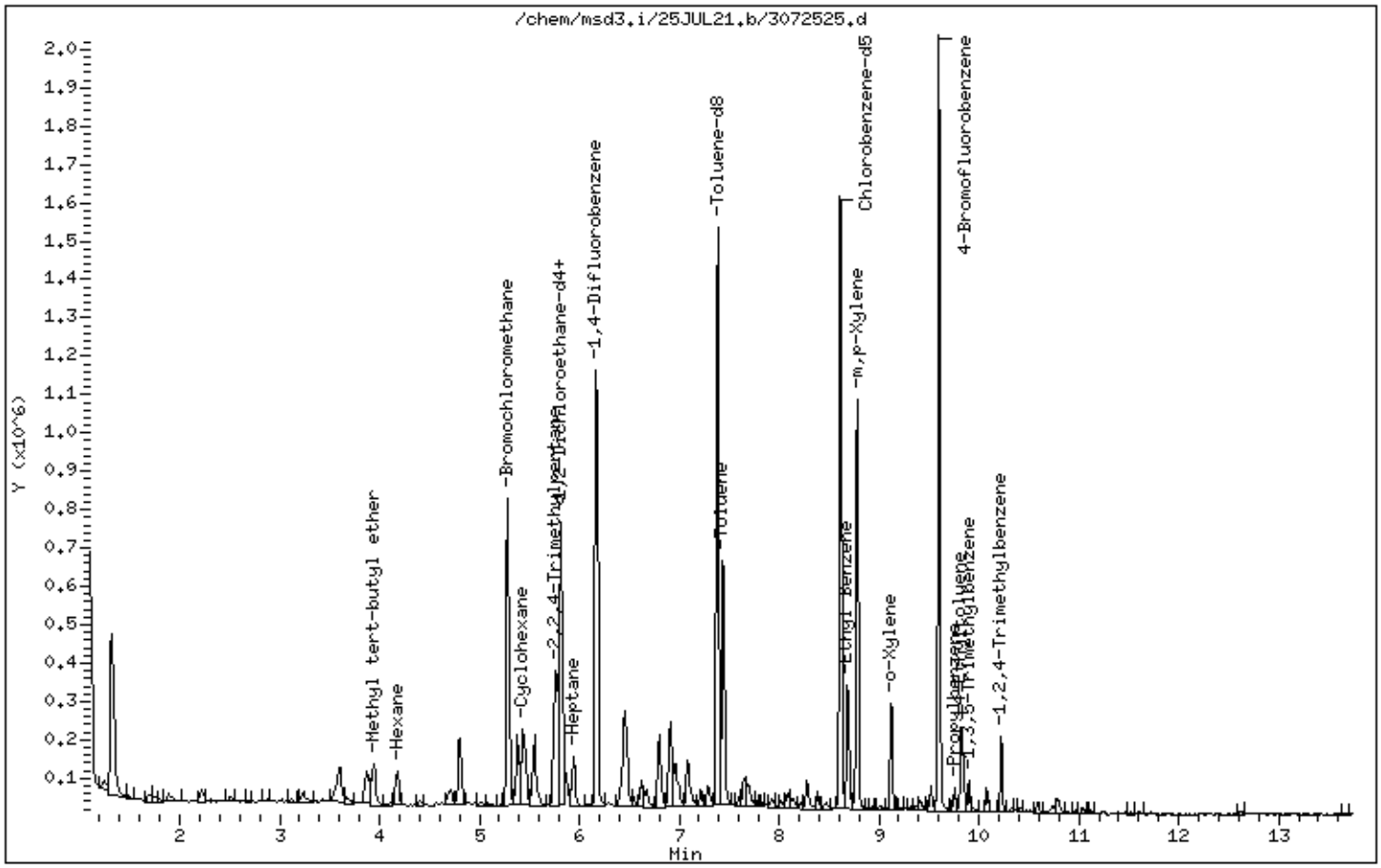
Instrument: msd3.i

Sample Info: 200mL 00877

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

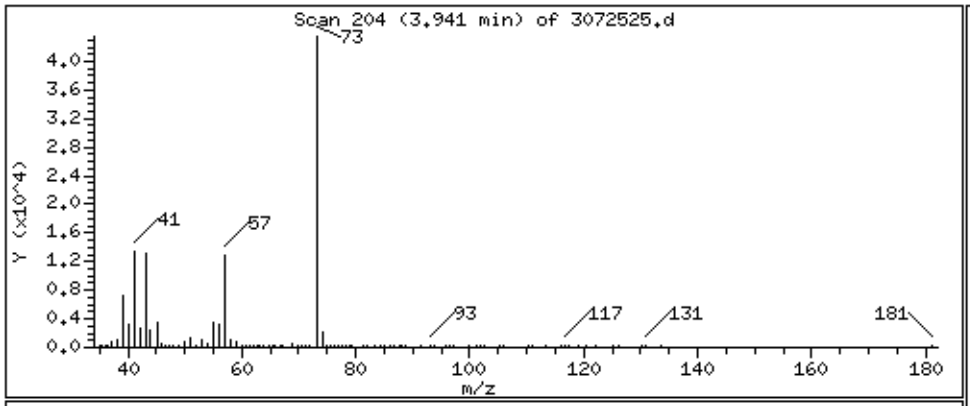
Operator: AB

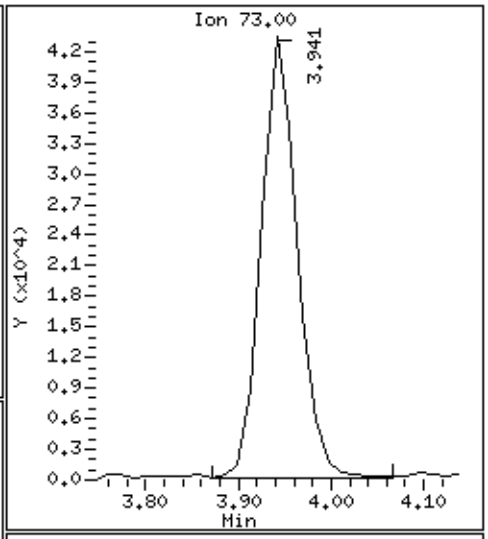
Column phase: RTX-624

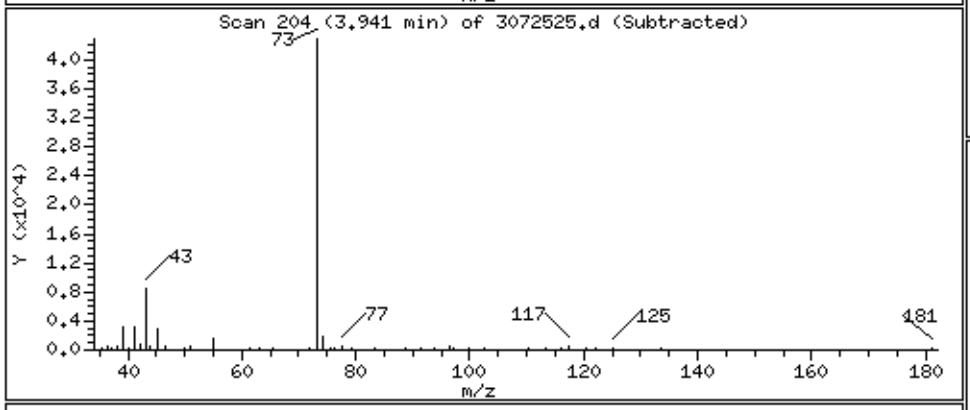
Column diameter: 0.25

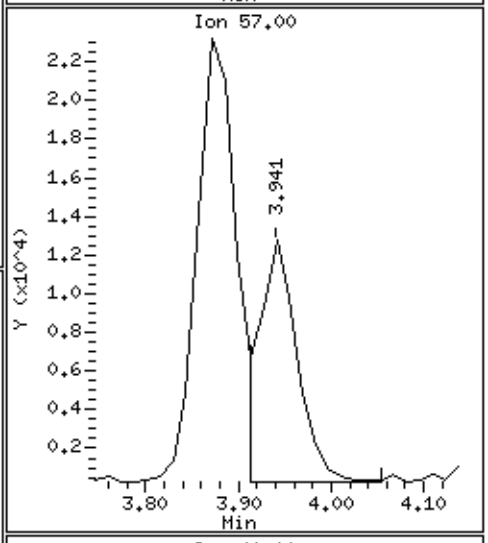
63 Methyl tert-butyl ether

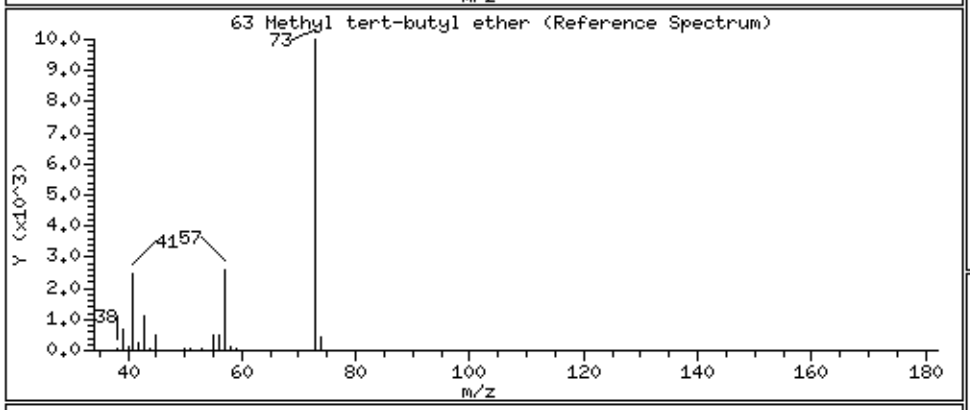
Concentration: 10.572 PPBV

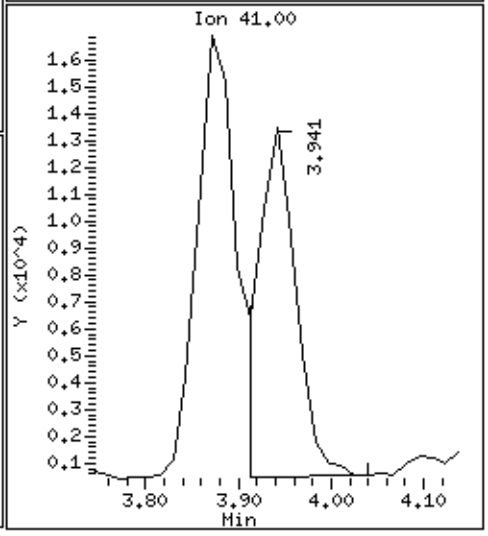


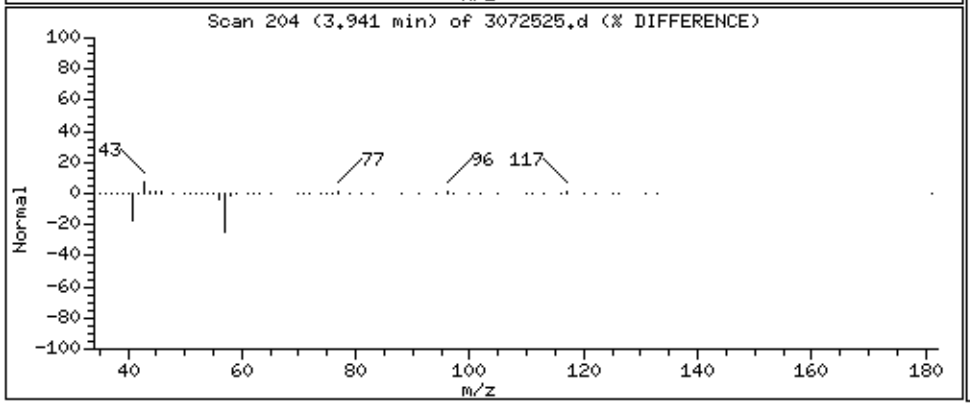












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

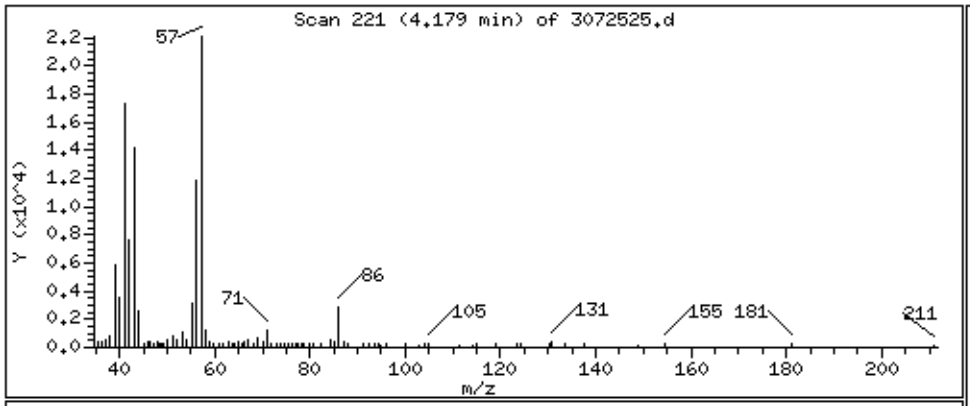
Operator: AB

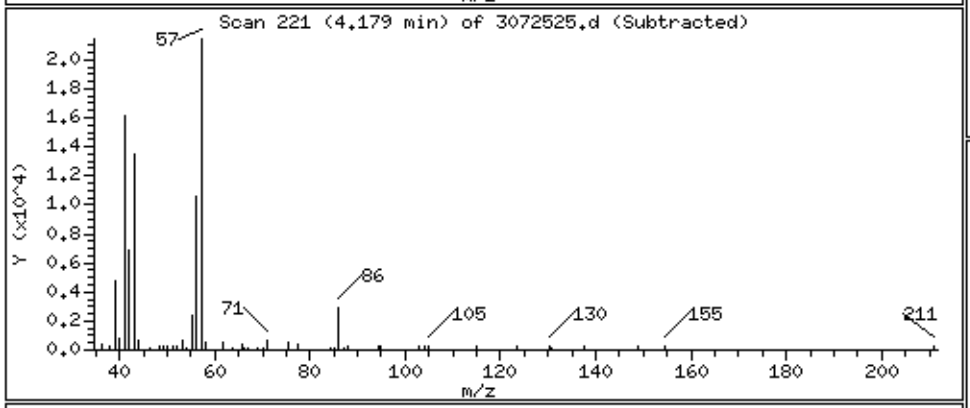
Column phase: RTX-624

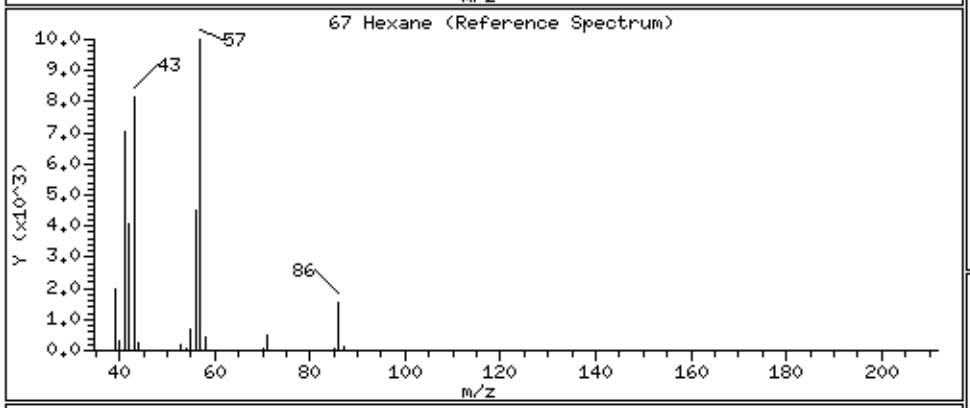
Column diameter: 0.25

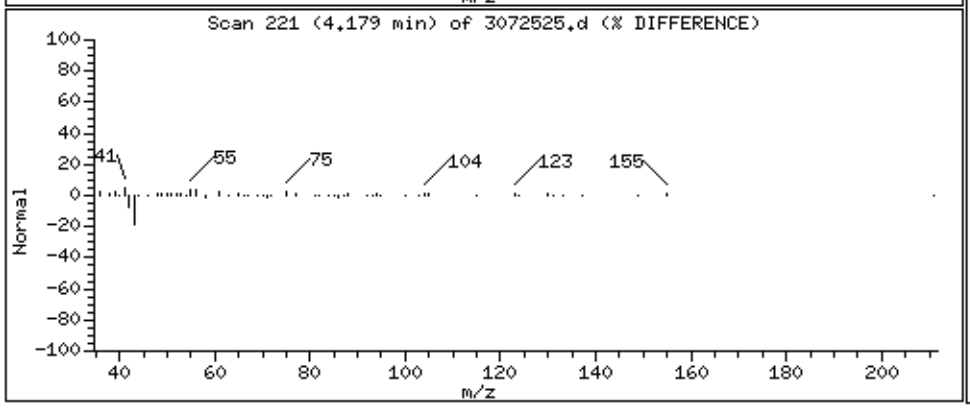
67 Hexane

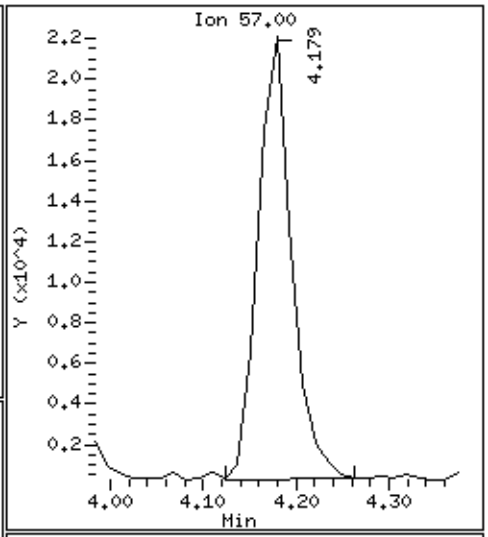
Concentration: 7.322 PPBV

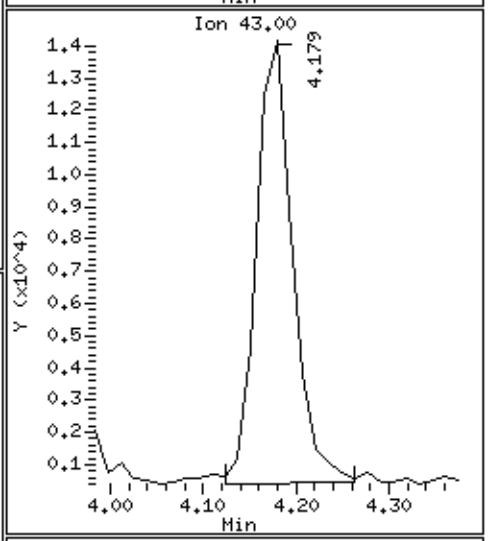


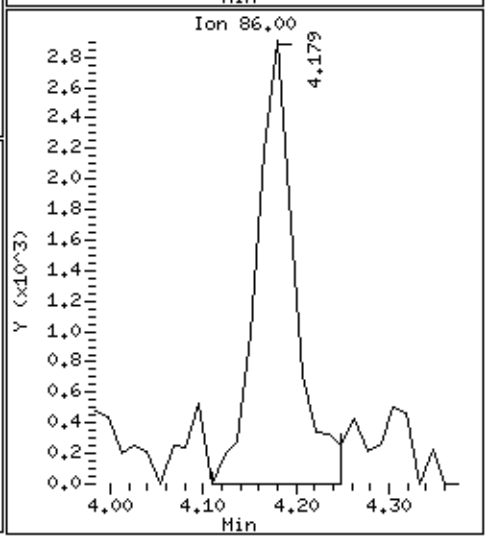












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

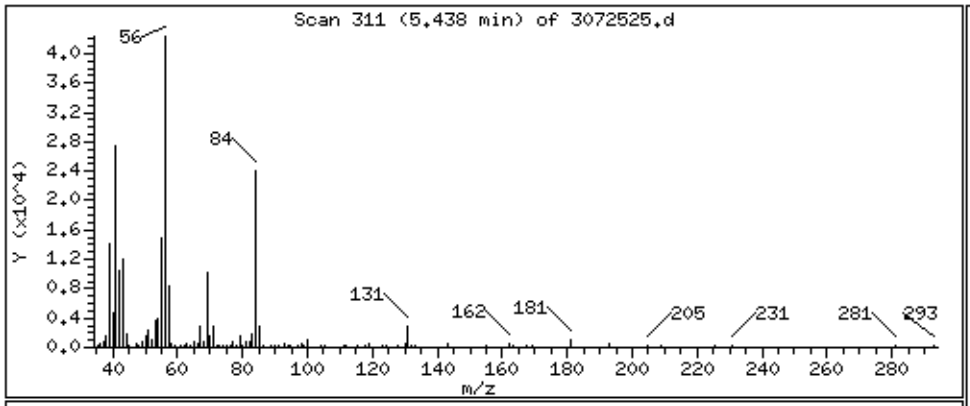
Operator: AB

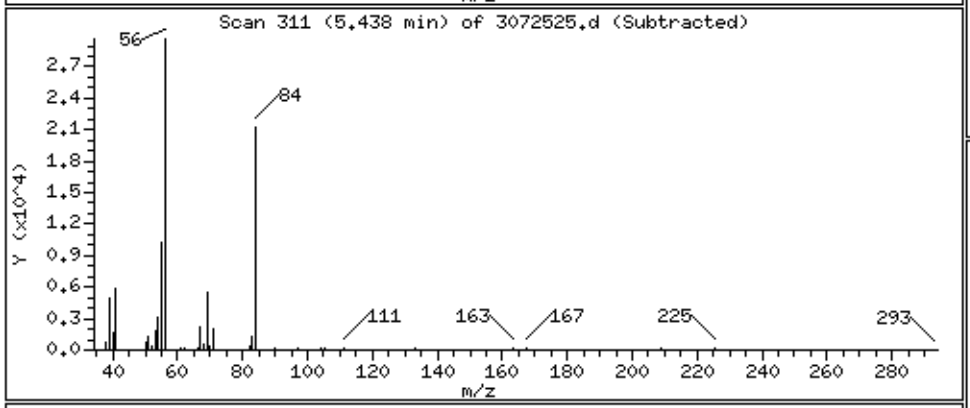
Column phase: RTX-624

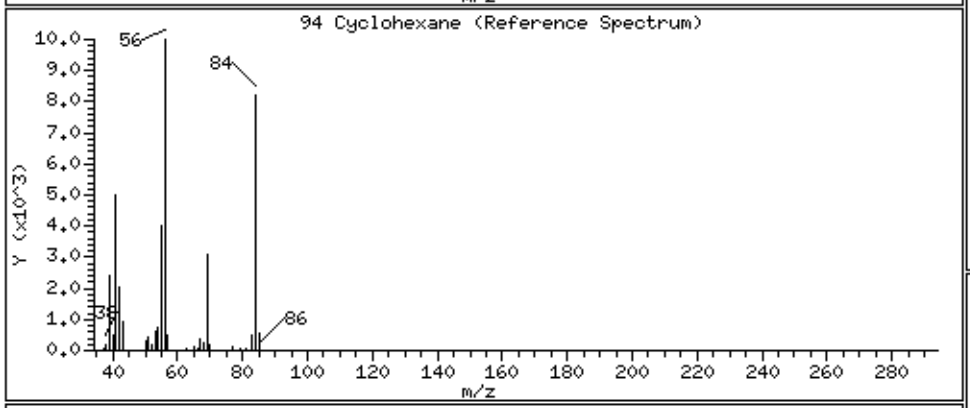
Column diameter: 0.25

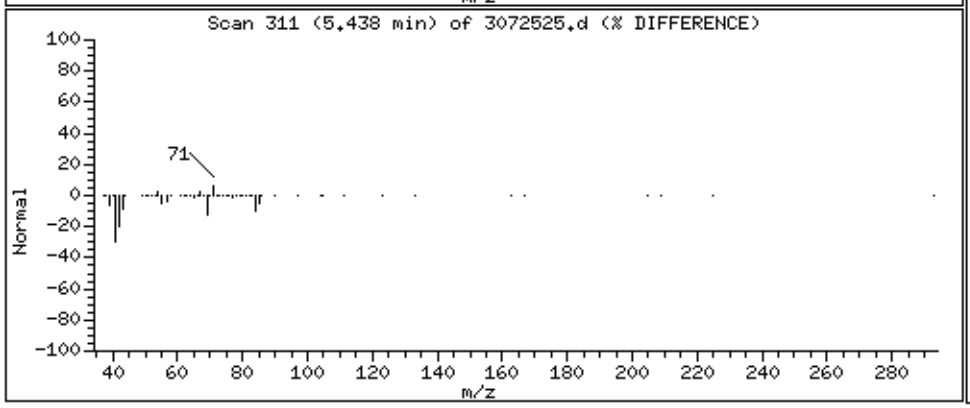
94 Cyclohexane

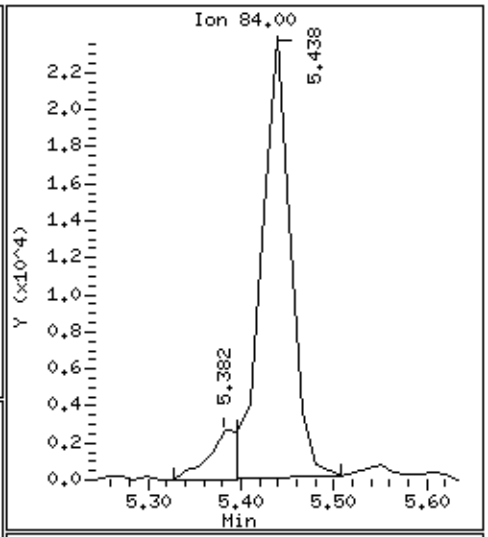
Concentration: 9.795 PPBV

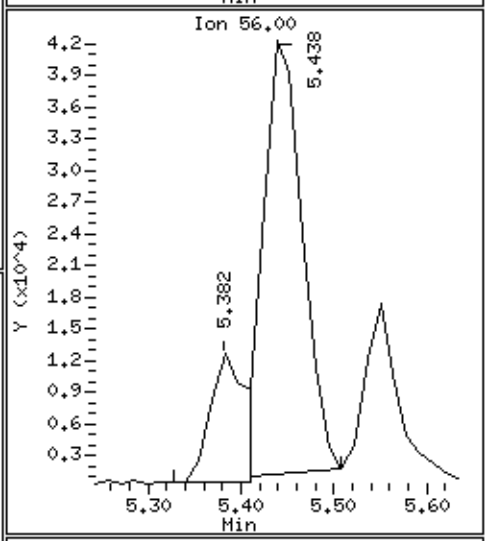


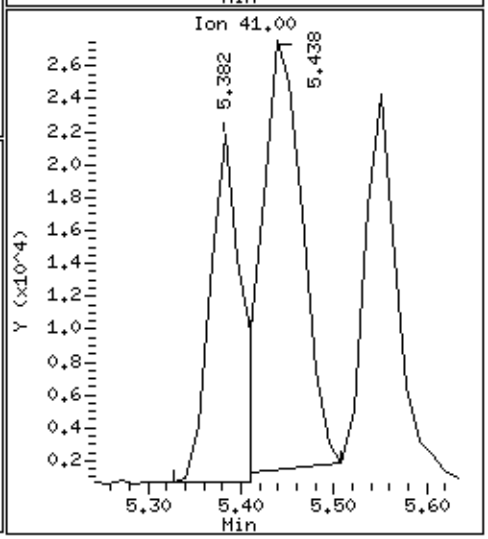












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

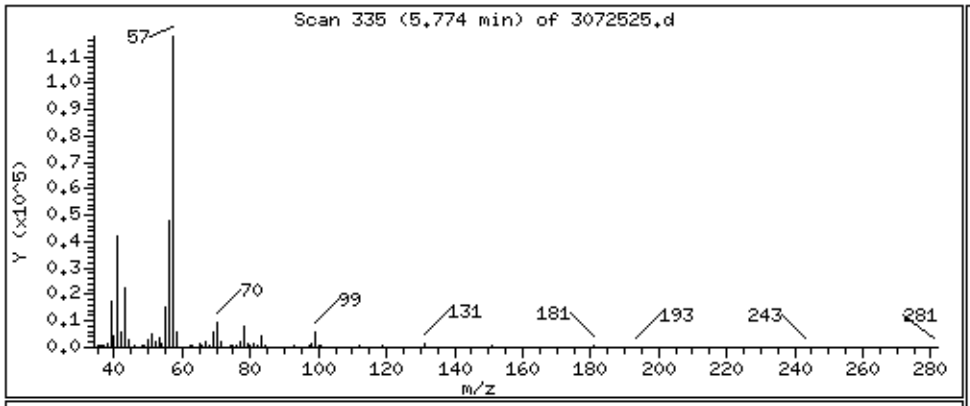
Operator: AB

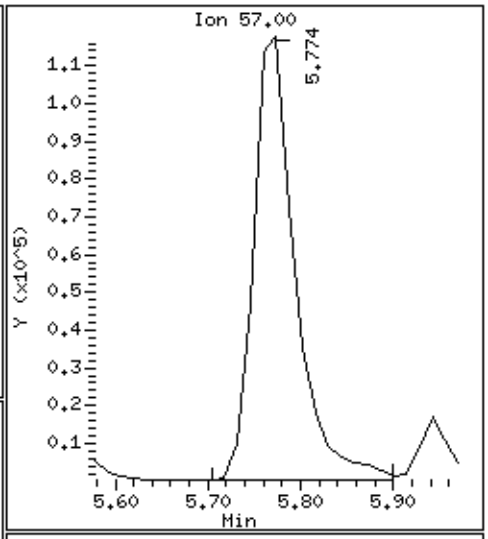
Column phase: RTX-624

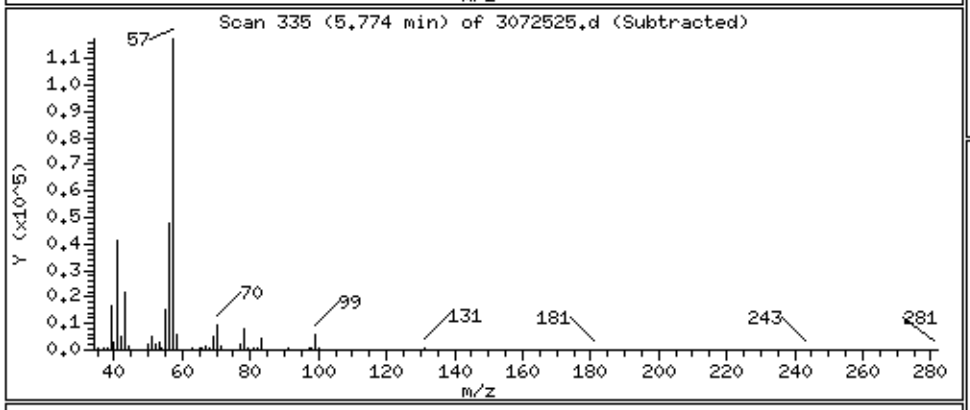
Column diameter: 0.25

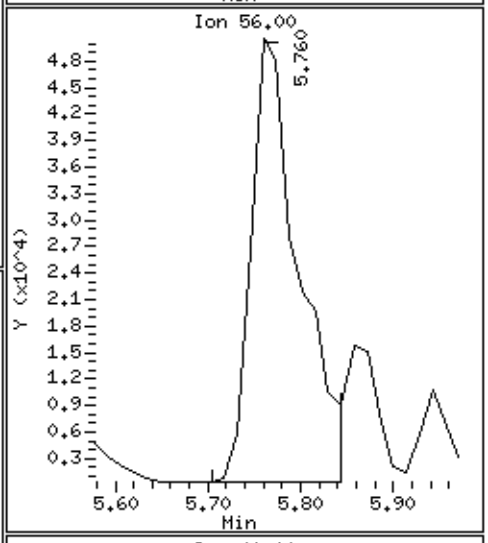
101 2,2,4-Trimethylpentane

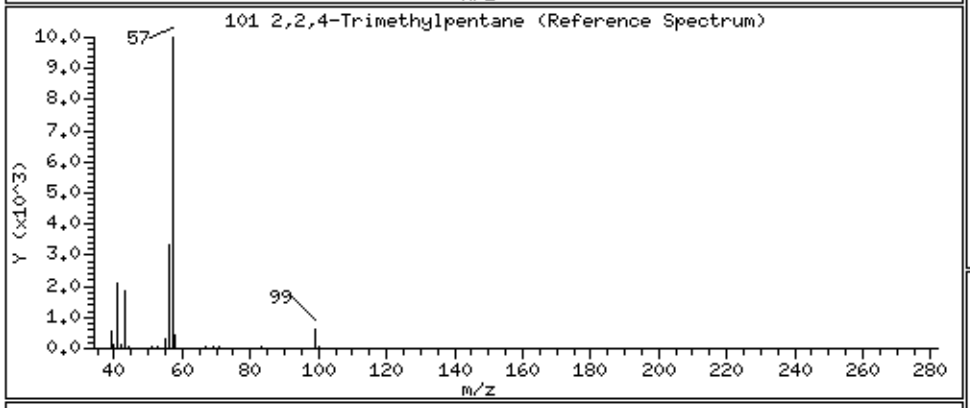
Concentration: 15.630 PPBV

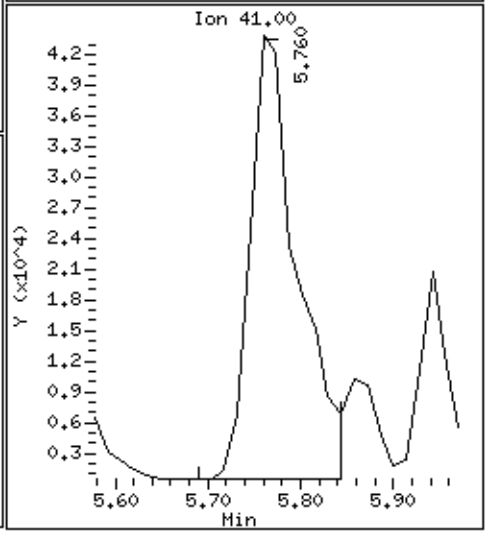


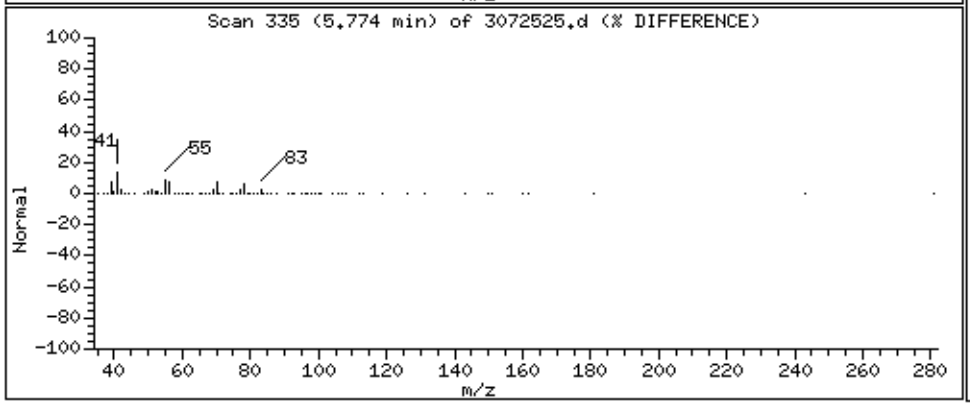












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

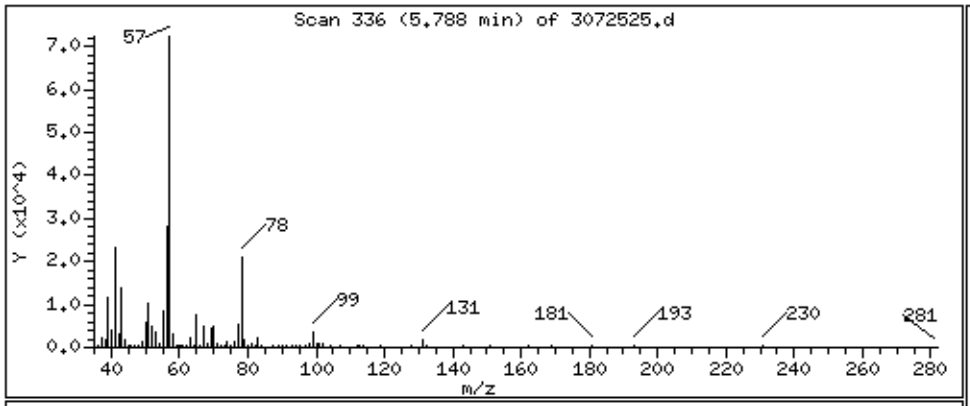
Operator: AB

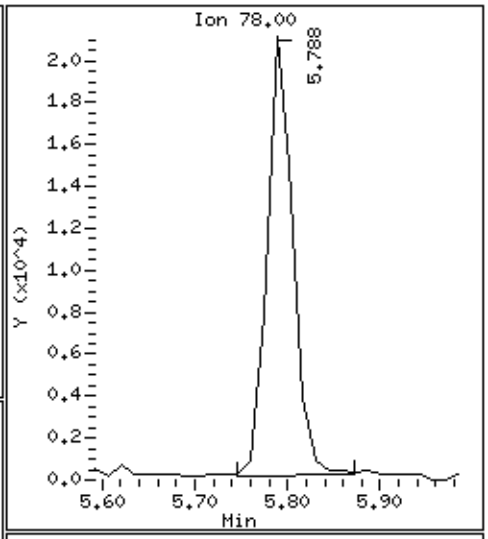
Column phase: RTX-624

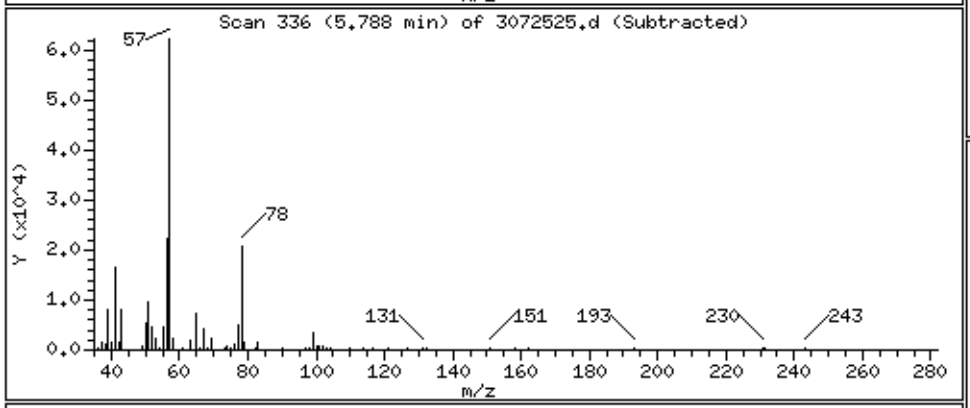
Column diameter: 0.25

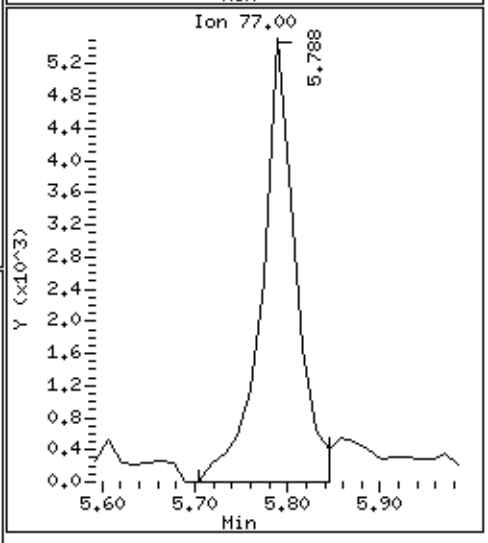
102 Benzene

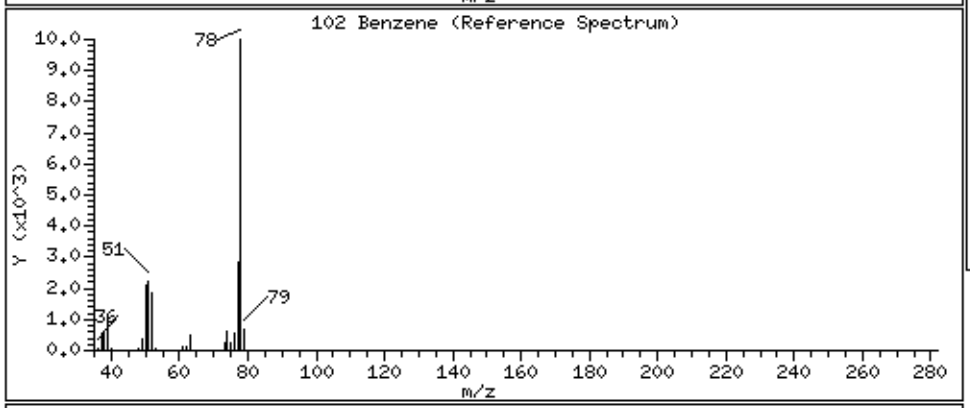
Concentration: 3.869 PPBV

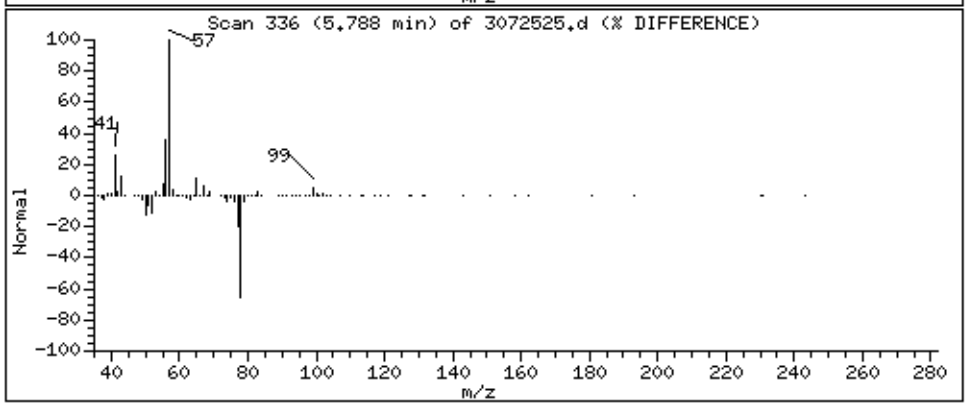












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

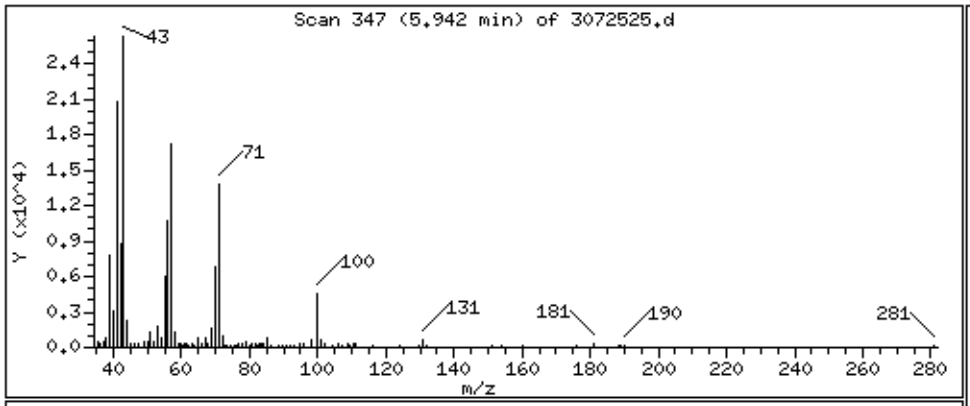
Operator: AB

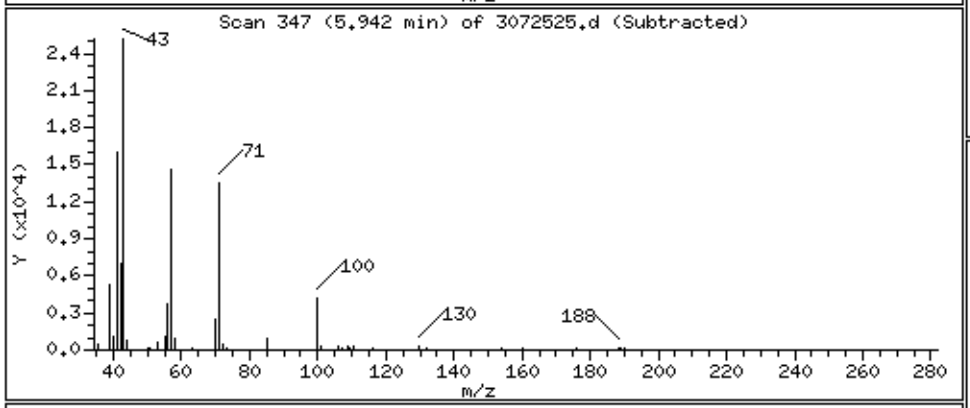
Column phase: RTX-624

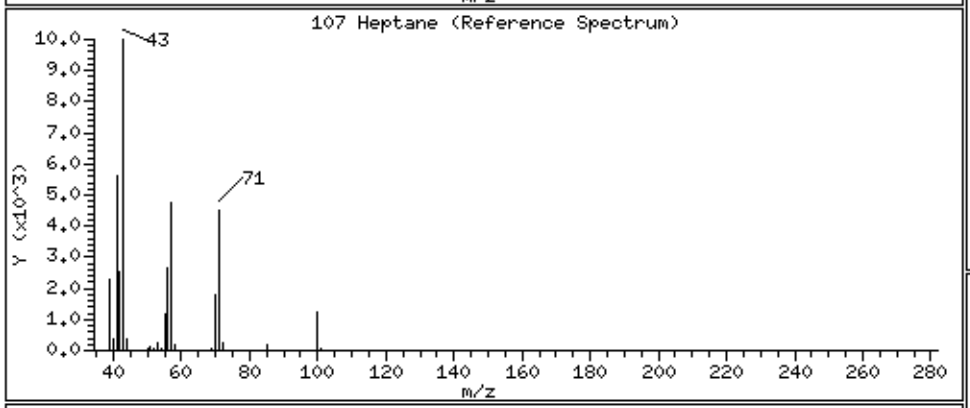
Column diameter: 0.25

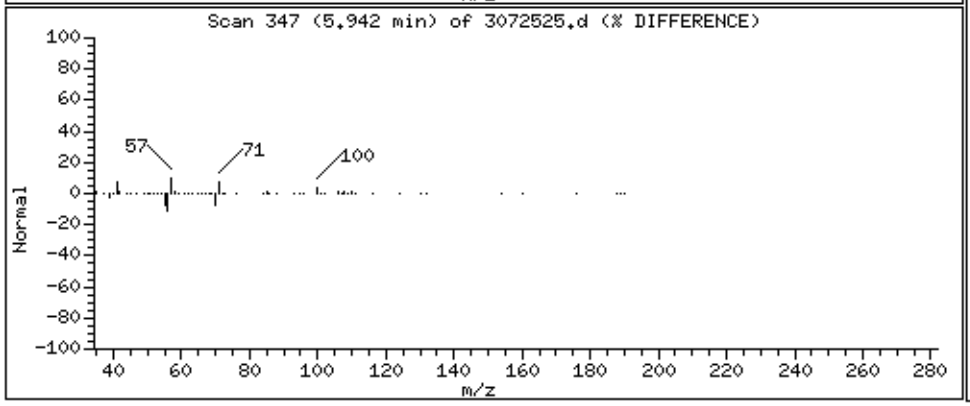
107 Heptane

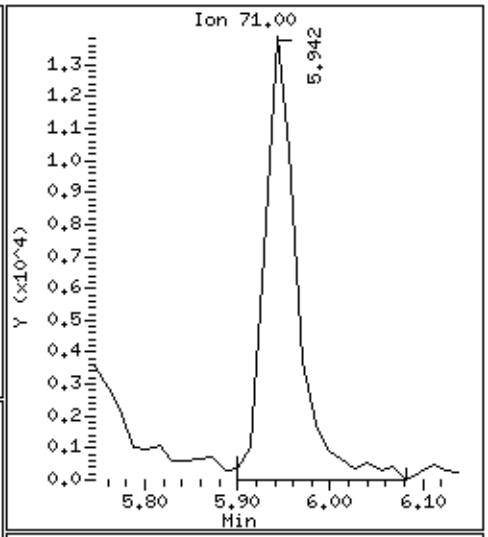
Concentration: 8.296 PPBV

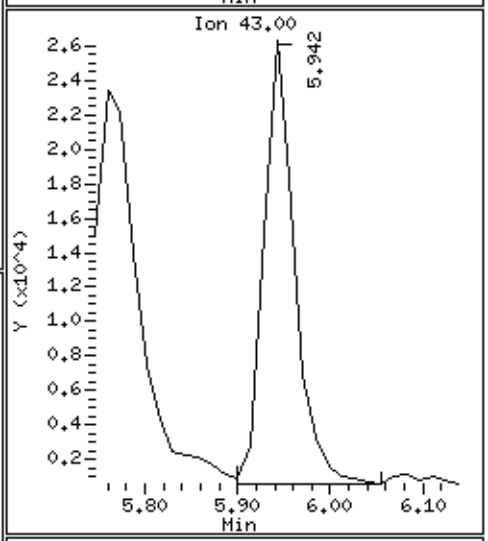


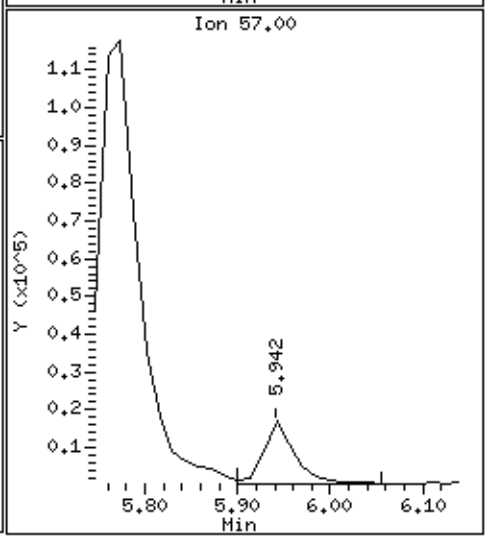












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

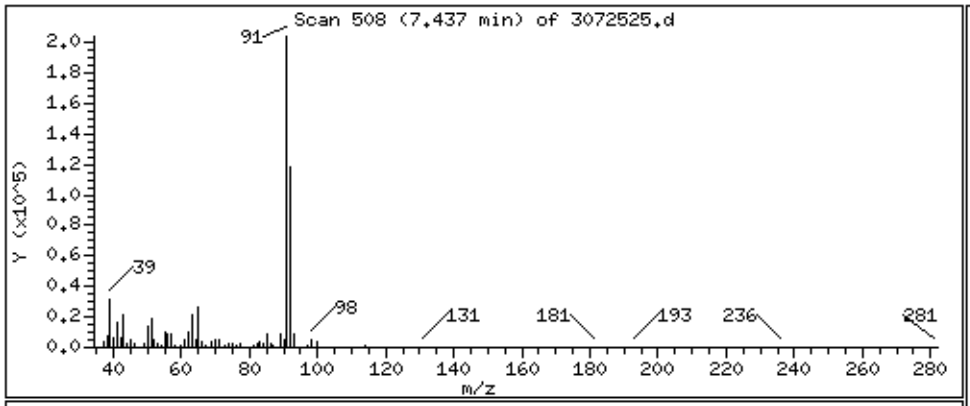
Operator: AB

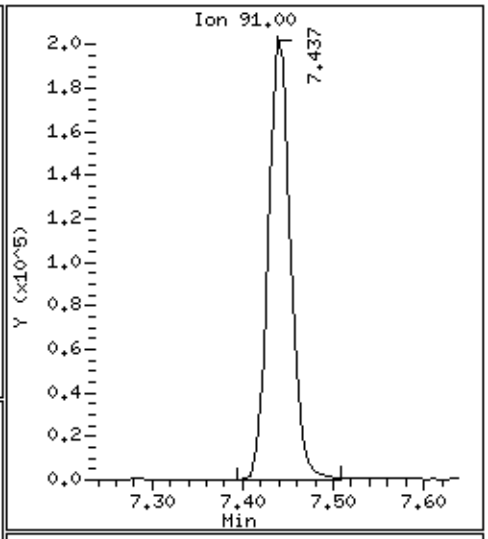
Column phase: RTX-624

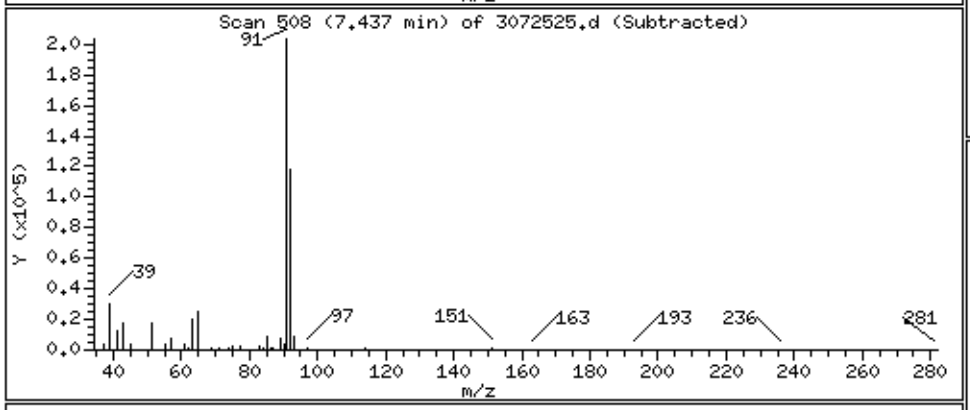
Column diameter: 0.25

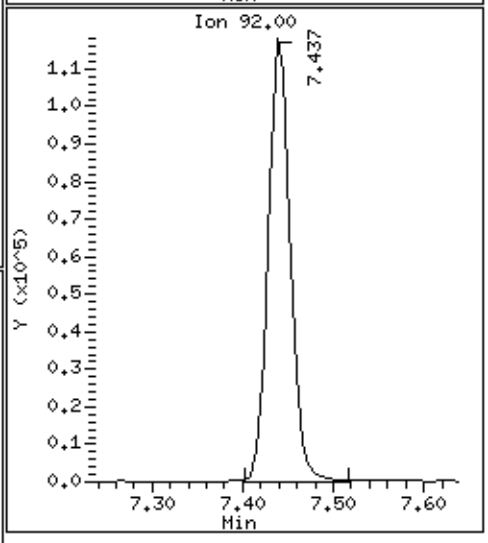
137 Toluene

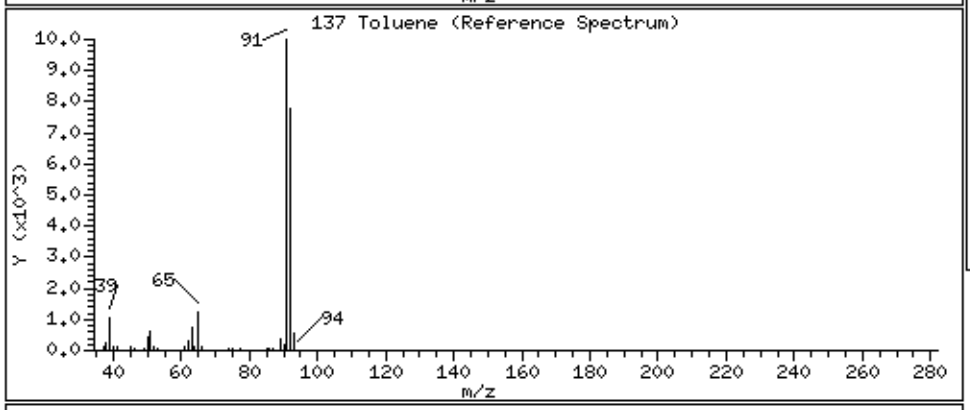
Concentration: 24.404 PPBV

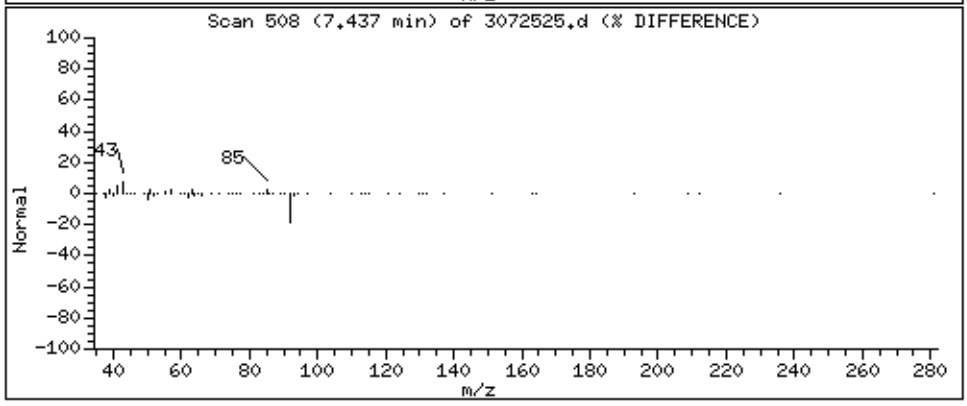












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

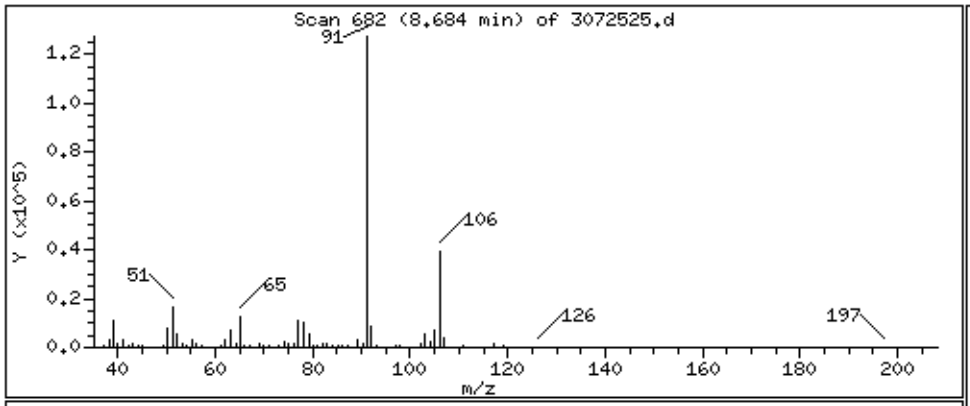
Operator: AB

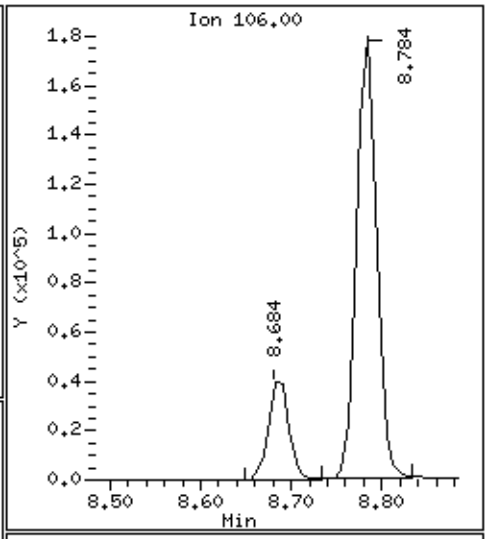
Column phase: RTX-624

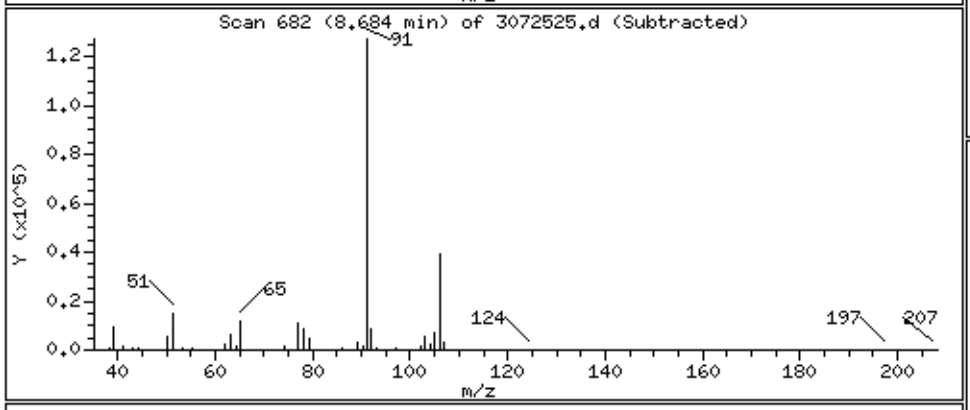
Column diameter: 0.25

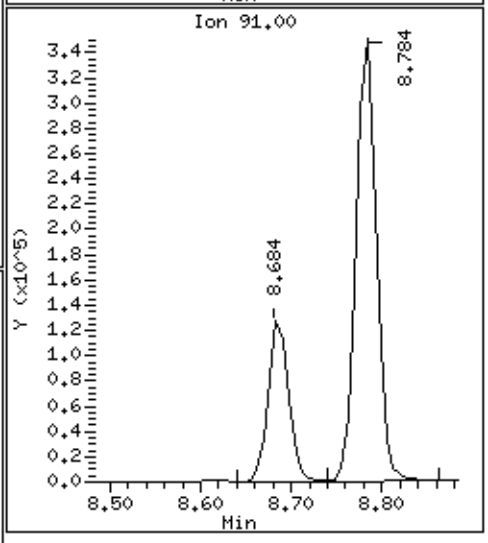
155 Ethyl Benzene

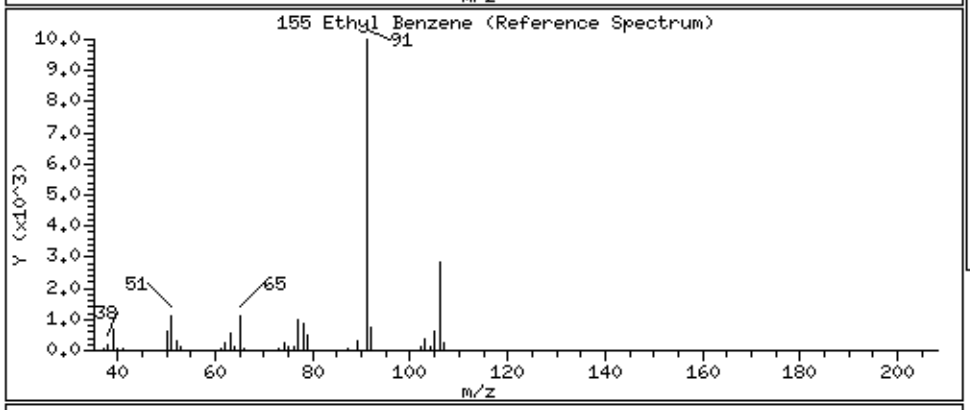
Concentration: 11.391 PPBV

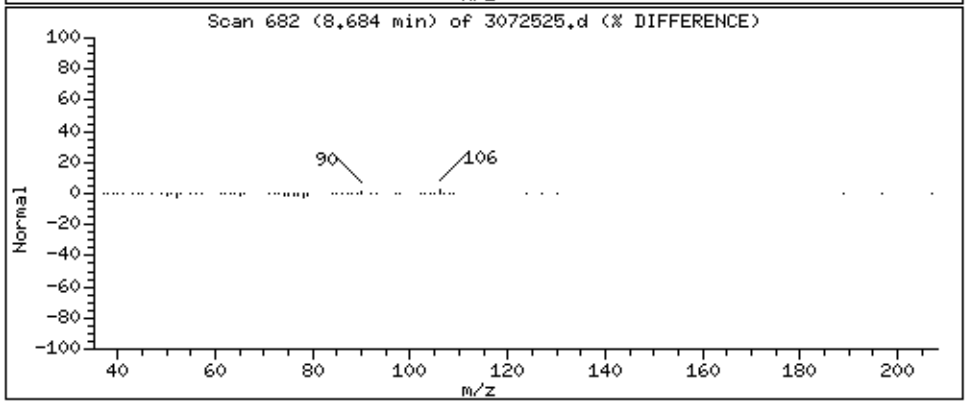












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

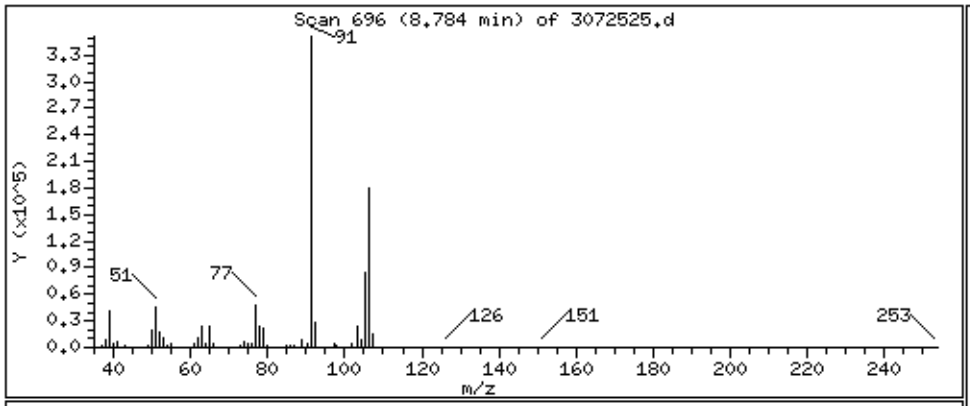
Operator: AB

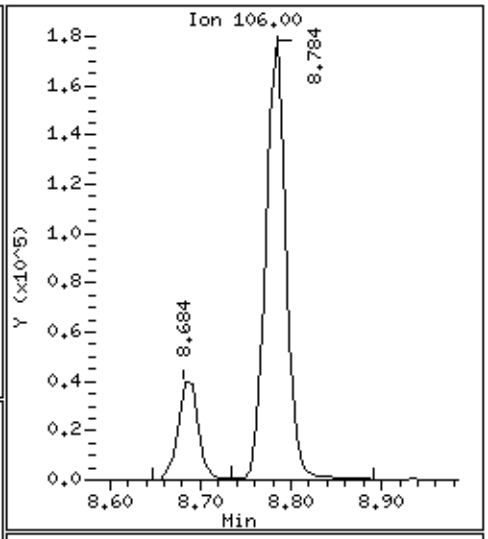
Column phase: RTX-624

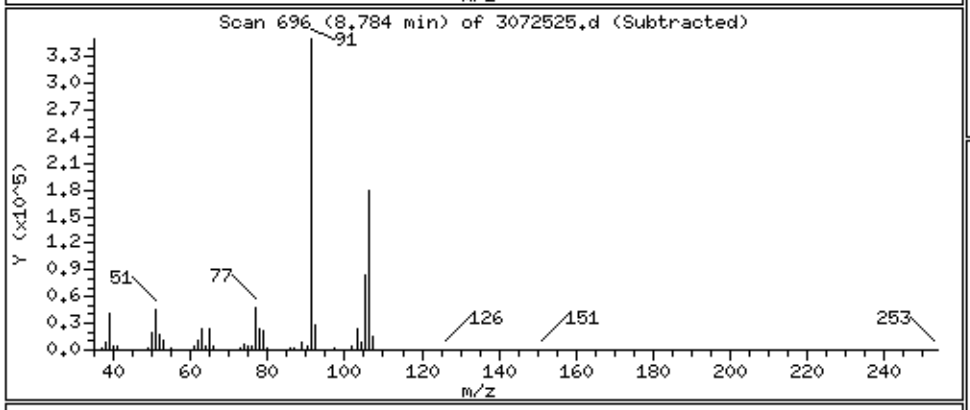
Column diameter: 0.25

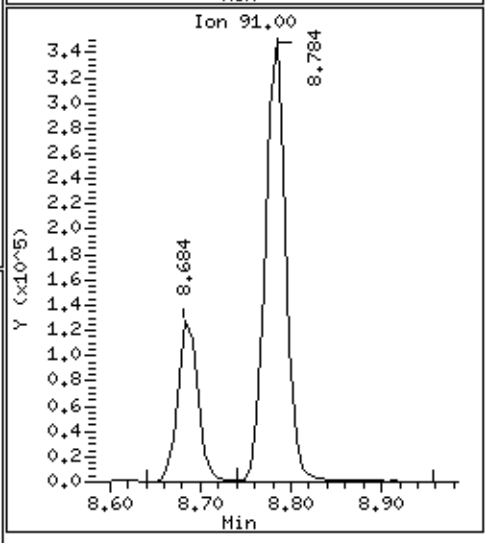
158 m,p-Xylene

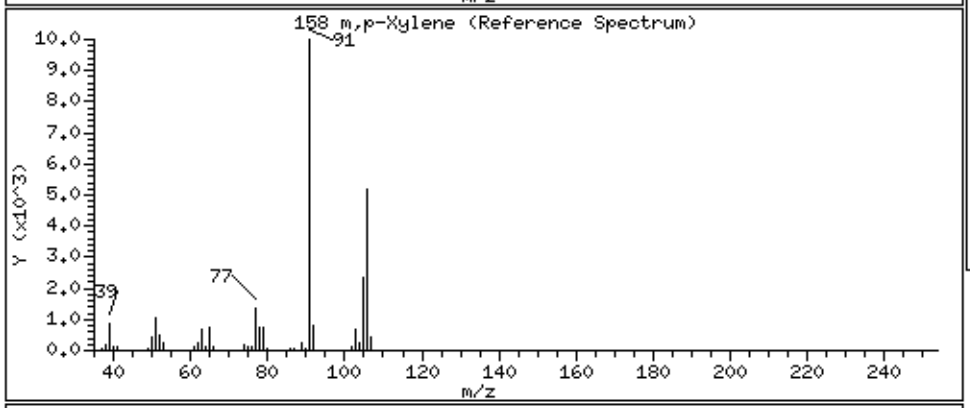
Concentration: 39.922 PPBV

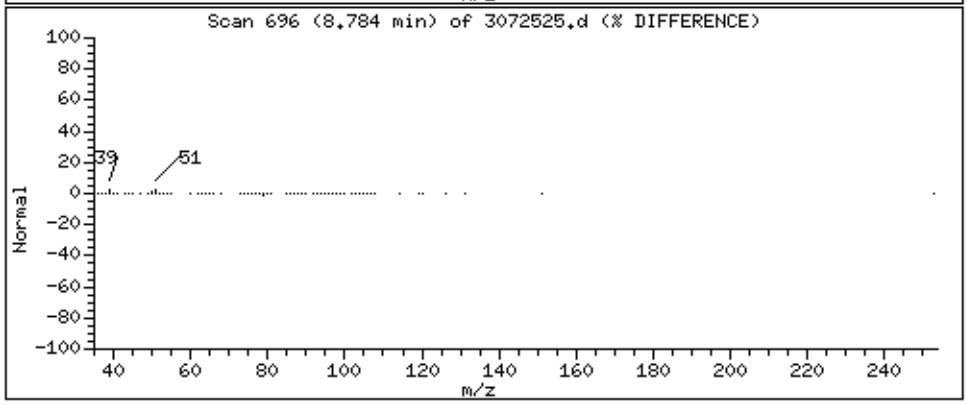












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

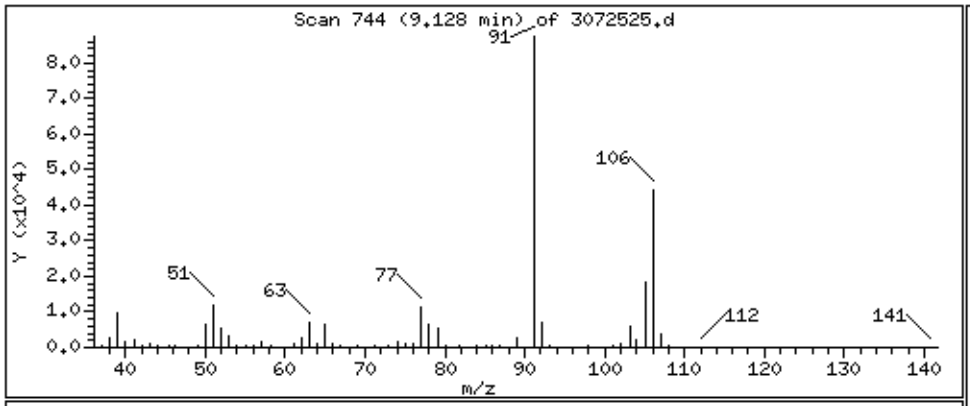
Operator: AB

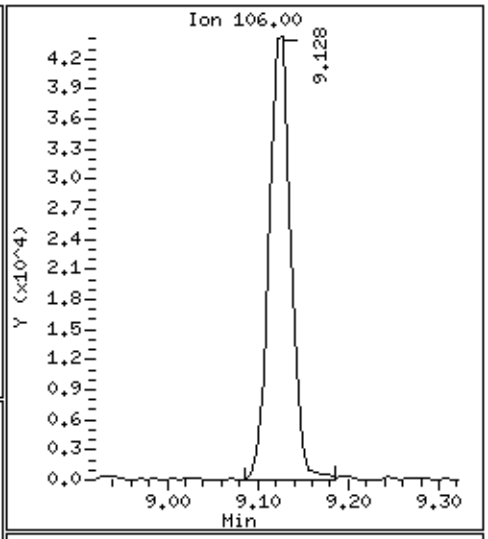
Column phase: RTX-624

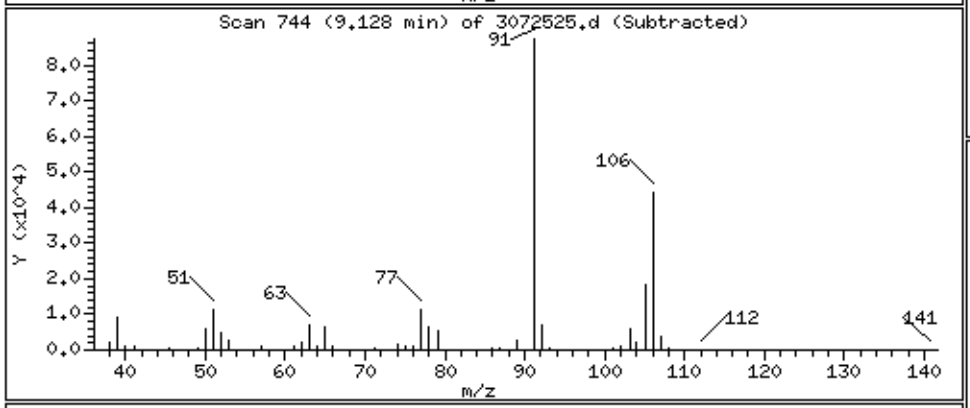
Column diameter: 0.25

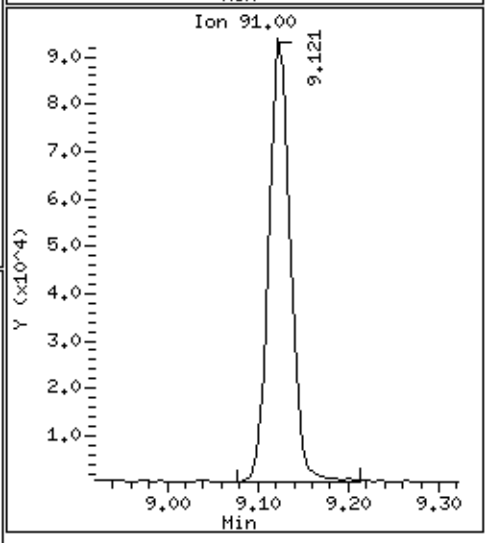
164 o-Xylene

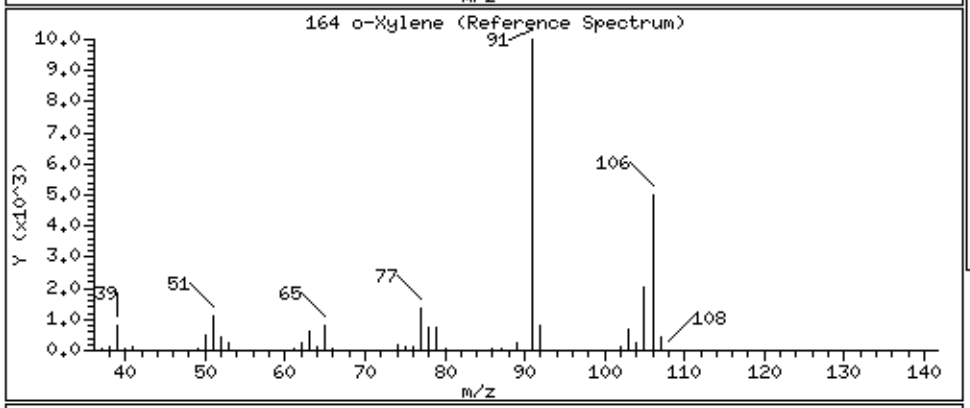
Concentration: 11.217 PPBV

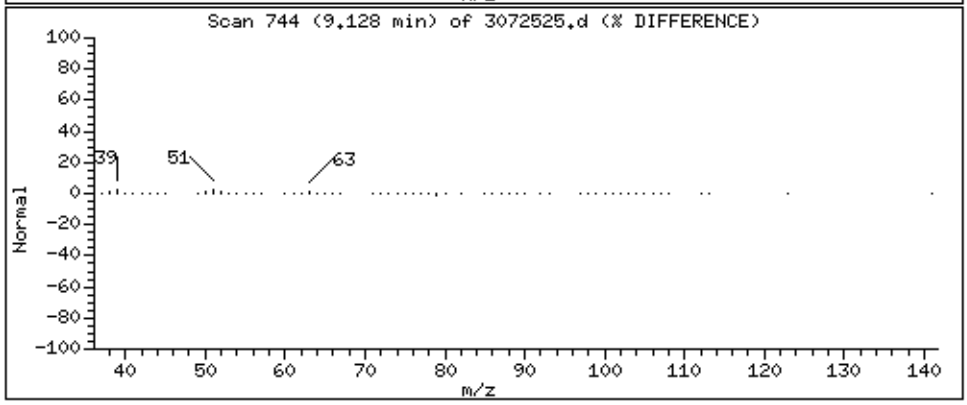












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

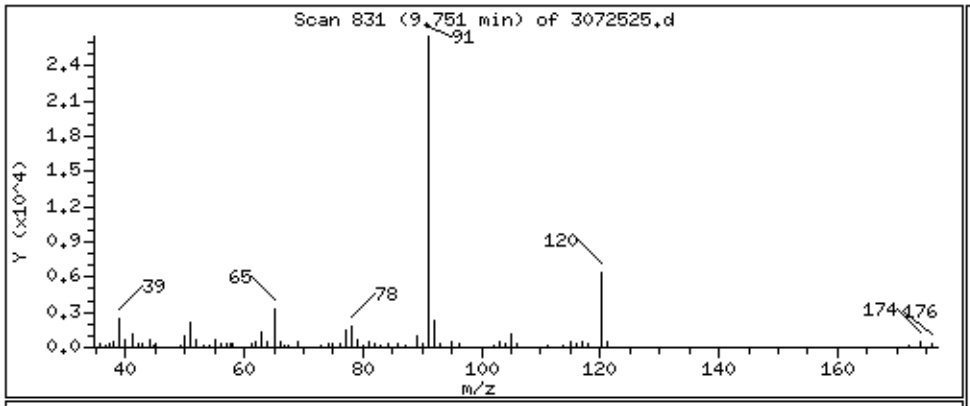
Operator: AB

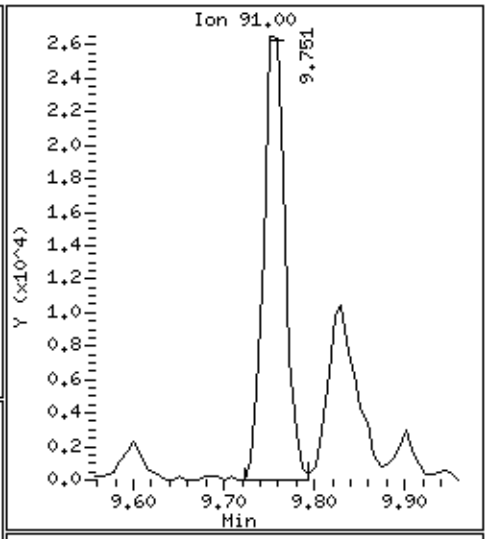
Column phase: RTX-624

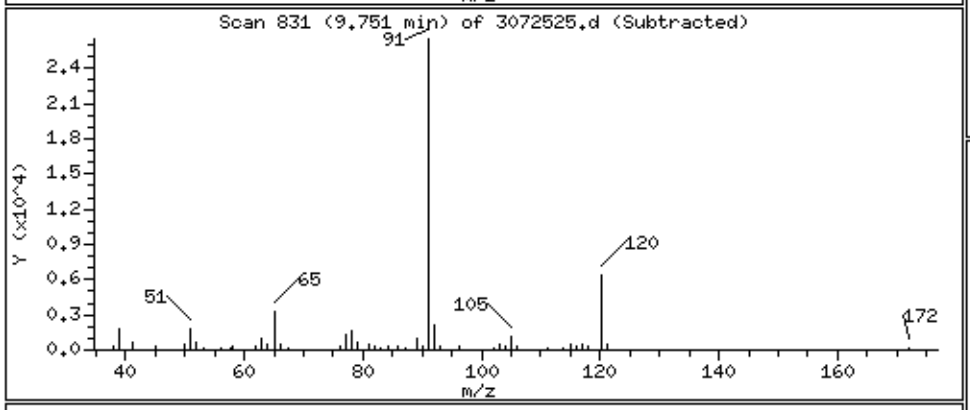
Column diameter: 0.25

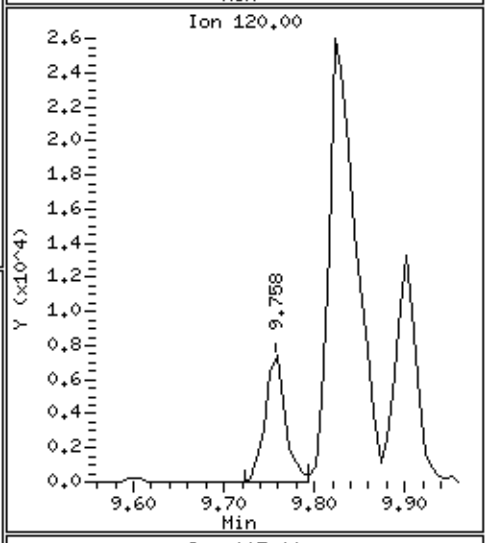
178 Propylbenzene

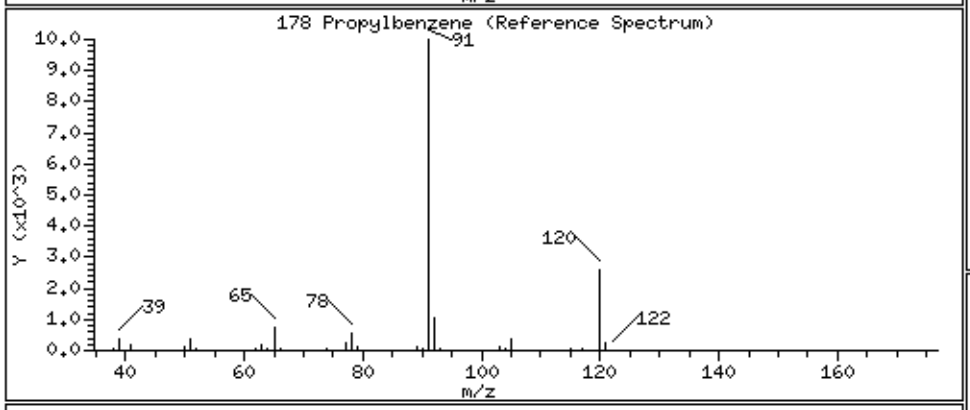
Concentration: 1.786 PPBV

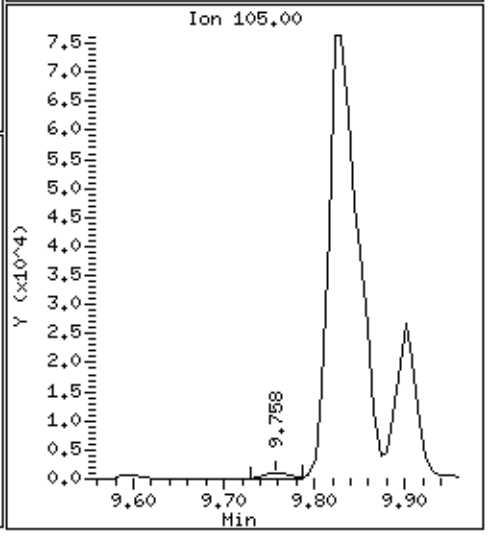


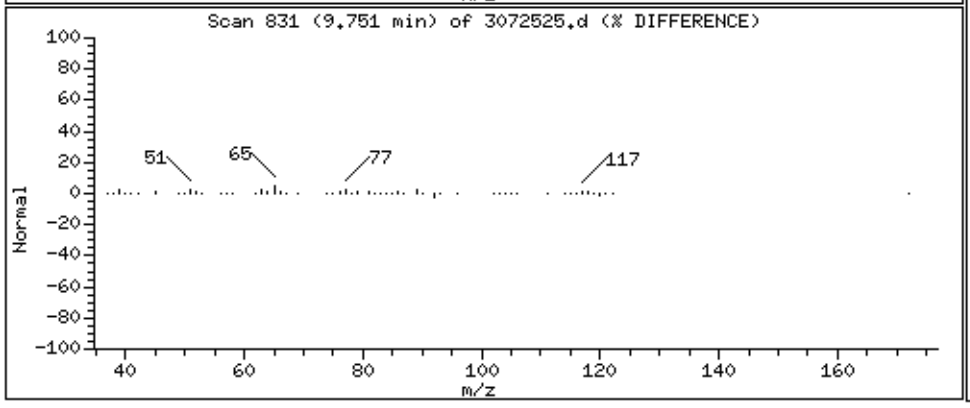












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

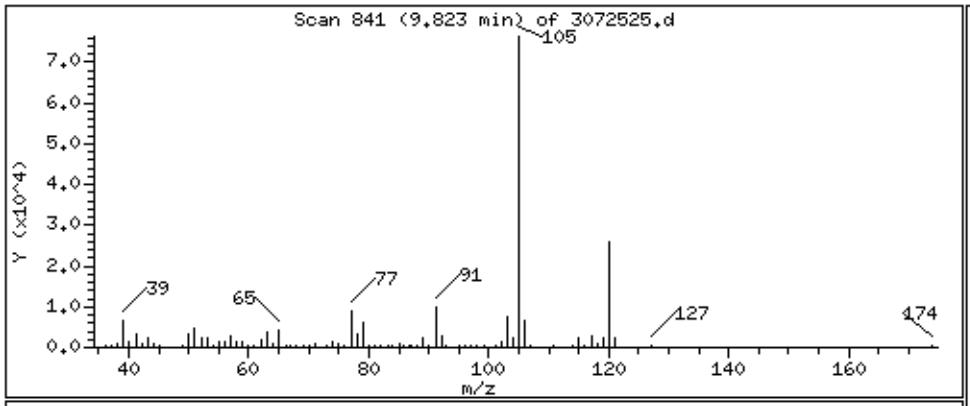
Operator: AB

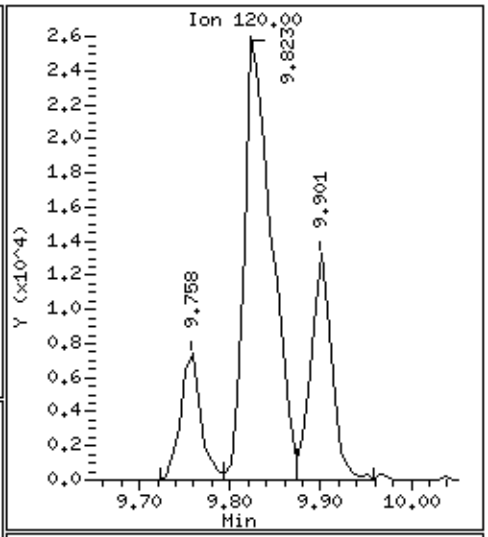
Column phase: RTX-624

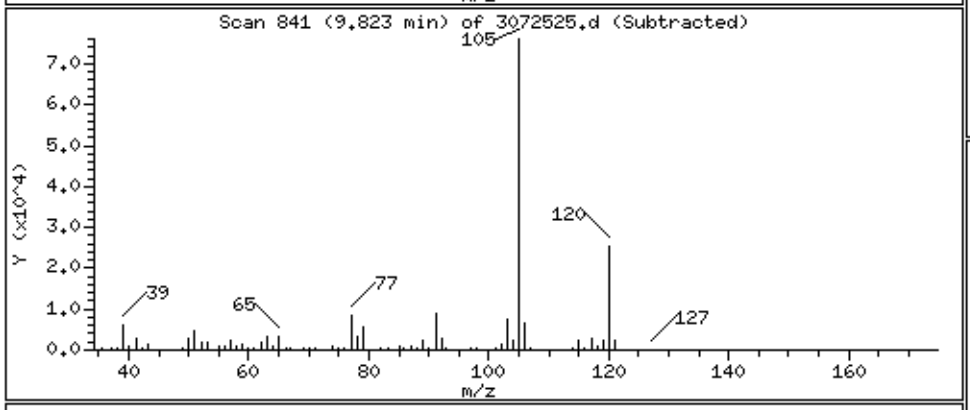
Column diameter: 0.25

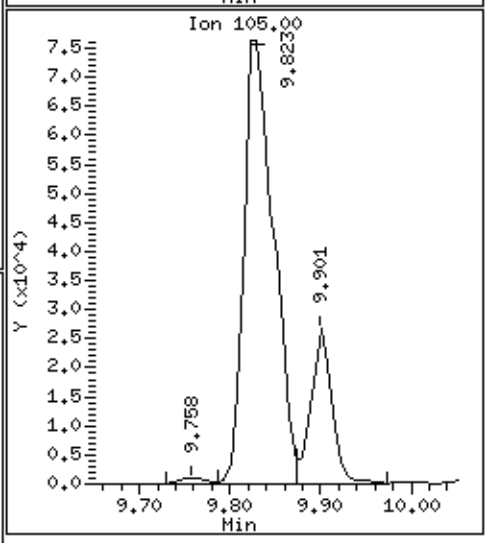
183 4-Ethyltoluene

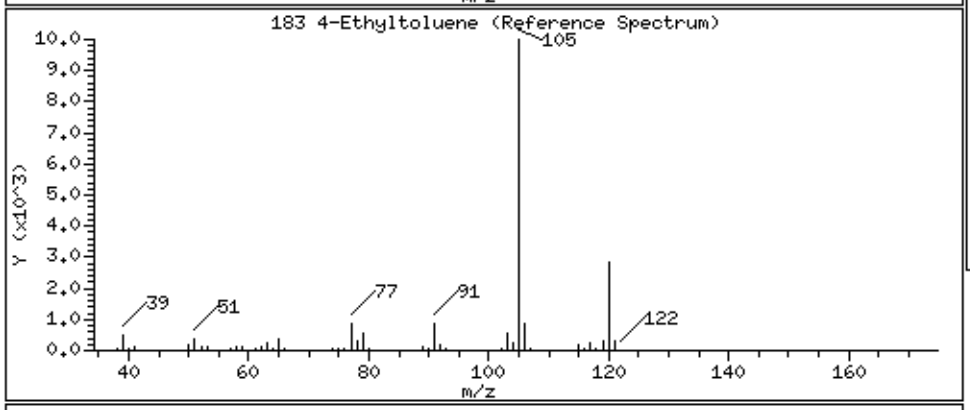
Concentration: 8.674 PPBV

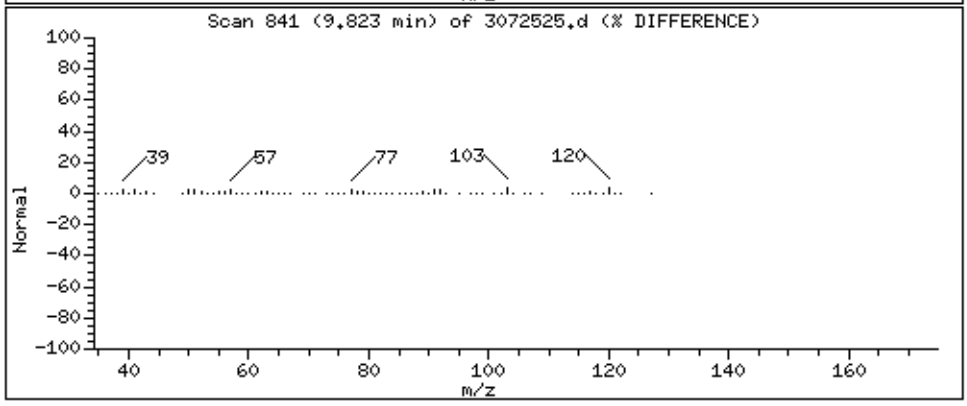












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

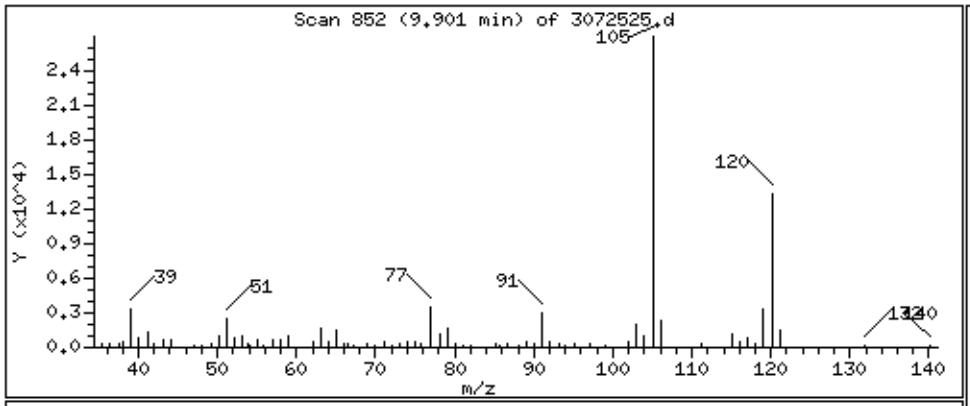
Operator: AB

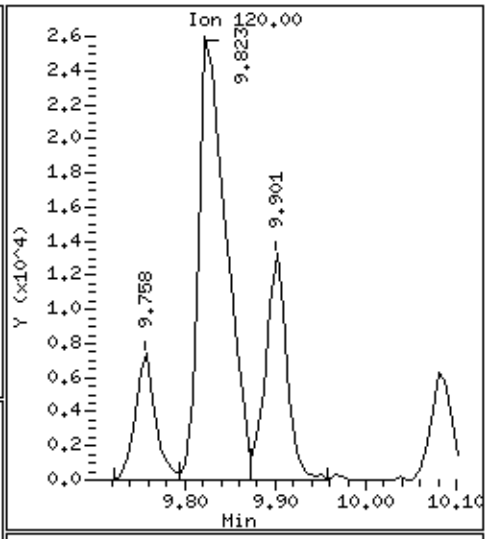
Column phase: RTX-624

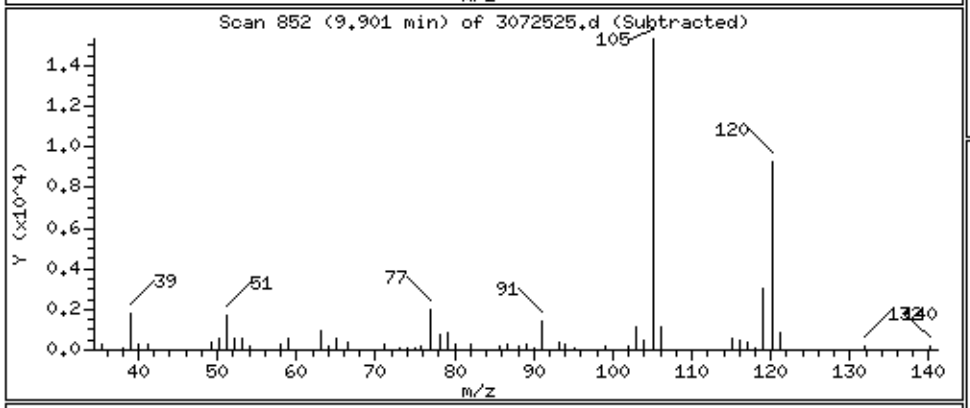
Column diameter: 0.25

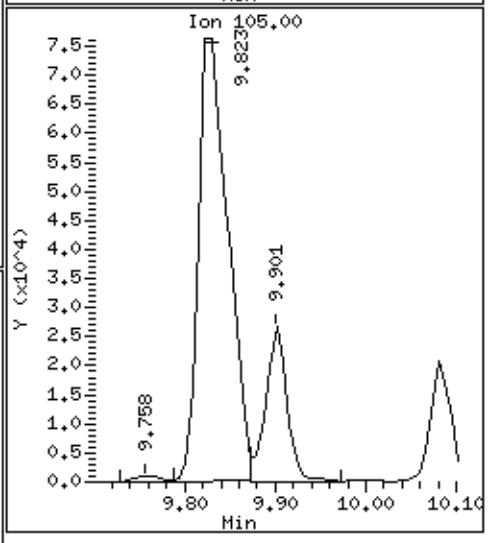
185 1,3,5-Trimethylbenzene

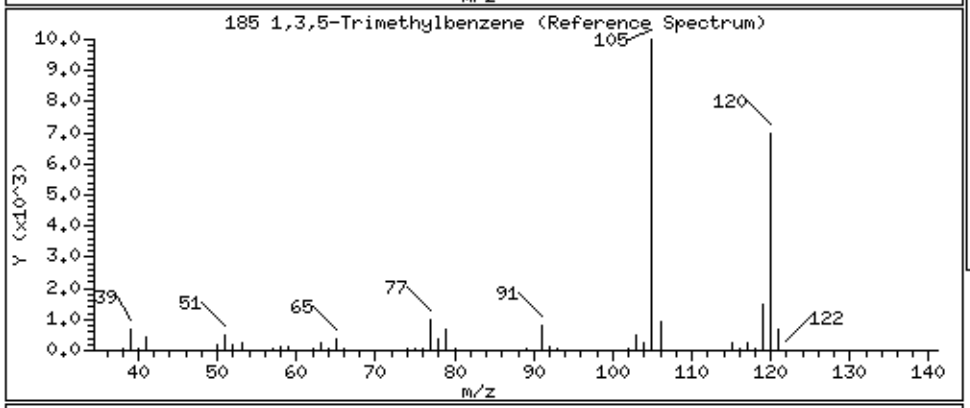
Concentration: 2.426 PPBV

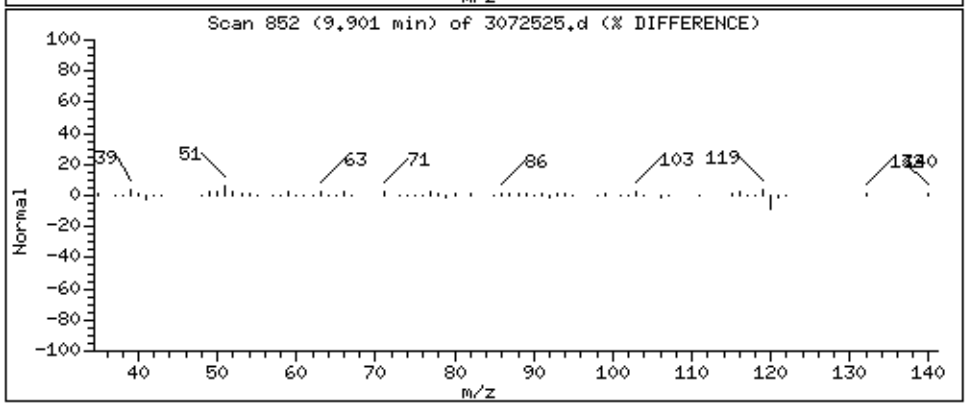












Data File: /chem/msd3.i/25JUL21.b/3072525.d

Date : 26-JUL-2021 01:15

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00877

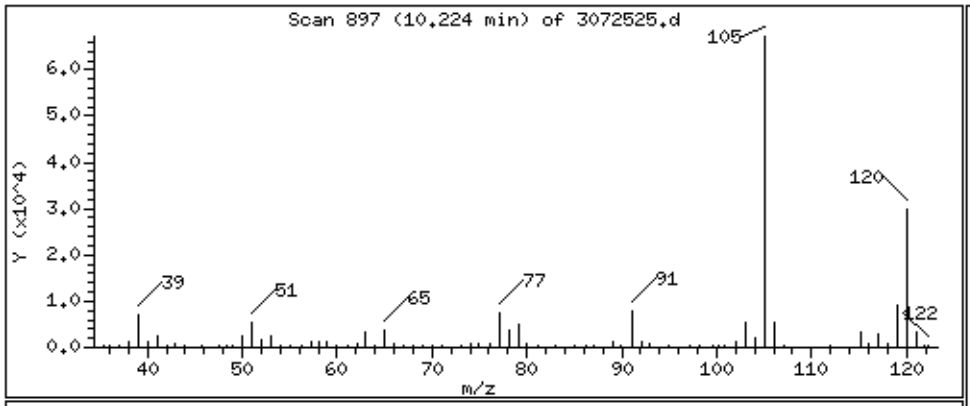
Operator: AB

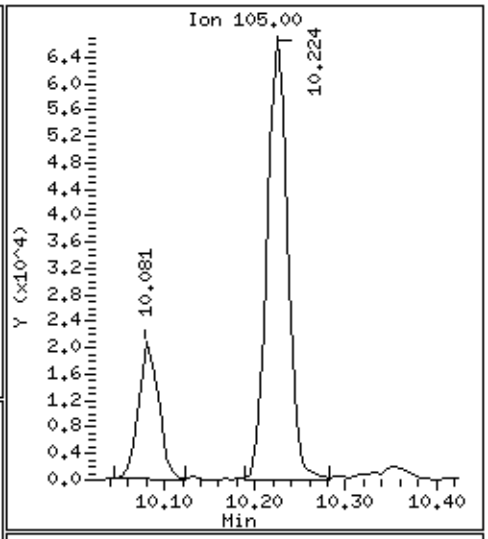
Column phase: RTX-624

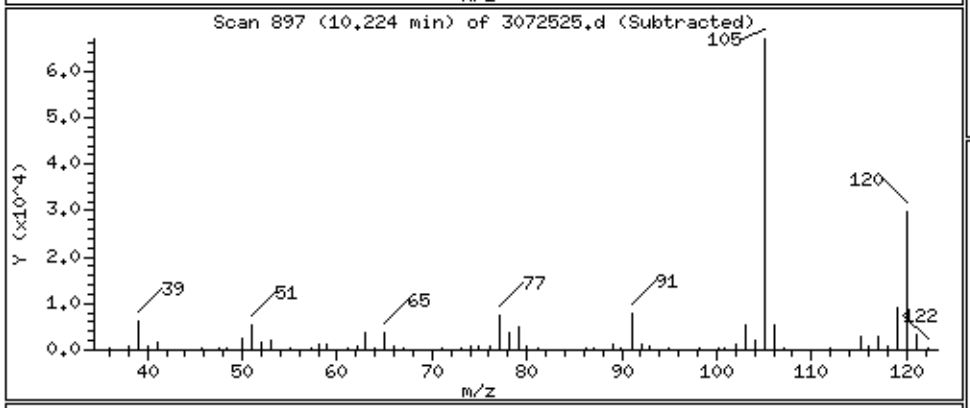
Column diameter: 0.25

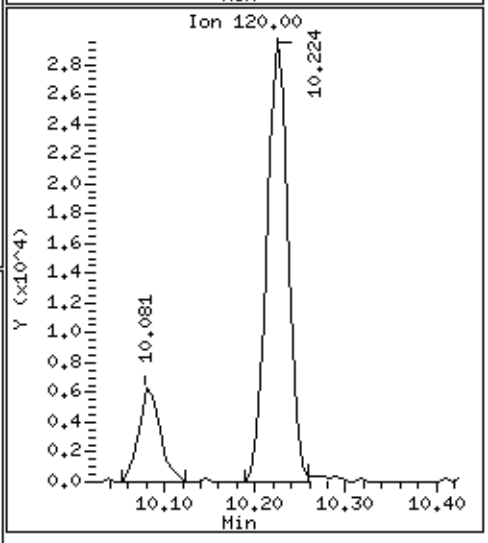
190 1,2,4-Trimethylbenzene

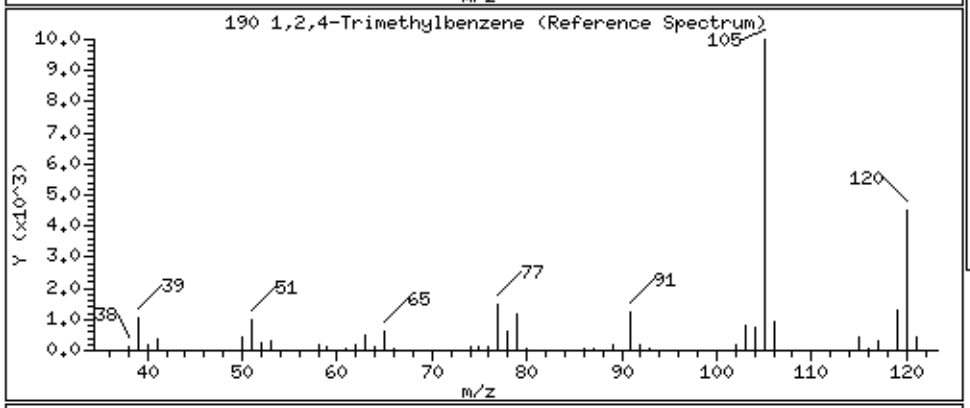
Concentration: 6.039 PPBV

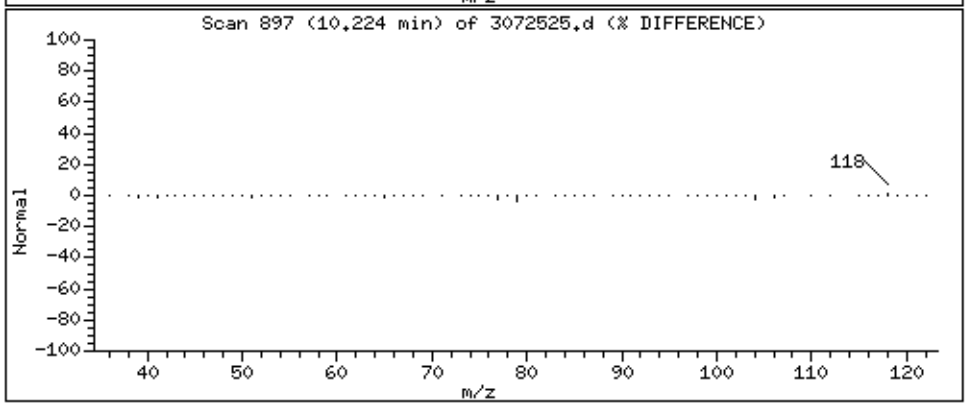












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Client Sample ID: SG-VW41B-02

Lab ID#: 2107260A-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072526**	**Date of Collection:**	**7/13/21 9:45:00 AM**
Dil. Factor:	**2.08**	**Date of Analysis:**	**7/26/21 01:45 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.2	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.7	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
1,1-Difluoroethane	4.2	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	25	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	40	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.0	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
2-Hexanone	4.2	Not Detected	17	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Acetone	10	Not Detected	25	Not Detected
Acrolein	4.2	Not Detected	9.5	Not Detected
Acrylonitrile	4.2	Not Detected	9.0	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
Bromodichloromethane	1.0	Not Detected	7.0	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Chloroform	1.0	Not Detected	5.1	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected

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Client Sample ID: SG-VW41B-02

Lab ID#: 2107260A-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072526**	**Date of Collection:**	**7/13/21 9:45:00 AM**
Dil. Factor:	**2.08**	**Date of Analysis:**	**7/26/21 01:45 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
Ethanol	10	Not Detected	20	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	17	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 113	1.0	Not Detected	8.0	Not Detected
Freon 114	1.0	Not Detected	7.3	Not Detected
Freon 134a	4.2	Not Detected	17	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Hexachlorobutadiene	4.2	Not Detected	44	Not Detected
Hexachloroethane	4.2	Not Detected	40	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
Iodomethane	10	Not Detected	60	Not Detected
Isopropyl ether	4.2	Not Detected	17	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
Propylene	4.2	Not Detected	7.2	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	17	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
Tetrachloroethene	1.0	1.2	7.0	8.5
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	420	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW41B-02

Lab ID#: 2107260A-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072526**	**Date of Collection:**	**7/13/21 9:45:00 AM**
Dil. Factor:	**2.08**	**Date of Analysis:**	**7/26/21 01:45 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072526.d
Lab Smp Id: 2107260A-18A
Inj Date : 26-JUL-2021 01:45
Operator : AB Inst ID: msd3.i
Smp Info : 200mL 1L1906
Misc Info : 5.9 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 6
Dil Factor: 2.08000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	245324	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	190984				48.46- 108.46	77.85
5.284	5.270 (1.000)	49	359176				120.39- 180.39	146.41
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	850770	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	127497				0.00- 45.52	14.99
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	731140	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	381838				25.46- 85.46	52.23
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	334633	24.7868	24.787		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	163467				21.66- 81.66	48.85
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	801200	22.8641	22.864		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	88244				0.00- 41.47	11.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	526510			36.47- 96.47	65.72
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	461217	23.8491	23.849	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	521765			93.06- 153.06	113.13
9.601	9.601 (1.114)	176	426607			62.87- 122.87	92.50
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.882 (0.914)	166	6908	0.60310	1.254	80.00- 120.00	100.00
7.882	7.874 (0.914)	129	5287			48.71- 108.71	76.53
7.874	7.874 (0.914)	131	6744			46.55- 106.55	97.64

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072526.d
Lab Smp Id: 2107260A-18A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.9 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	245324	-7.87
108 1,4-Difluorobenze	910055	546033	1274077	850770	-6.51
153 Chlorobenzene-d5	785948	471569	1100327	731140	-6.97

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-18A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.9 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.787	99.15	70-130
$ 134 Toluene-d8	25.000	22.864	91.46	70-130
$ 170 4-Bromofluorobenz	25.000	23.849	95.40	70-130

Data File: /chem/msd3.i/25JUL21.b/3072526.d

Date : 26-JUL-2021 01:45

Client ID:

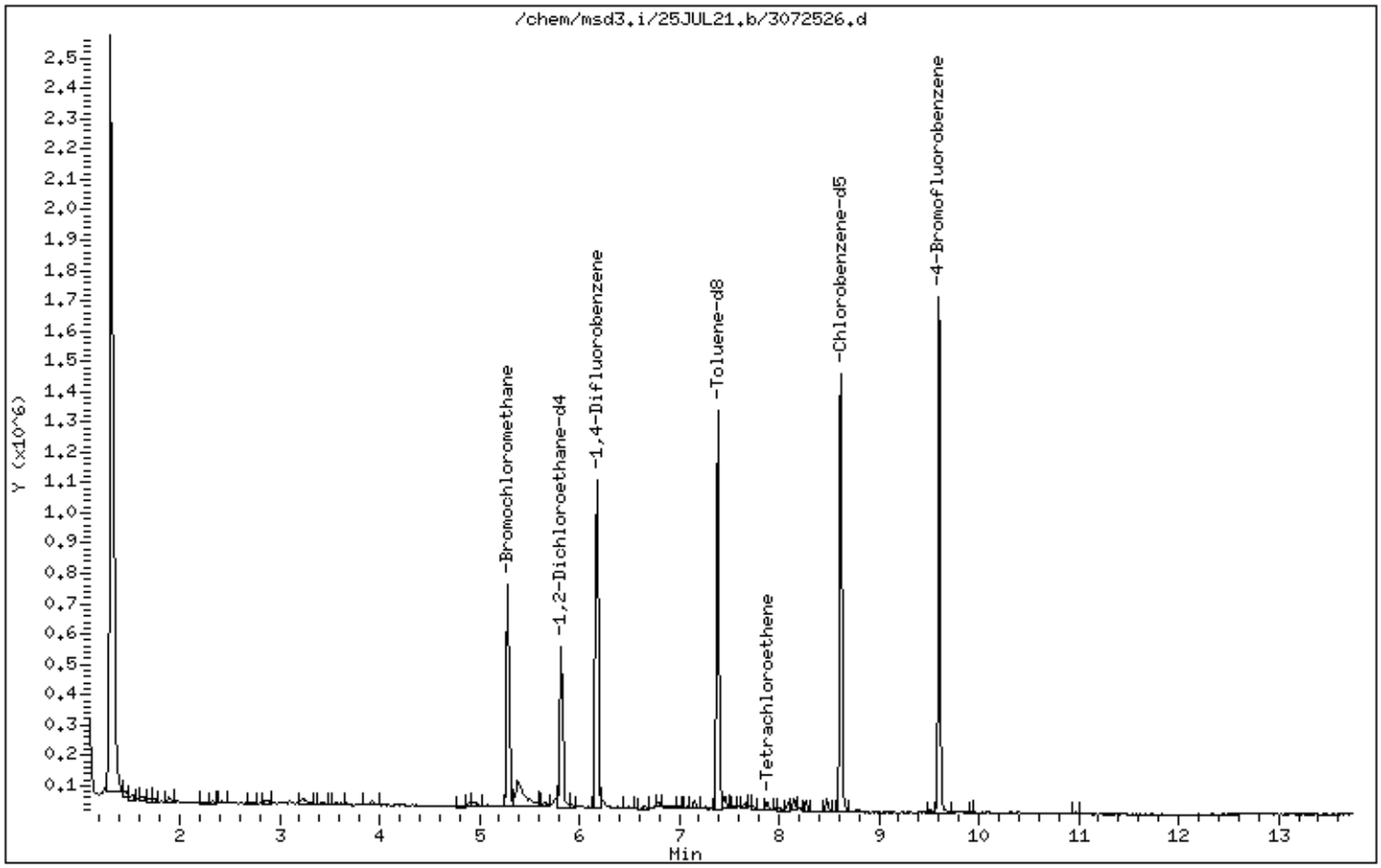
Instrument: msd3.i

Sample Info: 200mL 1L1906

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072526.d

Date : 26-JUL-2021 01:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1906

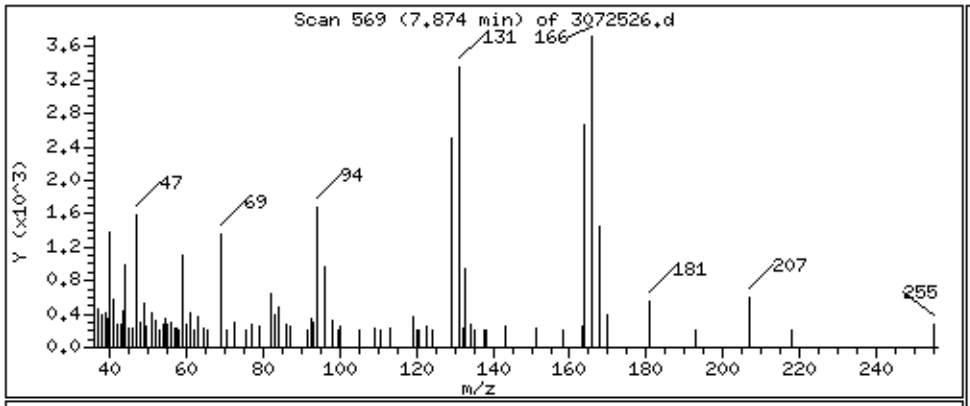
Operator: AB

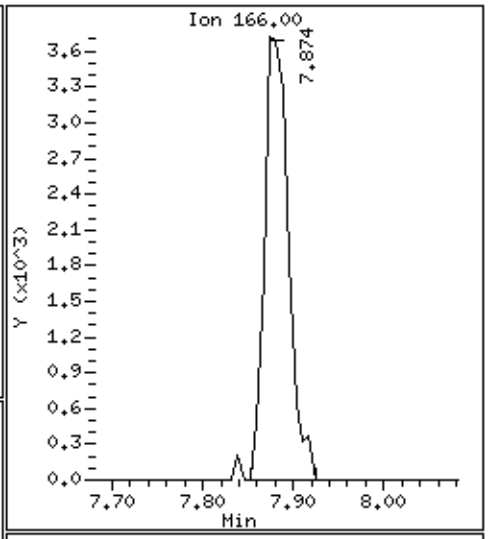
Column phase: RTX-624

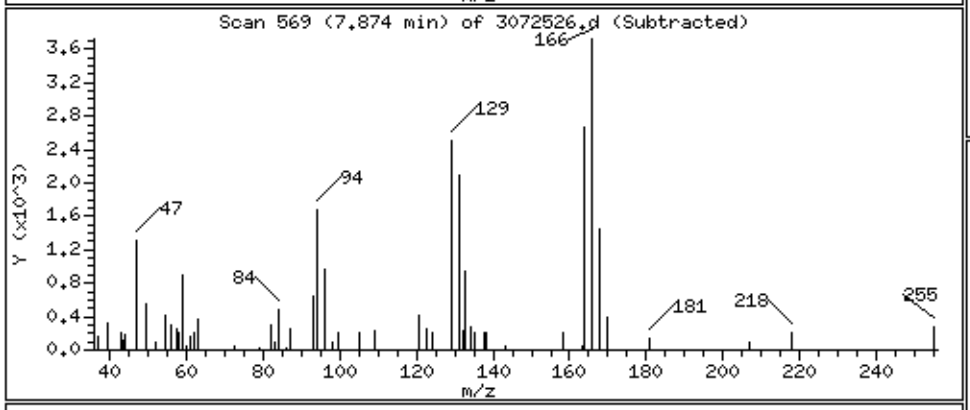
Column diameter: 0.25

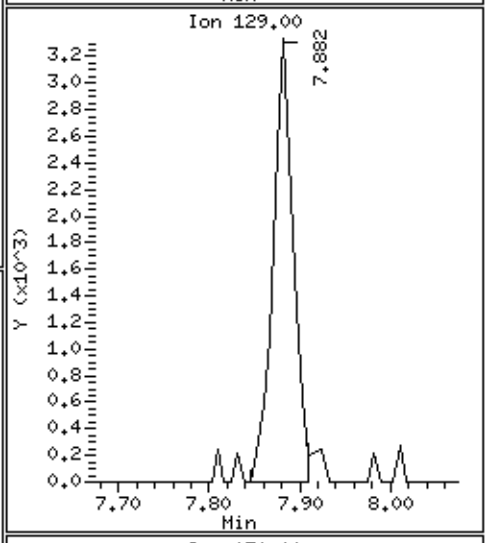
142 Tetrachloroethene

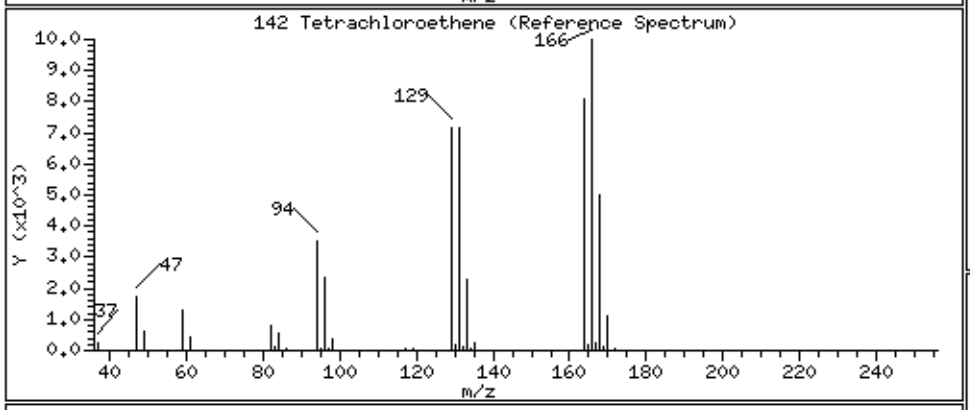
Concentration: 1.254 PPBV

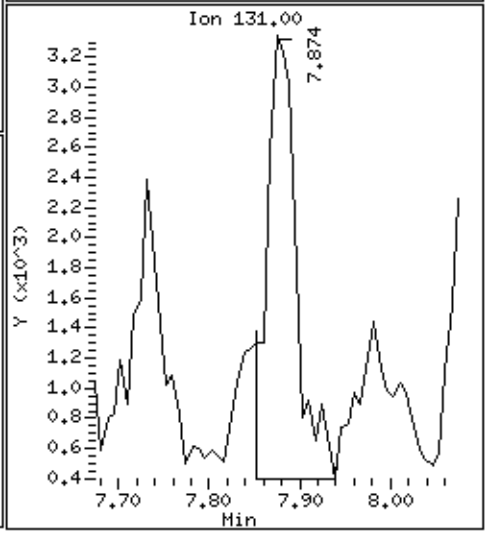


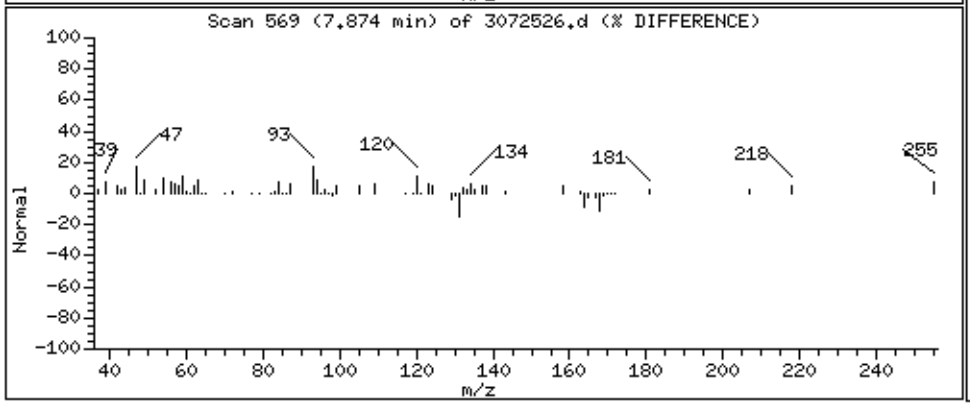












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Client Sample ID: SG-VW41A-03

Lab ID#: 2107260A-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072527**	**Date of Collection:**	**7/13/21 10:30:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/26/21 02:14 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.0	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	6.9	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
1,1-Difluoroethane	4.0	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.0	Not Detected	24	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected	30	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,2-Dibromo-3-chloropropane	4.0	Not Detected	39	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.8	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.0	Not Detected	12	Not Detected
2-Hexanone	4.0	Not Detected	16	Not Detected
2-Propanol	4.0	Not Detected	9.9	Not Detected
3-Chloropropene	4.0	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Acetone	10	Not Detected	24	Not Detected
Acrolein	4.0	Not Detected	9.3	Not Detected
Acrylonitrile	4.0	Not Detected	8.8	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
Benzene	1.0	Not Detected	3.2	Not Detected
Bromodichloromethane	1.0	Not Detected	6.8	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Carbon Disulfide	4.0	Not Detected	12	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.4	Not Detected
Chlorobenzene	1.0	Not Detected	4.6	Not Detected
Chloroethane	4.0	Not Detected	11	Not Detected
Chloroform	1.0	Not Detected	4.9	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected

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Client Sample ID: SG-VW41A-03

Lab ID#: 2107260A-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072527**	**Date of Collection:**	**7/13/21 10:30:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/26/21 02:14 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Cumene	1.0	Not Detected	5.0	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
Dibromomethane	4.0	Not Detected	29	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Ethyl Acetate	4.0	Not Detected	14	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
Ethyl-tert-butyl ether	4.0	Not Detected	17	Not Detected
Freon 11	1.0	Not Detected	5.7	Not Detected
Freon 12	1.0	Not Detected	5.0	Not Detected
Freon 113	1.0	Not Detected	7.7	Not Detected
Freon 114	1.0	Not Detected	7.1	Not Detected
Freon 134a	4.0	Not Detected	17	Not Detected
Heptane	1.0	Not Detected	4.1	Not Detected
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected
Hexachloroethane	4.0	Not Detected	39	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
Iodomethane	10	Not Detected	59	Not Detected
Isopropyl ether	4.0	Not Detected	17	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
Methyl tert-butyl ether	4.0	Not Detected	14	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Propylbenzene	1.0	Not Detected	5.0	Not Detected
Propylene	4.0	Not Detected	7.0	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
tert-Amyl methyl ether	4.0	Not Detected	17	Not Detected
tert-Butyl alcohol	4.0	Not Detected	12	Not Detected
Tetrachloroethene	1.0	5.5	6.8	37
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	410	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Trichloroethene	1.0	Not Detected	5.4	Not Detected
Vinyl Acetate	4.0	Not Detected	14	Not Detected
Vinyl Bromide	4.0	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW41A-03

Lab ID#: 2107260A-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072527**	**Date of Collection:**	**7/13/21 10:30:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/26/21 02:14 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	95	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072527.d
Lab Smp Id: 2107260A-19A
Inj Date : 26-JUL-2021 02:14
Operator : AB Inst ID: msd3.i
Smp Info : 200mL LC021
Misc Info : 5.1 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 7
Dil Factor: 2.02000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	277553	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	216938				48.46- 108.46	78.16
5.284	5.270 (1.000)	49	389811				120.39- 180.39	140.45
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	960343	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	140853				0.00- 45.52	14.67
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	824269	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	426636				25.46- 85.46	51.76
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	392748	25.7135	25.713		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	188862				21.66- 81.66	48.09
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	894644	22.6178	22.618		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	97699				0.00- 41.47	10.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	588670			36.47- 96.47	65.80
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	518082	23.7627	23.763	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	593586			93.06- 153.06	114.57
9.601	9.601 (1.114)	176	477101			62.87- 122.87	92.09
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.882 (0.914)	166	34981	2.70895	5.472	80.00- 120.00	100.00
7.881	7.874 (0.914)	129	27814			48.71- 108.71	79.51
7.881	7.874 (0.914)	131	25661			46.55- 106.55	73.36

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072527.d
Lab Smp Id: 2107260A-19A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.1 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	277553	4.24
108 1,4-Difluorobenze	910055	546033	1274077	960343	5.53
153 Chlorobenzene-d5	785948	471569	1100327	824269	4.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:21

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RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-19A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 5.1 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.713	102.85	70-130
$ 134 Toluene-d8	25.000	22.618	90.47	70-130
$ 170 4-Bromofluorobenz	25.000	23.763	95.05	70-130

Data File: /chem/msd3.i/25JUL21.b/3072527.d

Date : 26-JUL-2021 02:14

Client ID:

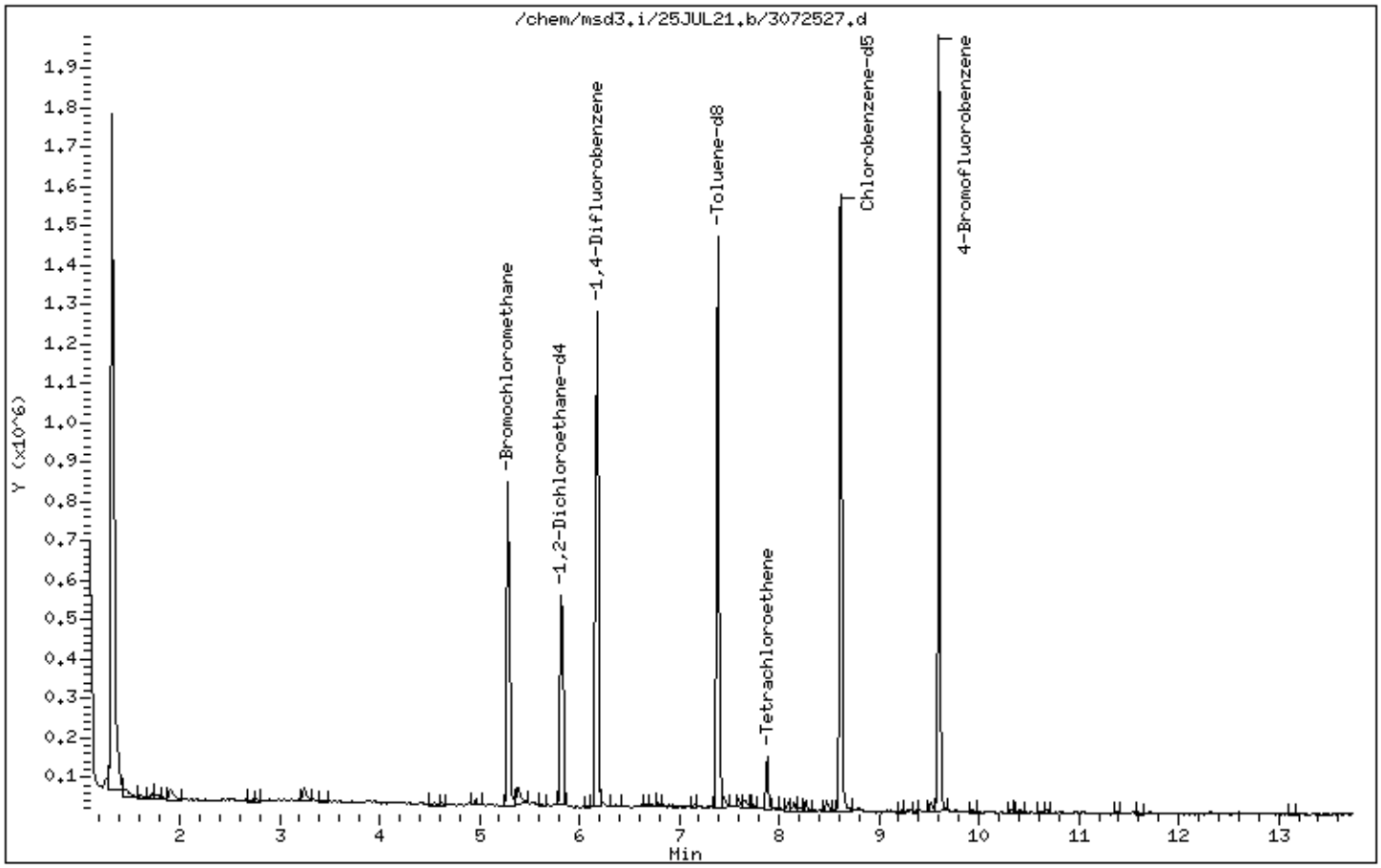
Instrument: msd3.i

Sample Info: 200mL LC021

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072527.d

Date : 26-JUL-2021 02:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL LC021

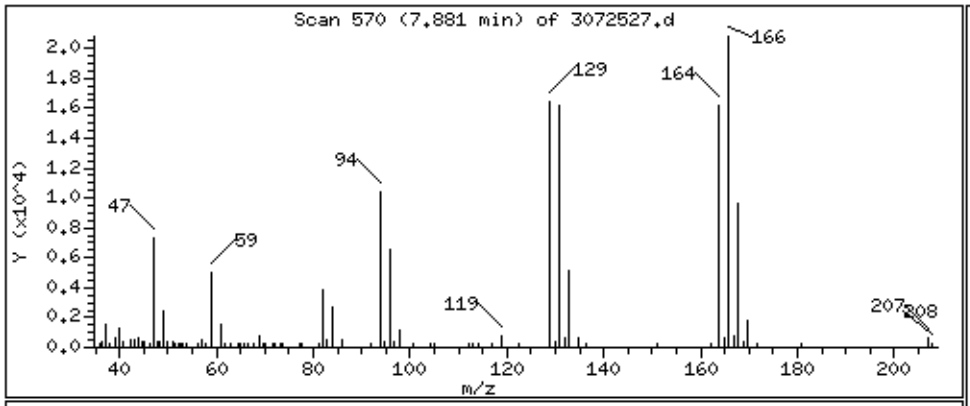
Operator: AB

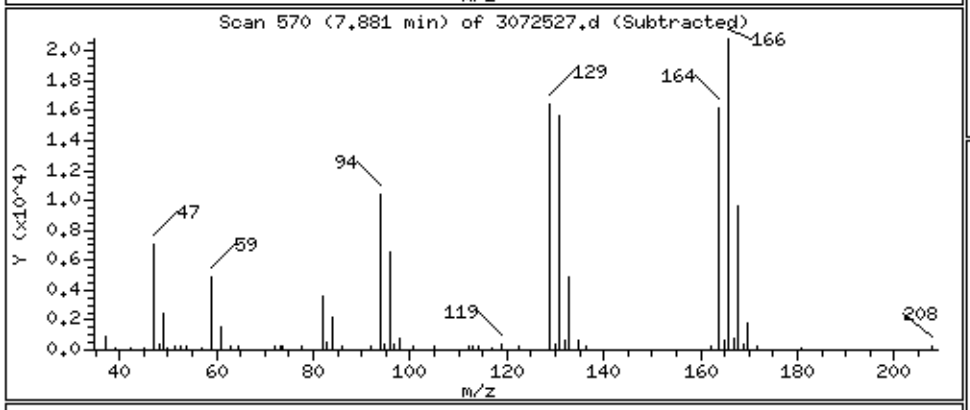
Column phase: RTX-624

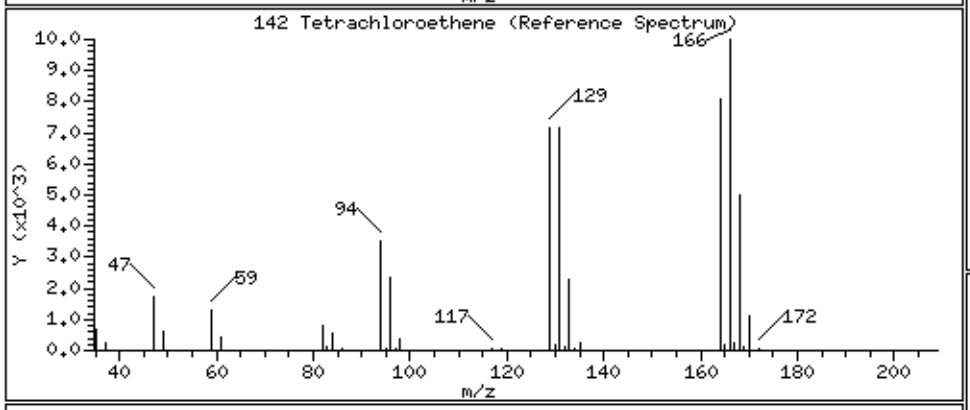
Column diameter: 0.25

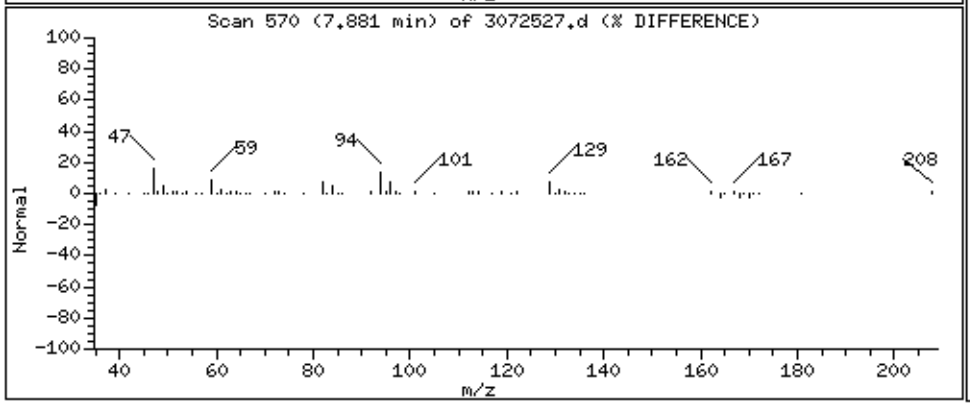
142 Tetrachloroethene

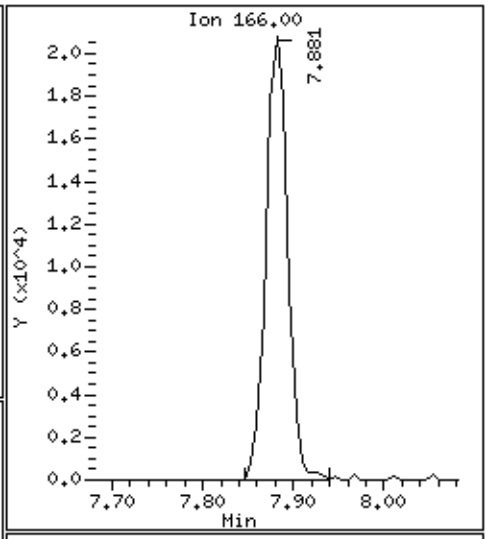
Concentration: 5.472 PPBV

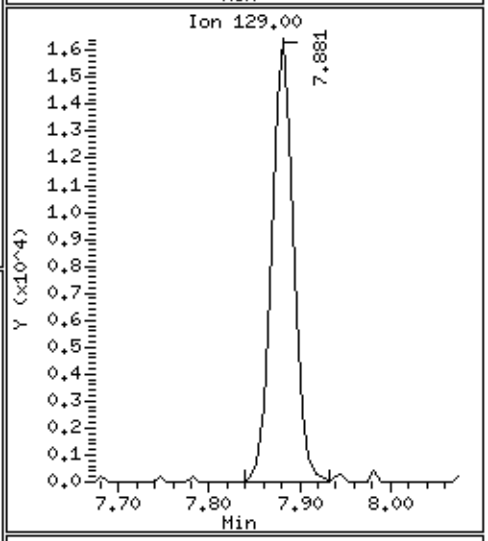


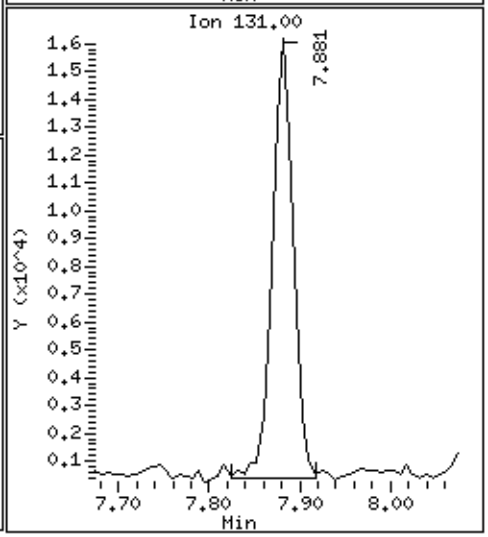












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Client Sample ID: SG-VW42B-02

Lab ID#: 2107260A-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072528**	**Date of Collection:**	**7/13/21 11:03:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/26/21 02:43 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.3	Not Detected	30	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.4	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
1,1-Difluoroethane	4.3	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.3	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,2-Dibromo-3-chloropropane	4.3	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.3	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	13	Not Detected
2-Hexanone	4.3	Not Detected	18	Not Detected
2-Propanol	4.3	11	11	27
3-Chloropropene	4.3	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.3	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Acetone	11	Not Detected	26	Not Detected
Acrolein	4.3	Not Detected	10	Not Detected
Acrylonitrile	4.3	Not Detected	9.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.3	24	14	75
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected

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Client Sample ID: SG-VW42B-02

Lab ID#: 2107260A-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072528**	**Date of Collection:**	**7/13/21 11:03:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/26/21 02:43 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Cumene	1.1	Not Detected	5.3	Not Detected
Cyclohexane	1.1	Not Detected	3.7	Not Detected
Dibromochloromethane	1.1	Not Detected	9.2	Not Detected
Dibromomethane	4.3	Not Detected	31	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.3	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
Ethyl-tert-butyl ether	4.3	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 113	1.1	Not Detected	8.3	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected
Hexachloroethane	4.3	Not Detected	42	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
Iodomethane	11	Not Detected	63	Not Detected
Isopropyl ether	4.3	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
Methyl tert-butyl ether	4.3	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Propylbenzene	1.1	Not Detected	5.3	Not Detected
Propylene	4.3	Not Detected	7.5	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
tert-Amyl methyl ether	4.3	Not Detected	18	Not Detected
tert-Butyl alcohol	4.3	Not Detected	13	Not Detected
Tetrachloroethene	1.1	1.3	7.4	8.8
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
Vinyl Acetate	4.3	Not Detected	15	Not Detected
Vinyl Bromide	4.3	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW42B-02

Lab ID#: 2107260A-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072528**	**Date of Collection:**	**7/13/21 11:03:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/26/21 02:43 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	92	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072528.d
Lab Smp Id: 2107260A-20A
Inj Date : 26-JUL-2021 02:43
Operator : AB Inst ID: msd3.i
Smp Info : 200mL 34000601
Misc Info : 6.9 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 9
Dil Factor: 2.17000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	255285	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	196185				48.46- 108.46	76.85
5.284	5.270 (1.000)	49	363161				120.39- 180.39	142.26
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.166 (1.000)	114	805316	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	119263				0.00- 45.52	14.81
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	751455	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	398599				25.46- 85.46	53.04
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	334302	23.7961	23.796		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	165233				21.66- 81.66	49.43
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	801436	24.1618	24.162		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	89212				0.00- 41.47	11.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	525415			36.47- 96.47	65.56
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	454962	22.8896	22.890	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	513902			93.06- 153.06	112.95
9.601	9.601 (1.114)	176	421697			62.87- 122.87	92.69
48 Carbon Disulfide					CAS #: 75-15-0		
3.311	3.298 (0.627)	76	213081	11.0543	23.988	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.423	3.396 (0.648)	45	77275	5.01962	10.892	80.00- 120.00	100.00
3.423	3.396 (0.648)	43	16928			0.00- 48.61	21.91
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.882 (0.914)	166	7003	0.59487	1.291	80.00- 120.00	100.00
7.881	7.874 (0.914)	129	5289			48.71- 108.71	75.53
7.881	7.874 (0.914)	131	5144			46.55- 106.55	73.46

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072528.d
Lab Smp Id: 2107260A-20A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	255285	-4.12
108 1,4-Difluorobenze	910055	546033	1274077	805316	-11.51
153 Chlorobenzene-d5	785948	471569	1100327	751455	-4.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.22
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:23

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-20A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.9 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.796	95.18	70-130
$ 134 Toluene-d8	25.000	24.162	96.65	70-130
$ 170 4-Bromofluorobenz	25.000	22.890	91.56	70-130

Data File: /chem/msd3.i/25JUL21.b/3072528.d

Date : 26-JUL-2021 02:43

Client ID:

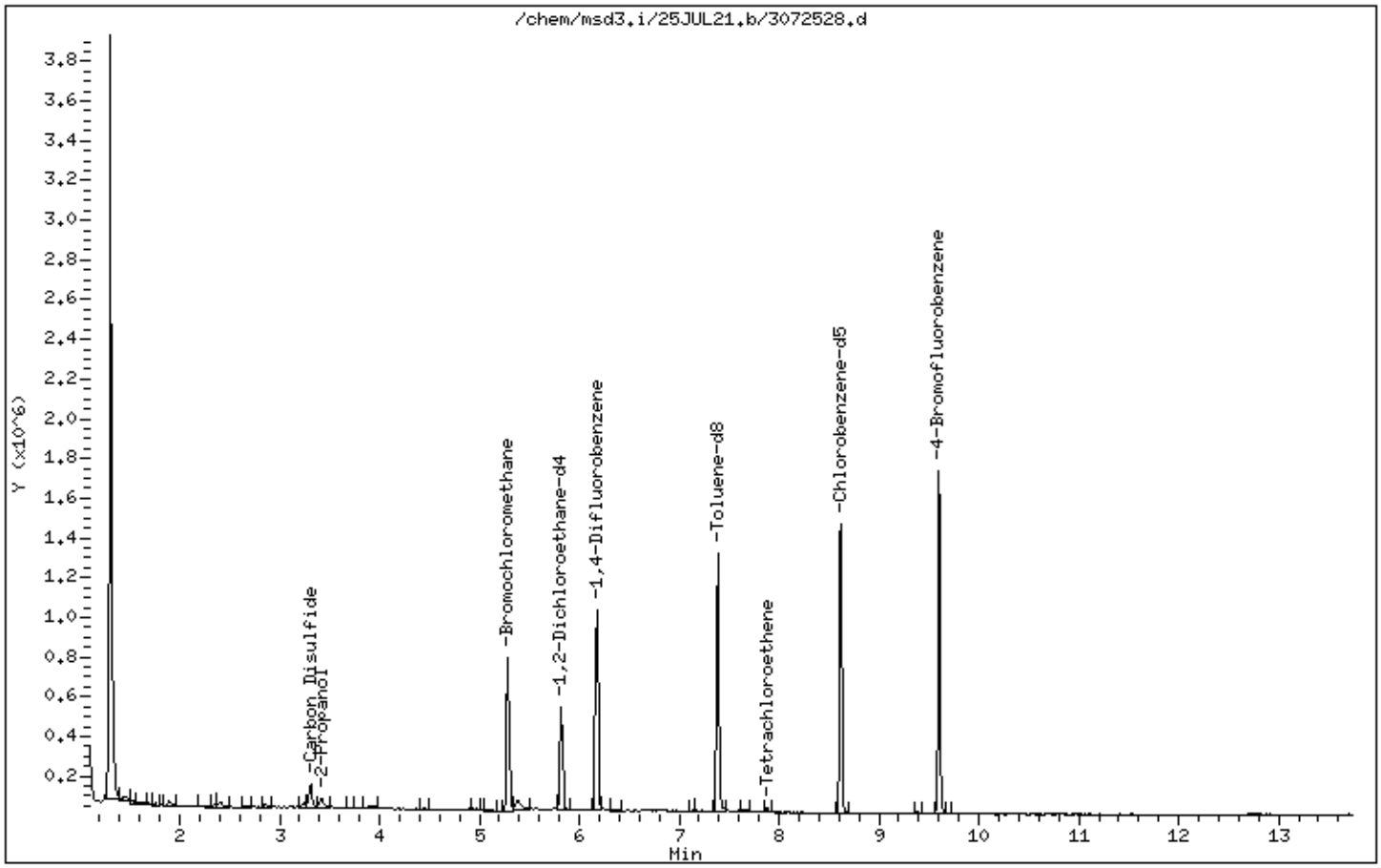
Instrument: msd3.i

Sample Info: 200mL 34000601

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072528.d

Date : 26-JUL-2021 02:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 34000601

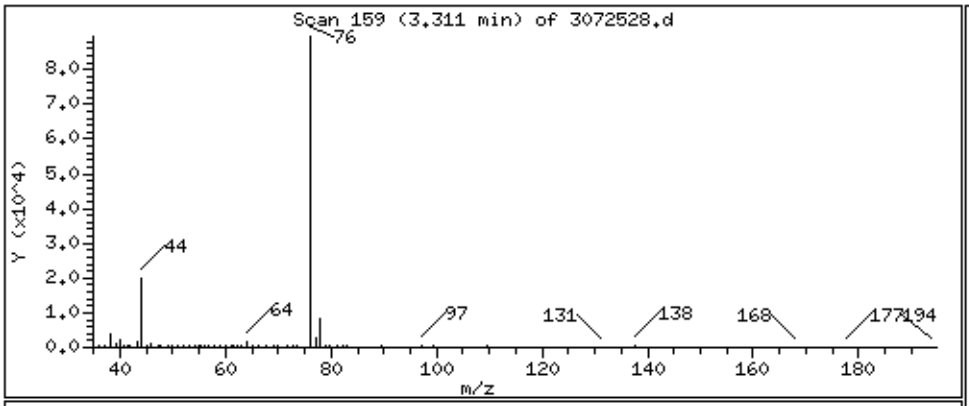
Operator: AB

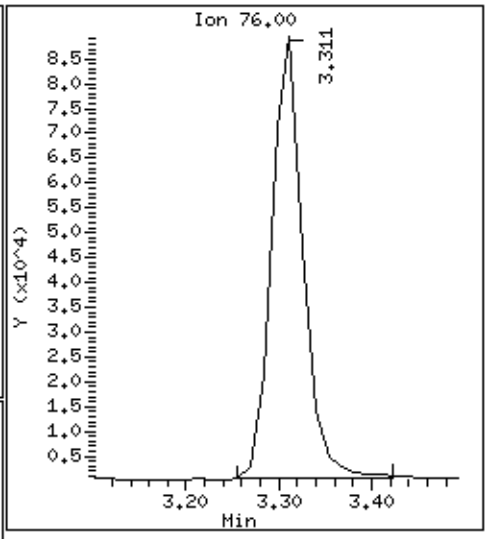
Column phase: RTX-624

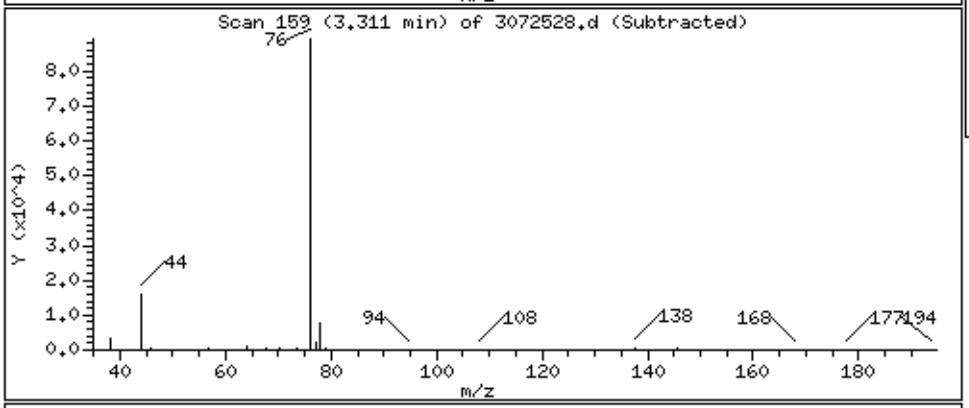
Column diameter: 0.25

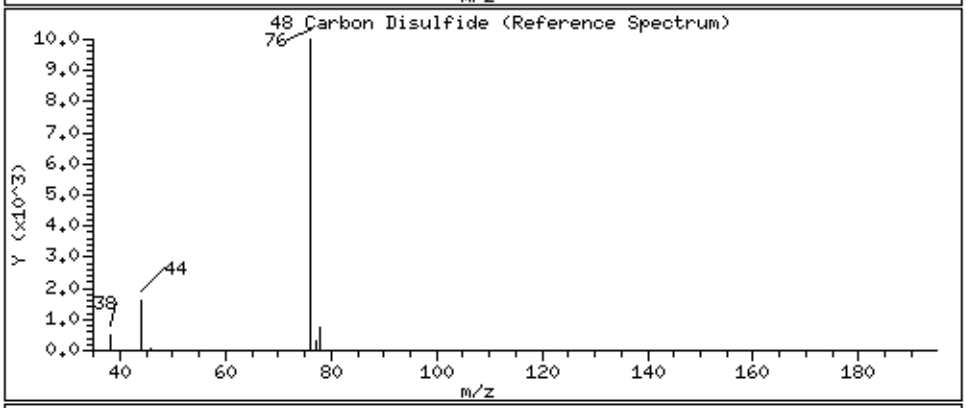
48 Carbon Disulfide

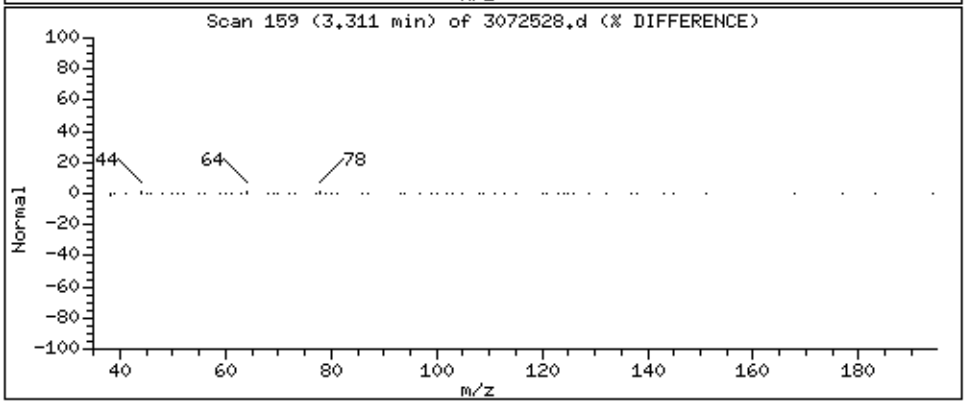
Concentration: 23.988 PPBV











Data File: /chem/msd3.i/25JUL21.b/3072528.d

Date : 26-JUL-2021 02:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 34000601

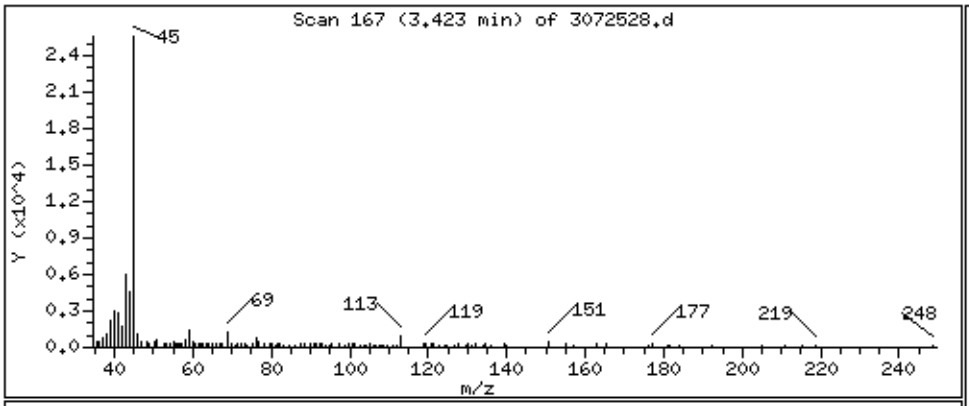
Operator: AB

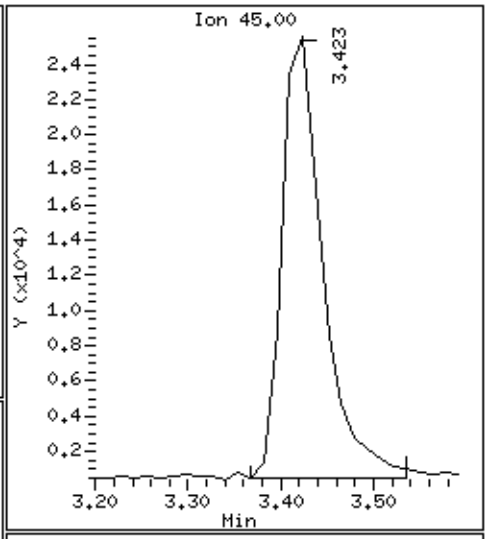
Column phase: RTX-624

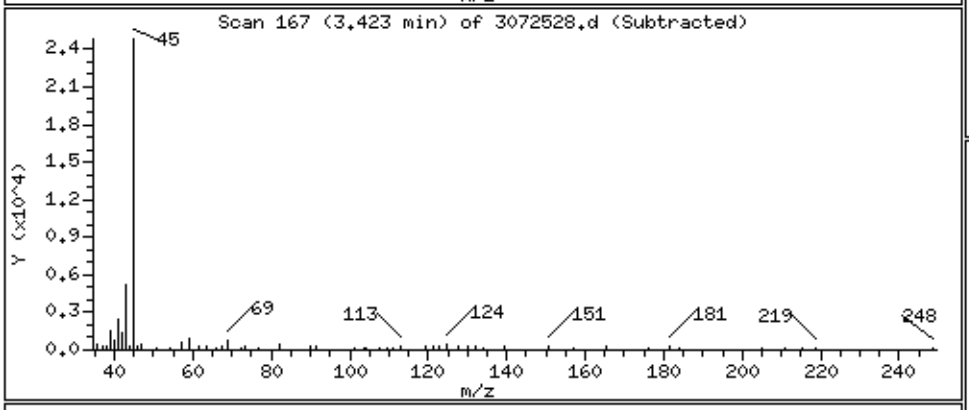
Column diameter: 0.25

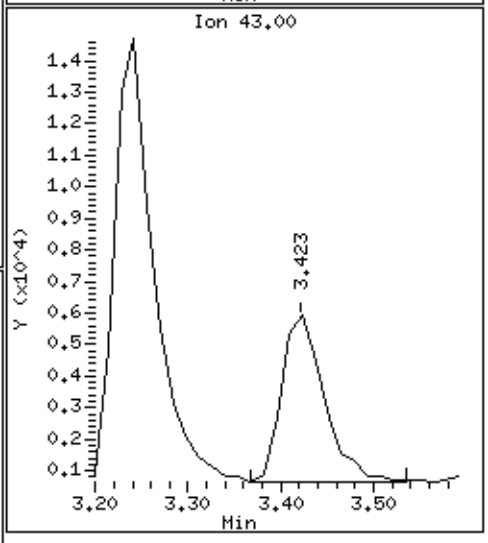
52 2-Propanol

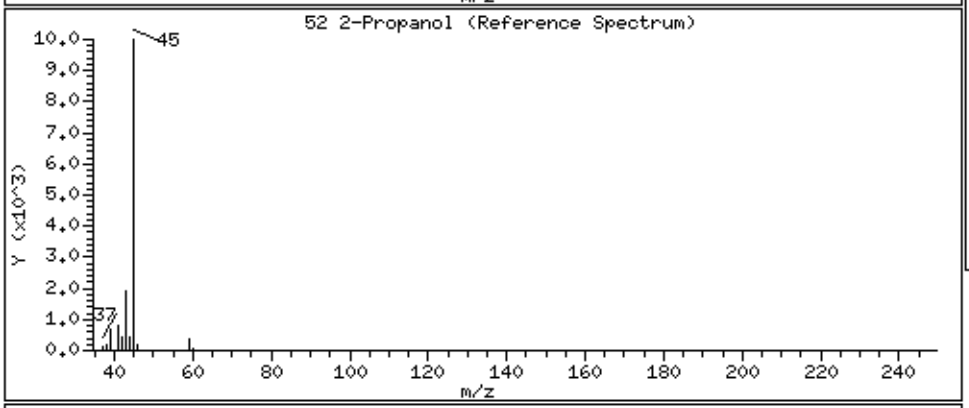
Concentration: 10.892 PPBV

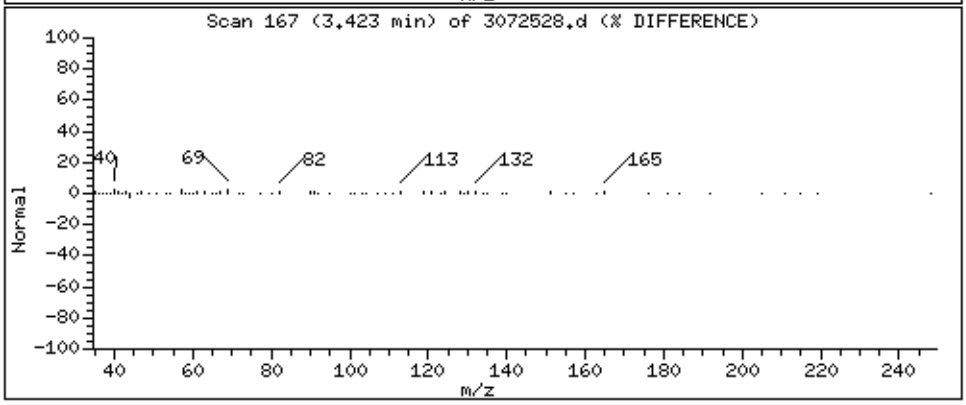












Data File: /chem/msd3.i/25JUL21.b/3072528.d

Date : 26-JUL-2021 02:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 34000601

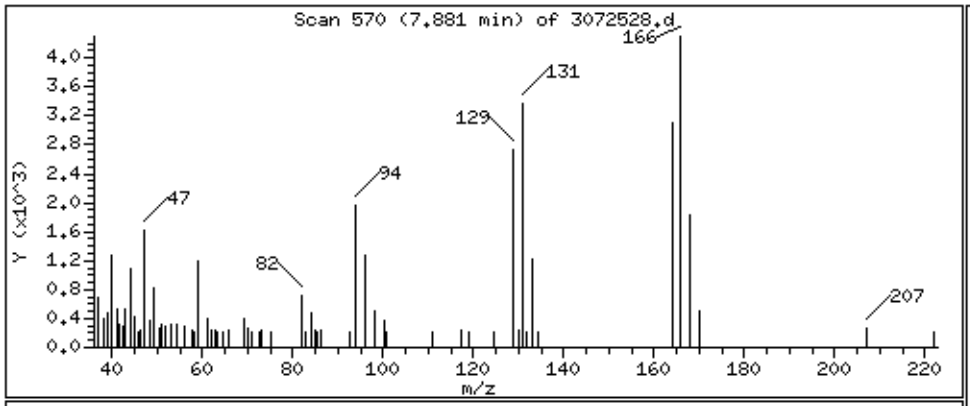
Operator: AB

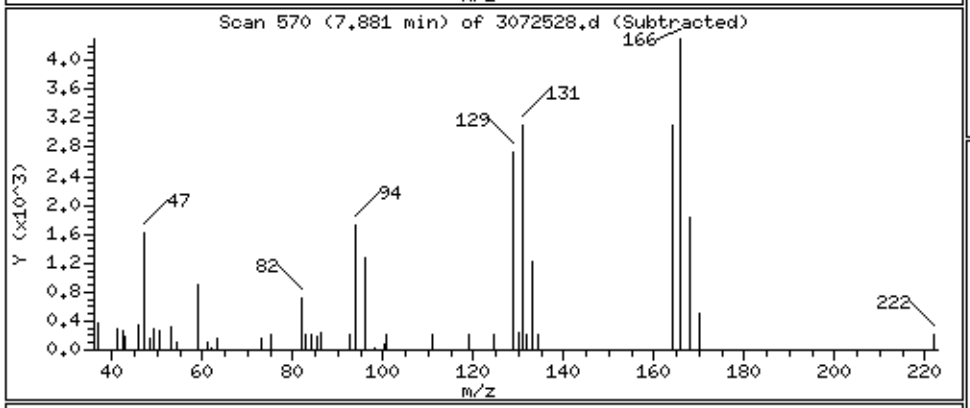
Column phase: RTX-624

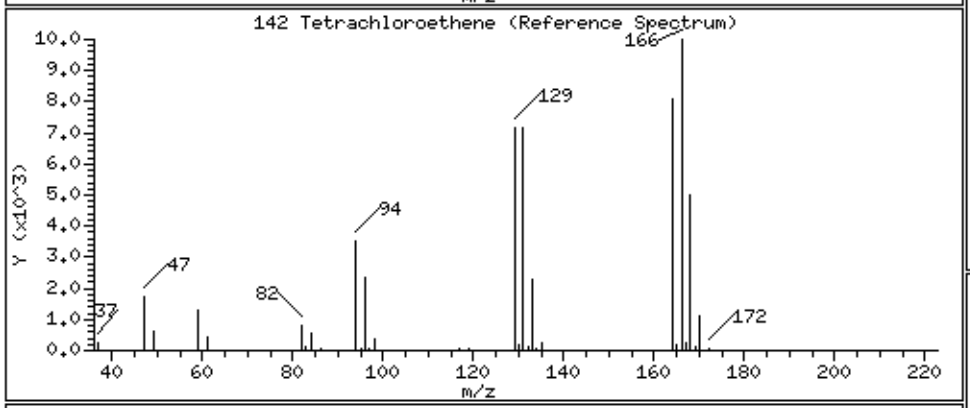
Column diameter: 0.25

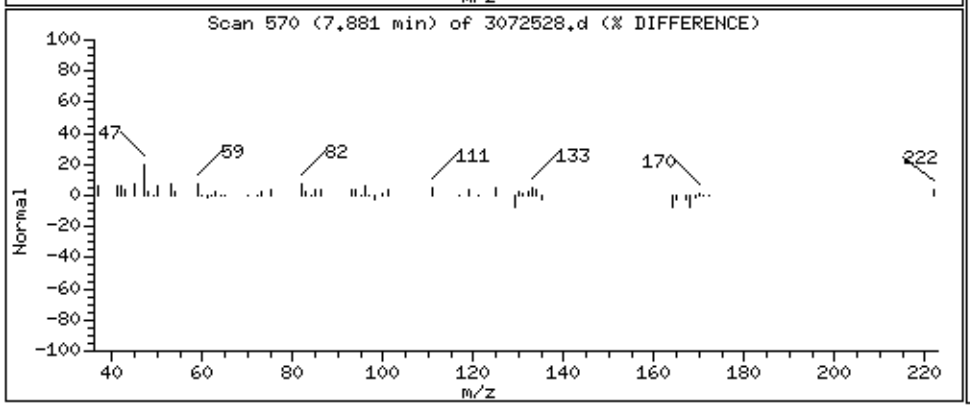
142 Tetrachloroethene

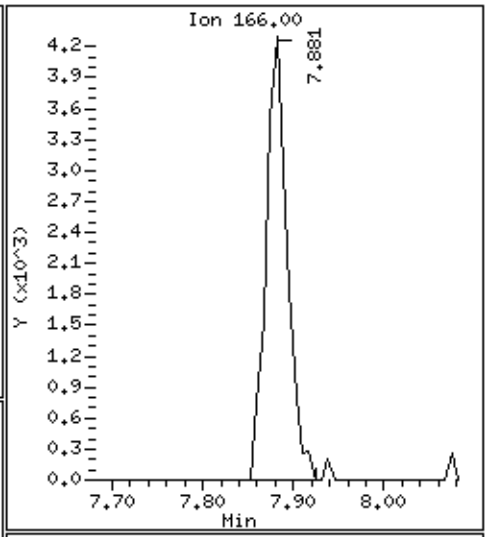
Concentration: 1.291 PPBV

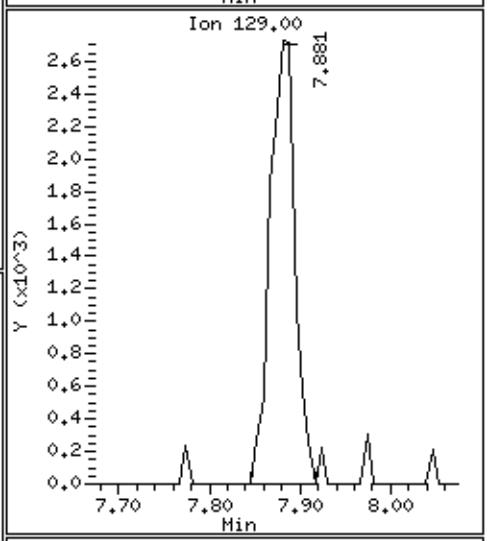


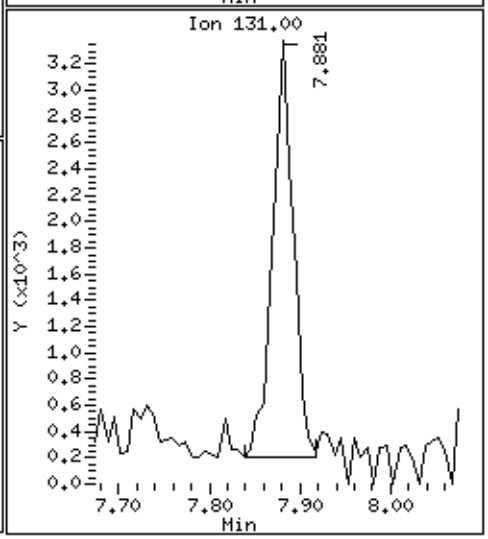












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Client Sample ID: SG-VW42A-03

Lab ID#: 2107260A-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072529**	**Date of Collection:**	**7/13/21 11:56:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/26/21 03:13 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.3	Not Detected	29	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
1,1-Difluoroethane	4.3	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.3	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2-Dibromo-3-chloropropane	4.3	Not Detected	41	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.2	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dioxane	4.3	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	12	Not Detected
2-Hexanone	4.3	Not Detected	17	Not Detected
2-Propanol	4.3	Not Detected	10	Not Detected
3-Chloropropene	4.3	Not Detected	13	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Acetone	11	Not Detected	25	Not Detected
Acrolein	4.3	Not Detected	9.8	Not Detected
Acrylonitrile	4.3	Not Detected	9.2	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Carbon Disulfide	4.3	Not Detected	13	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Chloroform	1.1	Not Detected	5.2	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected

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Client Sample ID: SG-VW42A-03

Lab ID#: 2107260A-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072529**	**Date of Collection:**	**7/13/21 11:56:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/26/21 03:13 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
Cyclohexane	1.1	Not Detected	3.7	Not Detected
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
Ethanol	11	12	20	23
Ethyl Acetate	4.3	Not Detected	15	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
Ethyl-tert-butyl ether	4.3	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Freon 12	1.1	Not Detected	5.3	Not Detected
Freon 113	1.1	Not Detected	8.2	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Hexachlorobutadiene	4.3	Not Detected	45	Not Detected
Hexachloroethane	4.3	Not Detected	41	Not Detected
Hexane	1.1	1.2	3.8	4.0
Iodomethane	11	Not Detected	62	Not Detected
Isopropyl ether	4.3	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
Methyl tert-butyl ether	4.3	Not Detected	15	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Propylbenzene	1.1	Not Detected	5.2	Not Detected
Propylene	4.3	Not Detected	7.3	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
tert-Amyl methyl ether	4.3	Not Detected	18	Not Detected
tert-Butyl alcohol	4.3	Not Detected	13	Not Detected
Tetrachloroethene	1.1	4.6	7.2	31
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
Vinyl Acetate	4.3	Not Detected	15	Not Detected
Vinyl Bromide	4.3	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW42A-03

Lab ID#: 2107260A-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072529**	**Date of Collection:**	**7/13/21 11:56:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**7/26/21 03:13 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	93	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072529.d
Lab Smp Id: 2107260A-21A
Inj Date : 26-JUL-2021 03:13
Operator : AB Inst ID: msd3.i
Smp Info : 200mL 1L1766
Misc Info : 6.3 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 10
Dil Factor: 2.13000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	270069	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	211389				48.46- 108.46	78.27
5.270	5.270 (1.000)	49	377365				120.39- 180.39	139.73
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.166 (1.000)	114	890775	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	130531				0.00- 45.52	14.65
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	800210	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	417004				25.46- 85.46	52.11
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	360028	24.2244	24.224		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	175386				21.66- 81.66	48.71
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	875660	23.8668	23.867		80.00- 120.00	100.00
7.387	7.387 (1.198)	70	98676				0.00- 41.47	11.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	573376			36.47- 96.47	65.48
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.600	9.601 (1.114)	174	494639	23.3696	23.370	80.00- 120.00	100.00
9.600	9.601 (1.114)	95	565408			93.06- 153.06	114.31
9.600	9.601 (1.114)	176	461793			62.87- 122.87	93.36
39 Ethanol					CAS #: 64-17-5		
2.794	2.766 (0.529)	46	9257	5.74857	12.244	80.00- 120.00	100.00
2.794	2.780 (0.529)	45	24314			523.01- 583.01	262.66
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.788)	57	8085	0.54060	1.151	80.00- 120.00	100.00
4.165	4.179 (0.788)	43	11051			32.99- 92.99	136.68
4.165	4.179 (0.788)	86	1691			0.00- 42.56	20.92
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.882 (0.914)	166	27083	2.16038	4.602	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	21442			48.71- 108.71	79.17
7.874	7.874 (0.914)	131	21264			46.55- 106.55	78.51

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072529.d
Lab Smp Id: 2107260A-21A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	270069	1.43
108 1,4-Difluorobenze	910055	546033	1274077	890775	-2.12
153 Chlorobenzene-d5	785948	471569	1100327	800210	1.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	-0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:29

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-21A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.224	96.90	70-130
$ 134 Toluene-d8	25.000	23.867	95.47	70-130
$ 170 4-Bromofluorobenz	25.000	23.370	93.48	70-130

Data File: /chem/msd3.i/25JUL21.b/3072529.d

Date : 26-JUL-2021 03:13

Client ID:

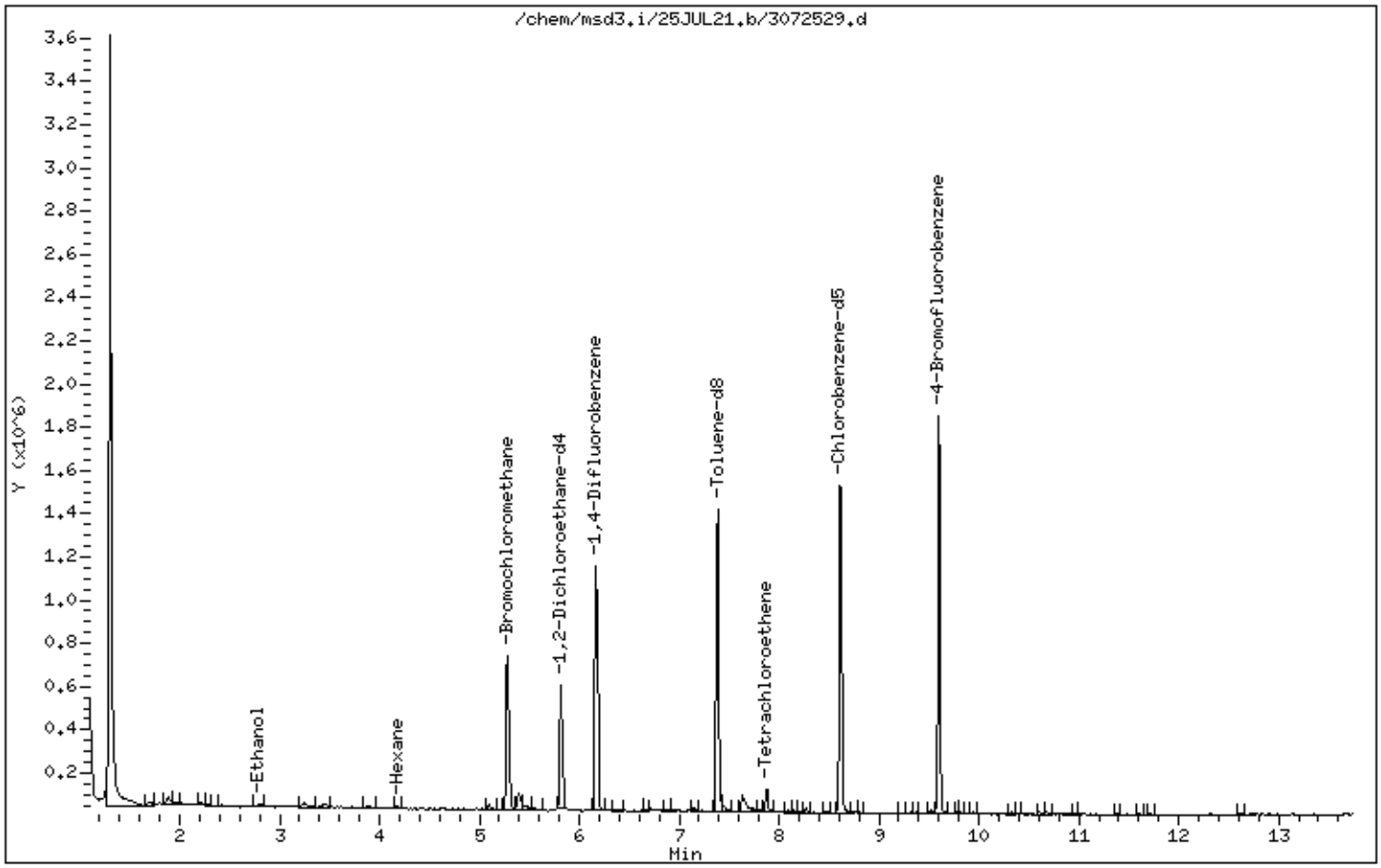
Instrument: msd3.i

Sample Info: 200mL 1L1766

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072529.d

Date : 26-JUL-2021 03:13

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1766

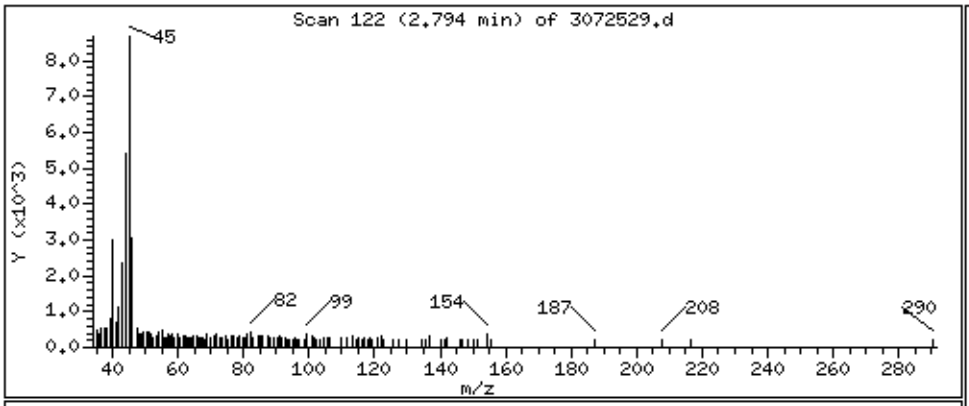
Operator: AB

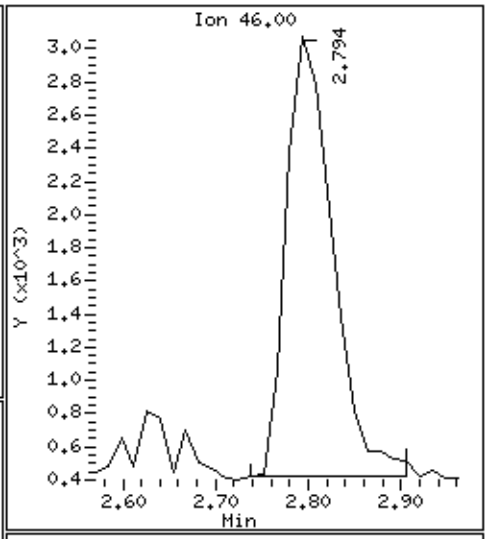
Column phase: RTX-624

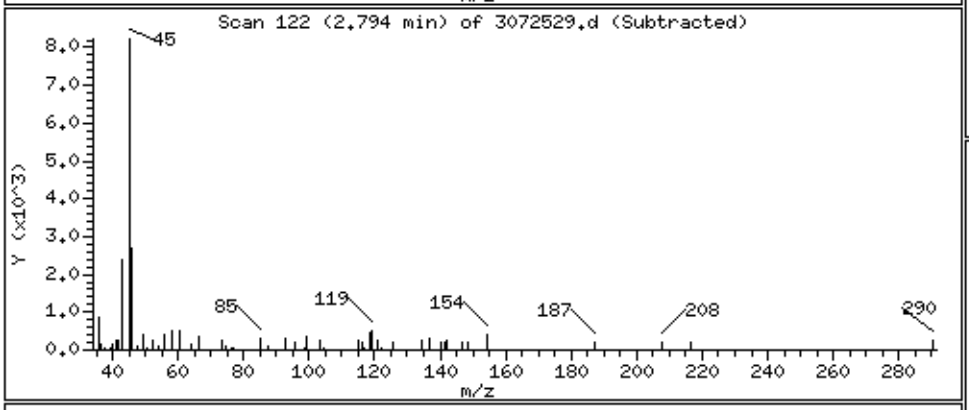
Column diameter: 0.25

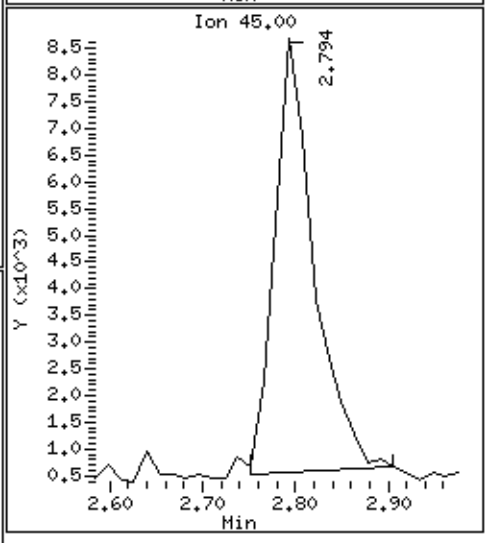
39 Ethanol

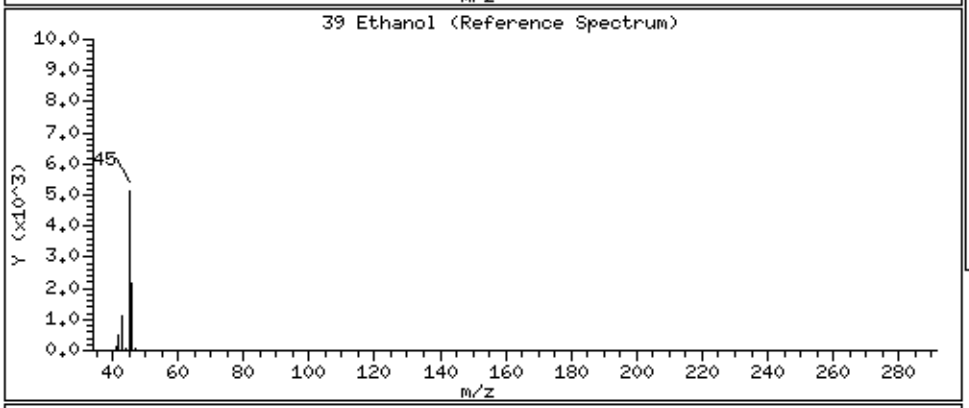
Concentration: 12.244 PPBV

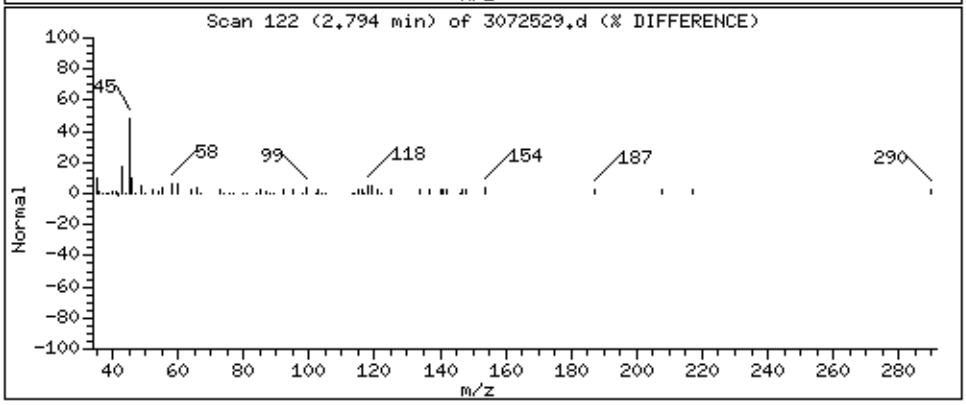












Data File: /chem/msd3.i/25JUL21.b/3072529.d

Date : 26-JUL-2021 03:13

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1766

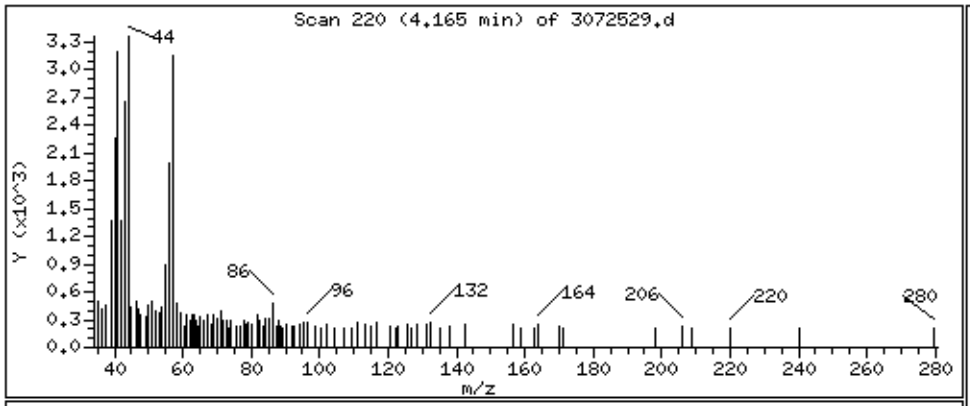
Operator: AB

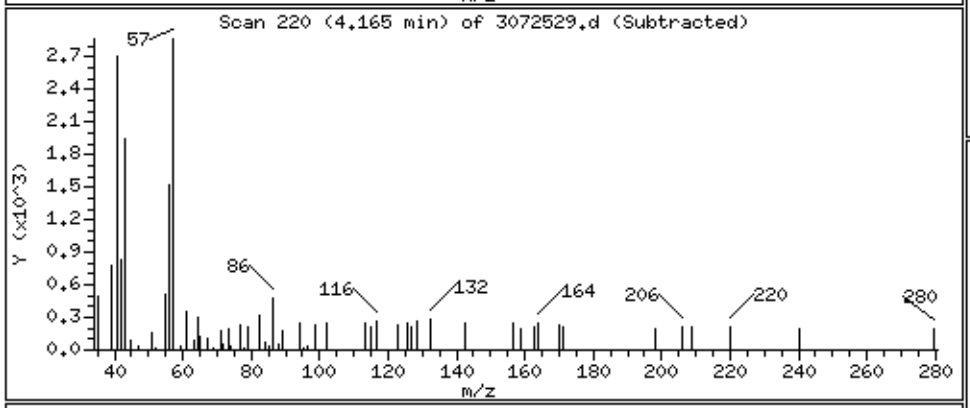
Column phase: RTX-624

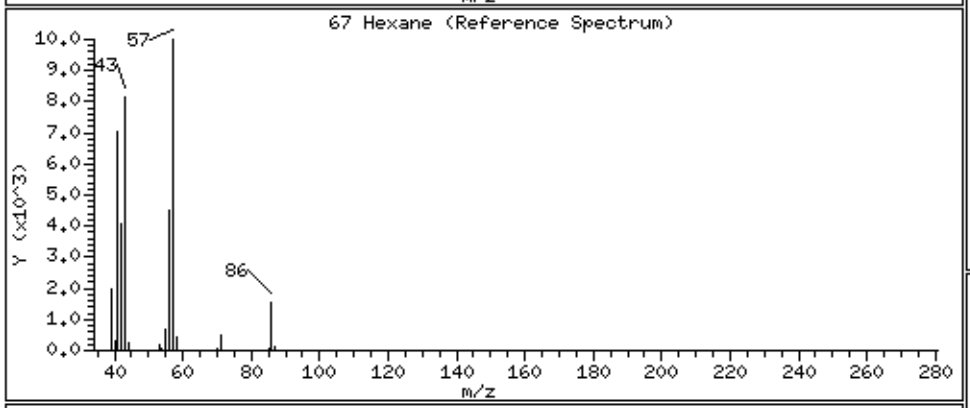
Column diameter: 0.25

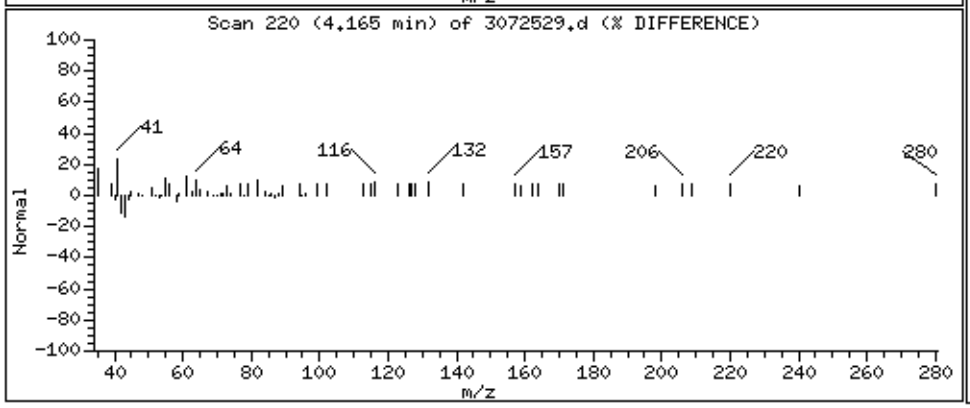
67 Hexane

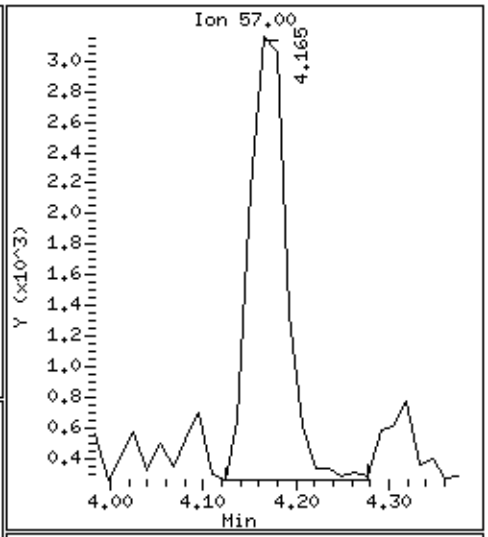
Concentration: 1.151 PPBV

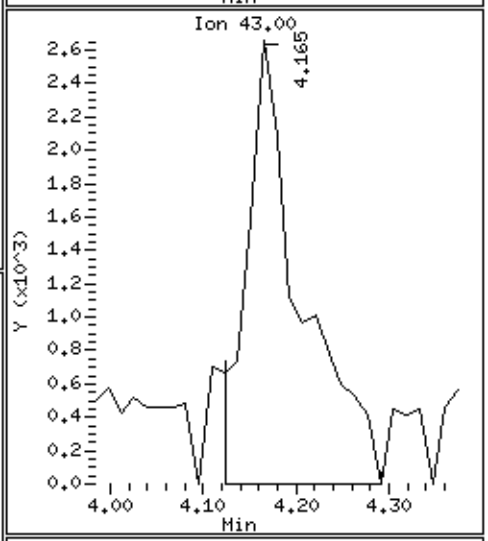


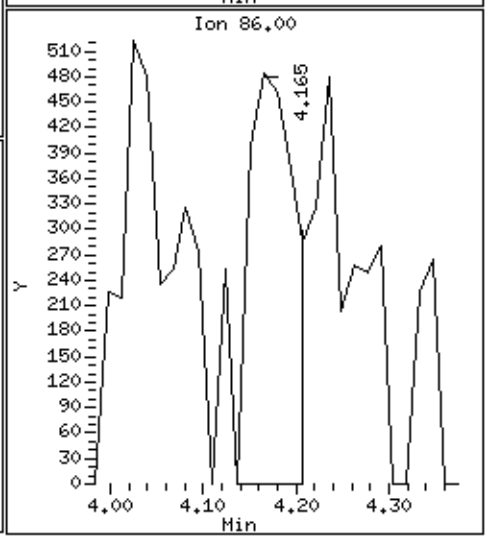












Data File: /chem/msd3.i/25JUL21.b/3072529.d

Date : 26-JUL-2021 03:13

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L1766

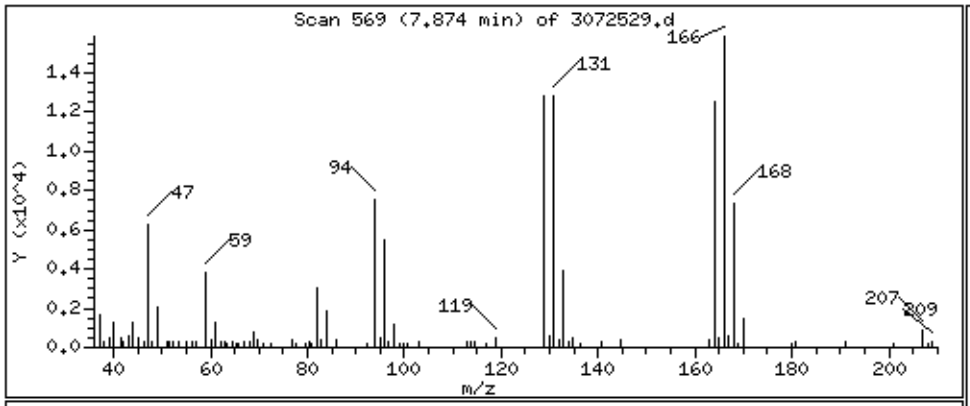
Operator: AB

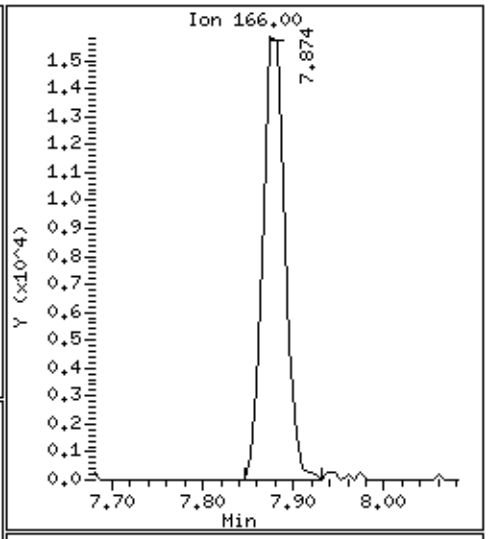
Column phase: RTX-624

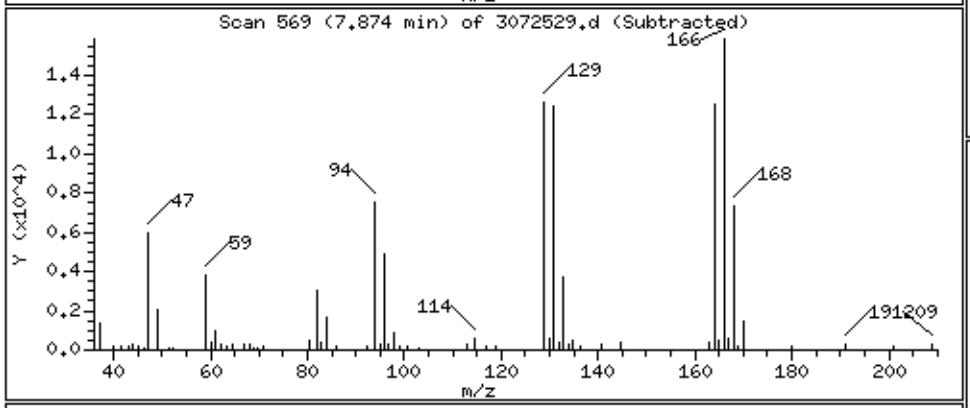
Column diameter: 0.25

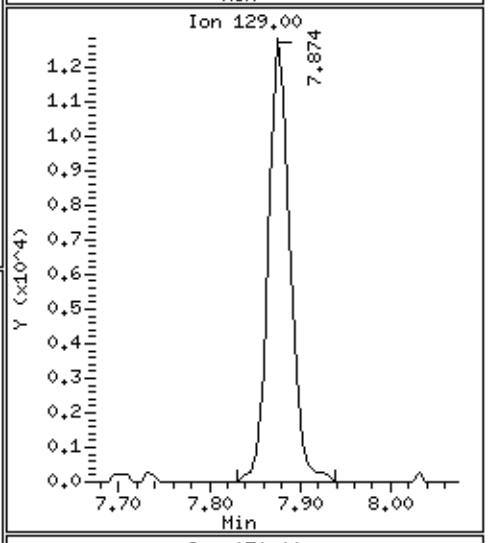
142 Tetrachloroethene

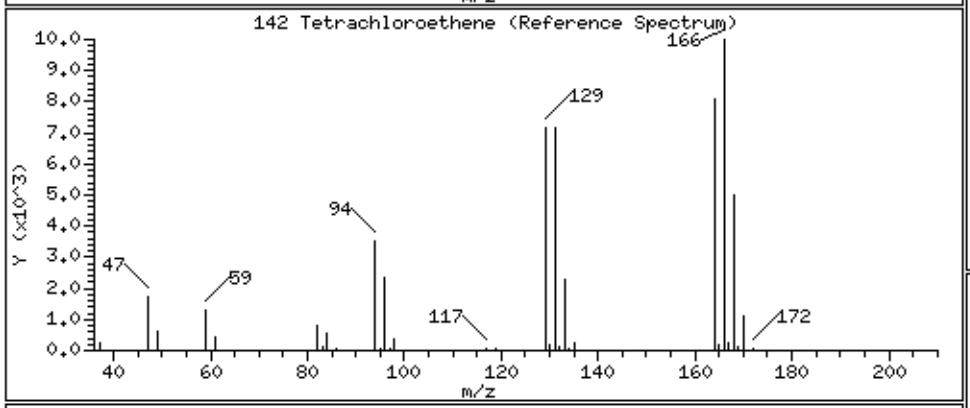
Concentration: 4.602 PPBV

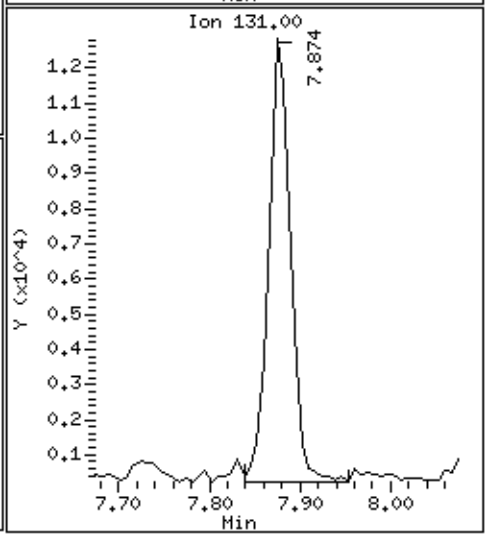


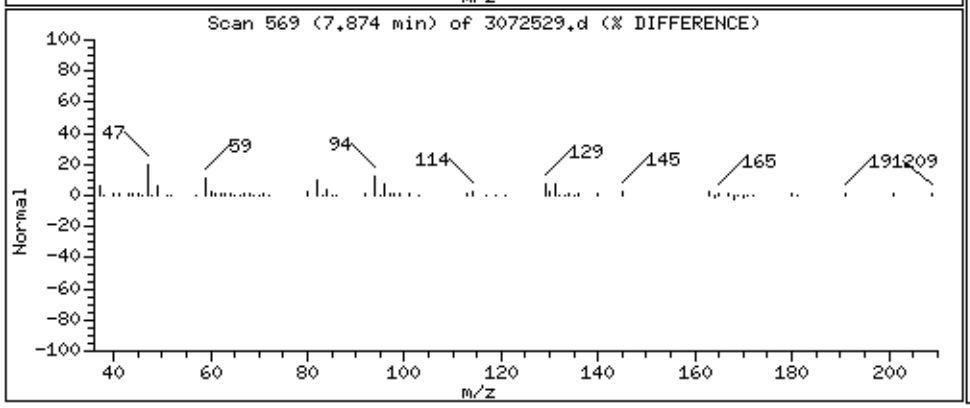












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Client Sample ID: SG-VW42A-04

Lab ID#: 2107260A-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072530**	**Date of Collection:**	**7/13/21 11:56:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/26/21 03:42 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
1,1-Difluoroethane	4.2	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.2	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	41	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.1	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Butadiene	1.1	Not Detected	2.3	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
2-Hexanone	4.2	Not Detected	17	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.3	Not Detected
Acetone	11	Not Detected	25	Not Detected
Acrolein	4.2	Not Detected	9.7	Not Detected
Acrylonitrile	4.2	Not Detected	9.2	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Chloroform	1.1	Not Detected	5.2	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected

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Client Sample ID: SG-VW42A-04

Lab ID#: 2107260A-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072530**	**Date of Collection:**	**7/13/21 11:56:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/26/21 03:42 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
Cyclohexane	1.1	Not Detected	3.6	Not Detected
Dibromochloromethane	1.1	Not Detected	9.0	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Freon 12	1.1	Not Detected	5.2	Not Detected
Freon 113	1.1	Not Detected	8.1	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Freon 134a	4.2	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.3	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Hexane	1.1	Not Detected	3.7	Not Detected
Iodomethane	11	Not Detected	62	Not Detected
Isopropyl ether	4.2	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Propylbenzene	1.1	Not Detected	5.2	Not Detected
Propylene	4.2	Not Detected	7.3	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	18	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
Tetrachloroethene	1.1	4.6	7.2	31
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	430	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW42A-04

Lab ID#: 2107260A-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072530**	**Date of Collection:**	**7/13/21 11:56:00 AM**
Dil. Factor:	**2.12**	**Date of Analysis:**	**7/26/21 03:42 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	91	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072530.d
Lab Smp Id: 2107260A-22A
Inj Date : 26-JUL-2021 03:42
Operator : AB Inst ID: msd3.i
Smp Info : 200mL N2002
Misc Info : 6.3 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 11
Dil Factor: 2.12000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.270	5.284 (1.000)	130	277681	25.0000			80.00- 120.00	100.00
5.270	5.284 (1.000)	128	214762				48.46- 108.46	77.34
5.270	5.270 (1.000)	49	380664				120.39- 180.39	137.09
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.166 (1.000)	114	884532	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	129153				0.00- 45.52	14.60
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	829754	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	427298				25.46- 85.46	51.50
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.104)	65	354979	23.2300	23.230		80.00- 120.00	100.00
5.816	5.816 (1.104)	67	171136				21.66- 81.66	48.21
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	902842	24.7813	24.781		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	99553				0.00- 41.47	11.03

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.380	7.387 (1.197)	100	590995			36.47- 96.47	65.46
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	501049	22.8296	22.830	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	571671			93.06- 153.06	114.09
9.601	9.601 (1.115)	176	465274			62.87- 122.87	92.86
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.882 (0.914)	166	28303	2.17731	4.616	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	22043			48.71- 108.71	77.88
7.874	7.874 (0.914)	131	20311			46.55- 106.55	71.76

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072530.d
Lab Smp Id: 2107260A-22A
Analysis Type: VOA
Quant Type: ISTD
Operator: AB
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	277681	4.29
108 1,4-Difluorobenze	910055	546033	1274077	884532	-2.80
153 Chlorobenzene-d5	785948	471569	1100327	829754	5.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.27
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	-0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:39

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-22A
Level: LOW Operator: AB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.230	92.92	70-130
$ 134 Toluene-d8	25.000	24.781	99.13	70-130
$ 170 4-Bromofluorobenz	25.000	22.830	91.32	70-130

Data File: /chem/msd3.i/25JUL21.b/3072530.d

Date : 26-JUL-2021 03:42

Client ID:

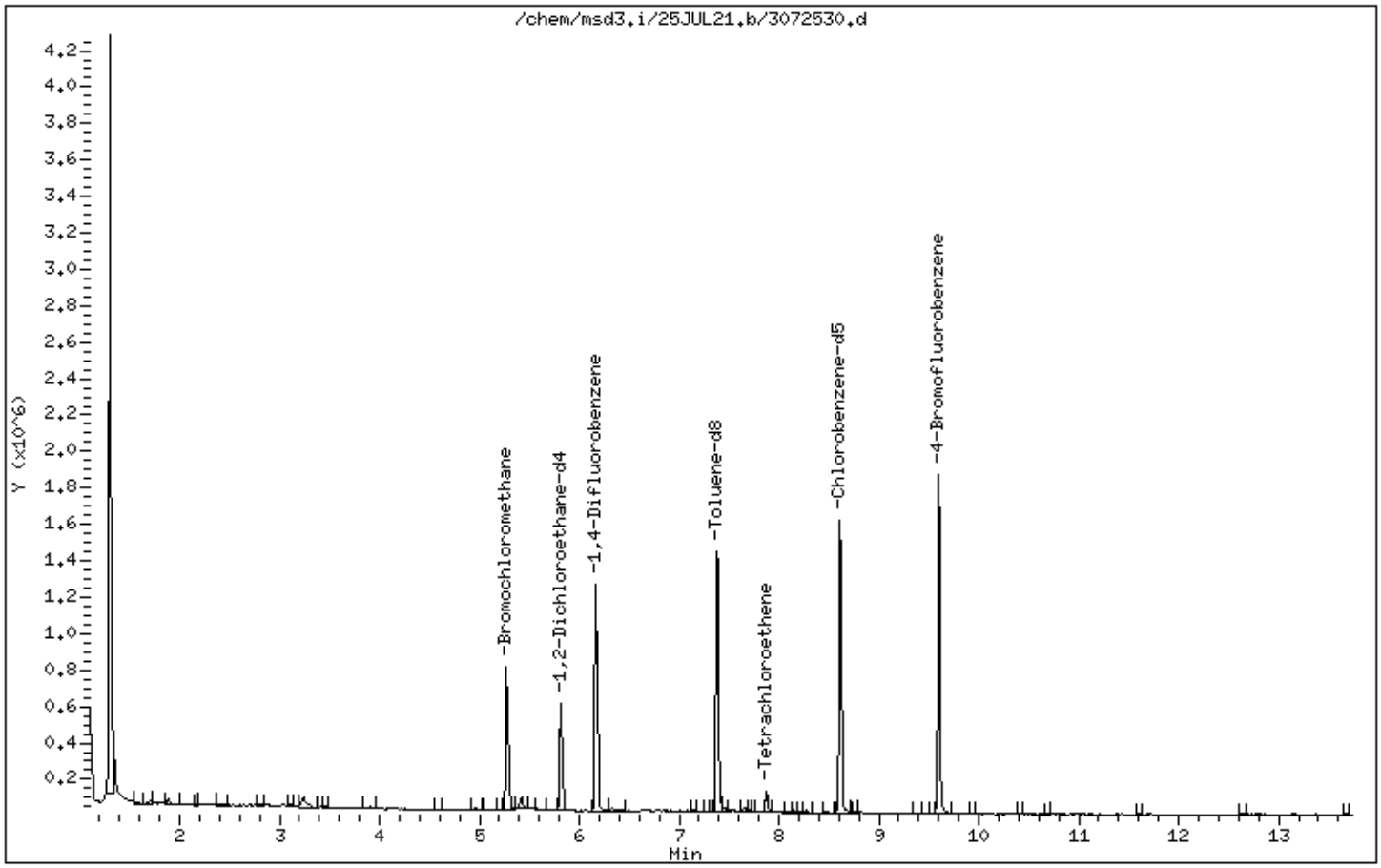
Instrument: msd3.i

Sample Info: 200mL N2002

Operator: AB

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072530.d

Date : 26-JUL-2021 03:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2002

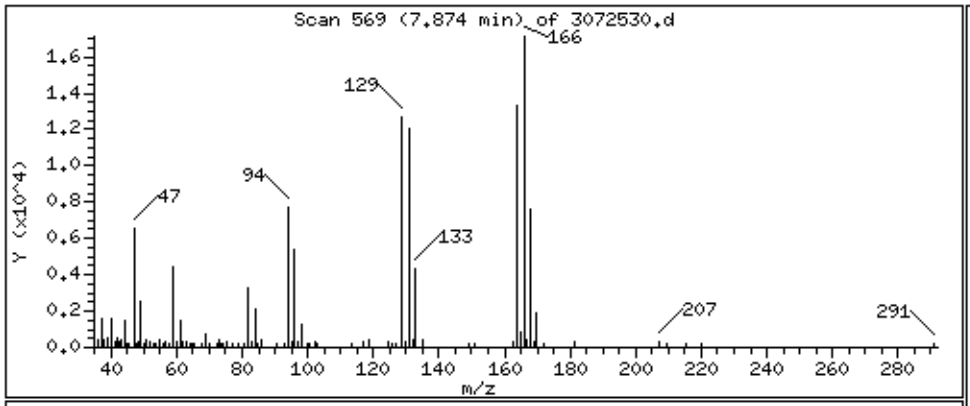
Operator: AB

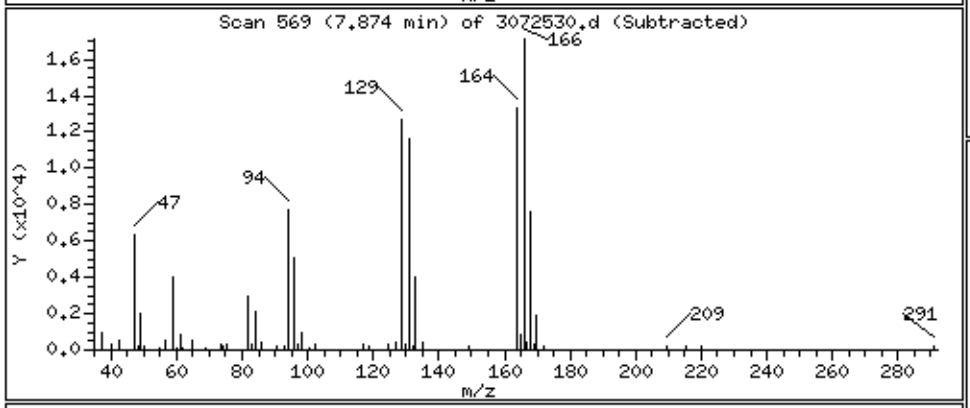
Column phase: RTX-624

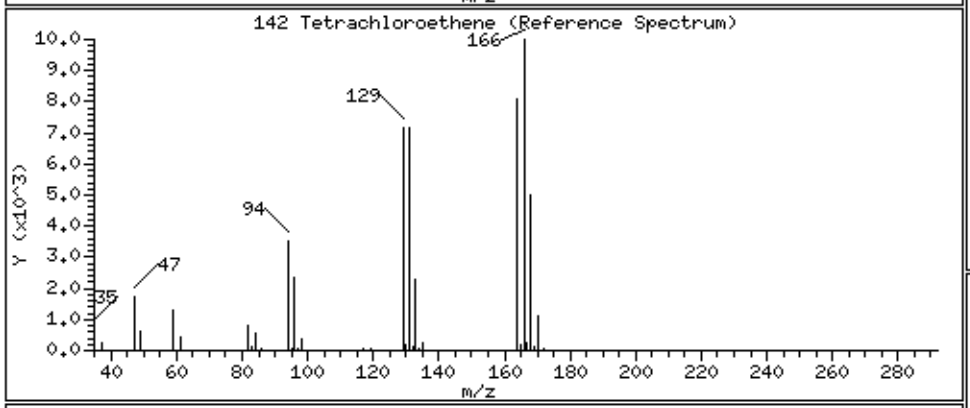
Column diameter: 0.25

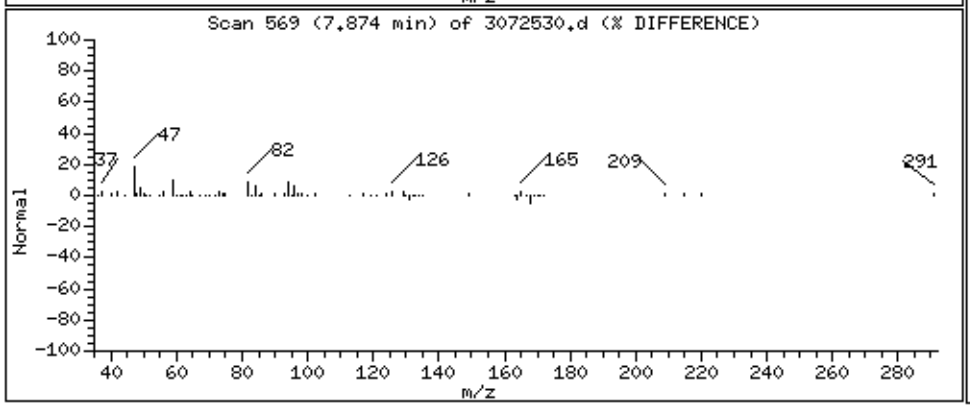
142 Tetrachloroethene

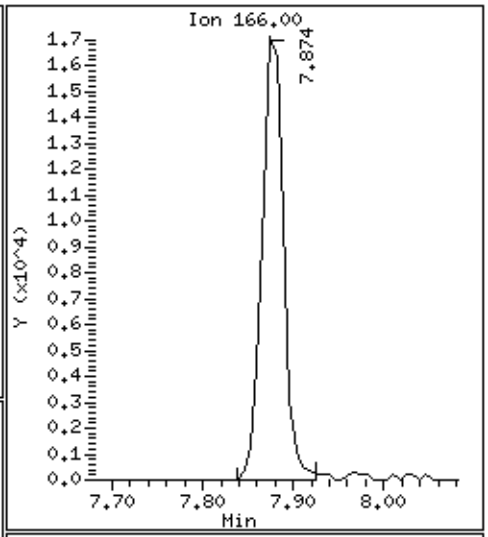
Concentration: 4.616 PPBV

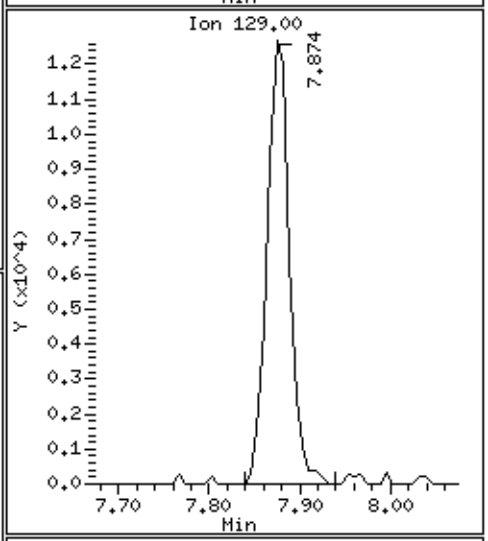


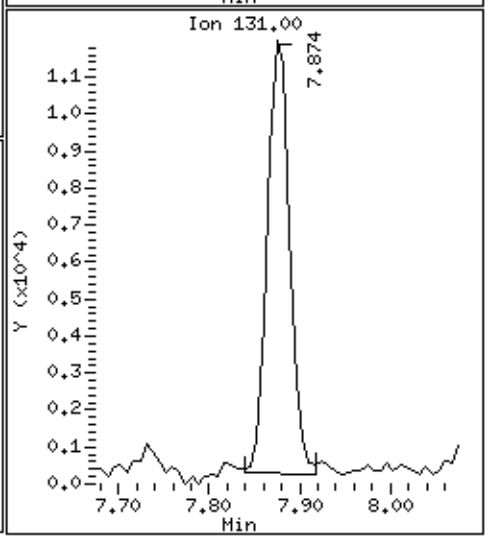












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Client Sample ID: SG-VW57B-04

Lab ID#: 2107260A-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072531**	**Date of Collection:**	**7/13/21 12:52:00 PM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**7/26/21 07:42 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.7	Not Detected	32	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.4	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
1,1-Difluoroethane	4.7	5.7	12	15
1,2,3-Trichloropropane	4.7	Not Detected	28	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	34	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,2-Dibromo-3-chloropropane	4.7	Not Detected	45	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
2-Hexanone	4.7	Not Detected	19	Not Detected
2-Propanol	4.7	Not Detected	11	Not Detected
3-Chloropropene	4.7	Not Detected	14	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.7	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	28	Not Detected
Acrolein	4.7	Not Detected	11	Not Detected
Acrylonitrile	4.7	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Bromomethane	12	Not Detected	45	Not Detected
Carbon Disulfide	4.7	Not Detected	14	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.3	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Chloromethane	12	Not Detected	24	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected

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Client Sample ID: SG-VW57B-04

Lab ID#: 2107260A-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072531**	**Date of Collection:**	**7/13/21 12:52:00 PM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**7/26/21 07:42 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Cumene	1.2	Not Detected	5.7	Not Detected
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Dibromochloromethane	1.2	Not Detected	9.9	Not Detected
Dibromomethane	4.7	Not Detected	33	Not Detected
Ethanol	12	Not Detected	22	Not Detected
Ethyl Acetate	4.7	Not Detected	17	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
Ethyl-tert-butyl ether	4.7	Not Detected	19	Not Detected
Freon 11	1.2	Not Detected	6.5	Not Detected
Freon 12	1.2	Not Detected	5.8	Not Detected
Freon 113	1.2	Not Detected	8.9	Not Detected
Freon 114	1.2	Not Detected	8.1	Not Detected
Freon 134a	4.7	Not Detected	19	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected
Hexachloroethane	4.7	Not Detected	45	Not Detected
Hexane	1.2	Not Detected	4.1	Not Detected
Iodomethane	12	Not Detected	68	Not Detected
Isopropyl ether	4.7	Not Detected	19	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
Methyl tert-butyl ether	4.7	Not Detected	17	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
Propylbenzene	1.2	Not Detected	5.7	Not Detected
Propylene	4.7	Not Detected	8.0	Not Detected
Styrene	1.2	Not Detected	5.0	Not Detected
tert-Amyl methyl ether	4.7	Not Detected	19	Not Detected
tert-Butyl alcohol	4.7	Not Detected	14	Not Detected
Tetrachloroethene	1.2	3.1	7.9	21
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	480	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Vinyl Acetate	4.7	Not Detected	16	Not Detected
Vinyl Bromide	4.7	Not Detected	20	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW57B-04

Lab ID#: 2107260A-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072531**	**Date of Collection:**	**7/13/21 12:52:00 PM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**7/26/21 07:42 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072531.d
Lab Smp Id: 2107260A-23A
Inj Date : 26-JUL-2021 07:42
Operator : LD Inst ID: msd3.i
Smp Info : 200mL O0725
Misc Info : 8.4 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 3
Dil Factor: 2.33000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.285	5.284 (1.000)	130	261299	25.0000			80.00- 120.00	100.00
5.285	5.284 (1.000)	128	204394				48.46- 108.46	78.22
5.271	5.270 (1.000)	49	371508				120.39- 180.39	142.18
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.166 (1.000)	114	852715	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	125801				0.00- 45.52	14.75
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	768570	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	404560				25.46- 85.46	52.64
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	348138	24.2106	24.211		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	171083				21.66- 81.66	49.14
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	844593	24.0475	24.047		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	93836				0.00- 41.47	11.11

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	550113			36.47- 96.47	65.13
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	479421	23.5831	23.583	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	542790			93.06- 153.06	113.22
9.601	9.601 (1.115)	176	445953			62.87- 122.87	93.02
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	10073	2.44832	5.704	80.00- 120.00	100.00
1.451	1.479 (0.275)	51	19941			321.86- 381.86	197.96
1.465	1.451 (0.277)	47	3800			45.34- 105.34	37.73
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.882 (0.915)	166	16230	1.34795	3.141	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	12207			48.71- 108.71	75.21
7.874	7.874 (0.914)	131	12845			46.55- 106.55	79.14

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072531.d
Lab Smp Id: 2107260A-23A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.4 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	261299	-1.87
108 1,4-Difluorobenze	910055	546033	1274077	852715	-6.30
153 Chlorobenzene-d5	785948	471569	1100327	768570	-2.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:13

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-23A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 8.4 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.211	96.84	70-130
$ 134 Toluene-d8	25.000	24.047	96.19	70-130
$ 170 4-Bromofluorobenz	25.000	23.583	94.33	70-130

Data File: /chem/msd3.i/25JUL21.b/3072531.d

Date : 26-JUL-2021 07:42

Client ID:

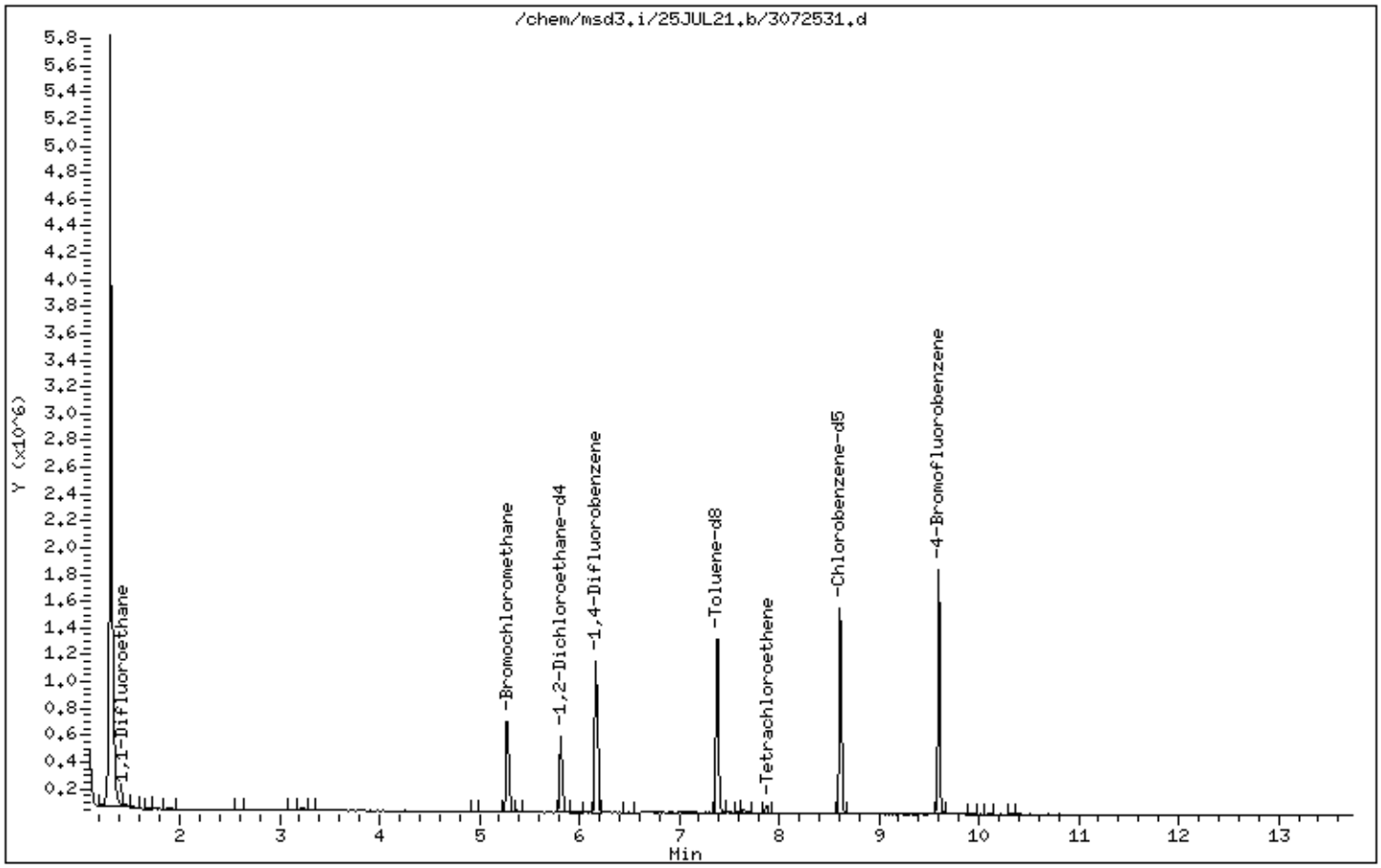
Instrument: msd3.i

Sample Info: 200mL 00725

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/25JUL21.b/3072531.d

Date : 26-JUL-2021 07:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00725

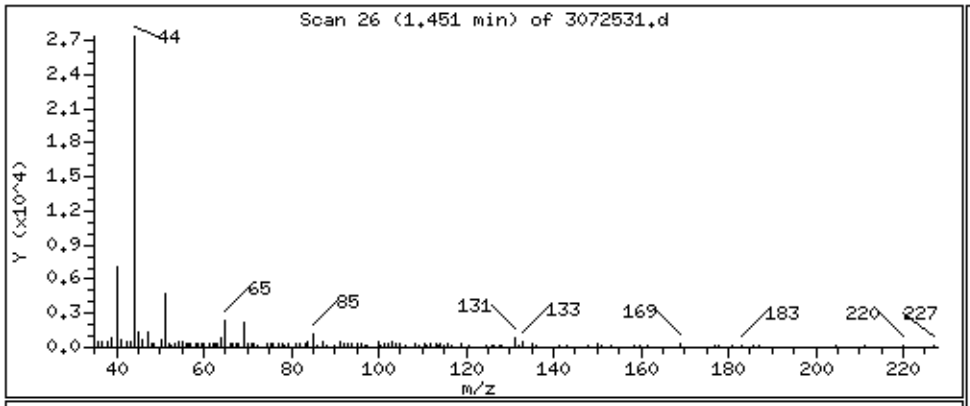
Operator: LD

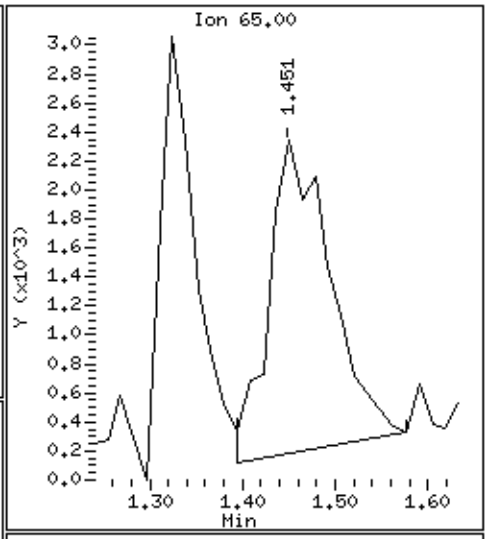
Column phase: RTX-624

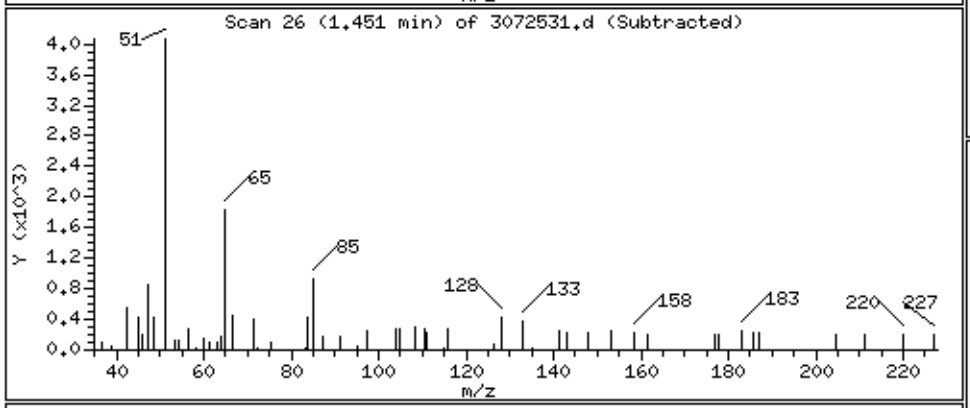
Column diameter: 0.25

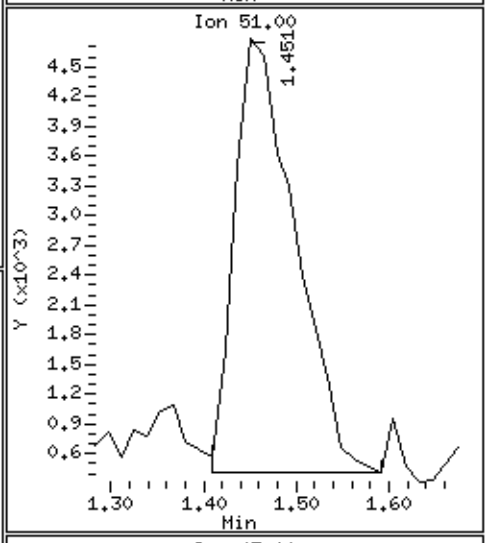
7 1,1-Difluoroethane

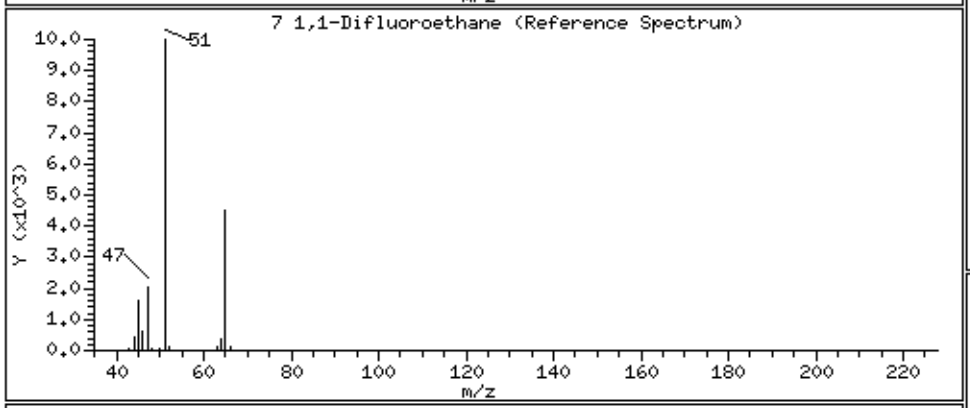
Concentration: 5.704 PPBV

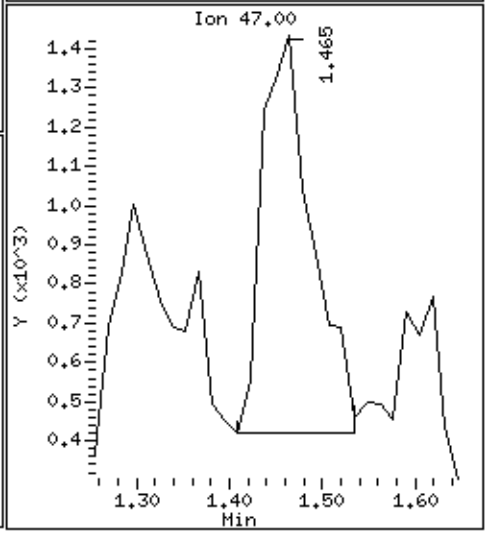


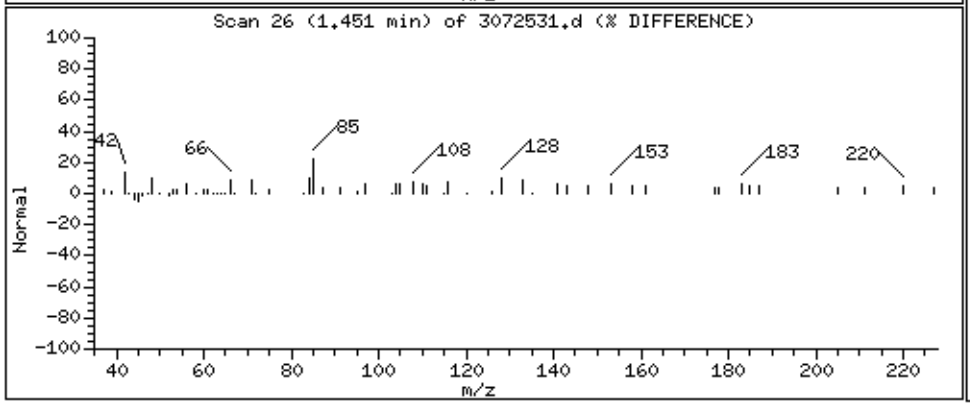












Data File: /chem/msd3.i/25JUL21.b/3072531.d

Date : 26-JUL-2021 07:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00725

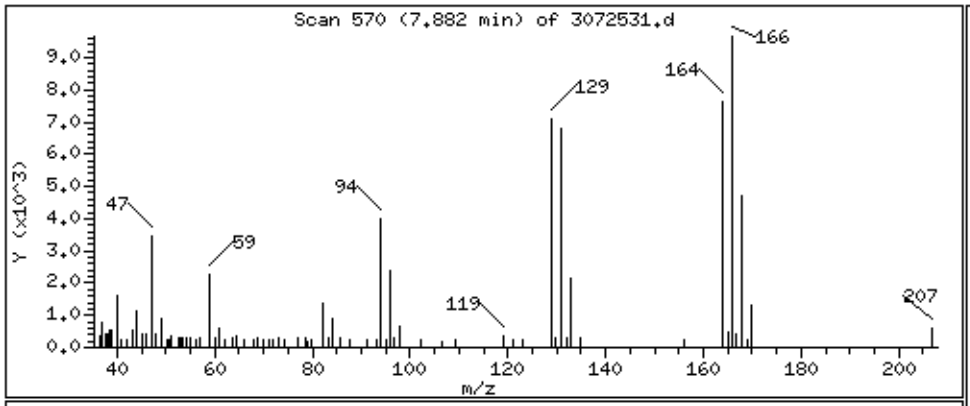
Operator: LD

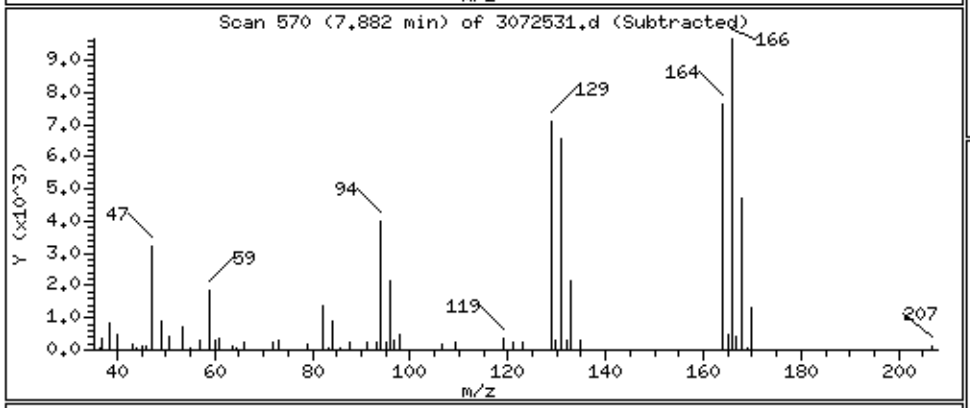
Column phase: RTX-624

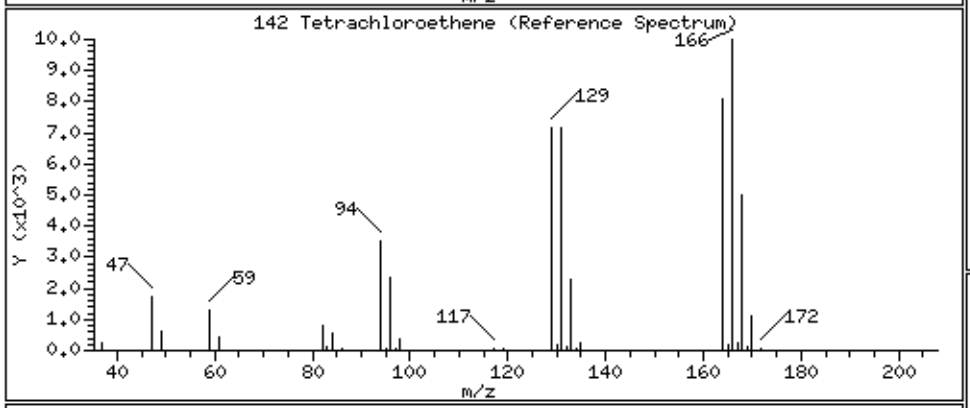
Column diameter: 0.25

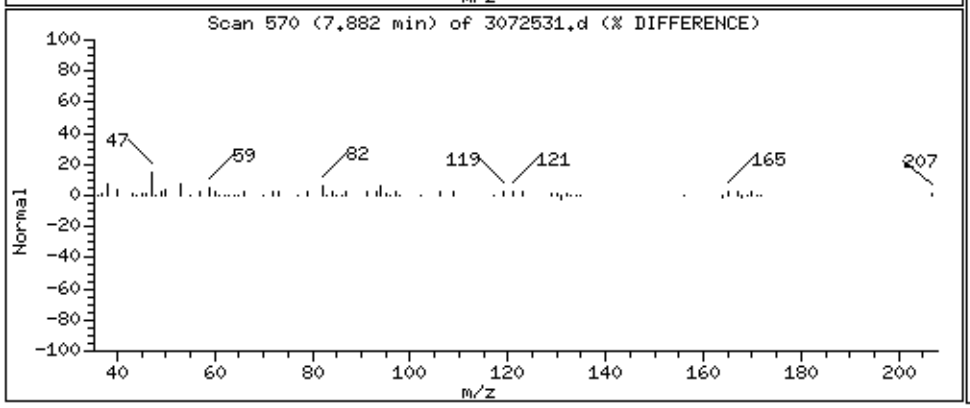
142 Tetrachloroethene

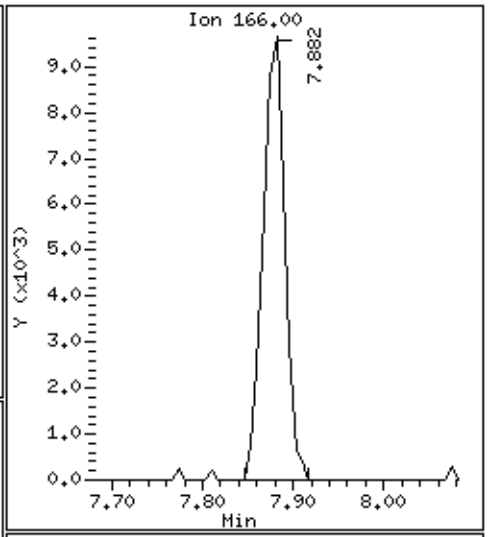
Concentration: 3.141 PPBV

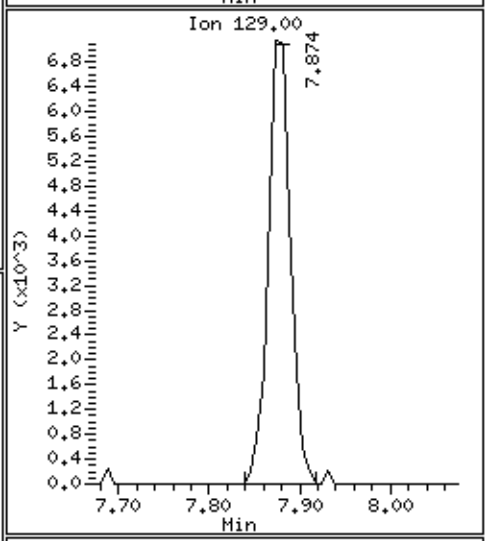


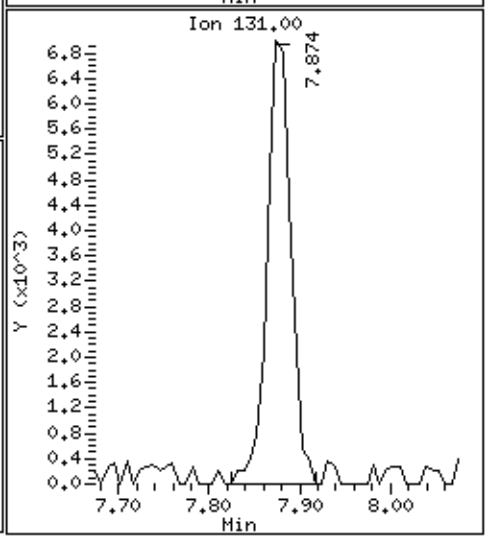












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Client Sample ID: SG-VW57B-05

Lab ID#: 2107260A-24A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072519**	**Date of Collection:**	**7/13/21 12:52:00 PM**
Dil. Factor:	**2.26**	**Date of Analysis:**	**7/25/21 10:53 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.5	Not Detected	31	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
1,1-Difluoroethane	4.5	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.5	Not Detected	27	Not Detected
1,2,4-Trichlorobenzene	4.5	Not Detected	34	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2-Dibromo-3-chloropropane	4.5	Not Detected	44	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.5	Not Detected	13	Not Detected
2-Hexanone	4.5	Not Detected	18	Not Detected
2-Propanol	4.5	Not Detected	11	Not Detected
3-Chloropropene	4.5	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.6	Not Detected
Acetone	11	Not Detected	27	Not Detected
Acrolein	4.5	Not Detected	10	Not Detected
Acrylonitrile	4.5	Not Detected	9.8	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.8	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Carbon Disulfide	4.5	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.1	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Chloroethane	4.5	Not Detected	12	Not Detected
Chloroform	1.1	Not Detected	5.5	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected

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Client Sample ID: SG-VW57B-05

Lab ID#: 2107260A-24A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072519**	**Date of Collection:**	**7/13/21 12:52:00 PM**
Dil. Factor:	**2.26**	**Date of Analysis:**	**7/25/21 10:53 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Dibromochloromethane	1.1	Not Detected	9.6	Not Detected
Dibromomethane	4.5	Not Detected	32	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Ethyl Acetate	4.5	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
Ethyl-tert-butyl ether	4.5	Not Detected	19	Not Detected
Freon 11	1.1	Not Detected	6.3	Not Detected
Freon 12	1.1	Not Detected	5.6	Not Detected
Freon 113	1.1	Not Detected	8.7	Not Detected
Freon 114	1.1	Not Detected	7.9	Not Detected
Freon 134a	4.5	Not Detected	19	Not Detected
Heptane	1.1	Not Detected	4.6	Not Detected
Hexachlorobutadiene	4.5	Not Detected	48	Not Detected
Hexachloroethane	4.5	Not Detected	44	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Isopropyl ether	4.5	Not Detected	19	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	4.5	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
Propylene	4.5	Not Detected	7.8	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
tert-Amyl methyl ether	4.5	Not Detected	19	Not Detected
tert-Butyl alcohol	4.5	Not Detected	14	Not Detected
Tetrachloroethene	1.1	3.1	7.7	21
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Toluene	1.1	Not Detected	4.2	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	460	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Vinyl Acetate	4.5	Not Detected	16	Not Detected
Vinyl Bromide	4.5	Not Detected	20	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW57B-05

Lab ID#: 2107260A-24A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072519**	**Date of Collection:**	**7/13/21 12:52:00 PM**
Dil. Factor:	**2.26**	**Date of Analysis:**	**7/25/21 10:53 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072519.d
Lab Smp Id: 2107260A-24A
Inj Date : 25-JUL-2021 22:53
Operator : kk Inst ID: msdp.i
Smp Info : 200ml 1L1929
Misc Info : 7.8 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 1
Dil Factor: 2.26000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	148447	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	115986				48.23- 108.23	78.13
5.785	5.778 (1.000)	49	313641				150.57- 210.57	211.28
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	550994	25.0000			80.00- 120.00	100.00
6.659	6.666 (1.000)	88	80636				0.00- 45.71	14.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	560281	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	290195				23.78- 83.78	51.79
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	211864	25.8611	25.861		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	102856				27.21- 87.21	48.55
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	606371	25.3433	25.343		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	64117				0.00- 40.44	10.57

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	391647			34.95- 94.95	64.59
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	347817	24.1751	24.175	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	426972			95.92- 155.92	122.76
10.921	10.921 (1.154)	176	331241			66.89- 126.89	95.23
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	17735	1.38888	3.139	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	13855			47.84- 107.84	78.13
8.471	8.464 (0.895)	131	13643			45.29- 105.29	76.93

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072519.d
Lab Smp Id: 2107260A-24A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.8 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	148447	-3.98
108 1,4-Difluorobenze	573421	344053	802789	550994	-3.91
153 Chlorobenzene-d5	566079	339647	792511	560281	-1.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 12:25

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107260A-24A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.8 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.861	103.44	70-130
$ 134 Toluene-d8	25.000	25.343	101.37	70-130
$ 170 4-Bromofluorobenz	25.000	24.175	96.70	70-130

Data File: /chem/msdp.i/25JUL21.b/p072519.d

Date : 25-JUL-2021 22:53

Client ID:

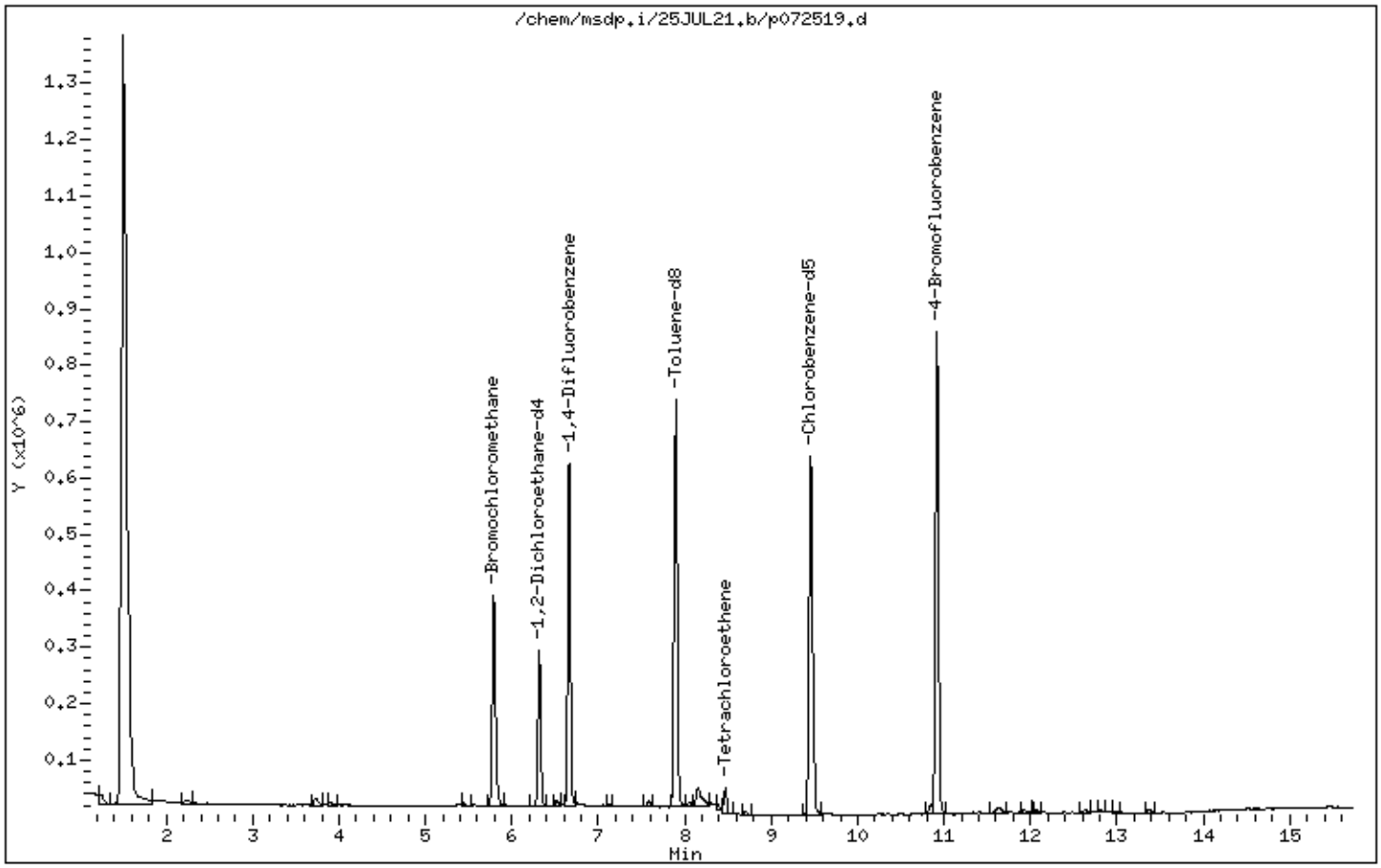
Instrument: msdp.i

Sample Info: 200ml 1L1929

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072519.d

Page 2

Date : 25-JUL-2021 22:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1929

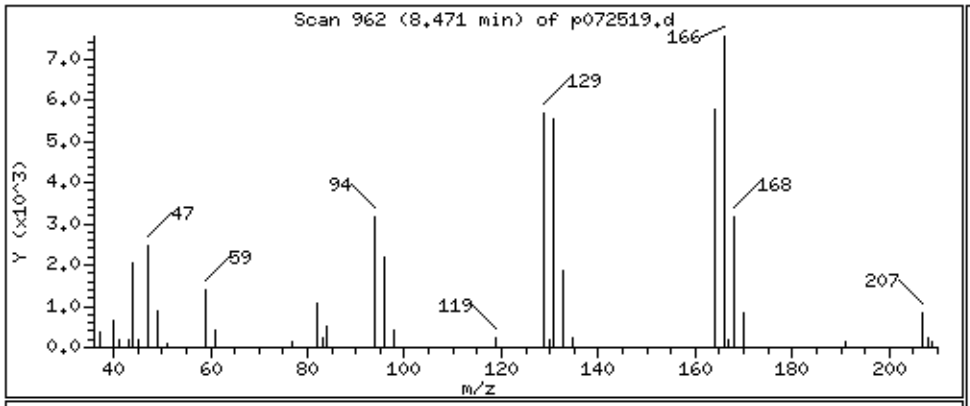
Operator: kk

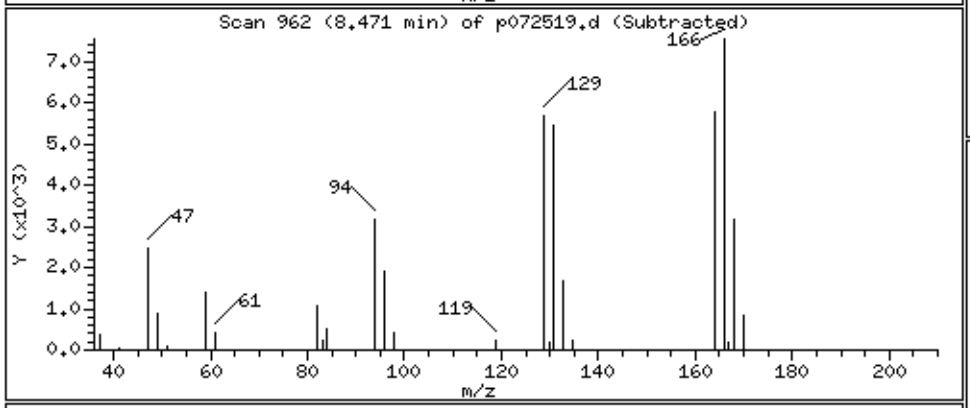
Column phase: RTX-624

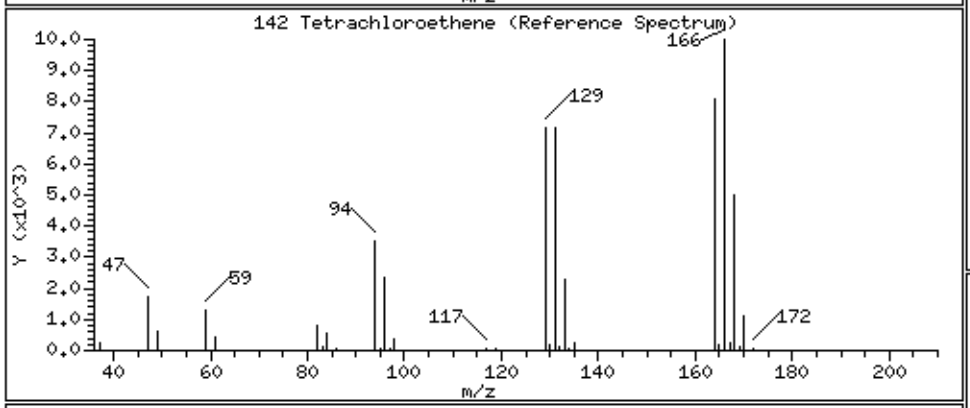
Column diameter: 0.25

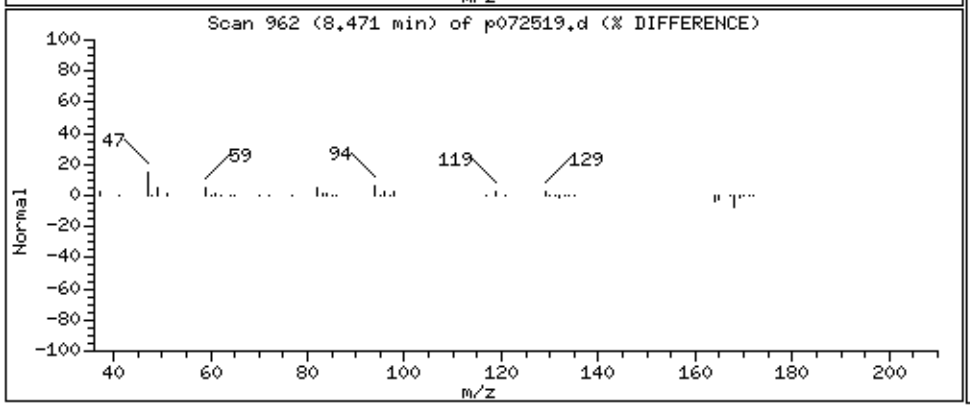
142 Tetrachloroethene

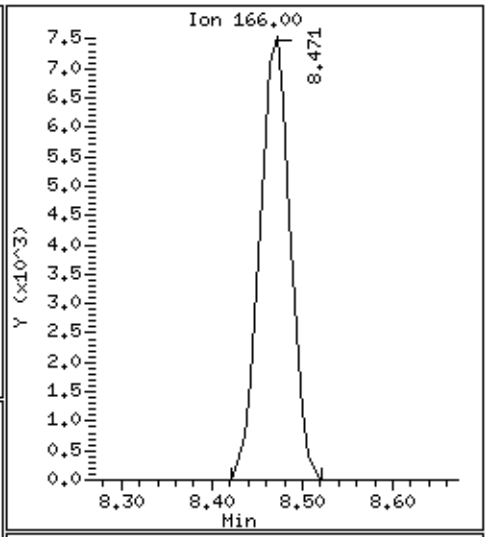
Concentration: 3.139 PPBV

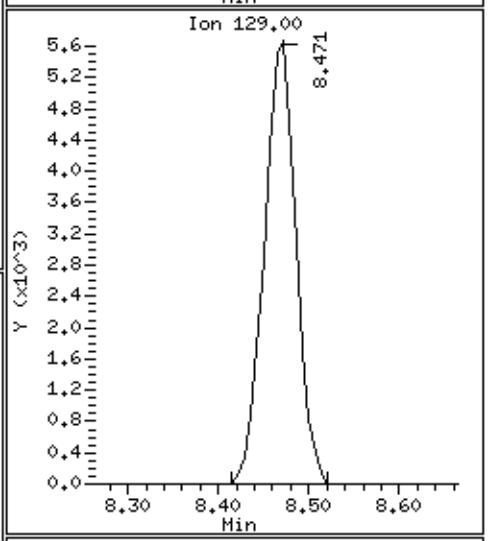


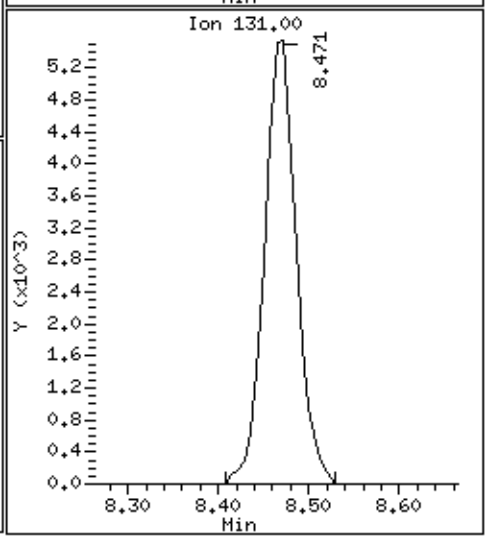












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 2107260A-25A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 01:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Difluoroethane	2.0	Not Detected	5.4	Not Detected
1,2,3-Trichloropropane	2.0	Not Detected	12	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2-Dibromo-3-chloropropane	2.0	Not Detected	19	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Acrolein	2.0	Not Detected	4.6	Not Detected
Acrylonitrile	2.0	Not Detected	4.3	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2107260A-25A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 01:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
Dibromomethane	2.0	Not Detected	14	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Ethyl Acetate	2.0	Not Detected	7.2	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Freon 134a	2.0	Not Detected	8.3	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Hexachloroethane	2.0	Not Detected	19	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
Iodomethane	5.0	Not Detected	29	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Vinyl Acetate	2.0	Not Detected	7.0	Not Detected
Vinyl Bromide	2.0	Not Detected	8.7	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 2107260A-25A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 01:43 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	96	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072507a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 25-JUL-2021 13:43
Operator : LD Inst ID: msd3.i
Smp Info : 200ml 34353
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 25-Jul-2021 12:43 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.284	5.284 (1.000)	130	268131	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	211187				48.46- 108.46	78.76
5.284	5.270 (1.000)	49	383786				120.39- 180.39	143.13
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.166 (1.000)	114	846657	25.0000			80.00- 120.00	100.00
6.180	6.166 (1.000)	88	125133				0.00- 45.52	14.78
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	754992	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	397051				25.46- 85.46	52.59
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	346851	23.5065	23.506		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	169351				21.66- 81.66	48.83
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	831519	23.8446	23.845		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	91371				0.00- 41.47	10.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	549597			36.47- 96.47	66.10
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	479577	24.0150	24.015	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	544562			93.06- 153.06	113.55
9.601	9.601 (1.114)	176	444605			62.87- 122.87	92.71

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072507a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: Humid

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	268131	0.70
108 1,4-Difluorobenze	910055	546033	1274077	846657	-6.97
153 Chlorobenzene-d5	785948	471569	1100327	754992	-3.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.23
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 25-Jul-2021 14:15

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RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.506	94.03	70-130
$ 134 Toluene-d8	25.000	23.845	95.38	70-130
$ 170 4-Bromofluorobenz	25.000	24.015	96.06	70-130

Data File: /chem/msd3.i/25JUL21.b/3072507a.d

Page 1

Date : 25-JUL-2021 13:43

Client ID: Lab Blank

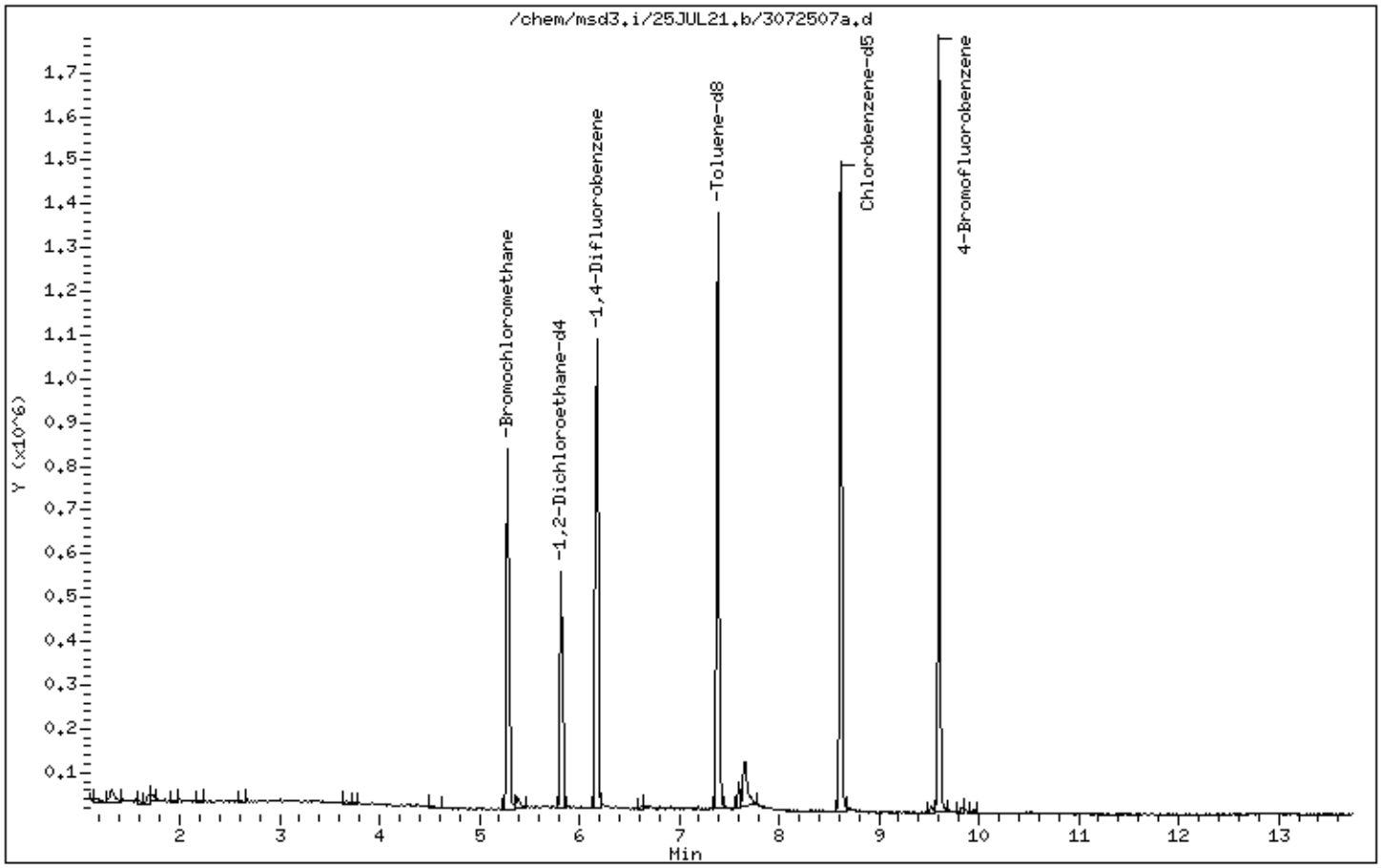
Instrument: msd3.i

Sample Info: 200ml 34353

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: Lab Blank

Lab ID#: 2107260A-25B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 02:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Difluoroethane	2.0	Not Detected	5.4	Not Detected
1,2,3-Trichloropropane	2.0	Not Detected	12	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2-Dibromo-3-chloropropane	2.0	Not Detected	19	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Acrolein	2.0	Not Detected	4.6	Not Detected
Acrylonitrile	2.0	Not Detected	4.3	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2107260A-25B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 02:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
Dibromomethane	2.0	Not Detected	14	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Ethyl Acetate	2.0	Not Detected	7.2	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Freon 134a	2.0	Not Detected	8.3	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Hexachloroethane	2.0	Not Detected	19	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
Iodomethane	5.0	Not Detected	29	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Vinyl Acetate	2.0	Not Detected	7.0	Not Detected
Vinyl Bromide	2.0	Not Detected	8.7	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 2107260A-25B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 02:25 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	99	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072507a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 25-JUL-2021 14:25
Operator : LD Inst ID: msdp.i
Smp Info : 200ml 35157
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 12:48 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	161074	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123311				48.23- 108.23	76.56
5.785	5.778 (1.000)	49	325870				150.57- 210.57	202.31
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	596246	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	88804				0.00- 45.71	14.89
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	596979	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	316530				23.78- 83.78	53.02
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.315 (1.092)	65	228084	25.6584	25.658		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110355				27.21- 87.21	48.38
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	649783	25.0965	25.096		80.00- 120.00	100.00
7.898	7.891 (1.185)	70	66259				0.00- 40.44	10.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	419945			34.95- 94.95	64.63
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	378795	24.7098	24.710	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	466199			95.92- 155.92	123.07
10.921	10.921 (1.154)	176	365773			66.89- 126.89	96.56

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072507a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: Humid

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	161074	4.19
108 1,4-Difluorobenze	573421	344053	802789	596246	3.98
153 Chlorobenzene-d5	566079	339647	792511	596979	5.46

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 25-Jul-2021 14:57

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.658	102.63	70-130
$ 134 Toluene-d8	25.000	25.096	100.39	70-130
$ 170 4-Bromofluorobenz	25.000	24.710	98.84	70-130

Data File: /chem/msdp.i/25JUL21.b/p072507a.d

Page 1

Date : 25-JUL-2021 14:25

Client ID: Lab Blank

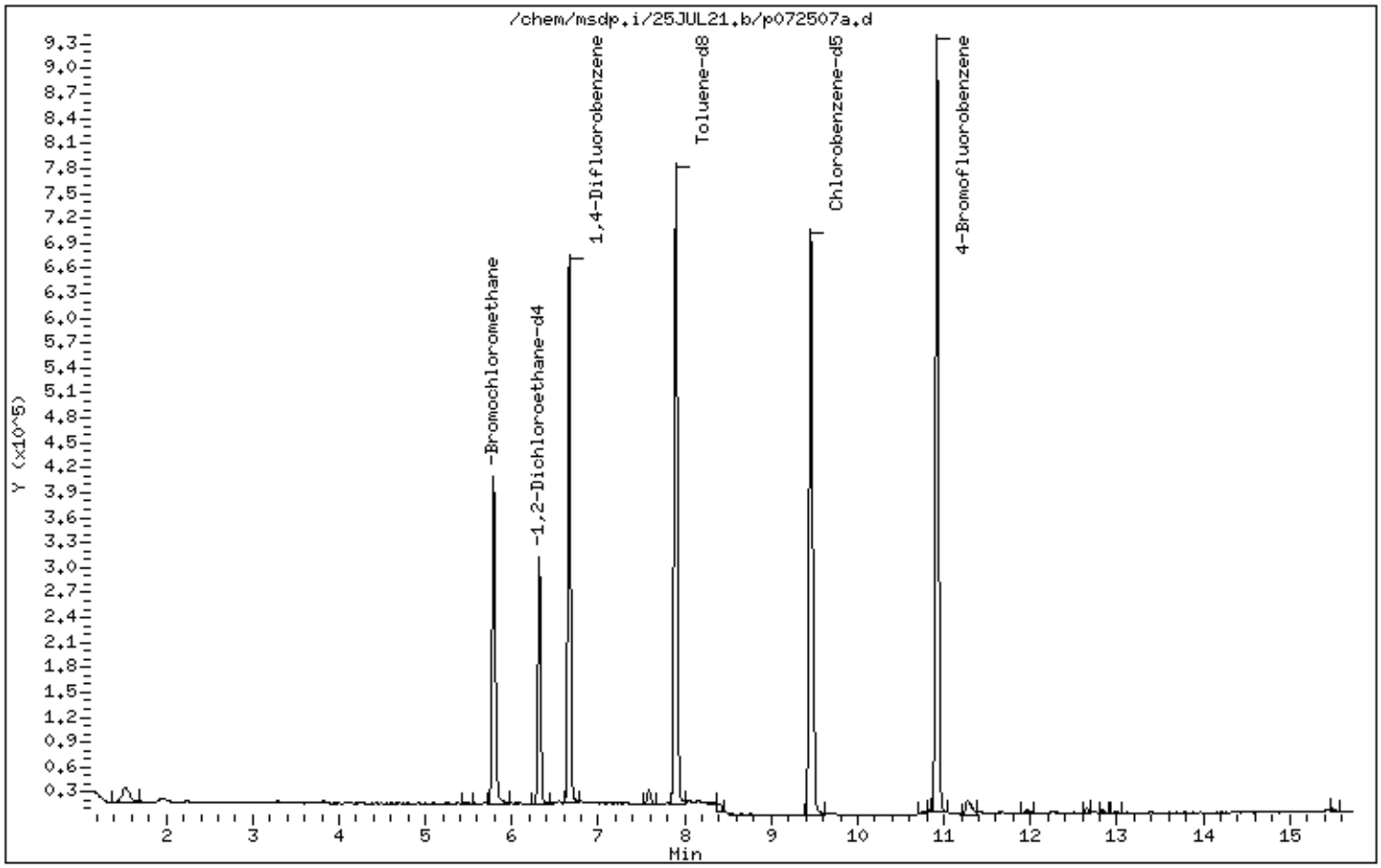
Instrument: msdp.i

Sample Info: 200ml 35157

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

SURROGATE RECOVERY FORM

Lab Name : Eurofins Air Toxics, LLC _____ SDG No. :2107260A

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY						TOTAL
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#	OUT
1	SG-VW32B-02	102		93		101		
2	SG-VW32A-03	98		94		88		
3	SG-VW36B-02	100		94		96		
4	SG-VW36B-03	94		94		89		
5	SG-VW36A-02	96		96		94		
6	SG-VW51B-02	98		95		94		
7	SG-VW51A-02	93		100		92		
8	SG-VW40B-02	98		96		93		
9	SG-VW40A-02	98		99		89		
10	SG-VW37B-03	96		95		98		
11	SG-VW37B-04	99		95		99		
12	SG-VW37A-02	100		94		95		
13	SG-VW41B-02	99		91		95		
14	SG-VW41A-03	103		90		95		
15	SG-VW42B-02	95		97		92		
16	SG-VW42A-03	97		95		93		
17	SG-VW42A-04	93		99		91		
18	SG-VW57B-04	97		96		94		
19	SG-VW57B-05	103		101		97		
20	Lab Blank	94		95		96		
21	Lab Blank	103		100		99		
22	CCV	97		93		100		
23	CCV	105		99		101		
24	LCS	102		96		100		
25	LCSD	100		93		100		
26	LCS	106		100		103		
27	LCSD	106		102		101		

Surrogate Recovery Limits

1,2-Dichloroethane-d4	70 - 130
Toluene-d8	70 - 130
4-Bromofluorobenzene	70 - 130

* Designates Values Outside of QC limits

LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name : Eurofins Air Toxics, LLC File ID: 3072502.d Date : 2021-07-25 10:46:00 SDG No. : 2107260A

		Bromochloromethane	RT	1,4-Difluorobenzene	RT	Chlorobenzene-d5	RT
	24-HOUR CCV	266266	5.28	910055	6.17	785948	8.61
	UPPER LIMIT	372772	5.61	1274077	6.50	1100327	8.94
	LOWER LIMIT	159759	4.95	546033	5.84	471568	8.28
	CLIENT SAMPLE NO.						
1	SG-VW32B-02	302984	5.28	1026651	6.17	906842	8.61
2	SG-VW32A-03	250947	5.28	830113	6.18	806303	8.62
3	SG-VW36B-02	262991	5.28	877911	6.18	786378	8.62
4	SG-VW36B-03	272172	5.28	878765	6.18	831853	8.62
5	SG-VW36A-02	313066	5.27	1057878	6.17	949911	8.61
6	SG-VW51B-02	287693	5.28	948127	6.18	852244	8.62
7	SG-VW51A-02	254697	5.28	802650	6.17	752503	8.62
8	SG-VW40B-02	272502	5.28	894957	6.18	809167	8.62
9	SG-VW40A-02	299208	5.28	1045148	6.17	955487	8.61
10	SG-VW37B-03	271269	5.28	895314	6.18	798226	8.62
11	SG-VW37B-04	256638	5.28	840947	6.18	749036	8.62
12	SG-VW37A-02	280504	5.28	958744	6.18	852400	8.62
13	SG-VW41B-02	245324	5.28	850770	6.18	731140	8.62
14	SG-VW41A-03	277553	5.28	960343	6.18	824269	8.62
15	SG-VW42B-02	255285	5.28	805316	6.18	751455	8.62
16	SG-VW42A-03	270069	5.28	890775	6.17	800210	8.62
17	SG-VW42A-04	277681	5.27	884532	6.17	829754	8.61
18	SG-VW57B-04	261299	5.28	852715	6.17	768570	8.61
19	Lab Blank	268131	5.28	846657	6.18	754992	8.62
20	CCV	266266	5.28	910055	6.17	785948	8.61
21	LCS	296267	5.28	980049	6.17	854834	8.61
22	LCSD	303039	5.28	1051372	6.17	897232	8.61

Area Upper Limit = +40% of intenral standard area

Area Lower Limit = -40% of intenral standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Designates Values Outside of QC limits

LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name : Eurofins Air Toxics, LLC File ID: p072502.d Date : 2021-07-25 11:00:00 SDG No. : 2107260A

		Bromochloromethane		RT		1,4-Difluorobenzene		RT		Chlorobenzene-d5		RT	
	24-HOUR CCV	154602		5.78		573421		6.67		566079		9.46	
	UPPER LIMIT	216442		6.11		802789		7.00		792510		9.79	
	LOWER LIMIT	92761		5.45		344052		6.34		339647		9.13	
	CLIENT SAMPLE NO.												
1	SG-VW57B-05	148447		5.79		550994		6.67		560281		9.46	
2	Lab Blank	161074		5.79		596246		6.67		596979		9.46	
3	CCV	154602		5.78		573421		6.67		566079		9.46	
4	LCS	155314		5.79		592829		6.67		584610		9.46	
5	LCSD	160685		5.79		609536		6.67		603321		9.46	

Area Upper Limit = +40% of intenral standard area

Area Lower Limit = -40% of intenral standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Designates Values Outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab File ID: 3072503.d & 3072504.d

Lab Sample ID: 27A & 27AA

CAS Number	Compound	Original Amount	Duplicate Amount	RPD	Result Less Than 5X RL
630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	0	
71-55-6	1,1,1-Trichloroethane	91	92	1.1	
79-34-5	1,1,2,2-Tetrachloroethane	97	98	1.0	
79-00-5	1,1,2-Trichloroethane	96	98	2.1	
75-34-3	1,1-Dichloroethane	93	97	4.2	
75-35-4	1,1-Dichloroethene	93	99	6.2	
75-37-6	1,1-Difluoroethane	ND	ND	0	
96-18-4	1,2,3-Trichloropropane	ND	ND	0	
120-82-1	1,2,4-Trichlorobenzene	103	116	12	
95-63-6	1,2,4-Trimethylbenzene	98	100	2.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	100	102	2.0	
95-50-1	1,2-Dichlorobenzene	105	104	0.96	
107-06-2	1,2-Dichloroethane	106	101	4.8	
78-87-5	1,2-Dichloropropane	84	94	11	
108-67-8	1,3,5-Trimethylbenzene	97	99	2.0	
106-99-0	1,3-Butadiene	96	102	6.1	
541-73-1	1,3-Dichlorobenzene	103	106	2.9	
106-46-7	1,4-Dichlorobenzene	100	103	3.0	
123-91-1	1,4-Dioxane	92	100	8.3	
540-84-1	2,2,4-Trimethylpentane	95	91	4.3	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	93	98	5.2	
591-78-6	2-Hexanone	94	96	2.1	
67-63-0	2-Propanol	98	104	5.9	
107-05-1	3-Chloropropene	92	98	6.3	
622-96-8	4-Ethyltoluene	100	102	2.0	
108-10-1	4-Methyl-2-pentanone	82	83	1.2	
67-64-1	Acetone	96	100	4.1	
107-02-8	Acrolein	ND	ND	0	
107-13-1	Acrylonitrile	ND	ND	0	
100-44-7	alpha-Chlorotoluene	94	97	3.1	
71-43-2	Benzene	106	97	8.9	
75-27-4	Bromodichloromethane	91	94	3.2	
75-25-2	Bromoform	105	106	0.95	
74-83-9	Bromomethane	99	101	2.0	
75-15-0	Carbon Disulfide	102	106	3.8	

56-23-5	Carbon Tetrachloride	98	101	3.0	
108-90-7	Chlorobenzene	98	100	2.0	
75-00-3	Chloroethane	100	103	3.0	
67-66-3	Chloroform	94	95	1.1	
74-87-3	Chloromethane	111	114	2.7	
156-59-2	cis-1,2-Dichloroethene	88	93	5.5	
10061-01-5	cis-1,3-Dichloropropene	90	91	1.1	
98-82-8	Cumene	96	97	1.0	
110-82-7	Cyclohexane	88	90	2.2	
124-48-1	Dibromochloromethane	105	106	0.95	
74-95-3	Dibromomethane	ND	ND	0	
64-17-5	Ethanol	72	74	2.7	
141-78-6	Ethyl Acetate	ND	ND	0	
100-41-4	Ethyl Benzene	99	101	2.0	
637-92-3	Ethyl-tert-butyl ether	ND	ND	0	
75-69-4	Freon 11	105	110	4.7	
76-13-1	Freon 113	101	105	3.9	
76-14-2	Freon 114	103	109	5.7	
75-71-8	Freon 12	102	107	4.8	
811-97-2	Freon 134a	ND	ND	0	
142-82-5	Heptane	92	88	4.4	
87-68-3	Hexachlorobutadiene	107	119	11	
110-54-3	Hexane	94	97	3.1	
74-88-4	Iodomethane	ND	ND	0	
108-20-3	Isopropyl ether	ND	ND	0	
108-38-3	m,p-Xylene	98	100	2.0	
1634-04-4	Methyl tert-butyl ether	92	97	5.3	
75-09-2	Methylene Chloride	96	99	3.1	
91-20-3	Naphthalene	80	88	9.5	Y
95-47-6	o-Xylene	96	98	2.1	
103-65-1	Propylbenzene	100	101	1.00	
115-07-1	Propylene	96	100	4.1	
100-42-5	Styrene	96	98	2.1	
994-05-8	tert-Amyl methyl ether	ND	ND	0	
75-65-0	tert-Butyl alcohol	ND	ND	0	
127-18-4	Tetrachloroethene	102	105	2.9	
109-99-9	Tetrahydrofuran	89	89	0	
108-88-3	Toluene	93	93	0	
156-60-5	trans-1,2-Dichloroethene	88	94	6.6	
10061-02-6	trans-1,3-Dichloropropene	97	99	2.0	
79-01-6	Trichloroethene	95	98	3.1	
108-05-4	Vinyl Acetate	92	97	5.3	

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	102	106	3.8

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab File ID: p072503.d & p072504.d

Lab Sample ID: 27B & 27BB

CAS Number	Compound	Original Amount	Duplicate Amount	RPD	Result Less Than 5X RL
630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	0	
71-55-6	1,1,1-Trichloroethane	102	101	0.99	
79-34-5	1,1,2,2-Tetrachloroethane	104	103	0.97	
79-00-5	1,1,2-Trichloroethane	104	102	1.9	
75-34-3	1,1-Dichloroethane	106	105	0.95	
75-35-4	1,1-Dichloroethene	97	97	0	
75-37-6	1,1-Difluoroethane	ND	ND	0	
96-18-4	1,2,3-Trichloropropane	ND	ND	0	
120-82-1	1,2,4-Trichlorobenzene	118	121	2.5	
95-63-6	1,2,4-Trimethylbenzene	100	98	2.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	109	106	2.8	
95-50-1	1,2-Dichlorobenzene	102	100	2.0	
107-06-2	1,2-Dichloroethane	115	115	0	
78-87-5	1,2-Dichloropropane	105	104	0.96	
108-67-8	1,3,5-Trimethylbenzene	100	98	2.0	
106-99-0	1,3-Butadiene	119	114	4.3	
541-73-1	1,3-Dichlorobenzene	104	102	1.9	
106-46-7	1,4-Dichlorobenzene	104	102	1.9	
123-91-1	1,4-Dioxane	98	96	2.1	
540-84-1	2,2,4-Trimethylpentane	105	102	2.9	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	97	96	1.0	
591-78-6	2-Hexanone	102	100	2.0	
67-63-0	2-Propanol	113	110	2.7	
107-05-1	3-Chloropropene	93	91	2.2	
622-96-8	4-Ethyltoluene	99	98	1.0	
108-10-1	4-Methyl-2-pentanone	101	102	0.99	
67-64-1	Acetone	106	102	3.8	
107-02-8	Acrolein	ND	ND	0	
107-13-1	Acrylonitrile	ND	ND	0	
100-44-7	alpha-Chlorotoluene	98	98	0	
71-43-2	Benzene	103	102	0.98	
75-27-4	Bromodichloromethane	111	111	0	
75-25-2	Bromoform	107	106	0.94	
74-83-9	Bromomethane	92	91	1.1	
75-15-0	Carbon Disulfide	97	95	2.1	

56-23-5	Carbon Tetrachloride	112	110	1.8
108-90-7	Chlorobenzene	103	101	2.0
75-00-3	Chloroethane	96	95	1.0
67-66-3	Chloroform	108	105	2.8
74-87-3	Chloromethane	108	104	3.8
156-59-2	cis-1,2-Dichloroethene	103	103	0
10061-01-5	cis-1,3-Dichloropropene	104	104	0
98-82-8	Cumene	97	96	1.0
110-82-7	Cyclohexane	95	95	0
124-48-1	Dibromochloromethane	110	108	1.8
74-95-3	Dibromomethane	ND	ND	0
64-17-5	Ethanol	91	92	1.1
141-78-6	Ethyl Acetate	ND	ND	0
100-41-4	Ethyl Benzene	100	98	2.0
637-92-3	Ethyl-tert-butyl ether	ND	ND	0
75-69-4	Freon 11	108	107	0.93
76-13-1	Freon 113	100	99	1.0
76-14-2	Freon 114	107	101	5.8
75-71-8	Freon 12	109	106	2.8
811-97-2	Freon 134a	ND	ND	0
142-82-5	Heptane	99	99	0
87-68-3	Hexachlorobutadiene	125	124	0.80
110-54-3	Hexane	103	101	2.0
74-88-4	Iodomethane	ND	ND	0
108-20-3	Isopropyl ether	ND	ND	0
108-38-3	m,p-Xylene	100	99	1.0
1634-04-4	Methyl tert-butyl ether	93	91	2.2
75-09-2	Methylene Chloride	120	116	3.4
91-20-3	Naphthalene	104	108	3.8
95-47-6	o-Xylene	98	96	2.1
103-65-1	Propylbenzene	101	98	3.0
115-07-1	Propylene	110	110	0
100-42-5	Styrene	94	93	1.1
994-05-8	tert-Amyl methyl ether	ND	ND	0
75-65-0	tert-Butyl alcohol	ND	ND	0
127-18-4	Tetrachloroethene	105	104	0.96
109-99-9	Tetrahydrofuran	117	115	1.7
108-88-3	Toluene	101	100	1.00
156-60-5	trans-1,2-Dichloroethene	97	96	1.0
10061-02-6	trans-1,3-Dichloropropene	107	105	1.9
79-01-6	Trichloroethene	107	107	0
108-05-4	Vinyl Acetate	100	96	4.1

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	96	96	0

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Calibration File Names:
Level 2: /chem/msd3.i/22JUN21.b/3062215.d
Level 3: /chem/msd3.i/22JUN21.b/3062216.d
Level 5: /chem/msd3.i/22JUN21.b/3062217.d
Level 6: /chem/msd3.i/22JUN21.b/3062218.d
Level 7: /chem/msd3.i/22JUN21.b/3062219.d
Level 8: /chem/msd3.i/22JUN21.b/3062220.d
Level 9: /chem/msd3.i/22JUN21.b/3062221.d
Level 10: /chem/msd3.i/22JUN21.b/3062222.d
Level 11: /chem/msd3.i/22JUN21.b/3062223.d

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Freon 143a	+++++	+++++	+++++	0.39291	0.44265	0.44864		
	0.42230	0.41716	0.38549				0.41819	6.098
4 Freon 134a	+++++	+++++	0.63865	0.60478	0.59997	0.61448		
	0.58371	0.56637	0.55610				0.59487	4.787
5 Propylene	+++++	+++++	+++++	0.65170	0.58539	0.61293		
	0.60477	0.58759	0.58081				0.60387	4.387

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
6 Propane	+++++	+++++	+++++	0.25834	0.22661	0.22466		
	0.22548	0.21771	0.21415				0.22783	6.904
7 1,1-Difluoroethane	+++++	+++++	+++++	0.46192	0.39747	0.39789		
	0.37311	0.37063	0.36078				0.39363	9.318
8 Freon 12	+++++	2.15603	1.89816	1.71961	1.69339	1.70056		
	1.63747	1.60084	1.52621				1.74153	11.439
9 Chlorodifluoromethane	+++++	+++++	0.25854	0.19306	0.18741	0.18633		
	0.17510	0.17147	0.16789				0.19140	16.198
10 Freon 114	+++++	1.42810	1.34458	1.34985	1.29466	1.27769		
	1.24628	1.21706	1.16502				1.29040	6.461
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
12 Isobutane	+++++	+++++	1.34906	1.44535	1.36698	1.39313		
	1.34963	1.32626	1.27032				1.35725	4.011
13 Freon 142b	+++++	+++++	+++++	1.34756	1.29500	1.38610		
	1.35039	1.32331	1.27674				1.32985	3.004
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
15 Chloromethane	+++++	+++++	+++++	0.82763	0.72732	0.74182		
	0.72479	0.68082	0.64063				0.72383	8.712
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
18 Butane	+++++	+++++	+++++	0.20113	0.23357	0.15790		
	0.15259	0.14406	0.13639				0.17094	22.286
19 Vinyl Chloride	+++++	1.12980	0.86470	0.78857	0.71677	0.70750		
	0.68973	0.65899	0.64054				0.77458	20.752
20 1,3-Butadiene	+++++	1.03243	0.84231	0.72895	0.69007	0.65005		
	0.60500	0.57217	0.55799				0.70987	22.523
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
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Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
24 Bromomethane	+++++	+++++	+++++	0.67314	0.74066	0.57705		
	0.57021	0.57219	0.54233				0.61260	12.580
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
30 Chloroethane	+++++	+++++	+++++	0.40138	0.37327	0.36736		
	0.35675	0.34449	0.33834				0.36360	6.254
31 Isopentane	+++++	+++++	+++++	0.99549	0.94525	0.97775		
	0.90728	0.88280	0.87022				0.92980	5.509
32 Vinyl Bromide	+++++	+++++	0.75093	0.69351	0.67421	0.66583		
	0.64939	0.62307	0.60538				0.66605	7.209

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Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
33 Freon 11	+++++	2.03908	1.88806	1.94469	1.86978	1.86503		
	1.76682	1.71424	1.65341				1.84264	6.814
34 Dichlorofluoromethane	+++++	+++++	1.56202	1.56160	1.45002	1.50906		
	1.46222	1.40697	1.35915				1.47301	5.188
35 Pentane	+++++	+++++	1.56512	1.57917	1.48190	1.50343		
	1.45505	1.40603	1.37871				1.48134	5.080
36 1-Pentene	+++++	+++++	+++++	0.84456	0.82508	0.86645		
	0.85550	0.84812	0.82750				0.84453	1.896
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
38 Ethyl Ether	+++++	+++++	0.39240	0.37333	0.33203	0.31725		
	0.30985	0.30127	0.29877				0.33213	11.071
39 Ethanol	+++++	+++++	+++++	0.20784	0.16584	0.13654		
	0.13230	0.12826	0.12362				0.14907	21.746
40 Freon 123a	+++++	+++++	+++++	0.98582	0.95494	1.02622		
	0.99781	0.98345	0.95217				0.98340	2.815
41 Freon 123	+++++	+++++	+++++	1.44622	1.42044	1.49355		
	1.45220	1.44145	1.40015				1.44234	2.192

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Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
42 Acrolein	+++++	+++++	+++++	0.27311	0.23701	0.24881		
	0.24693	0.24379	0.23457				0.24737	5.569
43 Freon 113	+++++	1.46824	1.31921	1.29076	1.21478	1.29651		
	1.19339	1.15481	1.13941				1.25964	8.552
44 1,1-Dichloroethene	+++++	0.99526	0.88651	0.79755	0.71745	0.69929		
	0.67490	0.65436	0.64436				0.75871	16.524
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
47 Acetone	+++++	+++++	+++++	0.51469	0.44425	0.40084		
	0.39639	0.38588	0.37313				0.41920	12.549
48 Carbon Disulfide	+++++	+++++	+++++	2.05775	1.93862	1.90843		
	1.84826	1.80791	1.76509				1.88768	5.551
49 Iodomethane	+++++	+++++	+++++	1.65946	1.28082	1.88529		
	1.79371	1.63354	1.54101				1.63230	12.928
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	1.55257	1.52862	1.55402	1.52396	1.47517	1.41118	1.50759	3.661
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	0.40376	0.34789	0.32210	0.30733	0.29846	0.29912	0.29628	0.32499	12.080
55 Cyclopentene	+++++	+++++	+++++	1.54893	1.47899	1.57264	1.55307	1.55116	1.50686	1.53527	2.280
56 Methyl Acetate	+++++	+++++	+++++	1.66411	1.65826	1.56879	1.56601	1.54169	1.49440	1.58221	4.220
57 Acetonitrile	+++++	+++++	+++++	0.70457	0.66923	0.66054	0.65603	0.63131	0.63893	0.66010	3.924
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	1.12275	1.03732	1.01485	0.96969	0.94713	0.92775	1.00325	7.126

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Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	2.06813	1.88426	1.96728	1.85902	1.80438	1.77065	1.89229	5.801
63 Methyl tert-butyl ether	+++++	+++++	2.33752	2.14499	2.05012	2.08189	1.95664	1.88244	1.84330	2.04241	8.286
64 trans-1,2-Dichloroethene	+++++	0.70810	0.61753	0.51542	0.47696	0.45306	0.44165	0.43998	0.43195	0.51058	19.702
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	0.94125	0.68377	0.65726	0.53958	0.52132	0.52644	0.51492	0.51761	0.61277	24.262
67 Hexane	+++++	1.64886	1.36501	1.39813	1.34449	1.35927	1.33134	1.31741	1.31083	1.38442	7.980
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	1.65400	1.53910	1.44790	1.45129	1.40169	1.35543	1.34743	1.31085	1.30599	1.42374	8.056
72 Isopropyl ether	+++++	+++++	+++++	3.03891	2.92537	3.07842	2.89703	2.82512	2.76512	2.92166	4.129
73 Vinyl Acetate	+++++	+++++	+++++	0.20069	0.17412	0.16618	0.17310	0.16880	0.16735	0.17504	7.401
74 Chloroprene	+++++	+++++	+++++	1.32729	1.31878	1.36187	1.37195	1.35051	1.30853	1.33982	1.892
75 1-Propanol	+++++	+++++	+++++	0.27964	0.21494	0.19133	0.18786	0.18713	0.18191	0.20714	18.032
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	3.00888	2.84283	2.90543	2.77800	2.71606	2.67248	2.82061	4.423
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	1.41174	1.38403	1.34012	1.35294	1.30280	1.25609	1.23673	1.32635	4.871
85 cis-1,2-Dichloroethene	+++++	0.63031	0.57390	0.54892	0.48648	0.45435	0.45262	0.45380	0.44869	0.50614	13.731
86 2-Butanone	+++++	+++++	+++++	0.37903	0.37296	0.35087	0.34136	0.34189	0.33506	0.35353	5.154

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
87 Ethyl Acetate	+++++	+++++	+++++	0.27562	0.29852	0.29822		
	0.29575	0.29213	0.28844				0.29145	2.969
88 Methyl Acrylate	+++++	+++++	+++++	1.66838	1.64750	1.58199		
	1.61233	1.60036	1.55070				1.61021	2.666
89 Tetrahydrofuran	+++++	1.07008	1.00292	1.04787	1.00636	0.97799		
	0.96310	0.95636	0.95055				0.99690	4.384
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
92 Chloroform	1.96521	1.64019	1.50840	1.61041	1.49476	1.50595		
	1.48492	1.45775	1.43932				1.56743	10.414
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
94 Cyclohexane	+++++	1.22023	1.07215	1.01365	0.93034	0.97861		
	0.91761	0.90108	0.89226				0.99074	11.233
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
96 1,1,1-Trichloroethane	2.23129	2.05048	1.81091	1.75915	1.67257	1.67685		
	1.59247	1.55264	1.51015				1.76184	13.567

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
97 Carbon Tetrachloride	+++++	1.84434	1.51851	1.59602	1.58811	1.68095		
	1.61629	1.57619	1.56099				1.62268	6.219
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
99 1,1-Dichloropropene	+++++	+++++	0.12119	0.11613	0.11694	0.11346		
	0.11216	0.11077	0.10576				0.11377	4.342
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
101 2,2,4-Trimethylpentane	+++++	4.78156	4.38481	4.33179	4.21293	4.42535		
	4.25264	4.15467	4.09124				4.32938	4.965
102 Benzene	+++++	0.65505	0.59983	0.57117	0.55674	0.56004		
	0.55416	0.54394	0.52302				0.57049	7.116
103 Isobutanol	+++++	+++++	+++++	0.49942	0.37776	0.23624		
	0.22752	0.22265	0.21185				0.29591	39.638 <-
105 tert-Amyl methyl ether	+++++	+++++	+++++	0.15923	0.15616	0.15814		
	0.15062	0.14634	0.14220				0.15212	4.528
106 1,2-Dichloroethane	+++++	0.37902	0.34806	0.33618	0.32981	0.31718		
	0.31483	0.30818	0.29434				0.32845	8.047

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	50.000 Level 9	100.000 Level 10	200.000 Level 11						
107 Heptane	+++++	0.33792	0.22403	0.20766	0.20608	0.21729			
	0.20793	0.20256	0.19418				0.22471	20.747	
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
110 n-Butanol	+++++	+++++	+++++	0.18934	0.19071	0.17762			
	0.18239	0.18056	0.17653				0.18286	3.250	
111 Trichloroethene	+++++	0.31117	0.32769	0.29118	0.27710	0.27541			
	0.27509	0.27051	0.26149				0.28620	7.868	
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
113 Ethyl acrylate	+++++	+++++	+++++	0.04509	0.04589	0.03861			
	0.03720	0.03653	0.03639				0.03995	10.936	
114 1,2-Dichloropropane	+++++	0.20680	0.17987	0.15597	0.12037	0.11612			
	0.09207	0.10091	0.08582				0.13224	33.260	<-
115 2-Pentanone	+++++	+++++	+++++	1.11388	1.03670	0.82493			
	0.89586	0.87342	0.86203				0.93447	12.211	
116 Methyl Methacrylate	+++++	+++++	0.29806	0.23701	0.23039	0.23977			
	0.22896	0.22635	0.22363				0.24060	10.793	

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
117 1,4-Dioxane	+++++	+++++	0.15020	0.15052	0.14901	0.14603		
	0.14111	0.13926	0.13549				0.14452	4.109
118 Dibromomethane	+++++	0.29449	0.28101	0.26147	0.26360	0.26460		
	0.26313	0.26053	0.25477				0.26795	4.885
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
122 Bromodichloromethane	0.55191	0.57875	0.48462	0.47042	0.45398	0.45550		
	0.44937	0.44453	0.42613				0.47947	10.789
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
126 cis-1,3-Dichloropropene	+++++	0.38484	0.36508	0.35464	0.35120	0.35787		
	0.35615	0.34711	0.33406				0.35637	4.110
127 Methylcyclohexane	+++++	0.49350	0.42088	0.37921	0.35673	0.37356		
	0.35568	0.34798	0.33420				0.38272	13.539
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
131 4-Methyl-2-pentanone	+++++	0.33023	0.25196	0.22701	0.22484	0.23852		
	0.22744	0.22179	0.21673				0.24232	15.340
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
136 Octane	+++++	0.29765	0.26256	0.24020	0.24794	0.26178		
	0.24913	0.24264	0.23554				0.25468	7.792

US32TAR1

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
137 Toluene	+++++	0.91701	0.76758	0.75540	0.74698	0.77174		
	0.74467	0.72579	0.69469				0.76548	8.619
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
139 trans-1,3-Dichloropropene	+++++	0.40687	0.37993	0.36744	0.35787	0.37172		
	0.35844	0.35616	0.34723				0.36821	5.063
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
141 1,1,2-Trichloroethane	+++++	0.34720	0.29011	0.27882	0.27255	0.28256		
	0.26991	0.26544	0.25880				0.28317	9.776
142 Tetrachloroethene	+++++	0.43410	0.40731	0.38596	0.38515	0.39520		
	0.37964	0.37852	0.36735				0.39165	5.322
143 2-Hexanone	+++++	+++++	+++++	0.31990	0.32699	0.34401		
	0.32729	0.32069	0.31273				0.32527	3.269
144 1,3-Dichloropropane	+++++	0.41984	0.38640	0.36235	0.35686	0.36795		
	0.35318	0.34457	0.33063				0.36522	7.523
145 Butyl Acetate	+++++	+++++	+++++	0.37428	0.36225	0.32044		
	0.30786	0.30617	0.30638				0.32956	9.311

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Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
146 Dibromochloromethane	+++++	0.56921	0.54488	0.53586	0.51292	0.55310	0.53597	0.52826	0.51753	0.53722	3.444
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB)	+++++	0.48087	0.43657	0.44243	0.43273	0.44944	0.43280	0.42753	0.41566	0.43975	4.407
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	0.47903	0.47277	0.46515	0.46257	0.45698	0.43971	0.46270	2.956
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Chlorobenzene	0.76910	0.74560	0.72064	0.66663	0.65193	0.68685	0.65267	0.63792	0.61813	0.68328	7.526
155 Ethyl Benzene	+++++	0.36451	0.34530	0.34543	0.34070	0.35619	0.33501	0.32785	0.31833	0.34167	4.342

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Curve Type : Average

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
156 Nonane	+++++	+++++	0.71920	0.66701	0.64345	0.70654		
	0.66135	0.63353	0.60456				0.66223	6.082
157 1,1,1,2-Tetrachloroethane	+++++	0.44284	0.37328	0.35539	0.34747	0.39755		
	0.37098	0.36365	0.35719				0.37604	8.233
158 m,p-Xylene	+++++	0.48145	0.44650	0.41386	0.40778	0.43652		
	0.41628	0.40382	0.39426				0.42506	6.697
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
160 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
163 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
164 o-Xylene	+++++	0.45314	0.40808	0.39628	0.38390	0.42267		
	0.39648	0.38811	0.37953				0.40353	6.034

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
165 Styrene	+++++	0.76486	0.73265	0.66912	0.66488	0.73099		
	0.69299	0.67552	0.66197				0.69912	5.542
166 2-Heptanone	+++++	+++++	+++++	2.07850	2.02853	1.76276		
	1.72790	1.71667	1.69635				1.83512	9.333
167 Bromoform	+++++	0.55582	0.49485	0.49209	0.48297	0.52943		
	0.51178	0.50891	0.49935				0.50940	4.617
168 Cumene	+++++	1.46347	1.32018	1.25126	1.24254	1.33307		
	1.24859	1.20423	1.14310				1.27581	7.591
169 Cyclohexanone	+++++	+++++	0.49888	0.43341	0.38419	0.39800		
	0.37159	0.36798	0.35640				0.40149	12.398
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
172 D-Limonene	+++++	+++++	+++++	0.41613	0.42102	0.48642		
	0.47452	0.46711	0.46003				0.45421	6.383
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
174 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
175 1,1,2,2-Tetrachloroethane	+++++	0.73988	0.66457	0.63414	0.60752	0.65052		
	0.60387	0.58908	0.57075				0.63254	8.456
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
177 Bromobenzene	+++++	+++++	0.41758	0.39469	0.38831	0.42203		
	0.39264	0.38566	0.37533				0.39660	4.303
178 Propylbenzene	+++++	1.63248	1.52426	1.49879	1.44291	1.59042		
	1.47490	1.41973	1.32553				1.48863	6.526
179 1,2,3-Trichloropropane	+++++	0.21832	0.19260	0.18821	0.18486	0.19859		
	0.18622	0.18030	0.17525				0.19054	6.973
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
181 trans-1,4-Dichloro-2-butene	+++++	+++++	0.17894	0.15447	0.14080	0.15603		
	0.14575	0.14239	0.13704				0.15077	9.452
182 Decane	+++++	+++++	0.82127	0.78301	0.76466	0.82898		
	0.76049	0.73340	0.69627				0.76973	6.087
183 4-Ethyltoluene	+++++	0.44626	0.38352	0.38395	0.37080	0.40565		
	0.37645	0.36551	0.35475				0.38586	7.426

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
184 2-Chlorotoluene	+++++	0.33540	0.32249	0.30729	0.30590	0.33413		
	0.30764	0.30110	0.29427				0.31353	4.882
185 1,3,5-Trimethylbenzene	+++++	0.62236	0.56602	0.52640	0.51744	0.56132		
	0.52664	0.51298	0.50253				0.54196	7.278
186 4-Chlorotoluene	+++++	+++++	+++++	0.33149	0.33329	0.33791		
	0.32580	0.31978	0.31580				0.32734	2.582
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
188 alpha Methyl Styrene	+++++	0.58674	0.55163	0.54458	0.52340	0.59373		
	0.55896	0.54819	0.53323				0.55506	4.393
189 tert-Butylbenzene	+++++	+++++	1.05940	1.01750	0.95902	1.07649		
	0.99956	0.94305	0.92521				0.99718	5.811
190 1,2,4-Trimethylbenzene	+++++	1.23256	1.10654	1.03187	1.02225	1.11861		
	1.04393	1.01613	0.97757				1.06868	7.583
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
192 sec-Butylbenzene	+++++	0.34742	0.34215	0.31549	0.30761	0.33721		
	0.31815	0.30969	0.29897				0.32209	5.541

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193 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	1.50554	1.35565	1.31539	1.30460	1.43659	1.34323	1.30113	1.22848	1.34882	6.401
195 1,3-Dichlorobenzene	+++++	0.76718	0.73738	0.71502	0.69941	0.76661	0.72843	0.70729	0.68717	0.72606	4.088
196 1,4-Dichlorobenzene	+++++	0.81657	0.76389	0.75583	0.71833	0.77930	0.73468	0.71905	0.69530	0.74787	5.220
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	0.44184	0.44487	0.46203	0.44756	0.44921	0.44673	0.44871	1.559
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	1.13155	1.00249	1.00181	0.98469	1.08287	1.02949	1.01381	0.97942	1.02827	5.134
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	0.98102	0.92723	0.87231	0.95819	0.90352	0.87389	0.83312	0.90704	5.743

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
202 Butylbenzene	+++++	0.37762	0.34507	0.35117	0.34380	0.36489		
	0.34524	0.33876	0.33129				0.34973	4.251
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
204 1,2-Dichlorobenzene	+++++	0.74510	0.70537	0.70212	0.67508	0.74275		
	0.69885	0.67872	0.66494				0.70162	4.234
205 Hexachloroethane	+++++	+++++	+++++	0.25073	0.22807	0.31064		
	0.28724	0.28330	0.28360				0.27393	10.765
206 1,2-Dibromo-3-chloropropane	+++++	+++++	+++++	0.41149	0.40289	0.43195		
	0.40756	0.39876	0.38829				0.40682	3.609
207 Dodecane	+++++	0.81660	0.76273	0.77645	0.75742	0.77338		
	0.77451	0.75867	0.71615				0.76699	3.625
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	0.63274	0.64837	0.52413		
	0.58122	0.59822	0.59901				0.59728	7.291
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	0.77525	0.76555	0.81070		
	0.77613	0.76205	0.74860				0.77304	2.717

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	0.52439	0.51233	0.49622	0.51061		
	0.49833	0.48084	0.46566				0.49834	4.016
214 beta-Pinene	+++++	+++++	+++++	0.59511	0.57596	0.65627		
	0.62204	0.60187	0.59120				0.60708	4.679
215 Hexachlorobutadiene	+++++	+++++	0.40609	0.37526	0.37381	0.39489		
	0.37593	0.36008	0.34901				0.37644	5.142
216 Naphthalene	+++++	+++++	1.91443	1.85945	1.72125	1.33565		
	1.31107	1.27329	1.23705				1.52174	19.528
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	0.49108	0.47734	0.45571	0.46004		
	0.45065	0.43868	0.41862				0.45602	5.242
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
225 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
228 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 234 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
238 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
239 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
240 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
241 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
242 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
243 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
244 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
245 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
246 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
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Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
247 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
248 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
249 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
250 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Start Cal Date : 22-JUN-2021 15:51
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2 / 50.000 Level 9	0.40000 Level 3 / 100.000 Level 10	0.80000 Level 5 / 200.000 Level 11	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
256 C8 - C9 Hydrocarbons	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref C5 + C6	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref Heptane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref Decane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref Dodecan	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,2,3-TMB	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++

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Start Cal Date : 22-JUN-2021 15:51
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Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
266 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
267 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 104 1,2-Dichloroethane-d4	1.39594	1.39931	1.39591	1.38860	1.38809	1.39744		
	1.36655	1.34902	1.30112				1.37578	2.373
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 134 Toluene-d8	1.02949	1.03423	1.02563	1.02620	1.03253	1.03211		
	1.03424	1.03707	1.01586				1.02971	0.623
$ 170 4-Bromofluorobenzene	0.65667	0.65828	0.66384	0.65372	0.65403	0.66471		
	0.66865	0.67027	0.66119				0.66126	0.916

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INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdp.i/19MAY21.b/p051914.d
Level 3: /chem/msdp.i/19MAY21.b/p051915.d
Level 4: /chem/msdp.i/19MAY21.b/p051916.d
Level 5: /chem/msdp.i/19MAY21.b/p051917.d
Level 6: /chem/msdp.i/19MAY21.b/p051918.d
Level 7: /chem/msdp.i/19MAY21.b/p051919.d
Level 8: /chem/msdp.i/19MAY21.b/p051920.d
Level 9: /chem/msdp.i/19MAY21.b/p051921.d
Level 10: /chem/msdp.i/19MAY21.b/p051924.d

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	0.64347	0.55833	0.28699	0.48663	0.54132	0.53859	0.32618	+++++	0.48307	26.850
4 Freon 134a	+++++	0.77011	0.84089	0.78129	0.71828	0.77669	0.83041	0.82114	+++++	0.79126	5.405
5 Propylene	+++++	+++++	1.30044	1.16437	0.97808	1.08818	1.14258	1.19048	+++++	1.14402	9.390

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
6 Propane	0.35885	0.70755	0.41224	0.45766	0.35651	0.39030		
	0.42780	0.42956	+++++				0.44256	25.464
7 1,1-Difluoroethane	+++++	+++++	0.71318	0.51293	0.51356	0.55570		
	0.58422	0.52044	+++++				0.56667	13.609
8 Freon 12	+++++	1.89452	2.25684	2.41287	1.98305	2.23908		
	2.37709	2.51953	2.25486				2.24223	9.426
9 Chlorodifluoromethane	+++++	0.19040	0.21703	0.22854	0.20953	0.22781		
	0.23846	0.23864	+++++				0.22149	7.823
10 Freon 114	+++++	2.19697	2.35022	2.42550	1.98865	2.15848		
	2.32315	2.38505	1.78003				2.20100	10.095
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
12 Isobutane	+++++	+++++	2.94068	2.70679	2.13532	2.31544		
	2.47976	2.61851	+++++				2.53275	11.334
13 Freon 142b	2.88379	2.72504	2.51717	2.51995	1.92155	2.20295		
	2.38394	2.38895	+++++				2.44292	12.194
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
15 Chloromethane	+++++	+++++	1.62633	1.12803	1.35456	1.40983		
	1.30365	0.98253	+++++				1.30082	17.255
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
18 Butane	+++++	+++++	0.36632	0.35071	0.20777	0.23711		
	0.29558	0.35050	+++++				0.30133	22.008
19 Vinyl Chloride	+++++	1.63750	1.79369	1.70399	1.29644	1.43002		
	1.50248	1.58819	1.56702				1.56492	10.007
20 1,3-Butadiene	+++++	1.15962	1.11125	1.12135	1.33604	1.33164		
	1.39178	1.46398	1.15352				1.25865	10.936
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Start Cal Date : 19-MAY-2021 14:02
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
24 Bromomethane	+++++	+++++	1.20010	1.20656	0.84526	0.89756		
	0.93585	0.95210	+++++				1.00624	15.607
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
30 Chloroethane	+++++	+++++	0.55246	0.65854	0.47089	0.52675		
	0.57230	0.59544	+++++				0.56273	11.288
31 Isopentane	+++++	+++++	1.67935	1.76478	1.70699	1.64818		
	1.70298	1.77148	+++++				1.71230	2.809
32 Vinyl Bromide	+++++	0.89521	1.00012	0.99635	0.80298	0.86636		
	0.95282	0.99672	+++++				0.93008	8.292

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
33 Freon 11	+++++	2.37298	2.30540	2.51055	2.23314	2.30111		
	2.43347	2.54911	2.35618				2.38274	4.554
34 Dichlorofluoromethane	+++++	2.10328	2.06570	2.13311	1.73001	1.97932		
	2.12384	2.24043	+++++				2.05367	7.927
35 Pentane	+++++	2.89800	2.83104	2.84872	2.63186	2.68332		
	2.75389	2.83565	+++++				2.78321	3.479
36 1-Pentene	2.06121	1.59213	1.56421	1.63474	1.37543	1.48214		
	1.53709	1.54332	+++++				1.59878	12.659
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
38 Ethyl Ether	+++++	0.41543	0.47730	0.50593	0.42858	0.46228		
	0.48772	0.50964	+++++				0.46955	7.767
39 Ethanol	+++++	+++++	0.27474	0.25602	0.21630	0.23850		
	0.24473	0.25725	+++++				0.24792	8.009
40 Freon 123a	1.67643	1.70260	1.56653	1.71267	1.35347	1.42708		
	1.48357	1.59067	+++++				1.56413	8.516
41 Freon 123	2.23549	2.28998	2.32261	2.22470	2.10291	2.12379		
	2.22936	2.25042	+++++				2.22241	3.385

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
42 Acrolein	+++++	+++++	0.43742	0.46343	0.37582	0.40776		
	0.43668	0.46010	+++++				0.43020	7.747
43 Freon 113	+++++	1.66116	1.75764	1.84846	1.81076	1.72301		
	1.78692	1.85367	1.72082				1.77031	3.803
44 1,1-Dichloroethene	+++++	1.13047	0.98158	1.08462	0.90481	0.98246		
	1.04403	1.08444	1.24812				1.05757	9.982
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
47 Acetone	+++++	+++++	0.71912	0.66713	0.55646	0.62462		
	0.66710	0.69799	+++++				0.65540	8.867
48 Carbon Disulfide	+++++	+++++	2.82595	2.99407	2.45111	2.66619		
	2.81912	2.96077	+++++				2.78620	7.233
49 Iodomethane	+++++	+++++	1.13057	1.12578	1.89275	2.20331		
	2.35282	2.40768	+++++				1.85215	31.782 <-
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
51 2-Methyl-2-butene	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
52 2-Propanol	*****	*****	2.69785	2.66069	2.37669	2.59218	2.71904	2.80241	*****	2.64148	5.564
53 trans-2-Pentene	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
54 3-Chloropropene	*****	0.46426	0.51422	0.48997	0.39775	0.44877	0.47843	0.46484	*****	0.46546	7.851
55 Cyclopentene	2.17715	2.47822	2.46632	2.56699	2.14041	2.34707	2.46346	2.49030	*****	2.39124	6.514
56 Methyl Acetate	2.75833	2.64156	2.95164	2.98908	2.39164	2.73802	2.95740	2.94353	*****	2.79640	7.421
57 Acetonitrile	*****	*****	1.17773	1.29138	1.02662	1.19401	1.30642	1.39067	*****	1.23114	10.326
58 cis-2-Pentene	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
59 Methylene Chloride	*****	*****	1.66058	1.84335	1.45839	1.64567	1.75730	1.84887	*****	1.70236	8.667

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
61 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	3.20065	3.30496	2.90583	2.89744		
	3.04086	3.13252	+++++				3.08038	5.297
63 Methyl tert-butyl ether	+++++	3.20233	3.03539	3.11282	3.04059	2.95544		
	3.02504	3.11966	+++++				3.07018	2.627
64 trans-1,2-Dichloroethene	+++++	0.70368	0.71795	0.72086	0.61472	0.66913		
	0.70892	0.74337	0.77451				0.70664	6.798
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
66 Acrylonitrile	+++++	1.08486	1.02749	1.03009	0.83743	0.92318		
	0.97672	1.03119	0.95852				0.98368	7.902
67 Hexane	+++++	2.36995	2.44383	2.55815	2.23183	2.38896		
	2.51048	2.60764	2.59146				2.46279	5.242
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
71 1,1-Dichloroethane	+++++	2.12050	2.15298	2.31268	1.88443	2.09213		
	2.23176	2.32442	1.81878				2.11721	8.735
72 Isopropyl ether	+++++	+++++	5.59896	5.72998	5.66571	5.66877		
	5.76012	5.94316	+++++				5.72778	2.086
73 Vinyl Acetate	+++++	+++++	0.27670	0.27644	0.22773	0.26524		
	0.28486	0.30161	+++++				0.27210	9.135
74 Chloroprene	2.14359	2.03061	2.29463	2.44863	1.90092	2.21243		
	2.40069	2.43763	+++++				2.23364	8.953
75 1-Propanol	0.34779	0.37288	0.37461	0.33474	0.25627	0.30465		
	0.32597	0.32511	+++++				0.33025	11.608
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	4.83620	5.05574	4.88798	4.89187		
	4.97055	5.10638	+++++				4.95812	2.131
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
84 2,2-Dichloropropane	+++++	1.77964	1.81997	1.87272	1.91022	1.85607		
	1.92796	1.99401	+++++				1.88008	3.793
85 cis-1,2-Dichloroethene	+++++	0.63006	0.72053	0.77116	0.61241	0.72577		
	0.77548	0.80235	0.82883				0.73332	10.638
86 2-Butanone	+++++	+++++	0.58624	0.61354	0.46455	0.53642		
	0.58432	0.60531	+++++				0.56506	9.921

US32TAR1

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
87 Ethyl Acetate	+++++	+++++	0.57084	0.59355	0.47870	0.54564		
	0.57818	0.60540	+++++				0.56205	8.124
88 Methyl Acrylate	3.17133	2.76269	2.95610	3.12287	2.41468	2.81782		
	3.08995	3.13777	+++++				2.93415	8.839
89 Tetrahydrofuran	+++++	1.93446	1.95308	2.03673	1.59091	1.83806		
	1.94537	2.03649	1.69916				1.87928	8.525
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
92 Chloroform	+++++	2.04196	2.15806	2.35426	1.86695	2.17101		
	2.31664	2.42886	2.06383				2.17519	8.546
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
94 Cyclohexane	+++++	1.43367	1.50722	1.58410	1.57245	1.53317		
	1.54570	1.61103	1.79345				1.57260	6.636
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
96 1,1,1-Trichloroethane	+++++	2.46156	2.42553	2.48444	2.36393	2.36921		
	2.42958	2.51331	2.61099				2.45732	3.291

US32TAR1

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
97 Carbon Tetrachloride	+++++	2.25147	2.24440	2.22561	2.35635	2.31498		
	2.45306	2.54156	2.05010				2.30469	6.528
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
99 1,1-Dichloropropene	+++++	0.17378	0.17794	0.17658	0.15112	0.16544		
	0.17360	0.17276	+++++				0.17017	5.462
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
101 2,2,4-Trimethylpentane	+++++	8.25963	8.27890	8.75173	8.57253	8.58971		
	8.69563	8.91957	8.41247				8.56002	2.709
102 Benzene	+++++	0.78550	0.87685	0.84553	0.74484	0.82677		
	0.84553	0.84637	0.82851				0.82499	5.017
103 Isobutanol	0.54457	0.28827	0.32257	0.35375	0.28589	0.33052		
	0.36043	0.34600	+++++				0.35400	23.128
105 tert-Amyl methyl ether	+++++	+++++	0.24796	0.22661	0.23645	0.23382		
	0.22848	0.22244	+++++				0.23262	3.884
106 1,2-Dichloroethane	+++++	0.41345	0.44525	0.47019	0.38312	0.44057		
	0.45058	0.44750	0.38354				0.42928	7.531

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
107 Heptane	+++++	0.30034	0.32485	0.33244	0.32365	0.33156		
	0.32821	0.32372	0.34983				0.32683	4.186
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
110 n-Butanol	+++++	+++++	0.28572	0.30596	0.28104	0.30551		
	0.31292	0.30849	+++++				0.29994	4.393
111 Trichloroethene	+++++	0.38664	0.41237	0.41315	0.35498	0.40036		
	0.41626	0.41270	0.40610				0.40032	5.166
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
113 Ethyl acrylate	0.05846	0.06007	0.06293	0.05929	0.05058	0.05740		
	0.05605	0.05682	+++++				0.05770	6.225
114 1,2-Dichloropropane	+++++	0.43979	0.42737	0.42567	0.39065	0.41185		
	0.42060	0.42118	0.44647				0.42295	4.035
115 2-Pentanone	1.21904	1.27106	1.31222	1.33128	1.17591	1.27524		
	1.28236	1.28701	+++++				1.26926	3.934
116 Methyl Methacrylate	+++++	0.35343	0.34137	0.34552	0.32431	0.34108		
	0.34921	0.34961	+++++				0.34351	2.790

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
117 1,4-Dioxane	+++++	0.22595	0.23899	0.23631	0.21158	0.22036		
	0.22028	0.21996	+++++				0.22478	4.349
118 Dibromomethane	+++++	0.34506	0.39714	0.39205	0.34241	0.37852		
	0.39319	0.38886	0.33065				0.37098	7.285
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
122 Bromodichloromethane	+++++	0.58233	0.63649	0.64840	0.58270	0.62912		
	0.65408	0.65615	0.57631				0.62070	5.563
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
126 cis-1,3-Dichloropropene	+++++	0.50516	0.52561	0.54285	0.48751	0.51912		
	0.54679	0.54891	0.51913				0.52438	4.097
127 Methylcyclohexane	+++++	0.61465	0.55349	0.55932	0.59377	0.58677		
	0.57314	0.56161	0.59163				0.57930	3.623
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
131 4-Methyl-2-pentanone	+++++	0.44567	0.41535	0.42739	0.42024	0.41445		
	0.41323	0.40846	0.49125				0.42950	6.406
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
136 Octane	+++++	0.49928	0.45400	0.47320	0.49988	0.47864		
	0.47697	0.47146	0.52912				0.48532	4.775

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
137 Toluene	+++++	1.17435	1.15077	1.15598	1.08690	1.13273		
	1.13471	1.13158	1.13864				1.13821	2.227
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
139 trans-1,3-Dichloropropene	+++++	0.47393	0.50610	0.49304	0.46856	0.50673		
	0.51882	0.51939	0.44922				0.49197	5.206
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
141 1,1,2-Trichloroethane	+++++	0.39429	0.40170	0.39839	0.38144	0.40439		
	0.41066	0.41457	0.44769				0.40664	4.784
142 Tetrachloroethene	+++++	0.60799	0.58444	0.57342	0.55590	0.57612		
	0.57841	0.58067	0.50122				0.56977	5.476
143 2-Hexanone	+++++	+++++	0.57709	0.59101	0.58032	0.57999		
	0.57982	0.57760	+++++				0.58097	0.877
144 1,3-Dichloropropane	+++++	0.50031	0.56980	0.56359	0.52057	0.55649		
	0.56248	0.55833	0.49258				0.54052	5.748
145 Butyl Acetate	0.62964	0.65442	0.64029	0.63612	0.60754	0.62559		
	0.62661	0.61750	+++++				0.62971	2.270

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
146 Dibromochloromethane	+++++	0.78306	0.76265	0.73963	0.72881	0.77388		
	0.79214	0.79892	0.69915				0.75978	4.551
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
148 1,2-Dibromoethane (EDB)	+++++	0.66728	0.66954	0.65728	0.60433	0.66080		
	0.67392	0.67207	0.61234				0.65220	4.249
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	0.78697	0.80160	0.70538	0.77001		
	0.79910	0.79313	+++++				0.77603	4.691
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
154 Chlorobenzene	+++++	0.98039	1.00297	1.00615	0.95318	0.98786		
	1.00429	1.00931	0.99753				0.99271	1.887
155 Ethyl Benzene	+++++	0.54541	0.51726	0.50090	0.51483	0.52055		
	0.51499	0.51317	0.52561				0.51909	2.460

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
156 Nonane	+++++	1.38941	1.32633	1.28604	1.42437	1.31837		
	1.30797	1.29642	+++++				1.33556	3.856
157 1,1,1,2-Tetrachloroethane	0.61281	0.53381	0.51050	0.53112	0.56741	0.57195		
	0.55638	0.56243	+++++				0.55580	5.622
158 m,p-Xylene	+++++	0.67481	0.63902	0.63767	0.64445	0.64388		
	0.63345	0.63344	0.69432				0.65013	3.424
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
160 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
163 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
164 o-Xylene	+++++	0.62320	0.64348	0.61211	0.64029	0.61923		
	0.61359	0.61455	0.61674				0.62290	1.967

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
165 Styrene	+++++	1.11525	1.07016	1.03759	1.05319	1.04745		
	1.04414	1.04408	1.11034				1.06528	2.899
166 2-Heptanone	3.67167	3.65906	3.63687	3.79847	3.47203	3.63504		
	3.74717	3.74578	+++++				3.67076	2.721
167 Bromoform	+++++	0.73776	0.73139	0.72964	0.73975	0.76576		
	0.77834	0.78519	0.72346				0.74891	3.192
168 Cumene	+++++	2.00688	1.92184	1.93874	2.01036	1.95640		
	1.93477	1.91851	1.96634				1.95673	1.829
169 Cyclohexanone	+++++	0.76224	0.72554	0.66914	0.71016	0.68589		
	0.67623	0.66926	+++++				0.69978	4.981
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
172 D-Limonene	0.41095	0.35482	0.36589	0.34451	0.78397	0.78575		
	0.74309	0.72747	+++++				0.56456	37.333 <-
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
174 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
175 1,1,2,2-Tetrachloroethane	+++++	0.98352	0.94583	0.93628	0.96719	0.95406		
	0.94385	0.94078	0.96890				0.95505	1.733
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
177 Bromobenzene	+++++	0.57508	0.60639	0.58293	0.59010	0.60294		
	0.60418	0.60421	+++++				0.59512	2.090
178 Propylbenzene	+++++	0.60804	0.57139	0.56757	0.59410	0.57645		
	0.57084	0.56325	0.58989				0.58019	2.677
179 1,2,3-Trichloropropane	+++++	0.31533	0.32131	0.28626	0.30096	0.29557		
	0.29066	0.28564	0.33945				0.30440	6.324
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
181 trans-1,4-Dichloro-2-butene	+++++	0.19277	0.21017	0.19835	0.19195	0.20110		
	0.20192	0.20059	+++++				0.19955	3.082
182 Decane	+++++	1.79609	1.57143	1.44505	1.61070	1.49654		
	1.37373	1.36070	+++++				1.52203	10.036
183 4-Ethyltoluene	+++++	0.65033	0.64054	0.60196	0.63791	0.61418		
	0.60505	0.58832	0.70940				0.63096	6.073

US32TAR1

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
184 2-Chlorotoluene	+++++	0.49984	0.49658	0.48311	0.50814	0.48663		
	0.47710	0.47426	0.52646				0.49401	3.541
185 1,3,5-Trimethylbenzene	+++++	0.88840	0.83919	0.85191	0.89900	0.86876		
	0.85974	0.86328	0.87938				0.86871	2.254
186 4-Chlorotoluene	0.50588	0.49708	0.52780	0.52855	0.50077	0.52139		
	0.50962	0.50476	+++++				0.51198	2.399
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
188 alpha Methyl Styrene	+++++	0.86535	0.87923	0.83462	0.89343	0.87794		
	0.86963	0.86867	0.81509				0.86300	2.969
189 tert-Butylbenzene	+++++	1.62733	1.62633	1.57945	1.65095	1.62250		
	1.63890	1.62816	+++++				1.62480	1.368
190 1,2,4-Trimethylbenzene	+++++	1.70877	1.62174	1.59089	1.69054	1.63659		
	1.62056	1.60514	1.64323				1.63968	2.487
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
192 sec-Butylbenzene	+++++	0.49560	0.50610	0.49423	0.52391	0.50675		
	0.50351	0.50154	0.50833				0.50500	1.821

US32TAR1

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
193 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
194 p-Cymene	+++++	2.30462	2.16921	2.12863	2.30933	2.22972		
	2.20755	2.18683	2.32036				2.23203	3.228
195 1,3-Dichlorobenzene	+++++	1.15658	1.15643	1.11720	1.11291	1.12849		
	1.10749	1.10683	1.09255				1.12231	2.086
196 1,4-Dichlorobenzene	+++++	1.16982	1.13485	1.12938	1.10992	1.14109		
	1.13566	1.13005	1.12236				1.13414	1.523
197 1,2,3-Trimethylbenzene	0.74930	0.74831	0.73294	0.73383	0.76340	0.76689		
	0.73531	0.73354	+++++				0.74544	1.857
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
199 alpha-Chlorotoluene	+++++	1.51181	1.54888	1.53627	1.57168	1.58619		
	1.58130	1.57052	1.55269				1.55742	1.609
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
201 Undecane	+++++	1.88866	1.82307	1.77843	1.79835	1.77435		
	1.69116	1.55266	+++++				1.75810	6.155

US32TAR1

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
202 Butylbenzene	+++++	0.58573	0.58249	0.55423	0.58167	0.56357		
	0.53997	0.53683	0.59066				0.56690	3.760
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
204 1,2-Dichlorobenzene	+++++	1.10407	1.12539	1.09831	1.11450	1.09041		
	1.07307	1.07027	1.12778				1.10047	1.987
205 Hexachloroethane	0.25905	0.24933	0.20237	0.17807	0.37549	0.37170		
	0.35119	0.35730	+++++				0.29306	27.359
206 1,2-Dibromo-3-chloropropane	+++++	+++++	0.65994	0.64226	0.67551	0.68086		
	0.67149	0.66910	+++++				0.66653	2.068
207 Dodecane	+++++	1.08884	1.29307	1.39322	1.32012	1.47555		
	1.50880	1.50906	1.55944				1.39351	11.157
208 1,3,5-Trichlorobenzene	1.03535	1.05171	1.06253	1.06764	0.99487	1.06875		
	1.05551	1.04770	+++++				1.04801	2.304
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
210 alpha-Pinene	0.88866	0.92999	0.95994	0.95225	1.08022	1.15606		
	1.13931	1.16647	+++++				1.03411	10.952

US32TAR1

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	0.73365	0.82349	0.83826	0.78299	0.83257		
	0.83665	0.84391	+++++				0.81307	4.981
214 beta-Pinene	0.45942	0.49034	0.48541	0.49081	0.86434	0.92317		
	0.87191	0.83101	+++++				0.67705	31.130 <-
215 Hexachlorobutadiene	+++++	0.49305	0.57072	0.57784	0.56417	0.59160		
	0.59973	0.60841	+++++				0.57222	6.696
216 Naphthalene	+++++	2.17464	2.22406	2.02701	1.91757	2.04984		
	2.05935	2.09326	+++++				2.07796	4.828
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	0.63662	0.72700	0.71965	0.68156	0.74340		
	0.75801	0.76517	+++++				0.71877	6.351
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
225 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
228 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
229 1-Dodecene	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
230 Nitrobenzene	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
231 Tridecane	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
232 2-Methylnaphthalene	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
233 1,3,5-Triethylbenzene	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
M 234 1,2-Dichloroethene (Total)	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
M 235 Chlorobutane (Total)	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
M 236 Total Xylene	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####
M 237 3 and 4-Ethyltoluene	#####	#####	#####	#####	#####	#####	#####	#####		#####	#####

US32TAR1

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
238 Total Volatile Hydrocarbons	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
239 TPH reference to Hexane	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
240 TPH reference to Heptane	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
241 TPH reference to Gasoline	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
242 TPH reference MineralSpirits	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
243 TPH reference to Stoddard	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
244 TVOC reference to Hexane	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
245 TVOC reference to Heptane	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
246 TVOC reference to Toluene	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

US32TAR1

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Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
247 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

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Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

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Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
266 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
267 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 104 1,2-Dichloroethane-d4	+++++	1.29421	1.33794	1.42747	1.32413	1.34572		
	1.44423	1.55619	1.30758				1.37968	6.488
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 134 Toluene-d8	+++++	1.07349	1.09274	1.09966	1.07597	1.08471		
	1.09026	1.08938	1.07858				1.08560	0.834
$ 170 4-Bromofluorobenzene	+++++	0.64219	0.64090	0.63876	0.63357	0.63698		
	0.64598	0.65756	0.63983				0.64197	1.133

US32TAR1

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Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Average %RSD Results.
Calculated Average %RSD = 7.06874
Maximun Average %RSD = 30.00000
* Passed Average %RSD Test.

Report Date: 23-Jun-2021 12:05

Calibration History

Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Start Cal Date: 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.30000		
22-JUN-2021 20:28	AT20_Level2	/chem/msd3.i/22JUN21.b/3062215.d
Cal Level: 3 , Cal Amount: 0.40000		
22-JUN-2021 20:55	AT20_Level3	/chem/msd3.i/22JUN21.b/3062216.d
22-JUN-2021 15:51	AT20spICAL_lv3	/chem/msd3.i/22JUN21.b/3062205.d
Cal Level: 5 , Cal Amount: 0.80000		
22-JUN-2021 21:22	AT20_Level5	/chem/msd3.i/22JUN21.b/3062217.d
22-JUN-2021 16:17	AT20spICAL_lv3	/chem/msd3.i/22JUN21.b/3062206.d
Cal Level: 6 , Cal Amount: 2.00000		
22-JUN-2021 21:49	AT20ICAL	/chem/msd3.i/22JUN21.b/3062218.d
22-JUN-2021 16:44	AT20spICAL	/chem/msd3.i/22JUN21.b/3062207.d
Cal Level: 7 , Cal Amount: 5.00000		
22-JUN-2021 22:18	AT20ICAL	/chem/msd3.i/22JUN21.b/3062219.d
22-JUN-2021 17:13	AT20spICAL	/chem/msd3.i/22JUN21.b/3062208.d
Cal Level: 8 , Cal Amount: 20.00000		
22-JUN-2021 22:44	AT20ICAL	/chem/msd3.i/22JUN21.b/3062220.d
22-JUN-2021 17:39	AT20spICAL	/chem/msd3.i/22JUN21.b/3062209.d
Cal Level: 9 , Cal Amount: 50.00000		
22-JUN-2021 23:12	AT20ICAL	/chem/msd3.i/22JUN21.b/3062221.d
22-JUN-2021 18:07	AT20spICAL	/chem/msd3.i/22JUN21.b/3062210.d

Cal Level: 10, Cal Amount: 100.00000		
22-JUN-2021 23:39	AT20ICAL	/chem/msd3.i/22JUN21.b/3062222.d
22-JUN-2021 18:34	AT20spICAL	/chem/msd3.i/22JUN21.b/3062211.d

Cal Level: 11, Cal Amount: 200.00000		
23-JUN-2021 00:09	AT20ICAL	/chem/msd3.i/22JUN21.b/3062223.d
22-JUN-2021 19:03	AT20spICAL	/chem/msd3.i/22JUN21.b/3062212.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 9

Ccal Level: 9 , Ccal Amount: 50.000		
22-JUN-2021 23:12	AT20ICAL	/chem/msd3.i/22JUN21.b/3062221.d

Ccal Level: 9 , Ccal Amount: 50.000		
22-JUN-2021 18:07	AT20spICAL	/chem/msd3.i/22JUN21.b/3062210.d

Report Date: 20-May-2021 11:06

Calibration History

Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Start Cal Date: 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.40000		
19-MAY-2021 19:17	AT20spICAL	/chem/msdp.i/19MAY21.b/p051914.d
Cal Level: 3 , Cal Amount: 0.80000		
19-MAY-2021 19:45	AT20spICAL	/chem/msdp.i/19MAY21.b/p051915.d
19-MAY-2021 14:02	AT20_Level3	/chem/msdp.i/19MAY21.b/p051904.d
Cal Level: 4 , Cal Amount: 2.00000		
19-MAY-2021 20:13	AT20spICAL	/chem/msdp.i/19MAY21.b/p051916.d
19-MAY-2021 14:30	AT20ICAL	/chem/msdp.i/19MAY21.b/p051905.d
Cal Level: 5 , Cal Amount: 5.00000		
19-MAY-2021 20:43	AT20spICAL	/chem/msdp.i/19MAY21.b/p051917.d
19-MAY-2021 15:00	AT20ICAL	/chem/msdp.i/19MAY21.b/p051906.d
Cal Level: 6 , Cal Amount: 20.00000		
19-MAY-2021 21:10	AT20spICAL	/chem/msdp.i/19MAY21.b/p051918.d
19-MAY-2021 15:27	AT20ICAL	/chem/msdp.i/19MAY21.b/p051907.d
Cal Level: 7 , Cal Amount: 50.00000		
19-MAY-2021 21:38	AT20spICAL	/chem/msdp.i/19MAY21.b/p051919.d
19-MAY-2021 15:55	AT20ICAL	/chem/msdp.i/19MAY21.b/p051908.d
Cal Level: 8 , Cal Amount: 100.00000		
19-MAY-2021 22:07	AT20spICAL	/chem/msdp.i/19MAY21.b/p051920.d
19-MAY-2021 16:24	AT20ICAL	/chem/msdp.i/19MAY21.b/p051909.d

Cal Level: 9 , Cal Amount: 200.00000		
19-MAY-2021 22:39	AT20spICAL	/chem/msdp.i/19MAY21.b/p051921.d
19-MAY-2021 16:53	AT20ICAL	/chem/msdp.i/19MAY21.b/p051910.d

Cal Level: 10, Cal Amount: 0.50000		
20-MAY-2021 00:05	AT20_Level2	/chem/msdp.i/19MAY21.b/p051924.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 7

Ccal Level: 7 , Ccal Amount: 50.000		
19-MAY-2021 15:55	AT20ICAL	/chem/msdp.i/19MAY21.b/p051908.d
Ccal Level: 7 , Ccal Amount: 50.000		
19-MAY-2021 21:38	AT20spICAL	/chem/msdp.i/19MAY21.b/p051919.d

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
End Cal Date : 23-JUN-2021 00:09
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msd3.i/22JUN21.b/321q0622a.m
Cal Date : 23-Jun-2021 12:05 lk8g
Curve Type : Average

Please see Calibration History page(s) for all the calibration files.

UP 6/23/21

Calibration File Names:
Level 2: /chem/msd3.i/22JUN21.b/3062215.d
Level 3: /chem/msd3.i/22JUN21.b/3062216.d
Level 5: /chem/msd3.i/22JUN21.b/3062217.d
Level 6: /chem/msd3.i/22JUN21.b/3062218.d
Level 7: /chem/msd3.i/22JUN21.b/3062219.d
Level 8: /chem/msd3.i/22JUN21.b/3062220.d
Level 9: /chem/msd3.i/22JUN21.b/3062221.d
Level 10: /chem/msd3.i/22JUN21.b/3062222.d
Level 11: /chem/msd3.i/22JUN21.b/3062223.d

Compound	0.30000 Level 2	0.40000 Level 3	0.80000 Level 5	2.000 Level 6	5.000 Level 7	20.000 Level 8	___ RRF	% RSD
	50.000 Level 9	100.000 Level 10	200.000 Level 11					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Freon 143a	+++++	+++++	+++++	0.39291	0.44265	0.44864		
	0.42230	0.41716	0.38549				0.41819	6.098
4 Freon 134a	+++++	+++++	0.63865	0.60478	0.59997	0.61448		
	0.58371	0.56637	0.55610				0.59487	4.787
5 Propylene	+++++	+++++	+++++	0.65170	0.58539	0.61293		
	0.60477	0.58759	0.58081				0.60387	4.387

Initial Calibration Narrative
321Q0622A.m

A multi-point TO-15 initial calibration was analyzed on MSD-3 on 06/22/2021.

ICAL: 1 out. 1,2-Dichloropropane @ 33.26%
Naph: 19.528%RSD.

ICV: 1 out. Trans-1,4-dichloro-2-butene @ 132.92%. File: 3062226.
Naph Recovery: 76.92%R.
DOD QSM: 1 out. Trans-1,4-dichloro-2-butene @ 132.92%. File: 3062226a.
RCP: 3 Non RCP compounds out: See file 3062226c.
DODsp (PID 23339): 1 out. Trans-1,4-dichloro-2-butene @ 132.92%. File: 3062226d.

The concentrations for Ethanol, Acrolein, 1,2,4-Trichlorobenzene, Naphthalene, 1,2,3-Trichlorobenzene, and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

An 8-point ICAL for AT20 supplemental compounds was analyzed on MSD on 06/22/2021.

ICAL: 1 out. Isobutanol @ 39.638%

NO ICV for AT20 supplemental compounds except 1,1,1,2-Tetrachloroethane.

The low point spike verification file is 3062216x for BTEXS.

The concentrations for Dodecane, 1,2,4-TCB, Hexachlorobutadiene, 1,2,3-TCB, and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.

-Dodecane was curved at 0.4944ppbv→ 247.2ppbv.
-1,2,4-TCB was curved at 1.0072ppbv→251.8ppbv
-Hexachlorobutadiene was curved at 1.0296ppbv→257.4ppbv
-1,2,3-TCB was curved at 1.0648ppbv→266.2ppbv
-Naphthalene was curved at 0.10160ppbv →25.4ppbv*

*The secondary mass ion peak, 127amu, for Naphthalene shows baseline interference at the special reporting limit of 0.05ppbv. Identification of Naphthalene is however reliable at the lowest concentrations based on the presence and abundance ratio of the primary ion. The spectrum of Naphthalene in this ICAL point will be used as the reference to determine the ion ratio target in the samples for this ICAL.

The following compounds were calibrated down to 0.3ppbv:

1,1-Dichloroethane	Chloroform	1,1,1-Trichloroethane
Bromodichloroethane	Chlorobenzene	

BFB tune file:
1. 3062204.

The AT20MDL Expires 6/8/22.

The MDL for 1,1,1,2-PCE expires 05/05/22.

MSD3

							Method TO-15/TO-14					
BFB Tune Verification: (321984/343552) * 100 =93.72%							SOP# 6					
	3234-42	Exp. Date:	9/22/2021			Vacuum:	NA					
BCM	243405			Surrogate # 3234-42		Exp Date:	9/22/2021				Exp Date	
1,4-DFB	874076			CCV	3018-2115	Exp Date:	9/21/2021	LCS	3018-2121		Exp Date	9/22/2021
CB-d5	831223			CCV SP 1 #	3018-2116	Exp Date:	9/21/2021	LCS Sp #1	NA		Exp Date	NA
				CCV SP 2 #	3018-2078	Exp Date:	8/4/2021	LCS Sp #2	NA		Exp Date	NA
				CCV SP 3#	3018-2013	Exp Date:	8/4/2021	LCS Sp #3	NA		Exp Date	NA
Verified CCV vs. ICAL midpoint (-40%): LD				CCV SP 4#	NA	Exp Date:	NA					
Method: 321q0622a.m												

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init.	Date Analyzed	Time	Review Init	Comments
√	3062204	BFB Tune Check	3234-42	3	36ng	200mL	1.00	LD	LD	06/22/21	1428	LD	Exp. 9/22/21
√	3062205	ICAL Level 3	3018-2078	4	0.4ppbv (5.0ppbv)	16mL	1.00	LD	LD	06/22/21	1551	LD	Exp. 8/04/21
√	3062206	ICAL Level 5	3018-2078	4	0.8ppbv (5.0ppbv)	32mL	1.00	LD	LD	06/22/21	1617	LD	
√	3062207	ICAL Level 6	3018-2078	4	2.0ppbv (5.0ppbv)	80mL	1.00	LD	LD	06/22/21	1644	LD	
√	3062208	ICAL Level 7	3018-2078	4	5.0ppbv (5.0ppbv)	200mL	1.00	LD	LD	06/22/21	1713	LD	
√	3062209	ICAL Level 8	3018-2013	5	20ppbv (200ppbv)	20mL	1.00	LD	LD	06/22/21	1739	LD	Exp. 8/04/21
√	3062210	ICAL Level 9	3018-2013	5	50ppbv (200ppbv)	50mL	1.00	LD	LD	06/22/21	1807	LD	
√	3062211	ICAL Level 10	3018-2013	5	100ppbv (200ppbv)	100mL	1.00	LD	LD	06/22/21	1834	LD	
√	3062212	ICAL Level 11	3018-2013	5	200ppbv (200ppbv)	200mL	1.00	LD	LD	06/22/21	1903	LD	
√	3062213	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/22/21	1932	LD	
√	3062214	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/22/21	2001	LD	
√	3062215	ICAL Level 2	3018-2116	1	0.3ppbv (5.0ppbv)	12mL	1.00	LD	LD	06/22/21	2028	LD	Exp. 9/21/21
√	3062216	ICAL Level 3	3018-2116	1	0.4ppbv (5.0ppbv)	16mL	1.00	LD	LD	06/22/21	2055	LD	
√	3062217	ICAL Level 5	3018-2116	1	0.8ppbv (5.0ppbv)	32mL	1.00	LD	LD	06/22/21	2122	LD	
√	3062218	ICAL Level 6	3018-2116	1	2.0ppbv (5.0ppbv)	80mL	1.00	LD	LD	06/22/21	2149	LD	
√	3062219	ICAL Level 7	3018-2116	1	5.0ppbv (5.0ppbv)	200mL	1.00	LD	LD	06/22/21	2218	LD	
√	3062220	ICAL Level 8	3018-2115	2	20ppbv (200ppbv)	20mL	1.00	LD	LD	06/22/21	2244	LD	Exp. 9/21/21
√	3062221	ICAL Level 9	3018-2115	2	50ppbv (200ppbv)	50mL	1.00	LD	LD	06/22/21	2312	LD	
√	3062222	ICAL Level 10	3018-2115	2	100ppbv (200ppbv)	100mL	1.00	LD	LD	06/22/21	2339	LD	
√	3062223	ICAL Level 11	3018-2115	2	200ppbv (200ppbv)	200mL	1.00	LD	LD	06/23/21	0009	LD	
√	3062224	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/23/21	0038	LD	
√	3062225	System Blank	35157	3	Humid	200mL	1.00	LD	LD	06/23/21	0107	LD	
√	3062226	ICV	3018-2121	14	50ppbv (200ppbv)	50mL	1.00	LD	LD	06/23/21	0945	LD	Exp. 9/22/21

GD 6/23/21

IS and Associated Target Compounds and Surr.
Instruction #: I1.20

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane*
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

*Note: If Bromochloromethane (BCM) is required as a target compound, the internal standard mix is blended without BCM. Compounds and surrogates assigned to BCM are re-assigned to 1,4-Difluorobenzene for calibration and subsequent quantitation.

Initial Calibration Narrative (Extended)
P21Q0519a.m

A multi-point TO-15 initial calibration was analyzed on MSD-P on 05/19/21 and 05/20/21.

ICAL: 3 out. Iodomethane @ 32%, D-Limonene @ 37%, and beta-Pinene @ 31%
Naph RSD @ 4.8%

ICV: 3 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153%, and 1,2,3-Trichlorobenzene @ 133%
File: P051925. Naph recovery: 117%
DODQSM: 3 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153%, and 1,2,3-Trichlorobenzene @ 133% File: P051925a
DOD4.2: 0 (zero) out; File: P051925c
RCP: 0 (zero) RCP compounds out. 5 **Non-RCP** compounds outside 80-120%. File P051925d
DODsp: (PID 23339): 2 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153% and 1,2,3-Trichlorobenzene @ 133 File: P051925e

The concentrations for Ethanol, Acrolein, 1,2,4-Trichlorobenzene, Naphthalene, 1,2,3-Trichlorobenzene, and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

An 8-point ICAL for AT20 supplemental compounds was analyzed on MSDP on 05/19/21-05/20/21.

An ICV was analyzed for the following AT20 supplemental compounds: 1,1,1,2-Tetrachloroethane.
ICV: 0 out; File: P051925
RCP Compounds: 0 RCP compounds out. File P051925d

ICAL Levels 1 and 2 were not included due to poor peak quality.

*****Bottom of the curve is 0.5ppbv; no TA RLs.*****

The RL for Isobutane was raised from 0.8ppbv to 2.0ppbv.

The concentrations for Dodecane, 1,2,4-TCB, Hexachlorobutadiene, 1,2,3-TCB, and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.
-Dodecane was curved at 0.618ppbv→ 247ppbv.
-1,2,4-TCB was curved at 1.01ppbv→252ppbv
-Hexachlorobutadiene was curved at 1.03ppbv→257ppbv
-1,2,3-TCB was curved at 1.06ppbv→266ppbv
-Naphthalene was curved at 0.10ppbv →25.4ppbv

BFB tune file:
1. P051901

The TO-15MDL study expires on 10/29/21.
Select specials MDL study expires 10/29/21.

Initial Calibration Narrative (TO-15)
P21Q0519a.m

A multi-point TO-15 initial calibration was analyzed on MSD-P on 05/19/21 and 05/20/21.

ICAL: 0 out
Naph RSD @ 4.8%

ICV: 0 (zero) out. File: P051925
Naph recovery: 117%.
DODQSM: 0 (zero) out. File: P051925a
DOD4.2: 0 (zero) out; P051925c
RCP: 0 (zero) RCP compounds out. 2 **Non-RCP** compounds outside 80-120%. File P051925d
DODsp: (PID 23339): 2 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153% and 1,2,3-Trichlorobenzene @ 133 File: P051925e

The concentrations for Ethanol, 1,2,4-Trichlorobenzene, Naphthalene and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

ICAL Levels 1 and 2 were not included due to poor peak quality.

*****Bottom of the curve is 0.5ppbv; no TA RLs.*****

The RL for Isobutane was raised from 0.8ppbv to 2.0ppbv.

The concentrations for 1,2,4-TCB, Hexachlorobutadiene and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.

-1,2,4-TCB was curved at 1.01ppbv→252ppbv
-Hexachlorobutadiene was curved at 1.03ppbv→257ppbv
-Naphthalene was curved at 0.10ppbv →25.4ppbv

BFB tune file:
1. P051901

The TO-15MDL study expires on 10/29/21.

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Please see Calibration History page(s) for all the calibration files.

UD 5/20/21

GH 5/20/21

Calibration File Names:
Level 2: /chem/msdp.i/19MAY21.b/p051914.d
Level 3: /chem/msdp.i/19MAY21.b/p051915.d
Level 4: /chem/msdp.i/19MAY21.b/p051916.d
Level 5: /chem/msdp.i/19MAY21.b/p051917.d
Level 6: /chem/msdp.i/19MAY21.b/p051918.d
Level 7: /chem/msdp.i/19MAY21.b/p051919.d
Level 8: /chem/msdp.i/19MAY21.b/p051920.d
Level 9: /chem/msdp.i/19MAY21.b/p051921.d
Level 10: /chem/msdp.i/19MAY21.b/p051924.d

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Freon 143a	+++++	0.64347	0.55833	0.28699	0.48663	0.54132		
	0.53859	0.32618	+++++				0.48307	26.850
4 Freon 134a	+++++	0.77011	0.84089	0.78129	0.71828	0.77669		
	0.83041	0.82114	+++++				0.79126	5.405
5 Propylene	+++++	+++++	1.30044	1.16437	0.97808	1.08818		
	1.14258	1.19048	+++++				1.14402	9.390

MSDP

									Method TO-15/TO-14				
	BFB Verification of 176/174 ratio: (142592/146432)*100=97.37%								SOP# 6				
		3234-10	Exp. Date:		8/17/21				Vacuum:	NA			
	BCM	158,810							Please check all standards				
	1,4-DFB	597,103						Surr.# 3234-10	Exp. Date:	8/17/21	Surrogate# NA	Exp. Date:	NA
	CB-d5	587,747						CCV #3018-2034	Exp. Date:	8/17/21	LCS: #3018-2016	Exp. Date:	8/5/21
								CCV sp1# 3018-2045	Exp. Date:	8/17/21	LCS sp1 #	Exp. Date:	
								CCV sp2# 3018-1928	Exp. Date:	6/1/21	LCS sp2 #	Exp. Date:	
	Verified CCV vs ICAL mid-point(-40%): LD							CCV sp3# 3018-2013	Exp. Date:	8/4/21	LCS sp3 #	Exp. Date:	
	Method: p21q0519a.m												

	File #	Enter/Scan Sample ID#	Canister#	Cert Pos.	Pressure	mL	DF	Verify Lead	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P051901	BFB Tune Check	3234-10	4	36ng	200mL	1.00	LD	LD	5/19/2021	1139	LD	Exp. 8/17/21
X	P051902	ICAL Level 1	3018-2045	1	0.3ppbv (5.0ppbv)	12mL	1.00	LD	LD	5/19/2021	1224	LD	Exp. 8/17/21. Poor peak quality.
X	P051903	ICAL Level 2	3018-2045	1	0.4ppbv (5.0ppbv)	16mL	1.00	LD	LD	5/19/2021	1252	LD	Poor peak quality.
√	P051904	ICAL Level 3	3018-2045	1	0.8ppbv (5.0ppbv)	32mL	1.00	gh	LD	5/19/2021	1402	LD	
√	P051905	ICAL Level 4	3018-2045	1	2.0ppbv (5.0ppbv)	80mL	1.00	gh	LD	5/19/2021	1430	LD	
√	P051906	ICAL Level 5	3018-2045	1	5.0ppbv (5.0ppbv)	200mL	1.00	gh	LD	5/19/2021	1500	LD	
√	P051907	ICAL Level 6	3018-2034	13	20ppbv (200ppbv)	20mL	1.00	gh	LD	5/19/2021	1527	LD	Exp. 8/17/21.
√	P051908	ICAL Level 7	3018-2034	13	50ppbv (200ppbv)	50mL	1.00	gh	LD	5/19/2021	1555	LD	
√	P051909	ICAL Level 8	3018-2034	13	100ppbv (200ppbv)	100mL	1.00	gh	LD	5/19/2021	1624	LD	
√	P051910	ICAL Level 9	3018-2034	13	200ppbv (200ppbv)	200mL	1.00	gh	LD	5/19/2021	1653	LD	
√	P051911	System Blank	35157	4	Humid	200mL	1.00	gh	LD	5/19/2021	1723	LD	
√	P051912	System Blank	35157	4	Humid	200mL	1.00	gh	gh	5/19/2021	1809	LD	
X	P051913	ICAL Level 2	3018-2045	1	0.4ppbv (5.0ppbv)	16mL	1.00	gh	gh	5/19/2021	1849	LD	Exp. 8/17/21. Poor peak quality.
√	P051914	ICAL Level 2	3018-1928	2	0.4ppbv (5.0ppbv)	16mL	1.00	gh	gh	5/19/2021	1917	LD	Exp. 6/1/21.
√	P051915	ICAL Level 3	3018-1928	2	0.8ppbv (5.0ppbv)	32mL	1.00	gh	gh	5/19/2021	1945	LD	
√	P051916	ICAL Level 4	3018-1928	2	2.0ppbv (5.0ppbv)	80mL	1.00	gh	gh	5/19/2021	2013	LD	
√	P051917	ICAL Level 5	3018-1928	2	5.0ppbv (5.0ppbv)	200mL	1.00	gh	gh	5/19/2021	2043	LD	
√	P051918	ICAL Level 6	3018-2013	3	20ppbv (200ppbv)	20mL	1.00	gh	gh	5/19/2021	2110	LD	Exp. 8/4/21.
√	P051919	ICAL Level 7	3018-2013	3	50ppbv (200ppbv)	50mL	1.00	gh	gh	5/19/2021	2138	LD	
√	P051920	ICAL Level 8	3018-2013	3	100ppbv (200ppbv)	100mL	1.00	gh	gh	5/19/2021	2207	LD	
√	P051921	ICAL Level 9	3018-2013	3	200ppbv (200ppbv)	200mL	1.00	LD	gh	5/19/2021	2239	LD	
√	P051922	System Blank	35157	4	Humid	200mL	1.00	LD	gh	5/19/2021	2308	LD	
√	P051923	System Blank	35157	4	Humid	200mL	1.00	LD	gh	5/19/2021	2338	LD	
√	P051924	ICAL Level 10	3018-2045	1	0.5ppbv (5.0ppbv)	20mL	1.00	LD	gh	5/20/2021	0005	LD	Exp. 8/17/21.
√	P051925	ICV	3018-2016	14	50ppbv (200ppbv)	50mL	1.00	LD	gh	5/20/2021	0033	LD	Exp. 8/5/21.

MB 5/20/21

IS and Associated Target Compounds and Surr.
Instruction #: I1.20

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane*
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

*Note: If Bromochloromethane (BCM) is required as a target compound, the internal standard mix is blended without BCM. Compounds and surrogates assigned to BCM are re-assigned to 1,4-Difluorobenzene for calibration and subsequent quantitation.

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062215.d
Lab Smp Id: ICAL Level 2
Inj Date : 22-JUN-2021 20:28
Operator : LD Inst ID: msd3.i
Smp Info : 12mL 3018-2116
Misc Info : 0.3ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 20:28 Cal File: 3062215.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level2.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	4948	0.30000	0.3485	80.00- 120.00	100.00(a)
4.459	4.459 (0.844)	65	2065			0.76- 60.76	41.73
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	249295	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	193294			48.46- 108.46	77.54
5.270	5.270 (1.000)	49	375698			120.39- 180.39	150.70
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	5879	0.30000	0.3761	80.00- 120.00	100.00(a)
5.340	5.340 (1.011)	85	3350			34.71- 94.71	56.98
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	6675	0.30000	0.3799	80.00- 120.00	100.00(a)
5.452	5.466 (1.032)	99	3504			33.76- 93.76	52.49
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	348002	25.0000	25.366	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	168803			21.66- 81.66	48.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	904126	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	141697			0.00- 45.52	15.67
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	5988	0.30000	0.3453	80.00- 120.00	100.00(a)
6.836	6.836 (1.109)	85	3626			34.31- 94.31	60.55
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	930785	25.0000	24.995	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	105468			0.00- 41.47	11.33
7.387	7.387 (1.198)	100	607392			36.47- 96.47	65.26
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	849694	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	472432			25.46- 85.46	55.60
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	7842	0.30000	0.3377	80.00- 120.00	100.00(a)
8.641	8.641 (1.003)	114	2767			2.13- 62.13	35.28
8.612	8.641 (1.000)	77	14194			26.35- 86.35	181.00
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	557967	25.0000	24.826	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	696856			93.06- 153.06	124.89
9.601	9.601 (1.115)	176	527415			62.87- 122.87	94.52

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062215.d
Lab Smp Id: ICAL Level 2
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.3ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	249295	2.42
108 1,4-Difluorobenze	874076	524446	1223706	904126	3.44
153 Chlorobenzene-d5	831223	498734	1163712	849694	2.22

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062215.d

Date : 22-JUN-2021 20:28

Client ID:

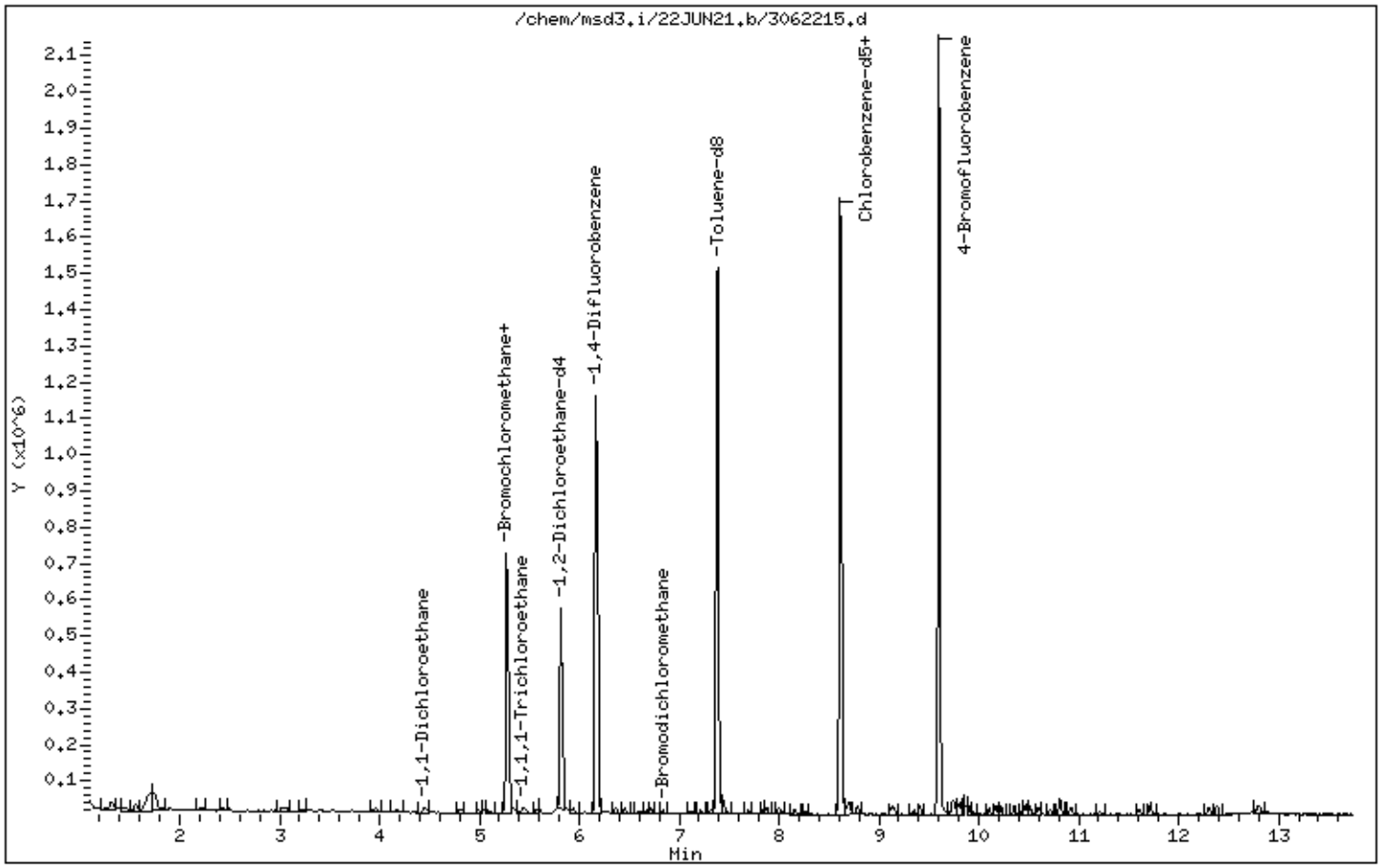
Instrument: msd3.i

Sample Info: 12mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051914.d
Lab Smp Id: ICAL Level 2
Inj Date : 19-MAY-2021 19:17
Operator : gh Inst ID: msdp.i
Smp Info : 16mL 3018-1928
Misc Info : 0.4ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:17 Cal File: p051914.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	163890	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127715			48.23- 108.23	77.93
5.771	5.778 (1.000)	49	296851			150.57- 210.57	181.13
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	600935	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93335			0.00- 45.71	15.53
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	587965	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	324501			23.78- 83.78	55.19
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	941	0.40000	0.3085	80.00- 120.00	100.00(a)
1.675	1.674 (0.290)	39	1309			34.98- 94.98	139.11
1.689	1.674 (0.292)	41	861			25.22- 85.22	91.50
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	7562	0.40000	0.4489	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
13 Freon 142b (continued)							
1.898	1.884 (0.329)	45	2247			0.00- 59.77	29.71
36 1-Pentene					CAS #: 109-67-1		
2.891	2.906 (0.500)	55	5405	0.40000	0.4946	80.00- 120.00	100.00(a)
2.899	2.906 (0.502)	42	6051			105.17- 165.17	111.95
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	4396	0.40000	0.4147	80.00- 120.00	100.00(a)
3.378	3.378 (0.585)	67	4936			104.69- 164.69	112.28
41 Freon 123					CAS #: 306-83-2		
3.464	3.479 (0.600)	83	5862	0.40000	0.3993	80.00- 120.00	100.00(a)
3.486	3.479 (0.603)	133	1216			0.00- 50.87	20.74
3.472	3.479 (0.601)	85	3801			36.08- 96.08	64.84
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	5709	0.40000	0.3618	80.00- 120.00	100.00(a)
4.066	4.073 (0.704)	68	2522			6.76- 66.76	44.18
4.066	4.073 (0.704)	53	1675			0.00- 57.54	29.34
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.073 (0.706)	43	7233	0.40000	0.3918	80.00- 120.00	100.00(a)
4.080	4.073 (0.706)	74	768			0.00- 44.13	10.62
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	5621	0.40000	0.3852	80.00- 120.00	100.00(a)
5.019	5.019 (0.869)	88	2057			9.21- 69.21	36.59
5.012	5.019 (0.867)	50	1789			0.00- 54.25	31.83
75 1-Propanol					CAS #: 71-23-8		
5.098	5.083 (0.882)	59	912	0.40000	0.4010	80.00- 120.00	100.00(a)
5.098	5.083 (0.882)	42	931			63.23- 123.23	102.08
5.105	5.083 (0.883)	41	494			24.74- 84.74	54.17
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.974)	55	8316	0.40000	0.4277	80.00- 120.00	100.00(a)
5.621	5.620 (0.973)	85	1426			0.00- 41.28	17.15
5.628	5.620 (0.974)	58	1499			0.00- 38.22	18.03
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	1428	0.40000	0.5920	80.00- 120.00	100.00(a)
6.244	6.244 (1.081)	43	3902			448.18- 508.18	273.25
6.244	6.244 (1.081)	41	2603			299.99- 359.99	182.28
113 Ethyl acrylate					CAS #: 140-88-5		
6.939	6.938 (0.733)	99	550	0.40000	0.3922	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
113 Ethyl acrylate (continued)							
6.939	6.938 (0.733)	45	1161			149.95- 209.95	211.09
6.939	6.938 (0.733)	55	9624			1849.07-1909.07	1749.82
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	11468	0.40000	0.3804	80.00- 120.00	100.00(a)
7.039	7.031 (0.744)	58	1303			0.00- 37.44	11.36
7.032	7.031 (0.743)	86	1613			0.00- 42.78	14.07
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	6054	0.40000	0.3952	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	2892			0.00- 59.10	47.77
8.665	8.657 (1.301)	43	14727			215.30- 275.30	243.26
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	5765	0.40000	0.4440	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	587965			57.42- 117.42	10198.87
9.596	9.596 (1.014)	95	2522			5.70- 65.70	43.75
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	9628	0.40000	0.3991	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	17002			136.03- 196.03	176.59
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	3866	0.40000	0.3634	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	2278			39.41- 99.41	58.92
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	4759	0.40000	0.3920	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	14696			295.02- 355.02	308.80
11.437	11.444 (1.209)	63	2158			11.82- 71.82	45.35
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	7049	0.40000	0.4016	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	15461			192.40- 252.40	219.34
12.318	12.318 (1.302)	77	2242			0.00- 54.69	31.81
205 Hexachloroethane					CAS #: 67-72-1		
12.963	12.970 (1.370)	201	2437	0.40000	0.4110	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	3360			102.99- 162.99	137.87
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	9740	0.40000	0.3917	80.00- 120.00	100.00(a)
13.758	13.758 (1.454)	182	8432			65.24- 125.24	86.57
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	8360	0.40000	0.3637	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
210 alpha-Pinene (continued)							
10.599	10.599 (1.120)	77	2517			0.00- 58.21	30.11
214 beta-Pinene					CAS #: 127-91-3		
11.415	11.422 (1.207)	93	4322	0.40000	0.3225	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	14696			153.57- 213.57	340.03

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051914.d
Lab Smp Id: ICAL Level 2
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.4ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	163890	3.20
108 1,4-Difluorobenze	597103	358262	835944	600935	0.64
153 Chlorobenzene-d5	587747	352648	822846	587965	0.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051914.d

Date : 19-MAY-2021 19:17

Client ID:

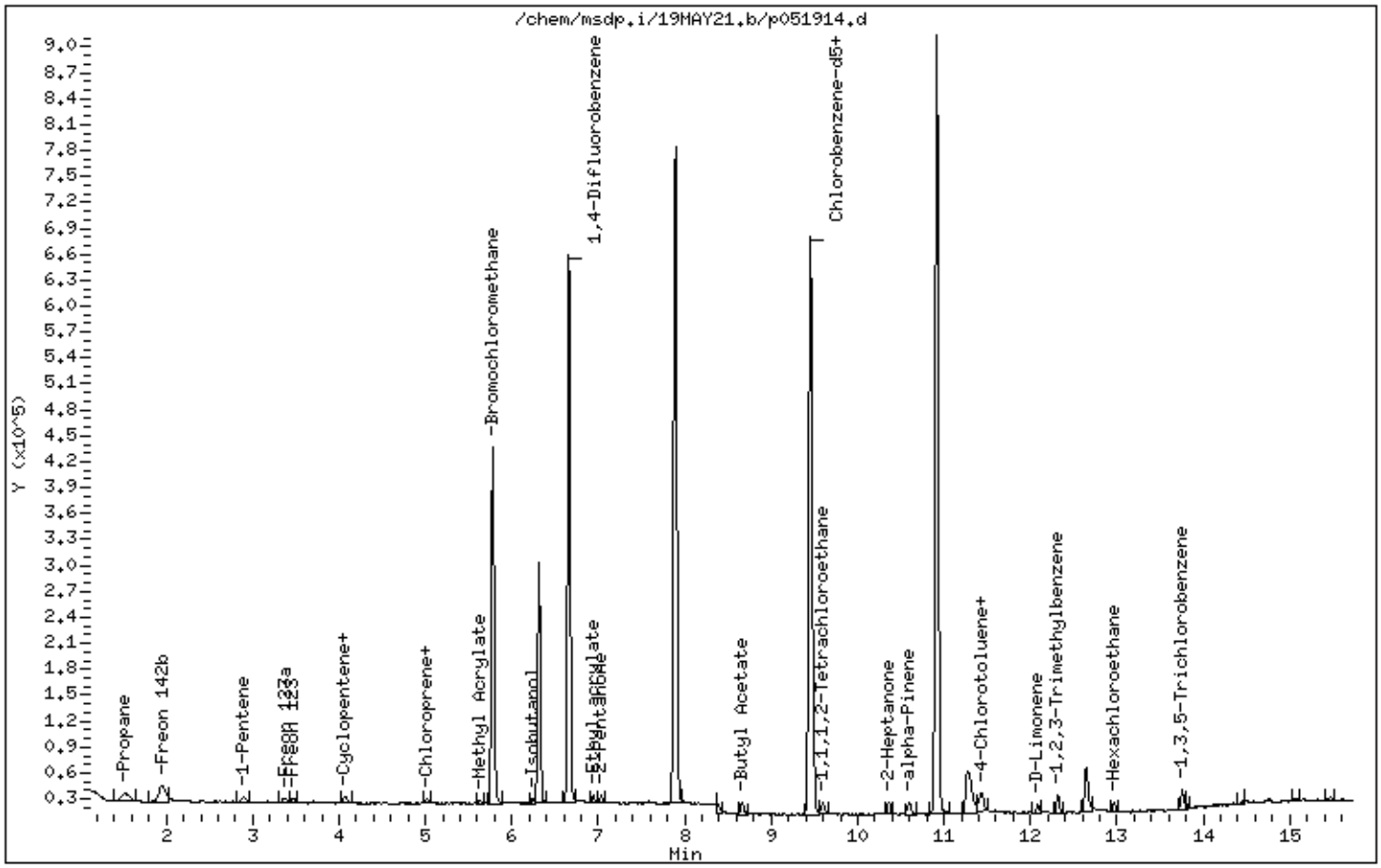
Instrument: msdp.i

Sample Info: 16mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062205.d
Lab Smp Id: ICAL Level 3
Inj Date : 22-JUN-2021 15:51
Operator : LD Inst ID: msd3.i
Smp Info : 16mL 3018-2078
Misc Info : 0.4ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 20:55 Cal File: 3062216.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL_lv3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	233349	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	177990			48.46- 108.46	76.28
5.270	5.270 (1.000)	49	342636			120.39- 180.39	146.83
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	847428	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	132894			0.00- 45.52	15.68
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	791619	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	440182			25.46- 85.46	55.61
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	5609	0.40000	0.4710	80.00- 120.00	100.00(a)
8.712	8.712 (1.011)	117	8658			38.22- 98.22	154.36
8.705	8.712 (1.010)	95	2537			7.54- 67.54	45.23

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062205.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.4ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	233349	-4.13
108 1,4-Difluorobenze	874076	524446	1223706	847428	-3.05
153 Chlorobenzene-d5	831223	498734	1163712	791619	-4.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.23
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062205.d

Date : 22-JUN-2021 15:51

Client ID:

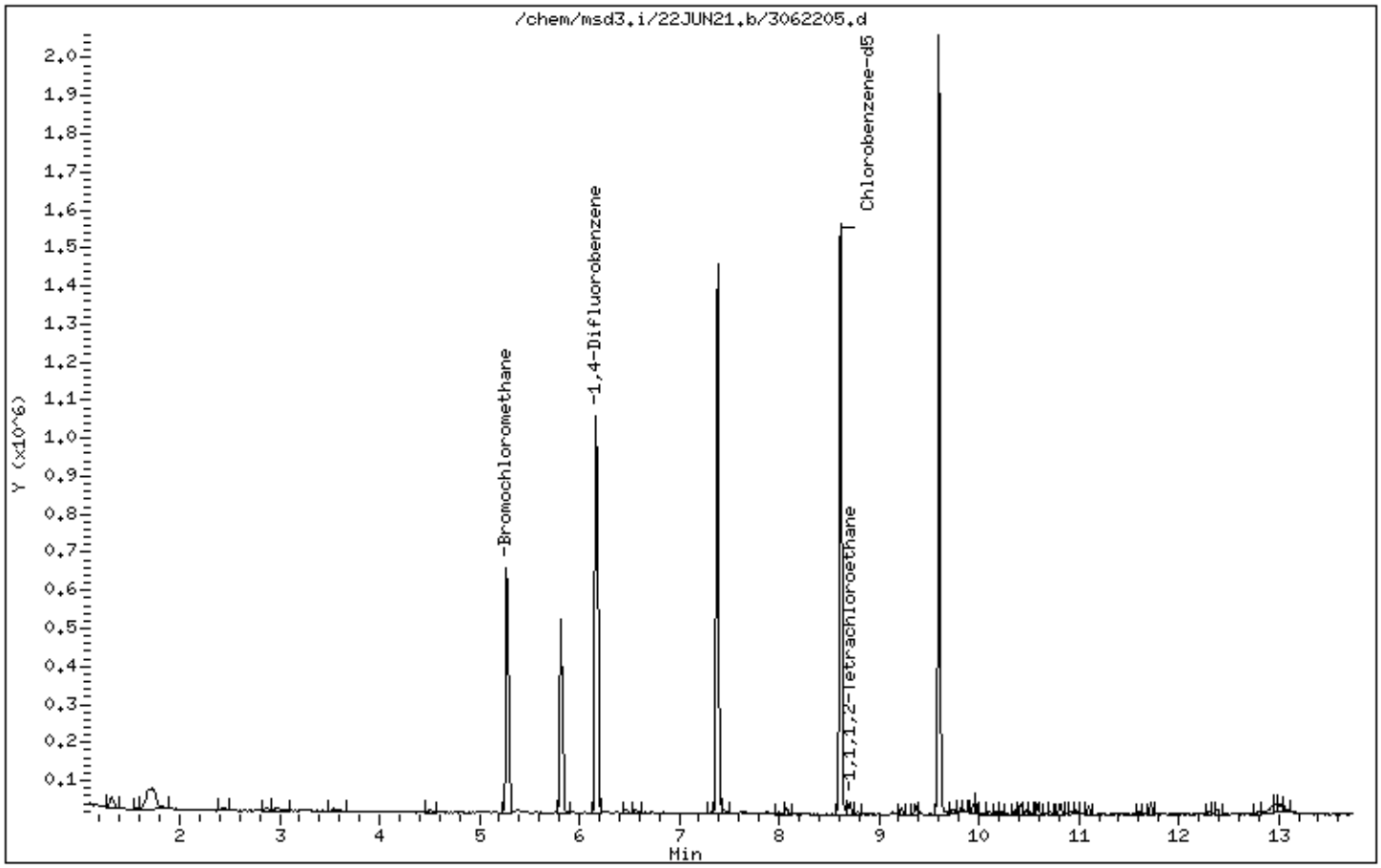
Instrument: msd3.i

Sample Info: 16mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062216.d
Lab Smp Id: ICAL Level 3
Inj Date : 22-JUN-2021 20:55
Operator : LD Inst ID: msd3.i
Smp Info : 16mL 3018-2116
Misc Info : 0.4ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 20:55 Cal File: 3062216.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
8 Freon 12					CAS #: 75-71-8		
1.451	1.465 (0.275)	85	8702	0.40000	0.4952	80.00- 120.00	100.00(a)
1.451	1.465 (0.275)	87	2729			2.63- 62.63	31.36
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	5764	0.40000	0.4427	80.00- 120.00	100.00(a)
1.563	1.562 (0.296)	137	1919			2.12- 62.12	33.29
19 Vinyl Chloride					CAS #: 75-01-4		
1.730	1.744 (0.328)	62	4560	0.40000	0.5834	80.00- 120.00	100.00
1.730	1.744 (0.328)	64	2703			1.28- 61.28	59.28
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.334)	54	4167	0.40000	0.5818	80.00- 120.00	100.00
1.758	1.758 (0.334)	39	7808			69.23- 129.23	187.38
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.461)	101	8230	0.40000	0.4426	80.00- 120.00	100.00(a)
2.430	2.430 (0.461)	103	6134			35.12- 95.12	74.53

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.575)	151	5926	0.40000	0.4662	80.00- 120.00	100.00(a)
3.032	3.032 (0.575)	153	3856			33.72- 93.72	65.07
3.032	3.032 (0.575)	101	7302			89.67- 149.67	123.22
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.060	3.074 (0.581)	96	4017	0.40000	0.5247	80.00- 120.00	100.00
3.060	3.074 (0.581)	98	2920			33.39- 93.39	72.69
3.060	3.074 (0.581)	61	6159			163.82- 223.82	153.32
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.753)	98	2858	0.40000	0.5547	80.00- 120.00	100.00
3.969	3.969 (0.753)	61	5551			244.59- 304.59	194.23
3.969	3.969 (0.753)	96	3975			129.84- 189.84	139.08
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.772)	52	3799	0.40000	0.6144	80.00- 120.00	100.00
4.081	4.067 (0.774)	53	3113			88.50- 148.50	81.94
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.790)	57	6655	0.40000	0.4764	80.00- 120.00	100.00(a)
4.165	4.179 (0.790)	43	5008			32.99- 92.99	75.25
4.179	4.179 (0.793)	86	1092			0.00- 42.56	16.41
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.846)	63	6212	0.40000	0.4324	80.00- 120.00	100.00(a)
4.459	4.459 (0.846)	65	2569			0.76- 60.76	41.36
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.046 (0.958)	98	2544	0.40000	0.4981	80.00- 120.00	100.00(a)
5.047	5.046 (0.958)	96	4023			127.22- 187.22	158.14
5.047	5.046 (0.958)	61	5227			283.85- 343.85	205.46
* 90 Bromochloromethane					CAS #: 74-97-5		
5.270	5.284 (1.000)	130	252258	25.0000		80.00- 120.00	100.00
5.270	5.284 (1.000)	128	193973			48.46- 108.46	76.89
5.270	5.270 (1.000)	49	377607			120.39- 180.39	149.69
89 Tetrahydrofuran					CAS #: 109-99-9		
5.284	5.270 (1.003)	42	4319	0.40000	0.4294	80.00- 120.00	100.00(a)
5.284	5.270 (1.003)	71	2513			2.92- 62.92	58.18
5.284	5.270 (1.003)	72	1686			3.54- 63.54	39.04
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.013)	83	6620	0.40000	0.4186	80.00- 120.00	100.00(a)
5.340	5.340 (1.013)	85	4523			34.71- 94.71	68.32

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.032)	84	4925	0.40000	0.4926	80.00- 120.00	100.00(a)
5.438	5.438 (1.032)	56	6278			120.40- 180.40	127.47
5.438	5.438 (1.032)	41	3996			54.20- 114.20	81.14
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.034)	97	8276	0.40000	0.4655	80.00- 120.00	100.00(a)
5.452	5.466 (1.034)	99	5016			33.76- 93.76	60.61
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.058)	119	7444	0.40000	0.4546	80.00- 120.00	100.00(a)
5.578	5.578 (1.058)	117	7310			73.68- 133.68	98.20
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.760	5.774 (1.093)	57	19299	0.40000	0.4418	80.00- 120.00	100.00(a)
5.774	5.774 (1.096)	56	6206			1.12- 61.12	32.16
5.760	5.774 (1.093)	41	5471			0.00- 57.49	28.35
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	9452	0.40000	0.4593	80.00- 120.00	100.00(a)
5.788	5.788 (0.939)	77	3560			0.00- 53.80	37.66
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.104)	65	352987	25.0000	25.428	80.00- 120.00	100.00
5.816	5.816 (1.104)	67	172487			21.66- 81.66	48.86
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	5469	0.40000	0.4616	80.00- 120.00	100.00(a)
5.886	5.886 (0.955)	64	1777			1.20- 61.20	32.49
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	4876	0.40000	0.6015	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	7418			179.02- 239.02	152.13
5.942	5.942 (0.964)	57	3845			84.85- 144.85	78.86
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	901842	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	141172			0.00- 45.52	15.65
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.032)	95	4490	0.40000	0.4349	80.00- 120.00	100.00(a)
6.362	6.362 (1.032)	130	4609			74.96- 134.96	102.65
6.362	6.362 (1.032)	97	3359			34.80- 94.80	74.81
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	2984	0.40000	0.6255	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 1,2-Dichloropropane (continued)							
6.586	6.586 (1.068)	62	2025			52.03- 112.03	67.86
6.586	6.586 (1.068)	41	1552			79.97- 139.97	52.01
118 Dibromomethane						CAS #: 74-95-3	
6.721	6.721 (0.780)	174	4067	0.40000	0.4396	80.00- 120.00	100.00(a)
6.721	6.721 (0.780)	93	4699			67.27- 127.27	115.54
6.721	6.721 (0.780)	95	3967			50.92- 110.92	97.54
122 Bromodichloromethane						CAS #: 75-27-4	
6.836	6.836 (1.109)	83	8351	0.40000	0.4828	80.00- 120.00	100.00(a)
6.836	6.836 (1.109)	85	5109			34.31- 94.31	61.18
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.215	7.208 (1.170)	75	5553	0.40000	0.4320	80.00- 120.00	100.00(a)
7.208	7.208 (1.169)	77	2297			1.42- 61.42	41.37
7.208	7.208 (1.169)	39	4193			38.56- 98.56	75.51
127 Methylcyclohexane						CAS #: 108-87-2	
6.460	6.460 (1.048)	83	7121	0.40000	0.5158	80.00- 120.00	100.00(a)
6.460	6.460 (1.048)	98	3326			15.60- 75.60	46.71
6.460	6.460 (1.048)	55	6479			78.53- 138.53	90.98
131 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.323	7.316 (1.188)	58	4765	0.40000	0.5451	80.00- 120.00	100.00
7.323	7.316 (1.188)	43	10377			231.30- 291.30	217.78
7.316	7.316 (1.186)	85	1814			8.94- 68.94	38.07
$ 134 Toluene-d8						CAS #: 2037-26-5	
7.380	7.387 (1.197)	98	932713	25.0000	25.110	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	106484			0.00- 41.47	11.42
7.380	7.387 (1.197)	100	622084			36.47- 96.47	66.70
137 Toluene						CAS #: 108-88-3	
7.437	7.437 (1.206)	91	13232	0.40000	0.4792	80.00- 120.00	100.00(a)
7.445	7.437 (1.207)	92	7422			28.30- 88.30	56.09
136 Octane						CAS #: 111-65-9	
7.445	7.444 (1.207)	57	4295	0.40000	0.4675	80.00- 120.00	100.00(a)
7.445	7.444 (1.207)	85	4221			67.11- 127.11	98.28
7.445	7.444 (1.207)	43	11135			214.21- 274.21	259.25
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
7.695	7.688 (0.894)	75	5619	0.40000	0.4420	80.00- 120.00	100.00(a)
7.688	7.688 (0.893)	77	2679			2.15- 62.15	47.68
7.688	7.688 (0.893)	39	3678			36.09- 96.09	65.46

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
141 1,1,2-Trichloroethane						CAS #: 79-00-5	
7.846	7.846 (0.911)	97	4795	0.40000	0.4904	80.00- 120.00	100.00(a)
7.846	7.846 (0.911)	99	2721			31.62- 91.62	56.75
7.846	7.846 (0.911)	83	4102			56.35- 116.35	85.55
142 Tetrachloroethene						CAS #: 127-18-4	
7.874	7.881 (0.914)	166	5995	0.40000	0.4433	80.00- 120.00	100.00(a)
7.874	7.881 (0.914)	129	5111			48.71- 108.71	85.25
7.874	7.881 (0.914)	131	4723			46.55- 106.55	78.78
144 1,3-Dichloropropane						CAS #: 142-28-9	
7.989	7.989 (1.296)	76	6058	0.40000	0.4598	80.00- 120.00	100.00(a)
7.989	7.989 (1.296)	41	6050			82.96- 142.96	99.87
7.989	7.989 (1.296)	78	2306			2.55- 62.55	38.07
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	7861	0.40000	0.4238	80.00- 120.00	100.00(a)
8.154	8.154 (0.947)	127	6418			47.77- 107.77	81.64
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.960)	107	6641	0.40000	0.4374	80.00- 120.00	100.00(a)
8.261	8.268 (0.959)	109	6195			64.60- 124.60	93.28
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	863143	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	476163			25.46- 85.46	55.17
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	10297	0.40000	0.4365	80.00- 120.00	100.00(a)
8.641	8.641 (1.003)	114	4003			2.13- 62.13	38.88
8.619	8.641 (1.001)	77	15051			26.35- 86.35	146.17
155 Ethyl Benzene						CAS #: 100-41-4	
8.691	8.684 (1.009)	106	5034	0.40000	0.4267	80.00- 120.00	100.00(a)
8.691	8.684 (1.009)	91	16494			282.48- 342.48	327.65
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	6649	0.40000	0.4531	80.00- 120.00	100.00(a)
8.784	8.784 (1.020)	91	12700			171.36- 231.36	191.01
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	6258	0.40000	0.4492	80.00- 120.00	100.00(a)
9.121	9.128 (1.059)	91	13678			179.99- 239.99	218.57
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.062)	104	10563	0.40000	0.4376	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
165 Styrene (continued)							
9.149	9.149 (1.062)	78	5781			19.09- 79.09	54.73
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	7676	0.40000	0.4364	80.00- 120.00	100.00(a)
9.357	9.350 (1.086)	171	4098			21.45- 81.45	53.39
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	20211	0.40000	0.4588	80.00- 120.00	100.00(a)
9.414	9.414 (1.093)	120	5508			0.00- 56.99	27.25
9.407	9.407 (1.092)	51	2729			0.00- 41.77	13.50
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	568188	25.0000	24.887	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	704540			93.06- 153.06	124.00
9.601	9.601 (1.115)	176	531559			62.87- 122.87	93.55
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	10218	0.40000	0.4679	80.00- 120.00	100.00(a)
9.737	9.737 (1.131)	85	6485			34.35- 94.35	63.47
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	22545	0.40000	0.4386	80.00- 120.00	100.00(a)
9.758	9.758 (1.133)	120	5690			0.00- 53.77	25.24
9.758	9.758 (1.133)	105	1648			0.00- 33.81	7.31
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.794	9.787 (1.137)	110	3015	0.40000	0.4583	80.00- 120.00	100.00(a)
9.787	9.787 (1.136)	75	9110			285.00- 345.00	302.16
9.787	9.787 (1.136)	61	3083			54.06- 114.06	102.26
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	6163	0.40000	0.4626	80.00- 120.00	100.00(a)
9.851	9.851 (1.144)	105	19828			296.79- 356.79	321.73
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	4632	0.40000	0.4279	80.00- 120.00	100.00(a)
9.873	9.873 (1.146)	91	18214			336.29- 396.29	393.22
9.873	9.873 (1.146)	65	2871			38.83- 98.83	61.98
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.150)	120	8595	0.40000	0.4593	80.00- 120.00	100.00(a)
9.901	9.901 (1.150)	105	17963			176.40- 236.40	208.99
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.109	10.102 (1.174)	118	8103	0.40000	0.4228	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
188 alpha Methyl Styrene (continued)							
10.102	10.102 (1.173)	103	4467			26.64- 86.64	55.13
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	17022	0.40000	0.4613	80.00- 120.00	100.00(a)
10.224	10.224 (1.187)	120	7387			16.58- 76.58	43.40
192 sec-Butylbenzene					CAS #: 135-98-8		
10.353	10.360 (1.202)	134	4798	0.40000	0.4315	80.00- 120.00	100.00(a)
10.353	10.360 (1.202)	105	23991			451.53- 511.53	500.02
10.353	10.353 (1.202)	91	3952			46.48- 106.48	82.37
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	20792	0.40000	0.4465	80.00- 120.00	100.00(a)
10.467	10.467 (1.215)	134	5696			0.00- 56.79	27.40
10.467	10.467 (1.215)	91	5277			0.00- 54.04	25.38
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.221)	146	10595	0.40000	0.4226	80.00- 120.00	100.00(a)
10.518	10.517 (1.221)	148	7151			33.53- 93.53	67.49
10.518	10.517 (1.221)	111	4722			11.05- 71.05	44.57
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	11277	0.40000	0.4367	80.00- 120.00	100.00(a)
10.596	10.596 (1.230)	148	7136			33.47- 93.47	63.28
10.596	10.596 (1.230)	111	4453			9.65- 69.65	39.49
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	15627	0.40000	0.4402	80.00- 120.00	100.00(a)
10.718	10.711 (1.245)	126	2806			0.00- 52.04	17.96
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	5215	0.40000	0.4319	80.00- 120.00	100.00(a)
10.818	10.818 (1.256)	91	19669			331.99- 391.99	377.16
10.818	10.818 (1.256)	92	10403			161.01- 221.01	199.48
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	10290	0.40000	0.4248	80.00- 120.00	100.00(a)
10.926	10.926 (1.269)	148	6583			33.23- 93.23	63.97
10.926	10.918 (1.269)	111	4235			12.36- 72.36	41.16
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	13939	0.49440	0.5264	80.00- 120.00	100.00(a)
11.721	11.714 (1.361)	43	11307			50.85- 110.85	81.12

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062216.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.4ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	252258	3.64
108 1,4-Difluorobenze	874076	524446	1223706	901842	3.18
153 Chlorobenzene-d5	831223	498734	1163712	863143	3.84

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.26
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062216.d

Page 1

Date : 22-JUN-2021 20:55

Client ID:

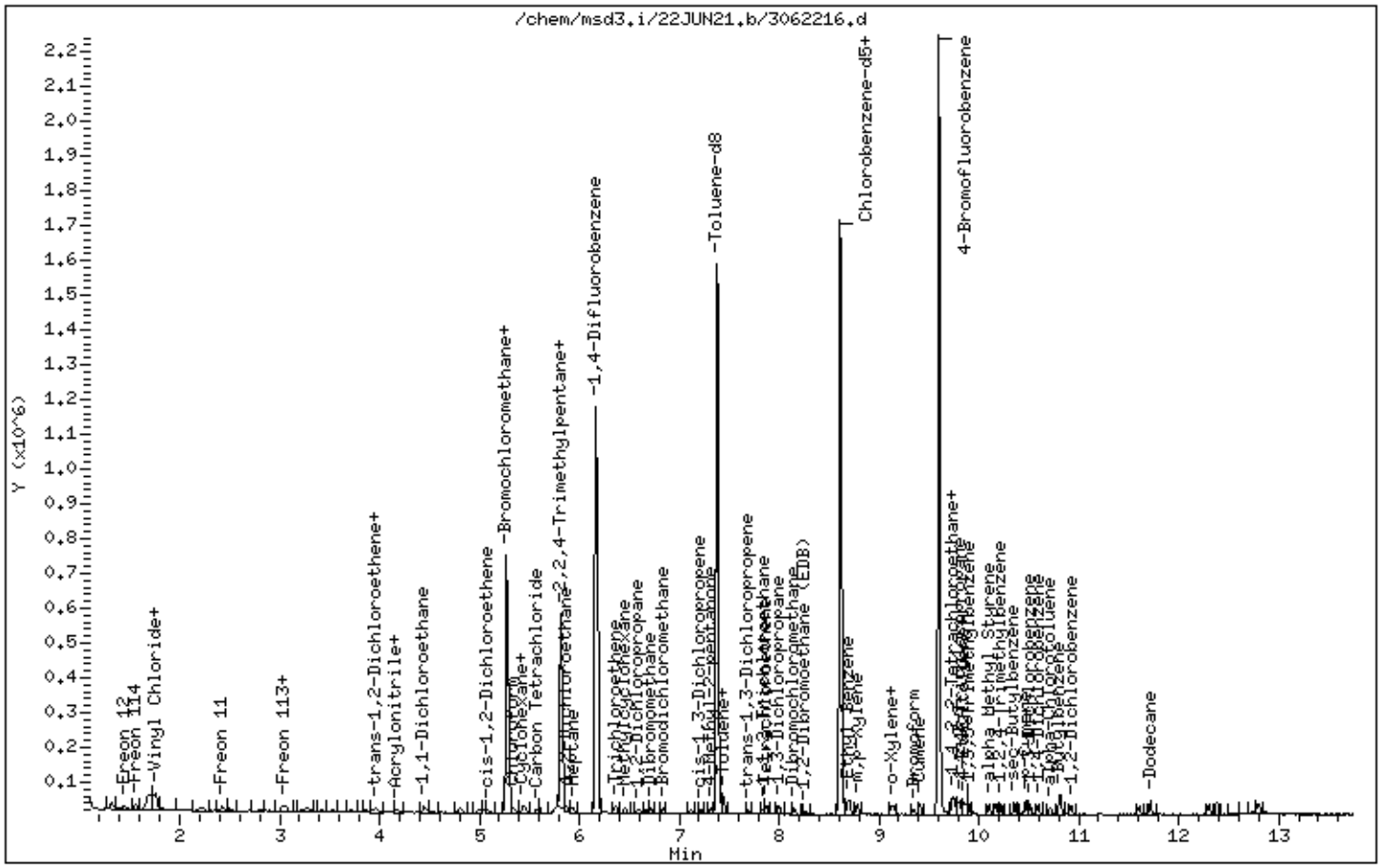
Instrument: msd3.i

Sample Info: 16mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051904.d
Lab Smp Id: ICAL Level 3
Inj Date : 19-MAY-2021 14:02
Operator : LD Inst ID: msdp.i
Smp Info : 32mL 3018-2045
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 11:07 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	4069	0.80000	0.7786	80.00- 120.00	100.00(a)
1.633	1.633 (0.283)	69	3525			59.44- 119.44	86.63
1.744	1.745 (0.302)	51	16724			419.06- 479.06	411.01
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	10010	0.80000	0.6759	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	3731			2.37- 62.37	37.27
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	1006	0.80000	0.6877	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	16724			1501.01-1561.01	1662.43
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	11608	0.80000	0.7985	80.00- 120.00	100.00
1.842	1.856 (0.319)	137	3024			2.30- 62.30	26.05
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	8652	0.80000	0.8371	80.00- 120.00	100.00
2.060	2.068 (0.357)	64	2015			0.00- 59.69	23.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	6127	0.80000	0.7370	80.00- 120.00	100.00
2.082	2.089 (0.360)	39	6271			52.37- 112.37	102.35
32 Vinyl Bromide					CAS #: 593-60-2		
2.834	2.841 (0.490)	106	4730	0.80000	0.7700	80.00- 120.00	100.00
2.834	2.841 (0.490)	108	4577			69.27- 129.27	96.77
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	12538	0.80000	0.7967	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	8055			34.72- 94.72	64.24
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.891	2.899 (0.500)	67	11113	0.80000	0.8193	80.00- 120.00	100.00(a)
2.891	2.899 (0.500)	69	4116			0.84- 60.84	37.04
35 Pentane					CAS #: 109-66-0		
2.963	2.970 (0.513)	43	15312	0.80000	0.8330	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	3948			0.00- 44.98	25.78
2.970	2.970 (0.514)	72	1224			0.00- 37.39	7.99
38 Ethyl Ether					CAS #: 60-29-7		
3.300	3.285 (0.571)	74	2195	0.80000	0.7078	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	5814			163.46- 223.46	264.87
3.278	3.285 (0.567)	45	7546			250.40- 310.40	343.78
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	8777	0.80000	0.7507	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	5991			33.56- 93.56	68.26
3.550	3.550 (0.614)	101	10762			89.21- 149.21	122.62
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.572	3.579 (0.618)	96	5973	0.80000	0.8551	80.00- 120.00	100.00
3.572	3.579 (0.618)	98	4228			34.02- 94.02	70.79
3.572	3.579 (0.618)	61	10403			168.77- 228.77	174.17
54 3-Chloropropene					CAS #: 107-05-1		
4.037	4.052 (0.699)	76	2453	0.80000	0.7979	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	9150			396.19- 456.19	373.01
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	16920	0.80000	0.8344	80.00- 120.00	100.00
4.453	4.446 (0.771)	57	5536			3.10- 63.10	32.72
4.446	4.446 (0.769)	41	6146			1.28- 61.28	36.32
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	3718	0.80000	0.7966	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
64 trans-1,2-Dichloroethene (continued)							
4.474	4.482 (0.774)	61	9389			255.84- 315.84	252.53
4.474	4.482 (0.774)	96	5939			127.59- 187.59	159.74
66 Acrylonitrile					CAS #: 107-13-1		
4.553	4.560 (0.788)	52	5732	0.80000	0.8823	80.00- 120.00	100.00
4.553	4.560 (0.788)	53	5440			88.05- 148.05	94.91
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	12522	0.80000	0.7698	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	8321			37.52- 97.52	66.45
4.696	4.697 (0.813)	86	1347			0.00- 41.48	10.76
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	11204	0.80000	0.8012	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	3451			0.00- 59.70	30.80
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	9403	0.80000	0.7573	80.00- 120.00	100.00(a)
5.506	5.506 (0.953)	79	3306			2.28- 62.28	35.16
5.506	5.506 (0.953)	97	2804			0.00- 53.93	29.82
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.542	5.549 (0.959)	98	3329	0.80000	0.6873	80.00- 120.00	100.00
5.542	5.549 (0.959)	96	6335			125.75- 185.75	190.30
5.542	5.549 (0.959)	61	13408			332.40- 392.40	402.76
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	10221	0.80000	0.8235	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	1918			0.00- 55.82	18.77
5.778	5.771 (1.000)	72	2670			0.00- 57.59	26.12
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	165114	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	125643			48.23- 108.23	76.09
5.771	5.778 (1.000)	49	294417			150.57- 210.57	178.31
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	10789	0.80000	0.7510	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	7171			34.70- 94.70	66.47
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	7575	0.80000	0.7293	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	14971			142.57- 202.57	197.64
5.957	5.957 (1.031)	41	7502			62.09- 122.09	99.04

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	13006	0.80000	0.8014	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	7613			34.02- 94.02	58.53
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	11896	0.80000	0.7815	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	10211			70.64- 130.64	85.84
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	3371	0.80000	0.8170	80.00- 120.00	100.00(a)
6.115	6.115 (0.918)	75	7643			226.85- 286.85	226.73
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	43641	0.80000	0.7719	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	13299			2.24- 62.24	30.47
6.280	6.280 (1.087)	41	11333			0.00- 54.39	25.97
102 Benzene					CAS #: 71-43-2		
6.294	6.301 (0.945)	78	15237	0.80000	0.7617	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	4544			0.00- 52.90	29.82
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213692	25.0000	23.451	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	105735			27.21- 87.21	49.48
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	8020	0.80000	0.7705	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	2408			0.79- 60.79	30.02
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	5826	0.80000	0.7352	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	17276			226.53- 286.53	296.53
6.444	6.444 (0.968)	57	8717			100.85- 160.85	149.62
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	606184	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94479			0.00- 45.71	15.59
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	7500	0.80000	0.7727	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	8249			76.29- 136.29	109.99
6.867	6.867 (1.031)	97	5319			33.63- 93.63	70.92
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	8531	0.80000	0.8318	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	5060			41.07- 101.07	59.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
114 1,2-Dichloropropane (continued)							
7.089	7.089 (1.065)	41	4367			22.53- 82.53	51.19
116 Methyl Methacrylate					CAS #: 80-62-6		
7.132	7.132 (0.754)	69	6670	0.80000	0.8231	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	13396			179.84- 239.84	200.84
7.139	7.139 (0.755)	100	2488			9.59- 69.59	37.30
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.079)	88	4383	0.80000	0.8042	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	4085			68.28- 128.28	93.20
7.182	7.175 (1.079)	57	1304			2.68- 62.68	29.75
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	6512	0.80000	0.7441	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	7271			60.09- 120.09	111.66
7.204	7.204 (0.761)	95	5822			48.38- 108.38	89.40
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	11296	0.80000	0.7506	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	7568			35.24- 95.24	67.00
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	9799	0.80000	0.7707	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	3081			2.42- 62.42	31.44
7.691	7.691 (1.155)	39	6857			37.16- 97.16	69.98
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	11923	0.80000	0.8488	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	4960			15.78- 75.78	41.60
6.974	6.974 (1.047)	55	14478			84.64- 144.64	121.43
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.791 (1.171)	58	8645	0.80000	0.8301	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	23117			242.35- 302.35	267.40
7.798	7.791 (1.171)	85	3561			3.24- 63.24	41.19
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	650730	25.0000	24.721	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	72936			0.00- 40.44	11.21
7.891	7.891 (1.185)	100	428196			34.95- 94.95	65.80
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	22780	0.80000	0.8254	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	12614			28.38- 88.38	55.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	9685	0.80000	0.8230	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	8103			56.00- 116.00	83.67
7.941	7.949 (1.193)	43	24475			228.66- 288.66	252.71
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	8944	0.80000	0.7706	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	3413			1.24- 61.24	38.16
8.214	8.214 (0.868)	39	5828			34.11- 94.11	65.16
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	7441	0.80000	0.7757	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	4988			31.96- 91.96	67.03
8.400	8.400 (0.888)	83	6109			52.93- 112.93	82.10
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	11474	0.80000	0.8537	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	9050			47.84- 107.84	78.87
8.464	8.464 (0.895)	131	8617			45.29- 105.29	75.10
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	9705	0.80000	0.7405	80.00- 120.00	100.00(a)
8.579	8.579 (1.288)	41	15102			94.99- 154.99	155.61
8.579	8.579 (1.288)	78	4420			2.05- 62.05	45.54
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	14778	0.80000	0.8245	80.00- 120.00	100.00
8.794	8.801 (0.930)	127	11344			47.45- 107.45	76.76
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	12593	0.80000	0.8185	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	11731			64.21- 124.21	93.15
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	589752	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	320479			23.78- 83.78	54.34
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	18502	0.80000	0.7901	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	5822			1.74- 61.74	31.47
9.496	9.496 (1.004)	77	16247			25.04- 85.04	87.81
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	10293	0.80000	0.8406	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	30246			273.74- 333.74	293.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	26221	0.80000	0.8322	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	21624			54.16- 114.16	82.47
9.603	9.603 (1.015)	85	6333			0.00- 53.90	24.15
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	12735	0.80000	0.8304	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	24959			163.73- 223.73	195.99
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	11761	0.80000	0.8004	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	25094			177.45- 237.45	213.37
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	21047	0.80000	0.8375	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	10991			17.88- 77.88	52.22
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	13923	0.80000	0.7881	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	7225			21.25- 81.25	51.89
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	37874	0.80000	0.8205	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	10437			0.00- 58.52	27.56
10.649	10.649 (1.126)	51	4962			0.00- 43.00	13.10
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	14385	0.80000	0.8714	80.00- 120.00	100.00(a)
10.878	10.871 (1.150)	98	5447			1.94- 61.94	37.87
10.871	10.871 (1.149)	42	10807			37.89- 97.89	75.13
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	378732	25.0000	25.008	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	481990			95.92- 155.92	127.26
10.921	10.921 (1.154)	176	365332			66.89- 126.89	96.46
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	18561	0.80000	0.8238	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	11307			35.20- 95.20	60.92
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	10853	0.80000	0.7731	80.00- 120.00	100.00(a)
11.107	11.107 (1.174)	158	10789			67.21- 127.21	99.41
11.179	11.179 (1.182)	77	6933			29.02- 89.02	63.88
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	11475	0.80000	0.8384	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
178 Propylbenzene (continued)							
11.150	11.150 (1.179)	91	43112			366.49- 426.49	375.70
11.143	11.150 (1.178)	105	2100			0.00- 44.85	18.30
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	5951	0.80000	0.8287	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	18371			280.55- 340.55	308.70
11.100	11.100 (1.173)	61	3117			15.49- 75.49	52.38
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	3638	0.80000	0.7728	80.00- 120.00	100.00(a)
11.179	11.179 (1.182)	89	2918			49.11- 109.11	80.21
11.179	11.179 (1.182)	75	18371			426.44- 486.44	504.98
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	33896	0.80000	0.9440	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	9535			0.00- 57.66	28.13
11.258	11.258 (1.190)	142	1347			0.00- 34.09	3.97
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	12273	0.80000	0.8246	80.00- 120.00	100.00
11.286	11.287 (1.193)	105	37727			284.55- 344.55	307.40
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	9433	0.80000	0.8094	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	32992			315.17- 375.17	349.75
11.308	11.301 (1.195)	65	4962			21.55- 81.55	52.60
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	16766	0.80000	0.8181	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	32345			164.93- 224.93	192.92
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	16331	0.80000	0.8022	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	9432			25.30- 85.30	57.76
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	30711	0.80000	0.8012	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	7000			0.00- 54.25	22.79
11.738	11.738 (1.241)	91	18642			31.27- 91.27	60.70
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	32248	0.80000	0.8337	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	16498			19.05- 79.05	51.16
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	9353	0.80000	0.7851	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
192 sec-Butylbenzene (continued)							
11.996	11.996 (1.268)	105	44701			437.55- 497.55	477.93
11.996	11.996 (1.268)	91	7110			40.76- 100.76	76.02
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	43493	0.80000	0.8260	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	10779			0.00- 55.54	24.78
12.153	12.153 (1.285)	91	9590			0.00- 51.48	22.05
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	21827	0.80000	0.8244	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	13524			33.21- 93.21	61.96
12.196	12.196 (1.289)	111	9335			11.31- 71.31	42.77
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	22077	0.80000	0.8252	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	13735			33.90- 93.90	62.21
12.311	12.311 (1.301)	111	9361			9.45- 69.45	42.40
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	28531	0.80000	0.7766	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	7255			0.00- 53.26	25.43
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	35643	0.80000	0.8594	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	32820			58.12- 118.12	92.08
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	11054	0.80000	0.8266	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	36768			314.79- 374.79	332.62
12.626	12.626 (1.335)	92	18539			154.29- 214.29	167.71
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	20836	0.80000	0.8026	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	14179			33.84- 93.84	68.05
12.733	12.741 (1.346)	111	9568			12.73- 72.73	45.92
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	25429	0.99000	0.7736	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	20311			52.87- 112.87	79.87
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	17480	1.01000	0.9113	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	17289			65.33- 125.33	98.91
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	11980	1.03000	0.8875	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
215 Hexachlorobutadiene (continued)							
14.581	14.582 (1.541)	223	7605			33.17- 93.17	63.48
216 Naphthalene					CAS #: 91-20-3		
14.761	14.768 (1.560)	128	5130	0.10000	0.1046	80.00- 120.00	100.00(a)
14.761	14.768 (1.560)	127	1046			0.00- 42.88	20.39
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	15919	1.06000	0.9388	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	15376			65.75- 125.75	96.59
15.069	15.069 (1.593)	145	5239			5.23- 65.23	32.91

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051904.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	165114	3.97
108 1,4-Difluorobenze	597103	358262	835944	606184	1.52
153 Chlorobenzene-d5	587747	352648	822846	589752	0.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051904.d

Page 1

Date : 19-MAY-2021 14:02

Client ID:

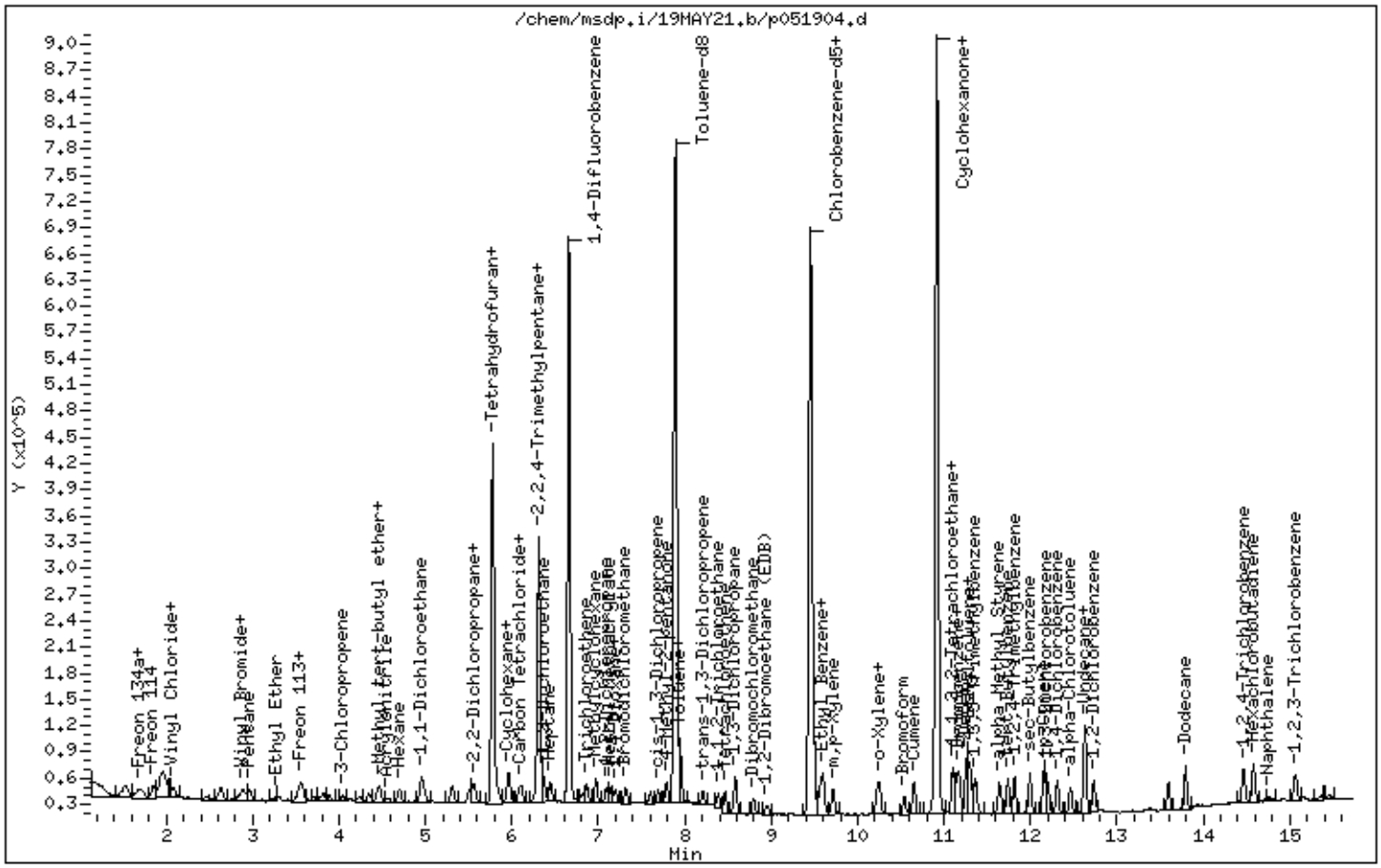
Instrument: msdp.i

Sample Info: 32mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051915.d
Lab Smp Id: ICAL Level 3
Inj Date : 19-MAY-2021 19:45
Operator : gh Inst ID: msdp.i
Smp Info : 32mL 3018-1928
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	164344	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	125886			48.23- 108.23	76.60
5.778	5.778 (1.000)	49	290825			150.57- 210.57	176.96
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	606504	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95686			0.00- 45.71	15.78
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	593084	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	324813			23.78- 83.78	54.77
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	3384	0.80000	1.014	80.00- 120.00	100.00(a)
1.591	1.590 (0.275)	69	8253			243.50- 303.50	243.88
1.591	1.590 (0.275)	64	1419			0.00- 54.06	41.93
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	3721	0.80000	1.216	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	2558			34.98- 94.98	68.74
1.688	1.674 (0.292)	41	1187			25.22- 85.22	31.90
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	14331	0.80000	0.8483	80.00- 120.00	100.00(a)
1.884	1.884 (0.326)	45	4817			0.00- 59.77	33.61
36 1-Pentene					CAS #: 109-67-1		
2.898	2.906 (0.502)	55	8373	0.80000	0.7641	80.00- 120.00	100.00(a)
2.898	2.906 (0.502)	42	10665			105.17- 165.17	127.37
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	8954	0.80000	0.8423	80.00- 120.00	100.00(a)
3.378	3.378 (0.585)	67	10000			104.69- 164.69	111.68
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	12043	0.80000	0.8181	80.00- 120.00	100.00(a)
3.486	3.479 (0.603)	133	2878			0.00- 50.87	23.90
3.472	3.479 (0.601)	85	7657			36.08- 96.08	63.58
55 Cyclopentene					CAS #: 142-29-0		
4.066	4.073 (0.704)	67	13033	0.80000	0.8236	80.00- 120.00	100.00(a)
4.073	4.073 (0.705)	68	5570			6.76- 66.76	42.74
4.073	4.073 (0.705)	53	4098			0.00- 57.54	31.44
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.073 (0.706)	43	13892	0.80000	0.7505	80.00- 120.00	100.00(a)
4.073	4.073 (0.705)	74	2356			0.00- 44.13	16.96
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	10679	0.80000	0.7298	80.00- 120.00	100.00(a)
5.019	5.019 (0.869)	88	4129			9.21- 69.21	38.66
5.019	5.019 (0.869)	50	3511			0.00- 54.25	32.88
75 1-Propanol					CAS #: 71-23-8		
5.090	5.083 (0.881)	59	1961	0.80000	0.8598	80.00- 120.00	100.00(a)
5.090	5.083 (0.881)	42	1356			63.23- 123.23	69.15
5.090	5.083 (0.881)	41	964			24.74- 84.74	49.16
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.974)	55	14529	0.80000	0.7451	80.00- 120.00	100.00(a)
5.620	5.620 (0.973)	85	2658			0.00- 41.28	18.29
5.620	5.620 (0.973)	58	1084			0.00- 38.22	7.46
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	1516	0.80000	0.6268	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	6586			448.18- 508.18	434.43
6.244	6.244 (1.081)	41	6296			299.99- 359.99	415.30
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	1140	0.80000	0.8059	80.00- 120.00	100.00(a)
6.938	6.938 (0.733)	45	2310			149.95- 209.95	202.63
6.938	6.938 (0.733)	55	19701			1849.07-1909.07	1728.16
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	24123	0.80000	0.7933	80.00- 120.00	100.00(a)
7.032	7.031 (0.743)	58	1837			0.00- 37.44	7.62
7.032	7.031 (0.743)	86	3321			0.00- 42.78	13.77
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	12701	0.80000	0.8216	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	3929			0.00- 59.10	30.93
8.665	8.657 (1.301)	43	29172			215.30- 275.30	229.68
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	10131	0.80000	0.7736	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	593084			57.42- 117.42	5854.15
9.596	9.596 (1.014)	95	4021			5.70- 65.70	39.69
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	19243	0.80000	0.7954	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	30387			136.03- 196.03	157.91
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	6734	0.80000	0.6275	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	4720			39.41- 99.41	70.09
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	9434	0.80000	0.7705	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	29750			295.02- 355.02	315.35
11.437	11.444 (1.209)	63	4126			11.82- 71.82	43.74
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	14202	0.80000	0.8022	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	30046			192.40- 252.40	211.56
12.318	12.318 (1.302)	77	4952			0.00- 54.69	34.87
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	4732	0.80000	0.7912	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	7064			102.99- 162.99	149.28

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	19960	0.80000	0.7958	80.00- 120.00	100.00(a)
13.758	13.758 (1.454)	182	18425			65.24- 125.24	92.31
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	17650	0.80000	0.7612	80.00- 120.00	100.00(a)
10.599	10.599 (1.120)	77	6081			0.00- 58.21	34.45
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	9306	0.80000	0.6884	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	29750			153.57- 213.57	319.69

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051915.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	164344	3.48
108 1,4-Difluorobenze	597103	358262	835944	606504	1.57
153 Chlorobenzene-d5	587747	352648	822846	593084	0.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051915.d

Date : 19-MAY-2021 19:45

Client ID:

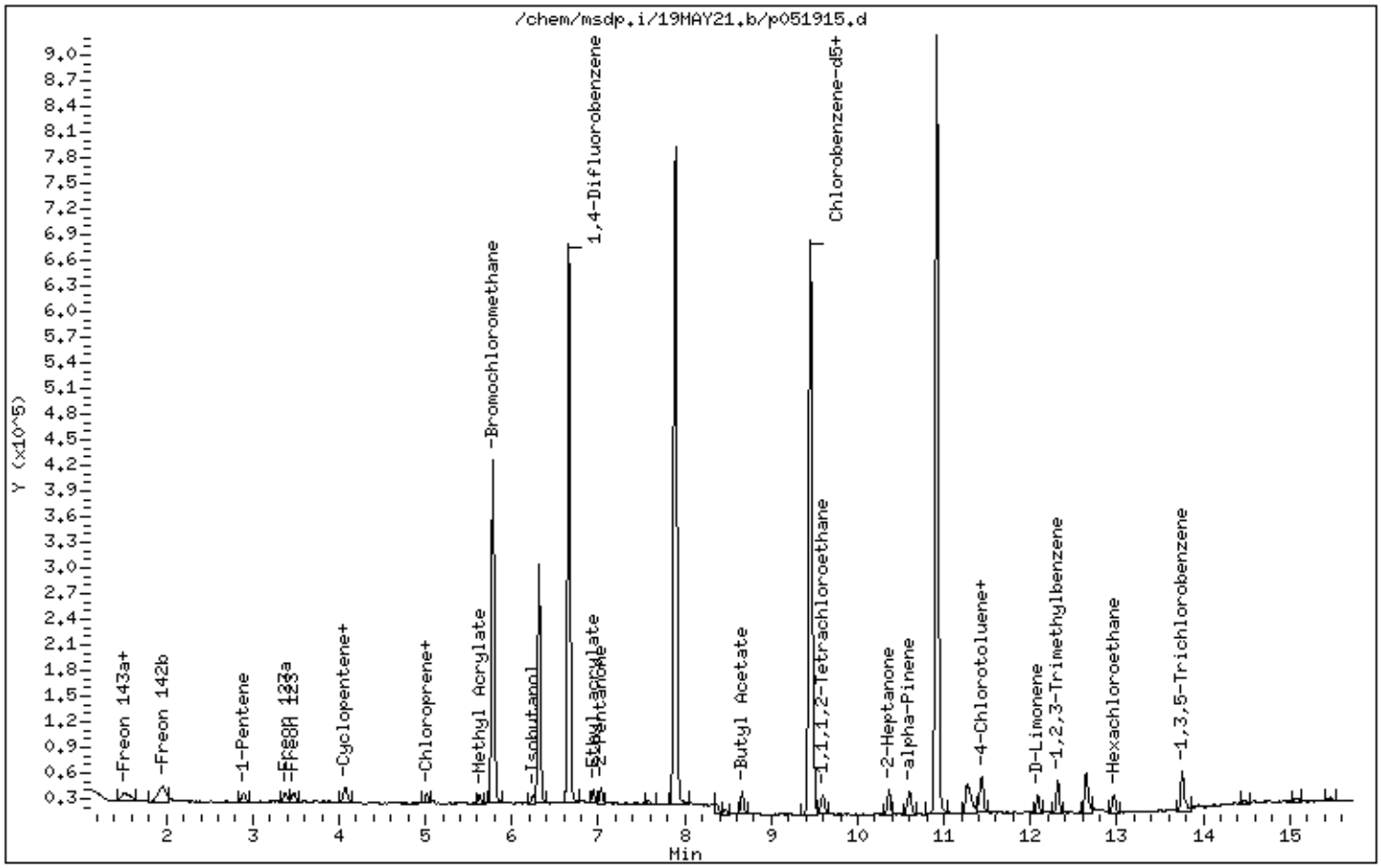
Instrument: msdp.i

Sample Info: 32mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051905.d
Lab Smp Id: ICAL Level 4
Inj Date : 19-MAY-2021 14:30
Operator : LD Inst ID: msdp.i
Smp Info : 80mL 3018-2045
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:13 Cal File: p051916.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.646	1.633 (0.285)	83	10752	2.00000	2.113	80.00- 120.00	100.00
1.646	1.633 (0.285)	69	9430			59.44- 119.44	87.70
1.744	1.745 (0.302)	51	44872			419.06- 479.06	417.34
5 Propylene					CAS #: 115-07-1		
1.674	1.675 (0.290)	41	16628	2.00000	2.178	80.00- 120.00	100.00
1.674	1.675 (0.290)	42	9737			35.28- 95.28	58.56
1.674	1.675 (0.290)	39	9475			38.35- 98.35	56.98
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.703 (0.295)	65	9119	2.00000	2.248	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	44872			597.63- 657.63	492.07
1.702	1.703 (0.295)	47	4376			33.72- 93.72	47.99
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	28857	2.00000	2.119	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	9809			2.37- 62.37	33.99
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	2775	2.00000	2.050	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	44872			1501.01-1561.01	1617.01
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	30051	2.00000	2.103	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	10561			2.30- 62.30	35.14
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	37601	2.00000	2.238	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	10224			2.44- 62.44	27.19
1.870	1.856 (0.324)	58	1126			0.00- 33.36	2.99
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	20795	2.00000	2.143	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	6777			0.00- 56.26	32.59
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	4684	2.00000	2.428	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	30160			823.29- 883.29	643.89
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	22935	2.00000	2.214	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	4016			0.00- 59.69	17.51
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	14209	2.00000	1.851	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	14860			52.37- 112.37	104.58
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	15345	2.00000	2.288	80.00- 120.00	100.00
2.476	2.483 (0.428)	96	14452			64.07- 124.07	94.18
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	7064	2.00000	2.048	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	2424			0.04- 60.04	34.31
2.619	2.612 (0.453)	49	2630			4.54- 64.54	37.23
31 Isopentane					CAS #: 78-78-4		
2.633	2.634 (0.456)	43	21473	2.00000	2.019	80.00- 120.00	100.00
2.633	2.634 (0.456)	57	14410			34.12- 94.12	67.11
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	12788	2.00000	2.173	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	11825			69.27- 129.27	92.47
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	29478	2.00000	1.982	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	21023			34.72- 94.72	71.32
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.899 (0.502)	67	26413	2.00000	2.016	80.00- 120.00	100.00
2.891	2.899 (0.500)	69	8532			0.84- 60.84	32.30
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	36199	2.00000	2.019	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	5481			0.00- 44.98	15.14
2.970	2.970 (0.514)	72	2569			0.00- 37.39	7.10
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.570)	74	6103	2.00000	2.113	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	11984			163.46- 223.46	196.36
3.285	3.285 (0.569)	45	17007			250.40- 310.40	278.67
39 Ethanol					CAS #: 64-17-5		
3.249	3.242 (0.562)	46	3513	2.00000	2.141	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	17032			511.19- 571.19	484.83
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	5593	2.00000	2.070	80.00- 120.00	100.00
3.529	3.529 (0.611)	56	9027			111.10- 171.10	161.40
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	22474	2.00000	2.051	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	14485			33.56- 93.56	64.45
3.550	3.550 (0.614)	101	27010			89.21- 149.21	120.18
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	12551	2.00000	1.903	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	8404			34.02- 94.02	66.96
3.579	3.579 (0.619)	61	26438			168.77- 228.77	210.64
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	9195	2.00000	2.141	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	30176			302.95- 362.95	328.18
48 Carbon Disulfide					CAS #: 75-15-0		
3.822	3.823 (0.662)	76	36134	2.00000	2.058	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	14456	2.00000	1.356	80.00- 120.00	100.00(a)
3.794	3.794 (0.657)	127	6010			12.22- 72.22	41.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.674)	45	34496	2.00000	2.040	80.00- 120.00	100.00
3.894	3.887 (0.674)	43	6922			0.00- 47.19	20.07
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	6575	2.00000	2.162	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	25612			396.19- 456.19	389.54
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.715)	41	15059	2.00000	1.986	80.00- 120.00	100.00
4.131	4.123 (0.715)	40	9224			20.95- 80.95	61.25
4.131	4.123 (0.715)	38	2726			0.00- 41.17	18.10
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.238 (0.732)	49	21233	2.00000	2.009	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	11130			22.03- 82.03	52.42
4.238	4.238 (0.733)	51	6579			0.18- 60.18	30.98
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.752)	59	40925	2.00000	2.099	80.00- 120.00	100.00
4.345	4.338 (0.752)	41	8206			0.00- 51.11	20.05
4.338	4.338 (0.751)	57	4155			0.00- 40.49	10.15
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.453	4.446 (0.771)	73	38812	2.00000	1.981	80.00- 120.00	100.00
4.453	4.446 (0.771)	57	12311			3.10- 63.10	31.72
4.453	4.446 (0.771)	41	12889			1.28- 61.28	33.21
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	9180	2.00000	2.060	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	24720			255.84- 315.84	269.28
4.474	4.482 (0.774)	96	14713			127.59- 187.59	160.27
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	13138	2.00000	2.031	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	14824			88.05- 148.05	112.83
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	31248	2.00000	2.036	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	21924			37.52- 97.52	70.16
4.696	4.697 (0.813)	86	3562			0.00- 41.48	11.40
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	27529	2.00000	2.029	80.00- 120.00	100.00
4.961	4.962 (0.859)	65	8205			0.00- 59.70	29.80

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.954	4.954 (0.857)	45	71591	2.00000	1.988	80.00- 120.00	100.00(a)
4.954	4.954 (0.857)	87	13182			0.00- 48.18	18.41
4.954	4.954 (0.857)	59	8012			0.00- 40.15	11.19
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.865)	86	3538	2.00000	2.042	80.00- 120.00	100.00
4.997	4.997 (0.865)	43	83098			2432.48-2492.48	2348.73
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.312	5.305 (0.919)	59	61838	2.00000	1.988	80.00- 120.00	100.00(a)
5.312	5.305 (0.919)	87	18730			1.00- 61.00	30.29
5.312	5.305 (0.919)	41	11608			0.00- 48.73	18.77
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.506	5.506 (0.953)	77	23271	2.00000	2.002	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	7682			2.28- 62.28	33.01
5.506	5.506 (0.953)	97	5978			0.00- 53.93	25.69
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.960)	98	9213	2.00000	2.082	80.00- 120.00	100.00
5.542	5.549 (0.959)	96	15160			125.75- 185.75	164.55
5.542	5.549 (0.959)	61	33574			332.40- 392.40	364.42
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.962)	72	7496	2.00000	2.089	80.00- 120.00	100.00
5.570	5.556 (0.964)	43	90870			1214.50-1274.50	1212.25
5.556	5.556 (0.962)	57	3054			14.68- 74.68	40.74
87 Ethyl Acetate						CAS #: 141-78-6	
5.577	5.570 (0.965)	45	7299	2.00000	2.045	80.00- 120.00	100.00
5.542	5.549 (0.959)	61	33574			452.04- 512.04	459.98
5.570	5.570 (0.964)	70	4007			22.77- 82.77	54.90
89 Tetrahydrofuran						CAS #: 109-99-9	
5.778	5.771 (1.000)	42	24973	2.00000	2.047	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	6164			0.00- 55.82	24.68
5.778	5.771 (1.000)	72	6913			0.00- 57.59	27.68
* 90 Bromochloromethane						CAS #: 74-97-5	
5.778	5.778 (1.000)	130	159831	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126227			48.23- 108.23	78.98
5.778	5.778 (1.000)	49	292527			150.57- 210.57	183.02
92 Chloroform						CAS #: 67-66-3	
5.835	5.835 (1.010)	83	27594	2.00000	2.032	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	18631			34.70- 94.70	67.52
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	19272	2.00000	2.021	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	34982			142.57- 202.57	181.52
5.957	5.957 (1.031)	41	20285			62.09- 122.09	105.26
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	31014	2.00000	2.006	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	19587			34.02- 94.02	63.16
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	28698	2.00000	1.977	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	27861			70.64- 130.64	97.08
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	8669	2.00000	2.064	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	21304			226.85- 286.85	245.75
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.280 (1.088)	57	105858	2.00000	1.977	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	34121			2.24- 62.24	32.23
6.287	6.280 (1.088)	41	25646			0.00- 54.39	24.23
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	42719	2.00000	2.114	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	9426			0.00- 52.90	22.07
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213845	25.0000	25.226	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	109056			27.21- 87.21	51.00
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	12080	2.00000	2.059	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	45185			372.79- 432.79	374.05
6.358	6.358 (0.955)	55	15451			112.09- 172.09	127.91
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	21692	2.00000	2.056	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	7191			0.79- 60.79	33.15
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	15826	2.00000	2.037	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	42456			226.53- 286.53	268.27
6.444	6.444 (0.968)	57	22790			100.85- 160.85	144.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	608981	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	97098			0.00- 45.71	15.94
110 n-Butanol						CAS #: 71-36-3	
6.817	6.810 (1.024)	56	13920	2.00000	1.933	80.00- 120.00	100.00
6.817	6.810 (1.024)	41	11206			40.99- 100.99	80.50
6.817	6.810 (1.024)	43	8308			27.38- 87.38	59.68
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	20090	2.00000	2.063	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	21639			76.29- 136.29	107.71
6.867	6.867 (1.031)	97	12122			33.63- 93.63	60.34
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.096	7.089 (1.066)	63	20821	2.00000	2.005	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	14576			41.07- 101.07	70.01
7.096	7.089 (1.066)	41	10584			22.53- 82.53	50.83
116 Methyl Methacrylate						CAS #: 80-62-6	
7.139	7.132 (0.755)	69	16454	2.00000	1.977	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	33345			179.84- 239.84	202.66
7.139	7.139 (0.755)	100	6482			9.59- 69.59	39.39
117 1,4-Dioxane						CAS #: 123-91-1	
7.182	7.175 (1.079)	88	11643	2.00000	2.092	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	11397			68.28- 128.28	97.89
7.175	7.175 (1.077)	57	4191			2.68- 62.68	36.00
118 Dibromomethane						CAS #: 74-95-3	
7.203	7.204 (0.761)	174	19142	2.00000	2.126	80.00- 120.00	100.00
7.203	7.204 (0.761)	93	16978			60.09- 120.09	88.70
7.203	7.204 (0.761)	95	14808			48.38- 108.38	77.36
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	31009	2.00000	2.066	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	19794			35.24- 95.24	63.83
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.691	7.691 (1.155)	75	25607	2.00000	2.035	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	8122			2.42- 62.42	31.72
7.691	7.691 (1.155)	39	17386			37.16- 97.16	67.90
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	26965	2.00000	1.892	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	13600			15.78- 75.78	50.44

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	34696			84.64- 144.64	128.67
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.791 (1.171)	58	20235	2.00000	1.954	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	55273			242.35- 302.35	273.16
7.798	7.791 (1.171)	85	7479			3.24- 63.24	36.96
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	665455	25.0000	25.210	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	77094			0.00- 40.44	11.59
7.891	7.891 (1.185)	100	431576			34.95- 94.95	64.85
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	56064	2.00000	1.997	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	34906			28.38- 88.38	62.26
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	22118	2.00000	1.902	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	18563			56.00- 116.00	83.93
7.941	7.949 (1.193)	43	60251			228.66- 288.66	272.41
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	24394	2.00000	2.042	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	8513			1.24- 61.24	34.90
8.213	8.214 (0.868)	39	16646			34.11- 94.11	68.24
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	19362	2.00000	2.008	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	12564			31.96- 91.96	64.89
8.400	8.400 (0.888)	83	17346			52.93- 112.93	89.59
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	28170	2.00000	1.983	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	21640			47.84- 107.84	76.82
8.464	8.464 (0.895)	131	20810			45.29- 105.29	73.87
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	27816	2.00000	1.995	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	55470			162.87- 222.87	199.42
8.586	8.586 (0.908)	100	4450			0.00- 45.94	16.00
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	27760	2.00000	2.102	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	35478			94.99- 154.99	127.80
8.579	8.579 (1.288)	78	9229			2.05- 62.05	33.25

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	146 Dibromochloromethane						CAS #: 124-48-1	
	8.801	8.801 (0.930)	129	36760	2.00000	1.973	80.00- 120.00	100.00
	8.801	8.801 (0.930)	127	28370			47.45- 107.45	77.18
	148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
	8.951	8.951 (0.946)	107	32272	2.00000	2.011	80.00- 120.00	100.00
	8.951	8.951 (0.946)	109	30370			64.21- 124.21	94.11
	151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
	7.605	7.605 (1.142)	63	38340	2.00000	2.022	80.00- 120.00	100.00
	7.605	7.605 (1.142)	65	11961			0.00- 59.64	31.20
	7.605	7.605 (1.142)	144	3836			0.00- 39.63	10.01
*	153 Chlorobenzene-d5						CAS #: 3114-55-4	
	9.460	9.460 (1.000)	117	602501	25.0000		80.00- 120.00	100.00
	9.460	9.460 (1.000)	82	328882			23.78- 83.78	54.59
	154 Chlorobenzene						CAS #: 108-90-7	
	9.496	9.496 (1.004)	112	48343	2.00000	2.025	80.00- 120.00	100.00
	9.496	9.496 (1.004)	114	15057			1.74- 61.74	31.15
	9.496	9.496 (1.004)	77	32004			25.04- 85.04	66.20
	155 Ethyl Benzene						CAS #: 100-41-4	
	9.567	9.567 (1.011)	106	24932	2.00000	1.960	80.00- 120.00	100.00
	9.567	9.567 (1.011)	91	76105			273.74- 333.74	305.25
	156 Nonane						CAS #: 111-84-2	
	9.596	9.596 (1.014)	43	63929	2.00000	1.973	80.00- 120.00	100.00
	9.596	9.603 (1.014)	57	51732			54.16- 114.16	80.92
	9.596	9.603 (1.014)	85	15047			0.00- 53.90	23.54
	158 m,p-Xylene						CAS #: 108-38-3	
	9.718	9.718 (1.027)	106	30801	2.00000	1.958	80.00- 120.00	100.00
	9.718	9.718 (1.027)	91	61907			163.73- 223.73	200.99
	164 o-Xylene						CAS #: 95-47-6	
	10.226	10.226 (1.081)	106	31016	2.00000	2.047	80.00- 120.00	100.00
	10.226	10.226 (1.081)	91	61477			177.45- 237.45	198.21
	165 Styrene						CAS #: 100-42-5	
	10.255	10.255 (1.084)	104	51582	2.00000	1.986	80.00- 120.00	100.00
	10.255	10.255 (1.084)	78	24588			17.88- 77.88	47.67
	167 Bromoform						CAS #: 75-25-2	
	10.541	10.542 (1.114)	173	35253	2.00000	1.964	80.00- 120.00	100.00
	10.549	10.542 (1.115)	171	18187			21.25- 81.25	51.59

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
168 Cumene						CAS #: 98-82-8		
10.649	10.649 (1.126)	105	92633	2.00000		1.959	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	25468				0.00- 58.52	27.49
10.649	10.649 (1.126)	51	12337				0.00- 43.00	13.32
169 Cyclohexanone						CAS #: 108-94-1		
10.871	10.871 (1.149)	55	34971	2.00000		2.003	80.00- 120.00	100.00(a)
10.878	10.871 (1.150)	98	11080				1.94- 61.94	31.68
10.871	10.871 (1.149)	42	22417				37.89- 97.89	64.10
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	386143	25.0000		25.034	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	491927				95.92- 155.92	127.40
10.921	10.921 (1.154)	176	373529				66.89- 126.89	96.73
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
11.100	11.100 (1.173)	83	45589	2.00000		1.968	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	30225				35.20- 95.20	66.30
177 Bromobenzene						CAS #: 108-86-1		
11.107	11.107 (1.174)	156	29228	2.00000		2.039	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	27871				67.21- 127.21	95.36
11.179	11.179 (1.182)	77	16535				29.02- 89.02	56.57
178 Propylbenzene						CAS #: 103-65-1		
11.150	11.150 (1.179)	120	27541	2.00000		1.952	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	110564				366.49- 426.49	401.45
11.150	11.150 (1.179)	105	4410				0.00- 44.85	16.01
179 1,2,3-Trichloropropane						CAS #: 96-18-4		
11.179	11.179 (1.182)	110	15487	2.00000		2.068	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	44040				280.55- 340.55	284.37
11.100	11.100 (1.173)	61	6929				15.49- 75.49	44.74
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6		
11.179	11.179 (1.182)	53	10130	2.00000		2.088	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	7740				49.11- 109.11	76.41
11.179	11.179 (1.182)	75	44040				426.44- 486.44	434.75
182 Decane						CAS #: 124-18-5		
11.251	11.251 (1.189)	57	75743	2.00000		1.938	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	21477				0.00- 57.66	28.36
11.258	11.258 (1.190)	142	2780				0.00- 34.09	3.67
183 4-Ethyltoluene						CAS #: 622-96-8		
11.286	11.287 (1.193)	120	30874	2.00000		2.017	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	94572			284.55- 344.55	306.32
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	23935	2.00000	2.009	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	81565			315.17- 375.17	340.78
11.301	11.301 (1.195)	65	12898			21.55- 81.55	53.89
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	40449	2.00000	1.939	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	83373			164.93- 224.93	206.12
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	42379	2.00000	2.012	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	23377			25.30- 85.30	55.16
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	78389	2.00000	2.001	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	18724			0.00- 54.25	23.89
11.738	11.738 (1.241)	91	46791			31.27- 91.27	59.69
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	78168	2.00000	1.959	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	40414			19.05- 79.05	51.70
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	24394	2.00000	2.013	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	113600			437.55- 497.55	465.69
11.996	11.996 (1.268)	91	17621			40.76- 100.76	72.23
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	104556	2.00000	1.942	80.00- 120.00	100.00
12.153	12.160 (1.285)	134	27205			0.00- 55.54	26.02
12.153	12.153 (1.285)	91	22499			0.00- 51.48	21.52
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	55740	2.00000	2.016	80.00- 120.00	100.00
12.196	12.196 (1.289)	148	34699			33.21- 93.21	62.25
12.196	12.196 (1.289)	111	22480			11.31- 71.31	40.33
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	54700	2.00000	1.976	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	35545			33.90- 93.90	64.98
12.311	12.311 (1.301)	111	21710			9.45- 69.45	39.69
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	74656	2.00000	2.000	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
199 alpha-Chlorotoluene (continued)								
12.461	12.461 (1.317)	126	17192				0.00- 53.26	23.03
201 Undecane						CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	87872	2.00000	1.994		80.00- 120.00	100.00
12.640	12.640 (1.336)	43	80279				58.12- 118.12	91.36
202 Butylbenzene						CAS #: 104-51-8		
12.626	12.626 (1.335)	134	28076	2.00000	2.018		80.00- 120.00	100.00
12.626	12.626 (1.335)	91	92470				314.79- 374.79	329.36
12.626	12.626 (1.335)	92	50010				154.29- 214.29	178.12
204 1,2-Dichlorobenzene						CAS #: 95-50-1		
12.733	12.741 (1.346)	146	54244	2.00000	2.034		80.00- 120.00	100.00
12.733	12.741 (1.346)	148	33671				33.84- 93.84	62.07
12.733	12.741 (1.346)	111	23692				12.73- 72.73	43.68
206 1,2-Dibromo-3-chloropropane						CAS #: 96-12-8		
13.600	13.600 (1.438)	157	31809	2.00000	1.969		80.00- 120.00	100.00(a)
13.600	13.600 (1.438)	75	26948				52.48- 112.48	84.72
13.600	13.600 (1.438)	155	24389				47.41- 107.41	76.67
207 Dodecane						CAS #: 112-40-3		
13.801	13.801 (1.459)	57	76973	2.47000	2.484		80.00- 120.00	100.00
13.801	13.801 (1.459)	43	66209				52.87- 112.87	86.02
213 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
14.460	14.467 (1.529)	180	50012	2.52000	2.605		80.00- 120.00	100.00
14.467	14.467 (1.529)	182	47092				65.33- 125.33	94.16
215 Hexachlorobutadiene						CAS #: 87-68-3		
14.581	14.582 (1.541)	225	35349	2.57000	2.658		80.00- 120.00	100.00
14.581	14.582 (1.541)	223	22934				33.17- 93.17	64.88
216 Naphthalene						CAS #: 91-20-3		
14.760	14.768 (1.560)	128	13400	0.25000	0.2587		80.00- 120.00	100.00(a)
14.768	14.768 (1.561)	127	2043				0.00- 42.88	15.25
222 1,2,3-Trichlorobenzene						CAS #: 87-61-6		
15.068	15.069 (1.593)	180	46605	2.66000	2.753		80.00- 120.00	100.00
15.068	15.069 (1.593)	182	42985				65.75- 125.75	92.23
15.061	15.069 (1.592)	145	15683				5.23- 65.23	33.65

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051905.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	159831	0.64
108 1,4-Difluorobenze	597103	358262	835944	608981	1.99
153 Chlorobenzene-d5	587747	352648	822846	602501	2.51

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051905.d

Date : 19-MAY-2021 14:30

Client ID:

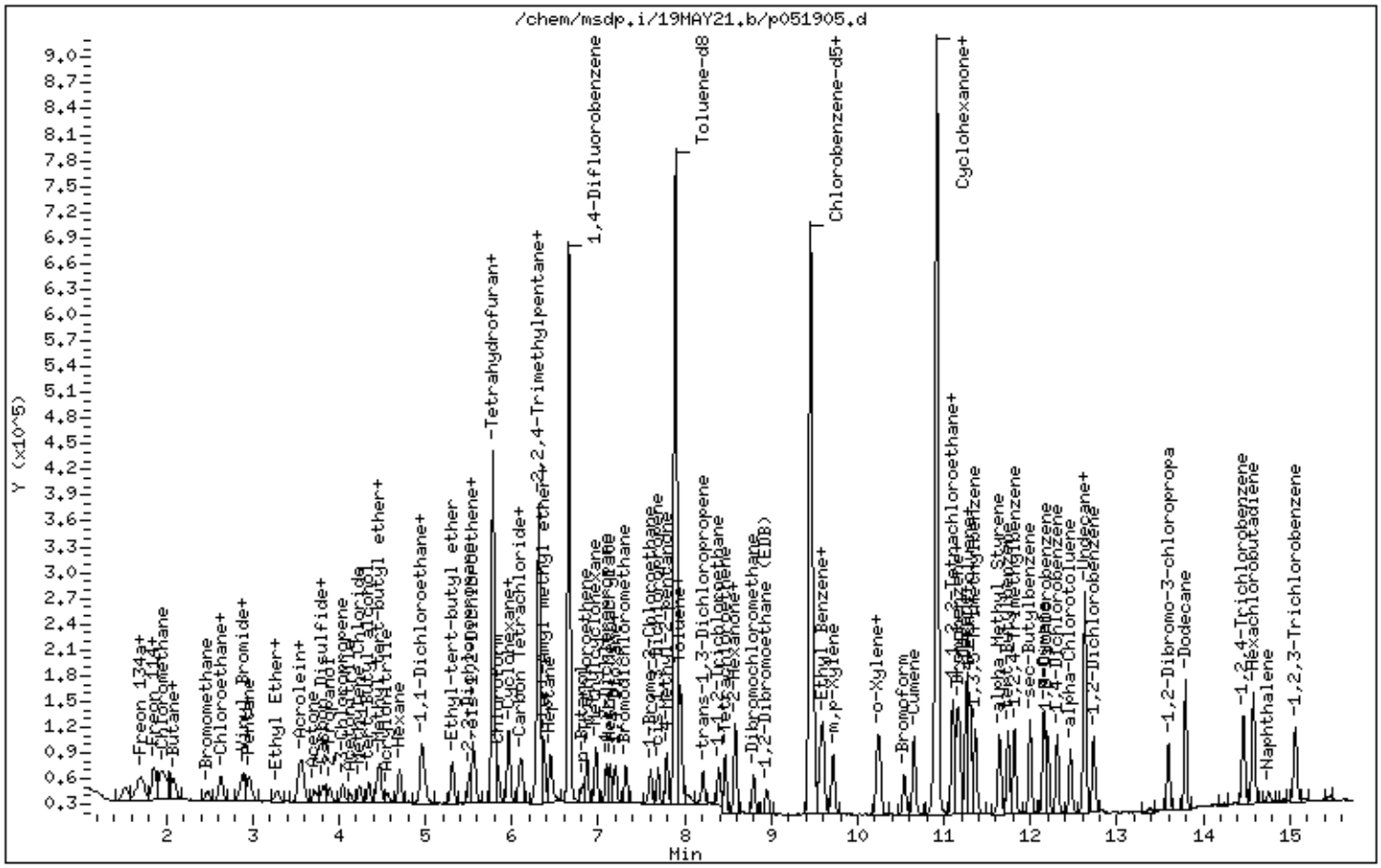
Instrument: msdp.i

Sample Info: 80mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051916.d
Lab Smp Id: ICAL Level 4
Inj Date : 19-MAY-2021 20:13
Operator : gh Inst ID: msdp.i
Smp Info : 80mL 3018-1928
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:13 Cal File: p051916.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	156828	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	122219			48.23- 108.23	77.93
5.778	5.778 (1.000)	49	287649			150.57- 210.57	183.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	605078	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	96791			0.00- 45.71	16.00
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	594880	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	325179			23.78- 83.78	54.66
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	7005	2.00000	2.200	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	17061			243.50- 303.50	243.55
1.591	1.590 (0.275)	64	2455			0.00- 54.06	35.05
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	5172	2.00000	1.772	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.675	1.674 (0.290)	39	4252			34.98- 94.98	82.21
1.675	1.674 (0.290)	41	3543			25.22- 85.22	68.50
13 Freon 142b						CAS #: 75-68-3	
1.898	1.884 (0.329)	65	31581	2.00000	1.959	80.00- 120.00	100.00(a)
1.884	1.884 (0.326)	45	11066			0.00- 59.77	35.04
36 1-Pentene						CAS #: 109-67-1	
2.906	2.906 (0.503)	55	19625	2.00000	1.877	80.00- 120.00	100.00(a)
2.906	2.906 (0.503)	42	27964			105.17- 165.17	142.49
40 Freon 123a						CAS #: 354-23-4	
3.378	3.385 (0.585)	117	19654	2.00000	1.937	80.00- 120.00	100.00(a)
3.386	3.378 (0.586)	67	26135			104.69- 164.69	132.98
41 Freon 123						CAS #: 306-83-2	
3.479	3.479 (0.602)	83	29140	2.00000	2.074	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	6343			0.00- 50.87	21.77
3.479	3.479 (0.602)	85	20407			36.08- 96.08	70.03
55 Cyclopentene						CAS #: 142-29-0	
4.073	4.073 (0.705)	67	30943	2.00000	2.049	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	11219			6.76- 66.76	36.26
4.073	4.073 (0.705)	53	8640			0.00- 57.54	27.92
56 Methyl Acetate						CAS #: 79-20-9	
4.080	4.073 (0.706)	43	37032	2.00000	2.096	80.00- 120.00	100.00(a)
4.080	4.073 (0.706)	74	5940			0.00- 44.13	16.04
74 Chloroprene						CAS #: 126-99-8	
5.019	5.019 (0.869)	53	28789	2.00000	2.062	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	11054			9.21- 69.21	38.40
5.019	5.019 (0.869)	50	7722			0.00- 54.25	26.82
75 1-Propanol						CAS #: 71-23-8	
5.090	5.083 (0.881)	59	4700	2.00000	2.160	80.00- 120.00	100.00
5.090	5.083 (0.881)	42	3899			63.23- 123.23	82.96
5.090	5.083 (0.881)	41	2821			24.74- 84.74	60.02
88 Methyl Acrylate						CAS #: 96-33-3	
5.628	5.620 (0.974)	55	37088	2.00000	1.993	80.00- 120.00	100.00(a)
5.628	5.620 (0.974)	85	5500			0.00- 41.28	14.83
5.628	5.620 (0.974)	58	3509			0.00- 38.22	9.46
103 Isobutanol						CAS #: 78-83-1	
6.244	6.244 (1.081)	39	4047	2.00000	1.753	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	20761			448.18- 508.18	513.00
6.244	6.244 (1.081)	41	13172			299.99- 359.99	325.48
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.938 (0.734)	99	2995	2.00000	2.111	80.00- 120.00	100.00
6.946	6.938 (0.734)	45	5574			149.95- 209.95	186.11
6.939	6.938 (0.733)	55	50476			1849.07-1909.07	1685.34
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	62449	2.00000	2.048	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	4500			0.00- 37.44	7.21
7.032	7.031 (0.743)	86	7757			0.00- 42.78	12.42
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	30994	2.00000	2.010	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	9804			0.00- 59.10	31.63
8.665	8.657 (1.301)	43	73858			215.30- 275.30	238.30
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	24295	2.00000	1.850	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	594880			57.42- 117.42	2448.57
9.603	9.596 (1.015)	95	9068			5.70- 65.70	37.32
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	45629	2.00000	1.976	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	77430			136.03- 196.03	169.69
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	17413	2.00000	1.618	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	11534			39.41- 99.41	66.24
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	25118	2.00000	2.045	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	72648			295.02- 355.02	289.23
11.444	11.444 (1.210)	63	9860			11.82- 71.82	39.25
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	34881	2.00000	1.964	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	77447			192.40- 252.40	222.03
12.311	12.318 (1.301)	77	8888			0.00- 54.69	25.48
205 Hexachloroethane					CAS #: 67-72-1		
12.963	12.970 (1.370)	201	9631	2.00000	1.605	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	13291			102.99- 162.99	138.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	50566	2.00000	2.010	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	47208			65.24- 125.24	93.36
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	45684	2.00000	1.964	80.00- 120.00	100.00(a)
10.599	10.599 (1.120)	77	14355			0.00- 58.21	31.42
214 beta-Pinene					CAS #: 127-91-3		
11.415	11.422 (1.207)	93	23101	2.00000	1.704	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	72648			153.57- 213.57	314.48

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051916.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	156828	-1.25
108 1,4-Difluorobenze	597103	358262	835944	605078	1.34
153 Chlorobenzene-d5	587747	352648	822846	594880	1.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051916.d

Date : 19-MAY-2021 20:13

Client ID:

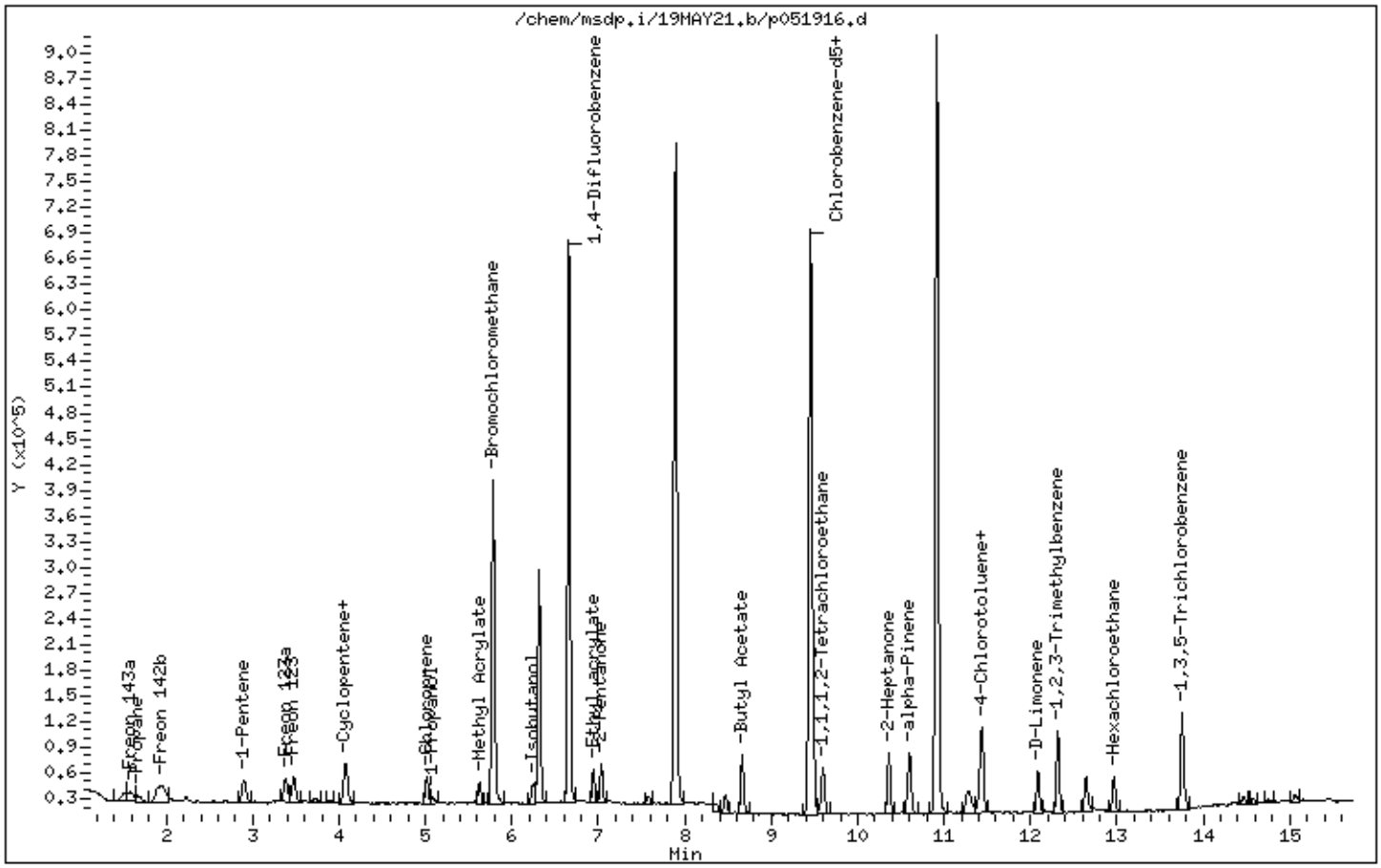
Instrument: msdp.i

Sample Info: 80mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062206.d
Lab Smp Id: ICAL Level 5
Inj Date : 22-JUN-2021 16:17
Operator : LD Inst ID: msd3.i
Smp Info : 32mL 3018-2078
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:22 Cal File: 3062217.d
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL_lv3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	230876	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	179221			48.46- 108.46	77.63
5.270	5.270 (1.000)	49	343480			120.39- 180.39	148.77
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	839788	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	132912			0.00- 45.52	15.83
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	799921	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	441630			25.46- 85.46	55.21
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	9555	0.80000	0.7941	80.00- 120.00	100.00(a)
8.712	8.712 (1.011)	117	10713			38.22- 98.22	112.12
8.712	8.712 (1.011)	95	4189			7.54- 67.54	43.84

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062206.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	230876	-5.15
108 1,4-Difluorobenze	874076	524446	1223706	839788	-3.92
153 Chlorobenzene-d5	831223	498734	1163712	799921	-3.77

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062206.d

Date : 22-JUN-2021 16:17

Client ID:

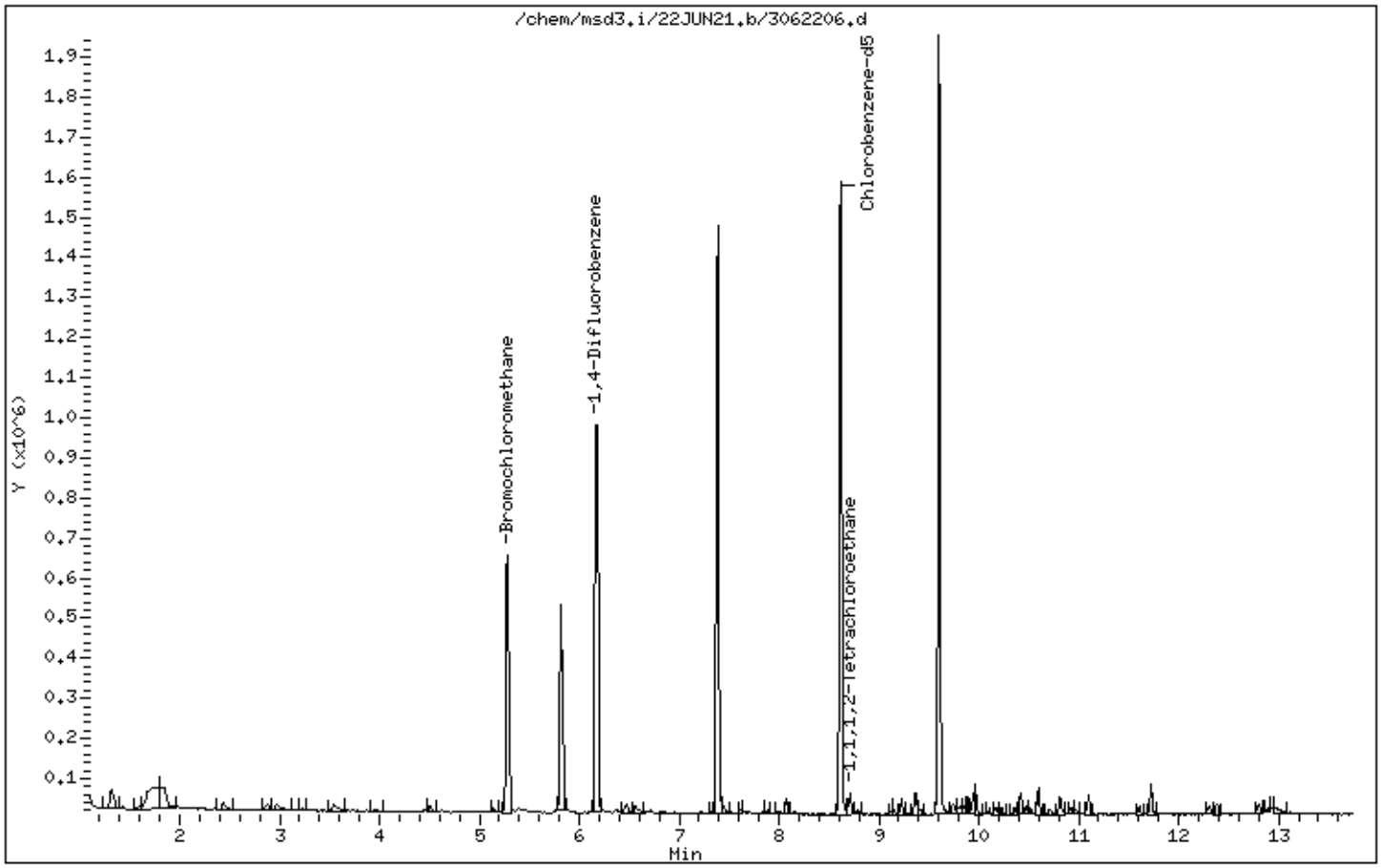
Instrument: msd3.i

Sample Info: 32mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062217.d
Lab Smp Id: ICAL Level 5
Inj Date : 22-JUN-2021 21:22
Operator : LD Inst ID: msd3.i
Smp Info : 32mL 3018-2116
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:22 Cal File: 3062217.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level5.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.265)	83	5563	0.80000	0.8589	80.00- 120.00	100.00
1.395	1.395 (0.265)	69	4431			51.82- 111.82	79.65
1.479	1.479 (0.281)	51	14662			194.91- 254.91	263.56
8 Freon 12					CAS #: 75-71-8		
1.451	1.465 (0.275)	85	16534	0.80000	0.8719	80.00- 120.00	100.00
1.451	1.465 (0.275)	87	5762			2.63- 62.63	34.85
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.479	1.479 (0.281)	67	2252	0.80000	1.081	80.00- 120.00	100.00
1.479	1.479 (0.281)	51	14662			719.76- 779.76	651.07
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	11712	0.80000	0.8336	80.00- 120.00	100.00
1.563	1.562 (0.296)	137	3517			2.12- 62.12	30.03
12 Isobutane					CAS #: 75-28-5		
1.577	1.576 (0.299)	43	11751	0.80000	0.7952	80.00- 120.00	100.00(a)
1.577	1.576 (0.299)	42	4362			2.44- 62.44	37.12

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
12 Isobutane (continued)							
1.577	1.576 (0.299)	58	1502			0.00- 33.26	12.78
19 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.744 (0.331)	62	7532	0.80000	0.8931	80.00- 120.00	100.00
1.731	1.744 (0.328)	64	3136			1.28- 61.28	41.64
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.334)	54	7337	0.80000	0.9492	80.00- 120.00	100.00
1.758	1.758 (0.334)	39	9535			69.23- 129.23	129.96
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.453)	106	6541	0.80000	0.9020	80.00- 120.00	100.00
2.388	2.388 (0.453)	108	5865			63.14- 123.14	89.67
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.461)	101	16446	0.80000	0.8197	80.00- 120.00	100.00
2.430	2.430 (0.461)	103	11426			35.12- 95.12	69.48
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.464)	67	13606	0.80000	0.8483	80.00- 120.00	100.00
2.444	2.444 (0.464)	69	4613			0.74- 60.74	33.90
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.474)	43	13633	0.80000	0.8452	80.00- 120.00	100.00
2.500	2.500 (0.474)	57	2861			0.00- 45.97	20.99
2.500	2.500 (0.474)	72	1508			0.00- 38.10	11.06
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.530)	74	3418	0.80000	0.9452	80.00- 120.00	100.00
2.794	2.780 (0.530)	59	5820			147.68- 207.68	170.28
2.794	2.780 (0.530)	45	8319			206.40- 266.40	243.39
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.575)	151	11491	0.80000	0.8378	80.00- 120.00	100.00
3.032	3.032 (0.575)	153	7583			33.72- 93.72	65.99
3.032	3.032 (0.575)	101	14089			89.67- 149.67	122.61
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.060	3.074 (0.581)	96	7722	0.80000	0.9348	80.00- 120.00	100.00
3.074	3.074 (0.583)	98	4733			33.39- 93.39	61.29
3.060	3.074 (0.581)	61	12988			163.82- 223.82	168.19
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.671)	76	3517	0.80000	0.9939	80.00- 120.00	100.00
3.535	3.535 (0.671)	41	10236			338.06- 398.06	291.04

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.748)	73	20361	0.80000	0.9156	80.00- 120.00	100.00
3.941	3.941 (0.748)	57	5537			0.00- 58.86	27.19
3.941	3.941 (0.748)	41	6338			0.00- 57.27	31.13
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.753)	98	5379	0.80000	0.9676	80.00- 120.00	100.00
3.969	3.969 (0.753)	61	11688			244.59- 304.59	217.29
3.969	3.969 (0.753)	96	7294			129.84- 189.84	135.60
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.772)	52	5956	0.80000	0.8927	80.00- 120.00	100.00
4.067	4.067 (0.772)	53	4861			88.50- 148.50	81.62
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.790)	57	11890	0.80000	0.7888	80.00- 120.00	100.00(a)
4.165	4.179 (0.790)	43	9089			32.99- 92.99	76.44
4.179	4.179 (0.793)	86	1816			0.00- 42.56	15.27
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.846)	63	12612	0.80000	0.8136	80.00- 120.00	100.00
4.459	4.459 (0.846)	65	4509			0.76- 60.76	35.75
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.004 (0.950)	77	12297	0.80000	0.8515	80.00- 120.00	100.00
5.005	5.004 (0.950)	79	5551			2.00- 62.00	45.14
5.005	5.004 (0.950)	97	3992			0.00- 53.36	32.46
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.046 (0.958)	98	4999	0.80000	0.9071	80.00- 120.00	100.00
5.047	5.046 (0.958)	96	7390			127.22- 187.22	147.83
5.047	5.046 (0.958)	61	10523			283.85- 343.85	210.50
* 90 Bromochloromethane					CAS #: 74-97-5		
5.270	5.284 (1.000)	130	272204	25.0000		80.00- 120.00	100.00
5.270	5.284 (1.000)	128	209444			48.46- 108.46	76.94
5.270	5.270 (1.000)	49	404014			120.39- 180.39	148.42
89 Tetrahydrofuran					CAS #: 109-99-9		
5.284	5.270 (1.003)	42	8736	0.80000	0.8048	80.00- 120.00	100.00
5.284	5.270 (1.003)	71	4820			2.92- 62.92	55.17
5.284	5.270 (1.003)	72	3472			3.54- 63.54	39.74
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.013)	83	13139	0.80000	0.7699	80.00- 120.00	100.00(a)
5.340	5.340 (1.013)	85	9115			34.71- 94.71	69.37

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.032)	84	9339	0.80000	0.8657	80.00- 120.00	100.00
5.438	5.438 (1.032)	56	13508			120.40- 180.40	144.64
5.438	5.438 (1.032)	41	7608			54.20- 114.20	81.46
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.034)	97	15774	0.80000	0.8223	80.00- 120.00	100.00
5.452	5.466 (1.034)	99	10080			33.76- 93.76	63.90
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.058)	119	13227	0.80000	0.7486	80.00- 120.00	100.00(a)
5.578	5.578 (1.058)	117	14856			73.68- 133.68	112.32
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	3831	0.80000	0.8521	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	9872			231.09- 291.09	257.69
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.760	5.774 (1.093)	57	38194	0.80000	0.8102	80.00- 120.00	100.00
5.760	5.774 (1.093)	56	12051			1.12- 61.12	31.55
5.774	5.774 (1.096)	41	11237			0.00- 57.49	29.42
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	18962	0.80000	0.8411	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	5258			0.00- 53.80	27.73
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.104)	65	379972	25.0000	25.366	80.00- 120.00	100.00
5.816	5.816 (1.104)	67	185171			21.66- 81.66	48.73
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	11003	0.80000	0.8478	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	4135			1.20- 61.20	37.58
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	7082	0.80000	0.7976	80.00- 120.00	100.00(a)
5.942	5.942 (0.964)	43	15177			179.02- 239.02	214.30
5.942	5.942 (0.964)	57	8196			84.85- 144.85	115.73
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	987880	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	154426			0.00- 45.52	15.63
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.032)	95	10359	0.80000	0.9160	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	9499			74.96- 134.96	91.70

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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111 Trichloroethene (continued)							
6.362	6.362 (1.032)	97	6374			34.80- 94.80	61.53
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	5686	0.80000	1.088	80.00- 120.00	100.00
6.586	6.586 (1.068)	62	3461			52.03- 112.03	60.87
6.586	6.586 (1.068)	41	4388			79.97- 139.97	77.17
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	8883	0.80000	0.9911	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	11902			134.02- 194.02	133.99
6.664	6.664 (0.774)	100	2690			9.54- 69.54	30.28
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.699 (1.087)	88	4748	0.80000	0.8314	80.00- 120.00	100.00
6.700	6.699 (1.087)	58	4521			55.80- 115.80	95.22
6.700	6.699 (1.087)	57	1703			8.68- 68.68	35.87
118 Dibromomethane					CAS #: 74-95-3		
6.714	6.721 (0.780)	174	8375	0.80000	0.8390	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	8226			67.27- 127.27	98.22
6.714	6.721 (0.780)	95	7202			50.92- 110.92	85.99
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	15320	0.80000	0.8086	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	9492			34.31- 94.31	61.96
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.169)	75	11541	0.80000	0.8196	80.00- 120.00	100.00
7.215	7.208 (1.170)	77	4622			1.42- 61.42	40.05
7.208	7.208 (1.169)	39	7603			38.56- 98.56	65.88
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	13305	0.80000	0.8798	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	6080			15.60- 75.60	45.70
6.460	6.460 (1.048)	55	12160			78.53- 138.53	91.39
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	7965	0.80000	0.8318	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	20271			231.30- 291.30	254.50
7.316	7.316 (1.186)	85	3326			8.94- 68.94	41.76
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	1013202	25.0000	24.901	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	116440			0.00- 41.47	11.49
7.380	7.387 (1.197)	100	669730			36.47- 96.47	66.10

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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137 Toluene						CAS #: 108-88-3	
7.437	7.437 (1.206)	91	24265	0.80000	0.8022	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	14851			28.30- 88.30	61.20
136 Octane						CAS #: 111-65-9	
7.445	7.444 (1.207)	57	8300	0.80000	0.8247	80.00- 120.00	100.00
7.445	7.444 (1.207)	85	8637			67.11- 127.11	104.06
7.437	7.444 (1.206)	43	20072			214.21- 274.21	241.83
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
7.688	7.688 (0.893)	75	11323	0.80000	0.8255	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	4369			2.15- 62.15	38.59
7.688	7.688 (0.893)	39	7657			36.09- 96.09	67.62
141 1,1,2-Trichloroethane						CAS #: 79-00-5	
7.839	7.846 (0.910)	97	8646	0.80000	0.8196	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	5360			31.62- 91.62	61.99
7.846	7.846 (0.911)	83	7766			56.35- 116.35	89.82
142 Tetrachloroethene						CAS #: 127-18-4	
7.882	7.881 (0.915)	166	12139	0.80000	0.8320	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	9872			48.71- 108.71	81.32
7.874	7.881 (0.914)	131	8828			46.55- 106.55	72.72
144 1,3-Dichloropropane						CAS #: 142-28-9	
7.989	7.989 (1.296)	76	12215	0.80000	0.8464	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	13111			82.96- 142.96	107.34
7.989	7.989 (1.296)	78	4266			2.55- 62.55	34.92
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	16239	0.80000	0.8114	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	12828			47.77- 107.77	79.00
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.261	8.268 (0.959)	107	13011	0.80000	0.7942	80.00- 120.00	100.00(a)
8.261	8.268 (0.959)	109	12882			64.60- 124.60	99.01
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	931335	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	518350			25.46- 85.46	55.66
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	21477	0.80000	0.8437	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	6709			2.13- 62.13	31.24
8.634	8.641 (1.002)	77	14599			26.35- 86.35	67.98

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	10291	0.80000	0.8085	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	32077			282.48- 342.48	311.70
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	21434	0.80000	0.8688	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	19389			59.52- 119.52	90.46
8.705	8.705 (1.011)	85	6369			0.00- 59.76	29.71
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	13307	0.80000	0.8404	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	26472			171.36- 231.36	198.93
164 o-Xylene					CAS #: 95-47-6		
9.121	9.128 (1.059)	106	12162	0.80000	0.8090	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	26734			179.99- 239.99	219.82
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.062)	104	21835	0.80000	0.8384	80.00- 120.00	100.00
9.149	9.149 (1.062)	78	11448			19.09- 79.09	52.43
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	14748	0.80000	0.7772	80.00- 120.00	100.00(a)
9.350	9.350 (1.086)	171	7835			21.45- 81.45	53.13
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	39345	0.80000	0.8278	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	10793			0.00- 56.99	27.43
9.407	9.407 (1.092)	51	5195			0.00- 41.77	13.20
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	14868	0.80000	0.9940	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	4953			9.22- 69.22	33.31
9.579	9.579 (1.112)	42	8629			42.60- 102.60	58.04
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	618262	25.0000	25.098	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	759997			93.06- 153.06	122.92
9.601	9.601 (1.115)	176	579650			62.87- 122.87	93.75
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	19806	0.80000	0.8405	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	12524			34.35- 94.35	63.23
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.131)	156	12445	0.80000	0.8423	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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177 Bromobenzene (continued)							
9.730	9.737 (1.130)	158	12195			67.29- 127.29	97.99
9.730	9.729 (1.130)	77	19823			132.41- 192.41	159.28
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	45427	0.80000	0.8191	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	10884			0.00- 53.77	23.96
9.758	9.758 (1.133)	105	2279			0.00- 33.81	5.02
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	5740	0.80000	0.8086	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	18016			285.00- 345.00	313.87
9.787	9.787 (1.136)	61	5058			54.06- 114.06	88.12
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	5333	0.80000	0.9495	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	2077			21.19- 81.19	38.95
9.787	9.787 (1.136)	75	18016			372.45- 432.45	337.82
182 Decane					CAS #: 124-18-5		
9.816	9.808 (1.140)	57	24476	0.80000	0.8536	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	9202			4.13- 64.13	37.60
9.816	9.815 (1.140)	142	1267			0.00- 34.73	5.18
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	11430	0.80000	0.7951	80.00- 120.00	100.00(a)
9.851	9.851 (1.144)	105	38367			296.79- 356.79	335.67
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	9611	0.80000	0.8229	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	36422			336.29- 396.29	378.96
9.873	9.873 (1.146)	65	3999			38.83- 98.83	41.61
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.902	9.901 (1.150)	120	16869	0.80000	0.8355	80.00- 120.00	100.00
9.902	9.901 (1.150)	105	35487			176.40- 236.40	210.37
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	16440	0.80000	0.7950	80.00- 120.00	100.00(a)
10.109	10.102 (1.174)	103	9786			26.64- 86.64	59.53
189 tert-Butylbenzene					CAS #: 98-06-6		
10.167	10.174 (1.180)	119	31573	0.80000	0.8499	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	7634			0.00- 54.82	24.18
10.167	10.174 (1.180)	91	21604			36.92- 96.92	68.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	32978	0.80000	0.8283	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	15023			16.58- 76.58	45.55
192 sec-Butylbenzene					CAS #: 135-98-8		
10.353	10.360 (1.202)	134	10197	0.80000	0.8498	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	48258			451.53- 511.53	473.26
10.353	10.353 (1.202)	91	8204			46.48- 106.48	80.46
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	40402	0.80000	0.8040	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	11326			0.00- 56.79	28.03
10.467	10.467 (1.215)	91	9885			0.00- 54.04	24.47
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.221)	146	21976	0.80000	0.8125	80.00- 120.00	100.00
10.518	10.517 (1.221)	148	14046			33.53- 93.53	63.92
10.518	10.517 (1.221)	111	9550			11.05- 71.05	43.46
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	22766	0.80000	0.8171	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	15056			33.47- 93.47	66.13
10.596	10.596 (1.230)	111	9088			9.65- 69.65	39.92
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	29877	0.80000	0.7799	80.00- 120.00	100.00(a)
10.711	10.711 (1.244)	126	6621			0.00- 52.04	22.16
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	29237	0.80000	0.8652	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	25734			55.86- 115.86	88.02
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	10284	0.80000	0.7893	80.00- 120.00	100.00(a)
10.818	10.818 (1.256)	91	38305			331.99- 391.99	372.47
10.818	10.818 (1.256)	92	20988			161.01- 221.01	204.08
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.919	10.926 (1.268)	146	21022	0.80000	0.8043	80.00- 120.00	100.00
10.919	10.926 (1.268)	148	13579			33.23- 93.23	64.59
10.919	10.918 (1.268)	111	9180			12.36- 72.36	43.67
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	28096	0.98880	0.9833	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	23611			50.85- 110.85	84.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	19676	1.00720	1.060	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	18474			65.40- 125.40	93.89
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	15576	1.02960	1.111	80.00- 120.00	100.00
12.380	12.387 (1.437)	223	9805			33.70- 93.70	62.95
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	7246	0.10160	0.1278	80.00- 120.00	100.00(a)
12.559	12.552 (1.458)	127	730			0.00- 43.10	10.07
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.802 (1.487)	180	19480	1.06480	1.147	80.00- 120.00	100.00
12.803	12.802 (1.487)	182	18041			65.67- 125.67	92.61
12.803	12.802 (1.487)	145	7042			6.02- 66.02	36.15

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062217.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	272204	11.83
108 1,4-Difluorobenze	874076	524446	1223706	987880	13.02
153 Chlorobenzene-d5	831223	498734	1163712	931335	12.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.26
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062217.d

Page 1

Date : 22-JUN-2021 21:22

Client ID:

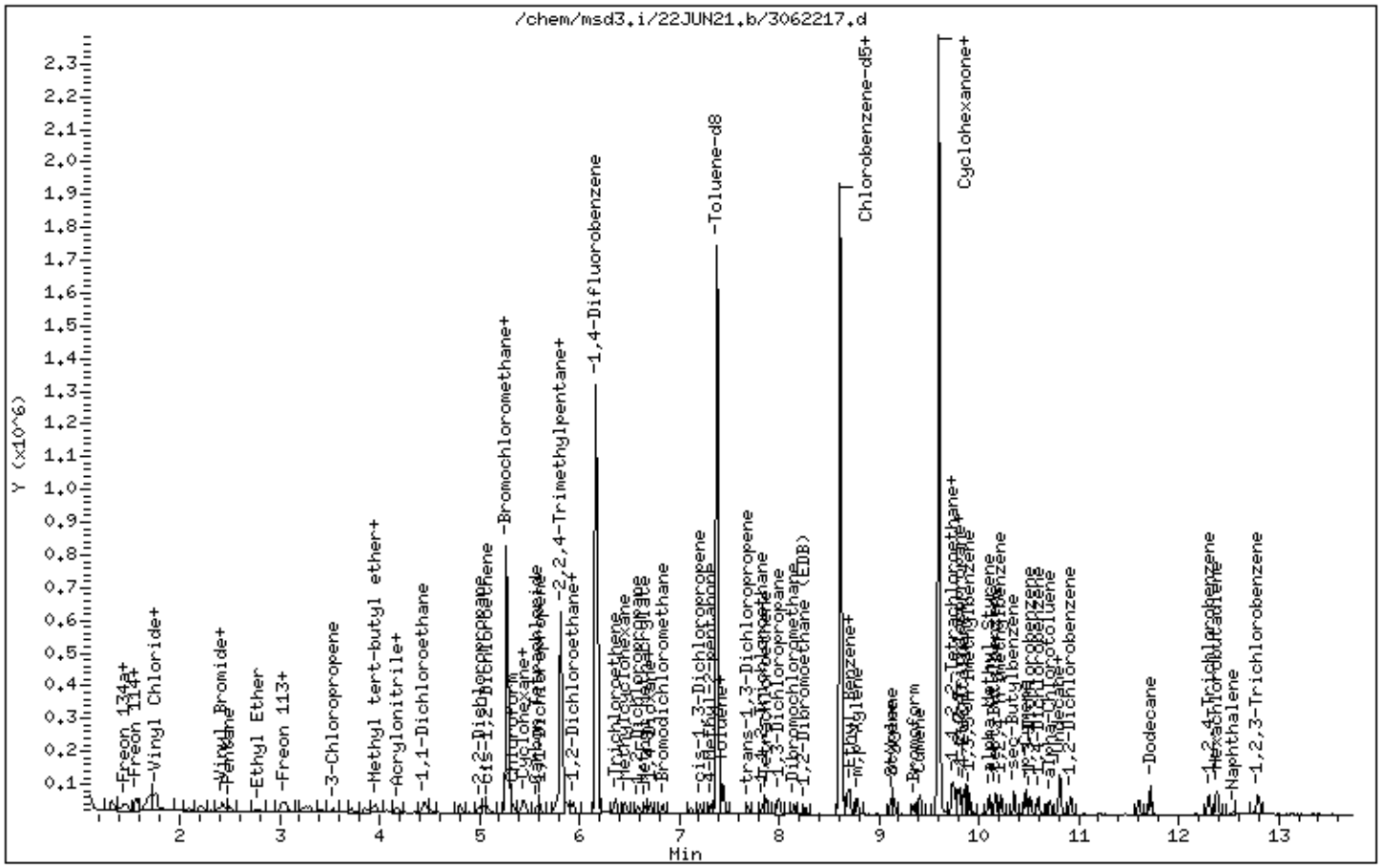
Instrument: msd3.i

Sample Info: 32mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051906.d
Lab Smp Id: ICAL Level 5
Inj Date : 19-MAY-2021 15:00
Operator : LD Inst ID: msdp.i
Smp Info : 200mL 3018-2045
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:43 Cal File: p051917.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.661	1.633 (0.287)	83	23995	5.00000	4.931	80.00- 120.00	100.00
1.661	1.633 (0.287)	69	22578			59.44- 119.44	94.09
1.759	1.745 (0.304)	51	102230			419.06- 479.06	426.05
5 Propylene					CAS #: 115-07-1		
1.689	1.675 (0.292)	41	35760	5.00000	4.916	80.00- 120.00	100.00
1.689	1.675 (0.292)	42	24631			35.28- 95.28	68.88
1.689	1.675 (0.292)	39	23528			38.35- 98.35	65.79
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	15753	5.00000	4.318	80.00- 120.00	100.00
1.759	1.745 (0.304)	51	102230			597.63- 657.63	648.96
1.717	1.703 (0.297)	47	10143			33.72- 93.72	64.39
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	74104	5.00000	5.482	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	24165			2.37- 62.37	32.61
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.745 (0.304)	67	7019	5.00000	5.292	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
9 Chlorodifluoromethane (continued)							
1.759	1.745 (0.304)	51	102230			1501.01-1561.01	1456.48
10 Freon 114					CAS #: 76-14-2		
1.857	1.856 (0.321)	135	74492	5.00000	5.312	80.00- 120.00	100.00
1.857	1.856 (0.321)	137	23699			2.30- 62.30	31.81
12 Isobutane					CAS #: 75-28-5		
1.871	1.870 (0.323)	43	83131	5.00000	5.099	80.00- 120.00	100.00
1.871	1.870 (0.323)	42	28746			2.44- 62.44	34.58
1.871	1.856 (0.323)	58	3128			0.00- 33.36	3.76
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	34644	5.00000	4.063	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	9203			0.00- 56.26	26.56
18 Butane					CAS #: 106-97-8		
2.032	2.025 (0.351)	58	10771	5.00000	5.513	80.00- 120.00	100.00
2.039	2.025 (0.352)	43	81676			823.29- 883.29	758.30
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	52333	5.00000	5.191	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	16408			0.00- 59.69	31.35
20 1,3-Butadiene					CAS #: 106-99-0		
2.104	2.089 (0.364)	54	34439	5.00000	4.748	80.00- 120.00	100.00
2.096	2.089 (0.362)	39	40510			52.37- 112.37	117.63
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.429)	94	37056	5.00000	5.477	80.00- 120.00	100.00
2.483	2.483 (0.429)	96	35000			64.07- 124.07	94.45
30 Chloroethane					CAS #: 75-00-3		
2.619	2.612 (0.453)	64	20225	5.00000	5.684	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	5966			0.04- 60.04	29.50
2.612	2.612 (0.452)	49	6111			4.54- 64.54	30.22
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	54200	5.00000	5.198	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	34951			34.12- 94.12	64.49
32 Vinyl Bromide					CAS #: 593-60-2		
2.849	2.841 (0.492)	106	30600	5.00000	5.302	80.00- 120.00	100.00
2.849	2.841 (0.492)	108	29476			69.27- 129.27	96.33
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	77104	5.00000	5.291	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.891	2.884 (0.500)	103	50811			34.72- 94.72	65.90
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.899 (0.502)	67	65512	5.00000	5.152	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	21322			0.84- 60.84	32.55
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	87490	5.00000	5.059	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	12542			0.00- 44.98	14.34
2.970	2.970 (0.513)	72	6373			0.00- 37.39	7.28
38 Ethyl Ether					CAS #: 60-29-7		
3.293	3.285 (0.569)	74	15538	5.00000	5.437	80.00- 120.00	100.00
3.293	3.285 (0.569)	59	30441			163.46- 223.46	195.91
3.285	3.285 (0.568)	45	42142			250.40- 310.40	271.22
39 Ethanol					CAS #: 64-17-5		
3.250	3.242 (0.562)	46	7863	5.00000	4.992	80.00- 120.00	100.00
3.285	3.242 (0.568)	45	41557			511.19- 571.19	528.51
42 Acrolein					CAS #: 107-02-8		
3.543	3.529 (0.612)	55	14233	5.00000	5.312	80.00- 120.00	100.00
3.543	3.529 (0.612)	56	18296			111.10- 171.10	128.55
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	56770	5.00000	5.289	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	35706			33.56- 93.56	62.90
3.550	3.550 (0.614)	101	68951			89.21- 149.21	121.46
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	33311	5.00000	5.191	80.00- 120.00	100.00
3.586	3.579 (0.620)	98	21526			34.02- 94.02	64.62
3.586	3.579 (0.620)	61	66191			168.77- 228.77	198.71
47 Acetone					CAS #: 67-64-1		
3.722	3.708 (0.643)	58	20489	5.00000	4.976	80.00- 120.00	100.00
3.722	3.708 (0.643)	43	68525			302.95- 362.95	334.45
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	91954	5.00000	5.292	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.801	3.794 (0.657)	142	34575	5.00000	3.786	80.00- 120.00	100.00
3.801	3.794 (0.657)	127	14689			12.22- 72.22	42.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.673)	45	81715	5.00000	5.020	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	14133			0.00- 47.19	17.30
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	15048	5.00000	5.111	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	60762			396.19- 456.19	403.79
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	39661	5.00000	5.288	80.00- 120.00	100.00
4.138	4.123 (0.715)	40	25399			20.95- 80.95	64.04
4.138	4.123 (0.715)	38	4002			0.00- 41.17	10.09
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	56613	5.00000	5.369	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	29850			22.03- 82.03	52.73
4.238	4.238 (0.733)	51	17301			0.18- 60.18	30.56
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.346	4.338 (0.751)	59	101502	5.00000	5.272	80.00- 120.00	100.00
4.346	4.338 (0.751)	41	20240			0.00- 51.11	19.94
4.346	4.338 (0.751)	57	10646			0.00- 40.49	10.49
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.453	4.446 (0.770)	73	95601	5.00000	5.059	80.00- 120.00	100.00
4.453	4.446 (0.770)	57	32712			3.10- 63.10	34.22
4.446	4.446 (0.768)	41	29468			1.28- 61.28	30.82
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	22139	5.00000	5.128	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	65349			255.84- 315.84	295.18
4.482	4.482 (0.775)	96	35688			127.59- 187.59	161.20
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.790)	52	31636	5.00000	5.067	80.00- 120.00	100.00
4.568	4.560 (0.790)	53	37230			88.05- 148.05	117.68
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.812)	57	78566	5.00000	5.242	80.00- 120.00	100.00
4.697	4.697 (0.812)	43	52548			37.52- 97.52	66.88
4.697	4.697 (0.812)	86	8762			0.00- 41.48	11.15
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	71027	5.00000	5.330	80.00- 120.00	100.00
4.969	4.962 (0.859)	65	20959			0.00- 59.70	29.51

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.954	4.954 (0.856)	45	175979	5.00000	5.056	80.00- 120.00	100.00
4.954	4.954 (0.856)	87	32174			0.00- 48.18	18.28
4.954	4.954 (0.856)	59	19101			0.00- 40.15	10.85
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.864)	86	8490	5.00000	5.067	80.00- 120.00	100.00
4.997	4.997 (0.864)	43	210809			2432.48-2492.48	2483.03
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.305	5.305 (0.917)	59	155272	5.00000	5.130	80.00- 120.00	100.00
5.313	5.305 (0.918)	87	47844			1.00- 61.00	30.81
5.305	5.305 (0.917)	41	29096			0.00- 48.73	18.74
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.506	5.506 (0.952)	77	57515	5.00000	5.111	80.00- 120.00	100.00
5.506	5.506 (0.952)	79	19126			2.28- 62.28	33.25
5.513	5.506 (0.953)	97	14288			0.00- 53.93	24.84
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.959)	98	23684	5.00000	5.416	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	37228			125.75- 185.75	157.19
5.549	5.549 (0.959)	61	88318			332.40- 392.40	372.90
86 2-Butanone						CAS #: 78-93-3	
5.563	5.556 (0.962)	72	18843	5.00000	5.301	80.00- 120.00	100.00
5.570	5.556 (0.963)	43	231029			1214.50-1274.50	1226.07
5.556	5.556 (0.960)	57	9599			14.68- 74.68	50.94
87 Ethyl Acetate						CAS #: 141-78-6	
5.578	5.570 (0.964)	45	18229	5.00000	5.206	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	88318			452.04- 512.04	484.49
5.578	5.570 (0.964)	70	9745			22.77- 82.77	53.46
89 Tetrahydrofuran						CAS #: 109-99-9	
5.778	5.771 (0.999)	42	62552	5.00000	5.248	80.00- 120.00	100.00
5.778	5.771 (0.999)	71	16889			0.00- 55.82	27.00
5.778	5.771 (0.999)	72	17687			0.00- 57.59	28.28
* 90 Bromochloromethane						CAS #: 74-97-5	
5.785	5.778 (1.000)	130	153560	25.0000		80.00- 120.00	100.00
5.785	5.778 (1.000)	128	120740			48.23- 108.23	78.63
5.785	5.778 (1.000)	49	285150			150.57- 210.57	185.69
92 Chloroform						CAS #: 67-66-3	
5.843	5.835 (1.010)	83	72304	5.00000	5.396	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.009)	85	48644			34.70- 94.70	67.28
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	48651	5.00000	5.230	80.00- 120.00	100.00
5.957	5.957 (1.030)	56	84034			142.57- 202.57	172.73
5.957	5.957 (1.030)	41	47136			62.09- 122.09	96.89
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.032)	97	76302	5.00000	5.101	80.00- 120.00	100.00
5.972	5.972 (1.032)	99	48638			34.02- 94.02	63.74
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.052)	119	68353	5.00000	4.926	80.00- 120.00	100.00
6.086	6.086 (1.052)	117	69130			70.64- 130.64	101.14
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.918)	110	21692	5.00000	5.091	80.00- 120.00	100.00
6.115	6.115 (0.917)	75	54412			226.85- 286.85	250.84
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.085)	57	268783	5.00000	5.166	80.00- 120.00	100.00
6.280	6.280 (1.085)	56	86771			2.24- 62.24	32.28
6.280	6.280 (1.085)	41	65018			0.00- 54.39	24.19
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	103868	5.00000	5.071	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	24431			0.00- 52.90	23.52
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	219202	25.0000	26.408	80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110588			27.21- 87.21	50.45
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	27837	5.00000	4.798	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	110361			372.79- 432.79	396.45
6.358	6.358 (0.954)	55	40445			112.09- 172.09	145.29
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	57760	5.00000	5.314	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	18494			0.79- 60.79	32.02
107 Heptane					CAS #: 142-82-5		
6.452	6.444 (0.968)	71	40838	5.00000	5.157	80.00- 120.00	100.00
6.452	6.444 (0.968)	43	109706			226.53- 286.53	268.64
6.452	6.444 (0.968)	57	53636			100.85- 160.85	131.34

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.659 (1.000)	114	614215	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	99192			0.00- 45.71	16.15
110 n-Butanol					CAS #: 71-36-3		
6.817	6.810 (1.023)	56	37585	5.00000	5.115	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	25791			40.99- 100.99	68.62
6.817	6.810 (1.023)	43	19657			27.38- 87.38	52.30
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	50753	5.00000	5.124	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	55306			76.29- 136.29	108.97
6.867	6.867 (1.030)	97	33227			33.63- 93.63	65.47
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.089 (1.064)	63	52290	5.00000	4.994	80.00- 120.00	100.00
7.096	7.089 (1.064)	62	37275			41.07- 101.07	71.29
7.096	7.089 (1.064)	41	32092			22.53- 82.53	61.37
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	42786	5.00000	5.002	80.00- 120.00	100.00
7.139	7.132 (0.755)	41	84724			179.84- 239.84	198.02
7.139	7.139 (0.755)	100	16675			9.59- 69.59	38.97
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.077)	88	29029	5.00000	5.128	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	30676			68.28- 128.28	105.67
7.175	7.175 (1.076)	57	10403			2.68- 62.68	35.84
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	48548	5.00000	5.183	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	44155			60.09- 120.09	90.95
7.204	7.204 (0.761)	95	37033			48.38- 108.38	76.28
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	79651	5.00000	5.195	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	50267			35.24- 95.24	63.11
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.691 (1.155)	75	66685	5.00000	5.188	80.00- 120.00	100.00
7.691	7.691 (1.154)	77	20474			2.42- 62.42	30.70
7.698	7.691 (1.155)	39	45208			37.16- 97.16	67.79
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	68708	5.00000	4.834	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	32707			15.78- 75.78	47.60

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.046)	55	78753			84.64- 144.64	114.62
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.791 (1.170)	58	52502	5.00000	5.020	80.00- 120.00	100.00
7.798	7.791 (1.170)	43	142064			242.35- 302.35	270.59
7.798	7.791 (1.170)	85	17584			3.24- 63.24	33.49
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	675430	25.0000	25.276	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	73047			0.00- 40.44	10.81
7.891	7.891 (1.184)	100	435947			34.95- 94.95	64.54
137 Toluene					CAS #: 108-88-3		
7.956	7.949 (1.193)	91	142004	5.00000	5.011	80.00- 120.00	100.00
7.956	7.949 (1.193)	92	83371			28.38- 88.38	58.71
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.192)	57	58129	5.00000	4.968	80.00- 120.00	100.00
7.949	7.949 (1.192)	85	50245			56.00- 116.00	86.44
7.949	7.949 (1.192)	43	157708			228.66- 288.66	271.31
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	61054	5.00000	4.981	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	20798			1.24- 61.24	34.06
8.214	8.214 (0.868)	39	41024			34.11- 94.11	67.19
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	49333	5.00000	4.984	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	30960			31.96- 91.96	62.76
8.400	8.400 (0.888)	83	42360			52.93- 112.93	85.87
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	71008	5.00000	4.897	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	56371			47.84- 107.84	79.39
8.464	8.464 (0.895)	131	53822			45.29- 105.29	75.80
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	73185	5.00000	5.071	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	139375			162.87- 222.87	190.44
8.586	8.586 (0.908)	100	11054			0.00- 45.94	15.10
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	69233	5.00000	5.146	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	91020			94.99- 154.99	131.47
8.579	8.579 (1.287)	78	23803			2.05- 62.05	34.38

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	146 Dibromochloromethane						CAS #: 124-48-1	
	8.801	8.801 (0.930)	129	91590	5.00000	4.835	80.00- 120.00	100.00
	8.801	8.801 (0.930)	127	70825			47.45- 107.45	77.33
	148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
	8.951	8.951 (0.946)	107	81392	5.00000	4.951	80.00- 120.00	100.00
	8.951	8.951 (0.946)	109	77262			64.21- 124.21	94.93
	151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
	7.605	7.605 (1.141)	63	98471	5.00000	5.098	80.00- 120.00	100.00
	7.605	7.605 (1.141)	65	28839			0.00- 59.64	29.29
	7.612	7.605 (1.142)	144	9784			0.00- 39.63	9.94
*	153 Chlorobenzene-d5						CAS #: 3114-55-4	
	9.460	9.460 (1.000)	117	619157	25.0000		80.00- 120.00	100.00
	9.460	9.460 (1.000)	82	334026			23.78- 83.78	53.95
	154 Chlorobenzene						CAS #: 108-90-7	
	9.496	9.496 (1.004)	112	124593	5.00000	5.059	80.00- 120.00	100.00
	9.496	9.496 (1.004)	114	38052			1.74- 61.74	30.54
	9.496	9.496 (1.004)	77	71532			25.04- 85.04	57.41
	155 Ethyl Benzene						CAS #: 100-41-4	
	9.567	9.567 (1.011)	106	62027	5.00000	4.807	80.00- 120.00	100.00
	9.567	9.567 (1.011)	91	188972			273.74- 333.74	304.66
	156 Nonane						CAS #: 111-84-2	
	9.603	9.596 (1.015)	43	159252	5.00000	4.835	80.00- 120.00	100.00
	9.603	9.603 (1.015)	57	134249			54.16- 114.16	84.30
	9.603	9.603 (1.015)	85	35745			0.00- 53.90	22.45
	158 m,p-Xylene						CAS #: 108-38-3	
	9.718	9.718 (1.027)	106	78963	5.00000	4.914	80.00- 120.00	100.00
	9.718	9.718 (1.027)	91	153333			163.73- 223.73	194.18
	164 o-Xylene						CAS #: 95-47-6	
	10.226	10.226 (1.081)	106	75798	5.00000	4.901	80.00- 120.00	100.00
	10.226	10.226 (1.081)	91	152985			177.45- 237.45	201.83
	165 Styrene						CAS #: 100-42-5	
	10.255	10.255 (1.084)	104	128486	5.00000	4.859	80.00- 120.00	100.00
	10.255	10.255 (1.084)	78	63172			17.88- 77.88	49.17
	167 Bromoform						CAS #: 75-25-2	
	10.549	10.542 (1.115)	173	90352	5.00000	4.922	80.00- 120.00	100.00
	10.549	10.542 (1.115)	171	45856			21.25- 81.25	50.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	240077	5.00000	4.956	80.00- 120.00	100.00
10.656	10.649 (1.126)	120	66515			0.00- 58.52	27.71
10.649	10.649 (1.126)	51	32083			0.00- 43.00	13.36
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	82861	5.00000	4.708	80.00- 120.00	100.00(a)
10.871	10.871 (1.149)	98	26897			1.94- 61.94	32.46
10.871	10.871 (1.149)	42	53882			37.89- 97.89	65.03
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	395495	25.0000	24.963	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	504864			95.92- 155.92	127.65
10.921	10.921 (1.154)	176	377124			66.89- 126.89	95.35
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	115941	5.00000	4.902	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	75106			35.20- 95.20	64.78
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	72185	5.00000	4.925	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	70501			67.21- 127.21	97.67
11.179	11.179 (1.182)	77	42638			29.02- 89.02	59.07
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	70283	5.00000	4.886	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	273213			366.49- 426.49	388.73
11.150	11.150 (1.179)	105	11389			0.00- 44.85	16.20
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	35448	5.00000	4.699	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	108981			280.55- 340.55	307.44
11.100	11.100 (1.173)	61	16930			15.49- 75.49	47.76
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	24562	5.00000	4.944	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	19278			49.11- 109.11	78.49
11.179	11.179 (1.182)	75	108981			426.44- 486.44	443.70
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	178943	5.00000	4.581	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	50239			0.00- 57.66	28.08
11.258	11.258 (1.190)	142	7536			0.00- 34.09	4.21
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	74542	5.00000	4.802	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
11.287	11.287 (1.193)	105	236331			284.55- 344.55	317.04
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	59824	5.00000	4.914	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	202772			315.17- 375.17	338.95
11.301	11.301 (1.195)	65	31085			21.55- 81.55	51.96
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	105493	5.00000	4.941	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	204343			164.93- 224.93	193.70
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	103352	5.00000	4.828	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	55037			25.30- 85.30	53.25
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	195585	5.00000	4.893	80.00- 120.00	100.00
11.745	11.738 (1.242)	134	47923			0.00- 54.25	24.50
11.738	11.738 (1.241)	91	122078			31.27- 91.27	62.42
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	197002	5.00000	4.852	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	100446			19.05- 79.05	50.99
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	61201	5.00000	4.936	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	289294			437.55- 497.55	472.69
11.996	11.996 (1.268)	91	43669			40.76- 100.76	71.35
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	263591	5.00000	4.820	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	69874			0.00- 55.54	26.51
12.160	12.153 (1.285)	91	57763			0.00- 51.48	21.91
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	138345	5.00000	4.901	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	88212			33.21- 93.21	63.76
12.196	12.196 (1.289)	111	57941			11.31- 71.31	41.88
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	139853	5.00000	4.937	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	90352			33.90- 93.90	64.60
12.311	12.311 (1.301)	111	54179			9.45- 69.45	38.74
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	190239	5.00000	4.969	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	42809			0.00- 53.26	22.50
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	220225	5.00000	4.896	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	195864			58.12- 118.12	88.94
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	68631	5.00000	4.849	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	231841			314.79- 374.79	337.81
12.626	12.626 (1.335)	92	123591			154.29- 214.29	180.08
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	136005	5.00000	4.972	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	85924			33.84- 93.84	63.18
12.733	12.741 (1.346)	111	58979			12.73- 72.73	43.37
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	79532	5.00000	4.858	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	66463			52.48- 112.48	83.57
13.600	13.600 (1.438)	155	62161			47.41- 107.41	78.16
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	213240	6.18000	6.559	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	173340			52.87- 112.87	81.29
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	130791	6.30000	6.544	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	126487			65.33- 125.33	96.71
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	92162	6.44000	6.665	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	58371			33.17- 93.17	63.34
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	32129	0.64000	0.6122	80.00- 120.00	100.00
14.761	14.768 (1.560)	127	4372			0.00- 42.88	13.61
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	118701	6.66000	6.782	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	113556			65.75- 125.75	95.67
15.069	15.069 (1.593)	145	41550			5.23- 65.23	35.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051906.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153560	-3.31
108 1,4-Difluorobenze	597103	358262	835944	614215	2.87
153 Chlorobenzene-d5	587747	352648	822846	619157	5.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.66	6.33	6.99	6.67	0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051906.d

Date : 19-MAY-2021 15:00

Client ID:

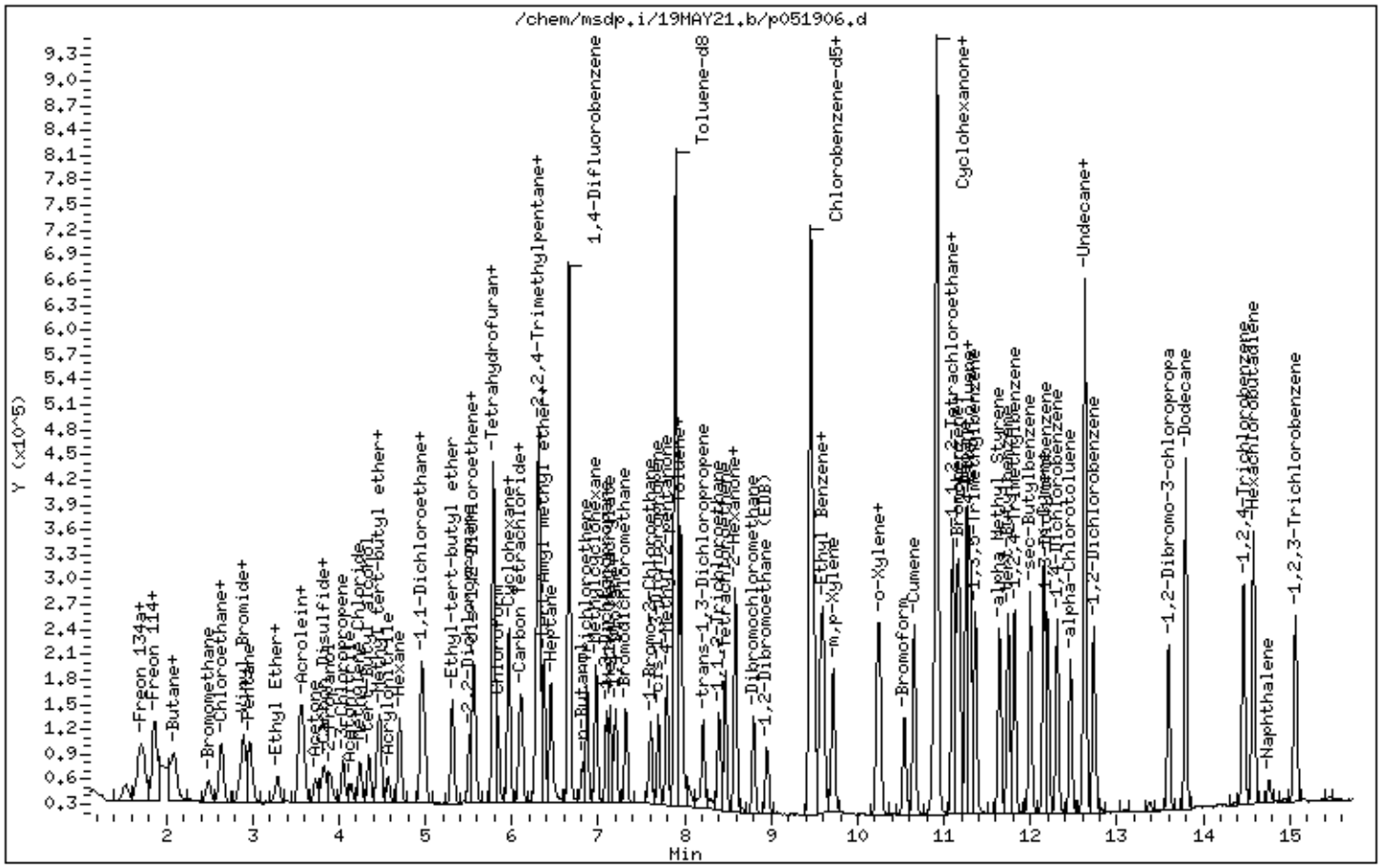
Instrument: msdp.i

Sample Info: 200mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051917.d
Lab Smp Id: ICAL Level 5
Inj Date : 19-MAY-2021 20:43
Operator : gh Inst ID: msdp.i
Smp Info : 200mL 3018-1928
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:43 Cal File: p051917.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.785	5.778 (1.000)	130	153596	25.0000		80.00- 120.00	100.00
5.785	5.778 (1.000)	128	120099			48.23- 108.23	78.19
5.785	5.778 (1.000)	49	277119			150.57- 210.57	180.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	607535	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95316			0.00- 45.71	15.69
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	599728	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	327307			23.78- 83.78	54.58
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	8816	5.00000	2.827	80.00- 120.00	100.00
1.605	1.590 (0.277)	69	21877			243.50- 303.50	248.15
1.605	1.590 (0.277)	64	2504			0.00- 54.06	28.40
6 Propane					CAS #: 74-98-6		
1.688	1.674 (0.292)	43	14059	5.00000	4.918	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.688	1.674 (0.292)	39	9149			34.98- 94.98	65.08
1.688	1.674 (0.292)	41	8274			25.22- 85.22	58.85
13 Freon 142b					CAS #: 75-68-3		
1.898	1.884 (0.328)	65	77411	5.00000	4.903	80.00- 120.00	100.00
1.898	1.884 (0.328)	45	23408			0.00- 59.77	30.24
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.502)	55	50218	5.00000	4.904	80.00- 120.00	100.00(a)
2.906	2.906 (0.502)	42	65836			105.17- 165.17	131.10
40 Freon 123a					CAS #: 354-23-4		
3.393	3.385 (0.586)	117	52612	5.00000	5.296	80.00- 120.00	100.00(a)
3.386	3.378 (0.585)	67	63816			104.69- 164.69	121.30
41 Freon 123					CAS #: 306-83-2		
3.486	3.479 (0.603)	83	68341	5.00000	4.967	80.00- 120.00	100.00
3.486	3.479 (0.603)	133	15880			0.00- 50.87	23.24
3.486	3.479 (0.603)	85	48933			36.08- 96.08	71.60
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.704)	67	78856	5.00000	5.332	80.00- 120.00	100.00
4.073	4.073 (0.704)	68	30336			6.76- 66.76	38.47
4.073	4.073 (0.704)	53	22763			0.00- 57.54	28.87
56 Methyl Acetate					CAS #: 79-20-9		
4.088	4.073 (0.707)	43	91822	5.00000	5.308	80.00- 120.00	100.00
4.088	4.073 (0.707)	74	13069			0.00- 44.13	14.23
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.868)	53	75220	5.00000	5.500	80.00- 120.00	100.00
5.019	5.019 (0.868)	88	29151			9.21- 69.21	38.75
5.019	5.019 (0.868)	50	18461			0.00- 54.25	24.54
75 1-Propanol					CAS #: 71-23-8		
5.090	5.083 (0.880)	59	10283	5.00000	4.824	80.00- 120.00	100.00
5.090	5.083 (0.880)	42	8877			63.23- 123.23	86.33
5.090	5.083 (0.880)	41	5590			24.74- 84.74	54.36
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.973)	55	95932	5.00000	5.264	80.00- 120.00	100.00
5.628	5.620 (0.973)	85	11014			0.00- 41.28	11.48
5.628	5.620 (0.973)	58	7843			0.00- 38.22	8.18
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.079)	39	10867	5.00000	4.807	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.079)	43	49327			448.18- 508.18	453.92
6.244	6.244 (1.079)	41	33984			299.99- 359.99	312.73
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.938 (0.734)	99	7111	5.00000	4.971	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	13011			149.95- 209.95	182.97
6.938	6.938 (0.733)	55	133152			1849.07-1909.07	1872.48
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	159681	5.00000	5.193	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	12244			0.00- 37.44	7.67
7.032	7.031 (0.743)	86	19990			0.00- 42.78	12.52
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	77293	5.00000	4.991	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	23632			0.00- 59.10	30.57
8.665	8.657 (1.301)	43	188441			215.30- 275.30	243.80
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	63705	5.00000	4.810	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	599728			57.42- 117.42	941.41
9.596	9.596 (1.014)	95	23461			5.70- 65.70	36.83
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.791)	58	116686	5.00000	5.161	80.00- 120.00	100.00
10.362	10.362 (1.791)	43	191827			136.03- 196.03	164.40
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	41323	5.00000	3.808	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	28530			39.41- 99.41	69.04
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	63397	5.00000	5.120	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	187470			295.02- 355.02	295.71
11.444	11.444 (1.210)	63	25896			11.82- 71.82	40.85
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	88020	5.00000	4.917	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	198476			192.40- 252.40	225.49
12.318	12.318 (1.302)	77	22835			0.00- 54.69	25.94
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	21359	5.00000	3.532	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	28923			102.99- 162.99	135.41

				AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	128059	5.00000	5.049	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	121863			65.24- 125.24	95.16
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	114218	5.00000	4.871	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	34098			0.00- 58.21	29.85
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	58870	5.00000	4.306	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	187470			153.57- 213.57	318.45

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051917.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153596	-3.28
108 1,4-Difluorobenze	597103	358262	835944	607535	1.75
153 Chlorobenzene-d5	587747	352648	822846	599728	2.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051917.d

Date : 19-MAY-2021 20:43

Client ID:

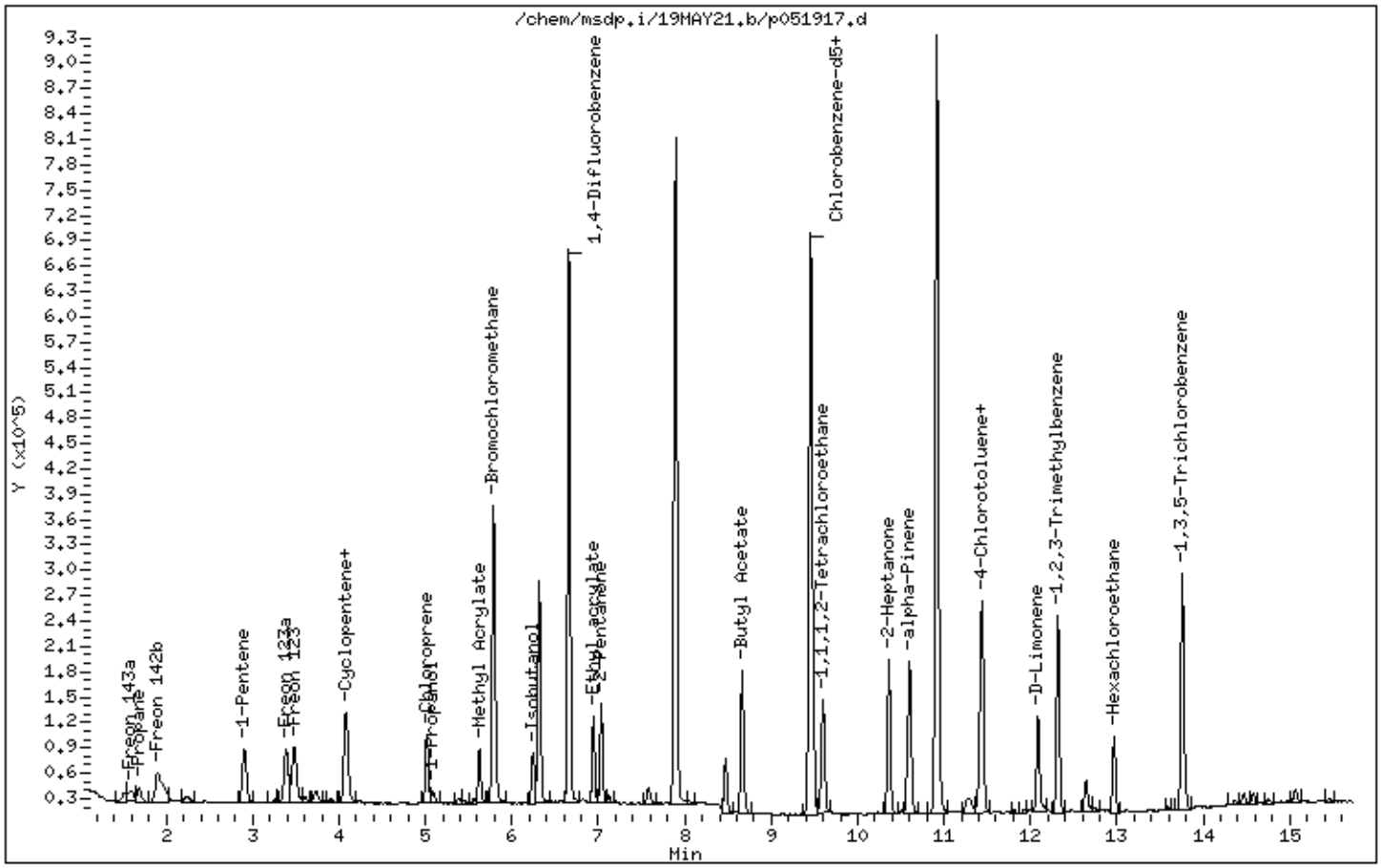
Instrument: msdp.i

Sample Info: 200mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062207.d
Lab Smp Id: ICAL Level 6
Inj Date : 22-JUN-2021 16:44
Operator : LD Inst ID: msd3.i
Smp Info : 80mL 3018-2078
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:49 Cal File: 3062218.d
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.270	5.284 (1.000)	130	289885	25.0000		80.00- 120.00	100.00
5.270	5.284 (1.000)	128	226876			48.46- 108.46	78.26
5.270	5.270 (1.000)	49	433966			120.39- 180.39	149.70
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	1078094	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	166843			0.00- 45.52	15.48
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	1013628	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	556752			25.46- 85.46	54.93
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.257)	65	9112	2.00000	1.879	80.00- 120.00	100.00(a)
1.353	1.353 (0.257)	69	25781			217.09- 277.09	282.93
1.353	1.353 (0.257)	64	3486			0.00- 55.87	38.26
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.273)	43	5991	2.00000	2.268	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.423	1.422 (0.270)	39	5192			41.62- 101.62	86.66
1.423	1.422 (0.270)	41	5108			22.97- 82.97	85.26
13 Freon 142b					CAS #: 75-68-3		
1.605	1.604 (0.304)	65	31251	2.00000	2.027	80.00- 120.00	100.00
1.605	1.604 (0.304)	45	8855			0.00- 58.17	28.34
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.464)	55	19586	2.00000	2.000	80.00- 120.00	100.00(a)
2.444	2.444 (0.464)	42	30145			99.17- 159.17	153.91
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.546)	117	22862	2.00000	2.005	80.00- 120.00	100.00(a)
2.878	2.878 (0.546)	67	30241			103.13- 163.13	132.28
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.565)	83	33539	2.00000	2.005	80.00- 120.00	100.00
2.976	2.976 (0.565)	133	8415			0.00- 51.81	25.09
2.976	2.976 (0.565)	85	25176			37.13- 97.13	75.06
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.673)	67	35921	2.00000	2.018	80.00- 120.00	100.00
3.549	3.549 (0.673)	68	15513			7.90- 67.90	43.19
3.549	3.549 (0.673)	53	8899			0.00- 54.87	24.77
56 Methyl Acetate					CAS #: 79-20-9		
3.591	3.577 (0.681)	43	38592	2.00000	2.104	80.00- 120.00	100.00(a)
3.591	3.577 (0.681)	74	7357			0.00- 47.15	19.06
74 Chloroprene					CAS #: 126-99-8		
4.501	4.515 (0.854)	53	30781	2.00000	1.981	80.00- 120.00	100.00(a)
4.501	4.515 (0.854)	88	13327			12.33- 72.33	43.30
4.501	4.515 (0.854)	50	10224			0.00- 57.62	33.22
75 1-Propanol					CAS #: 71-23-8		
4.627	4.613 (0.878)	59	6485	2.00000	2.700	80.00- 120.00	100.00
4.627	4.613 (0.878)	42	4281			53.89- 113.89	66.01
4.585	4.613 (0.870)	41	119			24.09- 84.09	1.84
88 Methyl Acrylate					CAS #: 96-33-3		
5.145	5.130 (0.976)	55	38691	2.00000	2.072	80.00- 120.00	100.00(a)
5.145	5.130 (0.976)	85	6532			0.00- 43.24	16.88
5.131	5.130 (0.973)	58	5015			0.00- 38.83	12.96
103 Isobutanol					CAS #: 78-83-1		
5.788	5.774 (1.098)	39	11582	2.00000	3.376	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.788	5.774 (1.098)	43	23653			327.69- 387.69	204.22
5.788	5.774 (1.098)	41	18940			237.56- 297.56	163.53
113 Ethyl acrylate					CAS #: 140-88-5		
6.460	6.474 (0.750)	99	3656	2.00000	2.257	80.00- 120.00	100.00
6.460	6.460 (0.750)	45	5038			124.67- 184.67	137.80
6.460	6.460 (0.750)	55	60018			1601.30-1661.30	1641.63
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	90325	2.00000	2.384	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	7067			0.00- 37.25	7.82
6.558	6.557 (0.761)	86	12465			0.00- 45.08	13.80
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.308)	56	32281	2.00000	2.271	80.00- 120.00	100.00(a)
8.068	8.068 (1.308)	73	11495			5.16- 65.16	35.61
8.068	8.068 (1.308)	43	75753			214.00- 274.00	234.67
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.012)	131	28819	2.00000	1.890	80.00- 120.00	100.00(a)
8.705	8.712 (1.011)	117	23948			38.22- 98.22	83.10
8.705	8.712 (1.011)	95	10938			7.54- 67.54	37.95
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.750)	58	48202	2.00000	2.265	80.00- 120.00	100.00
9.221	9.221 (1.750)	43	77902			133.36- 193.36	161.62
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.210)	68	33744	2.00000	1.832	80.00- 120.00	100.00(a)
10.417	10.424 (1.210)	93	24954			42.08- 102.08	73.95
186 4-Chlorotoluene					CAS #: 106-43-4		
9.966	9.973 (1.157)	126	26881	2.00000	2.025	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	88725			305.94- 365.94	330.07
9.966	9.966 (1.157)	63	12715			15.44- 75.44	47.30
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.230)	120	35829	2.00000	1.969	80.00- 120.00	100.00(a)
10.589	10.596 (1.230)	105	84796			206.43- 266.43	236.67
10.589	10.596 (1.230)	77	11184			0.00- 58.29	31.21
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.289)	201	20332	2.00000	1.831	80.00- 120.00	100.00(a)
11.098	11.098 (1.289)	117	28407			109.77- 169.77	139.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.728 (1.361)	180	51309	2.00000	2.119	80.00- 120.00	100.00
11.721	11.728 (1.361)	182	47707			65.79- 125.79	92.98
210 alpha-Pinene					CAS #: 80-56-8		
9.364	9.371 (1.087)	93	62865	2.00000	2.006	80.00- 120.00	100.00
9.364	9.371 (1.087)	77	18260			0.13- 60.13	29.05
214 beta-Pinene					CAS #: 127-91-3		
9.945	9.944 (1.155)	93	48258	2.00000	1.960	80.00- 120.00	100.00(a)
9.966	9.966 (1.157)	91	88725			145.95- 205.95	183.86

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062207.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	289885	19.10
108 1,4-Difluorobenze	874076	524446	1223706	1078094	23.34
153 Chlorobenzene-d5	831223	498734	1163712	1013628	21.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.26
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062207.d

Page 1

Date : 22-JUN-2021 16:44

Client ID:

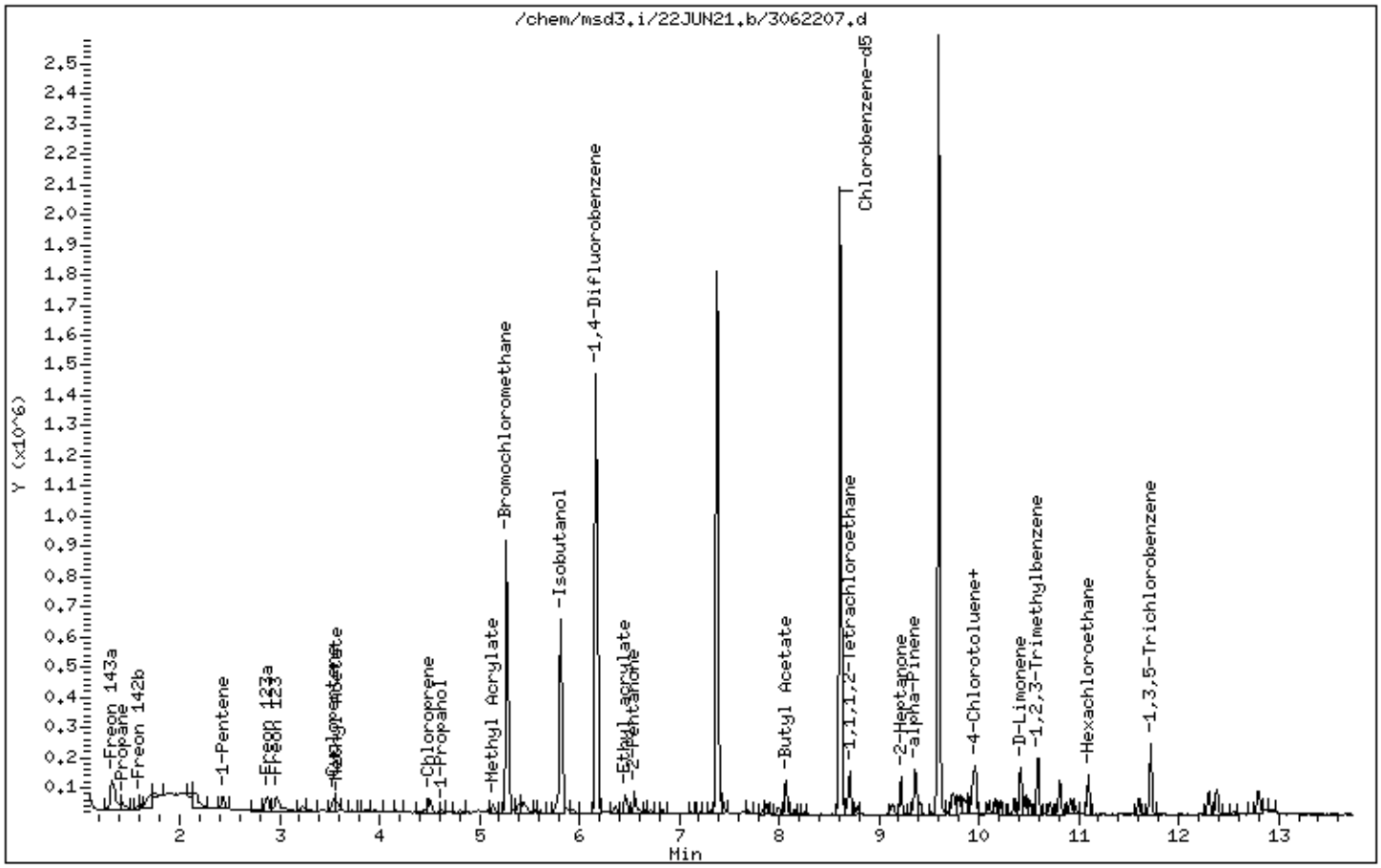
Instrument: msd3.i

Sample Info: 80mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062218.d
Lab Smp Id: ICAL Level 6
Inj Date : 22-JUN-2021 21:49
Operator : LD Inst ID: msd3.i
Smp Info : 80mL 3018-2116
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 21:49 Cal File: 3062218.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	12527	2.00000	2.033	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	10184			51.82- 111.82	81.30
1.493	1.479 (0.282)	51	30849			194.91- 254.91	246.26
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	13499	2.00000	2.158	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	8457			35.61- 95.61	62.65
1.437	1.423 (0.272)	39	10196			42.66- 102.66	75.53
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	9568	2.00000	2.347	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	30849			321.86- 381.86	322.42
1.451	1.437 (0.275)	47	7395			45.34- 105.34	77.29
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	35619	2.00000	1.975	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	12194			2.63- 62.63	34.23
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	3999	2.00000	2.017	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
9 Chlorodifluoromethane (continued)							
1.493	1.479 (0.282)	51	30849			719.76- 779.76	771.42
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	27960	2.00000	2.092	80.00- 120.00	100.00
1.563	1.562 (0.296)	137	9352			2.12- 62.12	33.45
12 Isobutane					CAS #: 75-28-5		
1.577	1.576 (0.298)	43	29938	2.00000	2.130	80.00- 120.00	100.00
1.577	1.576 (0.298)	42	9552			2.44- 62.44	31.91
1.577	1.576 (0.298)	58	2044			0.00- 33.26	6.83
15 Chloromethane					CAS #: 74-87-3		
1.647	1.646 (0.312)	50	17143	2.00000	2.287	80.00- 120.00	100.00
1.647	1.646 (0.312)	52	5650			2.41- 62.41	32.96
18 Butane					CAS #: 106-97-8		
1.703	1.702 (0.322)	58	4166	2.00000	2.353	80.00- 120.00	100.00
1.703	1.702 (0.322)	43	35051			727.41- 787.41	841.36
19 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.744 (0.330)	62	16334	2.00000	2.036	80.00- 120.00	100.00
1.745	1.744 (0.330)	64	5799			1.28- 61.28	35.50
20 1,3-Butadiene					CAS #: 106-99-0		
1.759	1.758 (0.333)	54	15099	2.00000	2.054	80.00- 120.00	100.00
1.759	1.758 (0.333)	39	18165			69.23- 129.23	120.31
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	13943	2.00000	2.198	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	12872			62.78- 122.78	92.32
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	8314	2.00000	2.208	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	3518			1.44- 61.44	42.31
2.192	2.206 (0.415)	49	3656			4.12- 64.12	43.97
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	20620	2.00000	2.141	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	14321			38.82- 98.82	69.45
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	14365	2.00000	2.082	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	13693			63.14- 123.14	95.32
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	40281	2.00000	2.111	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.430	2.430 (0.460)	103	26149			35.12- 95.12	64.92
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	32346	2.00000	2.120	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	12285			0.74- 60.74	37.98
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	32710	2.00000	2.132	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	5841			0.00- 45.97	17.86
2.500	2.500 (0.473)	72	3353			0.00- 38.10	10.25
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	7733	2.00000	2.248	80.00- 120.00	100.00
2.794	2.780 (0.529)	59	13463			147.68- 207.68	174.10
2.780	2.780 (0.526)	45	15377			206.40- 266.40	198.85
39 Ethanol					CAS #: 64-17-5		
2.780	2.766 (0.526)	46	4305	2.00000	2.788	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	15543			523.01- 583.01	361.05
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	5657	2.00000	2.208	80.00- 120.00	100.00
3.046	3.032 (0.576)	56	7738			110.33- 170.33	136.79
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	26736	2.00000	2.049	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	17279			33.72- 93.72	64.63
3.032	3.032 (0.574)	101	32869			89.67- 149.67	122.94
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	16520	2.00000	2.102	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	10176			33.39- 93.39	61.60
3.074	3.074 (0.582)	61	30134			163.82- 223.82	182.41
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	10661	2.00000	2.456	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	29629			299.66- 359.66	277.92
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.297 (0.624)	76	42623	2.00000	2.180	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.269 (0.619)	142	34373	2.00000	2.033	80.00- 120.00	100.00
3.270	3.269 (0.619)	127	15306			14.58- 74.58	44.53

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.410	3.395 (0.645)	45	32159	2.00000	2.060	80.00- 120.00	100.00
3.410	3.395 (0.645)	43	7570			0.00- 48.61	23.54
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	7206	2.00000	2.141	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	24505			338.06- 398.06	340.06
57 Acetonitrile					CAS #: 75-05-8		
3.647	3.633 (0.690)	41	14594	2.00000	2.135	80.00- 120.00	100.00
3.647	3.633 (0.690)	40	8254			21.81- 81.81	56.56
3.647	3.633 (0.690)	38	2096			0.00- 41.86	14.36
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	23256	2.00000	2.238	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	14521			30.77- 90.77	62.44
3.717	3.717 (0.703)	51	8384			1.39- 61.39	36.05
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.871	3.857 (0.733)	59	42838	2.00000	2.186	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	7649			0.00- 51.05	17.86
3.857	3.857 (0.730)	57	4880			0.00- 41.68	11.39
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	44430	2.00000	2.100	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	12345			0.00- 58.86	27.79
3.941	3.941 (0.746)	41	13055			0.00- 57.27	29.38
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	10676	2.00000	2.019	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	27646			244.59- 304.59	258.95
3.969	3.969 (0.751)	96	15803			129.84- 189.84	148.02
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	13614	2.00000	2.145	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	12537			88.50- 148.50	92.09
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	28960	2.00000	2.020	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	19813			32.99- 92.99	68.42
4.179	4.179 (0.791)	86	3928			0.00- 42.56	13.56
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	30061	2.00000	2.039	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	9575			0.76- 60.76	31.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.445	4.445 (0.841)	45	62946	2.00000	2.080	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	13914			0.00- 51.37	22.10
4.445	4.445 (0.841)	59	8128			0.00- 41.09	12.91
73 Vinyl Acetate						CAS #: 108-05-4	
4.501	4.501 (0.852)	86	4157	2.00000	2.293	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	51442			1391.63-1451.63	1237.48
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
4.809	4.809 (0.910)	59	62324	2.00000	2.133	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	19376			3.22- 63.22	31.09
4.809	4.809 (0.910)	41	11767			0.00- 48.12	18.88
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.005	5.004 (0.947)	77	28668	2.00000	2.087	80.00- 120.00	100.00
5.005	5.004 (0.947)	79	9974			2.00- 62.00	34.79
5.005	5.004 (0.947)	97	7911			0.00- 53.36	27.60
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.047	5.046 (0.955)	98	11370	2.00000	2.169	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	15084			127.22- 187.22	132.66
5.047	5.046 (0.955)	61	25421			283.85- 343.85	223.58
86 2-Butanone						CAS #: 78-93-3	
5.075	5.074 (0.960)	72	7851	2.00000	2.144	80.00- 120.00	100.00
5.089	5.074 (0.963)	43	78294			1055.75-1115.75	997.25
5.075	5.074 (0.960)	57	3411			10.59- 70.59	43.45
87 Ethyl Acetate						CAS #: 141-78-6	
5.089	5.088 (0.963)	45	5709	2.00000	1.891	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	25421			450.31- 510.31	445.28
5.089	5.088 (0.963)	70	4574			30.42- 90.42	80.12
89 Tetrahydrofuran						CAS #: 109-99-9	
5.284	5.270 (1.000)	42	21705	2.00000	2.102	80.00- 120.00	100.00
5.284	5.270 (1.000)	71	8067			2.92- 62.92	37.17
5.284	5.270 (1.000)	72	7888			3.54- 63.54	36.34
* 90 Bromochloromethane						CAS #: 74-97-5	
5.284	5.284 (1.000)	130	258917	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	201783			48.46- 108.46	77.93
5.270	5.270 (1.000)	49	385968			120.39- 180.39	149.07
92 Chloroform						CAS #: 67-66-3	
5.340	5.340 (1.011)	83	33357	2.00000	2.055	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.011)	85	21529			34.71- 94.71	64.54
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	20996	2.00000	2.046	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	29244			120.40- 180.40	139.28
5.438	5.438 (1.029)	41	17106			54.20- 114.20	81.47
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.032)	97	36438	2.00000	1.997	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	22845			33.76- 93.76	62.70
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	33059	2.00000	1.967	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	33894			73.68- 133.68	102.53
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	8789	2.00000	2.041	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	23996			231.09- 291.09	273.02
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	89726	2.00000	2.001	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	27046			1.12- 61.12	30.14
5.774	5.774 (1.093)	41	25210			0.00- 57.49	28.10
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	43228	2.00000	2.002	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	11463			0.00- 53.80	26.52
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	359531	25.0000	25.233	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173715			21.66- 81.66	48.32
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	12051	2.00000	2.094	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	46557			365.20- 425.20	386.33
5.858	5.858 (0.950)	55	13263			91.31- 151.31	110.06
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	25443	2.00000	2.047	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	8919			1.20- 61.20	35.05
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	15716	2.00000	1.848	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	33799			179.02- 239.02	215.06
5.942	5.942 (0.964)	57	17903			84.85- 144.85	113.92

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.166	6.180 (1.000)	114	946034	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	148259			0.00- 45.52	15.67
110 n-Butanol						CAS #: 71-36-3	
6.362	6.348 (1.032)	56	14330	2.00000	2.071	80.00- 120.00	100.00
6.362	6.348 (1.032)	41	10628			40.21- 100.21	74.17
6.348	6.348 (1.030)	43	7980			25.00- 85.00	55.69
111 Trichloroethene						CAS #: 79-01-6	
6.362	6.362 (1.032)	95	22037	2.00000	2.035	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	22117			74.96- 134.96	100.36
6.362	6.362 (1.032)	97	14434			34.80- 94.80	65.50
114 1,2-Dichloropropane						CAS #: 78-87-5	
6.586	6.586 (1.068)	63	11804	2.00000	2.359	80.00- 120.00	100.00
6.586	6.586 (1.068)	62	7528			52.03- 112.03	63.77
6.586	6.586 (1.068)	41	8139			79.97- 139.97	68.95
116 Methyl Methacrylate						CAS #: 80-62-6	
6.664	6.664 (0.774)	69	16998	2.00000	1.970	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	28082			134.02- 194.02	165.21
6.664	6.664 (0.774)	100	6257			9.54- 69.54	36.81
117 1,4-Dioxane						CAS #: 123-91-1	
6.700	6.699 (1.087)	88	11392	2.00000	2.083	80.00- 120.00	100.00
6.700	6.699 (1.087)	58	9905			55.80- 115.80	86.95
6.700	6.699 (1.087)	57	3944			8.68- 68.68	34.62
118 Dibromomethane						CAS #: 74-95-3	
6.714	6.721 (0.780)	174	18752	2.00000	1.952	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	19344			67.27- 127.27	103.16
6.714	6.721 (0.780)	95	16647			50.92- 110.92	88.77
122 Bromodichloromethane						CAS #: 75-27-4	
6.836	6.836 (1.109)	83	35603	2.00000	1.962	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	22516			34.31- 94.31	63.24
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.208	7.208 (1.169)	75	26840	2.00000	1.990	80.00- 120.00	100.00
7.208	7.208 (1.169)	77	9456			1.42- 61.42	35.23
7.208	7.208 (1.169)	39	18349			38.56- 98.56	68.36
127 Methylcyclohexane						CAS #: 108-87-2	
6.460	6.460 (1.048)	83	28700	2.00000	1.982	80.00- 120.00	100.00(a)
6.460	6.460 (1.048)	98	13249			15.60- 75.60	46.16

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.460	6.460 (1.048)	55	28200			78.53- 138.53	98.26
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	17181	2.00000	1.874	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	45888			231.30- 291.30	267.09
7.316	7.316 (1.186)	85	7262			8.94- 68.94	42.27
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	970823	25.0000	24.915	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	111479			0.00- 41.47	11.48
7.387	7.387 (1.198)	100	636499			36.47- 96.47	65.56
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	57171	2.00000	1.974	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	33030			28.30- 88.30	57.77
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.207)	57	18179	2.00000	1.886	80.00- 120.00	100.00
7.445	7.444 (1.207)	85	18740			67.11- 127.11	103.09
7.445	7.444 (1.207)	43	45414			214.21- 274.21	249.82
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	26352	2.00000	1.996	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	9021			2.15- 62.15	34.23
7.688	7.688 (0.893)	39	17627			36.09- 96.09	66.89
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	19996	2.00000	1.969	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	12392			31.62- 91.62	61.97
7.839	7.846 (0.910)	83	17818			56.35- 116.35	89.11
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.915)	166	27680	2.00000	1.971	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	22388			48.71- 108.71	80.88
7.882	7.881 (0.915)	131	21304			46.55- 106.55	76.97
143 2-Hexanone					CAS #: 591-78-6		
8.010	8.003 (0.930)	58	22942	2.00000	1.967	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	45796			157.91- 217.91	199.62
8.010	8.003 (0.930)	100	4202			0.00- 47.86	18.32
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	27424	2.00000	1.984	80.00- 120.00	100.00(a)
7.989	7.989 (1.296)	41	30899			82.96- 142.96	112.67
7.989	7.989 (1.296)	78	8899			2.55- 62.55	32.45

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	38430	2.00000	1.995	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	29685			47.77- 107.77	77.24
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.960)	107	31730	2.00000	2.012	80.00- 120.00	100.00
8.261	8.268 (0.959)	109	29448			64.60- 124.60	92.81
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.154)	63	36254	2.00000	2.070	80.00- 120.00	100.00
7.115	7.115 (1.154)	65	11738			0.95- 60.95	32.38
7.122	7.122 (1.155)	144	3735			0.00- 40.45	10.30
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	896463	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	496632			25.46- 85.46	55.40
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	47809	2.00000	1.951	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	15417			2.13- 62.13	32.25
8.641	8.641 (1.003)	77	36657			26.35- 86.35	76.67
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.008)	106	24773	2.00000	2.022	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	76793			282.48- 342.48	309.99
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.011)	43	47836	2.00000	2.014	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	41901			59.52- 119.52	87.59
8.705	8.705 (1.011)	85	14792			0.00- 59.76	30.92
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	29681	2.00000	1.947	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	60240			171.36- 231.36	202.96
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	28420	2.00000	1.964	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	58681			179.99- 239.99	206.48
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.062)	104	47987	2.00000	1.914	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	24297			19.09- 79.09	50.63
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.086)	173	35291	2.00000	1.932	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	17840			21.45- 81.45	50.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	89737	2.00000	1.962	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	24498			0.00- 56.99	27.30
9.407	9.407 (1.092)	51	11332			0.00- 41.77	12.63
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	31083	2.00000	2.159	80.00- 120.00	100.00(a)
9.579	9.579 (1.112)	98	11891			9.22- 69.22	38.26
9.579	9.579 (1.112)	42	20956			42.60- 102.60	67.42
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	586034	25.0000	24.715	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	730126			93.06- 153.06	124.59
9.601	9.601 (1.115)	176	549908			62.87- 122.87	93.84
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	45479	2.00000	2.005	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	28003			34.35- 94.35	61.57
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.131)	156	28306	2.00000	1.990	80.00- 120.00	100.00(a)
9.737	9.737 (1.131)	158	27654			67.29- 127.29	97.70
9.730	9.729 (1.130)	77	45934			132.41- 192.41	162.28
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	107489	2.00000	2.014	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	25682			0.00- 53.77	23.89
9.758	9.758 (1.133)	105	4623			0.00- 33.81	4.30
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	13498	2.00000	1.976	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	40201			285.00- 345.00	297.83
9.787	9.787 (1.136)	61	11873			54.06- 114.06	87.96
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	11078	2.00000	2.049	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	5431			21.19- 81.19	49.03
9.787	9.787 (1.136)	75	40201			372.45- 432.45	362.89
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	56155	2.00000	2.034	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	19932			4.13- 64.13	35.49
9.816	9.815 (1.140)	142	2636			0.00- 34.73	4.69
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	27536	2.00000	1.990	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.144)	105	89192				296.79- 356.79	323.91
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.146)	126	22038	2.00000		1.960	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	82197				336.29- 396.29	372.98
9.866	9.873 (1.146)	65	13007				38.83- 98.83	59.02
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.902	9.901 (1.150)	120	37752	2.00000		1.942	80.00- 120.00	100.00
9.902	9.901 (1.150)	105	80271				176.40- 236.40	212.63
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.173)	118	39056	2.00000		1.962	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	22102				26.64- 86.64	56.59
189 tert-Butylbenzene						CAS #: 98-06-6		
10.174	10.174 (1.181)	119	72972	2.00000		2.041	80.00- 120.00	100.00
10.167	10.174 (1.180)	134	17377				0.00- 54.82	23.81
10.174	10.174 (1.181)	91	48613				36.92- 96.92	66.62
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.187)	105	74003	2.00000		1.931	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	34304				16.58- 76.58	46.35
192 sec-Butylbenzene						CAS #: 135-98-8		
10.353	10.360 (1.202)	134	22626	2.00000		1.959	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	109866				451.53- 511.53	485.57
10.353	10.353 (1.202)	91	18185				46.48- 106.48	80.37
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.215)	119	94336	2.00000		1.950	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	25449				0.00- 56.79	26.98
10.467	10.467 (1.215)	91	23235				0.00- 54.04	24.63
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.518	10.517 (1.221)	146	51279	2.00000		1.970	80.00- 120.00	100.00
10.518	10.517 (1.221)	148	32439				33.53- 93.53	63.26
10.518	10.517 (1.221)	111	20660				11.05- 71.05	40.29
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.230)	146	54206	2.00000		2.021	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	34266				33.47- 93.47	63.21
10.596	10.596 (1.230)	111	21091				9.65- 69.65	38.91
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.244)	91	71847	2.00000		1.948	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	15914			0.00- 52.04	22.15
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	66498	2.00000	2.044	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	57381			55.86- 115.86	86.29
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	25185	2.00000	2.008	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	90951			331.99- 391.99	361.13
10.818	10.818 (1.256)	92	48740			161.01- 221.01	193.53
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	50354	2.00000	2.001	80.00- 120.00	100.00
10.919	10.926 (1.268)	148	31905			33.23- 93.23	63.36
10.919	10.918 (1.268)	111	21630			12.36- 72.36	42.96
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	29511	2.00000	2.023	80.00- 120.00	100.00
11.606	11.599 (1.348)	75	26419			58.96- 118.96	89.52
11.606	11.606 (1.348)	155	23036			47.82- 107.82	78.06
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	68826	2.47200	2.502	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	55006			50.85- 110.85	79.92
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	46259	2.51800	2.589	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	44390			65.40- 125.40	95.96
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.380	12.387 (1.437)	225	34636	2.57400	2.566	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	22076			33.70- 93.70	63.74
216 Naphthalene					CAS #: 91-20-3		
12.559	12.552 (1.458)	128	16936	0.25400	0.3104	80.00- 120.00	100.00(a)
12.559	12.552 (1.458)	127	2207			0.00- 43.10	13.03
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.802 (1.487)	180	45565	2.66200	2.786	80.00- 120.00	100.00
12.803	12.802 (1.487)	182	41761			65.67- 125.67	91.65
12.795	12.802 (1.486)	145	16507			6.02- 66.02	36.23

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062218.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	258917	6.37
108 1,4-Difluorobenze	874076	524446	1223706	946034	8.23
153 Chlorobenzene-d5	831223	498734	1163712	896463	7.85

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062218.d

Date : 22-JUN-2021 21:49

Client ID:

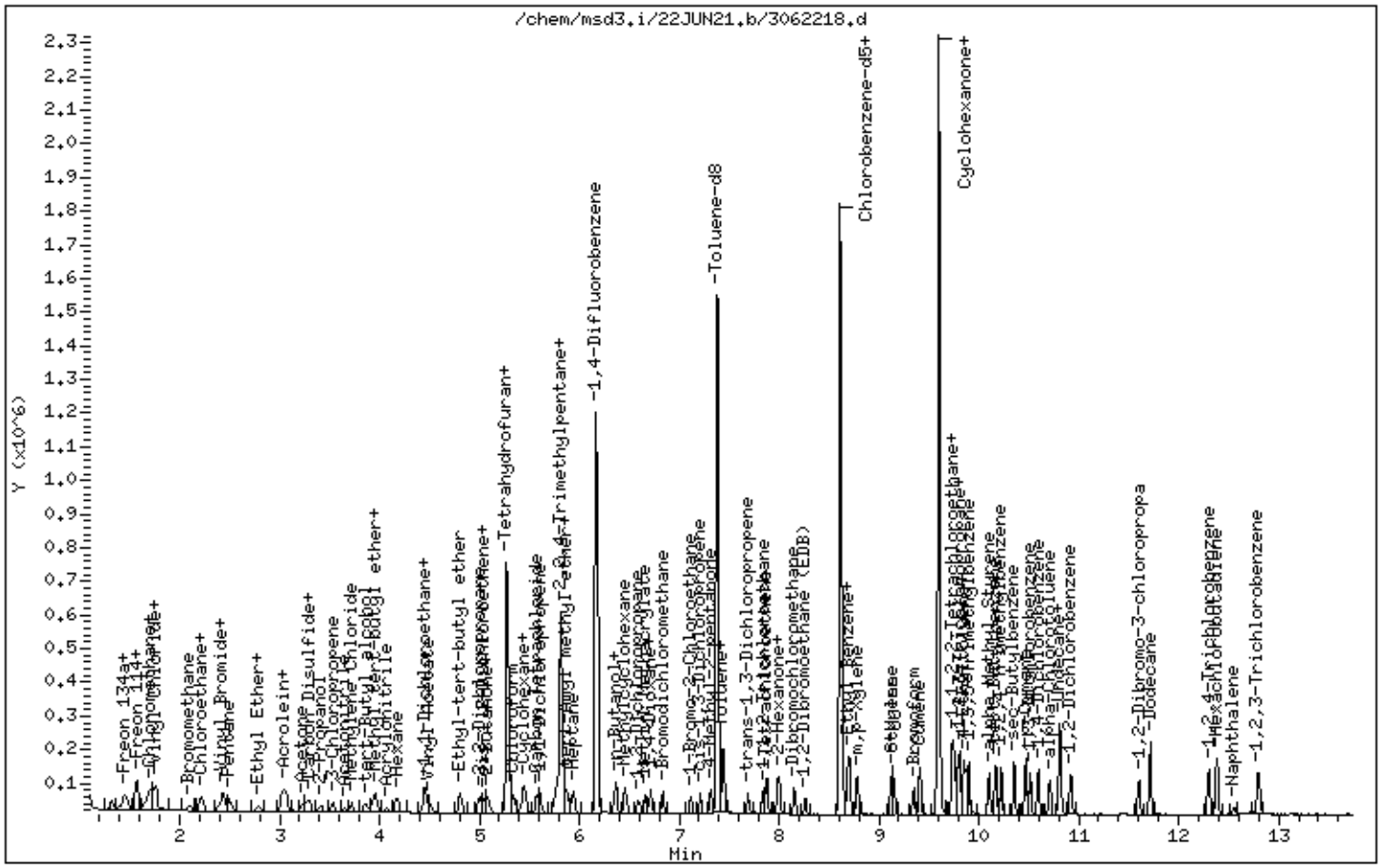
Instrument: msd3.i

Sample Info: 80mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051907.d
Lab Smp Id: ICAL Level 6
Inj Date : 19-MAY-2021 15:27
Operator : LD Inst ID: msdp.i
Smp Info : 20mL 3018-2034
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 15:27 Cal File: p051907.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	93022	20.0000	18.478	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	85552			59.44- 119.44	91.97
1.744	1.745 (0.302)	51	410469			419.06- 479.06	441.26
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	126668	20.0000	17.269	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	83011			35.28- 95.28	65.53
1.675	1.675 (0.290)	39	87777			38.35- 98.35	69.30
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.688	1.703 (0.292)	65	66510	20.0000	17.899	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	410469			597.63- 657.63	617.15
1.688	1.703 (0.292)	47	42224			33.72- 93.72	63.49
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	256819	20.0000	18.385	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	83094			2.37- 62.37	32.36
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	27136	20.0000	19.522	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	410469			1501.01-1561.01	1512.64
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	257544	20.0000	17.884	80.00- 120.00	100.00
1.842	1.856 (0.319)	137	84530			2.30- 62.30	32.82
12 Isobutane					CAS #: 75-28-5		
1.856	1.870 (0.321)	43	276539	20.0000	16.916	80.00- 120.00	100.00
1.856	1.870 (0.321)	42	89198			2.44- 62.44	32.26
1.856	1.856 (0.321)	58	9258			0.00- 33.36	3.35
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	175425	20.0000	19.636	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	48487			0.00- 56.26	27.64
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	26908	20.0000	14.306	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	210189			823.29- 883.29	781.14
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	167898	20.0000	16.491	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	51574			0.00- 59.69	30.72
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	173027	20.0000	22.047	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	131220			52.37- 112.37	75.84
24 Bromomethane					CAS #: 74-83-9		
2.476	2.483 (0.428)	94	109467	20.0000	16.296	80.00- 120.00	100.00
2.476	2.483 (0.428)	96	101049			64.07- 124.07	92.31
30 Chloroethane					CAS #: 75-00-3		
2.605	2.612 (0.451)	64	60984	20.0000	17.056	80.00- 120.00	100.00
2.605	2.612 (0.451)	66	18278			0.04- 60.04	29.97
2.605	2.612 (0.451)	49	19753			4.54- 64.54	32.39
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	221068	20.0000	20.084	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	143195			34.12- 94.12	64.77
32 Vinyl Bromide					CAS #: 593-60-2		
2.834	2.841 (0.490)	106	103992	20.0000	17.605	80.00- 120.00	100.00
2.834	2.841 (0.490)	108	100338			69.27- 129.27	96.49
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	289208	20.0000	19.049	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	188691			34.72- 94.72	65.24
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	224049	20.0000	17.280	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	67915			0.84- 60.84	30.31
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	340845	20.0000	18.944	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	51294			0.00- 44.98	15.05
2.970	2.970 (0.514)	72	24256			0.00- 37.39	7.12
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	55504	20.0000	18.719	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	102072			163.46- 223.46	183.90
3.278	3.285 (0.567)	45	151025			250.40- 310.40	272.10
39 Ethanol					CAS #: 64-17-5		
3.235	3.242 (0.560)	46	28012	20.0000	17.557	80.00- 120.00	100.00
3.278	3.242 (0.567)	45	150850			511.19- 571.19	538.52
42 Acrolein					CAS #: 107-02-8		
3.522	3.529 (0.609)	55	48671	20.0000	17.849	80.00- 120.00	100.00
3.522	3.529 (0.609)	56	67406			111.10- 171.10	138.49
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	234506	20.0000	20.574	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	150010			33.56- 93.56	63.97
3.550	3.550 (0.614)	101	277635			89.21- 149.21	118.39
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	117179	20.0000	17.797	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	73665			34.02- 94.02	62.87
3.579	3.579 (0.619)	61	234280			168.77- 228.77	199.93
47 Acetone					CAS #: 67-64-1		
3.708	3.708 (0.642)	58	72065	20.0000	17.340	80.00- 120.00	100.00
3.708	3.708 (0.642)	43	241838			302.95- 362.95	335.58
48 Carbon Disulfide					CAS #: 75-15-0		
3.815	3.823 (0.660)	76	317436	20.0000	17.928	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.787	3.794 (0.655)	142	245125	20.0000	23.837	80.00- 120.00	100.00
3.787	3.794 (0.655)	127	102171			12.22- 72.22	41.68

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.880	3.887 (0.671)	45	307798	20.0000	18.411	80.00- 120.00	100.00
3.880	3.887 (0.671)	43	51379			0.00- 47.19	16.69
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	51511	20.0000	17.182	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	225722			396.19- 456.19	438.20
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	132955	20.0000	17.513	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	69875			20.95- 80.95	52.56
4.123	4.123 (0.714)	38	15334			0.00- 41.17	11.53
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.238 (0.732)	49	188872	20.0000	17.656	80.00- 120.00	100.00
4.231	4.238 (0.732)	84	97783			22.03- 82.03	51.77
4.231	4.238 (0.732)	51	56590			0.18- 60.18	29.96
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	376326	20.0000	18.886	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	79824			0.00- 51.11	21.21
4.338	4.338 (0.751)	57	39827			0.00- 40.49	10.58
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	393778	20.0000	19.813	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	131571			3.10- 63.10	33.41
4.446	4.446 (0.769)	41	127804			1.28- 61.28	32.46
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	79611	20.0000	17.941	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	222503			255.84- 315.84	279.49
4.474	4.482 (0.774)	96	121969			127.59- 187.59	153.21
66 Acrylonitrile					CAS #: 107-13-1		
4.553	4.560 (0.788)	52	108453	20.0000	17.080	80.00- 120.00	100.00
4.553	4.560 (0.788)	53	125300			88.05- 148.05	115.53
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	289038	20.0000	18.610	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	192159			37.52- 97.52	66.48
4.696	4.697 (0.813)	86	34504			0.00- 41.48	11.94
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	244047	20.0000	17.840	80.00- 120.00	100.00
4.961	4.962 (0.859)	65	72133			0.00- 59.70	29.56

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether						CAS #: 108-20-3	
	4.947	4.954 (0.856)	45	733750	20.0000	19.999	80.00- 120.00	100.00
	4.954	4.954 (0.857)	87	130937			0.00- 48.18	17.84
	4.947	4.954 (0.856)	59	74206			0.00- 40.15	10.11
	73 Vinyl Acetate						CAS #: 108-05-4	
	4.997	4.997 (0.865)	86	29493	20.0000	17.415	80.00- 120.00	100.00
	4.990	4.997 (0.864)	43	540307			2432.48-2492.48	1831.98
	79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
	5.305	5.305 (0.918)	59	633028	20.0000	19.878	80.00- 120.00	100.00
	5.305	5.305 (0.918)	87	196731			1.00- 61.00	31.08
	5.305	5.305 (0.918)	41	121691			0.00- 48.73	19.22
	84 2,2-Dichloropropane						CAS #: 594-20-7	
	5.506	5.506 (0.953)	77	247387	20.0000	20.676	80.00- 120.00	100.00
	5.506	5.506 (0.953)	79	79013			2.28- 62.28	31.94
	5.506	5.506 (0.953)	97	59214			0.00- 53.93	23.94
	85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
	5.542	5.549 (0.959)	98	79311	20.0000	17.700	80.00- 120.00	100.00
	5.542	5.549 (0.959)	96	126353			125.75- 185.75	159.31
	5.542	5.549 (0.959)	61	301739			332.40- 392.40	380.45
	86 2-Butanone						CAS #: 78-93-3	
	5.556	5.556 (0.962)	72	60163	20.0000	16.887	80.00- 120.00	100.00
	5.563	5.556 (0.963)	43	755298			1214.50-1274.50	1255.42
	5.556	5.556 (0.962)	57	27140			14.68- 74.68	45.11
	87 Ethyl Acetate						CAS #: 141-78-6	
	5.570	5.570 (0.964)	45	61995	20.0000	17.497	80.00- 120.00	100.00
	5.542	5.549 (0.959)	61	301739			452.04- 512.04	486.72
	5.570	5.570 (0.964)	70	32560			22.77- 82.77	52.52
	89 Tetrahydrofuran						CAS #: 109-99-9	
	5.771	5.771 (0.999)	42	206034	20.0000	17.009	80.00- 120.00	100.00
	5.771	5.771 (0.999)	71	54220			0.00- 55.82	26.32
	5.771	5.771 (0.999)	72	59914			0.00- 57.59	29.08
*	90 Bromochloromethane						CAS #: 74-97-5	
	5.778	5.778 (1.000)	130	161884	25.0000		80.00- 120.00	100.00
	5.778	5.778 (1.000)	128	125674			48.23- 108.23	77.63
	5.771	5.778 (1.000)	49	290833			150.57- 210.57	179.66
	92 Chloroform						CAS #: 67-66-3	
	5.835	5.835 (1.010)	83	241783	20.0000	17.626	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	158829			34.70- 94.70	65.69
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	203644	20.0000	20.607	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	346268			142.57- 202.57	170.04
5.957	5.957 (1.031)	41	187080			62.09- 122.09	91.87
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	306146	20.0000	19.529	80.00- 120.00	100.00
5.964	5.972 (1.032)	99	199684			34.02- 94.02	65.23
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	305164	20.0000	20.683	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	305319			70.64- 130.64	100.05
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	71487	20.0000	17.887	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	180986			226.85- 286.85	253.17
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	1110205	20.0000	20.193	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	359061			2.24- 62.24	32.34
6.279	6.280 (1.087)	41	278205			0.00- 54.39	25.06
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	352350	20.0000	18.258	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	82919			0.00- 52.90	23.53
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	214356	25.0000	24.596	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	113737			27.21- 87.21	53.06
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	111853	20.0000	20.020	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	458075			372.79- 432.79	409.53
6.358	6.358 (0.955)	55	161464			112.09- 172.09	144.35
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	181236	20.0000	17.798	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	57046			0.79- 60.79	31.48
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	153106	20.0000	20.067	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	404624			226.53- 286.53	264.28
6.444	6.444 (0.968)	57	205765			100.85- 160.85	134.39

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	591321	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94057			0.00- 45.71	15.91
110 n-Butanol						CAS #: 71-36-3	
6.810	6.810 (1.023)	56	132950	20.0000	19.082	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	94545			40.99- 100.99	71.11
6.810	6.810 (1.023)	43	78634			27.38- 87.38	59.15
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	167926	20.0000	18.042	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	180875			76.29- 136.29	107.71
6.867	6.867 (1.031)	97	109619			33.63- 93.63	65.28
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.089	7.089 (1.065)	63	184802	20.0000	18.644	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	133840			41.07- 101.07	72.42
7.089	7.089 (1.065)	41	101498			22.53- 82.53	54.92
116 Methyl Methacrylate						CAS #: 80-62-6	
7.132	7.132 (0.754)	69	150281	20.0000	19.013	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	320687			179.84- 239.84	213.39
7.132	7.139 (0.754)	100	60103			9.59- 69.59	39.99
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	100090	20.0000	18.671	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	98658			68.28- 128.28	98.57
7.175	7.175 (1.077)	57	32744			2.68- 62.68	32.71
118 Dibromomethane						CAS #: 74-95-3	
7.204	7.204 (0.761)	174	158665	20.0000	18.457	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	142936			60.09- 120.09	90.09
7.204	7.204 (0.761)	95	122464			48.38- 108.38	77.18
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	275648	20.0000	18.925	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	177537			35.24- 95.24	64.41
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.691	7.691 (1.155)	75	230619	20.0000	18.894	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	72627			2.42- 62.42	31.49
7.691	7.691 (1.155)	39	154077			37.16- 97.16	66.81
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	280885	20.0000	20.418	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	132474			15.78- 75.78	47.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	326597			84.64- 144.64	116.27
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	198797	20.0000	19.794	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	542659			242.35- 302.35	272.97
7.791	7.791 (1.170)	85	66078			3.24- 63.24	33.24
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	636242	25.0000	24.785	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	65527			0.00- 40.44	10.30
7.891	7.891 (1.185)	100	416442			34.95- 94.95	65.45
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	514167	20.0000	19.066	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	307832			28.38- 88.38	59.87
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	236470	20.0000	20.785	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	199342			56.00- 116.00	84.30
7.941	7.949 (1.193)	43	614834			228.66- 288.66	260.01
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	217123	20.0000	19.138	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	68252			1.24- 61.24	31.43
8.214	8.214 (0.868)	39	141891			34.11- 94.11	65.35
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	176754	20.0000	19.263	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	111333			31.96- 91.96	62.99
8.400	8.400 (0.888)	83	150175			52.93- 112.93	84.96
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	257592	20.0000	19.183	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	201058			47.84- 107.84	78.05
8.464	8.464 (0.895)	131	191367			45.29- 105.29	74.29
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	268908	20.0000	19.939	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	517945			162.87- 222.87	192.61
8.586	8.586 (0.908)	100	41484			0.00- 45.94	15.43
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	246257	20.0000	19.204	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	314850			94.99- 154.99	127.85
8.579	8.579 (1.288)	78	78397			2.05- 62.05	31.84

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1	
8.801	8.801 (0.930)	129	337715	20.0000	19.240	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	263594			47.45- 107.45	78.05
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.951	8.951 (0.946)	107	280035	20.0000	18.542	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	267724			64.21- 124.21	95.60
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.605	7.605 (1.142)	63	333684	20.0000	18.417	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	97824			0.00- 59.64	29.32
7.605	7.605 (1.142)	144	32120			0.00- 39.63	9.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	579226	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	311215			23.78- 83.78	53.73
154 Chlorobenzene						CAS #: 108-90-7	
9.496	9.496 (1.004)	112	441684	20.0000	19.332	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	142490			1.74- 61.74	32.26
9.496	9.496 (1.004)	77	248503			25.04- 85.04	56.26
155 Ethyl Benzene						CAS #: 100-41-4	
9.567	9.567 (1.011)	106	238564	20.0000	19.809	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	733130			273.74- 333.74	307.31
156 Nonane						CAS #: 111-84-2	
9.596	9.596 (1.014)	43	660026	20.0000	21.119	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	552781			54.16- 114.16	83.75
9.596	9.603 (1.014)	85	158629			0.00- 53.90	24.03
158 m,p-Xylene						CAS #: 108-38-3	
9.718	9.718 (1.027)	106	298628	20.0000	19.892	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	589189			163.73- 223.73	197.30
164 o-Xylene						CAS #: 95-47-6	
10.226	10.226 (1.081)	106	296697	20.0000	20.402	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	604874			177.45- 237.45	203.87
165 Styrene						CAS #: 100-42-5	
10.255	10.255 (1.084)	104	488029	20.0000	19.783	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	228738			17.88- 77.88	46.87
167 Bromoform						CAS #: 75-25-2	
10.541	10.542 (1.114)	173	342784	20.0000	19.970	80.00- 120.00	100.00
10.541	10.542 (1.114)	171	175679			21.25- 81.25	51.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	931561	20.0000	20.442	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	266395			0.00- 58.52	28.60
10.649	10.649 (1.126)	51	122943			0.00- 43.00	13.20
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	329076	20.0000	19.988	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	105887			1.94- 61.94	32.18
10.871	10.871 (1.149)	42	225892			37.89- 97.89	68.64
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	366979	25.0000	24.808	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	468117			95.92- 155.92	127.56
10.921	10.921 (1.154)	176	351685			66.89- 126.89	95.83
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	448177	20.0000	20.205	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	290309			35.20- 95.20	64.78
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	273442	20.0000	19.953	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	268738			67.21- 127.21	98.28
11.179	11.179 (1.182)	77	168602			29.02- 89.02	61.66
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	275295	20.0000	20.363	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	1090818			366.49- 426.49	396.24
11.150	11.150 (1.179)	105	41933			0.00- 44.85	15.23
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	139458	20.0000	19.807	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	427261			280.55- 340.55	306.37
11.100	11.100 (1.173)	61	62807			15.49- 75.49	45.04
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	88946	20.0000	19.304	80.00- 120.00	100.00
11.172	11.179 (1.181)	89	71489			49.11- 109.11	80.37
11.179	11.179 (1.182)	75	427261			426.44- 486.44	480.36
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	746366	20.0000	20.338	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	204118			0.00- 57.66	27.35
11.258	11.258 (1.190)	142	29608			0.00- 34.09	3.97
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	295596	20.0000	20.284	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
11.286	11.287 (1.193)	105	929331				284.55- 344.55	314.39
184 2-Chlorotoluene						CAS #: 95-49-8		
11.308	11.308 (1.195)	126	235462	20.0000		20.537	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	804535				315.17- 375.17	341.68
11.301	11.301 (1.195)	65	116734				21.55- 81.55	49.58
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
11.365	11.365 (1.201)	120	416581	20.0000		20.680	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	804831				164.93- 224.93	193.20
188 alpha Methyl Styrene						CAS #: 98-83-9		
11.645	11.645 (1.231)	118	413999	20.0000		20.536	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	229936				25.30- 85.30	55.54
189 tert-Butylbenzene						CAS #: 98-06-6		
11.738	11.738 (1.241)	119	765020	20.0000		20.366	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	183021				0.00- 54.25	23.92
11.738	11.738 (1.241)	91	463050				31.27- 91.27	60.53
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
11.817	11.817 (1.249)	105	783363	20.0000		20.495	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	381421				19.05- 79.05	48.69
192 sec-Butylbenzene						CAS #: 135-98-8		
11.996	11.996 (1.268)	134	242771	20.0000		20.736	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	1145624				437.55- 497.55	471.89
11.996	11.996 (1.268)	91	174745				40.76- 100.76	71.98
194 p-Cymene						CAS #: 99-87-6		
12.160	12.160 (1.285)	119	1070099	20.0000		20.727	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	276177				0.00- 55.54	25.81
12.153	12.153 (1.285)	91	231505				0.00- 51.48	21.63
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
12.196	12.196 (1.289)	146	515702	20.0000		19.622	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	331017				33.21- 93.21	64.19
12.196	12.196 (1.289)	111	214395				11.31- 71.31	41.57
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
12.311	12.311 (1.301)	146	514316	20.0000		19.523	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	333938				33.90- 93.90	64.93
12.311	12.311 (1.301)	111	204966				9.45- 69.45	39.85
199 alpha-Chlorotoluene						CAS #: 100-44-7		
12.461	12.461 (1.317)	91	728285	20.0000		20.267	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	167108			0.00- 53.26	22.95
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	833319	20.0000	19.843	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	748015			58.12- 118.12	89.76
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	269536	20.0000	20.284	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	921873			314.79- 374.79	342.02
12.626	12.626 (1.335)	92	496131			154.29- 214.29	184.07
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	516436	20.0000	20.144	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	324827			33.84- 93.84	62.90
12.733	12.741 (1.346)	111	222511			12.73- 72.73	43.09
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	313020	20.0000	20.327	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	265111			52.48- 112.48	84.69
13.600	13.600 (1.438)	155	243659			47.41- 107.41	77.84
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	755474	24.7000	24.812	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	627549			52.87- 112.87	83.07
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	457157	25.2000	24.597	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	438717			65.33- 125.33	95.97
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	335930	25.7000	25.915	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	210653			33.17- 93.17	62.71
216 Naphthalene					CAS #: 91-20-3		
14.761	14.768 (1.560)	128	112848	2.54000	2.343	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	14592			0.00- 42.88	12.93
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	420041	26.6000	25.838	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	398636			65.75- 125.75	94.90
15.069	15.069 (1.593)	145	147343			5.23- 65.23	35.08

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051907.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	161884	1.94
108 1,4-Difluorobenze	597103	358262	835944	591321	-0.97
153 Chlorobenzene-d5	587747	352648	822846	579226	-1.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051907.d

Page 1

Date : 19-MAY-2021 15:27

Client ID:

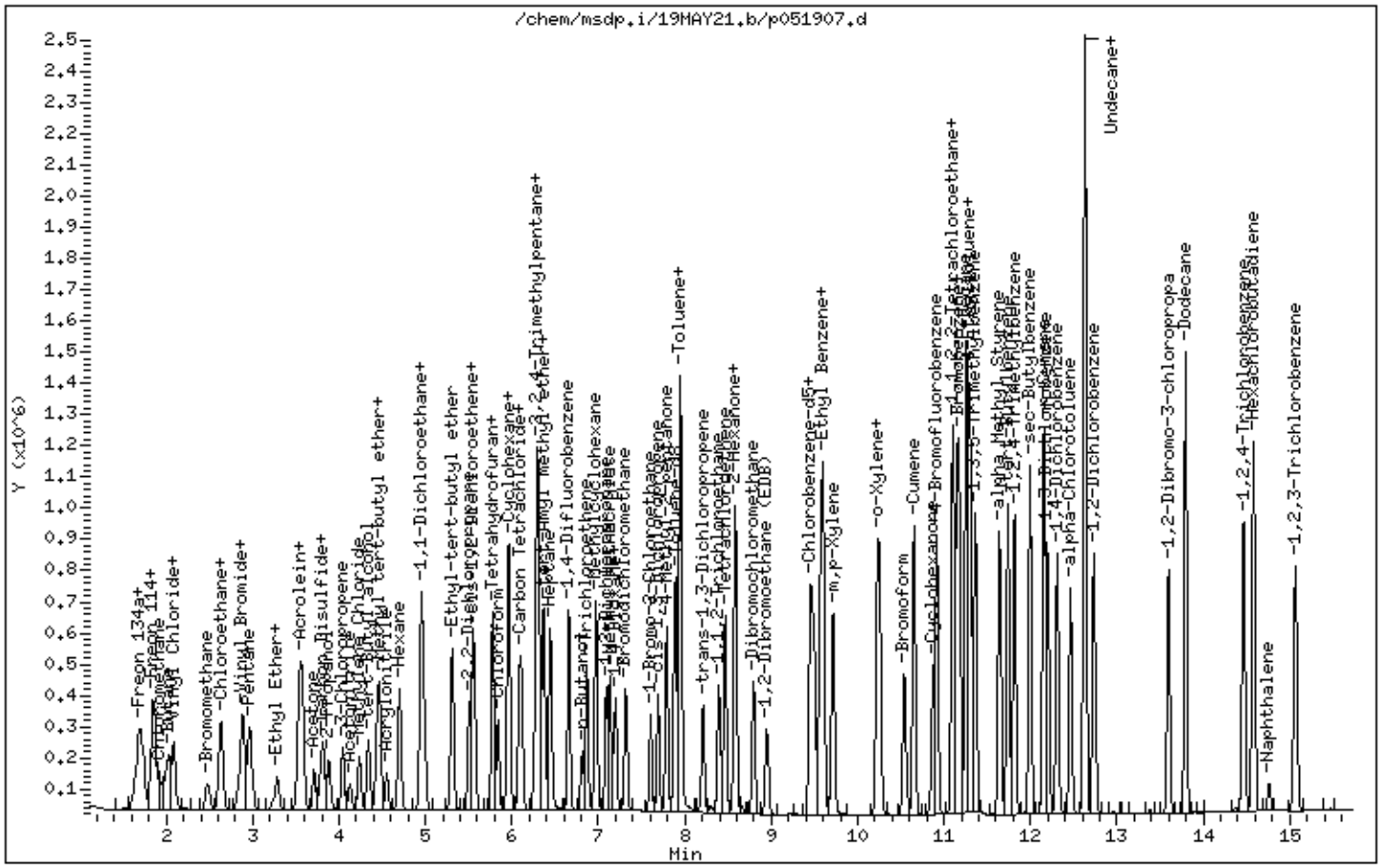
Instrument: msdp.i

Sample Info: 20mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051918.d
Lab Smp Id: ICAL Level 6
Inj Date : 19-MAY-2021 21:10
Operator : gh Inst ID: msdp.i
Smp Info : 20mL 3018-2013
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:10 Cal File: p051918.d
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	164276	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126583			48.23- 108.23	77.06
5.771	5.778 (1.000)	49	292813			150.57- 210.57	178.24
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	594883	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94502			0.00- 45.71	15.89
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	584012	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	316968			23.78- 83.78	54.27
3 Freon 143a					CAS #: 420-46-2		
1.577	1.590 (0.273)	65	63953	20.0000	19.336	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	170661			243.50- 303.50	266.85
1.591	1.590 (0.275)	64	16338			0.00- 54.06	25.55
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	46853	20.0000	15.945	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	29481			34.98- 94.98	62.92
1.674	1.674 (0.290)	41	25457			25.22- 85.22	54.33
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	252531	20.0000	15.611	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	76512			0.00- 59.77	30.30
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	180760	20.0000	16.998	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	247205			105.17- 165.17	136.76
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	177874	20.0000	17.207	80.00- 120.00	100.00
3.378	3.378 (0.585)	67	248317			104.69- 164.69	139.60
41 Freon 123					CAS #: 306-83-2		
3.472	3.479 (0.601)	83	276366	20.0000	18.974	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	56290			0.00- 50.87	20.37
3.472	3.479 (0.601)	85	179827			36.08- 96.08	65.07
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	281294	20.0000	18.118	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	105999			6.76- 66.76	37.68
4.066	4.073 (0.704)	53	78449			0.00- 57.54	27.89
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	314311	20.0000	17.425	80.00- 120.00	100.00
4.073	4.073 (0.705)	74	43403			0.00- 44.13	13.81
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	249821	20.0000	17.505	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	97837			9.21- 69.21	39.16
5.019	5.019 (0.869)	50	60899			0.00- 54.25	24.38
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	33679	20.0000	15.446	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	32228			63.23- 123.23	95.69
5.083	5.083 (0.880)	41	20019			24.74- 84.74	59.44
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	317339	20.0000	16.802	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	34842			0.00- 41.28	10.98
5.620	5.620 (0.973)	58	27405			0.00- 38.22	8.64
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	37572	20.0000	16.140	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	188703			448.18- 508.18	502.24
6.244	6.244 (1.081)	41	131184			299.99- 359.99	349.15
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	23633	20.0000	17.406	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	44798			149.95- 209.95	189.56
6.938	6.938 (0.733)	55	458959			1849.07-1909.07	1942.03
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	549397	20.0000	18.604	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	42813			0.00- 37.44	7.79
7.032	7.031 (0.743)	86	69391			0.00- 42.78	12.63
145 Butyl Acetate					CAS #: 123-86-4		
8.658	8.665 (1.300)	56	289132	20.0000	19.218	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	85224			0.00- 59.10	29.48
8.658	8.657 (1.300)	43	710835			215.30- 275.30	245.85
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	265099	20.0000	20.462	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	584012			57.42- 117.42	220.30
9.596	9.596 (1.014)	95	96156			5.70- 65.70	36.27
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	456297	20.0000	19.048	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	750475			136.03- 196.03	164.47
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	366276	20.0000	30.886	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	252611			39.41- 99.41	68.97
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	233965	20.0000	19.501	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	762751			295.02- 355.02	326.01
11.444	11.444 (1.210)	63	101096			11.82- 71.82	43.21
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	356670	20.0000	20.382	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	795713			192.40- 252.40	223.10
12.318	12.318 (1.302)	77	89457			0.00- 54.69	25.08
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	175433	20.0000	27.542	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	236009			102.99- 162.99	134.53

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	464814	20.0000	19.008	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	442074			65.24- 125.24	95.11
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	504688	20.0000	21.723	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	146698			0.00- 58.21	29.07
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	403829	20.0000	27.931	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	762751			153.57- 213.57	188.88

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051918.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	164276	3.44
108 1,4-Difluorobenze	597103	358262	835944	594883	-0.37
153 Chlorobenzene-d5	587747	352648	822846	584012	-0.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051918.d

Date : 19-MAY-2021 21:10

Client ID:

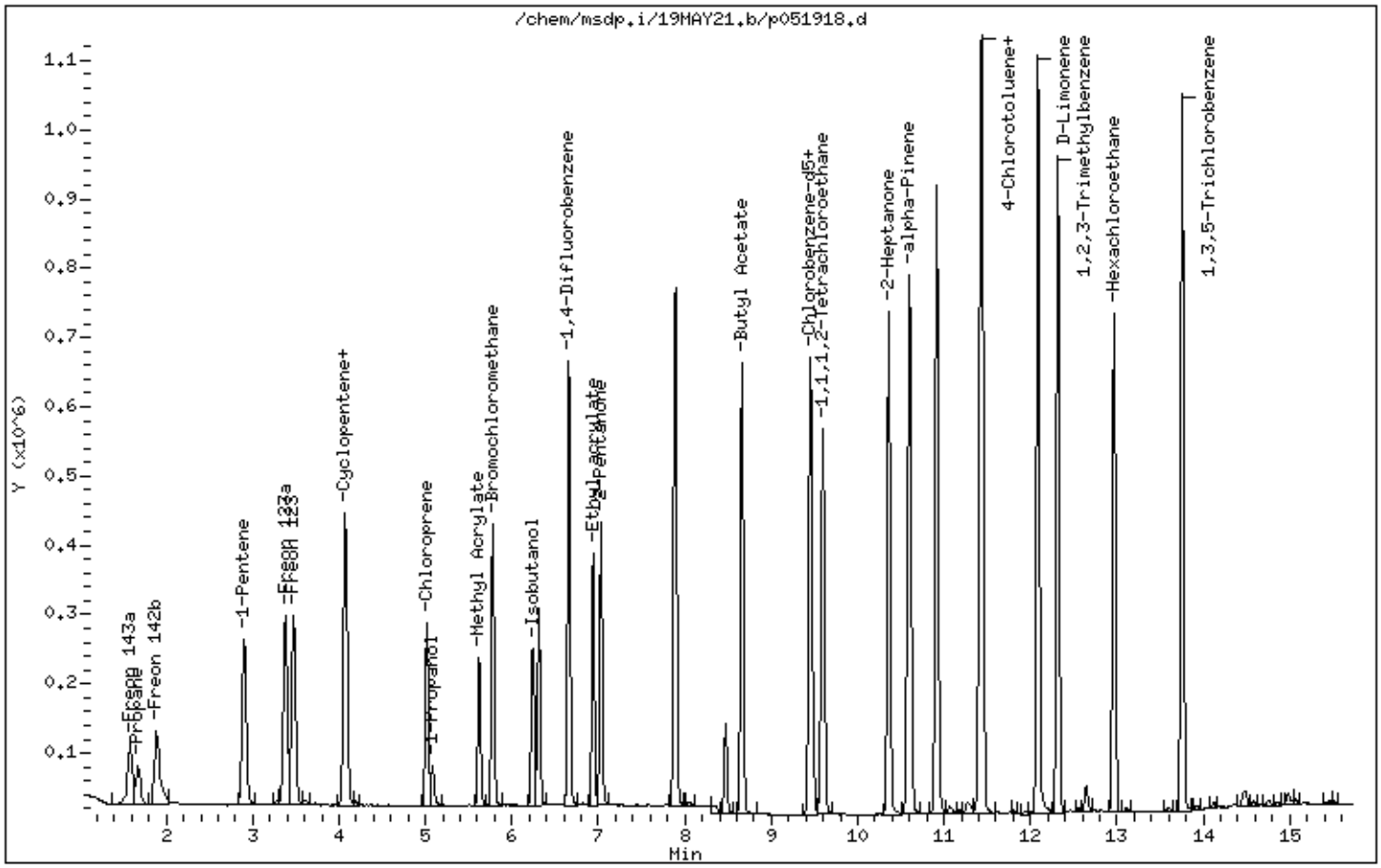
Instrument: msdp.i

Sample Info: 20mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062208.d
Lab Smp Id: ICAL Level 7
Inj Date : 22-JUN-2021 17:13
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2078
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:18 Cal File: 3062219.d
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	293494	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	228507			48.46- 108.46	77.86
5.270	5.270 (1.000)	49	438123			120.39- 180.39	149.28
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.180 (1.000)	114	1058029	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	166272			0.00- 45.52	15.72
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	1004400	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	564944			25.46- 85.46	56.25
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	25983	5.00000	5.292	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	63841			217.09- 277.09	245.70
1.353	1.353 (0.256)	64	6250			0.00- 55.87	24.05
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.272)	43	13302	5.00000	4.973	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.437	1.422 (0.272)	39	11936			41.62- 101.62	89.73
1.437	1.422 (0.272)	41	11547			22.97- 82.97	86.81
13 Freon 142b					CAS #: 75-68-3		
1.605	1.604 (0.304)	65	76015	5.00000	4.869	80.00- 120.00	100.00
1.605	1.604 (0.304)	45	23649			0.00- 58.17	31.11
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.463)	55	48431	5.00000	4.885	80.00- 120.00	100.00(a)
2.444	2.444 (0.463)	42	69052			99.17- 159.17	142.58
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	56054	5.00000	4.855	80.00- 120.00	100.00(a)
2.878	2.878 (0.545)	67	73224			103.13- 163.13	130.63
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	83378	5.00000	4.924	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	19265			0.00- 51.81	23.11
2.976	2.976 (0.563)	85	60487			37.13- 97.13	72.55
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	86815	5.00000	4.817	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	34754			7.90- 67.90	40.03
3.549	3.549 (0.672)	53	22334			0.00- 54.87	25.73
56 Methyl Acetate					CAS #: 79-20-9		
3.591	3.577 (0.680)	43	97338	5.00000	5.240	80.00- 120.00	100.00
3.591	3.577 (0.680)	74	16823			0.00- 47.15	17.28
74 Chloroprene					CAS #: 126-99-8		
4.501	4.515 (0.852)	53	77411	5.00000	4.921	80.00- 120.00	100.00
4.501	4.515 (0.852)	88	32483			12.33- 72.33	41.96
4.501	4.515 (0.852)	50	21250			0.00- 57.62	27.45
75 1-Propanol					CAS #: 71-23-8		
4.627	4.613 (0.876)	59	12617	5.00000	5.188	80.00- 120.00	100.00
4.627	4.613 (0.876)	42	10989			53.89- 113.89	87.10
4.627	4.613 (0.876)	41	7991			24.09- 84.09	63.34
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	96706	5.00000	5.116	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	14547			0.00- 43.24	15.04
5.130	5.130 (0.971)	58	8124			0.00- 38.83	8.40
103 Isobutanol					CAS #: 78-83-1		
5.788	5.774 (1.095)	39	22174	5.00000	6.383	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.788	5.774 (1.095)	43	58502			327.69- 387.69	263.83
5.788	5.774 (1.095)	41	49233			237.56- 297.56	222.03
113 Ethyl acrylate					CAS #: 140-88-5		
6.460	6.474 (0.750)	99	9219	5.00000	5.744	80.00- 120.00	100.00
6.460	6.460 (0.750)	45	13614			124.67- 184.67	147.67
6.460	6.460 (0.750)	55	147002			1601.30-1661.30	1594.55
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	208253	5.00000	5.547	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	18363			0.00- 37.25	8.82
6.558	6.557 (0.761)	86	31845			0.00- 45.08	15.29
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.308)	56	76654	5.00000	5.496	80.00- 120.00	100.00
8.068	8.068 (1.308)	73	28367			5.16- 65.16	37.01
8.068	8.068 (1.308)	43	192544			214.00- 274.00	251.19
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.012)	131	69799	5.00000	4.620	80.00- 120.00	100.00
8.705	8.712 (1.011)	117	53334			38.22- 98.22	76.41
8.705	8.712 (1.011)	95	27234			7.54- 67.54	39.02
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	119072	5.00000	5.527	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	194999			133.36- 193.36	163.77
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.210)	68	84575	5.00000	4.635	80.00- 120.00	100.00
10.417	10.424 (1.210)	93	60187			42.08- 102.08	71.16
186 4-Chlorotoluene					CAS #: 106-43-4		
9.966	9.973 (1.157)	126	66952	5.00000	5.091	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	215822			305.94- 365.94	322.35
9.966	9.966 (1.157)	63	29938			15.44- 75.44	44.72
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.589	10.596 (1.230)	120	89366	5.00000	4.957	80.00- 120.00	100.00(a)
10.589	10.596 (1.230)	105	206875			206.43- 266.43	231.49
10.589	10.596 (1.230)	77	25868			0.00- 58.29	28.95
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.289)	201	45814	5.00000	4.163	80.00- 120.00	100.00
11.098	11.098 (1.289)	117	64441			109.77- 169.77	140.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.728 (1.361)	180	130245	5.00000	5.428	80.00- 120.00	100.00
11.721	11.728 (1.361)	182	123901			65.79- 125.79	95.13
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.088)	93	153783	5.00000	4.952	80.00- 120.00	100.00
9.371	9.371 (1.088)	77	45062			0.13- 60.13	29.30
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.155)	93	115699	5.00000	4.744	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	215822			145.95- 205.95	186.54

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062208.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	293494	20.58
108 1,4-Difluorobenze	874076	524446	1223706	1058029	21.05
153 Chlorobenzene-d5	831223	498734	1163712	1004400	20.83

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.22
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062208.d

Date : 22-JUN-2021 17:13

Client ID:

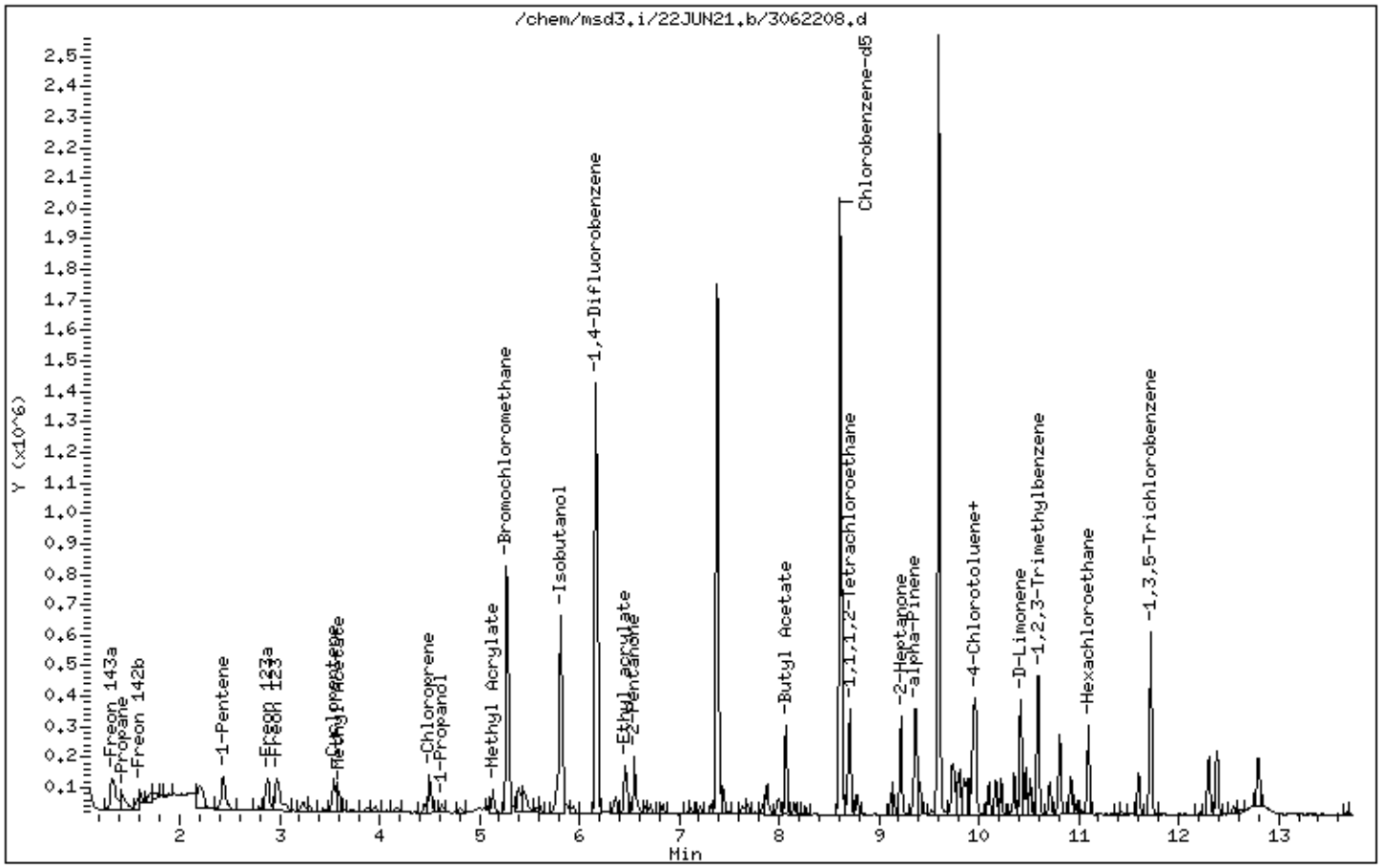
Instrument: msd3.i

Sample Info: 200mL 3018-2078

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062219.d
Lab Smp Id: ICAL Level 7
Inj Date : 22-JUN-2021 22:18
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2116
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:18 Cal File: 3062219.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.409	1.395 (0.267)	83	30870	5.00000	5.043	80.00- 120.00	100.00
1.409	1.395 (0.267)	69	27437			51.82- 111.82	88.88
1.493	1.479 (0.282)	51	115062			194.91- 254.91	372.73
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	30120	5.00000	4.847	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	20252			35.61- 95.61	67.24
1.437	1.423 (0.272)	39	23134			42.66- 102.66	76.81
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	20451	5.00000	5.049	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	115062			321.86- 381.86	562.62
1.465	1.437 (0.277)	47	15872			45.34- 105.34	77.61
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	87130	5.00000	4.862	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	28738			2.63- 62.63	32.98
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	9643	5.00000	4.896	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
9 Chlorodifluoromethane (continued)							
1.493	1.479 (0.282)	51	115062			719.76- 779.76	1193.22
10 Freon 114					CAS #: 76-14-2		
1.576	1.562 (0.298)	135	66614	5.00000	5.016	80.00- 120.00	100.00
1.576	1.562 (0.298)	137	21590			2.12- 62.12	32.41
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	70335	5.00000	5.036	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	23270			2.44- 62.44	33.08
1.576	1.576 (0.298)	58	3709			0.00- 33.26	5.27
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	37423	5.00000	5.024	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	14009			2.41- 62.41	37.43
18 Butane					CAS #: 106-97-8		
1.716	1.702 (0.325)	58	12018	5.00000	6.832	80.00- 120.00	100.00
1.716	1.702 (0.325)	43	73577			727.41- 787.41	612.22
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	36880	5.00000	4.627	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	13097			1.28- 61.28	35.51
20 1,3-Butadiene					CAS #: 106-99-0		
1.772	1.758 (0.335)	54	35506	5.00000	4.860	80.00- 120.00	100.00
1.772	1.758 (0.335)	39	35507			69.23- 129.23	100.00
24 Bromomethane					CAS #: 74-83-9		
2.108	2.094 (0.399)	94	38109	5.00000	6.045	80.00- 120.00	100.00
2.108	2.094 (0.399)	96	35133			62.78- 122.78	92.19
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	19206	5.00000	5.133	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	6521			1.44- 61.44	33.95
2.206	2.206 (0.417)	49	6939			4.12- 64.12	36.13
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	48636	5.00000	5.083	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	33342			38.82- 98.82	68.55
32 Vinyl Bromide					CAS #: 593-60-2		
2.402	2.388 (0.455)	106	34690	5.00000	5.061	80.00- 120.00	100.00
2.402	2.388 (0.455)	108	32419			63.14- 123.14	93.45
33 Freon 11					CAS #: 75-69-4		
2.444	2.430 (0.462)	101	96206	5.00000	5.074	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.444	2.430 (0.462)	103	62473			35.12- 95.12	64.94
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.458	2.444 (0.465)	67	74608	5.00000	4.922	80.00- 120.00	100.00
2.458	2.444 (0.465)	69	23139			0.74- 60.74	31.01
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	76248	5.00000	5.002	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	12267			0.00- 45.97	16.09
2.500	2.500 (0.473)	72	6676			0.00- 38.10	8.76
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	17084	5.00000	4.998	80.00- 120.00	100.00
2.794	2.780 (0.529)	59	30253			147.68- 207.68	177.08
2.794	2.780 (0.529)	45	39009			206.40- 266.40	228.34
39 Ethanol					CAS #: 64-17-5		
2.780	2.766 (0.526)	46	8533	5.00000	5.563	80.00- 120.00	100.00
2.794	2.780 (0.529)	45	39144			523.01- 583.01	458.74
42 Acrolein					CAS #: 107-02-8		
3.046	3.032 (0.576)	55	12195	5.00000	4.791	80.00- 120.00	100.00
3.046	3.032 (0.576)	56	17604			110.33- 170.33	144.35
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	62504	5.00000	4.822	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	41155			33.72- 93.72	65.84
3.032	3.032 (0.574)	101	77780			89.67- 149.67	124.44
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	36915	5.00000	4.728	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	23464			33.39- 93.39	63.56
3.074	3.074 (0.582)	61	69877			163.82- 223.82	189.29
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	22858	5.00000	5.299	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	68759			299.66- 359.66	300.81
48 Carbon Disulfide					CAS #: 75-15-0		
3.311	3.297 (0.627)	76	99748	5.00000	5.135	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.283	3.269 (0.621)	142	65902	5.00000	3.923	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	30617			14.58- 74.58	46.46

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.409	3.395 (0.645)	45	78652	5.00000	5.070	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	15386			0.00- 48.61	19.56
54 3-Chloropropene					CAS #: 107-05-1		
3.549	3.535 (0.672)	76	16573	5.00000	4.955	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	56964			338.06- 398.06	343.72
57 Acetonitrile					CAS #: 75-05-8		
3.647	3.633 (0.690)	41	34434	5.00000	5.069	80.00- 120.00	100.00
3.647	3.633 (0.690)	40	17283			21.81- 81.81	50.19
3.647	3.633 (0.690)	38	4545			0.00- 41.86	13.20
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	53373	5.00000	5.170	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	31988			30.77- 90.77	59.93
3.731	3.717 (0.706)	51	16157			1.39- 61.39	30.27
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	96951	5.00000	4.979	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	19154			0.00- 51.05	19.76
3.857	3.857 (0.730)	57	10645			0.00- 41.68	10.98
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	105485	5.00000	5.019	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	29722			0.00- 58.86	28.18
3.941	3.941 (0.746)	41	29577			0.00- 57.27	28.04
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	24541	5.00000	4.671	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	64474			244.59- 304.59	262.72
3.969	3.969 (0.751)	96	37973			129.84- 189.84	154.73
66 Acrylonitrile					CAS #: 107-13-1		
4.081	4.067 (0.772)	52	27763	5.00000	4.403	80.00- 120.00	100.00
4.081	4.067 (0.772)	53	31591			88.50- 148.50	113.79
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	69178	5.00000	4.856	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	44269			32.99- 92.99	63.99
4.179	4.179 (0.791)	86	9063			0.00- 42.56	13.10
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	72121	5.00000	4.922	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	22325			0.76- 60.76	30.95

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether					CAS #: 108-20-3		
	4.445	4.445 (0.841)	45	150519	5.00000	5.006	80.00- 120.00	100.00
	4.445	4.445 (0.841)	87	33160			0.00- 51.37	22.03
	4.445	4.445 (0.841)	59	17494			0.00- 41.09	11.62
	73 Vinyl Acetate					CAS #: 108-05-4		
	4.501	4.501 (0.852)	86	8959	5.00000	4.974	80.00- 120.00	100.00
	4.501	4.501 (0.852)	43	127594			1391.63-1451.63	1424.20
	79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
	4.809	4.809 (0.910)	59	146272	5.00000	5.039	80.00- 120.00	100.00
	4.809	4.809 (0.910)	87	48988			3.22- 63.22	33.49
	4.809	4.809 (0.910)	41	28007			0.00- 48.12	19.15
	84 2,2-Dichloropropane					CAS #: 594-20-7		
	5.004	5.004 (0.947)	77	68953	5.00000	5.052	80.00- 120.00	100.00
	5.004	5.004 (0.947)	79	22612			2.00- 62.00	32.79
	5.004	5.004 (0.947)	97	17231			0.00- 53.36	24.99
	85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
	5.046	5.046 (0.955)	98	25031	5.00000	4.806	80.00- 120.00	100.00
	5.046	5.046 (0.955)	96	37341			127.22- 187.22	149.18
	5.046	5.046 (0.955)	61	61406			283.85- 343.85	245.32
	86 2-Butanone					CAS #: 78-93-3		
	5.074	5.074 (0.960)	72	19190	5.00000	5.275	80.00- 120.00	100.00
	5.088	5.074 (0.963)	43	194878			1055.75-1115.75	1015.52
	5.074	5.074 (0.960)	57	7584			10.59- 70.59	39.52
	87 Ethyl Acetate					CAS #: 141-78-6		
	5.088	5.088 (0.963)	45	15360	5.00000	5.121	80.00- 120.00	100.00
	5.046	5.046 (0.955)	61	61406			450.31- 510.31	399.78
	5.088	5.088 (0.963)	70	11074			30.42- 90.42	72.10
	89 Tetrahydrofuran					CAS #: 109-99-9		
	5.284	5.270 (1.000)	42	51780	5.00000	5.047	80.00- 120.00	100.00
	5.284	5.270 (1.000)	71	17506			2.92- 62.92	33.81
	5.284	5.270 (1.000)	72	17706			3.54- 63.54	34.19
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.284	5.284 (1.000)	130	257265	25.0000		80.00- 120.00	100.00
	5.284	5.284 (1.000)	128	198868			48.46- 108.46	77.30
	5.284	5.270 (1.000)	49	382161			120.39- 180.39	148.55
	92 Chloroform					CAS #: 67-66-3		
	5.340	5.340 (1.011)	83	76910	5.00000	4.768	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.011)	85	51690			34.71- 94.71	67.21
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	47869	5.00000	4.695	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	71544			120.40- 180.40	149.46
5.438	5.438 (1.029)	41	39336			54.20- 114.20	82.17
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	86059	5.00000	4.747	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	53345			33.76- 93.76	61.99
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	81713	5.00000	4.893	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	85199			73.68- 133.68	104.27
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	21667	5.00000	5.139	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	54993			231.09- 291.09	253.81
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	216768	5.00000	4.866	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	66699			1.12- 61.12	30.77
5.774	5.774 (1.093)	41	61380			0.00- 57.49	28.32
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	103158	5.00000	4.879	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	24658			0.00- 53.80	23.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	357108	25.0000	25.224	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173770			21.66- 81.66	48.66
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	28935	5.00000	5.133	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	109587			365.20- 425.20	378.74
5.858	5.858 (0.948)	55	33901			91.31- 151.31	117.16
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	61110	5.00000	5.021	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	19136			1.20- 61.20	31.31
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	38185	5.00000	4.586	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	80884			179.02- 239.02	211.82
5.942	5.942 (0.962)	57	43453			84.85- 144.85	113.80

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.180	6.180 (1.000)	114	926448	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	143997			0.00- 45.52	15.54
110 n-Butanol						CAS #: 71-36-3	
6.348	6.348 (1.027)	56	35336	5.00000	5.214	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	25658			40.21- 100.21	72.61
6.348	6.348 (1.027)	43	19921			25.00- 85.00	56.38
111 Trichloroethene						CAS #: 79-01-6	
6.362	6.362 (1.029)	95	51343	5.00000	4.841	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	53310			74.96- 134.96	103.83
6.362	6.362 (1.029)	97	34367			34.80- 94.80	66.94
114 1,2-Dichloropropane						CAS #: 78-87-5	
6.586	6.586 (1.066)	63	22303	5.00000	4.551	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	18119			52.03- 112.03	81.24
6.586	6.586 (1.066)	41	18449			79.97- 139.97	82.72
116 Methyl Methacrylate						CAS #: 80-62-6	
6.664	6.664 (0.773)	69	40620	5.00000	4.788	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	63946			134.02- 194.02	157.42
6.664	6.664 (0.773)	100	16200			9.54- 69.54	39.88
117 1,4-Dioxane						CAS #: 123-91-1	
6.707	6.699 (1.085)	88	27610	5.00000	5.155	80.00- 120.00	100.00
6.699	6.699 (1.084)	58	24280			55.80- 115.80	87.94
6.699	6.699 (1.084)	57	8469			8.68- 68.68	30.67
118 Dibromomethane						CAS #: 74-95-3	
6.721	6.721 (0.780)	174	46476	5.00000	4.919	80.00- 120.00	100.00
6.714	6.721 (0.779)	93	46503			67.27- 127.27	100.06
6.714	6.721 (0.779)	95	38973			50.92- 110.92	83.86
122 Bromodichloromethane						CAS #: 75-27-4	
6.836	6.836 (1.106)	83	84118	5.00000	4.734	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	54033			34.31- 94.31	64.23
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.208	7.208 (1.166)	75	65073	5.00000	4.927	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	20430			1.42- 61.42	31.40
7.215	7.208 (1.168)	39	45406			38.56- 98.56	69.78
127 Methylcyclohexane						CAS #: 108-87-2	
6.460	6.460 (1.045)	83	66098	5.00000	4.660	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	31051			15.60- 75.60	46.98

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
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127 Methylcyclohexane (continued)								
6.460	6.460 (1.045)	55	67155				78.53- 138.53	101.60
131 4-Methyl-2-pentanone						CAS #: 108-10-1		
7.316	7.316 (1.184)	58	41661	5.00000		4.639	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	110219				231.30- 291.30	264.56
7.316	7.316 (1.184)	85	17067				8.94- 68.94	40.97
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	956581	25.0000		25.068	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	107663				0.00- 41.47	11.25
7.387	7.387 (1.195)	100	634365				36.47- 96.47	66.32
137 Toluene						CAS #: 108-88-3		
7.444	7.437 (1.205)	91	138408	5.00000		4.879	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	78368				28.30- 88.30	56.62
136 Octane						CAS #: 111-65-9		
7.444	7.444 (1.205)	57	45941	5.00000		4.868	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	44692				67.11- 127.11	97.28
7.444	7.444 (1.205)	43	108512				214.21- 274.21	236.20
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	63095	5.00000		4.860	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	21719				2.15- 62.15	34.42
7.688	7.688 (0.892)	39	40536				36.09- 96.09	64.25
141 1,1,2-Trichloroethane						CAS #: 79-00-5		
7.846	7.846 (0.910)	97	48053	5.00000		4.812	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	29801				31.62- 91.62	62.02
7.846	7.846 (0.910)	83	40996				56.35- 116.35	85.31
142 Tetrachloroethene						CAS #: 127-18-4		
7.881	7.881 (0.914)	166	67905	5.00000		4.917	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	52325				48.71- 108.71	77.06
7.881	7.881 (0.914)	131	51507				46.55- 106.55	75.85
143 2-Hexanone						CAS #: 591-78-6		
8.003	8.003 (0.929)	58	57652	5.00000		5.026	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	108442				157.91- 217.91	188.10
8.010	8.003 (0.929)	100	10390				0.00- 47.86	18.02
144 1,3-Dichloropropane						CAS #: 142-28-9		
7.989	7.989 (1.293)	76	66122	5.00000		4.885	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	74797				82.96- 142.96	113.12
7.989	7.989 (1.293)	78	21067				2.55- 62.55	31.86

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.946)	129	90433	5.00000	4.774	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	72167			47.77- 107.77	79.80
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.268	8.268 (0.959)	107	76295	5.00000	4.920	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	71622			64.60- 124.60	93.88
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.151)	63	87600	5.00000	5.109	80.00- 120.00	100.00
7.122	7.115 (1.152)	65	27142			0.95- 60.95	30.98
7.122	7.122 (1.152)	144	9349			0.00- 40.45	10.67
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.619	8.619 (1.000)	117	881547	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	488998			25.46- 85.46	55.47
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.002)	112	114941	5.00000	4.771	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	37258			2.13- 62.13	32.41
8.641	8.641 (1.002)	77	73881			26.35- 86.35	64.28
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.007)	106	60069	5.00000	4.986	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	182813			282.48- 342.48	304.34
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.010)	43	113446	5.00000	4.858	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	102410			59.52- 119.52	90.27
8.705	8.705 (1.010)	85	34795			0.00- 59.76	30.67
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.019)	106	71896	5.00000	4.797	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	145208			171.36- 231.36	201.97
164 o-Xylene						CAS #: 95-47-6	
9.128	9.128 (1.059)	106	67685	5.00000	4.757	80.00- 120.00	100.00
9.121	9.128 (1.058)	91	144014			179.99- 239.99	212.77
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.061)	104	117224	5.00000	4.755	80.00- 120.00	100.00
9.149	9.149 (1.061)	78	60052			19.09- 79.09	51.23
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.085)	173	85153	5.00000	4.741	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	42688			21.45- 81.45	50.13

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.091)	105	219071	5.00000	4.870	80.00- 120.00	100.00
9.407	9.414 (1.091)	120	58840			0.00- 56.99	26.86
9.407	9.407 (1.091)	51	26142			0.00- 41.77	11.93
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	67736	5.00000	4.784	80.00- 120.00	100.00(a)
9.579	9.579 (1.111)	98	25727			9.22- 69.22	37.98
9.579	9.579 (1.111)	42	47657			42.60- 102.60	70.36
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	576562	25.0000	24.727	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	723420			93.06- 153.06	125.47
9.601	9.601 (1.114)	176	545541			62.87- 122.87	94.62
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	107112	5.00000	4.802	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	68773			34.35- 94.35	64.21
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.130)	156	68462	5.00000	4.895	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	64845			67.29- 127.29	94.72
9.729	9.729 (1.129)	77	111900			132.41- 192.41	163.45
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	254398	5.00000	4.846	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	61239			0.00- 53.77	24.07
9.758	9.758 (1.132)	105	10150			0.00- 33.81	3.99
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	32592	5.00000	4.851	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	101946			285.00- 345.00	312.79
9.787	9.787 (1.135)	61	28367			54.06- 114.06	87.04
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	24824	5.00000	4.669	80.00- 120.00	100.00
9.787	9.787 (1.135)	89	12613			21.19- 81.19	50.81
9.787	9.787 (1.135)	75	101946			372.45- 432.45	410.68
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.138)	57	134816	5.00000	4.967	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	46047			4.13- 64.13	34.16
9.808	9.815 (1.138)	142	6372			0.00- 34.73	4.73
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	65376	5.00000	4.805	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.143)	105	212999				296.79- 356.79	325.81
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.145)	126	53933	5.00000		4.878	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	196435				336.29- 396.29	364.22
9.873	9.873 (1.145)	65	14803				38.83- 98.83	27.45
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.149)	120	91229	5.00000		4.774	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	188732				176.40- 236.40	206.88
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.172)	118	92281	5.00000		4.715	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	52780				26.64- 86.64	57.19
189 tert-Butylbenzene						CAS #: 98-06-6		
10.174	10.174 (1.180)	119	169085	5.00000		4.809	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	41511				0.00- 54.82	24.55
10.166	10.174 (1.179)	91	114268				36.92- 96.92	67.58
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.186)	105	180232	5.00000		4.783	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	83645				16.58- 76.58	46.41
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.202)	134	54234	5.00000		4.775	80.00- 120.00	100.00
10.353	10.360 (1.201)	105	264018				451.53- 511.53	486.81
10.360	10.353 (1.202)	91	42149				46.48- 106.48	77.72
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.214)	119	230013	5.00000		4.836	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	61361				0.00- 56.79	26.68
10.467	10.467 (1.214)	91	54876				0.00- 54.04	23.86
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.220)	146	123312	5.00000		4.816	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	79006				33.53- 93.53	64.07
10.517	10.517 (1.220)	111	51949				11.05- 71.05	42.13
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.229)	146	126649	5.00000		4.802	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	81497				33.47- 93.47	64.35
10.596	10.596 (1.229)	111	50009				9.65- 69.65	39.49
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.243)	91	173610	5.00000		4.788	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.243)	126	39012			0.00- 52.04	22.47
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	153796	5.00000	4.808	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	133916			55.86- 115.86	87.07
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	60615	5.00000	4.915	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	218931			331.99- 391.99	361.18
10.818	10.818 (1.255)	92	114155			161.01- 221.01	188.33
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	119023	5.00000	4.811	80.00- 120.00	100.00
10.919	10.926 (1.267)	148	75395			33.23- 93.23	63.34
10.919	10.918 (1.267)	111	50749			12.36- 72.36	42.64
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	71033	5.00000	4.952	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	63095			58.96- 118.96	88.82
11.606	11.606 (1.347)	155	53742			47.82- 107.82	75.66
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	165056	6.18000	6.103	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	134248			50.85- 110.85	81.33
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	110148	6.29500	6.268	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	106996			65.40- 125.40	97.14
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	84822	6.43500	6.390	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	53972			33.70- 93.70	63.63
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.456)	128	38541	0.63500	0.7182	80.00- 120.00	100.00
12.552	12.552 (1.456)	127	5058			0.00- 43.10	13.12
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.485)	180	106940	6.65500	6.650	80.00- 120.00	100.00
12.802	12.802 (1.485)	182	103120			65.67- 125.67	96.43
12.795	12.802 (1.484)	145	37861			6.02- 66.02	35.40

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062219.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	257265	5.69
108 1,4-Difluorobenze	874076	524446	1223706	926448	5.99
153 Chlorobenzene-d5	831223	498734	1163712	881547	6.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062219.d

Date : 22-JUN-2021 22:18

Client ID:

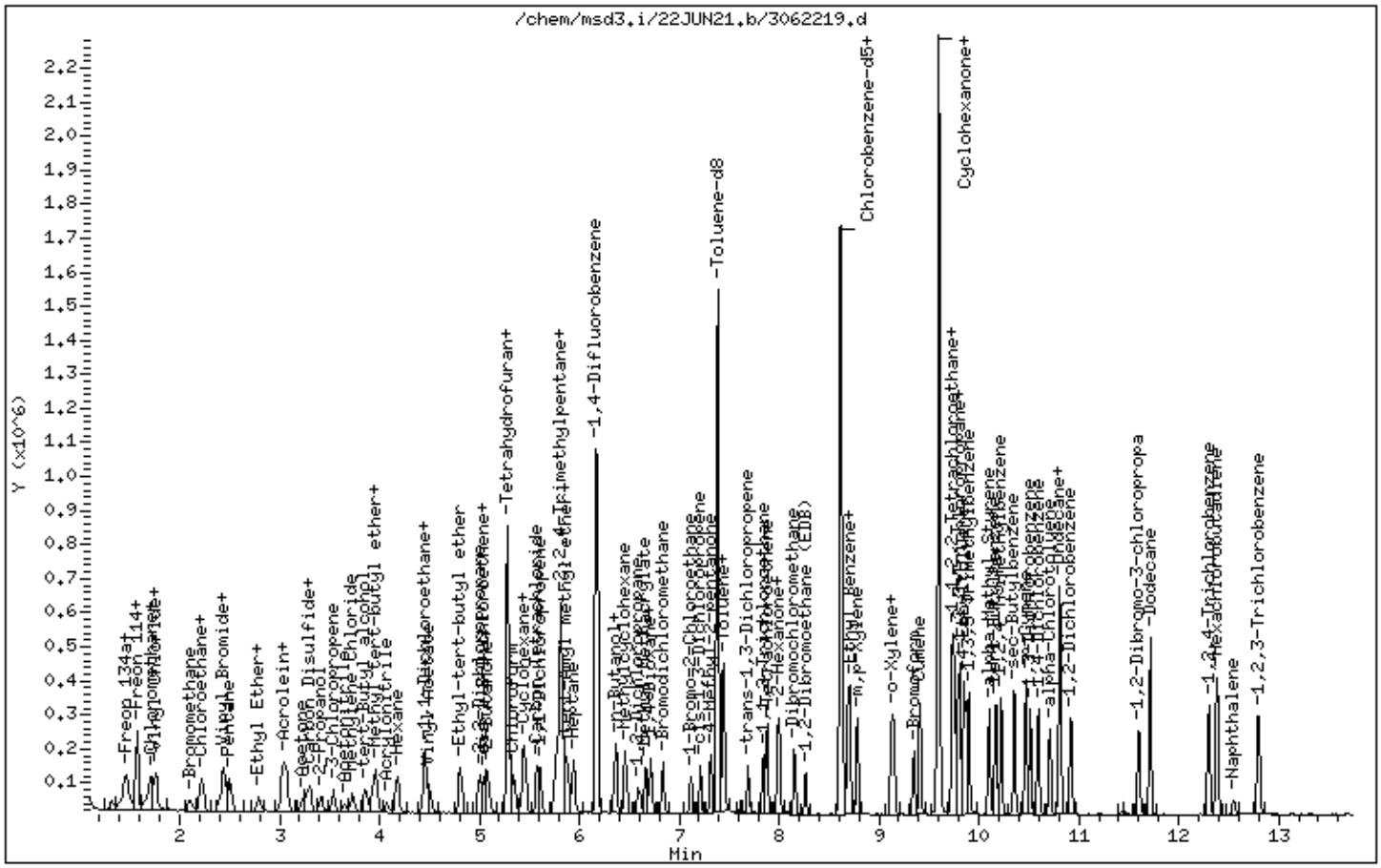
Instrument: msd3.i

Sample Info: 200mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051908.d
Lab Smp Id: ICAL Level 7
Inj Date : 19-MAY-2021 15:55
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2034
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:49 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:38 Cal File: p051919.d
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	246691	50.0000	50.000	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	220643			59.44- 119.44	89.44
1.745	1.745 (0.302)	51	1107781			419.06- 479.06	449.06
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	345627	50.0000	50.000	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	225623			35.28- 95.28	65.28
1.675	1.675 (0.290)	39	236222			38.35- 98.35	68.35
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	176502	50.0000	50.000	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1107781			597.63- 657.63	627.63
1.703	1.703 (0.295)	47	112469			33.72- 93.72	63.72
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	711177	50.0000	50.000	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	230217			2.37- 62.37	32.37
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.745	1.745 (0.302)	67	72356	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.745	1.745 (0.302)	51	1107781			1501.01-1561.01	1531.01
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	685577	50.0000	50.000	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	221438			2.30- 62.30	32.30
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	735430	50.0000	50.000	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	238581			2.44- 62.44	32.44
1.856	1.856 (0.321)	58	24710			0.00- 33.36	3.36
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	447790	50.0000	50.000	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	117587			0.00- 56.26	26.26
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	75310	50.0000	50.000	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	642610			823.29- 883.29	853.29
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	454203	50.0000	50.000	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	134867			0.00- 59.69	29.69
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	422955	50.0000	50.000	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	348369			52.37- 112.37	82.37
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	285084	50.0000	50.000	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	268184			64.07- 124.07	94.07
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	167305	50.0000	50.000	80.00- 120.00	100.00
2.605	2.605 (0.451)	66	50256			0.04- 60.04	30.04
2.612	2.612 (0.452)	49	57784			4.54- 64.54	34.54
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	523495	50.0000	50.000	80.00- 120.00	100.00
2.641	2.641 (0.457)	57	335680			34.12- 94.12	64.12
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	275173	50.0000	50.000	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	273159			69.27- 129.27	99.27
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	730878	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	472992			34.72- 94.72	64.72
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	628672	50.0000	50.000	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	193895			0.84- 60.84	30.84
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	852276	50.0000	50.000	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	127691			0.00- 44.98	14.98
2.970	2.970 (0.514)	72	63019			0.00- 37.39	7.39
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	146830	50.0000	50.000	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	284064			163.46- 223.46	193.46
3.285	3.285 (0.569)	45	411715			250.40- 310.40	280.40
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	75752	50.0000	50.000	80.00- 120.00	100.00
3.285	3.285 (0.569)	45	409963			511.19- 571.19	541.19
42 Acrolein					CAS #: 107-02-8		
3.529	3.529 (0.611)	55	129512	50.0000	50.000	80.00- 120.00	100.00
3.529	3.529 (0.611)	56	182747			111.10- 171.10	141.10
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	547261	50.0000	50.000	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	347836			33.56- 93.56	63.56
3.550	3.550 (0.614)	101	652410			89.21- 149.21	119.21
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	312049	50.0000	50.000	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	199778			34.02- 94.02	64.02
3.579	3.579 (0.619)	61	620248			168.77- 228.77	198.77
47 Acetone					CAS #: 67-64-1		
3.708	3.708 (0.642)	58	198391	50.0000	50.000	80.00- 120.00	100.00
3.708	3.708 (0.642)	43	660552			302.95- 362.95	332.95
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	846836	50.0000	50.000	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	699816	50.0000	50.000	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	295430			12.22- 72.22	42.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	823329	50.0000	50.000	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	141505			0.00- 47.19	17.19
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	142539	50.0000	50.000	80.00- 120.00	100.00
4.045	4.045 (0.700)	41	607488			396.19- 456.19	426.19
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	379243	50.0000	50.000	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	193207			20.95- 80.95	50.95
4.123	4.123 (0.714)	38	42379			0.00- 41.17	11.17
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	522699	50.0000	50.000	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	271957			22.03- 82.03	52.03
4.238	4.238 (0.733)	51	157735			0.18- 60.18	30.18
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	920285	50.0000	50.000	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	194304			0.00- 51.11	21.11
4.338	4.338 (0.751)	57	96551			0.00- 40.49	10.49
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	938706	50.0000	50.000	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	310725			3.10- 63.10	33.10
4.446	4.446 (0.769)	41	293659			1.28- 61.28	31.28
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.776)	98	212528	50.0000	50.000	80.00- 120.00	100.00
4.474	4.474 (0.774)	61	607494			255.84- 315.84	285.84
4.482	4.482 (0.776)	96	334925			127.59- 187.59	157.59
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	293221	50.0000	50.000	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	346138			88.05- 148.05	118.05
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.813)	57	758783	50.0000	50.000	80.00- 120.00	100.00
4.697	4.697 (0.813)	43	512299			37.52- 97.52	67.52
4.697	4.697 (0.813)	86	87084			0.00- 41.48	11.48
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	664501	50.0000	50.000	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	197374			0.00- 59.70	29.70

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.954	4.954 (0.857)	45	1800515	50.0000	50.000	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	327418			0.00- 48.18	18.18
4.954	4.954 (0.857)	59	182720			0.00- 40.15	10.15
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.865)	86	84247	50.0000	50.000	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2074564			2432.48-2492.48	2462.48
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.305	5.305 (0.918)	59	1553756	50.0000	50.000	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	481611			1.00- 61.00	31.00
5.305	5.305 (0.918)	41	291010			0.00- 48.73	18.73
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.506	5.506 (0.953)	77	589524	50.0000	50.000	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	190269			2.28- 62.28	32.28
5.506	5.506 (0.953)	97	141063			0.00- 53.93	23.93
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.960)	98	230520	50.0000	50.000	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	359034			125.75- 185.75	155.75
5.549	5.549 (0.960)	61	835407			332.40- 392.40	362.40
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.962)	72	170377	50.0000	50.000	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2120337			1214.50-1274.50	1244.50
5.556	5.556 (0.962)	57	76128			14.68- 74.68	44.68
87 Ethyl Acetate						CAS #: 141-78-6	
5.570	5.570 (0.964)	45	173307	50.0000	50.000	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	835407			452.04- 512.04	482.04
5.570	5.570 (0.964)	70	91460			22.77- 82.77	52.77
89 Tetrahydrofuran						CAS #: 109-99-9	
5.771	5.771 (0.999)	42	583804	50.0000	50.000	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	150745			0.00- 55.82	25.82
5.771	5.771 (0.999)	72	161049			0.00- 57.59	27.59
* 90 Bromochloromethane						CAS #: 74-97-5	
5.778	5.778 (1.000)	130	158810	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	124237			48.23- 108.23	78.23
5.778	5.778 (1.000)	49	286765			150.57- 210.57	180.57
92 Chloroform						CAS #: 67-66-3	
5.835	5.835 (1.010)	83	689555	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	446160			34.70- 94.70	64.70
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	486964	50.0000	50.000	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	840372			142.57- 202.57	172.57
5.957	5.957 (1.031)	41	448455			62.09- 122.09	92.09
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.033)	97	752510	50.0000	50.000	80.00- 120.00	100.00
5.972	5.972 (1.033)	99	481725			34.02- 94.02	64.02
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	735285	50.0000	50.000	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	739982			70.64- 130.64	100.64
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	197564	50.0000	50.000	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	507450			226.85- 286.85	256.85
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	2728265	50.0000	50.000	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	879725			2.24- 62.24	32.24
6.280	6.280 (1.087)	41	665520			0.00- 54.39	24.39
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	987337	50.0000	50.000	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	226078			0.00- 52.90	22.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213713	25.0000	25.000	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	122256			27.21- 87.21	57.21
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	279227	50.0000	50.000	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1124694			372.79- 432.79	402.79
6.358	6.358 (0.955)	55	396758			112.09- 172.09	142.09
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	526134	50.0000	50.000	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	162017			0.79- 60.79	30.79
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	395953	50.0000	50.000	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1015753			226.53- 286.53	256.53
6.444	6.444 (0.968)	57	518123			100.85- 160.85	130.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	597103	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93822			0.00- 45.71	15.71
110 n-Butanol						CAS #: 71-36-3	
6.810	6.810 (1.023)	56	364840	50.0000	50.000	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	258986			40.99- 100.99	70.99
6.810	6.810 (1.023)	43	209354			27.38- 87.38	57.38
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	478111	50.0000	50.000	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	508207			76.29- 136.29	106.29
6.867	6.867 (1.031)	97	304245			33.63- 93.63	63.63
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.089	7.089 (1.065)	63	491834	50.0000	50.000	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	349523			41.07- 101.07	71.07
7.096	7.096 (1.066)	41	258375			22.53- 82.53	52.53
116 Methyl Methacrylate						CAS #: 80-62-6	
7.132	7.132 (0.754)	69	400937	50.0000	50.000	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	841331			179.84- 239.84	209.84
7.139	7.139 (0.755)	100	158742			9.59- 69.59	39.59
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	263150	50.0000	50.000	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	258613			68.28- 128.28	98.28
7.175	7.175 (1.077)	57	86007			2.68- 62.68	32.68
118 Dibromomethane						CAS #: 74-95-3	
7.204	7.204 (0.761)	174	444945	50.0000	50.000	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	400838			60.09- 120.09	90.09
7.204	7.204 (0.761)	95	348769			48.38- 108.38	78.38
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	751298	50.0000	50.000	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	490118			35.24- 95.24	65.24
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.691	7.691 (1.155)	75	619937	50.0000	50.000	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	200964			2.42- 62.42	32.42
7.691	7.691 (1.155)	39	416341			37.16- 97.16	67.16
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	700725	50.0000	50.000	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	320784			15.78- 75.78	45.78

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	803336			84.64- 144.64	114.64
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	494934	50.0000	50.000	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1347937			242.35- 302.35	272.35
7.791	7.791 (1.170)	85	164527			3.24- 63.24	33.24
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	647681	25.0000	25.000	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	67618			0.00- 40.44	10.44
7.891	7.891 (1.185)	100	420696			34.95- 94.95	64.95
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	1352715	50.0000	50.000	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	789761			28.38- 88.38	58.38
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.194)	57	571594	50.0000	50.000	80.00- 120.00	100.00
7.949	7.949 (1.194)	85	491595			56.00- 116.00	86.00
7.949	7.949 (1.194)	43	1478464			228.66- 288.66	258.66
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	595661	50.0000	50.000	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	186109			1.24- 61.24	31.24
8.214	8.214 (0.868)	39	381886			34.11- 94.11	64.11
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	475355	50.0000	50.000	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	294547			31.96- 91.96	61.96
8.400	8.400 (0.888)	83	394203			52.93- 112.93	82.93
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	677222	50.0000	50.000	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	527121			47.84- 107.84	77.84
8.464	8.464 (0.895)	131	509856			45.29- 105.29	75.29
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	681778	50.0000	50.000	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1314958			162.87- 222.87	192.87
8.586	8.586 (0.908)	100	108687			0.00- 45.94	15.94
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	664559	50.0000	50.000	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	830619			94.99- 154.99	124.99
8.579	8.579 (1.288)	78	212995			2.05- 62.05	32.05

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1	
8.801	8.801 (0.930)	129	909694	50.0000	50.000	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	704539			47.45- 107.45	77.45
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.951	8.951 (0.946)	107	776769	50.0000	50.000	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	731780			64.21- 124.21	94.21
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.605	7.605 (1.142)	63	919549	50.0000	50.000	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	272524			0.00- 59.64	29.64
7.605	7.605 (1.142)	144	88579			0.00- 39.63	9.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	587747	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	316106			23.78- 83.78	53.78
154 Chlorobenzene						CAS #: 108-90-7	
9.496	9.496 (1.004)	112	1161228	50.0000	50.000	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	368543			1.74- 61.74	31.74
9.496	9.496 (1.004)	77	639171			25.04- 85.04	55.04
155 Ethyl Benzene						CAS #: 100-41-4	
9.567	9.567 (1.011)	106	611900	50.0000	50.000	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1858590			273.74- 333.74	303.74
156 Nonane						CAS #: 111-84-2	
9.596	9.596 (1.014)	43	1549739	50.0000	50.000	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1304255			54.16- 114.16	84.16
9.603	9.603 (1.015)	85	370362			0.00- 53.90	23.90
158 m,p-Xylene						CAS #: 108-38-3	
9.718	9.718 (1.027)	106	756872	50.0000	50.000	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1466255			163.73- 223.73	193.73
164 o-Xylene						CAS #: 95-47-6	
10.226	10.226 (1.081)	106	727897	50.0000	50.000	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1509987			177.45- 237.45	207.45
165 Styrene						CAS #: 100-42-5	
10.255	10.255 (1.084)	104	1231272	50.0000	50.000	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	589570			17.88- 77.88	47.88
167 Bromoform						CAS #: 75-25-2	
10.542	10.542 (1.114)	173	900150	50.0000	50.000	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	461304			21.25- 81.25	51.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2299741	50.0000	50.000	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	655786			0.00- 58.52	28.52
10.649	10.649 (1.126)	51	299021			0.00- 43.00	13.00
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	806258	50.0000	50.000	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	257503			1.94- 61.94	31.94
10.871	10.871 (1.149)	42	547332			37.89- 97.89	67.89
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	374384	25.0000	25.000	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	471423			95.92- 155.92	125.92
10.921	10.921 (1.154)	176	362754			66.89- 126.89	96.89
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.100 (1.173)	83	1121488	50.0000	50.000	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	731261			35.20- 95.20	65.20
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	708749	50.0000	50.000	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	689001			67.21- 127.21	97.21
11.179	11.179 (1.182)	77	418295			29.02- 89.02	59.02
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	677615	50.0000	50.000	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2686688			366.49- 426.49	396.49
11.150	11.150 (1.179)	105	100610			0.00- 44.85	14.85
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	347438	50.0000	50.000	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1078964			280.55- 340.55	310.55
11.100	11.100 (1.173)	61	158059			15.49- 75.49	45.49
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	236389	50.0000	50.000	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	187005			49.11- 109.11	79.11
11.179	11.179 (1.182)	75	1078964			426.44- 486.44	456.44
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1759170	50.0000	50.000	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	486507			0.00- 57.66	27.66
11.258	11.258 (1.190)	142	71926			0.00- 34.09	4.09
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	721963	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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183 4-Ethyltoluene (continued)							
11.287	11.287 (1.193)	105	2270938			284.55- 344.55	314.55
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	572035	50.0000	50.000	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1974474			315.17- 375.17	345.17
11.301	11.301 (1.195)	65	294904			21.55- 81.55	51.55
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1021220	50.0000	50.000	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1990658			164.93- 224.93	194.93
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	1032008	50.0000	50.000	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	570738			25.30- 85.30	55.30
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	1907239	50.0000	50.000	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	462558			0.00- 54.25	24.25
11.738	11.738 (1.241)	91	1168575			31.27- 91.27	61.27
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1923799	50.0000	50.000	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	943605			19.05- 79.05	49.05
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	595687	50.0000	50.000	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2785108			437.55- 497.55	467.55
11.996	11.996 (1.268)	91	421521			40.76- 100.76	70.76
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2621026	50.0000	50.000	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	669378			0.00- 55.54	25.54
12.153	12.153 (1.285)	91	562900			0.00- 51.48	21.48
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	1326539	50.0000	50.000	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	838543			33.21- 93.21	63.21
12.196	12.196 (1.289)	111	547931			11.31- 71.31	41.31
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1341343	50.0000	50.000	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	857150			33.90- 93.90	63.90
12.311	12.311 (1.301)	111	529140			9.45- 69.45	39.45
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1864560	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	433710			0.00- 53.26	23.26
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2085733	50.0000	50.000	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	1838043			58.12- 118.12	88.12
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	662478	50.0000	50.000	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2284179			314.79- 374.79	344.79
12.626	12.626 (1.335)	92	1220868			154.29- 214.29	184.29
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1281765	50.0000	50.000	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	818290			33.84- 93.84	63.84
12.733	12.733 (1.346)	111	547687			12.73- 72.73	42.73
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	800345	50.0000	50.000	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	660103			52.48- 112.48	82.48
13.600	13.600 (1.438)	155	619570			47.41- 107.41	77.41
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2143839	61.8000	61.800	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1776648			52.87- 112.87	82.87
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1233138	63.0000	63.000	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1175567			65.33- 125.33	95.33
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	895709	64.4000	64.400	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	565855			33.17- 93.17	63.17
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	306016	6.35000	6.350	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	39402			0.00- 42.88	12.88
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1163980	66.6000	66.600	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	1114530			65.75- 125.75	95.75
15.069	15.069 (1.593)	145	410098			5.23- 65.23	35.23

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051908.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	158810	0.00
108 1,4-Difluorobenze	597103	358262	835944	597103	0.00
153 Chlorobenzene-d5	587747	352648	822846	587747	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051908.d

Page 1

Date : 19-MAY-2021 15:55

Client ID:

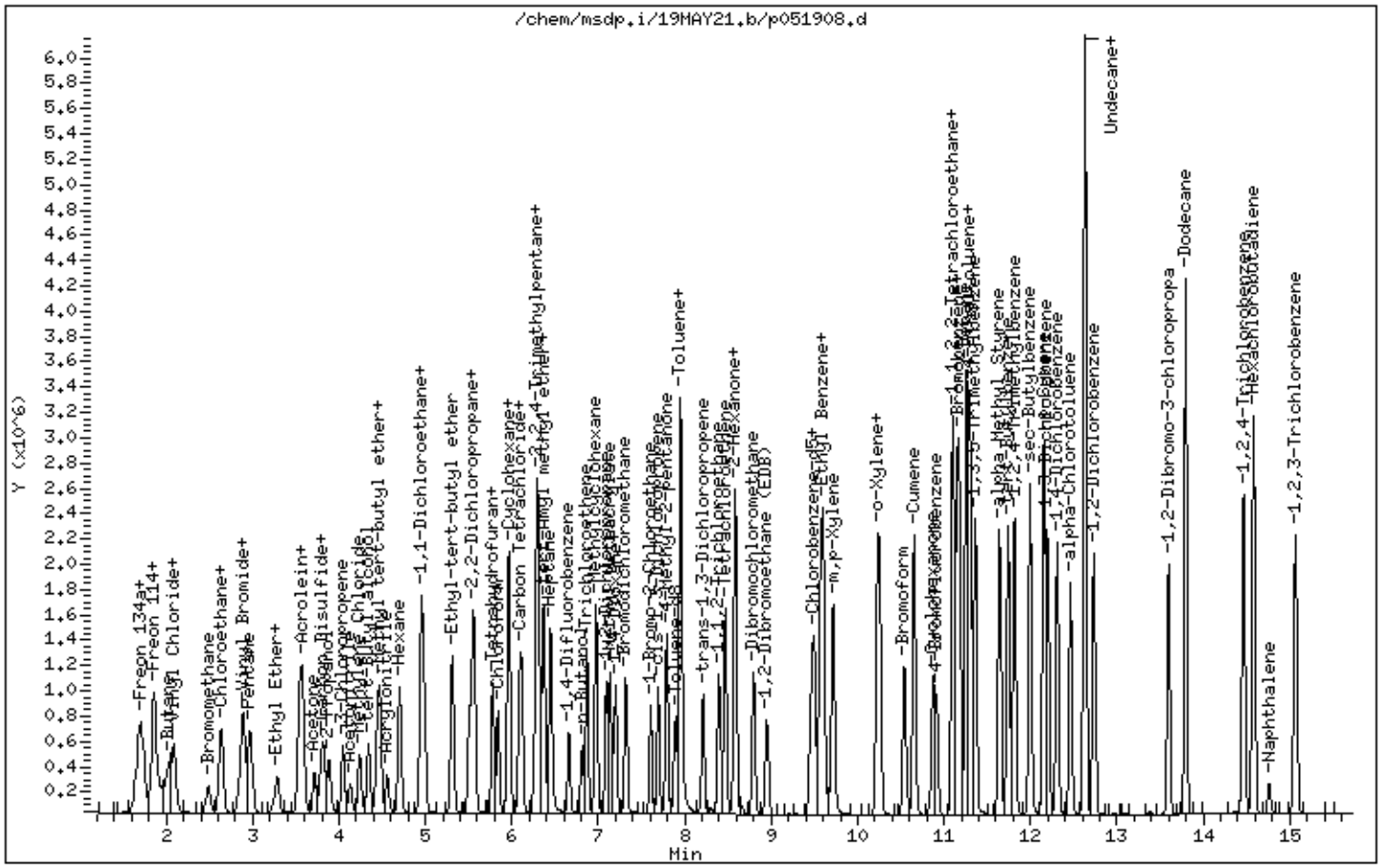
Instrument: msdp.i

Sample Info: 50mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051919.d
Lab Smp Id: ICAL Level 7
Inj Date : 19-MAY-2021 21:38
Operator : gh Inst ID: msdp.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:48 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:38 Cal File: p051919.d
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	161689	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	124860			47.22- 107.22	77.22
5.778	5.778 (1.000)	49	289657			149.14- 209.14	179.14
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	604813	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94059			0.00- 45.55	15.55
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	587682	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	320961			24.61- 84.61	54.61
3 Freon 143a					CAS #: 420-46-2		
1.590	1.590 (0.275)	65	175050	50.0000	50.000	80.00- 120.00	100.00
1.590	1.590 (0.275)	69	478765			243.50- 303.50	273.50
1.590	1.590 (0.275)	64	42119			0.00- 54.06	24.06
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	126213	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	82019			34.98- 94.98	64.98
1.674	1.674 (0.290)	41	69691			25.22- 85.22	55.22
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	712387	50.0000	50.000	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	212071			0.00- 59.77	29.77
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	479291	50.0000	50.000	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	647860			105.17- 165.17	135.17
40 Freon 123a					CAS #: 354-23-4		
3.385	3.385 (0.586)	117	461487	50.0000	50.000	80.00- 120.00	100.00
3.378	3.378 (0.585)	67	621572			104.69- 164.69	134.69
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	686787	50.0000	50.000	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	143333			0.00- 50.87	20.87
3.479	3.479 (0.602)	85	453806			36.08- 96.08	66.08
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	758990	50.0000	50.000	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	279019			6.76- 66.76	36.76
4.073	4.073 (0.705)	53	209054			0.00- 57.54	27.54
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	885414	50.0000	50.000	80.00- 120.00	100.00
4.073	4.073 (0.705)	74	125122			0.00- 44.13	14.13
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	715451	50.0000	50.000	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	280509			9.21- 69.21	39.21
5.019	5.019 (0.869)	50	173487			0.00- 54.25	24.25
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	98517	50.0000	50.000	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	91848			63.23- 123.23	93.23
5.083	5.083 (0.880)	41	53925			24.74- 84.74	54.74
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	911220	50.0000	50.000	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	102793			0.00- 41.28	11.28
5.620	5.620 (0.973)	58	74910			0.00- 38.22	8.22
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	106882	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	511089			448.18- 508.18	478.18
6.244	6.244 (1.081)	41	352703			299.99- 359.99	329.99
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	67461	50.0000	50.000	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	121394			149.95- 209.95	179.95
6.938	6.938 (0.733)	55	1267640			1849.07-1909.07	1879.07
115 2-Pentanone					CAS #: 107-87-9		
7.031	7.031 (0.743)	43	1498872	50.0000	50.000	80.00- 120.00	100.00
7.031	7.031 (0.743)	58	111516			0.00- 37.44	7.44
7.031	7.031 (0.743)	86	191499			0.00- 42.78	12.78
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	756724	50.0000	50.000	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	220224			0.00- 59.10	29.10
8.657	8.657 (1.300)	43	1856227			215.30- 275.30	245.30
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	672251	50.0000	50.000	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	587682			57.42- 117.42	87.42
9.596	9.596 (1.014)	95	240014			5.70- 65.70	35.70
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	1175492	50.0000	50.000	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	1951662			136.03- 196.03	166.03
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	923546	50.0000	50.000	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	641066			39.41- 99.41	69.41
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	612826	50.0000	50.000	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1991813			295.02- 355.02	325.02
11.444	11.444 (1.210)	63	256306			11.82- 71.82	41.82
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	901378	50.0000	50.000	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	2004624			192.40- 252.40	222.40
12.318	12.318 (1.302)	77	222560			0.00- 54.69	24.69
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	436881	50.0000	50.000	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	581027			102.99- 162.99	132.99

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	1256168	50.0000	50.000	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	1196432			65.24- 125.24	95.24
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	1358794	50.0000	50.000	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	383320			0.00- 58.21	28.21
214 beta-Pinene					CAS #: 127-91-3		
11.422	11.422 (1.207)	93	1085058	50.0000	50.000	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1991813			153.57- 213.57	183.57

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051919.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 21:38
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	161689	97013	226365	161689	0.00
108 1,4-Difluorobenze	604813	362888	846738	604813	0.00
153 Chlorobenzene-d5	587682	352609	822755	587682	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051919.d

Date : 19-MAY-2021 21:38

Client ID:

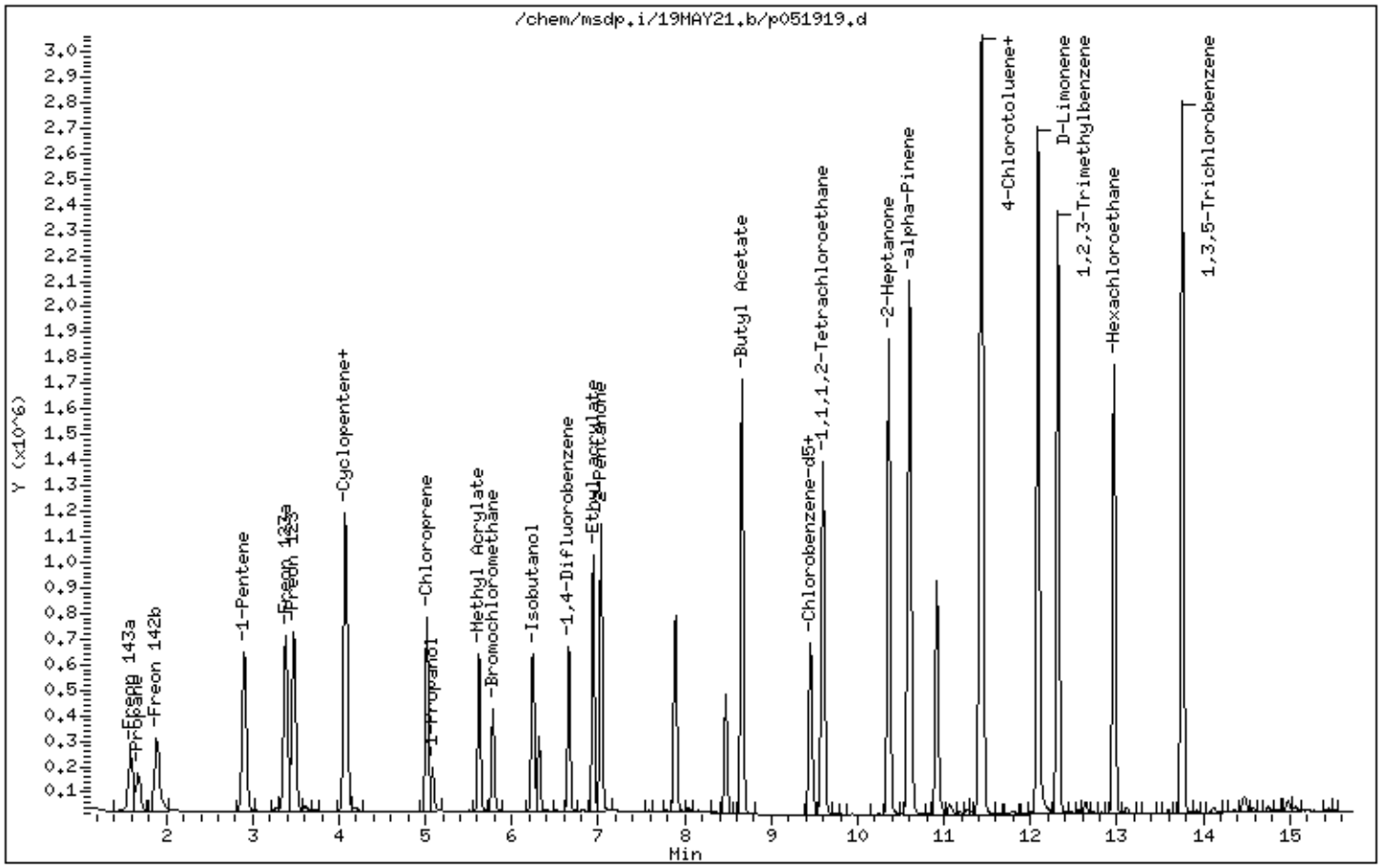
Instrument: msdp.i

Sample Info: 50mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062209.d
Lab Smp Id: ICAL Level 8
Inj Date : 22-JUN-2021 17:39
Operator : LD Inst ID: msd3.i
Smp Info : 20mL 3018-2013
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:44 Cal File: 3062220.d
Als bottle: 5 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	238218	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	185268			48.46- 108.46	77.77
5.270	5.270 (1.000)	49	355143			120.39- 180.39	149.08
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	858832	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	133184			0.00- 45.52	15.51
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	811449	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	449887			25.46- 85.46	55.44
3 Freon 143a					CAS #: 420-46-2		
1.339	1.353 (0.253)	65	85500	20.0000	21.456	80.00- 120.00	100.00
1.339	1.353 (0.253)	69	206588			217.09- 277.09	241.62
1.339	1.353 (0.253)	64	22705			0.00- 55.87	26.56
6 Propane					CAS #: 74-98-6		
1.423	1.422 (0.269)	43	42815	20.0000	19.722	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.423	1.422 (0.269)	39	31090			41.62- 101.62	72.61
1.423	1.422 (0.269)	41	23906			22.97- 82.97	55.84
13 Freon 142b					CAS #: 75-68-3		
1.591	1.604 (0.301)	65	264156	20.0000	20.846	80.00- 120.00	100.00
1.591	1.604 (0.301)	45	74425			0.00- 58.17	28.17
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.463)	55	165124	20.0000	20.519	80.00- 120.00	100.00
2.444	2.444 (0.463)	42	211095			99.17- 159.17	127.84
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	195571	20.0000	20.871	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	262508			103.13- 163.13	134.23
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	284633	20.0000	20.710	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	62462			0.00- 51.81	21.94
2.976	2.976 (0.563)	85	190087			37.13- 97.13	66.78
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	299705	20.0000	20.487	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	113549			7.90- 67.90	37.89
3.549	3.549 (0.672)	53	75244			0.00- 54.87	25.11
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	298972	20.0000	19.830	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	51281			0.00- 47.15	17.15
74 Chloroprene					CAS #: 126-99-8		
4.501	4.515 (0.852)	53	259538	20.0000	20.329	80.00- 120.00	100.00
4.515	4.515 (0.854)	88	110252			12.33- 72.33	42.48
4.501	4.515 (0.852)	50	71326			0.00- 57.62	27.48
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	36462	20.0000	18.474	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	29989			53.89- 113.89	82.25
4.613	4.613 (0.873)	41	20012			24.09- 84.09	54.88
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	301487	20.0000	19.650	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	42054			0.00- 43.24	13.95
5.130	5.130 (0.971)	58	28731			0.00- 38.83	9.53
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	45022	20.0000	15.967	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	157318			327.69- 387.69	349.42
5.774	5.774 (1.093)	41	117147			237.56- 297.56	260.20
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	25065	20.0000	19.329	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	38581			124.67- 184.67	153.92
6.460	6.460 (0.749)	55	404461			1601.30-1661.30	1613.65
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	535509	20.0000	17.656	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	47669			0.00- 37.25	8.90
6.558	6.557 (0.761)	86	88921			0.00- 45.08	16.60
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	220160	20.0000	19.446	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	79760			5.16- 65.16	36.23
8.068	8.068 (1.305)	43	546587			214.00- 274.00	248.27
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	258075	20.0000	21.144	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	177086			38.22- 98.22	68.62
8.712	8.712 (1.011)	95	95847			7.54- 67.54	37.14
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	335936	20.0000	19.211	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	545255			133.36- 193.36	162.31
172 D-Limonene					CAS #: 5989-27-5		
10.424	10.417 (1.209)	68	315767	20.0000	21.419	80.00- 120.00	100.00
10.424	10.424 (1.209)	93	228493			42.08- 102.08	72.36
186 4-Chlorotoluene					CAS #: 106-43-4		
9.973	9.973 (1.157)	126	219355	20.0000	20.645	80.00- 120.00	100.00
9.973	9.966 (1.157)	91	743925			305.94- 365.94	339.14
9.966	9.966 (1.156)	63	100352			15.44- 75.44	45.75
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	299929	20.0000	20.594	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	696099			206.43- 266.43	232.09
10.596	10.596 (1.229)	77	85107			0.00- 58.29	28.38
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.288)	201	201656	20.0000	22.680	80.00- 120.00	100.00
11.098	11.098 (1.288)	117	276979			109.77- 169.77	137.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.728	11.728 (1.361)	180	340241	20.0000	17.550	80.00- 120.00	100.00
11.728	11.728 (1.361)	182	325140			65.79- 125.79	95.56
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	526271	20.0000	20.974	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	158800			0.13- 60.13	30.17
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	426022	20.0000	21.620	80.00- 120.00	100.00
9.973	9.966 (1.157)	91	743925			145.95- 205.95	174.62

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062209.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	238218	-2.13
108 1,4-Difluorobenze	874076	524446	1223706	858832	-1.74
153 Chlorobenzene-d5	831223	498734	1163712	811449	-2.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062209.d

Date : 22-JUN-2021 17:39

Client ID:

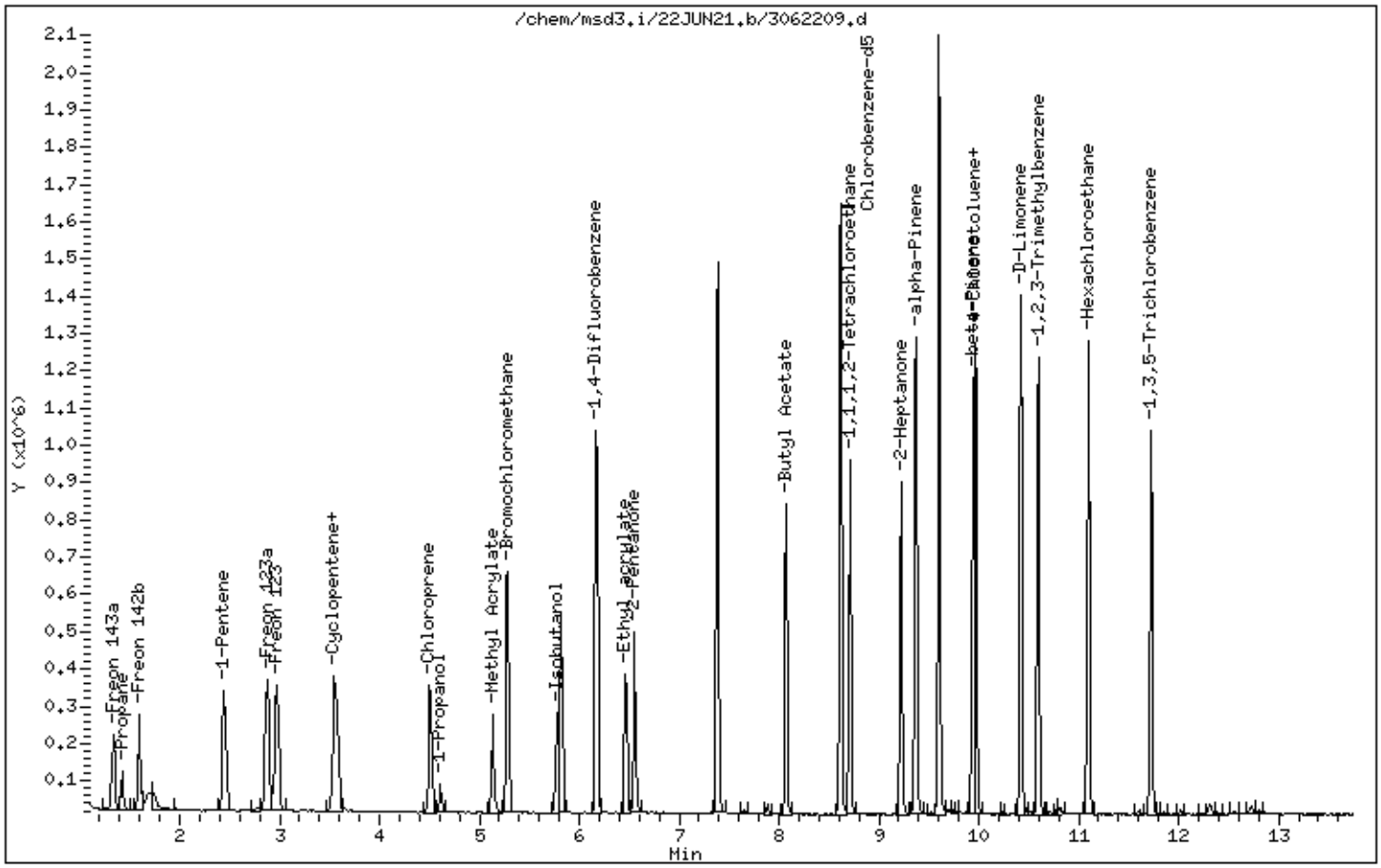
Instrument: msd3.i

Sample Info: 20mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062220.d
Lab Smp Id: ICAL Level 8
Inj Date : 22-JUN-2021 22:44
Operator : LD Inst ID: msd3.i
Smp Info : 20mL 3018-2115
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 22:44 Cal File: 3062220.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.265)	83	129641	20.0000	20.659	80.00- 120.00	100.00
1.395	1.395 (0.265)	69	106473			51.82- 111.82	82.13
1.478	1.479 (0.281)	51	337072			194.91- 254.91	260.00
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.270)	41	129315	20.0000	20.300	80.00- 120.00	100.00
1.423	1.423 (0.270)	42	85896			35.61- 95.61	66.42
1.423	1.423 (0.270)	39	94582			42.66- 102.66	73.14
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.273)	65	83946	20.0000	20.216	80.00- 120.00	100.00
1.478	1.479 (0.281)	51	337072			321.86- 381.86	401.53
1.437	1.437 (0.273)	47	63389			45.34- 105.34	75.51
8 Freon 12					CAS #: 75-71-8		
1.450	1.465 (0.275)	85	358781	20.0000	19.529	80.00- 120.00	100.00
1.450	1.465 (0.275)	87	117251			2.63- 62.63	32.68
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.478	1.479 (0.281)	67	39312	20.0000	19.470	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
9 Chlorodifluoromethane (continued)							
1.478	1.479 (0.281)	51	337072			719.76- 779.76	857.43
10 Freon 114					CAS #: 76-14-2		
1.562	1.562 (0.296)	135	269564	20.0000	19.803	80.00- 120.00	100.00
1.562	1.562 (0.296)	137	86297			2.12- 62.12	32.01
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.299)	43	293920	20.0000	20.529	80.00- 120.00	100.00
1.576	1.576 (0.299)	42	95420			2.44- 62.44	32.46
1.576	1.576 (0.299)	58	11334			0.00- 33.26	3.86
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	156507	20.0000	20.497	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	53916			2.41- 62.41	34.45
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.323)	58	33313	20.0000	18.474	80.00- 120.00	100.00
1.702	1.702 (0.323)	43	254263			727.41- 787.41	763.25
19 Vinyl Chloride					CAS #: 75-01-4		
1.730	1.744 (0.328)	62	149268	20.0000	18.268	80.00- 120.00	100.00
1.730	1.744 (0.328)	64	46821			1.28- 61.28	31.37
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.334)	54	137146	20.0000	18.314	80.00- 120.00	100.00
1.758	1.758 (0.334)	39	133734			69.23- 129.23	97.51
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.397)	94	121745	20.0000	18.839	80.00- 120.00	100.00
2.094	2.094 (0.397)	96	114666			62.78- 122.78	94.19
30 Chloroethane					CAS #: 75-00-3		
2.192	2.206 (0.416)	64	77505	20.0000	20.207	80.00- 120.00	100.00
2.192	2.206 (0.416)	66	25715			1.44- 61.44	33.18
2.192	2.206 (0.416)	49	27043			4.12- 64.12	34.89
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.421)	43	206284	20.0000	21.031	80.00- 120.00	100.00
2.220	2.220 (0.421)	57	140968			38.82- 98.82	68.34
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.453)	106	140476	20.0000	19.994	80.00- 120.00	100.00
2.388	2.388 (0.453)	108	132323			63.14- 123.14	94.20
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.461)	101	393482	20.0000	20.243	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.430	2.430 (0.461)	103	253926			35.12- 95.12	64.53
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.464)	67	318380	20.0000	20.490	80.00- 120.00	100.00
2.444	2.444 (0.464)	69	97738			0.74- 60.74	30.70
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.474)	43	317191	20.0000	20.298	80.00- 120.00	100.00
2.500	2.500 (0.474)	57	49339			0.00- 45.97	15.55
2.500	2.500 (0.474)	72	26407			0.00- 38.10	8.33
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.527)	74	66932	20.0000	19.104	80.00- 120.00	100.00
2.780	2.780 (0.527)	59	119789			147.68- 207.68	178.97
2.780	2.780 (0.527)	45	159778			206.40- 266.40	238.72
39 Ethanol					CAS #: 64-17-5		
2.752	2.766 (0.522)	46	28807	20.0000	18.320	80.00- 120.00	100.00
2.780	2.780 (0.527)	45	159778			523.01- 583.01	554.65
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.575)	55	52494	20.0000	20.117	80.00- 120.00	100.00
3.032	3.032 (0.575)	56	75605			110.33- 170.33	144.03
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.575)	151	273535	20.0000	20.585	80.00- 120.00	100.00
3.032	3.032 (0.575)	153	173964			33.72- 93.72	63.60
3.032	3.032 (0.575)	101	323471			89.67- 149.67	118.26
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.583)	96	147536	20.0000	18.434	80.00- 120.00	100.00
3.074	3.074 (0.583)	98	94290			33.39- 93.39	63.91
3.060	3.074 (0.581)	61	282368			163.82- 223.82	191.39
47 Acetone					CAS #: 67-64-1		
3.213	3.213 (0.610)	58	84569	20.0000	19.124	80.00- 120.00	100.00
3.213	3.213 (0.610)	43	283524			299.66- 359.66	335.26
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.626)	76	402637	20.0000	20.220	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.620)	142	397755	20.0000	23.100	80.00- 120.00	100.00
3.269	3.269 (0.620)	127	177692			14.58- 74.58	44.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.395	3.395 (0.644)	45	327864	20.0000	20.616	80.00- 120.00	100.00
3.395	3.395 (0.644)	43	59812			0.00- 48.61	18.24
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.671)	76	64840	20.0000	18.913	80.00- 120.00	100.00
3.535	3.535 (0.671)	41	237428			338.06- 398.06	366.18
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.689)	41	139359	20.0000	20.013	80.00- 120.00	100.00
3.633	3.633 (0.689)	40	74812			21.81- 81.81	53.68
3.633	3.633 (0.689)	38	16914			0.00- 41.86	12.14
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.705)	49	214111	20.0000	20.231	80.00- 120.00	100.00
3.717	3.717 (0.705)	84	126022			30.77- 90.77	58.86
3.717	3.717 (0.705)	51	64303			1.39- 61.39	30.03
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.732)	59	415054	20.0000	20.793	80.00- 120.00	100.00
3.857	3.857 (0.732)	41	88359			0.00- 51.05	21.29
3.857	3.857 (0.732)	57	43467			0.00- 41.68	10.47
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.748)	73	439233	20.0000	20.386	80.00- 120.00	100.00
3.941	3.941 (0.748)	57	128756			0.00- 58.86	29.31
3.941	3.941 (0.748)	41	118579			0.00- 57.27	27.00
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.753)	98	95585	20.0000	17.747	80.00- 120.00	100.00
3.969	3.969 (0.753)	61	259923			244.59- 304.59	271.93
3.969	3.969 (0.753)	96	151389			129.84- 189.84	158.38
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.772)	52	109987	20.0000	17.015	80.00- 120.00	100.00
4.067	4.067 (0.772)	53	130352			88.50- 148.50	118.52
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.790)	57	286776	20.0000	19.637	80.00- 120.00	100.00
4.165	4.179 (0.790)	43	179251			32.99- 92.99	62.51
4.165	4.179 (0.790)	86	36198			0.00- 42.56	12.62
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.846)	63	285967	20.0000	19.040	80.00- 120.00	100.00
4.459	4.459 (0.846)	65	87277			0.76- 60.76	30.52

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether						CAS #: 108-20-3	
	4.445	4.445 (0.843)	45	649480	20.0000	21.073	80.00- 120.00	100.00
	4.445	4.445 (0.843)	87	138914			0.00- 51.37	21.39
	4.445	4.445 (0.843)	59	70481			0.00- 41.09	10.85
	73 Vinyl Acetate						CAS #: 108-05-4	
	4.501	4.501 (0.854)	86	35060	20.0000	18.987	80.00- 120.00	100.00
	4.501	4.501 (0.854)	43	511715			1391.63-1451.63	1459.54
	79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
	4.809	4.809 (0.912)	59	612983	20.0000	20.601	80.00- 120.00	100.00
	4.809	4.809 (0.912)	87	208206			3.22- 63.22	33.97
	4.809	4.809 (0.912)	41	116192			0.00- 48.12	18.96
	84 2,2-Dichloropropane						CAS #: 594-20-7	
	5.004	5.004 (0.950)	77	285442	20.0000	20.401	80.00- 120.00	100.00
	5.004	5.004 (0.950)	79	93306			2.00- 62.00	32.69
	5.004	5.004 (0.950)	97	69169			0.00- 53.36	24.23
	85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
	5.046	5.046 (0.958)	98	95859	20.0000	17.954	80.00- 120.00	100.00
	5.046	5.046 (0.958)	96	153492			127.22- 187.22	160.12
	5.046	5.046 (0.958)	61	319089			283.85- 343.85	332.87
	86 2-Butanone						CAS #: 78-93-3	
	5.060	5.074 (0.960)	72	74025	20.0000	19.849	80.00- 120.00	100.00
	5.074	5.074 (0.963)	43	790149			1055.75-1115.75	1067.41
	5.060	5.074 (0.960)	57	29507			10.59- 70.59	39.86
	87 Ethyl Acetate						CAS #: 141-78-6	
	5.088	5.088 (0.965)	45	62917	20.0000	20.464	80.00- 120.00	100.00
	5.046	5.046 (0.958)	61	319089			450.31- 510.31	507.16
	5.088	5.088 (0.965)	70	39555			30.42- 90.42	62.87
	89 Tetrahydrofuran						CAS #: 109-99-9	
	5.270	5.270 (1.000)	42	206335	20.0000	19.620	80.00- 120.00	100.00
	5.270	5.270 (1.000)	71	65936			2.92- 62.92	31.96
	5.270	5.270 (1.000)	72	70062			3.54- 63.54	33.96
*	90 Bromochloromethane						CAS #: 74-97-5	
	5.270	5.284 (1.000)	130	263723	25.0000		80.00- 120.00	100.00
	5.270	5.284 (1.000)	128	203258			48.46- 108.46	77.07
	5.270	5.270 (1.000)	49	398101			120.39- 180.39	150.95
	92 Chloroform						CAS #: 67-66-3	
	5.340	5.340 (1.013)	83	317723	20.0000	19.215	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.013)	85	208174			34.71- 94.71	65.52
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.032)	84	206465	20.0000	19.755	80.00- 120.00	100.00
5.438	5.438 (1.032)	56	305753			120.40- 180.40	148.09
5.438	5.438 (1.032)	41	173004			54.20- 114.20	83.79
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.466 (1.034)	97	353780	20.0000	19.035	80.00- 120.00	100.00
5.452	5.466 (1.034)	99	226711			33.76- 93.76	64.08
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.058)	119	354645	20.0000	20.718	80.00- 120.00	100.00
5.578	5.578 (1.058)	117	369659			73.68- 133.68	104.23
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	86731	20.0000	19.946	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	225888			231.09- 291.09	260.45
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.096)	57	933654	20.0000	20.443	80.00- 120.00	100.00
5.774	5.774 (1.096)	56	290883			1.12- 61.12	31.16
5.774	5.774 (1.096)	41	258502			0.00- 57.49	27.69
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	428096	20.0000	19.634	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	100116			0.00- 53.80	23.39
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.104)	65	368537	25.0000	25.394	80.00- 120.00	100.00
5.816	5.816 (1.104)	67	184306			21.66- 81.66	50.01
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	120883	20.0000	20.792	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	475761			365.20- 425.20	393.57
5.858	5.858 (0.950)	55	144092			91.31- 151.31	119.20
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	242448	20.0000	19.314	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	75740			1.20- 61.20	31.24
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	166097	20.0000	19.340	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	348495			179.02- 239.02	209.81
5.942	5.942 (0.964)	57	189277			84.85- 144.85	113.96

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.166	6.180 (1.000)	114	955496	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	150786			0.00- 45.52	15.78
110 n-Butanol						CAS #: 71-36-3	
6.348	6.348 (1.030)	56	135772	20.0000	19.427	80.00- 120.00	100.00
6.348	6.348 (1.030)	41	97586			40.21- 100.21	71.87
6.348	6.348 (1.030)	43	75984			25.00- 85.00	55.96
111 Trichloroethene						CAS #: 79-01-6	
6.362	6.362 (1.032)	95	210526	20.0000	19.246	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	220731			74.96- 134.96	104.85
6.362	6.362 (1.032)	97	136718			34.80- 94.80	64.94
114 1,2-Dichloropropane						CAS #: 78-87-5	
6.585	6.586 (1.068)	63	88762	20.0000	17.562	80.00- 120.00	100.00
6.585	6.586 (1.068)	62	71989			52.03- 112.03	81.10
6.585	6.586 (1.068)	41	85754			79.97- 139.97	96.61
116 Methyl Methacrylate						CAS #: 80-62-6	
6.664	6.664 (0.774)	69	173646	20.0000	19.932	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	278436			134.02- 194.02	160.35
6.664	6.664 (0.774)	100	67667			9.54- 69.54	38.97
117 1,4-Dioxane						CAS #: 123-91-1	
6.699	6.699 (1.087)	88	111628	20.0000	20.210	80.00- 120.00	100.00
6.699	6.699 (1.087)	58	94250			55.80- 115.80	84.43
6.692	6.699 (1.085)	57	41965			8.68- 68.68	37.59
118 Dibromomethane						CAS #: 74-95-3	
6.714	6.721 (0.780)	174	191623	20.0000	19.750	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	188128			67.27- 127.27	98.18
6.714	6.721 (0.780)	95	155218			50.92- 110.92	81.00
122 Bromodichloromethane						CAS #: 75-27-4	
6.836	6.836 (1.109)	83	348185	20.0000	19.000	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	221251			34.31- 94.31	63.54
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.208	7.208 (1.169)	75	273558	20.0000	20.084	80.00- 120.00	100.00
7.208	7.208 (1.169)	77	88939			1.42- 61.42	32.51
7.208	7.208 (1.169)	39	191840			38.56- 98.56	70.13
127 Methylcyclohexane						CAS #: 108-87-2	
6.460	6.460 (1.048)	83	285545	20.0000	19.521	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	127891			15.60- 75.60	44.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.460	6.460 (1.048)	55	287852			78.53- 138.53	100.81
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.315	7.316 (1.186)	58	182321	20.0000	19.686	80.00- 120.00	100.00
7.315	7.316 (1.186)	43	476447			231.30- 291.30	261.32
7.315	7.316 (1.186)	85	69771			8.94- 68.94	38.27
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	986180	25.0000	25.058	80.00- 120.00	100.00
7.380	7.387 (1.197)	70	114166			0.00- 41.47	11.58
7.380	7.387 (1.197)	100	654564			36.47- 96.47	66.37
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	589912	20.0000	20.163	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	342233			28.30- 88.30	58.01
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.207)	57	200106	20.0000	20.558	80.00- 120.00	100.00
7.444	7.444 (1.207)	85	198709			67.11- 127.11	99.30
7.444	7.444 (1.207)	43	493159			214.21- 274.21	246.45
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	269205	20.0000	20.191	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	86100			2.15- 62.15	31.98
7.688	7.688 (0.893)	39	181147			36.09- 96.09	67.29
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.838	7.846 (0.910)	97	204634	20.0000	19.957	80.00- 120.00	100.00
7.838	7.846 (0.910)	99	125849			31.62- 91.62	61.50
7.838	7.846 (0.910)	83	177971			56.35- 116.35	86.97
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.881 (0.914)	166	286206	20.0000	20.181	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	225244			48.71- 108.71	78.70
7.874	7.881 (0.914)	131	221908			46.55- 106.55	77.53
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	249131	20.0000	21.152	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	465953			157.91- 217.91	187.03
8.003	8.003 (0.929)	100	45265			0.00- 47.86	18.17
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	281259	20.0000	20.149	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	321798			82.96- 142.96	114.41
7.989	7.989 (1.296)	78	91933			2.55- 62.55	32.69

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	400555	20.0000	20.591	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	309809			47.77- 107.77	77.34
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.261	8.268 (0.959)	107	325483	20.0000	20.440	80.00- 120.00	100.00
8.261	8.268 (0.959)	109	308152			64.60- 124.60	94.68
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.154)	63	355559	20.0000	20.106	80.00- 120.00	100.00
7.115	7.115 (1.154)	65	109912			0.95- 60.95	30.91
7.115	7.122 (1.154)	144	36823			0.00- 40.45	10.36
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	905256	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	503885			25.46- 85.46	55.66
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	497423	20.0000	20.105	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	163024			2.13- 62.13	32.77
8.641	8.641 (1.003)	77	283757			26.35- 86.35	57.05
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.008)	106	257953	20.0000	20.850	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	805391			282.48- 342.48	312.22
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.011)	43	511680	20.0000	21.338	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	461512			59.52- 119.52	90.20
8.705	8.705 (1.011)	85	155284			0.00- 59.76	30.35
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	316131	20.0000	20.539	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	644124			171.36- 231.36	203.75
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	306102	20.0000	20.949	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	645277			179.99- 239.99	210.80
165 Styrene						CAS #: 100-42-5	
9.142	9.149 (1.062)	104	529383	20.0000	20.912	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	262274			19.09- 79.09	49.54
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.086)	173	383414	20.0000	20.786	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	199648			21.45- 81.45	52.07

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
168 Cumene						CAS #: 98-82-8	
9.407	9.414 (1.092)	105	965419	20.0000	20.898	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	262721			0.00- 56.99	27.21
9.407	9.407 (1.092)	51	114165			0.00- 41.77	11.83
169 Cyclohexanone						CAS #: 108-94-1	
9.579	9.579 (1.112)	55	288233	20.0000	19.826	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	111377			9.22- 69.22	38.64
9.579	9.579 (1.112)	42	205722			42.60- 102.60	71.37
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4	
9.600	9.601 (1.115)	174	601735	25.0000	25.130	80.00- 120.00	100.00
9.600	9.601 (1.115)	95	749593			93.06- 153.06	124.57
9.600	9.601 (1.115)	176	564236			62.87- 122.87	93.77
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
9.737	9.737 (1.131)	83	471108	20.0000	20.568	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	302417			34.35- 94.35	64.19
177 Bromobenzene						CAS #: 108-86-1	
9.729	9.729 (1.130)	156	305636	20.0000	21.282	80.00- 120.00	100.00
9.729	9.737 (1.130)	158	293703			67.29- 127.29	96.10
9.729	9.729 (1.130)	77	498110			132.41- 192.41	162.97
178 Propylbenzene						CAS #: 103-65-1	
9.758	9.758 (1.133)	91	1151787	20.0000	21.368	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	273172			0.00- 53.77	23.72
9.758	9.758 (1.133)	105	43998			0.00- 33.81	3.82
179 1,2,3-Trichloropropane						CAS #: 96-18-4	
9.787	9.787 (1.136)	110	143818	20.0000	20.844	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	453627			285.00- 345.00	315.42
9.787	9.787 (1.136)	61	122921			54.06- 114.06	85.47
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6	
9.787	9.787 (1.136)	53	112999	20.0000	20.697	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	48773			21.19- 81.19	43.16
9.787	9.787 (1.136)	75	453627			372.45- 432.45	401.44
182 Decane						CAS #: 124-18-5	
9.808	9.808 (1.139)	57	600354	20.0000	21.540	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	205326			4.13- 64.13	34.20
9.808	9.815 (1.139)	142	27594			0.00- 34.73	4.60
183 4-Ethyltoluene						CAS #: 622-96-8	
9.851	9.851 (1.144)	120	293774	20.0000	21.026	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.144)	105	962719				296.79- 356.79	327.71
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.146)	126	241975	20.0000		21.314	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	875996				336.29- 396.29	362.02
9.873	9.873 (1.146)	65	119876				38.83- 98.83	49.54
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.150)	120	406512	20.0000		20.714	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	838492				176.40- 236.40	206.27
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.173)	118	429983	20.0000		21.393	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	242282				26.64- 86.64	56.35
189 tert-Butylbenzene						CAS #: 98-06-6		
10.166	10.174 (1.180)	119	779597	20.0000		21.591	80.00- 120.00	100.00
10.166	10.174 (1.180)	134	188686				0.00- 54.82	24.20
10.166	10.174 (1.180)	91	525911				36.92- 96.92	67.46
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.187)	105	810102	20.0000		20.934	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	374725				16.58- 76.58	46.26
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.203)	134	244206	20.0000		20.939	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	1180941				451.53- 511.53	483.58
10.353	10.353 (1.202)	91	188846				46.48- 106.48	77.33
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.215)	119	1040383	20.0000		21.301	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	273377				0.00- 56.79	26.28
10.467	10.467 (1.215)	91	250444				0.00- 54.04	24.07
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.221)	146	555180	20.0000		21.117	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	354339				33.53- 93.53	63.82
10.517	10.517 (1.221)	111	229208				11.05- 71.05	41.29
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.230)	146	564376	20.0000		20.841	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	358009				33.47- 93.47	63.43
10.596	10.596 (1.230)	111	223496				9.65- 69.65	39.60
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.244)	91	784223	20.0000		21.062	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	173331			0.00- 52.04	22.10
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	693926	20.0000	21.128	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	599450			55.86- 115.86	86.39
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	264258	20.0000	20.867	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	975496			331.99- 391.99	369.15
10.818	10.818 (1.256)	92	511283			161.01- 221.01	193.48
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.918	10.926 (1.268)	146	537905	20.0000	21.173	80.00- 120.00	100.00
10.918	10.926 (1.268)	148	339671			33.23- 93.23	63.15
10.918	10.918 (1.268)	111	228348			12.36- 72.36	42.45
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	312823	20.0000	21.235	80.00- 120.00	100.00
11.599	11.599 (1.347)	75	277182			58.96- 118.96	88.61
11.606	11.606 (1.348)	155	243263			47.82- 107.82	77.76
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	692267	24.7200	24.926	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	562156			50.85- 110.85	81.21
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	465565	25.1800	25.800	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	448092			65.40- 125.40	96.25
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	368056	25.7400	27.002	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	232220			33.70- 93.70	63.09
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	122845	2.54000	2.229	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	15728			0.00- 43.10	12.80
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.487)	180	443444	26.6200	26.855	80.00- 120.00	100.00
12.802	12.802 (1.487)	182	422798			65.67- 125.67	95.34
12.802	12.802 (1.487)	145	159126			6.02- 66.02	35.88

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062220.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	263723	8.35
108 1,4-Difluorobenze	874076	524446	1223706	955496	9.31
153 Chlorobenzene-d5	831223	498734	1163712	905256	8.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.27	-0.27
108 1,4-Difluorobenze	6.18	5.85	6.51	6.17	-0.23
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062220.d

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Date : 22-JUN-2021 22:44

Client ID:

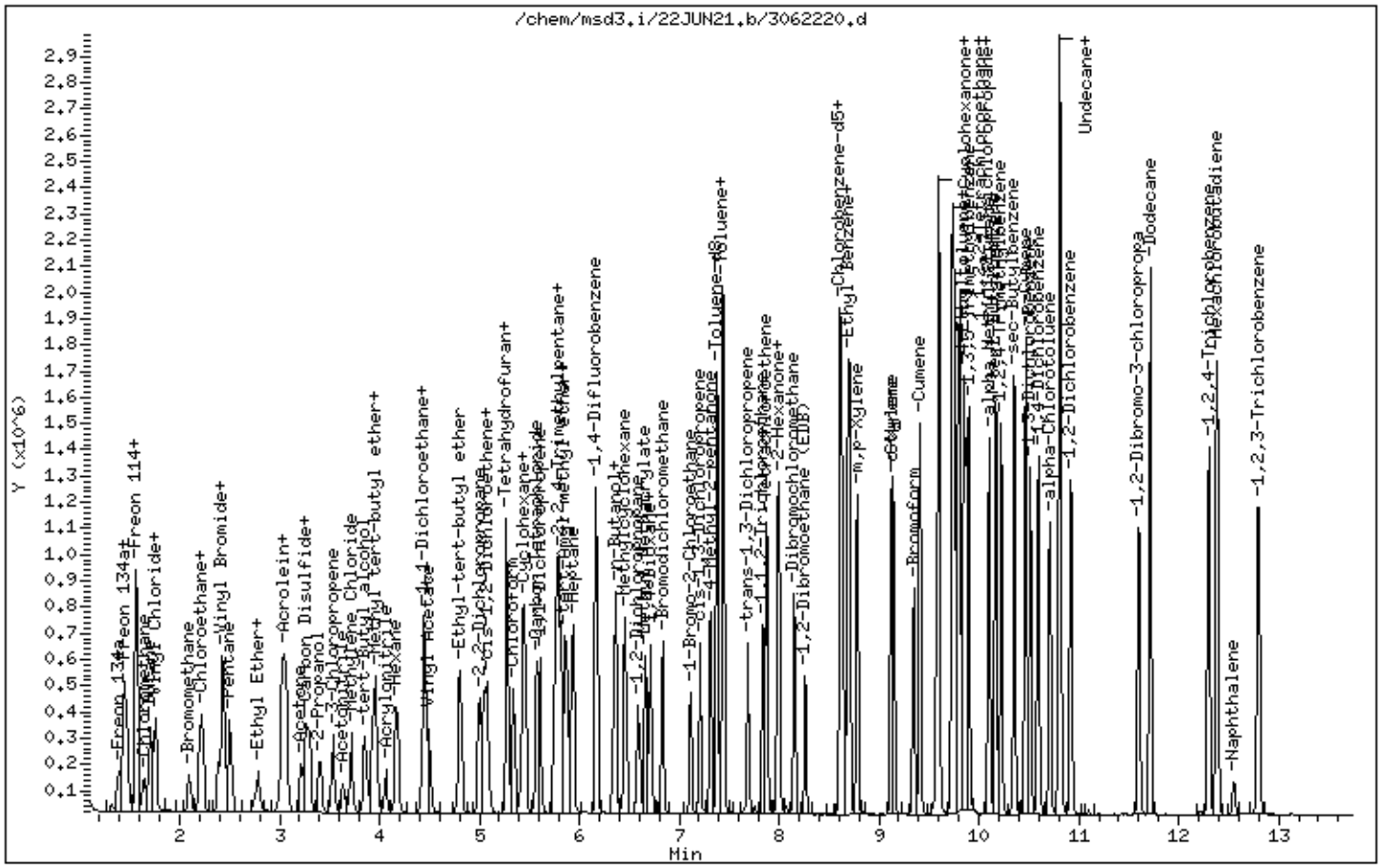
Instrument: msd3.i

Sample Info: 20mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051909.d
Lab Smp Id: ICAL Level 8
Inj Date : 19-MAY-2021 16:24
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2034
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 16:24 Cal File: p051909.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.646	1.633 (0.285)	83	507565	100.000	105.61	80.00- 120.00	100.00
1.646	1.633 (0.285)	69	455041			59.44- 119.44	89.65
1.744	1.745 (0.302)	51	2268262			419.06- 479.06	446.89
5 Propylene					CAS #: 115-07-1		
1.674	1.675 (0.290)	41	698368	100.000	100.69	80.00- 120.00	100.00
1.674	1.675 (0.290)	42	460529			35.28- 95.28	65.94
1.674	1.675 (0.290)	39	475977			38.35- 98.35	68.16
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.703 (0.295)	65	357088	100.000	101.44	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	2268262			597.63- 657.63	635.21
1.702	1.703 (0.295)	47	231703			33.72- 93.72	64.89
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	1452922	100.000	108.35	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	469974			2.37- 62.37	32.35
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.745 (0.304)	67	145754	100.000	109.07	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	2268262			1501.01-1561.01	1556.23
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	1419953	100.000	103.69	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	456158			2.30- 62.30	32.12
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	1515676	100.000	98.575	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	485596			2.44- 62.44	32.04
1.870	1.856 (0.324)	58	50044			0.00- 33.36	3.30
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	796816	100.000	95.542	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	204373			0.00- 56.26	25.65
18 Butane					CAS #: 106-97-8		
2.039	2.025 (0.353)	58	180663	100.000	101.40	80.00- 120.00	100.00
2.039	2.025 (0.353)	43	1466054			823.29- 883.29	811.49
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	918346	100.000	96.270	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	270816			0.00- 59.69	29.49
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.089 (0.363)	54	850684	100.000	112.06	80.00- 120.00	100.00
2.096	2.089 (0.363)	39	739010			52.37- 112.37	86.87
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	572011	100.000	92.015	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	535822			64.07- 124.07	93.67
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	349804	100.000	102.90	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	100650			0.04- 60.04	28.77
2.612	2.612 (0.452)	49	117019			4.54- 64.54	33.45
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.457)	43	1040896	100.000	100.15	80.00- 120.00	100.00
2.641	2.634 (0.457)	57	666459			34.12- 94.12	64.03
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	582384	100.000	103.68	80.00- 120.00	100.00
2.848	2.841 (0.493)	108	563942			69.27- 129.27	96.83
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	1487386	100.000	103.14	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.891	2.884 (0.500)	103	967038			34.72- 94.72	65.02
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.899 (0.502)	67	1298135	100.000	105.01	80.00- 120.00	100.00
2.898	2.899 (0.502)	69	401988			0.84- 60.84	30.97
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	1683232	100.000	99.258	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	245789			0.00- 44.98	14.60
2.970	2.970 (0.514)	72	121307			0.00- 37.39	7.21
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	298105	100.000	105.37	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	576501			163.46- 223.46	193.39
3.285	3.285 (0.569)	45	836034			250.40- 310.40	280.45
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	149584	100.000	99.460	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	832557			511.19- 571.19	556.58
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	266909	100.000	102.94	80.00- 120.00	100.00
3.536	3.529 (0.612)	56	376803			111.10- 171.10	141.17
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	1092200	100.000	101.26	80.00- 120.00	100.00
3.557	3.550 (0.616)	153	689565			33.56- 93.56	63.14
3.550	3.550 (0.614)	101	1295372			89.21- 149.21	118.60
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.621)	96	638130	100.000	102.22	80.00- 120.00	100.00
3.586	3.579 (0.621)	98	399466			34.02- 94.02	62.60
3.586	3.579 (0.621)	61	1261088			168.77- 228.77	197.62
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	407743	100.000	103.12	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	1336506			302.95- 362.95	327.78
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.663)	76	1723104	100.000	102.46	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	1438092	100.000	135.14	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	601035			12.22- 72.22	41.79

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	1661934	100.000	104.21	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	292411			0.00- 47.19	17.59
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	292429	100.000	102.76	80.00- 120.00	100.00
4.052	4.052 (0.701)	41	1196303			396.19- 456.19	409.09
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	798509	100.000	108.94	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	401874			20.95- 80.95	50.33
4.123	4.123 (0.714)	38	88300			0.00- 41.17	11.06
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	1074098	100.000	105.04	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	556924			22.03- 82.03	51.85
4.238	4.238 (0.733)	51	323217			0.18- 60.18	30.09
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	1858636	100.000	99.052	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	385487			0.00- 51.11	20.74
4.338	4.338 (0.751)	57	191013			0.00- 40.49	10.28
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	1848968	100.000	98.795	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	604553			3.10- 63.10	32.70
4.446	4.446 (0.769)	41	579143			1.28- 61.28	31.32
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.481	4.482 (0.776)	98	433306	100.000	102.86	80.00- 120.00	100.00
4.481	4.482 (0.776)	61	1236426			255.84- 315.84	285.35
4.481	4.482 (0.776)	96	693293			127.59- 187.59	160.00
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	596989	100.000	99.669	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	715968			88.05- 148.05	119.93
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	1534457	100.000	103.86	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	1029510			37.52- 97.52	67.09
4.696	4.697 (0.813)	86	176385			0.00- 41.48	11.49
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.860)	63	1364098	100.000	104.66	80.00- 120.00	100.00
4.969	4.962 (0.860)	65	405911			0.00- 59.70	29.76

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether					CAS #: 108-20-3		
	4.947	4.954 (0.856)	45	3520699	100.000	101.33	80.00- 120.00	100.00
	4.947	4.954 (0.856)	87	644730			0.00- 48.18	18.31
	4.947	4.954 (0.856)	59	358329			0.00- 40.15	10.18
	73 Vinyl Acetate					CAS #: 108-05-4		
	4.997	4.997 (0.865)	86	174113	100.000	107.01	80.00- 120.00	100.00
	4.990	4.997 (0.864)	43	3073069			2432.48-2492.48	1764.99
	79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
	5.305	5.305 (0.918)	59	3038101	100.000	100.85	80.00- 120.00	100.00
	5.305	5.305 (0.918)	87	938894			1.00- 61.00	30.90
	5.305	5.305 (0.918)	41	568486			0.00- 48.73	18.71
	84 2,2-Dichloropropane					CAS #: 594-20-7		
	5.506	5.506 (0.953)	77	1178409	100.000	103.59	80.00- 120.00	100.00
	5.506	5.506 (0.953)	79	375834			2.28- 62.28	31.89
	5.513	5.506 (0.954)	97	287766			0.00- 53.93	24.42
	85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
	5.549	5.549 (0.960)	98	473987	100.000	109.86	80.00- 120.00	100.00
	5.549	5.549 (0.960)	96	736483			125.75- 185.75	155.38
	5.549	5.549 (0.960)	61	1694585			332.40- 392.40	357.52
	86 2-Butanone					CAS #: 78-93-3		
	5.556	5.556 (0.962)	72	357150	100.000	104.90	80.00- 120.00	100.00
	5.563	5.556 (0.963)	43	4378918			1214.50-1274.50	1226.07
	5.556	5.556 (0.962)	57	154664			14.68- 74.68	43.31
	87 Ethyl Acetate					CAS #: 141-78-6		
	5.570	5.570 (0.964)	45	353395	100.000	104.48	80.00- 120.00	100.00
	5.549	5.549 (0.960)	61	1695217			452.04- 512.04	479.69
	5.570	5.570 (0.964)	70	189420			22.77- 82.77	53.60
	89 Tetrahydrofuran					CAS #: 109-99-9		
	5.771	5.771 (0.999)	42	1189052	100.000	103.31	80.00- 120.00	100.00
	5.771	5.771 (0.999)	71	309814			0.00- 55.82	26.06
	5.771	5.771 (0.999)	72	335384			0.00- 57.59	28.21
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.778	5.778 (1.000)	130	152805	25.0000		80.00- 120.00	100.00
	5.778	5.778 (1.000)	128	121664			48.23- 108.23	79.62
	5.778	5.778 (1.000)	49	281698			150.57- 210.57	184.35
	92 Chloroform					CAS #: 67-66-3		
	5.835	5.835 (1.010)	83	1415975	100.000	107.68	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	915346			34.70- 94.70	64.64
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	944762	100.000	101.07	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	1666010			142.57- 202.57	176.34
5.957	5.957 (1.031)	41	886450			62.09- 122.09	93.83
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.972 (1.033)	97	1485005	100.000	100.30	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	948874			34.02- 94.02	63.90
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	1499358	100.000	106.30	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	1503563			70.64- 130.64	100.28
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	416114	100.000	102.27	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	1049030			226.85- 286.85	252.10
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	5314941	100.000	102.00	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	1735895			2.24- 62.24	32.66
6.279	6.280 (1.087)	41	1349070			0.00- 54.39	25.38
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	2026776	100.000	103.01	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	474028			0.00- 52.90	23.39
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	220685	25.0000	26.504	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	141968			27.21- 87.21	64.33
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	547673	100.000	97.366	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	2227568			372.79- 432.79	406.73
6.358	6.358 (0.955)	55	768756			112.09- 172.09	140.37
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	1080056	100.000	103.85	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	332034			0.79- 60.79	30.74
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	786728	100.000	101.45	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	2022288			226.53- 286.53	257.05
6.444	6.444 (0.968)	57	1020722			100.85- 160.85	129.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	599259	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	96032			0.00- 45.71	16.03
110 n-Butanol					CAS #: 71-36-3		
6.809	6.810 (1.023)	56	750083	100.000	104.92	80.00- 120.00	100.00
6.809	6.810 (1.023)	41	530236			40.99- 100.99	70.69
6.809	6.810 (1.023)	43	429051			27.38- 87.38	57.20
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	997780	100.000	104.77	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	1060416			76.29- 136.29	106.28
6.867	6.867 (1.031)	97	630792			33.63- 93.63	63.22
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	1008198	100.000	100.30	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	717137			41.07- 101.07	71.13
7.096	7.089 (1.066)	41	522377			22.53- 82.53	51.81
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	824440	100.000	101.96	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	1710649			179.84- 239.84	207.49
7.139	7.139 (0.755)	100	331918			9.59- 69.59	40.26
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	528029	100.000	97.653	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	524400			68.28- 128.28	99.31
7.175	7.175 (1.077)	57	177216			2.68- 62.68	33.56
118 Dibromomethane					CAS #: 74-95-3		
7.203	7.204 (0.761)	174	928250	100.000	104.93	80.00- 120.00	100.00
7.203	7.204 (0.761)	93	831541			60.09- 120.09	89.58
7.203	7.204 (0.761)	95	722804			48.38- 108.38	77.87
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	1567843	100.000	105.12	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	1011256			35.24- 95.24	64.50
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.690	7.691 (1.155)	75	1310676	100.000	104.92	80.00- 120.00	100.00
7.690	7.691 (1.155)	77	416599			2.42- 62.42	31.79
7.690	7.691 (1.155)	39	879596			37.16- 97.16	67.11
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	1373843	100.000	98.785	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	639936			15.78- 75.78	46.58

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	1577222			84.64- 144.64	114.80
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	990523	100.000	97.755	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	2685952			242.35- 302.35	271.17
7.798	7.791 (1.171)	85	326227			3.24- 63.24	32.93
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	653351	25.0000	25.095	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	69659			0.00- 40.44	10.66
7.891	7.891 (1.185)	100	427970			34.95- 94.95	65.50
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	2719947	100.000	99.602	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	1593607			28.38- 88.38	58.59
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	1143310	100.000	99.301	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	970463			56.00- 116.00	84.88
7.948	7.949 (1.194)	43	2966309			228.66- 288.66	259.45
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	1224849	100.000	104.91	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	387990			1.24- 61.24	31.68
8.213	8.214 (0.868)	39	804536			34.11- 94.11	65.68
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	969495	100.000	103.06	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	600278			31.96- 91.96	61.92
8.400	8.400 (0.888)	83	805643			52.93- 112.93	83.10
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	1365527	100.000	99.832	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	1069381			47.84- 107.84	78.31
8.464	8.464 (0.895)	131	1033508			45.29- 105.29	75.69
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	1368856	100.000	99.686	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	2631318			162.87- 222.87	192.23
8.586	8.586 (0.908)	100	212248			0.00- 45.94	15.51
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	1348288	100.000	103.10	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	1683093			94.99- 154.99	124.83
8.579	8.579 (1.288)	78	436936			2.05- 62.05	32.41

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	==	====== ========	====	========	=======	=======	==========	=====
	146 Dibromochloromethane					CAS #: 124-48-1		
	8.801	8.801 (0.930)	129	1870111	100.000	103.77	80.00- 120.00	100.00
	8.801	8.801 (0.930)	127	1452482			47.45- 107.45	77.67
	148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
	8.951	8.951 (0.946)	107	1591018	100.000	102.80	80.00- 120.00	100.00
	8.951	8.951 (0.946)	109	1499795			64.21- 124.21	94.27
	151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
	7.605	7.605 (1.142)	63	1915471	100.000	103.43	80.00- 120.00	100.00
	7.605	7.605 (1.142)	65	566303			0.00- 59.64	29.56
	7.605	7.605 (1.142)	144	182840			0.00- 39.63	9.55
*	153 Chlorobenzene-d5					CAS #: 3114-55-4		
	9.460	9.460 (1.000)	117	590210	25.0000		80.00- 120.00	100.00
	9.460	9.460 (1.000)	82	323727			23.78- 83.78	54.85
	154 Chlorobenzene					CAS #: 108-90-7		
	9.496	9.496 (1.004)	112	2370958	100.000	101.53	80.00- 120.00	100.00
	9.496	9.496 (1.004)	114	756993			1.74- 61.74	31.93
	9.496	9.496 (1.004)	77	1286889			25.04- 85.04	54.28
	155 Ethyl Benzene					CAS #: 100-41-4		
	9.567	9.567 (1.011)	106	1215808	100.000	99.229	80.00- 120.00	100.00
	9.567	9.567 (1.011)	91	3709578			273.74- 333.74	305.11
	156 Nonane					CAS #: 111-84-2		
	9.603	9.596 (1.015)	43	3087905	100.000	97.458	80.00- 120.00	100.00
	9.603	9.603 (1.015)	57	2613991			54.16- 114.16	84.65
	9.603	9.603 (1.015)	85	738081			0.00- 53.90	23.90
	158 m,p-Xylene					CAS #: 108-38-3		
	9.718	9.718 (1.027)	106	1495472	100.000	98.126	80.00- 120.00	100.00
	9.718	9.718 (1.027)	91	2934052			163.73- 223.73	196.20
	164 o-Xylene					CAS #: 95-47-6		
	10.226	10.226 (1.081)	106	1448581	100.000	98.124	80.00- 120.00	100.00
	10.226	10.226 (1.081)	91	2977601			177.45- 237.45	205.55
	165 Styrene					CAS #: 100-42-5		
	10.255	10.255 (1.084)	104	2465052	100.000	98.384	80.00- 120.00	100.00
	10.255	10.255 (1.084)	78	1179971			17.88- 77.88	47.87
	167 Bromoform					CAS #: 75-25-2		
	10.549	10.542 (1.115)	173	1837525	100.000	104.18	80.00- 120.00	100.00
	10.541	10.542 (1.114)	171	942585			21.25- 81.25	51.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	4567679	100.000	98.637	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	1306308			0.00- 58.52	28.60
10.649	10.649 (1.126)	51	589542			0.00- 43.00	12.91
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	1596477	100.000	95.938	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	513572			1.94- 61.94	32.17
10.871	10.871 (1.149)	42	1073939			37.89- 97.89	67.27
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	381266	25.0000	25.244	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	486727			95.92- 155.92	127.66
10.921	10.921 (1.154)	176	367158			66.89- 126.89	96.30
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	2228280	100.000	98.820	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	1439832			35.20- 95.20	64.62
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	1426381	100.000	101.78	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	1394001			67.21- 127.21	97.73
11.179	11.179 (1.182)	77	841614			29.02- 89.02	59.00
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	1347671	100.000	98.184	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	5312611			366.49- 426.49	394.21
11.150	11.150 (1.179)	105	203289			0.00- 44.85	15.08
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	686203	100.000	96.347	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	2133287			280.55- 340.55	310.88
11.100	11.100 (1.173)	61	307567			15.49- 75.49	44.82
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	476707	100.000	101.28	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	367391			49.11- 109.11	77.07
11.179	11.179 (1.182)	75	2133287			426.44- 486.44	447.50
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	3243150	100.000	88.689	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	905505			0.00- 57.66	27.92
11.258	11.258 (1.190)	142	133433			0.00- 34.09	4.11
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	1428430	100.000	96.809	80.00- 120.00	100.00

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
183 4-Ethyltoluene (continued)								
11.286	11.287 (1.193)	105	4478546			284.55- 344.55		313.53
184 2-Chlorotoluene					CAS #: 95-49-8			
11.315	11.308 (1.196)	126	1126349	100.000	96.991	80.00- 120.00		100.00
11.308	11.308 (1.195)	91	3926471			315.17- 375.17		348.60
11.301	11.301 (1.195)	65	571555			21.55- 81.55		50.74
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
11.365	11.365 (1.201)	120	2029709	100.000	99.067	80.00- 120.00		100.00
11.365	11.365 (1.201)	105	3958269			164.93- 224.93		195.02
188 alpha Methyl Styrene					CAS #: 98-83-9			
11.644	11.645 (1.231)	118	2053068	100.000	99.954	80.00- 120.00		100.00
11.644	11.645 (1.231)	103	1126967			25.30- 85.30		54.89
189 tert-Butylbenzene					CAS #: 98-06-6			
11.738	11.738 (1.241)	119	3869191	100.000	100.90	80.00- 120.00		100.00
11.745	11.738 (1.242)	134	937426			0.00- 54.25		24.23
11.738	11.738 (1.241)	91	2366627			31.27- 91.27		61.17
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
11.816	11.817 (1.249)	105	3825889	100.000	98.524	80.00- 120.00		100.00
11.816	11.817 (1.249)	120	1877483			19.05- 79.05		49.07
192 sec-Butylbenzene					CAS #: 135-98-8			
11.995	11.996 (1.268)	134	1188712	100.000	99.702	80.00- 120.00		100.00
11.995	11.996 (1.268)	105	5589774			437.55- 497.55		470.24
11.995	11.996 (1.268)	91	846180			40.76- 100.76		71.18
194 p-Cymene					CAS #: 99-87-6			
12.160	12.160 (1.285)	119	5211679	100.000	99.223	80.00- 120.00		100.00
12.160	12.160 (1.285)	134	1335569			0.00- 55.54		25.63
12.160	12.153 (1.285)	91	1113414			0.00- 51.48		21.36
195 1,3-Dichlorobenzene					CAS #: 541-73-1			
12.203	12.196 (1.290)	146	2614617	100.000	98.021	80.00- 120.00		100.00
12.203	12.196 (1.290)	148	1681191			33.21- 93.21		64.30
12.196	12.196 (1.289)	111	1089961			11.31- 71.31		41.69
196 1,4-Dichlorobenzene					CAS #: 106-46-7			
12.311	12.311 (1.301)	146	2681111	100.000	99.901	80.00- 120.00		100.00
12.311	12.311 (1.301)	148	1693939			33.90- 93.90		63.18
12.311	12.311 (1.301)	111	1052991			9.45- 69.45		39.27
199 alpha-Chlorotoluene					CAS #: 100-44-7			
12.461	12.461 (1.317)	91	3733206	100.000	101.62	80.00- 120.00		100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	855205			0.00- 53.26	22.91
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	3992563	100.000	94.355	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	3525819			58.12- 118.12	88.31
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	1274791	100.000	95.075	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	4476615			314.79- 374.79	351.16
12.626	12.626 (1.335)	92	2399035			154.29- 214.29	188.19
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	2533352	100.000	97.467	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	1616747			33.84- 93.84	63.82
12.733	12.741 (1.346)	111	1075764			12.73- 72.73	42.46
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	1585272	100.000	100.82	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	1323143			52.48- 112.48	83.46
13.600	13.600 (1.438)	155	1237839			47.41- 107.41	78.08
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	4416932	124.000	138.94	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	3610956			52.87- 112.87	81.75
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	2488736	126.000	130.48	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	2388833			65.33- 125.33	95.99
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	1826473	129.000	136.64	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	1154987			33.17- 93.17	63.24
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	617447	12.7000	12.602	80.00- 120.00	100.00
14.760	14.768 (1.560)	127	78355			0.00- 42.88	12.69
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	2380079	133.000	141.78	80.00- 120.00	100.00
15.068	15.069 (1.593)	182	2269705			65.75- 125.75	95.36
15.061	15.069 (1.592)	145	846452			5.23- 65.23	35.56

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051909.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	152805	-3.78
108 1,4-Difluorobenze	597103	358262	835944	599259	0.36
153 Chlorobenzene-d5	587747	352648	822846	590210	0.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051909.d

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Date : 19-MAY-2021 16:24

Client ID:

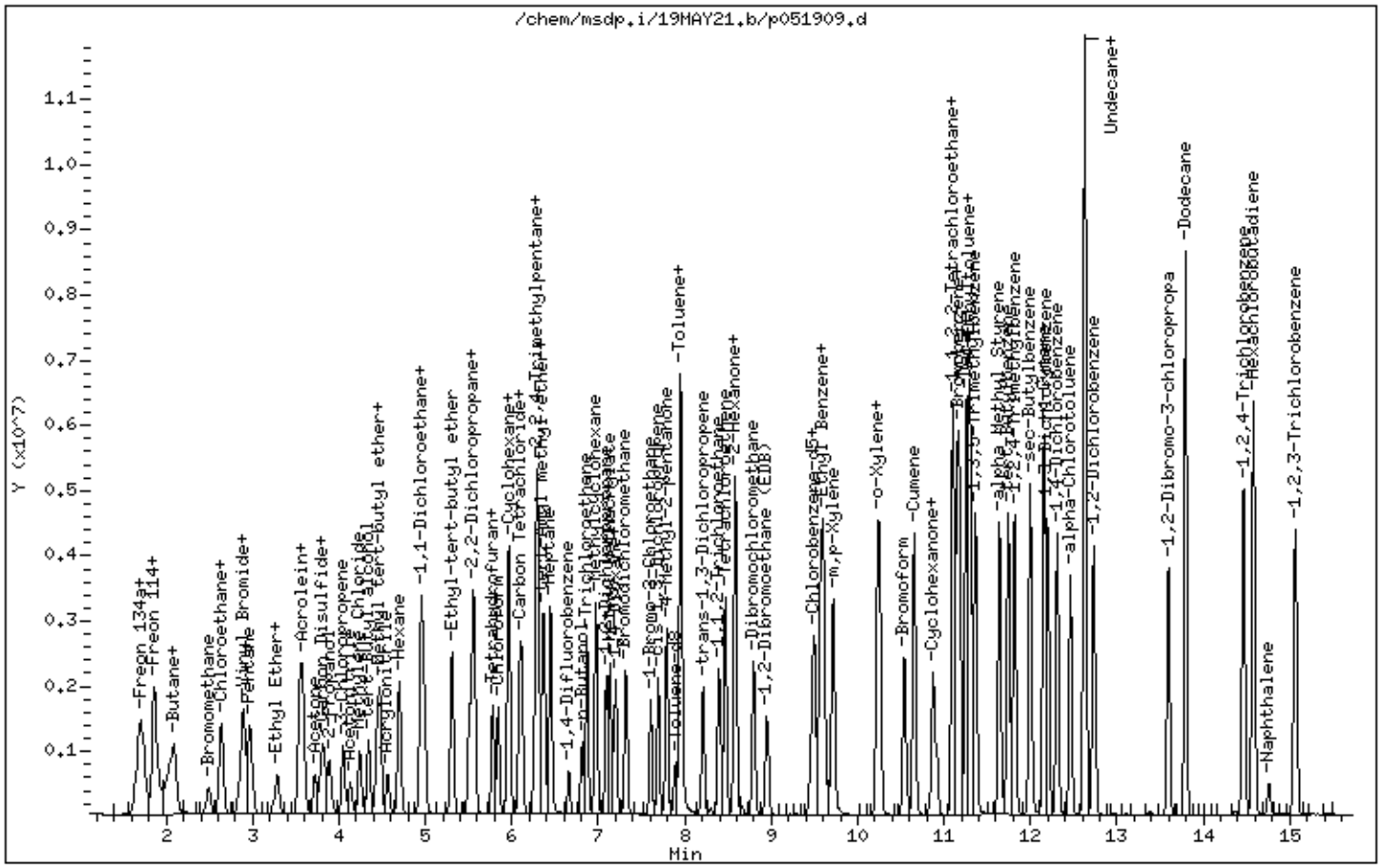
Instrument: msdp.i

Sample Info: 100mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051920.d
Lab Smp Id: ICAL Level 8
Inj Date : 19-MAY-2021 22:07
Operator : gh Inst ID: msdp.i
Smp Info : 100mL 3018-2013
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 22:07 Cal File: p051920.d
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
* 90 Bromochloromethane						CAS #: 74-97-5		
5.778	5.778 (1.000)	130	157260	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127325				48.23- 108.23	80.96
5.778	5.778 (1.000)	49	290406				150.57- 210.57	184.67
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	611896	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94534				0.00- 45.71	15.45
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	605655	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	331071				23.78- 83.78	54.66
3 Freon 143a						CAS #: 420-46-2		
1.590	1.590 (0.275)	65	338792	100.000	105.77		80.00- 120.00	100.00
1.590	1.590 (0.275)	69	923313				243.50- 303.50	272.53
1.590	1.590 (0.275)	64	80203				0.00- 54.06	23.67
6 Propane						CAS #: 74-98-6		
1.674	1.674 (0.290)	43	269102	100.000	96.261		80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	170552			34.98- 94.98	63.38
1.674	1.674 (0.290)	41	145053			25.22- 85.22	53.90
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	1499593	100.000	97.279	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	444419			0.00- 59.77	29.64
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	966890	100.000	95.667	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	1331259			105.17- 165.17	137.68
40 Freon 123a					CAS #: 354-23-4		
3.386	3.385 (0.586)	117	933222	100.000	95.080	80.00- 120.00	100.00
3.386	3.378 (0.586)	67	1253615			104.69- 164.69	134.33
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	1402358	100.000	100.49	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	293086			0.00- 50.87	20.90
3.479	3.479 (0.602)	85	954375			36.08- 96.08	68.06
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	1549614	100.000	103.63	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	574894			6.76- 66.76	37.10
4.073	4.073 (0.705)	53	430697			0.00- 57.54	27.79
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	1860322	100.000	106.56	80.00- 120.00	100.00
4.080	4.073 (0.706)	74	265330			0.00- 44.13	14.26
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	1510132	100.000	108.90	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	592673			9.21- 69.21	39.25
5.019	5.019 (0.869)	50	359244			0.00- 54.25	23.79
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	205049	100.000	98.484	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	189310			63.23- 123.23	92.32
5.083	5.083 (0.880)	41	113051			24.74- 84.74	55.13
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	1943701	100.000	106.36	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	217090			0.00- 41.28	11.17
5.620	5.620 (0.973)	58	162912			0.00- 38.22	8.38
103 Isobutanol					CAS #: 78-83-1		
6.236	6.244 (1.079)	39	226725	100.000	101.49	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	1059873			448.18- 508.18	467.47
6.244	6.244 (1.081)	41	745566			299.99- 359.99	328.84
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	135799	100.000	96.936	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	252316			149.95- 209.95	185.80
6.938	6.938 (0.733)	55	2635755			1849.07-1909.07	1940.92
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	3106672	100.000	101.23	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	227526			0.00- 37.44	7.32
7.032	7.031 (0.743)	86	400164			0.00- 42.78	12.88
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	1533686	100.000	99.232	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	450207			0.00- 59.10	29.35
8.658	8.657 (1.300)	43	3763757			215.30- 275.30	245.41
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	1347909	100.000	100.28	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	605655			57.42- 117.42	44.93
9.596	9.596 (1.014)	95	485333			5.70- 65.70	36.01
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	2357119	100.000	102.38	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	3890207			136.03- 196.03	165.04
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	1800213	100.000	137.28	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	1238262			39.41- 99.41	68.78
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	1234609	100.000	99.338	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	3962866			295.02- 355.02	320.98
11.444	11.444 (1.210)	63	506526			11.82- 71.82	41.03
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	1781367	100.000	98.416	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	3973322			192.40- 252.40	223.05
12.318	12.318 (1.302)	77	442101			0.00- 54.69	24.82
205 Hexachloroethane					CAS #: 67-72-1		
12.977	12.970 (1.372)	201	850803	100.000	123.71	80.00- 120.00	100.00
12.977	12.970 (1.372)	117	1124452			102.99- 162.99	132.16

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.779	13.758 (1.457)	180	2557091	100.000	100.71	80.00- 120.00	100.00
13.779	13.758 (1.457)	182	2439083			65.24- 125.24	95.39
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	2760113	100.000	112.22	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	796024			0.00- 58.21	28.84
214 beta-Pinene					CAS #: 127-91-3		
11.422	11.422 (1.207)	93	2112301	100.000	133.10	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	3962866			153.57- 213.57	187.61

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051920.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	157260	-0.98
108 1,4-Difluorobenze	597103	358262	835944	611896	2.48
153 Chlorobenzene-d5	587747	352648	822846	605655	3.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051920.d

Date : 19-MAY-2021 22:07

Client ID:

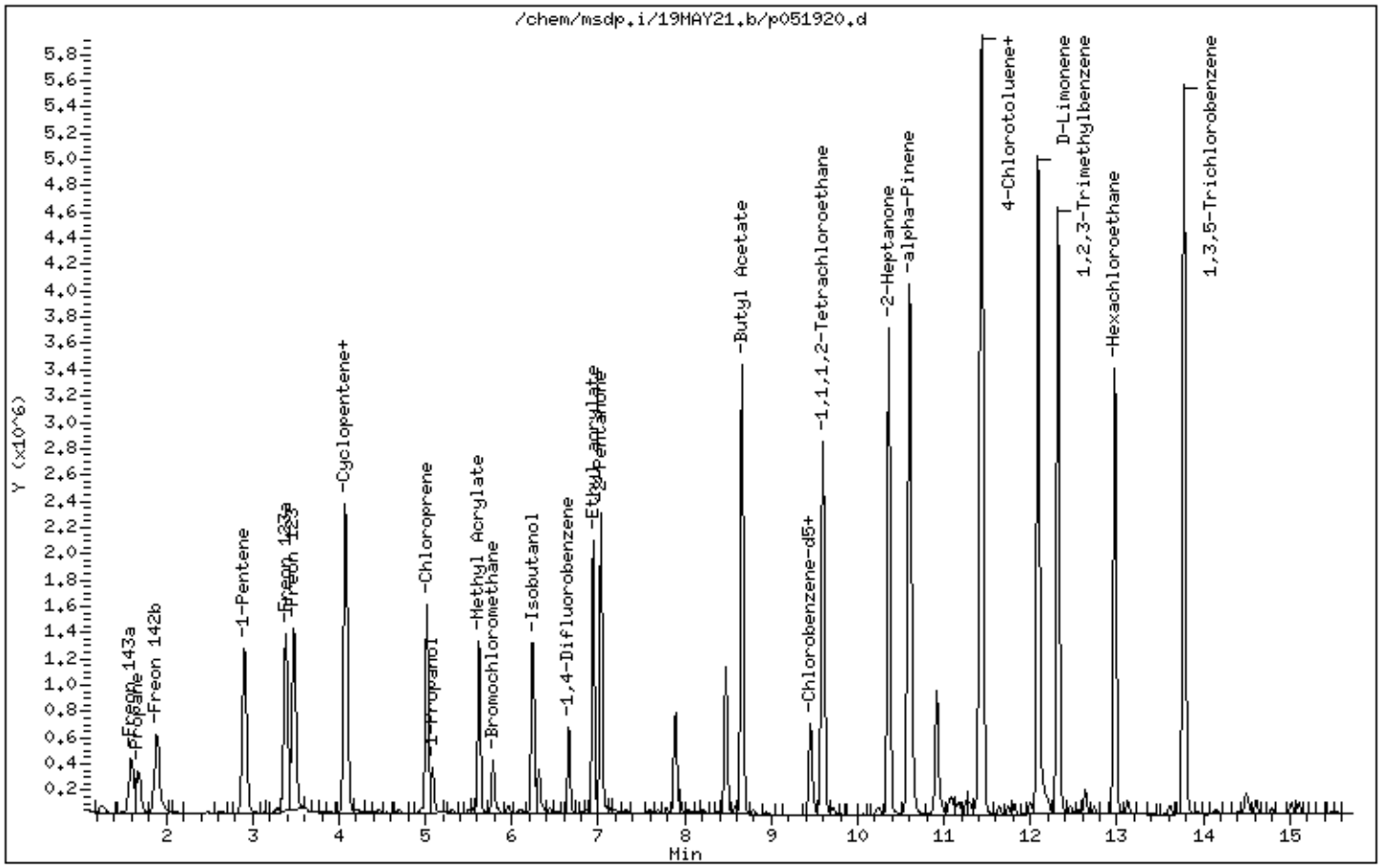
Instrument: msdp.i

Sample Info: 100mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062210.d
Lab Smp Id: ICAL Level 9
Inj Date : 22-JUN-2021 18:07
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 11:20 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:12 Cal File: 3062221.d
Als bottle: 5 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	240505	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	188690			48.46- 108.46	78.46
5.284	5.284 (1.000)	49	361684			120.39- 180.39	150.39
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	875857	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	135961			0.00- 45.52	15.52
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	827590	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	458953			25.46- 85.46	55.46
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	203130	50.0000	50.491	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	501917			217.09- 277.09	247.09
1.353	1.353 (0.256)	64	52555			0.00- 55.87	25.87
6 Propane					CAS #: 74-98-6		
1.422	1.422 (0.269)	43	108458	50.0000	49.485	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.422	1.422 (0.269)	39	77673			41.62- 101.62	71.62
1.422	1.422 (0.269)	41	57452			22.97- 82.97	52.97
13 Freon 142b					CAS #: 75-68-3		
1.604	1.604 (0.304)	65	649549	50.0000	50.772	80.00- 120.00	100.00
1.604	1.604 (0.304)	45	182976			0.00- 58.17	28.17
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.462)	55	411503	50.0000	50.649	80.00- 120.00	100.00
2.444	2.444 (0.462)	42	531533			99.17- 159.17	129.17
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	479957	50.0000	50.732	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	638983			103.13- 163.13	133.13
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	698523	50.0000	50.342	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	152375			0.00- 51.81	21.81
2.976	2.976 (0.563)	85	468904			37.13- 97.13	67.13
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	747040	50.0000	50.579	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	283092			7.90- 67.90	37.90
3.549	3.549 (0.672)	53	185808			0.00- 54.87	24.87
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	753266	50.0000	49.488	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	129155			0.00- 47.15	17.15
74 Chloroprene					CAS #: 126-99-8		
4.515	4.515 (0.854)	53	659922	50.0000	51.199	80.00- 120.00	100.00
4.515	4.515 (0.854)	88	279320			12.33- 72.33	42.33
4.515	4.515 (0.854)	50	182245			0.00- 57.62	27.62
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	90362	50.0000	45.347	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	75804			53.89- 113.89	83.89
4.613	4.613 (0.873)	41	48874			24.09- 84.09	54.09
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	775548	50.0000	50.066	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	102700			0.00- 43.24	13.24
5.130	5.130 (0.971)	58	68476			0.00- 38.83	8.83
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	109438	50.0000	38.444	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	391444			327.69- 387.69	357.69
5.774	5.774 (1.093)	41	292812			237.56- 297.56	267.56
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	61569	50.0000	46.554	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	95230			124.67- 184.67	154.67
6.460	6.460 (0.749)	55	1004376			1601.30-1661.30	1631.30
115 2-Pentanone					CAS #: 107-87-9		
6.557	6.557 (0.761)	43	1482803	50.0000	47.934	80.00- 120.00	100.00
6.557	6.557 (0.761)	58	107563			0.00- 37.25	7.25
6.557	6.557 (0.761)	86	223633			0.00- 45.08	15.08
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	539276	50.0000	46.707	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	189604			5.16- 65.16	35.16
8.068	8.068 (1.305)	43	1315845			214.00- 274.00	244.00
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	614036	50.0000	49.326	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	418914			38.22- 98.22	68.22
8.712	8.712 (1.011)	95	230491			7.54- 67.54	37.54
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	831136	50.0000	47.079	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	1357775			133.36- 193.36	163.36
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.209)	68	785422	50.0000	52.236	80.00- 120.00	100.00
10.424	10.424 (1.209)	93	566139			42.08- 102.08	72.08
186 4-Chlorotoluene					CAS #: 106-43-4		
9.973	9.973 (1.157)	126	539265	50.0000	49.765	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1811592			305.94- 365.94	335.94
9.966	9.966 (1.156)	63	245019			15.44- 75.44	45.44
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	740798	50.0000	49.872	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	1751480			206.43- 266.43	236.43
10.596	10.596 (1.229)	77	209551			0.00- 58.29	28.29
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.288)	201	475431	50.0000	52.429	80.00- 120.00	100.00
11.098	11.098 (1.288)	117	664512			109.77- 169.77	139.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.728	11.728 (1.361)	180	962027	50.0000	48.656	80.00- 120.00	100.00
11.728	11.728 (1.361)	182	921537			65.79- 125.79	95.79
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	1284627	50.0000	50.199	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	387101			0.13- 60.13	30.13
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	1029595	50.0000	51.233	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1811592			145.95- 205.95	175.95

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062210.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 18:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	240505	144303	336707	240505	0.00
108 1,4-Difluorobenze	875857	525514	1226200	875857	0.00
153 Chlorobenzene-d5	827590	496554	1158626	827590	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062210.d

Page 1

Date : 22-JUN-2021 18:07

Client ID:

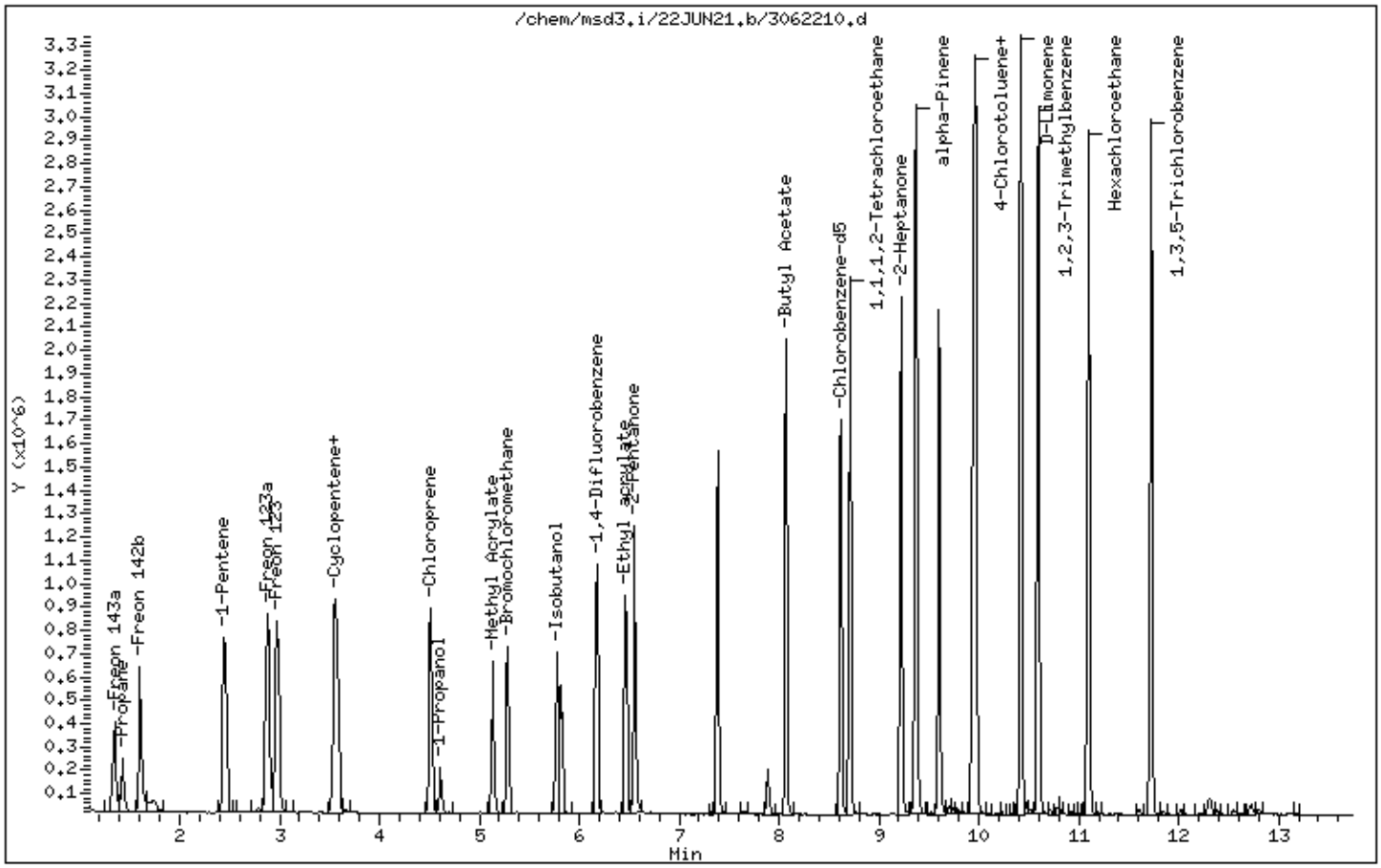
Instrument: msd3.i

Sample Info: 50mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062221.d
Lab Smp Id: ICAL Level 9
Inj Date : 22-JUN-2021 23:12
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2115
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:12 Cal File: 3062221.d
Als bottle: 2 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	284157	50.0000	49.062	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	232500			51.82- 111.82	81.82
1.479	1.479 (0.280)	51	639099			194.91- 254.91	224.91
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	294407	50.0000	50.075	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	193171			35.61- 95.61	65.61
1.423	1.423 (0.269)	39	213929			42.66- 102.66	72.66
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	181633	50.0000	47.393	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	639099			321.86- 381.86	351.86
1.437	1.437 (0.272)	47	136835			45.34- 105.34	75.34
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	797137	50.0000	47.012	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	260143			2.63- 62.63	32.63
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.479	1.479 (0.280)	67	85241	50.0000	45.742	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.479	1.479 (0.280)	51	639099			719.76- 779.76	749.76
10 Freon 114					CAS #: 76-14-2		
1.562	1.562 (0.296)	135	606702	50.0000	48.290	80.00- 120.00	100.00
1.562	1.562 (0.296)	137	194861			2.12- 62.12	32.12
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	657014	50.0000	49.719	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	213159			2.44- 62.44	32.44
1.576	1.576 (0.298)	58	21428			0.00- 33.26	3.26
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	352835	50.0000	50.066	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	114369			2.41- 62.41	32.41
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	74284	50.0000	44.633	80.00- 120.00	100.00
1.702	1.702 (0.322)	43	562632			727.41- 787.41	757.41
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	335767	50.0000	44.523	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	105035			1.28- 61.28	31.28
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	294521	50.0000	42.614	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	292262			69.23- 129.23	99.23
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	277582	50.0000	46.540	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	257551			62.78- 122.78	92.78
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	173670	50.0000	49.058	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	54600			1.44- 61.44	31.44
2.206	2.206 (0.417)	49	59249			4.12- 64.12	34.12
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	441673	50.0000	48.789	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	303981			38.82- 98.82	68.82
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	316129	50.0000	48.750	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	294456			63.14- 123.14	93.14
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	860106	50.0000	47.943	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.430	2.430 (0.460)	103	560066			35.12- 95.12	65.12
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	711822	50.0000	49.634	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	218791			0.74- 60.74	30.74
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	708333	50.0000	49.112	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	113101			0.00- 45.97	15.97
2.500	2.500 (0.473)	72	57350			0.00- 38.10	8.10
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	150840	50.0000	46.646	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	268008			147.68- 207.68	177.68
2.780	2.780 (0.526)	45	356586			206.40- 266.40	236.40
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	64405	50.0000	44.377	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	356168			523.01- 583.01	553.01
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	120208	50.0000	49.911	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	168682			110.33- 170.33	140.33
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	580955	50.0000	47.370	80.00- 120.00	100.00
3.032	3.032 (0.574)	153	370172			33.72- 93.72	63.72
3.032	3.032 (0.574)	101	695257			89.67- 149.67	119.67
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	328546	50.0000	44.476	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	208255			33.39- 93.39	63.39
3.074	3.074 (0.582)	61	636783			163.82- 223.82	193.82
47 Acetone					CAS #: 67-64-1		
3.213	3.213 (0.608)	58	192966	50.0000	47.280	80.00- 120.00	100.00
3.213	3.213 (0.608)	43	636127			299.66- 359.66	329.66
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.624)	76	899750	50.0000	48.956	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.619)	142	873195	50.0000	54.944	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	389245			14.58- 74.58	44.58

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.395	3.395 (0.643)	45	741880	50.0000	50.543	80.00- 120.00	100.00
3.395	3.395 (0.643)	43	138075			0.00- 48.61	18.61
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	145295	50.0000	45.918	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	534774			338.06- 398.06	368.06
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	319360	50.0000	49.691	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	165465			21.81- 81.81	51.81
3.633	3.633 (0.688)	38	37890			0.00- 41.86	11.86
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	472054	50.0000	48.327	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	286866			30.77- 90.77	60.77
3.717	3.717 (0.703)	51	148173			1.39- 61.39	31.39
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	904991	50.0000	49.121	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	190462			0.00- 51.05	21.05
3.857	3.857 (0.730)	57	105718			0.00- 41.68	11.68
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	952511	50.0000	47.900	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	274918			0.00- 58.86	28.86
3.941	3.941 (0.746)	41	259771			0.00- 57.27	27.27
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	214998	50.0000	43.249	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	590364			244.59- 304.59	274.59
3.969	3.969 (0.751)	96	343649			129.84- 189.84	159.84
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	256275	50.0000	42.956	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	303684			88.50- 148.50	118.50
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	648110	50.0000	48.083	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	408223			32.99- 92.99	62.99
4.179	4.179 (0.791)	86	81408			0.00- 42.56	12.56
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	655941	50.0000	47.320	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	201779			0.76- 60.76	30.76

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1410302	50.0000	49.578	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	301331			0.00- 51.37	21.37
4.445	4.445 (0.841)	59	156455			0.00- 41.09	11.09
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	84268	50.0000	49.446	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1197978			1391.63-1451.63	1421.63
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1352357	50.0000	49.244	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	449268			3.22- 63.22	33.22
4.809	4.809 (0.910)	41	245055			0.00- 48.12	18.12
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.004	5.004 (0.947)	77	634214	50.0000	49.112	80.00- 120.00	100.00
5.004	5.004 (0.947)	79	202924			2.00- 62.00	32.00
5.004	5.004 (0.947)	97	148175			0.00- 53.36	23.36
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.046	5.046 (0.955)	98	220341	50.0000	44.714	80.00- 120.00	100.00
5.046	5.046 (0.955)	96	346411			127.22- 187.22	157.22
5.046	5.046 (0.955)	61	691531			283.85- 343.85	313.85
86 2-Butanone					CAS #: 78-93-3		
5.074	5.074 (0.960)	72	166176	50.0000	48.279	80.00- 120.00	100.00
5.074	5.074 (0.960)	43	1804252			1055.75-1115.75	1085.75
5.074	5.074 (0.960)	57	67453			10.59- 70.59	40.59
87 Ethyl Acetate					CAS #: 141-78-6		
5.088	5.088 (0.963)	45	143976	50.0000	50.739	80.00- 120.00	100.00
5.046	5.046 (0.955)	61	691531			450.31- 510.31	480.31
5.088	5.088 (0.963)	70	86986			30.42- 90.42	60.42
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	468847	50.0000	48.304	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	154354			2.92- 62.92	32.92
5.270	5.270 (0.997)	72	157262			3.54- 63.54	33.54
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	243405	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	187819			48.46- 108.46	77.16
5.270	5.270 (1.000)	49	366478			120.39- 180.39	150.56
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	722872	50.0000	47.368	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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92 Chloroform (continued)							
5.340	5.340 (1.011)	85	467764			34.71- 94.71	64.71
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	446703	50.0000	46.309	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	671853			120.40- 180.40	150.40
5.438	5.438 (1.029)	41	376139			54.20- 114.20	84.20
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	775232	50.0000	45.194	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	494293			33.76- 93.76	63.76
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	786825	50.0000	49.803	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	815784			73.68- 133.68	103.68
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	196065	50.0000	49.289	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	511915			231.09- 291.09	261.09
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2070229	50.0000	49.114	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	644269			1.12- 61.12	31.12
5.774	5.774 (1.093)	41	569117			0.00- 57.49	27.49
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	968752	50.0000	48.568	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	230565			0.00- 53.80	23.80
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	332625	25.0000	24.832	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	171829			21.66- 81.66	51.66
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	263298	50.0000	49.507	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	1040562			365.20- 425.20	395.20
5.858	5.858 (0.948)	55	319398			91.31- 151.31	121.31
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	550376	50.0000	47.927	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	171716			1.20- 61.20	31.20
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	363489	50.0000	46.267	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	759758			179.02- 239.02	209.02
5.942	5.942 (0.962)	57	417473			84.85- 144.85	114.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	874076	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	137446			0.00- 45.52	15.72
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	318843	50.0000	49.871	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	223844			40.21- 100.21	70.21
6.348	6.348 (1.027)	43	175356			25.00- 85.00	55.00
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	480894	50.0000	48.058	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	504760			74.96- 134.96	104.96
6.362	6.362 (1.029)	97	311621			34.80- 94.80	64.80
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	160946	50.0000	34.810	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	132017			52.03- 112.03	82.03
6.586	6.586 (1.066)	41	176994			79.97- 139.97	109.97
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	380639	50.0000	47.582	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	624336			134.02- 194.02	164.02
6.664	6.664 (0.773)	100	150491			9.54- 69.54	39.54
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.699 (1.084)	88	246677	50.0000	48.820	80.00- 120.00	100.00
6.699	6.699 (1.084)	58	211647			55.80- 115.80	85.80
6.699	6.699 (1.084)	57	95411			8.68- 68.68	38.68
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	437437	50.0000	49.100	80.00- 120.00	100.00
6.721	6.721 (0.780)	93	425485			67.27- 127.27	97.27
6.721	6.721 (0.780)	95	353956			50.92- 110.92	80.92
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	785560	50.0000	46.861	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	505163			34.31- 94.31	64.31
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	622612	50.0000	49.970	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	195644			1.42- 61.42	31.42
7.208	7.208 (1.166)	39	426887			38.56- 98.56	68.56
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	621789	50.0000	46.468	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	283551			15.60- 75.60	45.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.460	6.460 (1.045)	55	674811			78.53- 138.53	108.53
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	397607	50.0000	46.931	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	1038955			231.30- 291.30	261.30
7.316	7.316 (1.184)	85	154832			8.94- 68.94	38.94
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	904005	25.0000	25.110	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	103668			0.00- 41.47	11.47
7.387	7.387 (1.195)	100	600870			36.47- 96.47	66.47
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1301803	50.0000	48.641	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	758903			28.30- 88.30	58.30
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	435525	50.0000	48.911	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	422920			67.11- 127.11	97.11
7.444	7.444 (1.205)	43	1063600			214.21- 274.21	244.21
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	595888	50.0000	48.674	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	191552			2.15- 62.15	32.15
7.688	7.688 (0.892)	39	393842			36.09- 96.09	66.09
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	448705	50.0000	47.657	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	276484			31.62- 91.62	61.62
7.846	7.846 (0.910)	83	387448			56.35- 116.35	86.35
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	631135	50.0000	48.467	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	496786			48.71- 108.71	78.71
7.881	7.881 (0.914)	131	483117			46.55- 106.55	76.55
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	544103	50.0000	50.311	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	1022398			157.91- 217.91	187.91
8.003	8.003 (0.929)	100	97172			0.00- 47.86	17.86
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	617417	50.0000	48.352	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	697427			82.96- 142.96	112.96
7.989	7.989 (1.293)	78	200948			2.55- 62.55	32.55

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.946)	129	891015	50.0000	49.884	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	692953			47.77- 107.77	77.77
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.268 (0.959)	107	719507	50.0000	49.209	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	680686			64.60- 124.60	94.60
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	808634	50.0000	49.985	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	250233			0.95- 60.95	30.95
7.122	7.122 (1.152)	144	84530			0.00- 40.45	10.45
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	831223	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	457929			25.46- 85.46	55.09
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	1085035	50.0000	47.761	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	348609			2.13- 62.13	32.13
8.641	8.641 (1.002)	77	611405			26.35- 86.35	56.35
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	556944	50.0000	49.027	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1740322			282.48- 342.48	312.48
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	1099456	50.0000	49.933	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	984285			59.52- 119.52	89.52
8.705	8.705 (1.010)	85	327172			0.00- 59.76	29.76
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	692050	50.0000	48.968	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1393518			171.36- 231.36	201.36
164 o-Xylene					CAS #: 95-47-6		
9.128	9.128 (1.059)	106	659123	50.0000	49.127	80.00- 120.00	100.00
9.128	9.128 (1.059)	91	1384085			179.99- 239.99	209.99
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	1152063	50.0000	49.562	80.00- 120.00	100.00
9.149	9.149 (1.061)	78	565543			19.09- 79.09	49.09
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	850814	50.0000	50.234	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	437768			21.45- 81.45	51.45

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
168 Cumene						CAS #: 98-82-8	
9.414	9.414 (1.092)	105	2075717	50.0000	48.933	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	560258			0.00- 56.99	26.99
9.407	9.407 (1.091)	51	244414			0.00- 41.77	11.77
169 Cyclohexanone						CAS #: 108-94-1	
9.579	9.579 (1.111)	55	617741	50.0000	46.276	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	242258			9.22- 69.22	39.22
9.579	9.579 (1.111)	42	448465			42.60- 102.60	72.60
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4	
9.601	9.601 (1.114)	174	555796	25.0000	25.279	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	683945			93.06- 153.06	123.06
9.601	9.601 (1.114)	176	516176			62.87- 122.87	92.87
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
9.737	9.737 (1.130)	83	1003904	50.0000	47.734	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	646042			34.35- 94.35	64.35
177 Bromobenzene						CAS #: 108-86-1	
9.729	9.729 (1.129)	156	652747	50.0000	49.500	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	635065			67.29- 127.29	97.29
9.729	9.729 (1.129)	77	1060120			132.41- 192.41	162.41
178 Propylbenzene						CAS #: 103-65-1	
9.758	9.758 (1.132)	91	2451939	50.0000	49.539	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	582723			0.00- 53.77	23.77
9.758	9.758 (1.132)	105	93517			0.00- 33.81	3.81
179 1,2,3-Trichloropropane						CAS #: 96-18-4	
9.787	9.787 (1.135)	110	309574	50.0000	48.865	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	975160			285.00- 345.00	315.00
9.787	9.787 (1.135)	61	260223			54.06- 114.06	84.06
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6	
9.787	9.787 (1.135)	53	242305	50.0000	48.334	80.00- 120.00	100.00
9.787	9.787 (1.135)	89	124031			21.19- 81.19	51.19
9.787	9.787 (1.135)	75	975160			372.45- 432.45	402.45
182 Decane						CAS #: 124-18-5	
9.808	9.808 (1.138)	57	1264280	50.0000	49.400	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	431474			4.13- 64.13	34.13
9.815	9.815 (1.139)	142	59836			0.00- 34.73	4.73
183 4-Ethyltoluene						CAS #: 622-96-8	
9.851	9.851 (1.143)	120	625823	50.0000	48.780	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
9.851	9.851 (1.143)	105	2045098			296.79- 356.79	326.79
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	511437	50.0000	49.061	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1873358			336.29- 396.29	366.29
9.873	9.873 (1.145)	65	352019			38.83- 98.83	68.83
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	875517	50.0000	48.587	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1807106			176.40- 236.40	206.40
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	929249	50.0000	50.352	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	526312			26.64- 86.64	56.64
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1661718	50.0000	50.120	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	412478			0.00- 54.82	24.82
10.174	10.174 (1.180)	91	1112004			36.92- 96.92	66.92
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1735479	50.0000	48.842	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	808333			16.58- 76.58	46.58
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	528908	50.0000	49.389	80.00- 120.00	100.00
10.360	10.360 (1.202)	105	2546830			451.53- 511.53	481.53
10.353	10.353 (1.201)	91	404509			46.48- 106.48	76.48
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	2233043	50.0000	49.792	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	598181			0.00- 56.79	26.79
10.467	10.467 (1.214)	91	536886			0.00- 54.04	24.04
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.220)	146	1210970	50.0000	50.163	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	769344			33.53- 93.53	63.53
10.517	10.517 (1.220)	111	497099			11.05- 71.05	41.05
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.229)	146	1221365	50.0000	49.118	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	775158			33.47- 93.47	63.47
10.596	10.596 (1.229)	111	484328			9.65- 69.65	39.65
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1711464	50.0000	50.059	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.243)	126	377222			0.00- 52.04	22.04
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1502052	50.0000	49.806	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1289714			55.86- 115.86	85.86
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	573948	50.0000	49.358	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	2077626			331.99- 391.99	361.99
10.818	10.818 (1.255)	92	1096298			161.01- 221.01	191.01
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1161793	50.0000	49.802	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	734569			33.23- 93.23	63.23
10.918	10.918 (1.267)	111	492079			12.36- 72.36	42.36
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	677550	50.0000	50.091	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	602730			58.96- 118.96	88.96
11.606	11.606 (1.347)	155	527267			47.82- 107.82	77.82
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1591448	61.8000	62.406	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	1286745			50.85- 110.85	80.85
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	1043013	62.9500	62.948	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	995018			65.40- 125.40	95.40
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	804329	64.3500	64.263	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	512377			33.70- 93.70	63.70
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.456)	128	276806	6.35000	5.471	80.00- 120.00	100.00
12.552	12.552 (1.456)	127	36248			0.00- 43.10	13.10
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.485)	180	997150	66.5500	65.766	80.00- 120.00	100.00
12.802	12.802 (1.485)	182	953973			65.67- 125.67	95.67
12.802	12.802 (1.485)	145	359141			6.02- 66.02	36.02

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062221.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	243405	0.00
108 1,4-Difluorobenze	874076	524446	1223706	874076	0.00
153 Chlorobenzene-d5	831223	498734	1163712	831223	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062221.d

Date : 22-JUN-2021 23:12

Client ID:

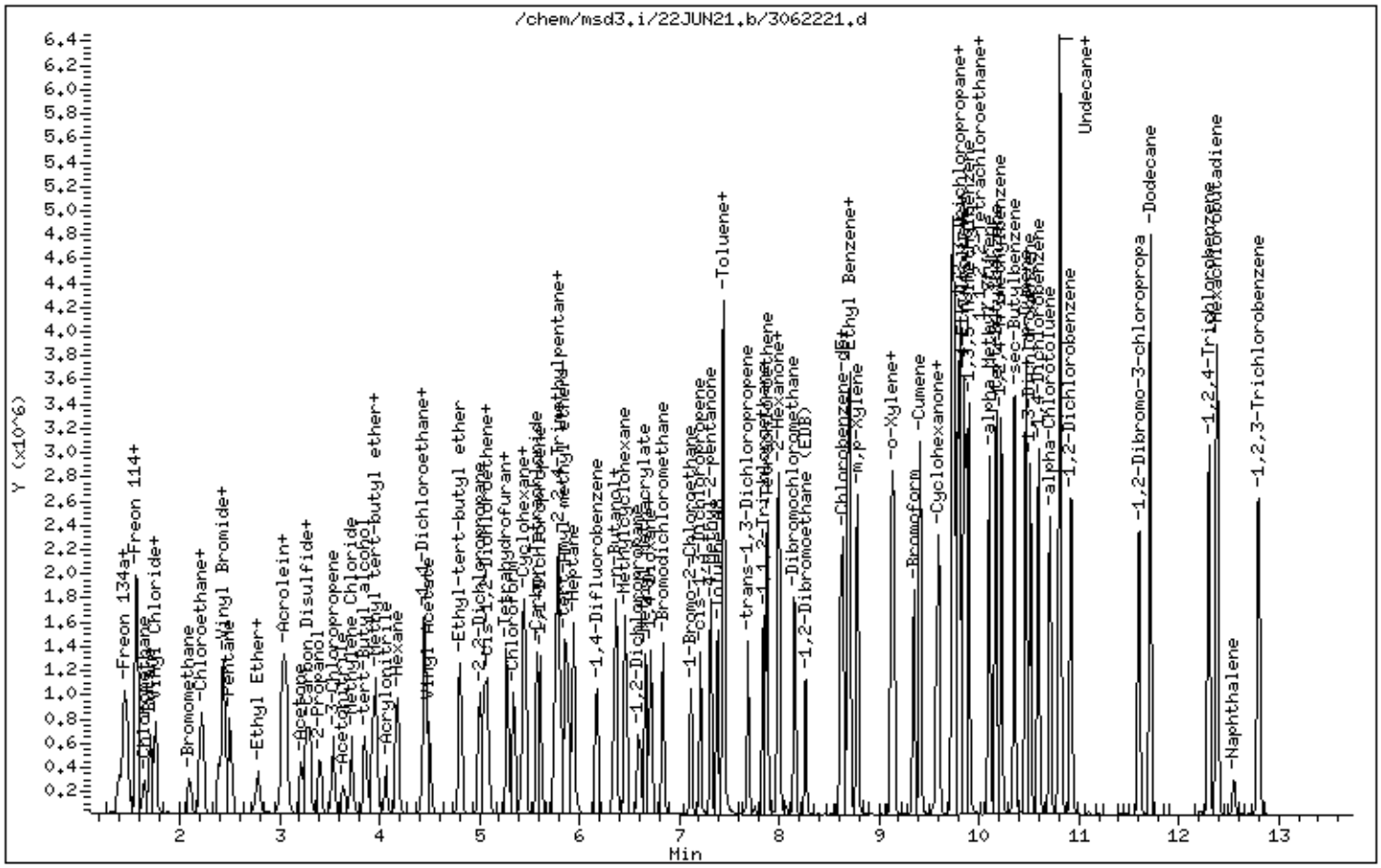
Instrument: msd3.i

Sample Info: 50mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051910.d
Lab Smp Id: ICAL Level 9
Inj Date : 19-MAY-2021 16:53
Operator : LD Inst ID: msdp.i
Smp Info : 200mL 3018-2034
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 16:53 Cal File: p051910.d
Als bottle: 13 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.660	1.633 (0.287)	83	963392	200.000	207.55	80.00- 120.00	100.00(A)
1.646	1.633 (0.285)	69	867624			59.44- 119.44	90.06
1.758	1.745 (0.304)	51	4138681			419.06- 479.06	429.59
5 Propylene					CAS #: 115-07-1		
1.688	1.675 (0.292)	41	1396714	200.000	208.12	80.00- 120.00	100.00(A)
1.688	1.675 (0.292)	42	925437			35.28- 95.28	66.26
1.688	1.675 (0.292)	39	960683			38.35- 98.35	68.78
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	610604	200.000	183.68	80.00- 120.00	100.00
1.758	1.745 (0.304)	51	4138681			597.63- 657.63	677.80
1.716	1.703 (0.297)	47	402984			33.72- 93.72	66.00
8 Freon 12					CAS #: 75-71-8		
1.730	1.717 (0.299)	85	2956019	200.000	224.92	80.00- 120.00	100.00(A)
1.730	1.717 (0.299)	87	956315			2.37- 62.37	32.35
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.745 (0.304)	67	279979	200.000	215.49	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.758	1.745 (0.304)	51	4138681			1501.01-1561.01	1478.21
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	2798238	200.000	210.96	80.00- 120.00	100.00(A)
1.856	1.856 (0.321)	137	896202			2.30- 62.30	32.03
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	3072142	200.000	206.77	80.00- 120.00	100.00(A)
1.870	1.870 (0.323)	42	980915			2.44- 62.44	31.93
1.870	1.856 (0.323)	58	99396			0.00- 33.36	3.24
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	1152746	200.000	151.06	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	283410			0.00- 56.26	24.59
18 Butane					CAS #: 106-97-8		
2.053	2.025 (0.355)	58	411216	200.000	232.63	80.00- 120.00	100.00(A)
2.053	2.025 (0.355)	43	3342638			823.29- 883.29	812.87
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	1863332	200.000	203.01	80.00- 120.00	100.00(A)
2.075	2.068 (0.359)	64	541008			0.00- 59.69	29.03
20 1,3-Butadiene					CAS #: 106-99-0		
2.111	2.089 (0.365)	54	1717595	200.000	229.88	80.00- 120.00	100.00(A)
2.111	2.089 (0.365)	39	2054933			52.37- 112.37	119.64
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	1117043	200.000	189.24	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	1045104			64.07- 124.07	93.56
30 Chloroethane					CAS #: 75-00-3		
2.619	2.612 (0.453)	64	698592	200.000	211.62	80.00- 120.00	100.00(A)
2.619	2.612 (0.453)	66	205685			0.04- 60.04	29.44
2.619	2.612 (0.453)	49	231191			4.54- 64.54	33.09
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	2078373	200.000	206.91	80.00- 120.00	100.00(A)
2.641	2.634 (0.456)	57	1341657			34.12- 94.12	64.55
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.492)	106	1169390	200.000	214.33	80.00- 120.00	100.00(A)
2.848	2.841 (0.492)	108	1149051			69.27- 129.27	98.26
33 Freon 11					CAS #: 75-69-4		
2.898	2.884 (0.501)	101	2990714	200.000	213.62	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.898	2.884 (0.501)	103	1954067			34.72- 94.72	65.34
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.899 (0.502)	67	2628562	200.000	218.19	80.00- 120.00	100.00(A)
2.906	2.899 (0.502)	69	808198			0.84- 60.84	30.75
35 Pentane					CAS #: 109-66-0		
2.977	2.970 (0.515)	43	3326896	200.000	203.77	80.00- 120.00	100.00(A)
2.977	2.970 (0.515)	57	497125			0.00- 44.98	14.94
2.977	2.970 (0.515)	72	250044			0.00- 37.39	7.52
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	597925	200.000	217.07	80.00- 120.00	100.00(A)
3.292	3.285 (0.569)	59	1144802			163.46- 223.46	191.46
3.285	3.285 (0.568)	45	1667751			250.40- 310.40	278.92
39 Ethanol					CAS #: 64-17-5		
3.249	3.242 (0.562)	46	301814	200.000	207.52	80.00- 120.00	100.00(A)
3.285	3.242 (0.568)	45	1657457			511.19- 571.19	549.17
42 Acrolein					CAS #: 107-02-8		
3.543	3.529 (0.612)	55	539808	200.000	213.90	80.00- 120.00	100.00(A)
3.543	3.529 (0.612)	56	750593			111.10- 171.10	139.05
43 Freon 113					CAS #: 76-13-1		
3.557	3.550 (0.615)	151	2174805	200.000	208.58	80.00- 120.00	100.00(A)
3.557	3.550 (0.615)	153	1392066			33.56- 93.56	64.01
3.557	3.550 (0.615)	101	2603153			89.21- 149.21	119.70
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.593	3.579 (0.621)	96	1272304	200.000	210.50	80.00- 120.00	100.00(A)
3.593	3.579 (0.621)	98	804446			34.02- 94.02	63.23
3.593	3.579 (0.621)	61	2540756			168.77- 228.77	199.70
47 Acetone					CAS #: 67-64-1		
3.722	3.708 (0.643)	58	818913	200.000	213.00	80.00- 120.00	100.00(A)
3.722	3.708 (0.643)	43	2670673			302.95- 362.95	326.12
48 Carbon Disulfide					CAS #: 75-15-0		
3.837	3.823 (0.663)	76	3473690	200.000	212.53	80.00- 120.00	100.00(A)
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	2824784	200.000	259.99	80.00- 120.00	100.00(A)
3.794	3.794 (0.656)	127	1185970			12.22- 72.22	41.98

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	3287894	200.000	212.18	80.00- 120.00	100.00(A)
3.901	3.887 (0.674)	43	565170			0.00- 47.19	17.19
54 3-Chloropropene					CAS #: 107-05-1		
4.059	4.052 (0.702)	76	545365	200.000	199.73	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	2224570			396.19- 456.19	407.90
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	1631593	200.000	225.92	80.00- 120.00	100.00(A)
4.131	4.123 (0.714)	40	829052			20.95- 80.95	50.81
4.131	4.123 (0.714)	38	182363			0.00- 41.17	11.18
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	2169168	200.000	217.21	80.00- 120.00	100.00(A)
4.238	4.238 (0.733)	84	1125402			22.03- 82.03	51.88
4.238	4.238 (0.733)	51	657885			0.18- 60.18	30.33
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	3675194	200.000	203.38	80.00- 120.00	100.00(A)
4.345	4.338 (0.751)	41	762931			0.00- 51.11	20.76
4.345	4.338 (0.751)	57	374274			0.00- 40.49	10.18
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	3660106	200.000	203.22	80.00- 120.00	100.00(A)
4.446	4.446 (0.768)	57	1205080			3.10- 63.10	32.92
4.446	4.446 (0.768)	41	1137977			1.28- 61.28	31.09
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	872146	200.000	213.32	80.00- 120.00	100.00(A)
4.482	4.482 (0.775)	61	2471299			255.84- 315.84	283.36
4.482	4.482 (0.775)	96	1368568			127.59- 187.59	156.92
66 Acrylonitrile					CAS #: 107-13-1		
4.567	4.560 (0.789)	52	1209839	200.000	208.90	80.00- 120.00	100.00(A)
4.567	4.560 (0.789)	53	1441756			88.05- 148.05	119.17
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.812)	57	3059384	200.000	213.36	80.00- 120.00	100.00(A)
4.696	4.697 (0.812)	43	2035499			37.52- 97.52	66.53
4.696	4.697 (0.812)	86	348023			0.00- 41.48	11.38
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	2727099	200.000	215.24	80.00- 120.00	100.00(A)
4.969	4.962 (0.859)	65	807144			0.00- 59.70	29.60

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.947	4.954 (0.855)	45	6972756	200.000	207.52	80.00- 120.00	100.00(A)
4.947	4.954 (0.855)	87	1261426			0.00- 48.18	18.09
4.947	4.954 (0.855)	59	707319			0.00- 40.15	10.14
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.864)	86	353856	200.000	221.69	80.00- 120.00	100.00(A)
4.997	4.997 (0.864)	43	6152688			2432.48-2492.48	1738.75
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.305	5.305 (0.917)	59	5991015	200.000	205.98	80.00- 120.00	100.00(A)
5.305	5.305 (0.917)	87	1852036			1.00- 61.00	30.91
5.305	5.305 (0.917)	41	1108520			0.00- 48.73	18.50
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.513	5.506 (0.953)	77	2339456	200.000	212.12	80.00- 120.00	100.00(A)
5.513	5.506 (0.953)	79	759579			2.28- 62.28	32.47
5.513	5.506 (0.953)	97	577290			0.00- 53.93	24.68
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.959)	98	941351	200.000	222.97	80.00- 120.00	100.00(A)
5.549	5.549 (0.959)	96	1475590			125.75- 185.75	156.75
5.549	5.549 (0.959)	61	3406307			332.40- 392.40	361.85
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.960)	72	710177	200.000	214.24	80.00- 120.00	100.00(A)
5.563	5.556 (0.962)	43	8748765			1214.50-1274.50	1231.91
5.556	5.556 (0.960)	57	313614			14.68- 74.68	44.16
87 Ethyl Acetate						CAS #: 141-78-6	
5.570	5.570 (0.963)	45	710278	200.000	215.42	80.00- 120.00	100.00(A)
5.549	5.549 (0.959)	61	3406439			452.04- 512.04	479.59
5.570	5.570 (0.963)	70	376648			22.77- 82.77	53.03
89 Tetrahydrofuran						CAS #: 109-99-9	
5.778	5.771 (0.999)	42	2389288	200.000	213.80	80.00- 120.00	100.00(A)
5.778	5.771 (0.999)	71	621062			0.00- 55.82	25.99
5.778	5.771 (0.999)	72	679138			0.00- 57.59	28.42
* 90 Bromochloromethane						CAS #: 74-97-5	
5.785	5.778 (1.000)	130	146655	25.0000		80.00- 120.00	100.00
5.785	5.778 (1.000)	128	114483			48.23- 108.23	78.06
5.785	5.778 (1.000)	49	264310			150.57- 210.57	180.23
92 Chloroform						CAS #: 67-66-3	
5.842	5.835 (1.010)	83	2849633	200.000	221.70	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.842	5.835 (1.010)	85	1839274			34.70- 94.70	64.54
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	1890120	200.000	209.08	80.00- 120.00	100.00(A)
5.957	5.957 (1.030)	56	3281786			142.57- 202.57	173.63
5.957	5.957 (1.030)	41	1740496			62.09- 122.09	92.08
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.972 (1.032)	97	2948715	200.000	206.40	80.00- 120.00	100.00(A)
5.971	5.972 (1.032)	99	1896974			34.02- 94.02	64.33
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.053)	119	2981854	200.000	217.13	80.00- 120.00	100.00(A)
6.093	6.086 (1.053)	117	3007163			70.64- 130.64	100.85
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.919)	110	839217	200.000	203.04	80.00- 120.00	100.00(A)
6.115	6.115 (0.918)	75	2124877			226.85- 286.85	253.20
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.085)	57	10464793	200.000	207.89	80.00- 120.00	100.00(A)
6.279	6.280 (1.085)	56	3399889			2.24- 62.24	32.49
6.279	6.280 (1.085)	41	2587604			0.00- 54.39	24.73
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	4111436	200.000	205.31	80.00- 120.00	100.00(A)
6.301	6.301 (0.946)	77	947596			0.00- 52.90	23.05
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	228223	25.0000	27.989	80.00- 120.00	100.00
6.308	6.308 (1.090)	67	169168			27.21- 87.21	74.12
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	1080564	200.000	191.25	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	4364452			372.79- 432.79	403.90
6.358	6.358 (0.955)	55	1482176			112.09- 172.09	137.17
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	2173814	200.000	205.36	80.00- 120.00	100.00(A)
6.380	6.380 (0.958)	64	662081			0.79- 60.79	30.46
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	1572559	200.000	200.11	80.00- 120.00	100.00(A)
6.444	6.444 (0.968)	43	4039565			226.53- 286.53	256.88
6.444	6.444 (0.968)	57	2057612			100.85- 160.85	130.84

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	607214	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93970			0.00- 45.71	15.48
110 n-Butanol						CAS #: 71-36-3	
6.809	6.810 (1.023)	56	1498541	200.000	205.70	80.00- 120.00	100.00(A)
6.809	6.810 (1.023)	41	1046025			40.99- 100.99	69.80
6.809	6.810 (1.023)	43	852168			27.38- 87.38	56.87
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	2004771	200.000	206.61	80.00- 120.00	100.00(A)
6.867	6.867 (1.031)	130	2152958			76.29- 136.29	107.39
6.867	6.867 (1.031)	97	1282796			33.63- 93.63	63.99
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.096	7.089 (1.066)	63	2045978	200.000	200.76	80.00- 120.00	100.00(A)
7.096	7.089 (1.066)	62	1452463			41.07- 101.07	70.99
7.096	7.089 (1.066)	41	1025055			22.53- 82.53	50.10
116 Methyl Methacrylate						CAS #: 80-62-6	
7.139	7.132 (0.755)	69	1664410	200.000	203.56	80.00- 120.00	100.00(A)
7.139	7.132 (0.755)	41	3490137			179.84- 239.84	209.69
7.139	7.139 (0.755)	100	669735			9.59- 69.59	40.24
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	1068493	200.000	195.71	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	1054342			68.28- 128.28	98.68
7.175	7.175 (1.077)	57	357622			2.68- 62.68	33.47
118 Dibromomethane						CAS #: 74-95-3	
7.211	7.204 (0.762)	174	1851234	200.000	206.43	80.00- 120.00	100.00(A)
7.203	7.204 (0.761)	93	1651072			60.09- 120.09	89.19
7.203	7.204 (0.761)	95	1434152			48.38- 108.38	77.47
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	3187397	200.000	209.29	80.00- 120.00	100.00(A)
7.318	7.318 (1.099)	85	2050718			35.24- 95.24	64.34
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.698	7.691 (1.156)	75	2666430	200.000	209.05	80.00- 120.00	100.00(A)
7.698	7.691 (1.156)	77	846283			2.42- 62.42	31.74
7.691	7.691 (1.155)	39	1760038			37.16- 97.16	66.01
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	2728123	200.000	194.48	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	1272958			15.78- 75.78	46.66

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	3109761			84.64- 144.64	113.99
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	1984175	200.000	194.19	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	5363252			242.35- 302.35	270.30
7.798	7.791 (1.171)	85	653050			3.24- 63.24	32.91
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	661488	25.0000	25.064	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62867			0.00- 40.44	9.50
7.891	7.891 (1.185)	100	430214			34.95- 94.95	65.04
137 Toluene					CAS #: 108-88-3		
7.956	7.949 (1.195)	91	5496866	200.000	198.84	80.00- 120.00	100.00
7.956	7.949 (1.195)	92	3223093			28.38- 88.38	58.64
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	2290202	200.000	196.83	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	1946174			56.00- 116.00	84.98
7.948	7.949 (1.194)	43	5895371			228.66- 288.66	257.42
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	2472659	200.000	208.56	80.00- 120.00	100.00(A)
8.213	8.214 (0.868)	77	780505			1.24- 61.24	31.57
8.213	8.214 (0.868)	39	1616909			34.11- 94.11	65.39
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	1973653	200.000	206.88	80.00- 120.00	100.00(A)
8.400	8.400 (0.888)	99	1227648			31.96- 91.96	62.20
8.400	8.400 (0.888)	83	1639096			52.93- 112.93	83.05
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	2764412	200.000	200.38	80.00- 120.00	100.00(A)
8.464	8.464 (0.895)	129	2156828			47.84- 107.84	78.02
8.464	8.464 (0.895)	131	2092898			45.29- 105.29	75.71
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	2749799	200.000	198.84	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	5238084			162.87- 222.87	190.49
8.586	8.586 (0.908)	100	433880			0.00- 45.94	15.78
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	2712190	200.000	204.00	80.00- 120.00	100.00(A)
8.579	8.579 (1.288)	41	3365614			94.99- 154.99	124.09
8.579	8.579 (1.288)	78	882760			2.05- 62.05	32.55

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1		
8.801	8.801 (0.930)	129	3803420	200.000		207.93	80.00- 120.00	100.00(A)
8.801	8.801 (0.930)	127	2948441				47.45- 107.45	77.52
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4		
8.951	8.951 (0.946)	107	3199545	200.000		204.31	80.00- 120.00	100.00(A)
8.951	8.951 (0.946)	109	3015665				64.21- 124.21	94.25
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0		
7.605	7.605 (1.142)	63	3852793	200.000		204.41	80.00- 120.00	100.00(A)
7.605	7.605 (1.142)	65	1142924				0.00- 59.64	29.66
7.605	7.605 (1.142)	144	374076				0.00- 39.63	9.71
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	595090	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	322638				23.78- 83.78	54.22
154 Chlorobenzene						CAS #: 108-90-7		
9.496	9.496 (1.004)	112	4805022	200.000		203.48	80.00- 120.00	100.00(A)
9.496	9.496 (1.004)	114	1542900				1.74- 61.74	32.11
9.496	9.496 (1.004)	77	2584699				25.04- 85.04	53.79
155 Ethyl Benzene						CAS #: 100-41-4		
9.567	9.567 (1.011)	106	2443043	200.000		198.07	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	7445132				273.74- 333.74	304.75
156 Nonane						CAS #: 111-84-2		
9.603	9.596 (1.015)	43	6171885	200.000		194.14	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	5253139				54.16- 114.16	85.11
9.603	9.603 (1.015)	85	1482943				0.00- 53.90	24.03
158 m,p-Xylene						CAS #: 108-38-3		
9.718	9.718 (1.027)	106	3015614	200.000		196.78	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	5869082				163.73- 223.73	194.62
164 o-Xylene						CAS #: 95-47-6		
10.226	10.226 (1.081)	106	2925715	200.000		197.04	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	5968076				177.45- 237.45	203.99
165 Styrene						CAS #: 100-42-5		
10.255	10.255 (1.084)	104	4970586	200.000		197.21	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	2372058				17.88- 77.88	47.72
167 Bromoform						CAS #: 75-25-2		
10.549	10.542 (1.115)	173	3738056	200.000		208.68	80.00- 120.00	100.00(A)
10.549	10.542 (1.115)	171	1919438				21.25- 81.25	51.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.656	10.649 (1.126)	105	9133490	200.000	196.23	80.00- 120.00	100.00
10.656	10.649 (1.126)	120	2612516			0.00- 58.52	28.60
10.649	10.649 (1.126)	51	1174655			0.00- 43.00	12.86
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	3186182	200.000	191.28	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	1023262			1.94- 61.94	32.12
10.871	10.871 (1.149)	42	2155068			37.89- 97.89	67.64
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	391305	25.0000	25.595	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	492677			95.92- 155.92	125.91
10.921	10.921 (1.154)	176	379433			66.89- 126.89	96.97
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	4478778	200.000	197.42	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	2889301			35.20- 95.20	64.51
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	2876488	200.000	203.06	80.00- 120.00	100.00(A)
11.107	11.107 (1.174)	158	2796126			67.21- 127.21	97.21
11.179	11.179 (1.182)	77	1690886			29.02- 89.02	58.78
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	2681478	200.000	194.62	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	10576237			366.49- 426.49	394.42
11.150	11.150 (1.179)	105	403848			0.00- 44.85	15.06
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	1359844	200.000	190.81	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	4281561			280.55- 340.55	314.86
11.107	11.100 (1.174)	61	607928			15.49- 75.49	44.71
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	954975	200.000	201.05	80.00- 120.00	100.00(A)
11.179	11.179 (1.182)	89	738088			49.11- 109.11	77.29
11.179	11.179 (1.182)	75	4281561			426.44- 486.44	448.34
182 Decane					CAS #: 124-18-5		
11.258	11.251 (1.190)	57	6477918	200.000	178.80	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	1764517			0.00- 57.66	27.24
11.258	11.258 (1.190)	142	263248			0.00- 34.09	4.06
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	2800806	200.000	189.85	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	9001865			284.55- 344.55	321.40
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.308 (1.196)	126	2257842	200.000	193.82	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	7834055			315.17- 375.17	346.97
11.301	11.301 (1.195)	65	1128270			21.55- 81.55	49.97
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	4109840	200.000	199.10	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	7853670			164.93- 224.93	191.09
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	4135477	200.000	199.73	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	2280562			25.30- 85.30	55.15
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.738 (1.242)	119	7751216	200.000	200.41	80.00- 120.00	100.00(A)
11.745	11.738 (1.242)	134	1872880			0.00- 54.25	24.16
11.738	11.738 (1.241)	91	4741993			31.27- 91.27	61.18
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	7641602	200.000	195.85	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	3760947			19.05- 79.05	49.22
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	11.996 (1.269)	134	2387678	200.000	198.82	80.00- 120.00	100.00
12.003	11.996 (1.269)	105	11138250			437.55- 497.55	466.49
11.996	11.996 (1.268)	91	1685037			40.76- 100.76	70.57
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	10410880	200.000	197.06	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	2680251			0.00- 55.54	25.74
12.160	12.153 (1.285)	91	2223506			0.00- 51.48	21.36
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	5269323	200.000	196.50	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	3364893			33.21- 93.21	63.86
12.196	12.196 (1.289)	111	2179310			11.31- 71.31	41.36
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	5379837	200.000	198.98	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	3443156			33.90- 93.90	64.00
12.311	12.311 (1.301)	111	2132840			9.45- 69.45	39.65
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	7476818	200.000	201.60	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	1723549			0.00- 53.26	23.05
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	7391785	200.000	176.63	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	6481442			58.12- 118.12	87.68
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	2555712	200.000	190.54	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	8833770			314.79- 374.79	345.65
12.626	12.626 (1.335)	92	4753356			154.29- 214.29	185.99
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	5095250	200.000	195.20	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	3245004			33.84- 93.84	63.69
12.733	12.741 (1.346)	111	2166463			12.73- 72.73	42.52
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	3185412	200.000	200.77	80.00- 120.00	100.00(A)
13.600	13.600 (1.438)	75	2632735			52.48- 112.48	82.65
13.600	13.600 (1.438)	155	2459698			47.41- 107.41	77.22
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	8872524	247.000	272.11	80.00- 120.00	100.00(A)
13.801	13.801 (1.459)	43	7239358			52.87- 112.87	81.59
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	5062178	252.000	261.56	80.00- 120.00	100.00(A)
14.467	14.467 (1.529)	182	4827276			65.33- 125.33	95.36
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	3721949	257.000	273.25	80.00- 120.00	100.00(A)
14.581	14.582 (1.541)	223	2342743			33.17- 93.17	62.94
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	1265607	25.4000	25.587	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	157387			0.00- 42.88	12.44
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	4844896	266.000	283.17	80.00- 120.00	100.00(A)
15.068	15.069 (1.593)	182	4630533			65.75- 125.75	95.58
15.068	15.069 (1.593)	145	1724268			5.23- 65.23	35.59

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051910.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	146655	-7.65
108 1,4-Difluorobenze	597103	358262	835944	607214	1.69
153 Chlorobenzene-d5	587747	352648	822846	595090	1.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051910.d

Date : 19-MAY-2021 16:53

Client ID:

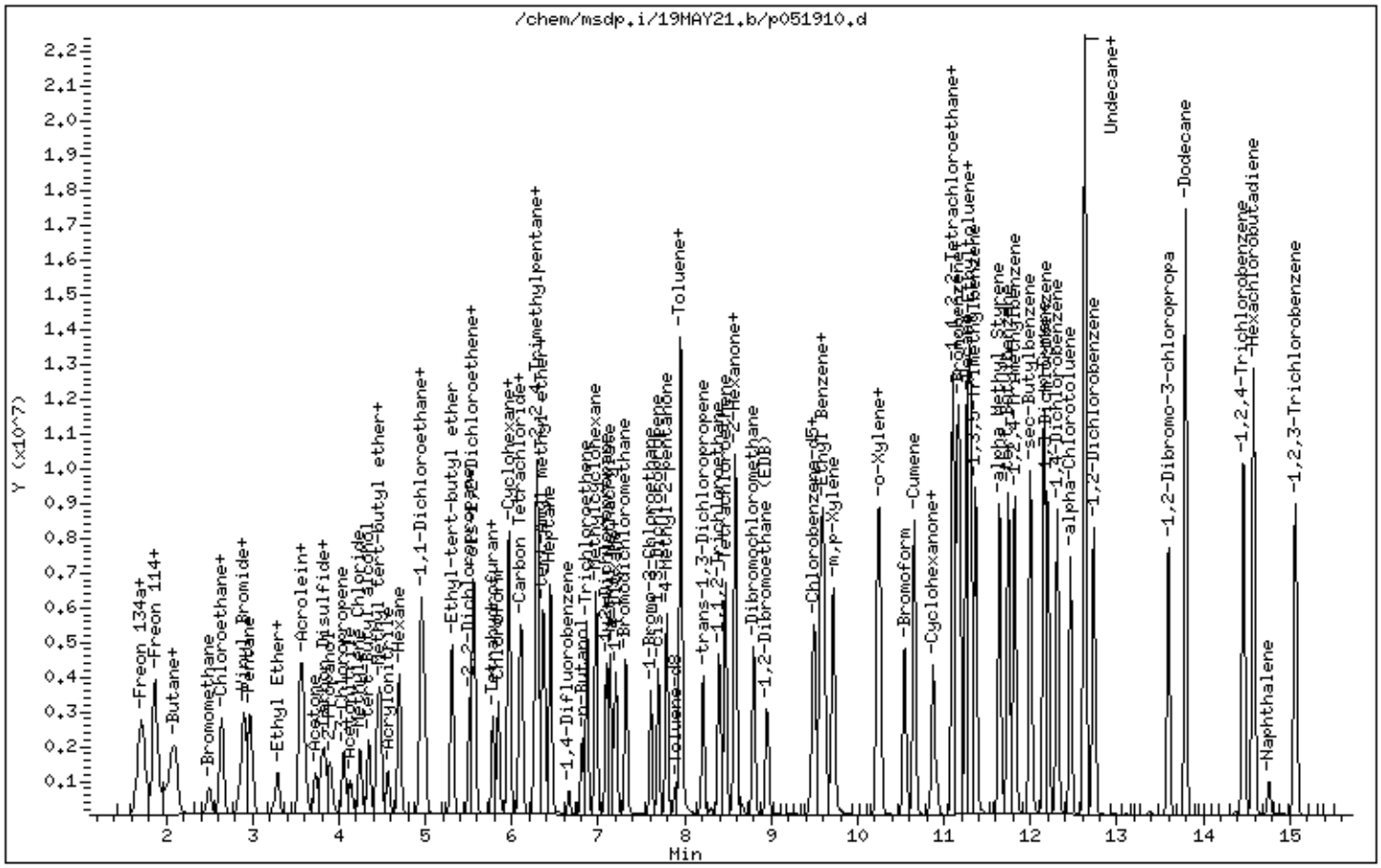
Instrument: msdp.i

Sample Info: 200mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051921.d
Lab Smp Id: ICAL Level 9
Inj Date : 19-MAY-2021 22:39
Operator : gh Inst ID: msdp.i
Smp Info : 200mL 3018-2013
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 22:39 Cal File: p051921.d
Als bottle: 3 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	153421	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	119993			48.23- 108.23	78.21
5.778	5.778 (1.000)	49	281111			150.57- 210.57	183.23
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	611809	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95212			0.00- 45.71	15.56
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	591968	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	325404			23.78- 83.78	54.97
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	400344	200.000	135.04	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	1105090			243.50- 303.50	276.04
1.591	1.590 (0.275)	64	95760			0.00- 54.06	23.92
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	527234	200.000	194.13	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.675	1.674 (0.290)	39	330737			34.98- 94.98	62.73
1.675	1.674 (0.290)	41	280905			25.22- 85.22	53.28
13 Freon 142b						CAS #: 75-68-3	
1.884	1.884 (0.326)	65	2932126	200.000	195.58	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	866027			0.00- 59.77	29.54
36 1-Pentene						CAS #: 109-67-1	
2.906	2.906 (0.503)	55	1894226	200.000	193.06	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	2580451			105.17- 165.17	136.23
40 Freon 123a						CAS #: 354-23-4	
3.386	3.385 (0.586)	117	1952332	200.000	203.39	80.00- 120.00	100.00(A)
3.378	3.378 (0.585)	67	2434248			104.69- 164.69	124.68
41 Freon 123						CAS #: 306-83-2	
3.479	3.479 (0.602)	83	2762089	200.000	202.52	80.00- 120.00	100.00(A)
3.479	3.479 (0.602)	133	571513			0.00- 50.87	20.69
3.479	3.479 (0.602)	85	1881243			36.08- 96.08	68.11
55 Cyclopentene						CAS #: 142-29-0	
4.073	4.073 (0.705)	67	3056516	200.000	208.28	80.00- 120.00	100.00(A)
4.073	4.073 (0.705)	68	1136453			6.76- 66.76	37.18
4.066	4.073 (0.704)	53	851928			0.00- 57.54	27.87
56 Methyl Acetate						CAS #: 79-20-9	
4.073	4.073 (0.705)	43	3612790	200.000	210.52	80.00- 120.00	100.00(A)
4.073	4.073 (0.705)	74	515897			0.00- 44.13	14.28
74 Chloroprene						CAS #: 126-99-8	
5.012	5.019 (0.867)	53	2991875	200.000	218.26	80.00- 120.00	100.00(A)
5.019	5.019 (0.869)	88	1176445			9.21- 69.21	39.32
5.012	5.019 (0.867)	50	709040			0.00- 54.25	23.70
75 1-Propanol						CAS #: 71-23-8	
5.083	5.083 (0.880)	59	399024	200.000	196.88	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	379166			63.23- 123.23	95.02
5.083	5.083 (0.880)	41	223562			24.74- 84.74	56.03
88 Methyl Acrylate						CAS #: 96-33-3	
5.621	5.620 (0.973)	55	3851199	200.000	213.88	80.00- 120.00	100.00(A)
5.621	5.620 (0.973)	85	434023			0.00- 41.28	11.27
5.621	5.620 (0.973)	58	316363			0.00- 38.22	8.21
103 Isobutanol						CAS #: 78-83-1	
6.237	6.244 (1.079)	39	424672	200.000	195.48	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.237	6.244 (1.079)	43	2091776			448.18- 508.18	492.56
6.237	6.244 (1.079)	41	1430737			299.99- 359.99	336.90
113 Ethyl acrylate					CAS #: 140-88-5		
6.939	6.938 (0.733)	99	269080	200.000	196.94	80.00- 120.00	100.00
6.939	6.938 (0.733)	45	496156			149.95- 209.95	184.39
6.939	6.938 (0.733)	55	5189842			1849.07-1909.07	1928.74
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	6094951	200.000	202.80	80.00- 120.00	100.00(A)
7.032	7.031 (0.743)	58	460764			0.00- 37.44	7.56
7.032	7.031 (0.743)	86	784528			0.00- 42.78	12.87
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	3022342	200.000	196.12	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	883323			0.00- 59.10	29.23
8.665	8.657 (1.301)	43	7358553			215.30- 275.30	243.47
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	2663540	200.000	202.39	80.00- 120.00	100.00(A)
9.460	9.460 (1.000)	117	591968			57.42- 117.42	22.22
9.596	9.596 (1.014)	95	938731			5.70- 65.70	35.24
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	4597454	200.000	204.09	80.00- 120.00	100.00(A)
10.362	10.362 (1.793)	43	7586394			136.03- 196.03	165.01
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	3445097	200.000	257.71	80.00- 120.00	100.00(A)
12.089	12.089 (1.278)	93	2389612			39.41- 99.41	69.36
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	2390402	200.000	197.18	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	7653013			295.02- 355.02	320.16
11.444	11.444 (1.210)	63	988176			11.82- 71.82	41.34
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	3473836	200.000	196.80	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	7726951			192.40- 252.40	222.43
12.318	12.318 (1.302)	77	848060			0.00- 54.69	24.41
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	1692084	200.000	243.84	80.00- 120.00	100.00(A)
12.963	12.970 (1.370)	117	2255610			102.99- 162.99	133.30

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	4961639	200.000	199.94	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	4745365			65.24- 125.24	95.64
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	5524082	200.000	225.60	80.00- 120.00	100.00(A)
10.599	10.599 (1.120)	77	1558779			0.00- 58.21	28.22
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	3935444	200.000	245.48	80.00- 120.00	100.00(A)
11.444	11.444 (1.210)	91	7653013			153.57- 213.57	194.46

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051921.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153421	-3.39
108 1,4-Difluorobenze	597103	358262	835944	611809	2.46
153 Chlorobenzene-d5	587747	352648	822846	591968	0.72

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051921.d

Date : 19-MAY-2021 22:39

Client ID:

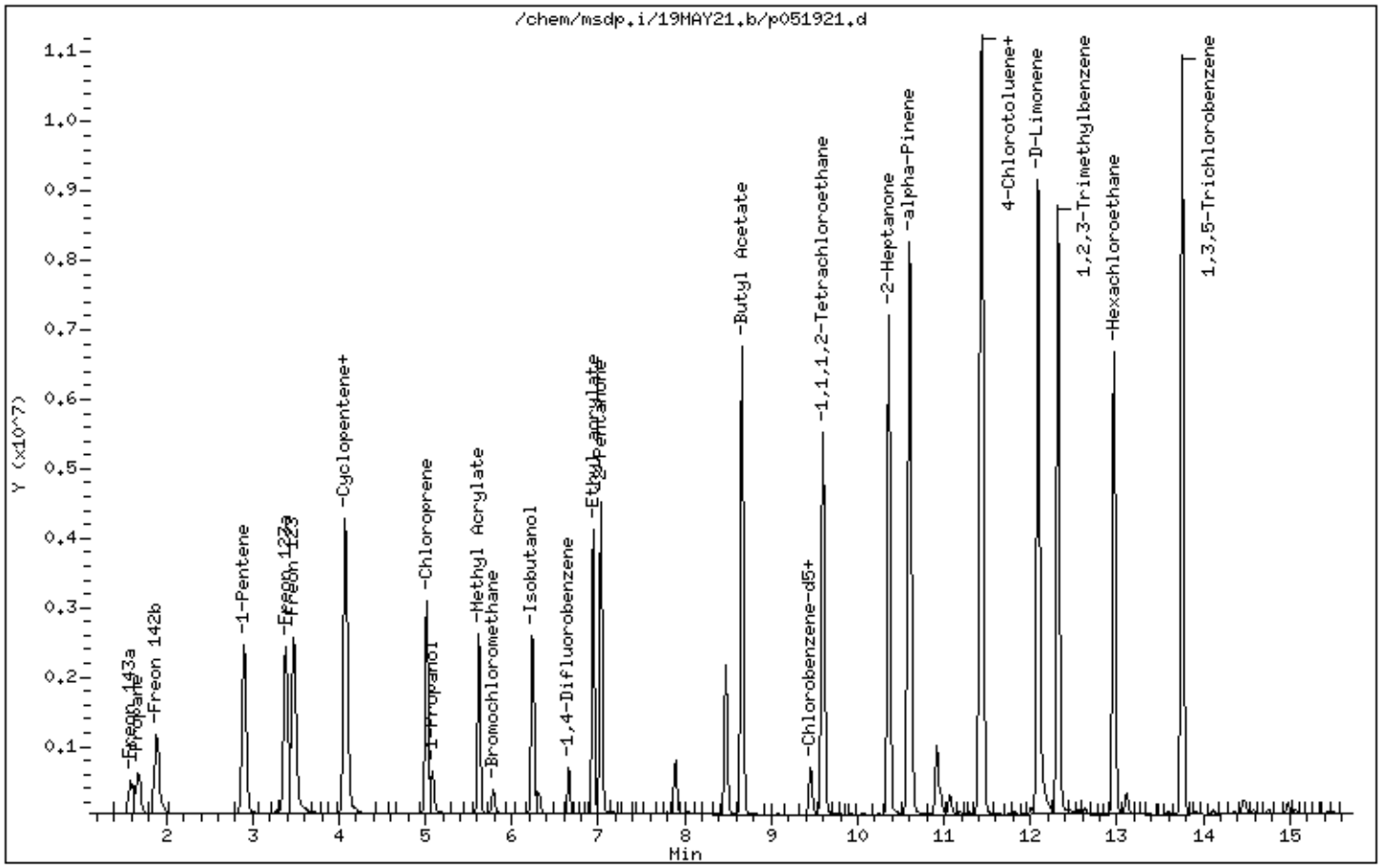
Instrument: msdp.i

Sample Info: 200mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062211.d
Lab Smp Id: ICAL Level 10
Inj Date : 22-JUN-2021 18:34
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2013
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:39 Cal File: 3062222.d
Als bottle: 5 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	253083	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	197908			48.46- 108.46	78.20
5.284	5.270 (1.000)	49	379733			120.39- 180.39	150.04
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	922710	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	143994			0.00- 45.52	15.61
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	877543	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	481707			25.46- 85.46	54.89
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	422301	100.000	99.752	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	1045065			217.09- 277.09	247.47
1.353	1.353 (0.256)	64	103510			0.00- 55.87	24.51
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.272)	43	220396	100.000	95.560	80.00- 120.00	100.00

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
6 Propane (continued)								
1.437	1.422 (0.272)	39	154993			41.62- 101.62		70.32
1.437	1.422 (0.272)	41	124136			22.97- 82.97		56.32
13 Freon 142b					CAS #: 75-68-3			
1.605	1.604 (0.304)	65	1339634	100.000	99.508	80.00- 120.00		100.00
1.605	1.604 (0.304)	45	375942			0.00- 58.17		28.06
36 1-Pentene					CAS #: 109-67-1			
2.458	2.444 (0.465)	55	858577	100.000	100.42	80.00- 120.00		100.00
2.444	2.444 (0.463)	42	1104782			99.17- 159.17		128.68
40 Freon 123a					CAS #: 354-23-4			
2.878	2.878 (0.545)	117	995577	100.000	100.00	80.00- 120.00		100.00
2.878	2.878 (0.545)	67	1327677			103.13- 163.13		133.36
41 Freon 123					CAS #: 306-83-2			
2.976	2.976 (0.563)	83	1459229	100.000	99.939	80.00- 120.00		100.00
2.976	2.976 (0.563)	133	313282			0.00- 51.81		21.47
2.976	2.976 (0.563)	85	961907			37.13- 97.13		65.92
55 Cyclopentene					CAS #: 142-29-0			
3.549	3.549 (0.672)	67	1570286	100.000	101.03	80.00- 120.00		100.00
3.549	3.549 (0.672)	68	593419			7.90- 67.90		37.79
3.549	3.549 (0.672)	53	385199			0.00- 54.87		24.53
56 Methyl Acetate					CAS #: 79-20-9			
3.577	3.577 (0.677)	43	1560707	100.000	97.439	80.00- 120.00		100.00
3.577	3.577 (0.677)	74	264599			0.00- 47.15		16.95
74 Chloroprene					CAS #: 126-99-8			
4.515	4.515 (0.854)	53	1367166	100.000	100.80	80.00- 120.00		100.00
4.515	4.515 (0.854)	88	580254			12.33- 72.33		42.44
4.515	4.515 (0.854)	50	373283			0.00- 57.62		27.30
75 1-Propanol					CAS #: 71-23-8			
4.613	4.613 (0.873)	59	189442	100.000	90.344	80.00- 120.00		100.00
4.613	4.613 (0.873)	42	160675			53.89- 113.89		84.81
4.613	4.613 (0.873)	41	100475			24.09- 84.09		53.04
88 Methyl Acrylate					CAS #: 96-33-3			
5.131	5.130 (0.971)	55	1620095	100.000	99.388	80.00- 120.00		100.00
5.131	5.130 (0.971)	85	212661			0.00- 43.24		13.13
5.131	5.130 (0.971)	58	139809			0.00- 38.83		8.63
103 Isobutanol					CAS #: 78-83-1			
5.774	5.774 (1.093)	39	225396	100.000	75.243	80.00- 120.00		100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	831274			327.69- 387.69	368.81
5.774	5.774 (1.093)	41	612193			237.56- 297.56	271.61
113 Ethyl acrylate					CAS #: 140-88-5		
6.460	6.474 (0.750)	99	128213	100.000	91.427	80.00- 120.00	100.00
6.460	6.460 (0.750)	45	194063			124.67- 184.67	151.36
6.460	6.460 (0.750)	55	2114618			1601.30-1661.30	1649.30
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	3065851	100.000	93.467	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	246156			0.00- 37.25	8.03
6.558	6.557 (0.761)	86	468245			0.00- 45.08	15.27
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	1130017	100.000	92.901	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	396522			5.16- 65.16	35.09
8.068	8.068 (1.305)	43	2753919			214.00- 274.00	243.71
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.012)	131	1276488	100.000	96.705	80.00- 120.00	100.00
8.712	8.712 (1.012)	117	862064			38.22- 98.22	67.53
8.712	8.712 (1.012)	95	481397			7.54- 67.54	37.71
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	1737838	100.000	93.545	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	2814385			133.36- 193.36	161.95
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.210)	68	1639621	100.000	102.84	80.00- 120.00	100.00
10.417	10.424 (1.210)	93	1183759			42.08- 102.08	72.20
186 4-Chlorotoluene					CAS #: 106-43-4		
9.966	9.973 (1.157)	126	1122466	100.000	97.688	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	3789856			305.94- 365.94	337.64
9.966	9.966 (1.157)	63	502773			15.44- 75.44	44.79
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.230)	120	1576820	100.000	100.11	80.00- 120.00	100.00
10.596	10.596 (1.230)	105	3678486			206.43- 266.43	233.29
10.596	10.596 (1.230)	77	434629			0.00- 58.29	27.56
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.289)	201	994424	100.000	103.42	80.00- 120.00	100.00
11.098	11.098 (1.289)	117	1375706			109.77- 169.77	138.34

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.728 (1.361)	180	2099856	100.000	100.16	80.00- 120.00	100.00
11.728	11.728 (1.362)	182	1998399			65.79- 125.79	95.17
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.088)	93	2674923	100.000	98.578	80.00- 120.00	100.00
9.371	9.371 (1.088)	77	798194			0.13- 60.13	29.84
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.155)	93	2112661	100.000	99.142	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	3789856			145.95- 205.95	179.39

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062211.d
Lab Smp Id: ICAL Level 10
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	253083	3.98
108 1,4-Difluorobenze	874076	524446	1223706	922710	5.56
153 Chlorobenzene-d5	831223	498734	1163712	877543	5.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062211.d

Date : 22-JUN-2021 18:34

Client ID:

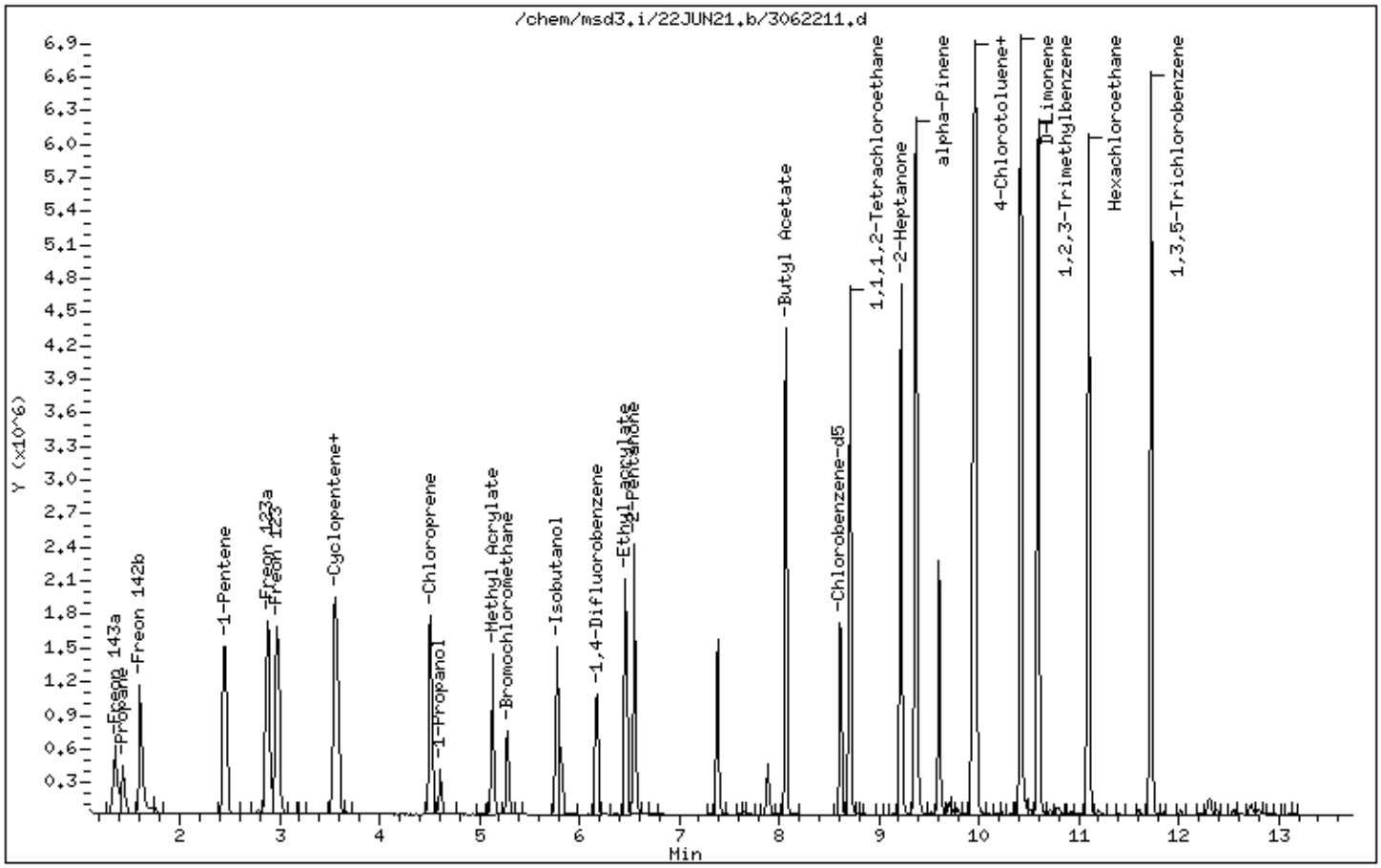
Instrument: msd3.i

Sample Info: 100mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062222.d
Lab Smp Id: ICAL Level 10
Inj Date : 22-JUN-2021 23:39
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2115
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 22-JUN-2021 23:39 Cal File: 3062222.d
Als bottle: 2 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	613528	100.000	95.210	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	511616			51.82- 111.82	83.39
1.492	1.479 (0.282)	51	1594986			194.91- 254.91	259.97
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	636513	100.000	97.305	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	424408			35.61- 95.61	66.68
1.437	1.423 (0.272)	39	467122			42.66- 102.66	73.39
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.450	1.437 (0.274)	65	401492	100.000	94.157	80.00- 120.00	100.00
1.492	1.479 (0.282)	51	1594986			321.86- 381.86	397.26
1.450	1.437 (0.274)	47	291028			45.34- 105.34	72.49
8 Freon 12					CAS #: 75-71-8		
1.464	1.465 (0.277)	85	1734118	100.000	91.921	80.00- 120.00	100.00
1.464	1.465 (0.277)	87	560580			2.63- 62.63	32.33
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.492	1.479 (0.282)	67	185750	100.000	89.588	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.492	1.479 (0.282)	51	1594986			719.76- 779.76	858.67
10 Freon 114					CAS #: 76-14-2		
1.576	1.562 (0.298)	135	1318387	100.000	94.316	80.00- 120.00	100.00
1.576	1.562 (0.298)	137	422419			2.12- 62.12	32.04
12 Isobutane					CAS #: 75-28-5		
1.576	1.576 (0.298)	43	1436676	100.000	97.717	80.00- 120.00	100.00
1.576	1.576 (0.298)	42	471194			2.44- 62.44	32.80
1.576	1.576 (0.298)	58	49177			0.00- 33.26	3.42
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	737502	100.000	94.057	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	236973			2.41- 62.41	32.13
18 Butane					CAS #: 106-97-8		
1.716	1.702 (0.325)	58	156059	100.000	84.277	80.00- 120.00	100.00
1.702	1.702 (0.322)	43	1166146			727.41- 787.41	747.25
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	713856	100.000	85.078	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	217647			1.28- 61.28	30.49
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	619808	100.000	80.602	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	613422			69.23- 129.23	98.97
24 Bromomethane					CAS #: 74-83-9		
2.108	2.094 (0.399)	94	619825	100.000	93.404	80.00- 120.00	100.00
2.108	2.094 (0.399)	96	581336			62.78- 122.78	93.79
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	373173	100.000	94.745	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	116387			1.44- 61.44	31.19
2.206	2.206 (0.417)	49	119717			4.12- 64.12	32.08
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	956298	100.000	94.945	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	662049			38.82- 98.82	69.23
32 Vinyl Bromide					CAS #: 593-60-2		
2.402	2.388 (0.455)	106	674945	100.000	93.548	80.00- 120.00	100.00
2.402	2.388 (0.455)	108	624999			63.14- 123.14	92.60
33 Freon 11					CAS #: 75-69-4		
2.444	2.430 (0.462)	101	1856957	100.000	93.032	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.444	2.430 (0.462)	103	1205290			35.12- 95.12	64.91
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	1524106	100.000	95.517	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	465350			0.74- 60.74	30.53
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	1523095	100.000	94.916	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	243603			0.00- 45.97	15.99
2.500	2.500 (0.473)	72	127162			0.00- 38.10	8.35
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	326353	100.000	90.709	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	579526			147.68- 207.68	177.58
2.780	2.780 (0.526)	45	779526			206.40- 266.40	238.86
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	138933	100.000	86.040	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	778648			523.01- 583.01	560.45
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	264085	100.000	98.552	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	363405			110.33- 170.33	137.61
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	1250959	100.000	91.678	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	798630			33.72- 93.72	63.84
3.032	3.032 (0.574)	101	1511159			89.67- 149.67	120.80
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	708836	100.000	86.246	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	448778			33.39- 93.39	63.31
3.074	3.074 (0.582)	61	1363659			163.82- 223.82	192.38
47 Acetone					CAS #: 67-64-1		
3.213	3.213 (0.608)	58	418004	100.000	92.052	80.00- 120.00	100.00
3.213	3.213 (0.608)	43	1359990			299.66- 359.66	325.35
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.297 (0.624)	76	1958428	100.000	95.774	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.269 (0.619)	142	1769537	100.000	100.08	80.00- 120.00	100.00
3.269	3.269 (0.619)	127	783525			14.58- 74.58	44.28

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.409	3.395 (0.645)	45	1597988	100.000	97.850	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	297202			0.00- 48.61	18.60
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	324026	100.000	92.040	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	1158928			338.06- 398.06	357.67
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	683875	100.000	95.639	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	358324			21.81- 81.81	52.40
3.633	3.633 (0.688)	38	82419			0.00- 41.86	12.05
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	1025987	100.000	94.407	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	622839			30.77- 90.77	60.71
3.731	3.717 (0.706)	51	315351			1.39- 61.39	30.74
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	1954601	100.000	95.354	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	411903			0.00- 51.05	21.07
3.857	3.857 (0.730)	57	206768			0.00- 41.68	10.58
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	2039161	100.000	92.167	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	612141			0.00- 58.86	30.02
3.941	3.941 (0.746)	41	551449			0.00- 57.27	27.04
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	476616	100.000	86.173	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	1275368			244.59- 304.59	267.59
3.969	3.969 (0.751)	96	745512			129.84- 189.84	156.42
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	557795	100.000	84.032	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	664587			88.50- 148.50	119.15
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	1427094	100.000	95.160	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	899519			32.99- 92.99	63.03
4.179	4.179 (0.791)	86	172439			0.00- 42.56	12.08
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	1419983	100.000	92.070	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	436496			0.76- 60.76	30.74

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
72 Isopropyl ether						CAS #: 108-20-3		
4.445	4.445 (0.841)	45	3060328	100.000	96.696	80.00- 120.00		100.00
4.445	4.445 (0.841)	87	670085			0.00- 51.37		21.90
4.445	4.445 (0.841)	59	344177			0.00- 41.09		11.25
73 Vinyl Acetate						CAS #: 108-05-4		
4.501	4.501 (0.852)	86	182859	100.000	96.437	80.00- 120.00		100.00
4.501	4.501 (0.852)	43	2614522			1391.63-1451.63		1429.80
79 Ethyl-tert-butyl ether						CAS #: 637-92-3		
4.809	4.809 (0.910)	59	2942184	100.000	96.293	80.00- 120.00		100.00
4.809	4.809 (0.910)	87	985529			3.22- 63.22		33.50
4.809	4.809 (0.910)	41	533952			0.00- 48.12		18.15
84 2,2-Dichloropropane						CAS #: 594-20-7		
5.004	5.004 (0.947)	77	1360664	100.000	94.702	80.00- 120.00		100.00
5.004	5.004 (0.947)	79	444158			2.00- 62.00		32.64
5.004	5.004 (0.947)	97	317666			0.00- 53.36		23.35
85 cis-1,2-Dichloroethene						CAS #: 156-59-2		
5.046	5.046 (0.955)	98	491586	100.000	89.660	80.00- 120.00		100.00
5.046	5.046 (0.955)	96	761611			127.22- 187.22		154.93
5.046	5.046 (0.955)	61	1517092			283.85- 343.85		308.61
86 2-Butanone						CAS #: 78-93-3		
5.060	5.074 (0.958)	72	370355	100.000	96.708	80.00- 120.00		100.00
5.074	5.074 (0.960)	43	3955007			1055.75-1115.75		1067.90
5.060	5.074 (0.958)	57	149566			10.59- 70.59		40.38
87 Ethyl Acetate						CAS #: 141-78-6		
5.088	5.088 (0.963)	45	316451	100.000	100.23	80.00- 120.00		100.00
5.046	5.046 (0.955)	61	1517092			450.31- 510.31		479.41
5.088	5.088 (0.963)	70	192551			30.42- 90.42		60.85
89 Tetrahydrofuran						CAS #: 109-99-9		
5.270	5.270 (0.997)	42	1035981	100.000	95.933	80.00- 120.00		100.00
5.270	5.270 (0.997)	71	333878			2.92- 62.92		32.23
5.270	5.270 (0.997)	72	344828			3.54- 63.54		33.29
* 90 Bromochloromethane						CAS #: 74-97-5		
5.284	5.284 (1.000)	130	270814	25.0000		80.00- 120.00		100.00
5.284	5.284 (1.000)	128	210159			48.46- 108.46		77.60
5.270	5.270 (1.000)	49	408222			120.39- 180.39		150.74
92 Chloroform						CAS #: 67-66-3		
5.340	5.340 (1.011)	83	1579112	100.000	93.002	80.00- 120.00		100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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92 Chloroform (continued)							
5.340	5.340 (1.011)	85	1020939			34.71- 94.71	64.65
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	976098	100.000	90.950	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	1468324			120.40- 180.40	150.43
5.438	5.438 (1.029)	41	805074			54.20- 114.20	82.48
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	1681907	100.000	88.126	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	1071661			33.76- 93.76	63.72
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	1707419	100.000	97.135	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	1780267			73.68- 133.68	104.27
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	429711	100.000	97.363	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	1116661			231.09- 291.09	259.86
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	4500575	100.000	95.965	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	1406154			1.12- 61.12	31.24
5.774	5.774 (1.093)	41	1217054			0.00- 57.49	27.04
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	2110049	100.000	95.345	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	493874			0.00- 53.80	23.41
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	365334	25.0000	24.514	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	193990			21.66- 81.66	53.10
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	567701	100.000	96.206	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	2251162			365.20- 425.20	396.54
5.858	5.858 (0.948)	55	682011			91.31- 151.31	120.14
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	1195487	100.000	93.828	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	370222			1.20- 61.20	30.97
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	785763	100.000	90.143	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	1642483			179.02- 239.02	209.03
5.942	5.942 (0.962)	57	909991			84.85- 144.85	115.81

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	969803	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	151552			0.00- 45.52	15.63
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	700436	100.000	98.744	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	494892			40.21- 100.21	70.65
6.348	6.348 (1.027)	43	386523			25.00- 85.00	55.18
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	1049365	100.000	94.516	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	1108357			74.96- 134.96	105.62
6.362	6.362 (1.029)	97	680678			34.80- 94.80	64.87
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.585	6.586 (1.066)	63	391457	100.000	76.309	80.00- 120.00	100.00
6.585	6.586 (1.066)	62	250711			52.03- 112.03	64.05
6.585	6.586 (1.066)	41	383309			79.97- 139.97	97.92
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	834771	100.000	94.078	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	1363486			134.02- 194.02	163.34
6.664	6.664 (0.774)	100	333587			9.54- 69.54	39.96
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.699 (1.084)	88	540204	100.000	96.360	80.00- 120.00	100.00
6.692	6.699 (1.083)	58	467204			55.80- 115.80	86.49
6.692	6.699 (1.083)	57	199887			8.68- 68.68	37.00
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	960834	100.000	97.231	80.00- 120.00	100.00
6.714	6.721 (0.780)	93	929216			67.27- 127.27	96.71
6.714	6.721 (0.780)	95	768363			50.92- 110.92	79.97
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	1724424	100.000	92.713	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	1104118			34.31- 94.31	64.03
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	1346503	100.000	97.401	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	430744			1.42- 61.42	31.99
7.208	7.208 (1.166)	39	915435			38.56- 98.56	67.99
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	1349887	100.000	90.923	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	614901			15.60- 75.60	45.55

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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127 Methylcyclohexane (continued)							
6.460	6.460 (1.045)	55	1514744			78.53- 138.53	112.21
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.315	7.316 (1.184)	58	860374	100.000	91.530	80.00- 120.00	100.00
7.315	7.316 (1.184)	43	2250859			231.30- 291.30	261.61
7.315	7.316 (1.184)	85	329277			8.94- 68.94	38.27
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	1005757	25.0000	25.179	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	114191			0.00- 41.47	11.35
7.387	7.387 (1.195)	100	672050			36.47- 96.47	66.82
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	2815495	100.000	94.814	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	1643396			28.30- 88.30	58.37
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	941260	100.000	95.273	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	918231			67.11- 127.11	97.55
7.444	7.444 (1.205)	43	2265956			214.21- 274.21	240.74
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	1313517	100.000	96.729	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	417074			2.15- 62.15	31.75
7.688	7.688 (0.893)	39	852170			36.09- 96.09	64.88
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	978950	100.000	93.739	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	608344			31.62- 91.62	62.14
7.846	7.846 (0.911)	83	846723			56.35- 116.35	86.49
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.915)	166	1395971	100.000	96.647	80.00- 120.00	100.00
7.881	7.881 (0.915)	129	1092821			48.71- 108.71	78.28
7.881	7.881 (0.915)	131	1058130			46.55- 106.55	75.80
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	1182682	100.000	98.592	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	2214530			157.91- 217.91	187.25
8.003	8.003 (0.929)	100	213311			0.00- 47.86	18.04
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	1336647	100.000	94.344	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	1510339			82.96- 142.96	112.99
7.989	7.989 (1.293)	78	439394			2.55- 62.55	32.87

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1		
8.154	8.154 (0.947)	129	1948212	100.000	98.333	80.00- 120.00		100.00
8.154	8.154 (0.947)	127	1522204			47.77- 107.77		78.13
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4		
8.268	8.268 (0.960)	107	1576705	100.000	97.220	80.00- 120.00		100.00
8.268	8.268 (0.960)	109	1483694			64.60- 124.60		94.10
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0		
7.115	7.115 (1.151)	63	1772704	100.000	98.763	80.00- 120.00		100.00
7.115	7.115 (1.151)	65	547792			0.95- 60.95		30.90
7.115	7.122 (1.151)	144	182664			0.00- 40.45		10.30
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.619 (1.000)	117	921990	25.0000		80.00- 120.00		100.00
8.612	8.619 (1.000)	82	511597			25.46- 85.46		55.49
154 Chlorobenzene						CAS #: 108-90-7		
8.641	8.641 (1.003)	112	2352628	100.000	93.362	80.00- 120.00		100.00
8.641	8.641 (1.003)	114	762481			2.13- 62.13		32.41
8.641	8.641 (1.003)	77	1324984			26.35- 86.35		56.32
155 Ethyl Benzene						CAS #: 100-41-4		
8.684	8.684 (1.008)	106	1209107	100.000	95.957	80.00- 120.00		100.00
8.684	8.684 (1.008)	91	3757569			282.48- 342.48		310.77
156 Nonane						CAS #: 111-84-2		
8.705	8.705 (1.011)	43	2336438	100.000	95.666	80.00- 120.00		100.00
8.705	8.705 (1.011)	57	2117667			59.52- 119.52		90.64
8.705	8.705 (1.011)	85	691015			0.00- 59.76		29.58
158 m,p-Xylene						CAS #: 108-38-3		
8.784	8.784 (1.020)	106	1489255	100.000	95.002	80.00- 120.00		100.00
8.784	8.784 (1.020)	91	2985822			171.36- 231.36		200.49
164 o-Xylene						CAS #: 95-47-6		
9.121	9.128 (1.059)	106	1431351	100.000	96.181	80.00- 120.00		100.00
9.121	9.128 (1.059)	91	3022397			179.99- 239.99		211.16
165 Styrene						CAS #: 100-42-5		
9.142	9.149 (1.062)	104	2491307	100.000	96.625	80.00- 120.00		100.00
9.142	9.149 (1.062)	78	1233241			19.09- 79.09		49.50
167 Bromoform						CAS #: 75-25-2		
9.350	9.350 (1.086)	173	1876827	100.000	99.903	80.00- 120.00		100.00
9.350	9.350 (1.086)	171	970844			21.45- 81.45		51.73

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.093)	105	4441141	100.000	94.389	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	1213205			0.00- 56.99	27.32
9.407	9.407 (1.092)	51	520168			0.00- 41.77	11.71
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	1357093	100.000	91.653	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	519078			9.22- 69.22	38.25
9.579	9.579 (1.112)	42	966302			42.60- 102.60	71.20
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.600	9.601 (1.115)	174	617978	25.0000	25.340	80.00- 120.00	100.00
9.600	9.601 (1.115)	95	766815			93.06- 153.06	124.08
9.600	9.601 (1.115)	176	568534			62.87- 122.87	92.00
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	2172510	100.000	93.129	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	1409525			34.35- 94.35	64.88
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.131)	156	1422294	100.000	97.240	80.00- 120.00	100.00
9.729	9.737 (1.130)	158	1378995			67.29- 127.29	96.96
9.729	9.729 (1.130)	77	2306309			132.41- 192.41	162.15
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	5235902	100.000	95.372	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	1259252			0.00- 53.77	24.05
9.758	9.758 (1.133)	105	201142			0.00- 33.81	3.84
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	664921	100.000	94.622	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	2103413			285.00- 345.00	316.34
9.787	9.787 (1.136)	61	561893			54.06- 114.06	84.51
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	525143	100.000	94.441	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	264898			21.19- 81.19	50.44
9.787	9.787 (1.136)	75	2103413			372.45- 432.45	400.54
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	2704752	100.000	95.281	80.00- 120.00	100.00
9.815	9.808 (1.140)	71	909461			4.13- 64.13	33.62
9.815	9.815 (1.140)	142	126798			0.00- 34.73	4.69
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	1347972	100.000	94.725	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.144)	105	4384263				296.79- 356.79	325.25
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.146)	126	1110440	100.000		96.036	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	4029584				336.29- 396.29	362.88
9.873	9.873 (1.146)	65	638776				38.83- 98.83	57.52
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.150)	120	1891863	100.000		94.653	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	3870232				176.40- 236.40	204.57
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.173)	118	2021719	100.000		98.763	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	1137074				26.64- 86.64	56.24
189 tert-Butylbenzene						CAS #: 98-06-6		
10.174	10.174 (1.181)	119	3477934	100.000		94.572	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	876103				0.00- 54.82	25.19
10.174	10.174 (1.181)	91	2342532				36.92- 96.92	67.35
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.187)	105	3747431	100.000		95.082	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	1759100				16.58- 76.58	46.94
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.203)	134	1142132	100.000		96.152	80.00- 120.00	100.00
10.353	10.360 (1.202)	105	5423689				451.53- 511.53	474.87
10.353	10.353 (1.202)	91	862410				46.48- 106.48	75.51
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.215)	119	4798506	100.000		96.464	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	1298497				0.00- 56.79	27.06
10.467	10.467 (1.215)	91	1164811				0.00- 54.04	24.27
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.221)	146	2608452	100.000		97.415	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	1662791				33.53- 93.53	63.75
10.517	10.517 (1.221)	111	1080794				11.05- 71.05	41.43
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.230)	146	2651837	100.000		96.147	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	1689235				33.47- 93.47	63.70
10.596	10.596 (1.230)	111	1056200				9.65- 69.65	39.83
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.244)	91	3738875	100.000		98.594	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	834770			0.00- 52.04	22.33
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	3222859	100.000	96.345	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	2761339			55.86- 115.86	85.68
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	1249319	100.000	96.862	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	4460893			331.99- 391.99	357.07
10.818	10.818 (1.256)	92	2360311			161.01- 221.01	188.93
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.918	10.926 (1.268)	146	2503101	100.000	96.737	80.00- 120.00	100.00
10.926	10.926 (1.269)	148	1595663			33.23- 93.23	63.75
10.918	10.918 (1.268)	111	1066702			12.36- 72.36	42.62
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	1470618	100.000	98.018	80.00- 120.00	100.00
11.606	11.599 (1.348)	75	1299661			58.96- 118.96	88.38
11.606	11.606 (1.348)	155	1132957			47.82- 107.82	77.04
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	3458257	123.600	122.26	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	2784562			50.85- 110.85	80.52
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	2232617	125.900	121.48	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	2139821			65.40- 125.40	95.84
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	1709087	128.700	123.11	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	1090155			33.70- 93.70	63.79
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	596371	12.7000	10.626	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	78294			0.00- 43.10	13.13
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.802 (1.487)	180	2153358	133.100	128.04	80.00- 120.00	100.00
12.802	12.802 (1.487)	182	2052941			65.67- 125.67	95.34
12.802	12.802 (1.487)	145	775566			6.02- 66.02	36.02

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062222.d
Lab Smp Id: ICAL Level 10
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	270814	11.26
108 1,4-Difluorobenze	874076	524446	1223706	969803	10.95
153 Chlorobenzene-d5	831223	498734	1163712	921990	10.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	-0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062222.d

Date : 22-JUN-2021 23:39

Client ID:

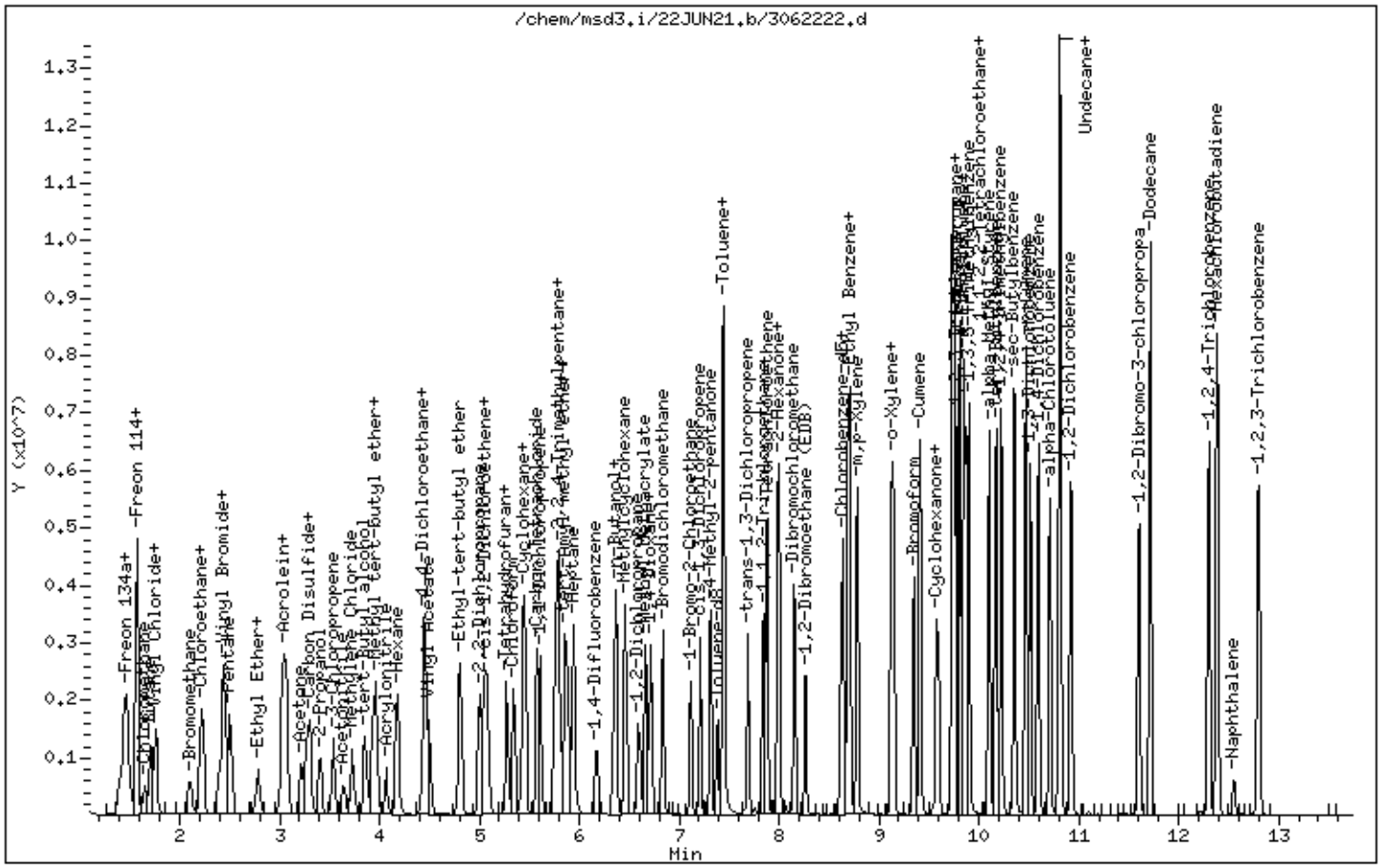
Instrument: msd3.i

Sample Info: 100mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051924.d
Lab Smp Id: ICAL Level 10
Inj Date : 20-MAY-2021 00:05
Operator : gh Inst ID: msdp.i
Smp Info : 20mL 3018-2045
Misc Info : 0.5ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 20-MAY-2021 00:05 Cal File: p051924.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level2.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	163846	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127369			48.23- 108.23	77.74
5.771	5.778 (1.000)	49	298690			150.57- 210.57	182.30
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	600718	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95422			0.00- 45.71	15.88
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	590361	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	322116			23.78- 83.78	54.56
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	214241	25.0000	23.693	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	108928			27.21- 87.21	50.84
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	647924	25.0000	24.838	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	71814			0.00- 40.44	11.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	419509			34.95- 94.95	64.75
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	377731	25.0000	24.917	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	484972			95.92- 155.92	128.39
10.921	10.921 (1.154)	176	368139			66.89- 126.89	97.46
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	7389	0.50000	0.5028	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	2098			2.37- 62.37	28.39
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	5833	0.50000	0.4044	80.00- 120.00	100.00(a)
1.842	1.856 (0.319)	137	1678			2.30- 62.30	28.77
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	5135	0.50000	0.5007	80.00- 120.00	100.00
2.053	2.068 (0.355)	64	2485			0.00- 59.69	48.39
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	3780	0.50000	0.4582	80.00- 120.00	100.00(a)
2.082	2.089 (0.360)	39	3849			52.37- 112.37	101.83
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	7721	0.50000	0.4944	80.00- 120.00	100.00(a)
2.877	2.884 (0.498)	103	5435			34.72- 94.72	70.39
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	5639	0.50000	0.4860	80.00- 120.00	100.00(a)
3.550	3.550 (0.614)	153	3997			33.56- 93.56	70.88
3.543	3.550 (0.613)	101	6873			89.21- 149.21	121.88
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	4090	0.50000	0.5901	80.00- 120.00	100.00
3.572	3.579 (0.618)	98	2595			34.02- 94.02	63.45
3.579	3.579 (0.619)	61	6008			168.77- 228.77	146.89
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	2538	0.50000	0.5480	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	5211			255.84- 315.84	205.32
4.474	4.482 (0.774)	96	4298			127.59- 187.59	169.35
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	3141	0.50000	0.4872	80.00- 120.00	100.00(a)
4.553	4.560 (0.788)	53	3388			88.05- 148.05	107.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
67 Hexane					CAS #: 110-54-3		
4.689	4.697 (0.812)	57	8492	0.50000	0.5261	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	5530			37.52- 97.52	65.12
4.696	4.697 (0.813)	86	877			0.00- 41.48	10.33
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	5960	0.50000	0.4295	80.00- 120.00	100.00(a)
4.961	4.962 (0.859)	65	2369			0.00- 59.70	39.75
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.542	5.549 (0.959)	98	2716	0.50000	0.5651	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	3855			125.75- 185.75	141.94
5.542	5.549 (0.959)	61	7686			332.40- 392.40	282.99
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	5568	0.50000	0.4521	80.00- 120.00	100.00(a)
5.778	5.771 (1.000)	71	1335			0.00- 55.82	23.98
5.778	5.771 (1.000)	72	1481			0.00- 57.59	26.60
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	6763	0.50000	0.4744	80.00- 120.00	100.00(a)
5.835	5.835 (1.010)	85	4617			34.70- 94.70	68.27
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	5877	0.50000	0.5702	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	9323			142.57- 202.57	158.64
5.957	5.957 (1.031)	41	5136			62.09- 122.09	87.39
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	8556	0.50000	0.5313	80.00- 120.00	100.00
5.964	5.972 (1.032)	99	5329			34.02- 94.02	62.28
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	6718	0.50000	0.4448	80.00- 120.00	100.00(a)
6.086	6.086 (1.053)	117	6855			70.64- 130.64	102.04
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	27567	0.50000	0.4914	80.00- 120.00	100.00(a)
6.279	6.280 (1.087)	56	8468			2.24- 62.24	30.72
6.279	6.280 (1.087)	41	9487			0.00- 54.39	34.41
102 Benzene					CAS #: 71-43-2		
6.294	6.301 (0.945)	78	9954	0.50000	0.5021	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	2384			0.00- 52.90	23.95
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	4608	0.50000	0.4467	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
106 1,2-Dichloroethane (continued)							
6.380	6.380 (0.958)	64	1942			0.79- 60.79	42.14
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	4203	0.50000	0.5352	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	9247			226.53- 286.53	220.01
6.444	6.444 (0.968)	57	5163			100.85- 160.85	122.84
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	4879	0.50000	0.5072	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	4525			76.29- 136.29	92.74
6.867	6.867 (1.031)	97	2893			33.63- 93.63	59.29
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	5364	0.50000	0.5278	80.00- 120.00	100.00
7.096	7.089 (1.066)	62	3356			41.07- 101.07	62.57
7.096	7.089 (1.066)	41	2982			22.53- 82.53	55.59
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.204 (0.762)	174	3904	0.50000	0.4456	80.00- 120.00	100.00(a)
7.204	7.204 (0.761)	93	4176			60.09- 120.09	106.97
7.204	7.204 (0.761)	95	4289			48.38- 108.38	109.86
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	6924	0.50000	0.4642	80.00- 120.00	100.00(a)
7.318	7.318 (1.099)	85	4799			35.24- 95.24	69.31
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	6237	0.50000	0.4950	80.00- 120.00	100.00(a)
7.691	7.691 (1.155)	77	2224			2.42- 62.42	35.66
7.698	7.691 (1.156)	39	4083			37.16- 97.16	65.46
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	7108	0.50000	0.5106	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	3734			15.78- 75.78	52.53
6.967	6.974 (1.046)	55	8514			84.64- 144.64	119.78
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	5902	0.50000	0.5719	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	15074			242.35- 302.35	255.40
7.798	7.791 (1.171)	85	2388			3.24- 63.24	40.46
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	13680	0.50000	0.5002	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	7825			28.38- 88.38	57.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	6357	0.50000	0.5451	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	5775			56.00- 116.00	90.84
7.941	7.949 (1.193)	43	15538			228.66- 288.66	244.42
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	5304	0.50000	0.4565	80.00- 120.00	100.00(a)
8.213	8.214 (0.868)	77	3481			1.24- 61.24	65.63
8.213	8.214 (0.868)	39	3904			34.11- 94.11	73.60
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.393	8.400 (0.887)	97	5286	0.50000	0.5505	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	2785			31.96- 91.96	52.69
8.400	8.400 (0.888)	83	4153			52.93- 112.93	78.57
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	5918	0.50000	0.4398	80.00- 120.00	100.00(a)
8.464	8.464 (0.895)	129	5123			47.84- 107.84	86.57
8.464	8.464 (0.895)	131	4693			45.29- 105.29	79.30
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	5918	0.50000	0.4556	80.00- 120.00	100.00(a)
8.579	8.579 (1.288)	41	8417			94.99- 154.99	142.23
8.579	8.579 (1.288)	78	2554			2.05- 62.05	43.16
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	8255	0.50000	0.4601	80.00- 120.00	100.00(a)
8.794	8.801 (0.930)	127	6763			47.45- 107.45	81.93
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	7230	0.50000	0.4694	80.00- 120.00	100.00(a)
8.951	8.951 (0.946)	109	7175			64.21- 124.21	99.24
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	11778	0.50000	0.5024	80.00- 120.00	100.00
9.489	9.496 (1.003)	114	3810			1.74- 61.74	32.35
9.489	9.496 (1.003)	77	11483			25.04- 85.04	97.50
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	6206	0.50000	0.5063	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	18714			273.74- 333.74	301.55
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	8198	0.50000	0.5340	80.00- 120.00	100.00
9.711	9.718 (1.026)	91	15993			163.73- 223.73	195.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	7282	0.50000	0.4950	80.00- 120.00	100.00(a)
10.226	10.226 (1.081)	91	15872			177.45- 237.45	217.96
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	13110	0.50000	0.5212	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	6253			17.88- 77.88	47.70
167 Bromoform					CAS #: 75-25-2		
10.549	10.542 (1.115)	173	8542	0.50000	0.4830	80.00- 120.00	100.00(a)
10.549	10.542 (1.115)	171	4517			21.25- 81.25	52.88
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	23217	0.50000	0.5024	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	6594			0.00- 58.52	28.40
10.649	10.649 (1.126)	51	3671			0.00- 43.00	15.81
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	11440	0.50000	0.5072	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	7316			35.20- 95.20	63.95
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	6965	0.50000	0.5084	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	26590			366.49- 426.49	381.77
11.150	11.150 (1.179)	105	910			0.00- 44.85	13.07
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	4008	0.50000	0.5576	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	11313			280.55- 340.55	282.26
11.100	11.100 (1.173)	61	1733			15.49- 75.49	43.24
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	8376	0.50000	0.5622	80.00- 120.00	100.00
11.286	11.287 (1.193)	105	23951			284.55- 344.55	285.95
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	6216	0.50000	0.5328	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	20231			315.17- 375.17	325.47
11.294	11.301 (1.194)	65	3746			21.55- 81.55	60.26
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.358	11.365 (1.201)	120	10383	0.50000	0.5061	80.00- 120.00	100.00
11.358	11.365 (1.201)	105	18974			164.93- 224.93	182.74
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	9624	0.50000	0.4722	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
188 alpha Methyl Styrene (continued)							
11.645	11.645 (1.231)	103	5344			25.30- 85.30	55.53
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	19402	0.50000	0.5011	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	9573			19.05- 79.05	49.34
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	6002	0.50000	0.5033	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	29055			437.55- 497.55	484.09
11.996	11.996 (1.268)	91	4721			40.76- 100.76	78.66
194 p-Cymene					CAS #: 99-87-6		
12.153	12.160 (1.285)	119	27397	0.50000	0.5198	80.00- 120.00	100.00(a)
12.160	12.160 (1.285)	134	6978			0.00- 55.54	25.47
12.153	12.153 (1.285)	91	6676			0.00- 51.48	24.37
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	12900	0.50000	0.4867	80.00- 120.00	100.00(a)
12.203	12.196 (1.290)	148	8737			33.21- 93.21	67.73
12.203	12.196 (1.290)	111	5935			11.31- 71.31	46.01
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	13252	0.50000	0.4948	80.00- 120.00	100.00(a)
12.311	12.311 (1.301)	148	8912			33.90- 93.90	67.25
12.311	12.311 (1.301)	111	5613			9.45- 69.45	42.36
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	18333	0.50000	0.4985	80.00- 120.00	100.00(a)
12.461	12.461 (1.317)	126	4052			0.00- 53.26	22.10
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	6974	0.50000	0.5210	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	24024			314.79- 374.79	344.48
12.626	12.626 (1.335)	92	13531			154.29- 214.29	194.02
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	13316	0.50000	0.5124	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	8543			33.84- 93.84	64.16
12.733	12.741 (1.346)	111	6040			12.73- 72.73	45.36
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	22758	0.61800	0.6916	80.00- 120.00	100.00(a)
13.801	13.801 (1.459)	43	20608			52.87- 112.87	90.55

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051924.d
Lab Smp Id: ICAL Level 10
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	163846	3.17
108 1,4-Difluorobenze	597103	358262	835944	600718	0.61
153 Chlorobenzene-d5	587747	352648	822846	590361	0.44

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051924.d

Date : 20-MAY-2021 00:05

Client ID:

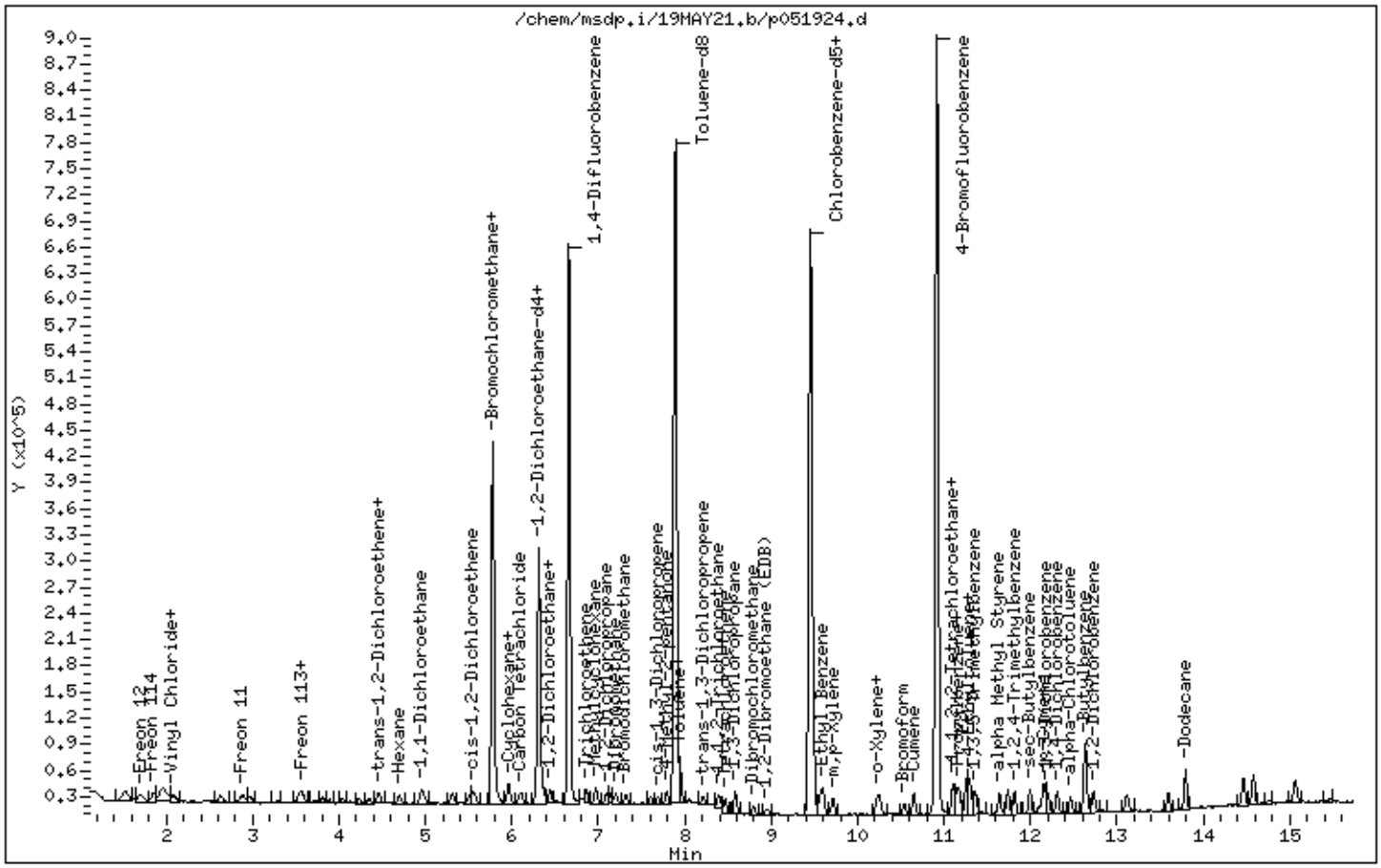
Instrument: msdp.i

Sample Info: 20mL 3018-2045

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062212.d
Lab Smp Id: ICAL Level 11
Inj Date : 22-JUN-2021 19:03
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2013
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 5 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	238686	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	184595			48.46- 108.46	77.34
5.284	5.270 (1.000)	49	359400			120.39- 180.39	150.57
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	855175	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	133937			0.00- 45.52	15.66
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	819732	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	458641			25.46- 85.46	55.95
3 Freon 143a					CAS #: 420-46-2		
1.367	1.353 (0.259)	65	736095	200.000	184.36	80.00- 120.00	100.00
1.367	1.353 (0.259)	69	1817010			217.09- 277.09	246.84
1.367	1.353 (0.259)	64	176211			0.00- 55.87	23.94
6 Propane					CAS #: 74-98-6		
1.437	1.422 (0.272)	43	408916	200.000	187.99	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.437	1.422 (0.272)	39	284533			41.62- 101.62	69.58
1.437	1.422 (0.272)	41	226156			22.97- 82.97	55.31
13 Freon 142b					CAS #: 75-68-3		
1.604	1.604 (0.304)	65	2437918	200.000	192.01	80.00- 120.00	100.00
1.604	1.604 (0.304)	45	682416			0.00- 58.17	27.99
36 1-Pentene					CAS #: 109-67-1		
2.458	2.444 (0.465)	55	1580097	200.000	195.96	80.00- 120.00	100.00
2.458	2.444 (0.465)	42	2019285			99.17- 159.17	127.80
40 Freon 123a					CAS #: 354-23-4		
2.892	2.878 (0.547)	117	1818166	200.000	193.65	80.00- 120.00	100.00
2.892	2.878 (0.547)	67	2459121			103.13- 163.13	135.25
41 Freon 123					CAS #: 306-83-2		
2.990	2.976 (0.566)	83	2673564	200.000	194.15	80.00- 120.00	100.00
2.990	2.976 (0.566)	133	572215			0.00- 51.81	21.40
2.990	2.976 (0.566)	85	1774129			37.13- 97.13	66.36
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	2877324	200.000	196.30	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	1088968			7.90- 67.90	37.85
3.549	3.549 (0.672)	53	712030			0.00- 54.87	24.75
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	2853533	200.000	188.90	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	493560			0.00- 47.15	17.30
74 Chloroprene					CAS #: 126-99-8		
4.515	4.515 (0.854)	53	2498620	200.000	195.33	80.00- 120.00	100.00
4.515	4.515 (0.854)	88	1063999			12.33- 72.33	42.58
4.515	4.515 (0.854)	50	674100			0.00- 57.62	26.98
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	347356	200.000	175.64	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	296931			53.89- 113.89	85.48
4.613	4.613 (0.873)	41	186816			24.09- 84.09	53.78
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	2961043	200.000	192.61	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	391358			0.00- 43.24	13.22
5.130	5.130 (0.971)	58	264860			0.00- 38.83	8.94
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	404518	200.000	143.18	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.774	5.774 (1.093)	43	1541951			327.69- 387.69	381.18
5.774	5.774 (1.093)	41	1133973			237.56- 297.56	280.33
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	238652	200.000	182.18	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	367576			124.67- 184.67	154.02
6.460	6.460 (0.749)	55	3959794			1601.30-1661.30	1659.23
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.557 (0.761)	43	5653052	200.000	184.50	80.00- 120.00	100.00
6.558	6.557 (0.761)	58	456621			0.00- 37.25	8.08
6.558	6.557 (0.761)	86	871681			0.00- 45.08	15.42
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	2096069	200.000	185.93	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	730739			5.16- 65.16	34.86
8.068	8.068 (1.305)	43	5054712			214.00- 274.00	241.15
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	2342378	200.000	189.97	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	1580451			38.22- 98.22	67.47
8.712	8.712 (1.011)	95	883866			7.54- 67.54	37.73
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	3239163	200.000	184.88	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	5150416			133.36- 193.36	159.00
172 D-Limonene					CAS #: 5989-27-5		
10.424	10.417 (1.209)	68	3016819	200.000	202.56	80.00- 120.00	100.00(A)
10.424	10.424 (1.209)	93	2188422			42.08- 102.08	72.54
186 4-Chlorotoluene					CAS #: 106-43-4		
9.973	9.973 (1.157)	126	2070941	200.000	192.94	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	6921803			305.94- 365.94	334.23
9.966	9.966 (1.156)	63	912677			15.44- 75.44	44.07
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	2929619	200.000	199.12	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	6724542			206.43- 266.43	229.54
10.596	10.596 (1.229)	77	803081			0.00- 58.29	27.41
205 Hexachloroethane					CAS #: 67-72-1		
11.105	11.098 (1.288)	201	1859811	200.000	207.06	80.00- 120.00	100.00(A)
11.098	11.098 (1.288)	117	2577561			109.77- 169.77	138.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.728	11.728 (1.361)	180	3928237	200.000	200.58	80.00- 120.00	100.00(A)
11.728	11.728 (1.361)	182	3720649			65.79- 125.79	94.72
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	4909231	200.000	193.68	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	1471700			0.13- 60.13	29.98
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	3877029	200.000	194.77	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	6921803			145.95- 205.95	178.53

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062212.d
Lab Smp Id: ICAL Level 11
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	238686	-1.94
108 1,4-Difluorobenze	874076	524446	1223706	855175	-2.16
153 Chlorobenzene-d5	831223	498734	1163712	819732	-1.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062212.d

Date : 22-JUN-2021 19:03

Client ID:

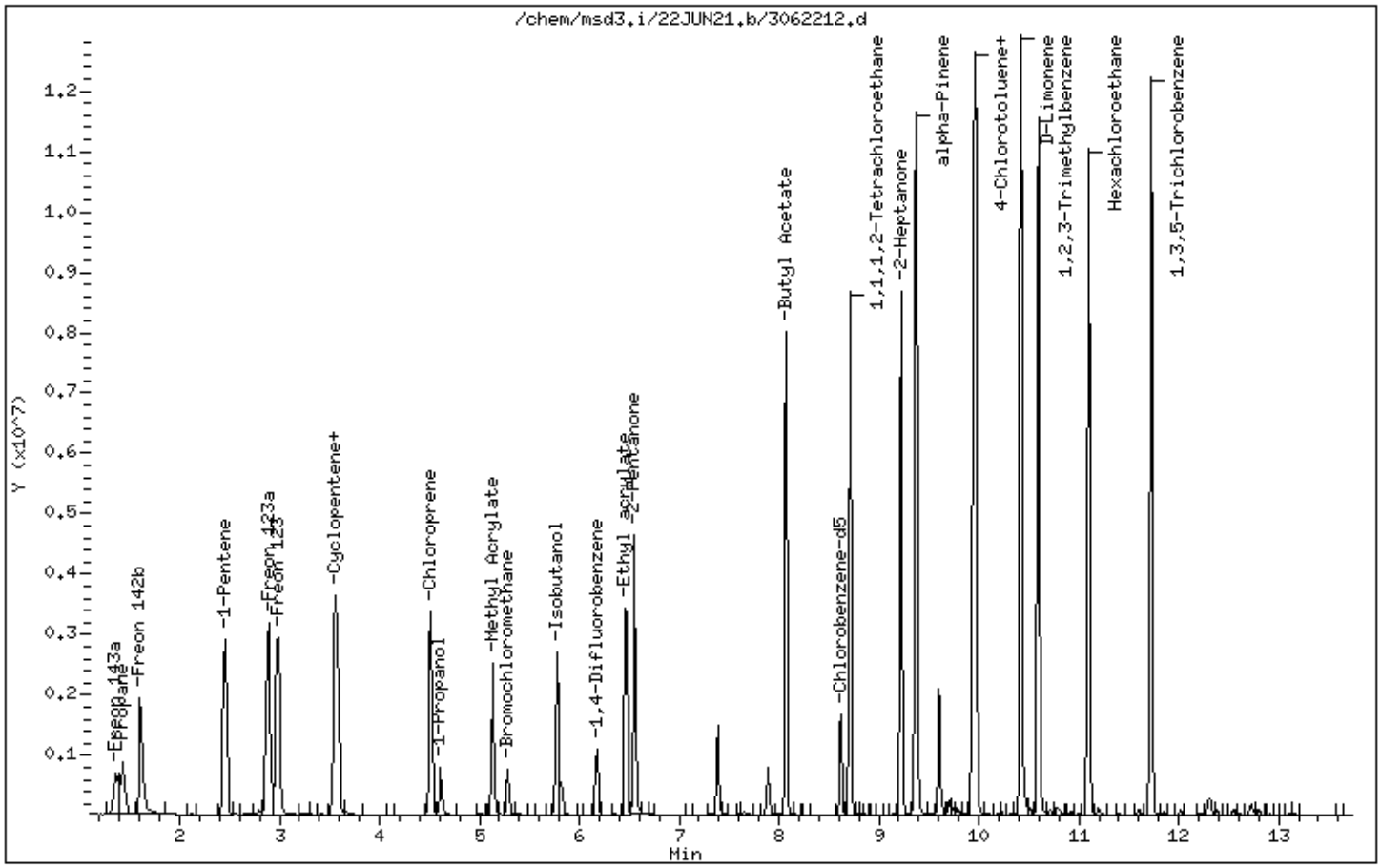
Instrument: msd3.i

Sample Info: 200mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062223.d
Lab Smp Id: ICAL Level 11
Inj Date : 23-JUN-2021 00:09
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 3018-2115
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 12:22 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.409	1.395 (0.267)	83	1248422	200.000	186.97	80.00- 120.00	100.00
1.409	1.395 (0.267)	69	1149722			51.82- 111.82	92.09
1.493	1.479 (0.282)	51	4726763			194.91- 254.91	378.62
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	1303911	200.000	192.36	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	862742			35.61- 95.61	66.17
1.437	1.423 (0.272)	39	941321			42.66- 102.66	72.19
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	809939	200.000	183.31	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	4726763			321.86- 381.86	583.59
1.465	1.437 (0.277)	47	547200			45.34- 105.34	67.56
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	3426295	200.000	175.27	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	1111289			2.63- 62.63	32.43
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.479 (0.282)	67	376917	200.000	175.44	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.493	1.479 (0.282)	51	4726763			719.76- 779.76	1254.06
10 Freon 114					CAS #: 76-14-2		
1.577	1.562 (0.298)	135	2615427	200.000	180.57	80.00- 120.00	100.00
1.577	1.562 (0.298)	137	835578			2.12- 62.12	31.95
12 Isobutane					CAS #: 75-28-5		
1.591	1.576 (0.301)	43	2851832	200.000	187.19	80.00- 120.00	100.00
1.591	1.576 (0.301)	42	908644			2.44- 62.44	31.86
1.577	1.576 (0.298)	58	94650			0.00- 33.26	3.32
15 Chloromethane					CAS #: 74-87-3		
1.647	1.646 (0.312)	50	1438189	200.000	177.01	80.00- 120.00	100.00
1.647	1.646 (0.312)	52	428405			2.41- 62.41	29.79
18 Butane					CAS #: 106-97-8		
1.716	1.702 (0.325)	58	306201	200.000	159.58	80.00- 120.00	100.00
1.716	1.702 (0.325)	43	2380035			727.41- 787.41	777.28
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	1437998	200.000	165.39	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	435136			1.28- 61.28	30.26
20 1,3-Butadiene					CAS #: 106-99-0		
1.772	1.758 (0.335)	54	1252672	200.000	157.21	80.00- 120.00	100.00
1.772	1.758 (0.335)	39	1248954			69.23- 129.23	99.70
24 Bromomethane					CAS #: 74-83-9		
2.108	2.094 (0.399)	94	1217522	200.000	177.06	80.00- 120.00	100.00
2.108	2.094 (0.399)	96	1140143			62.78- 122.78	93.64
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	759564	200.000	186.11	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	229887			1.44- 61.44	30.27
2.206	2.206 (0.417)	49	240097			4.12- 64.12	31.61
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	1953607	200.000	187.18	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	1353192			38.82- 98.82	69.27
32 Vinyl Bromide					CAS #: 593-60-2		
2.402	2.388 (0.455)	106	1359049	200.000	181.78	80.00- 120.00	100.00
2.402	2.388 (0.455)	108	1264813			63.14- 123.14	93.07
33 Freon 11					CAS #: 75-69-4		
2.444	2.430 (0.463)	101	3711846	200.000	179.46	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.444	2.430 (0.463)	103	2428462			35.12- 95.12	65.42
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.458	2.444 (0.465)	67	3051239	200.000	184.54	80.00- 120.00	100.00
2.458	2.444 (0.465)	69	939246			0.74- 60.74	30.78
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	3095149	200.000	186.14	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	496522			0.00- 45.97	16.04
2.500	2.500 (0.473)	72	257490			0.00- 38.10	8.32
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	670734	200.000	179.91	80.00- 120.00	100.00
2.794	2.780 (0.529)	59	1190553			147.68- 207.68	177.50
2.780	2.780 (0.526)	45	1586644			206.40- 266.40	236.55
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	277518	200.000	165.86	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	1584044			523.01- 583.01	570.79
42 Acrolein					CAS #: 107-02-8		
3.046	3.032 (0.576)	55	526592	200.000	189.65	80.00- 120.00	100.00
3.046	3.032 (0.576)	56	737600			110.33- 170.33	140.07
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	2557928	200.000	180.91	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	1629708			33.72- 93.72	63.71
3.046	3.032 (0.576)	101	3066258			89.67- 149.67	119.87
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	1446563	200.000	169.86	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	921828			33.39- 93.39	63.73
3.074	3.074 (0.582)	61	2754233			163.82- 223.82	190.40
47 Acetone					CAS #: 67-64-1		
3.228	3.213 (0.611)	58	837664	200.000	178.02	80.00- 120.00	100.00
3.228	3.213 (0.611)	43	2686866			299.66- 359.66	320.76
48 Carbon Disulfide					CAS #: 75-15-0		
3.312	3.297 (0.627)	76	3962561	200.000	187.01	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.284	3.269 (0.621)	142	3459520	200.000	188.81	80.00- 120.00	100.00
3.284	3.269 (0.621)	127	1527438			14.58- 74.58	44.15

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.409	3.395 (0.645)	45	3168063	200.000	187.21	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	578653			0.00- 48.61	18.27
54 3-Chloropropene					CAS #: 107-05-1		
3.549	3.535 (0.672)	76	665132	200.000	182.33	80.00- 120.00	100.00
3.549	3.535 (0.672)	41	2336930			338.06- 398.06	351.35
57 Acetonitrile					CAS #: 75-05-8		
3.647	3.633 (0.690)	41	1434382	200.000	193.58	80.00- 120.00	100.00
3.647	3.633 (0.690)	40	735330			21.81- 81.81	51.26
3.647	3.633 (0.690)	38	161098			0.00- 41.86	11.23
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	2082765	200.000	184.95	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	1258942			30.77- 90.77	60.45
3.731	3.717 (0.706)	51	640889			1.39- 61.39	30.77
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	3975050	200.000	187.14	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	826780			0.00- 51.05	20.80
3.857	3.857 (0.730)	57	422561			0.00- 41.68	10.63
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	4138145	200.000	180.50	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	1251638			0.00- 58.86	30.25
3.941	3.941 (0.746)	41	1110563			0.00- 57.27	26.84
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	969712	200.000	169.20	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	2604019			244.59- 304.59	268.54
3.969	3.969 (0.751)	96	1524600			129.84- 189.84	157.22
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	1162022	200.000	168.94	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	1354428			88.50- 148.50	116.56
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	2942768	200.000	189.37	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	1830463			32.99- 92.99	62.20
4.179	4.179 (0.791)	86	357479			0.00- 42.56	12.15
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	2931915	200.000	183.46	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	896339			0.76- 60.76	30.57

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.445	4.445 (0.841)	45	6207613	200.000	189.28	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	1358337			0.00- 51.37	21.88
4.445	4.445 (0.841)	59	701959			0.00- 41.09	11.31
73 Vinyl Acetate						CAS #: 108-05-4	
4.501	4.501 (0.852)	86	375695	200.000	191.21	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	5279652			1391.63-1451.63	1405.30
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
4.809	4.809 (0.910)	59	5999639	200.000	189.50	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	2013318			3.22- 63.22	33.56
4.809	4.809 (0.910)	41	1083834			0.00- 48.12	18.06
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.005	5.004 (0.947)	77	2776414	200.000	186.48	80.00- 120.00	100.00
5.005	5.004 (0.947)	79	898403			2.00- 62.00	32.36
5.005	5.004 (0.947)	97	660944			0.00- 53.36	23.81
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.047	5.046 (0.955)	98	1007295	200.000	177.30	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	1561663			127.22- 187.22	155.04
5.047	5.046 (0.955)	61	3116398			283.85- 343.85	309.38
86 2-Butanone						CAS #: 78-93-3	
5.061	5.074 (0.958)	72	752204	200.000	189.55	80.00- 120.00	100.00
5.075	5.074 (0.960)	43	7965323			1055.75-1115.75	1058.93
5.061	5.074 (0.958)	57	303494			10.59- 70.59	40.35
87 Ethyl Acetate						CAS #: 141-78-6	
5.089	5.088 (0.963)	45	647543	200.000	197.94	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	3116398			450.31- 510.31	481.27
5.089	5.088 (0.963)	70	398005			30.42- 90.42	61.46
89 Tetrahydrofuran						CAS #: 109-99-9	
5.270	5.270 (0.997)	42	2133956	200.000	190.70	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	683656			2.92- 62.92	32.04
5.270	5.270 (0.997)	72	713970			3.54- 63.54	33.46
* 90 Bromochloromethane						CAS #: 74-97-5	
5.284	5.284 (1.000)	130	280621	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	221732			48.46- 108.46	79.01
5.284	5.270 (1.000)	49	420383			120.39- 180.39	149.80
92 Chloroform						CAS #: 67-66-3	
5.340	5.340 (1.011)	83	3231224	200.000	183.65	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.011)	85	2099027			34.71- 94.71	64.96
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	2003099	200.000	180.12	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	3006241			120.40- 180.40	150.08
5.438	5.438 (1.029)	41	1654291			54.20- 114.20	82.59
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	3390242	200.000	171.43	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	2171642			33.76- 93.76	64.06
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	3504381	200.000	192.40	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	3650955			73.68- 133.68	104.18
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	871622	200.000	185.92	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	2259954			231.09- 291.09	259.28
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.760	5.774 (1.090)	57	9184710	200.000	189.00	80.00- 120.00	100.00
5.760	5.774 (1.090)	56	2853004			1.12- 61.12	31.06
5.760	5.774 (1.090)	41	2495514			0.00- 57.49	27.17
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	4310366	200.000	183.36	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	1029979			0.00- 53.80	23.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	365121	25.0000	23.643	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	213543			21.66- 81.66	58.49
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	1171898	200.000	186.96	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	4600758			365.20- 425.20	392.59
5.858	5.858 (0.948)	55	1389945			91.31- 151.31	118.61
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	2425778	200.000	179.23	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	763575			1.20- 61.20	31.48
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	1600316	200.000	172.83	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	3358124			179.02- 239.02	209.84
5.942	5.942 (0.962)	57	1864974			84.85- 144.85	116.54

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	1030162	25.0000		80.00- 120.00		100.00
6.166	6.180 (1.000)	88	156599			0.00- 45.52		15.20
110 n-Butanol						CAS #: 71-36-3		
6.348	6.348 (1.027)	56	1454858	200.000	193.08	80.00- 120.00		100.00
6.348	6.348 (1.027)	41	1016569			40.21- 100.21		69.87
6.348	6.348 (1.027)	43	800851			25.00- 85.00		55.05
111 Trichloroethene						CAS #: 79-01-6		
6.362	6.362 (1.029)	95	2154997	200.000	182.73	80.00- 120.00		100.00
6.362	6.362 (1.029)	130	2276279			74.96- 134.96		105.63
6.362	6.362 (1.029)	97	1394870			34.80- 94.80		64.73
114 1,2-Dichloropropane						CAS #: 78-87-5		
6.586	6.586 (1.066)	63	707267	200.000	129.79	80.00- 120.00		100.00
6.586	6.586 (1.066)	62	498517			52.03- 112.03		70.48
6.586	6.586 (1.066)	41	791037			79.97- 139.97		111.84
116 Methyl Methacrylate						CAS #: 80-62-6		
6.664	6.664 (0.774)	69	1732766	200.000	185.90	80.00- 120.00		100.00
6.664	6.664 (0.774)	41	2771921			134.02- 194.02		159.97
6.664	6.664 (0.774)	100	689459			9.54- 69.54		39.79
117 1,4-Dioxane						CAS #: 123-91-1		
6.692	6.699 (1.083)	88	1116627	200.000	187.51	80.00- 120.00		100.00
6.692	6.699 (1.083)	58	970635			55.80- 115.80		86.93
6.692	6.699 (1.083)	57	401009			8.68- 68.68		35.91
118 Dibromomethane						CAS #: 74-95-3		
6.721	6.721 (0.780)	174	1973983	200.000	190.16	80.00- 120.00		100.00
6.714	6.721 (0.780)	93	1896487			67.27- 127.27		96.07
6.714	6.721 (0.780)	95	1584974			50.92- 110.92		80.29
122 Bromodichloromethane						CAS #: 75-27-4		
6.836	6.836 (1.106)	83	3511830	200.000	177.75	80.00- 120.00		100.00
6.836	6.836 (1.106)	85	2273528			34.31- 94.31		64.74
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	2753100	200.000	187.48	80.00- 120.00		100.00
7.208	7.208 (1.166)	77	882386			1.42- 61.42		32.05
7.208	7.208 (1.166)	39	1880986			38.56- 98.56		68.32
127 Methylcyclohexane						CAS #: 108-87-2		
6.460	6.460 (1.045)	83	2754207	200.000	174.64	80.00- 120.00		100.00
6.460	6.460 (1.045)	98	1262828			15.60- 75.60		45.85

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
127 Methylcyclohexane (continued)								
6.460	6.460 (1.045)	55	3106460				78.53- 138.53	112.79
131 4-Methyl-2-pentanone						CAS #: 108-10-1		
7.316	7.316 (1.184)	58	1786119	200.000		178.88	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	4615020				231.30- 291.30	258.38
7.316	7.316 (1.184)	85	675752				8.94- 68.94	37.83
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	1046502	25.0000		24.664	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	117636				0.00- 41.47	11.24
7.387	7.387 (1.195)	100	699156				36.47- 96.47	66.81
137 Toluene						CAS #: 108-88-3		
7.437	7.437 (1.203)	91	5725161	200.000		181.50	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	3388088				28.30- 88.30	59.18
136 Octane						CAS #: 111-65-9		
7.445	7.444 (1.205)	57	1941160	200.000		184.97	80.00- 120.00	100.00
7.445	7.444 (1.205)	85	1885654				67.11- 127.11	97.14
7.445	7.444 (1.205)	43	4613237				214.21- 274.21	237.65
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	2690414	200.000		188.60	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	860699				2.15- 62.15	31.99
7.688	7.688 (0.893)	39	1729052				36.09- 96.09	64.27
141 1,1,2-Trichloroethane						CAS #: 79-00-5		
7.846	7.846 (0.911)	97	2005268	200.000		182.79	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	1245924				31.62- 91.62	62.13
7.846	7.846 (0.911)	83	1746685				56.35- 116.35	87.10
142 Tetrachloroethene						CAS #: 127-18-4		
7.881	7.881 (0.915)	166	2846291	200.000		187.59	80.00- 120.00	100.00
7.881	7.881 (0.915)	129	2242287				48.71- 108.71	78.78
7.881	7.881 (0.915)	131	2176960				46.55- 106.55	76.48
143 2-Hexanone						CAS #: 591-78-6		
8.003	8.003 (0.929)	58	2423064	200.000		192.29	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	4499303				157.91- 217.91	185.69
8.003	8.003 (0.929)	100	434674				0.00- 47.86	17.94
144 1,3-Dichloropropane						CAS #: 142-28-9		
7.989	7.989 (1.293)	76	2724813	200.000		181.06	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	3071294				82.96- 142.96	112.72
7.989	7.989 (1.293)	78	895221				2.55- 62.55	32.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1	
8.154	8.154 (0.947)	129	4009938	200.000	192.67	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	3128882			47.77- 107.77	78.03
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.261	8.268 (0.959)	107	3220648	200.000	189.04	80.00- 120.00	100.00
8.261	8.268 (0.959)	109	3039854			64.60- 124.60	94.39
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.115	7.115 (1.151)	63	3623818	200.000	190.06	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	1124304			0.95- 60.95	31.03
7.122	7.122 (1.152)	144	384041			0.00- 40.45	10.60
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
8.612	8.619 (1.000)	117	968526	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	534124			25.46- 85.46	55.15
154 Chlorobenzene						CAS #: 108-90-7	
8.641	8.641 (1.003)	112	4789428	200.000	180.93	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	1559401			2.13- 62.13	32.56
8.641	8.641 (1.003)	77	2694421			26.35- 86.35	56.26
155 Ethyl Benzene						CAS #: 100-41-4	
8.684	8.684 (1.008)	106	2466472	200.000	186.34	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	7515848			282.48- 342.48	304.72
156 Nonane						CAS #: 111-84-2	
8.705	8.705 (1.011)	43	4684239	200.000	182.58	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	4249274			59.52- 119.52	90.71
8.705	8.705 (1.011)	85	1368284			0.00- 59.76	29.21
158 m,p-Xylene						CAS #: 108-38-3	
8.784	8.784 (1.020)	106	3054787	200.000	185.51	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	6087484			171.36- 231.36	199.28
164 o-Xylene						CAS #: 95-47-6	
9.121	9.128 (1.059)	106	2940706	200.000	188.11	80.00- 120.00	100.00
9.121	9.128 (1.059)	91	6120254			179.99- 239.99	208.12
165 Styrene						CAS #: 100-42-5	
9.149	9.149 (1.062)	104	5129048	200.000	189.37	80.00- 120.00	100.00
9.142	9.149 (1.062)	78	2527067			19.09- 79.09	49.27
167 Bromoform						CAS #: 75-25-2	
9.350	9.350 (1.086)	173	3869043	200.000	196.05	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	2017665			21.45- 81.45	52.15

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.093)	105	8856968	200.000	179.20	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	2474357			0.00- 56.99	27.94
9.407	9.407 (1.092)	51	1059754			0.00- 41.77	11.97
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	2761472	200.000	177.54	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	1065852			9.22- 69.22	38.60
9.579	9.579 (1.112)	42	1967492			42.60- 102.60	71.25
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	640376	25.0000	24.997	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	797484			93.06- 153.06	124.53
9.601	9.601 (1.115)	176	605747			62.87- 122.87	94.59
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	4422270	200.000	180.46	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	2877992			34.35- 94.35	65.08
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.729 (1.130)	156	2908112	200.000	189.27	80.00- 120.00	100.00
9.730	9.737 (1.130)	158	2812927			67.29- 127.29	96.73
9.730	9.729 (1.130)	77	4663366			132.41- 192.41	160.36
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	10270460	200.000	178.09	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	2524198			0.00- 53.77	24.58
9.758	9.758 (1.133)	105	406300			0.00- 33.81	3.96
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	1357894	200.000	183.95	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	4261505			285.00- 345.00	313.83
9.787	9.787 (1.136)	61	1147024			54.06- 114.06	84.47
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	1061786	200.000	181.78	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	556074			21.19- 81.19	52.37
9.787	9.787 (1.136)	75	4261505			372.45- 432.45	401.35
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	5394837	200.000	180.91	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	1811637			4.13- 64.13	33.58
9.816	9.815 (1.140)	142	252871			0.00- 34.73	4.69
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	2748666	200.000	183.87	80.00- 120.00	100.00

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	=======	==========	=====
183 4-Ethyltoluene (continued)								
9.851	9.851 (1.144)	105	8951786				296.79- 356.79	325.68
184 2-Chlorotoluene						CAS #: 95-49-8		
9.873	9.873 (1.146)	126	2280030	200.000		187.71	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	8187497				336.29- 396.29	359.10
9.873	9.873 (1.146)	65	1552268				38.83- 98.83	68.08
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
9.901	9.901 (1.150)	120	3893688	200.000		185.45	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	7694703				176.40- 236.40	197.62
188 alpha Methyl Styrene						CAS #: 98-83-9		
10.102	10.102 (1.173)	118	4131575	200.000		192.13	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	2350391				26.64- 86.64	56.89
189 tert-Butylbenzene						CAS #: 98-06-6		
10.174	10.174 (1.181)	119	7168687	200.000		185.56	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	1814326				0.00- 54.82	25.31
10.174	10.174 (1.181)	91	4712707				36.92- 96.92	65.74
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
10.224	10.224 (1.187)	105	7574431	200.000		182.95	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	3624792				16.58- 76.58	47.86
192 sec-Butylbenzene						CAS #: 135-98-8		
10.360	10.360 (1.203)	134	2316459	200.000		185.64	80.00- 120.00	100.00
10.360	10.360 (1.203)	105	10717996				451.53- 511.53	462.69
10.360	10.353 (1.203)	91	1750377				46.48- 106.48	75.56
194 p-Cymene						CAS #: 99-87-6		
10.467	10.467 (1.215)	119	9518485	200.000		182.15	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	2670560				0.00- 56.79	28.06
10.467	10.467 (1.215)	91	2378503				0.00- 54.04	24.99
195 1,3-Dichlorobenzene						CAS #: 541-73-1		
10.517	10.517 (1.221)	146	5324302	200.000		189.29	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	3428685				33.53- 93.53	64.40
10.517	10.517 (1.221)	111	2249453				11.05- 71.05	42.25
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
10.596	10.596 (1.230)	146	5387311	200.000		185.94	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	3449292				33.47- 93.47	64.03
10.596	10.596 (1.230)	111	2177041				9.65- 69.65	40.41
199 alpha-Chlorotoluene						CAS #: 100-44-7		
10.711	10.711 (1.244)	91	7588758	200.000		190.50	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
10.711	10.711 (1.244)	126	1728896			0.00- 52.04	22.78
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	6455210	200.000	183.70	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	5437451			55.86- 115.86	84.23
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	2566869	200.000	189.45	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	8905405			331.99- 391.99	346.94
10.818	10.818 (1.256)	92	4849144			161.01- 221.01	188.91
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	5152127	200.000	189.55	80.00- 120.00	100.00
10.926	10.926 (1.269)	148	3295260			33.23- 93.23	63.96
10.919	10.918 (1.268)	111	2226669			12.36- 72.36	43.22
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	3008551	200.000	190.89	80.00- 120.00	100.00
11.599	11.599 (1.347)	75	2640903			58.96- 118.96	87.78
11.606	11.606 (1.348)	155	2340600			47.82- 107.82	77.80
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	6858381	247.200	230.81	80.00- 120.00	100.00(A)
11.714	11.714 (1.360)	43	5511292			50.85- 110.85	80.36
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	4542514	251.800	235.29	80.00- 120.00	100.00(A)
12.301	12.301 (1.428)	182	4306455			65.40- 125.40	94.80
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	3480322	257.400	238.65	80.00- 120.00	100.00(A)
12.387	12.387 (1.438)	223	2234146			33.70- 93.70	64.19
216 Naphthalene					CAS #: 91-20-3		
12.552	12.552 (1.457)	128	1217286	25.4000	20.648	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	160451			0.00- 43.10	13.18
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.802 (1.487)	180	4317164	266.200	244.37	80.00- 120.00	100.00(A)
12.803	12.802 (1.487)	182	4109388			65.67- 125.67	95.19
12.803	12.802 (1.487)	145	1586688			6.02- 66.02	36.75

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062223.d
Lab Smp Id: ICAL Level 11
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	280621	15.29
108 1,4-Difluorobenze	874076	524446	1223706	1030162	17.86
153 Chlorobenzene-d5	831223	498734	1163712	968526	16.52

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.61	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/22JUN21.b/3062223.d

Date : 23-JUN-2021 00:09

Client ID:

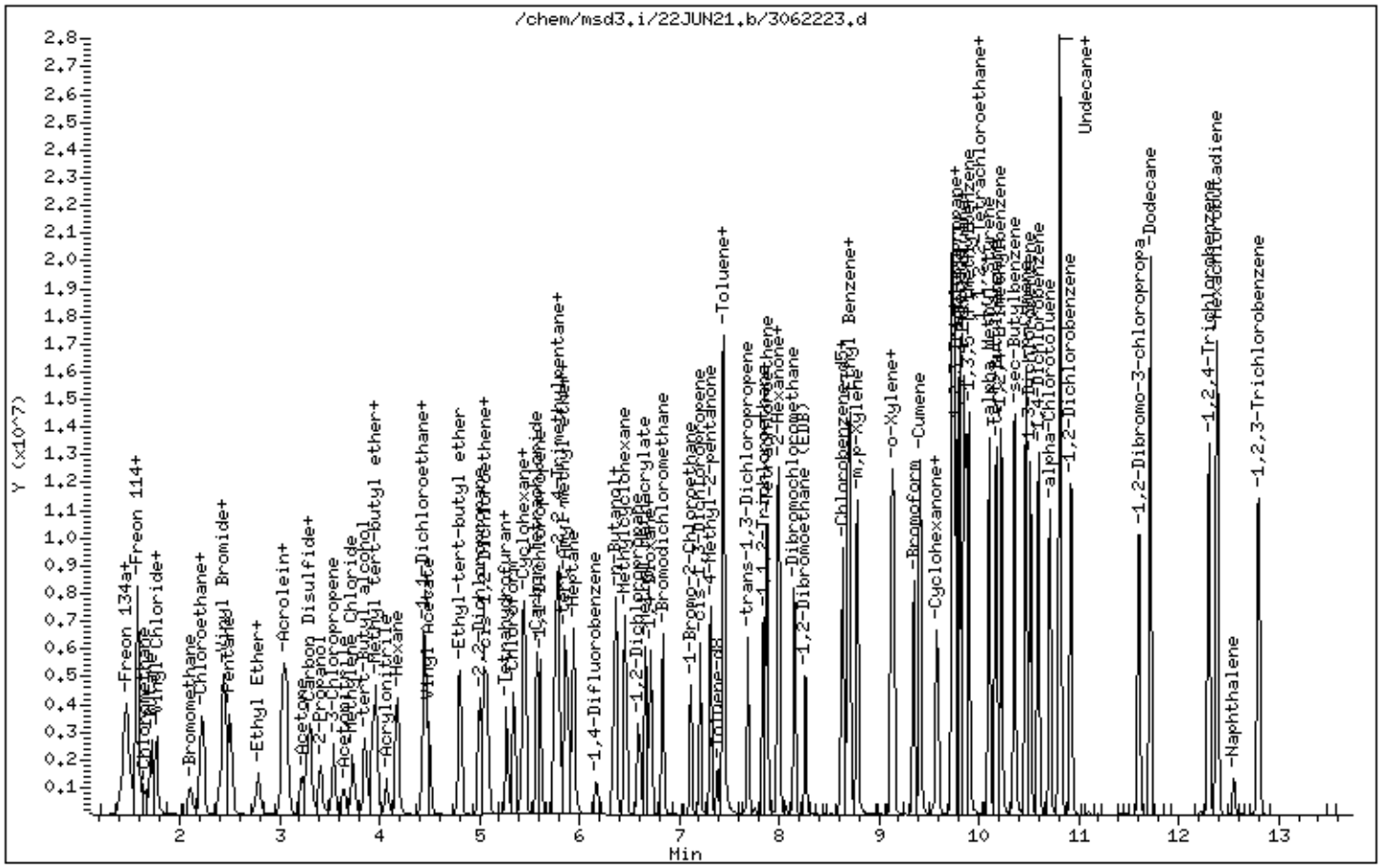
Instrument: msd3.i

Sample Info: 200mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/22JUN21.b/3062226.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 23-JUN-2021 09:45
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2121
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/22JUN21.b/321q0622a.m
Meth Date : 23-Jun-2021 11:20 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 14 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	230839	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	179182			48.46- 108.46	77.62
5.270	5.270 (1.000)	49	344686			120.39- 180.39	149.32
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	830933	25.0000		80.00- 120.00	100.00
6.166	6.180 (1.000)	88	129192			0.00- 45.52	15.55
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	786155	25.0000		80.00- 120.00	100.00
8.612	8.619 (1.000)	82	431570			25.46- 85.46	54.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	307921	24.2394	24.239	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	157280			21.66- 81.66	51.08
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	848994	24.8065	24.806	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	98028			0.00- 41.47	11.55

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	567231			36.47- 96.47	66.81
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	514712	24.7527	24.753	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	638497			93.06- 153.06	124.05
9.601	9.601 (1.114)	176	486174			62.87- 122.87	94.46
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	276653	50.3672	50.367	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	237465			51.82- 111.82	85.83
1.479	1.479 (0.280)	51	652737			194.91- 254.91	235.94
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	265441	47.6056	47.606	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	180339			35.61- 95.61	67.94
1.423	1.423 (0.269)	39	191086			42.66- 102.66	71.99
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	181412	49.9119	49.912	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	652737			321.86- 381.86	359.81
1.437	1.437 (0.272)	47	116541			45.34- 105.34	64.24
8 Freon 12					CAS #: 75-71-8		
1.451	1.465 (0.275)	85	746394	46.4159	46.416	80.00- 120.00	100.00
1.451	1.465 (0.275)	87	242142			2.63- 62.63	32.44
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.479	1.479 (0.280)	67	73808	41.7626	41.762	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	652737			719.76- 779.76	884.37
10 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.296)	135	585845	49.1686	49.168	80.00- 120.00	100.00
1.563	1.562 (0.296)	137	187786			2.12- 62.12	32.05
12 Isobutane					CAS #: 75-28-5		
1.577	1.576 (0.298)	43	609350	48.5739	48.574	80.00- 120.00	100.00
1.577	1.576 (0.298)	42	198445			2.44- 62.44	32.57
1.577	1.576 (0.298)	58	20678			0.00- 33.26	3.39
15 Chloromethane					CAS #: 74-87-3		
1.633	1.646 (0.309)	50	303441	45.4010	45.401	80.00- 120.00	100.00
1.633	1.646 (0.309)	52	103286			2.41- 62.41	34.04
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	63208	40.0457	40.046	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.702	1.702 (0.322)	43	477397			727.41- 787.41	755.28
19 Vinyl Chloride					CAS #: 75-01-4		
1.730	1.744 (0.327)	62	296122	41.4035	41.404	80.00- 120.00	100.00
1.730	1.744 (0.327)	64	92690			1.28- 61.28	31.30
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	263401	40.1855	40.185	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	247265			69.23- 129.23	93.87
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	261180	46.1739	46.174	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	245228			62.78- 122.78	93.89
30 Chloroethane					CAS #: 75-00-3		
2.192	2.206 (0.415)	64	163745	48.7725	48.772	80.00- 120.00	100.00
2.192	2.206 (0.415)	66	52790			1.44- 61.44	32.24
2.192	2.206 (0.415)	49	54045			4.12- 64.12	33.01
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	412845	48.0872	48.087	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	288174			38.82- 98.82	69.80
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	294472	47.8819	47.882	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	270982			63.14- 123.14	92.02
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	801961	47.1350	47.135	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	525485			35.12- 95.12	65.53
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	668886	49.1789	49.179	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	205287			0.74- 60.74	30.69
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	636532	46.5367	46.537	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	102112			0.00- 45.97	16.04
2.500	2.500 (0.473)	72	54671			0.00- 38.10	8.59
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	148680	48.4815	48.481	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	261727			147.68- 207.68	176.03
2.780	2.780 (0.526)	45	348533			206.40- 266.40	234.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.752	2.766 (0.521)	46	64671	46.9856	46.986	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	348533			523.01- 583.01	538.93
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	119957	52.5183	52.518	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	170363			110.33- 170.33	142.02
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	558862	48.0496	48.050	80.00- 120.00	100.00
3.032	3.032 (0.574)	153	357889			33.72- 93.72	64.04
3.032	3.032 (0.574)	101	669810			89.67- 149.67	119.85
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	320675	45.7741	45.774	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	205419			33.39- 93.39	64.06
3.060	3.074 (0.579)	61	608891			163.82- 223.82	189.88
47 Acetone					CAS #: 67-64-1		
3.214	3.213 (0.608)	58	182264	47.0884	47.088	80.00- 120.00	100.00
3.214	3.213 (0.608)	43	580286			299.66- 359.66	318.38
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.297 (0.624)	76	862907	49.5071	49.507	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.269 (0.619)	142	871666	57.8336	57.834	80.00- 120.00	100.00
3.270	3.269 (0.619)	127	377131			14.58- 74.58	43.27
52 2-Propanol					CAS #: 67-63-0		
3.396	3.395 (0.643)	45	720407	51.7519	51.752	80.00- 120.00	100.00
3.396	3.395 (0.643)	43	130730			0.00- 48.61	18.15
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	140946	46.9689	46.969	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	498302			338.06- 398.06	353.54
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	291218	47.7791	47.779	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	154337			21.81- 81.81	53.00
3.633	3.633 (0.688)	38	35776			0.00- 41.86	12.28
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	441798	47.6921	47.692	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	271820			30.77- 90.77	61.53
3.717	3.717 (0.703)	51	137904			1.39- 61.39	31.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	847744	48.5186	48.519	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	178217			0.00- 51.05	21.02
3.857	3.857 (0.730)	57	88570			0.00- 41.68	10.45
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	903456	47.9065	47.906	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	265771			0.00- 58.86	29.42
3.927	3.941 (0.743)	41	240075			0.00- 57.27	26.57
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	208277	44.1782	44.178	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	553514			244.59- 304.59	265.76
3.969	3.969 (0.751)	96	326683			129.84- 189.84	156.85
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	242318	42.8272	42.827	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	290915			88.50- 148.50	120.06
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	617136	48.2775	48.277	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	387908			32.99- 92.99	62.86
4.179	4.179 (0.791)	86	76914			0.00- 42.56	12.46
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	617626	46.9813	46.981	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	187405			0.76- 60.76	30.34
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1329420	49.2791	49.279	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	290396			0.00- 51.37	21.84
4.445	4.445 (0.841)	59	147222			0.00- 41.09	11.07
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	80675	49.9148	49.915	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1120059			1391.63-1451.63	1388.36
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1275211	48.9632	48.963	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	426576			3.22- 63.22	33.45
4.809	4.809 (0.910)	41	228698			0.00- 48.12	17.93
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.004 (0.947)	77	590995	48.2566	48.256	80.00- 120.00	100.00
5.005	5.004 (0.947)	79	192709			2.00- 62.00	32.61
5.005	5.004 (0.947)	97	141275			0.00- 53.36	23.90

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.046 (0.955)	98	219389	46.9439	46.944	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	338814			127.22- 187.22	154.44
5.047	5.046 (0.955)	61	695365			283.85- 343.85	316.96
86 2-Butanone					CAS #: 78-93-3		
5.061	5.074 (0.958)	72	159453	48.8472	48.847	80.00- 120.00	100.00
5.075	5.074 (0.960)	43	1698541			1055.75-1115.75	1065.23
5.061	5.074 (0.958)	57	63424			10.59- 70.59	39.78
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.088 (0.963)	45	135429	50.3248	50.325	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	695365			450.31- 510.31	513.45
5.089	5.088 (0.963)	70	82618			30.42- 90.42	61.00
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	450175	48.9056	48.906	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	147888			2.92- 62.92	32.85
5.270	5.270 (0.997)	72	150501			3.54- 63.54	33.43
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	682394	47.1495	47.149	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	443132			34.71- 94.71	64.94
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	426290	46.5989	46.599	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	637500			120.40- 180.40	149.55
5.438	5.438 (1.029)	41	351146			54.20- 114.20	82.37
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	732951	45.0547	45.055	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	467751			33.76- 93.76	63.82
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	747752	49.9064	49.906	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	783754			73.68- 133.68	104.81
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	184273	48.7302	48.730	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	478848			231.09- 291.09	259.86
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1944713	48.6476	48.648	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	606500			1.12- 61.12	31.19
5.774	5.774 (1.093)	41	525031			0.00- 57.49	27.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	923835	48.7211	48.721	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	219980			0.00- 53.80	23.81
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	246941	48.8421	48.842	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	988323			365.20- 425.20	400.23
5.858	5.858 (0.948)	55	292246			91.31- 151.31	118.35
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	514115	47.0940	47.094	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	159770			1.20- 61.20	31.08
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	345477	46.2572	46.257	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	714720			179.02- 239.02	206.88
5.942	5.942 (0.962)	57	389337			84.85- 144.85	112.70
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	362639	59.6668	59.667	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	254365			40.21- 100.21	70.14
6.348	6.348 (1.027)	43	200559			25.00- 85.00	55.31
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	451180	47.4295	47.429	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	479590			74.96- 134.96	106.30
6.362	6.362 (1.029)	97	293531			34.80- 94.80	65.06
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	177010	40.2725	40.272	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	138474			52.03- 112.03	78.23
6.586	6.586 (1.066)	41	160835			79.97- 139.97	90.86
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	468768	61.9580	61.958	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	579449			134.02- 194.02	123.61
6.664	6.664 (0.773)	100	141197			9.54- 69.54	30.12
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.699 (1.084)	88	233447	48.6009	48.601	80.00- 120.00	100.00
6.700	6.699 (1.084)	58	204594			55.80- 115.80	87.64
6.700	6.699 (1.084)	57	85755			8.68- 68.68	36.73
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	410747	48.7473	48.747	80.00- 120.00	100.00
6.714	6.721 (0.779)	93	398942			67.27- 127.27	97.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.714	6.721 (0.779)	95	332955			50.92- 110.92	81.06
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	736581	46.2205	46.220	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	476785			34.31- 94.31	64.73
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	584209	49.3222	49.322	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	186879			1.42- 61.42	31.99
7.208	7.208 (1.166)	39	397058			38.56- 98.56	67.97
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	581182	45.6885	45.688	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	267415			15.60- 75.60	46.01
6.460	6.460 (1.045)	55	588990			78.53- 138.53	101.34
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	375128	46.5771	46.577	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	987393			231.30- 291.30	263.21
7.316	7.316 (1.184)	85	142840			8.94- 68.94	38.08
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1211925	47.6336	47.634	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	705909			28.30- 88.30	58.25
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.205)	57	411162	48.5724	48.572	80.00- 120.00	100.00
7.445	7.444 (1.205)	85	397266			67.11- 127.11	96.62
7.445	7.444 (1.205)	43	993852			214.21- 274.21	241.72
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	567866	49.0437	49.044	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	179211			2.15- 62.15	31.56
7.688	7.688 (0.892)	39	362676			36.09- 96.09	63.87
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	418129	46.9556	46.956	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	259959			31.62- 91.62	62.17
7.846	7.846 (0.910)	83	364240			56.35- 116.35	87.11
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	602834	48.9472	48.947	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	471766			48.71- 108.71	78.26
7.881	7.881 (0.914)	131	456078			46.55- 106.55	75.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	511144	49.9730	49.973	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	961960			157.91- 217.91	188.20
8.003	8.003 (0.929)	100	91824			0.00- 47.86	17.96
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	566994	46.7084	46.708	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	641768			82.96- 142.96	113.19
7.989	7.989 (1.293)	78	186383			2.55- 62.55	32.87
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.946)	129	846162	50.0883	50.088	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	651984			47.77- 107.77	77.05
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.268 (0.959)	107	678752	49.0832	49.083	80.00- 120.00	100.00
8.268	8.268 (0.959)	109	641952			64.60- 124.60	94.58
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	755211	49.1069	49.107	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	231086			0.95- 60.95	30.60
7.122	7.122 (1.152)	144	79308			0.00- 40.45	10.50
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	1023504	47.6349	47.635	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	330682			2.13- 62.13	32.31
8.641	8.641 (1.002)	77	577849			26.35- 86.35	56.46
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	522969	48.6750	48.675	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1634715			282.48- 342.48	312.58
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	1029711	49.4466	49.446	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	930261			59.52- 119.52	90.34
8.705	8.705 (1.010)	85	309137			0.00- 59.76	30.02
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	506531	42.8350	42.835	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	345244			38.22- 98.22	68.16
8.712	8.712 (1.011)	95	189031			7.54- 67.54	37.32
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	656920	49.1467	49.147	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1321984			171.36- 231.36	201.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
9.121	9.128 (1.058)	106	613695	48.3631	48.363	80.00- 120.00	100.00
9.121	9.128 (1.058)	91	1301162			179.99- 239.99	212.02
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	1061214	48.2705	48.270	80.00- 120.00	100.00
9.149	9.149 (1.061)	78	522635			19.09- 79.09	49.25
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	806097	50.3223	50.322	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	412227			21.45- 81.45	51.14
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.091)	105	1900407	47.3689	47.369	80.00- 120.00	100.00
9.407	9.414 (1.091)	120	514504			0.00- 56.99	27.07
9.407	9.407 (1.091)	51	220885			0.00- 41.77	11.62
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	611030	48.3969	48.397	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	236867			9.22- 69.22	38.77
9.579	9.579 (1.111)	42	437371			42.60- 102.60	71.58
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	936271	47.0699	47.070	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	600808			34.35- 94.35	64.17
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.729 (1.130)	156	607057	48.6747	48.675	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	593292			67.29- 127.29	97.73
9.730	9.729 (1.129)	77	995300			132.41- 192.41	163.95
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2290878	48.9382	48.938	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	541415			0.00- 53.77	23.63
9.758	9.758 (1.132)	105	86417			0.00- 33.81	3.77
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	289933	48.3881	48.388	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	1009679			285.00- 345.00	348.25
9.787	9.787 (1.135)	61	246266			54.06- 114.06	84.94
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	315097	66.4580	66.458	80.00- 120.00	100.00(R)
9.787	9.787 (1.135)	89	163024			21.19- 81.19	51.74
9.787	9.787 (1.135)	75	1009679			372.45- 432.45	320.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.138)	57	1197898	49.4898	49.490	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	405230			4.13- 64.13	33.83
9.816	9.815 (1.139)	142	55996			0.00- 34.73	4.67
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	585173	48.2264	48.226	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1911490			296.79- 356.79	326.65
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	476561	48.3366	48.337	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1735908			336.29- 396.29	364.26
9.873	9.873 (1.145)	65	325512			38.83- 98.83	68.30
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	799023	46.8837	46.884	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1648088			176.40- 236.40	206.26
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	855997	49.0416	49.042	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	483742			26.64- 86.64	56.51
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1502829	47.9258	47.926	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	374135			0.00- 54.82	24.90
10.174	10.174 (1.180)	91	1013570			36.92- 96.92	67.44
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1620169	48.2107	48.211	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	750731			16.58- 76.58	46.34
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	485531	47.9377	47.938	80.00- 120.00	100.00
10.360	10.360 (1.202)	105	2338945			451.53- 511.53	481.73
10.360	10.353 (1.202)	91	369819			46.48- 106.48	76.17
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	2043204	48.1713	48.171	80.00- 120.00	100.00
10.475	10.467 (1.215)	134	548005			0.00- 56.79	26.82
10.467	10.467 (1.214)	91	490581			0.00- 54.04	24.01
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.220)	146	1106363	48.4571	48.457	80.00- 120.00	100.00
10.517	10.517 (1.220)	148	703822			33.53- 93.53	63.62
10.517	10.517 (1.220)	111	455868			11.05- 71.05	41.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.229)	146	1115809	47.4456	47.446	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	716661			33.47- 93.47	64.23
10.596	10.596 (1.229)	111	449960			9.65- 69.65	40.33
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1619916	50.0978	50.098	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	353017			0.00- 52.04	21.79
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1303110	45.6864	45.686	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1118498			55.86- 115.86	85.83
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	526009	47.8292	47.829	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	1894116			331.99- 391.99	360.09
10.818	10.818 (1.255)	92	993791			161.01- 221.01	188.93
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1049945	47.5881	47.588	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	670191			33.23- 93.23	63.83
10.919	10.918 (1.267)	111	443537			12.36- 72.36	42.24
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	625255	48.8744	48.874	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	554821			58.96- 118.96	88.74
11.606	11.606 (1.347)	155	488548			47.82- 107.82	78.14
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1020660	42.3179	42.318	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	820544			50.85- 110.85	80.39
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	814851	51.9976	51.998	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	773714			65.40- 125.40	94.95
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	634879	53.6326	53.633	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	401706			33.70- 93.70	63.27
216 Naphthalene					CAS #: 91-20-3		
12.559	12.552 (1.457)	128	213475	4.46106	4.461	80.00- 120.00	100.00
12.559	12.552 (1.457)	127	27510			0.00- 43.10	12.89
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.810	12.802 (1.486)	180	708948	49.4384	49.438	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
12.810	12.802 (1.486)	182	672604			65.67- 125.67	94.87
12.810	12.802 (1.486)	145	253332			6.02- 66.02	35.73

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 23-Jun-2021 11:20

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3062226.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-JUN-2021
Calibration Time: 23:12
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	243405	146043	340767	230839	-5.16
108 1,4-Difluorobenze	874076	524446	1223706	830933	-4.94
153 Chlorobenzene-d5	831223	498734	1163712	786155	-5.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	0.00
153 Chlorobenzene-d5	8.62	8.29	8.95	8.62	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 22JUN21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: LD
Data Type: MS DATA SampleType: ICV
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msd3.i/22JUN21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	50.367	100.73	70-130
5 Propylene	50.000	47.606	95.21	70-130
7 1,1-Difluoroethan	50.000	49.912	99.82	70-130
8 Freon 12	50.000	46.416	92.83	70-130
9 Chlorodifluoromet	50.000	41.762	83.53	70-130
10 Freon 114	50.000	49.168	98.34	70-130
12 Isobutane	50.000	48.574	97.15	70-130
15 Chloromethane	50.000	45.401	90.80	70-130
18 Butane	50.000	40.046	80.09	70-130
19 Vinyl Chloride	50.000	41.404	82.81	70-130
20 1,3-Butadiene	50.000	40.185	80.37	70-130
24 Bromomethane	50.000	46.174	92.35	70-130
30 Chloroethane	50.000	48.772	97.55	70-130
31 Isopentane	50.000	48.087	96.17	70-130
32 Vinyl Bromide	50.000	47.882	95.76	70-130
33 Freon 11	50.000	47.135	94.27	70-130
34 Dichlorofluoromet	50.000	49.179	98.36	70-130
35 Pentane	50.000	46.537	93.07	70-130
38 Ethyl Ether	50.000	48.481	96.96	70-130
39 Ethanol	58.000	46.986	81.01	70-130
42 Acrolein	58.000	52.518	90.55	70-130
43 Freon 113	50.000	48.050	96.10	70-130
44 1,1-Dichloroethen	50.000	45.774	91.55	70-130
47 Acetone	50.000	47.088	94.18	70-130
48 Carbon Disulfide	50.000	49.507	99.01	70-130
49 Iodomethane	50.000	57.834	115.67	70-130
52 2-Propanol	50.000	51.752	103.50	70-130
54 3-Chloropropene	50.000	46.969	93.94	70-130
57 Acetonitrile	50.000	47.779	95.56	70-130
59 Methylene Chlorid	50.000	47.692	95.38	70-130
62 tert-Butyl alcoho	50.000	48.519	97.04	70-130
63 Methyl tert-butyl	50.000	47.906	95.81	70-130
64 trans-1,2-Dichlor	50.000	44.178	88.36	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	42.827	85.65	70-130
67	Hexane	50.000	48.277	96.55	70-130
71	1,1-Dichloroethan	50.000	46.981	93.96	70-130
72	Isopropyl ether	50.000	49.279	98.56	70-130
73	Vinyl Acetate	50.000	49.915	99.83	70-130
79	Ethyl-tert-butyl	50.000	48.963	97.93	70-130
84	2,2-Dichloropropa	50.000	48.256	96.51	70-130
85	cis-1,2-Dichloroe	50.000	46.944	93.89	70-130
86	2-Butanone	50.000	48.847	97.69	70-130
87	Ethyl Acetate	50.000	50.325	100.65	70-130
89	Tetrahydrofuran	50.000	48.906	97.81	70-130
92	Chloroform	50.000	47.149	94.30	70-130
94	Cyclohexane	50.000	46.599	93.20	70-130
96	1,1,1-Trichloroet	50.000	45.055	90.11	70-130
99	1,1-Dichloroprope	50.000	48.730	97.46	70-130
97	Carbon Tetrachlor	50.000	49.906	99.81	70-130
101	2,2,4-Trimethylpe	50.000	48.648	97.30	70-130
102	Benzene	50.000	48.721	97.44	70-130
105	tert-Amyl methyl	50.000	48.842	97.68	70-130
106	1,2-Dichloroethan	50.000	47.094	94.19	70-130
107	Heptane	50.000	46.257	92.51	70-130
110	n-Butanol	50.000	59.667	119.33	70-130
111	Trichloroethene	50.000	47.429	94.86	70-130
118	Dibromomethane	50.000	48.747	97.49	70-130
127	Methylcyclohexane	50.000	45.688	91.38	70-130
114	1,2-Dichloropropa	50.000	40.272	80.55	70-130
116	Methyl Methacryla	50.000	61.958	123.92	70-130
117	1,4-Dioxane	50.000	48.601	97.20	70-130
122	Bromodichlorometh	50.000	46.220	92.44	70-130
126	cis-1,3-Dichlorop	50.000	49.322	98.64	70-130
131	4-Methyl-2-pentan	50.000	46.577	93.15	70-130
136	Octane	50.000	48.572	97.14	70-130
137	Toluene	50.000	47.634	95.27	70-130
139	trans-1,3-Dichlor	50.000	49.044	98.09	70-130
141	1,1,2-Trichloroet	50.000	46.956	93.91	70-130
142	Tetrachloroethene	50.000	48.947	97.89	70-130
143	2-Hexanone	50.000	49.973	99.95	70-130
144	1,3-Dichloropropa	50.000	46.708	93.42	70-130
146	Dibromochlorometh	50.000	50.088	100.18	70-130
148	1,2-Dibromoethane	50.000	49.083	98.17	70-130
151	1-Bromo-2-Chloroe	50.000	49.107	98.21	70-130
154	Chlorobenzene	50.000	47.635	95.27	70-130
155	Ethyl Benzene	50.000	48.675	97.35	70-130
156	Nonane	50.000	49.446	98.89	70-130
157	1,1,1,2-Tetrachlo	50.000	42.835	85.67	70-130
158	m,p-Xylene	50.000	49.147	98.29	70-130
164	o-Xylene	50.000	48.363	96.73	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	48.270	96.54	70-130
167 Bromoform	50.000	50.322	100.64	70-130
168 Cumene	50.000	47.369	94.74	70-130
169 Cyclohexanone	50.000	48.397	96.79	70-130
175 1,1,2,2-Tetrachlo	50.000	47.070	94.14	70-130
177 Bromobenzene	50.000	48.675	97.35	70-130
178 Propylbenzene	50.000	48.938	97.88	70-130
179 1,2,3-Trichloropr	50.000	48.388	96.78	70-130
181 trans-1,4-Dichlor	50.000	66.458	132.92*	70-130
182 Decane	50.000	49.490	98.98	70-130
183 4-Ethyltoluene	50.000	48.226	96.45	70-130
184 2-Chlorotoluene	50.000	48.337	96.67	70-130
185 1,3,5-Trimethylbe	50.000	46.884	93.77	70-130
188 alpha Methyl Styr	50.000	49.042	98.08	70-130
189 tert-Butylbenzene	50.000	47.926	95.85	70-130
190 1,2,4-Trimethylbe	50.000	48.211	96.42	70-130
192 sec-Butylbenzene	50.000	47.938	95.88	70-130
194 p-Cymene	50.000	48.171	96.34	70-130
195 1,3-Dichlorobenze	50.000	48.457	96.91	70-130
196 1,4-Dichlorobenze	50.000	47.446	94.89	70-130
199 alpha-Chlorotolue	50.000	50.098	100.20	70-130
201 Undecane	50.000	45.686	91.37	70-130
202 Butylbenzene	50.000	47.829	95.66	70-130
204 1,2-Dichlorobenze	50.000	47.588	95.18	70-130
206 1,2-Dibromo-3-chl	50.000	48.874	97.75	70-130
207 Dodecane	50.000	42.318	84.64	70-130
213 1,2,4-Trichlorobe	58.000	51.998	89.65	70-130
215 Hexachlorobutadie	58.000	53.633	92.47	70-130
216 Naphthalene	5.800	4.461	76.91	60-140
222 1,2,3-Trichlorobe	58.000	49.438	85.24	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.239	96.96	70-130
$ 134 Toluene-d8	25.000	24.806	99.23	70-130
$ 170 4-Bromofluorobenz	25.000	24.753	99.01	70-130

Data File: /chem/msd3.i/22JUN21.b/3062226.d

Date : 23-JUN-2021 09:45

Client ID: ICV

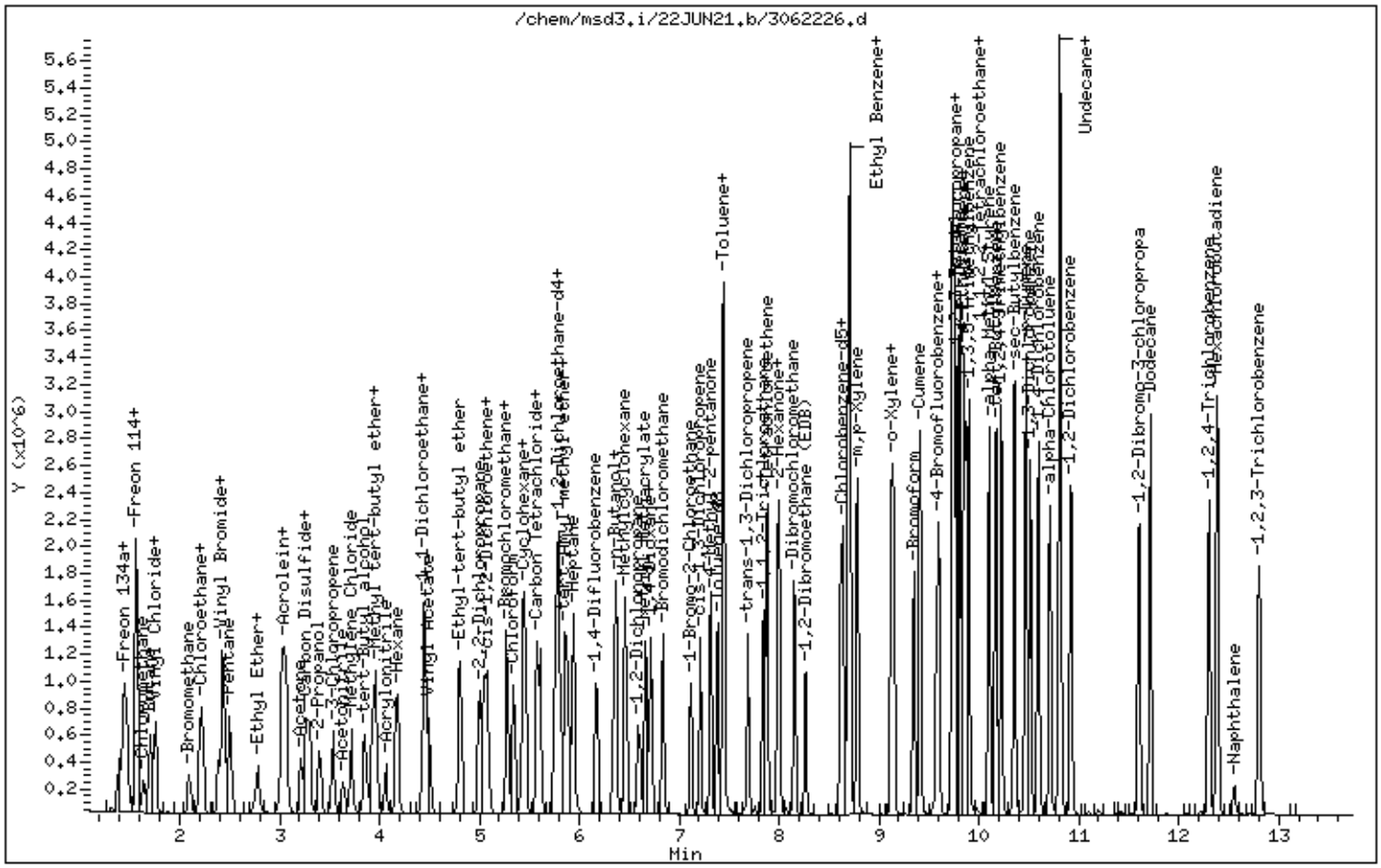
Instrument: msd3.i

Sample Info: 50mL 3018-2121

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051925.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 20-MAY-2021 00:33
Operator : gh Inst ID: msdp.i
Smp Info : 50mL 3018-2016
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 11:31 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.778	5.778 (1.000)	130	159261	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	123314				48.23- 108.23	77.43
5.778	5.778 (1.000)	49	287112				150.57- 210.57	180.28
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.659 (1.000)	114	599327	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93610				0.00- 45.71	15.62
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	583008	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	317926				23.78- 83.78	54.53
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.308	6.308 (1.092)	65	217297	24.7232	24.723		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	123853				27.21- 87.21	57.00
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	648333	24.9118	24.912		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	65745				0.00- 40.44	10.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	421967			34.95- 94.95	65.08
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	376160	25.1259	25.126	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	479143			95.92- 155.92	127.38
10.921	10.921 (1.154)	176	367133			66.89- 126.89	97.60
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	269381	53.4416	53.442	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	238008			59.44- 119.44	88.35
1.745	1.745 (0.302)	51	1146080			419.06- 479.06	425.45
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	351150	48.1826	48.182	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	231660			35.28- 95.28	65.97
1.675	1.675 (0.290)	39	239136			38.35- 98.35	68.10
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	184945	51.2320	51.232	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1146080			597.63- 657.63	619.69
1.703	1.703 (0.295)	47	118519			33.72- 93.72	64.08
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	729033	51.0385	51.038	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	236858			2.37- 62.37	32.49
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.745	1.745 (0.302)	67	72194	51.1662	51.166	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1146080			1501.01-1561.01	1587.50
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	701038	49.9978	49.998	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	225650			2.30- 62.30	32.19
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	765128	47.4212	47.421	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	246889			2.44- 62.44	32.27
1.856	1.856 (0.321)	58	25257			0.00- 33.36	3.30
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	437995	52.8545	52.854	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	114348			0.00- 56.26	26.11
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	80145	41.7506	41.751	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.025	2.025 (0.350)	43	645591			823.29- 883.29	805.53
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	464010	46.5443	46.544	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	139745			0.00- 59.69	30.12
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	446648	55.7047	55.705	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	360563			52.37- 112.37	80.73
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	297578	46.4227	46.423	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	278799			64.07- 124.07	93.69
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	171538	47.8510	47.851	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	50751			0.04- 60.04	29.59
2.612	2.612 (0.452)	49	59140			4.54- 64.54	34.48
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	529089	48.5043	48.504	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	338228			34.12- 94.12	63.93
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	279438	47.1623	47.162	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	273101			69.27- 129.27	97.73
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	742373	48.9075	48.908	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	483442			34.72- 94.72	65.12
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	646344	49.4042	49.404	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	195128			0.84- 60.84	30.19
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	832217	46.9376	46.938	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	122475			0.00- 44.98	14.72
2.970	2.970 (0.514)	72	59490			0.00- 37.39	7.15
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	152084	50.8427	50.843	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	294053			163.46- 223.46	193.35
3.285	3.285 (0.569)	45	421334			250.40- 310.40	277.04

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	73066	46.2624	46.262	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	419314			511.19- 571.19	573.88
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	138287	50.4592	50.459	80.00- 120.00	100.00
3.536	3.529 (0.612)	56	194444			111.10- 171.10	140.61
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	550653	48.8270	48.827	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	354592			33.56- 93.56	64.39
3.550	3.550 (0.614)	101	666533			89.21- 149.21	121.04
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	337843	50.1462	50.146	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	214195			34.02- 94.02	63.40
3.579	3.579 (0.619)	61	675008			168.77- 228.77	199.80
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	199513	47.7852	47.785	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	667100			302.95- 362.95	334.36
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	862293	48.5817	48.582	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	700808	59.3954	59.395	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	293044			12.22- 72.22	41.82
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	849259	50.4689	50.469	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	140946			0.00- 47.19	16.60
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	145308	49.0044	49.004	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	618664			396.19- 456.19	425.76
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	381456	48.6371	48.637	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	193635			20.95- 80.95	50.76
4.123	4.123 (0.714)	38	41374			0.00- 41.17	10.85
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	531632	49.0219	49.022	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	271047			22.03- 82.03	50.98
4.238	4.238 (0.733)	51	161032			0.18- 60.18	30.29

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	909661	46.3560	46.356	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	192086			0.00- 51.11	21.12
4.338	4.338 (0.751)	57	96676			0.00- 40.49	10.63
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	942632	48.1957	48.196	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	317705			3.10- 63.10	33.70
4.446	4.446 (0.769)	41	299560			1.28- 61.28	31.78
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	218803	48.6055	48.605	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	620102			255.84- 315.84	283.41
4.474	4.482 (0.774)	96	343318			127.59- 187.59	156.91
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	303698	48.4637	48.464	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	359381			88.05- 148.05	118.33
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.813)	57	776348	49.4834	49.483	80.00- 120.00	100.00
4.697	4.697 (0.813)	43	525013			37.52- 97.52	67.63
4.697	4.697 (0.813)	86	88068			0.00- 41.48	11.34
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	682714	50.6181	50.618	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	199004			0.00- 59.70	29.15
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.954 (0.856)	45	1790476	49.0696	49.070	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	321907			0.00- 48.18	17.98
4.954	4.954 (0.857)	59	180794			0.00- 40.15	10.10
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.865)	86	88227	50.8989	50.899	80.00- 120.00	100.00
4.990	4.997 (0.864)	43	2127436			2432.48-2492.48	2411.32
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1542046	48.8215	48.821	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	471804			1.00- 61.00	30.60
5.305	5.305 (0.918)	41	285817			0.00- 48.73	18.53
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	590380	49.2930	49.293	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	190828			2.28- 62.28	32.32
5.513	5.506 (0.954)	97	143176			0.00- 53.93	24.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.960)	98	233240	49.9273	49.927	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	363999			125.75- 185.75	156.06
5.549	5.549 (0.960)	61	845213			332.40- 392.40	362.38
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	172909	48.0341	48.034	80.00- 120.00	100.00
5.563	5.556 (0.963)	43	2166913			1214.50-1274.50	1253.21
5.556	5.556 (0.962)	57	75659			14.68- 74.68	43.76
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	177582	49.5968	49.597	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	845213			452.04- 512.04	475.96
5.570	5.570 (0.964)	70	92639			22.77- 82.77	52.17
89 Tetrahydrofuran					CAS #: 109-99-9		
5.771	5.771 (0.999)	42	596496	49.8249	49.825	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	151172			0.00- 55.82	25.34
5.771	5.771 (0.999)	72	164276			0.00- 57.59	27.54
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	698985	50.4429	50.443	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	450734			34.70- 94.70	64.48
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	484683	48.3805	48.380	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	852306			142.57- 202.57	175.85
5.957	5.957 (1.031)	41	457785			62.09- 122.09	94.45
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.033)	97	760233	48.5642	48.564	80.00- 120.00	100.00
5.972	5.972 (1.033)	99	490526			34.02- 94.02	64.52
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	745174	50.7546	50.755	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	752839			70.64- 130.64	101.03
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	203160	49.7993	49.799	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	511996			226.85- 286.85	252.02
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	2687519	49.2841	49.284	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	862052			2.24- 62.24	32.08
6.280	6.280 (1.087)	41	651161			0.00- 54.39	24.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	1008062	50.9701	50.970	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	234415			0.00- 52.90	23.25
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	277129	49.6938	49.694	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1123129			372.79- 432.79	405.27
6.358	6.358 (0.955)	55	386701			112.09- 172.09	139.54
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	539745	52.4480	52.448	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	168125			0.79- 60.79	31.15
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	404133	51.5803	51.580	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1034181			226.53- 286.53	255.90
6.444	6.444 (0.968)	57	534196			100.85- 160.85	132.18
110 n-Butanol					CAS #: 71-36-3		
6.810	6.810 (1.023)	56	349325	48.5815	48.581	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	250704			40.99- 100.99	71.77
6.810	6.810 (1.023)	43	202468			27.38- 87.38	57.96
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	487275	50.7743	50.774	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	525030			76.29- 136.29	107.75
6.867	6.867 (1.031)	97	316440			33.63- 93.63	64.94
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	501779	49.4882	49.488	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	357412			41.07- 101.07	71.23
7.096	7.089 (1.066)	41	260924			22.53- 82.53	52.00
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	396710	49.5227	49.523	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	847515			179.84- 239.84	213.64
7.139	7.139 (0.755)	100	159570			9.59- 69.59	40.22
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	259955	48.2421	48.242	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	255954			68.28- 128.28	98.46
7.175	7.175 (1.077)	57	86664			2.68- 62.68	33.34
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	458044	52.9443	52.944	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	407519			60.09- 120.09	88.97

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.204	7.204 (0.761)	95	354189			48.38- 108.38	77.33
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	770056	51.7510	51.751	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	492807			35.24- 95.24	64.00
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	636121	50.6019	50.602	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	200691			2.42- 62.42	31.55
7.691	7.691 (1.155)	39	434030			37.16- 97.16	68.23
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	691986	49.8280	49.828	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	322440			15.78- 75.78	46.60
6.974	6.974 (1.047)	55	795373			84.64- 144.64	114.94
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	480926	46.7077	46.708	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1325477			242.35- 302.35	275.61
7.798	7.791 (1.171)	85	161202			3.24- 63.24	33.52
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	1343637	49.2421	49.242	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	787609			28.38- 88.38	58.62
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.194)	57	566390	48.6818	48.682	80.00- 120.00	100.00
7.949	7.949 (1.194)	85	479927			56.00- 116.00	84.73
7.949	7.949 (1.194)	43	1456775			228.66- 288.66	257.20
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	600175	52.3121	52.312	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	190922			1.24- 61.24	31.81
8.214	8.214 (0.868)	39	389221			34.11- 94.11	64.85
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	476355	50.2326	50.232	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	296859			31.96- 91.96	62.32
8.400	8.400 (0.888)	83	396895			52.93- 112.93	83.32
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	682961	51.3998	51.400	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	535513			47.84- 107.84	78.41
8.464	8.464 (0.895)	131	516602			45.29- 105.29	75.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	657966	48.5640	48.564	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1278689			162.87- 222.87	194.34
8.586	8.586 (0.908)	100	102219			0.00- 45.94	15.54
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	649887	50.1538	50.154	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	820466			94.99- 154.99	126.25
8.579	8.579 (1.288)	78	211986			2.05- 62.05	32.62
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	922140	52.0444	52.044	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	712882			47.45- 107.45	77.31
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	783569	51.5187	51.519	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	740572			64.21- 124.21	94.51
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	920567	49.4826	49.482	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	271612			0.00- 59.64	29.50
7.605	7.605 (1.142)	144	89030			0.00- 39.63	9.67
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1170183	50.5473	50.547	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	376526			1.74- 61.74	32.18
9.496	9.496 (1.004)	77	640652			25.04- 85.04	54.75
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	610182	50.4060	50.406	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1864363			273.74- 333.74	305.54
156 Nonane					CAS #: 111-84-2		
9.603	9.596 (1.015)	43	1509244	48.4576	48.458	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1271714			54.16- 114.16	84.26
9.603	9.603 (1.015)	85	358055			0.00- 53.90	23.72
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	532758	41.1032	41.103	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	583008			57.42- 117.42	109.43
9.596	9.596 (1.014)	95	192120			5.70- 65.70	36.06
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	760695	50.1737	50.174	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1493758			163.73- 223.73	196.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	723870	49.8321	49.832	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1494892			177.45- 237.45	206.51
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1208123	48.6312	48.631	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	579213			17.88- 77.88	47.94
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	906568	51.9083	51.908	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	460931			21.25- 81.25	50.84
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2265548	49.6487	49.649	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	647806			0.00- 58.52	28.59
10.649	10.649 (1.126)	51	293698			0.00- 43.00	12.96
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	751578	46.0550	46.055	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	241627			1.94- 61.94	32.15
10.871	10.871 (1.149)	42	519433			37.89- 97.89	69.11
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	1111439	49.9028	49.903	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	714222			35.20- 95.20	64.26
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	712211	51.3180	51.318	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	694838			67.21- 127.21	97.56
11.179	11.179 (1.182)	77	448248			29.02- 89.02	62.94
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	673698	49.7919	49.792	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2670473			366.49- 426.49	396.39
11.150	11.150 (1.179)	105	100975			0.00- 44.85	14.99
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	347282	48.9223	48.922	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1167359			280.55- 340.55	336.14
11.100	11.100 (1.173)	61	156927			15.49- 75.49	45.19
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	340414	73.1510	73.151	80.00- 120.00	100.00(R)
11.179	11.179 (1.182)	89	238240			49.11- 109.11	69.99
11.179	11.179 (1.182)	75	1167359			426.44- 486.44	342.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1694913	47.7517	47.752	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	465002			0.00- 57.66	27.44
11.258	11.258 (1.190)	142	69403			0.00- 34.09	4.09
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	721474	49.0325	49.032	80.00- 120.00	100.00
11.287	11.287 (1.193)	105	2282704			284.55- 344.55	316.39
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	570341	49.5063	49.506	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1973274			315.17- 375.17	345.98
11.301	11.301 (1.195)	65	288198			21.55- 81.55	50.53
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1019008	50.3002	50.300	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1992138			164.93- 224.93	195.50
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	1011075	50.2389	50.239	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	559661			25.30- 85.30	55.35
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	1828423	48.2549	48.255	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	453008			0.00- 54.25	24.78
11.738	11.738 (1.241)	91	1113434			31.27- 91.27	60.90
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1940625	50.7513	50.751	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	961894			19.05- 79.05	49.57
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	587147	49.8567	49.857	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2755895			437.55- 497.55	469.37
11.996	11.996 (1.268)	91	411332			40.76- 100.76	70.06
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2592253	49.8015	49.802	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	667083			0.00- 55.54	25.73
12.160	12.153 (1.285)	91	550118			0.00- 51.48	21.22
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	1321489	50.4912	50.491	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	844750			33.21- 93.21	63.92
12.196	12.196 (1.289)	111	544933			11.31- 71.31	41.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1351414	51.0959	51.096	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	860632			33.90- 93.90	63.68
12.311	12.311 (1.301)	111	545078			9.45- 69.45	40.33
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1867138	51.4087	51.409	80.00- 120.00	100.00
12.468	12.461 (1.318)	126	432223			0.00- 53.26	23.15
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2141161	52.2242	52.224	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	1903384			58.12- 118.12	88.89
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	659133	49.8581	49.858	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2279398			314.79- 374.79	345.82
12.626	12.626 (1.335)	92	1217501			154.29- 214.29	184.71
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1280596	49.8997	49.900	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	810645			33.84- 93.84	63.30
12.741	12.741 (1.347)	111	542670			12.73- 72.73	42.38
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.614	13.600 (1.439)	157	808811	52.0350	52.035	80.00- 120.00	100.00
13.614	13.600 (1.439)	75	667140			52.48- 112.48	82.48
13.614	13.600 (1.439)	155	627024			47.41- 107.41	77.52
207 Dodecane					CAS #: 112-40-3		
13.822	13.801 (1.461)	57	2491393	76.6649	76.665	80.00- 120.00	100.00(R)
13.822	13.801 (1.461)	43	2053107			52.87- 112.87	82.41
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.496	14.467 (1.532)	180	1351062	71.2544	71.254	80.00- 120.00	100.00
14.496	14.467 (1.532)	182	1288755			65.33- 125.33	95.39
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.617	14.582 (1.545)	225	961978	72.0891	72.089	80.00- 120.00	100.00
14.617	14.582 (1.545)	223	615317			33.17- 93.17	63.96
216 Naphthalene					CAS #: 91-20-3		
14.796	14.768 (1.564)	128	329062	6.79056	6.790	80.00- 120.00	100.00
14.804	14.768 (1.565)	127	41782			0.00- 42.88	12.70
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.104	15.069 (1.597)	180	1290198	76.9717	76.972	80.00- 120.00	100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.104	15.069 (1.597)	182	1235122			65.75- 125.75	95.73
15.104	15.069 (1.597)	145	454864			5.23- 65.23	35.26

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051925.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	159261	0.28
108 1,4-Difluorobenze	597103	358262	835944	599327	0.37
153 Chlorobenzene-d5	587747	352648	822846	583008	-0.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 20-May-2021 11:42

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 19MAY21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: gh
Data Type: MS DATA SampleType: ICV
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	53.442	106.88	70-130
5 Propylene	50.000	48.182	96.37	70-130
7 1,1-Difluoroethan	50.000	51.232	102.46	70-130
8 Freon 12	50.000	51.038	102.08	70-130
9 Chlorodifluoromet	50.000	51.166	102.33	70-130
10 Freon 114	50.000	49.998	100.00	70-130
12 Isobutane	50.000	47.421	94.84	70-130
15 Chloromethane	50.000	52.854	105.71	70-130
18 Butane	50.000	41.751	83.50	70-130
19 Vinyl Chloride	50.000	46.544	93.09	70-130
20 1,3-Butadiene	50.000	55.705	111.41	70-130
24 Bromomethane	50.000	46.423	92.85	70-130
30 Chloroethane	50.000	47.851	95.70	70-130
31 Isopentane	50.000	48.504	97.01	70-130
32 Vinyl Bromide	50.000	47.162	94.32	70-130
33 Freon 11	50.000	48.908	97.82	70-130
34 Dichlorofluoromet	50.000	49.404	98.81	70-130
35 Pentane	50.000	46.938	93.88	70-130
38 Ethyl Ether	50.000	50.843	101.69	70-130
39 Ethanol	58.000	46.262	79.76	70-130
42 Acrolein	58.000	50.459	87.00	70-130
43 Freon 113	50.000	48.827	97.65	70-130
44 1,1-Dichloroethen	50.000	50.146	100.29	70-130
47 Acetone	50.000	47.785	95.57	70-130
48 Carbon Disulfide	50.000	48.582	97.16	70-130
49 Iodomethane	50.000	59.395	118.79	70-130
52 2-Propanol	50.000	50.469	100.94	70-130
54 3-Chloropropene	50.000	49.004	98.01	70-130
57 Acetonitrile	50.000	48.637	97.27	70-130
59 Methylene Chlorid	50.000	49.022	98.04	70-130
62 tert-Butyl alcoho	50.000	46.356	92.71	70-130
63 Methyl tert-butyl	50.000	48.196	96.39	70-130
64 trans-1,2-Dichlor	50.000	48.605	97.21	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	48.464	96.93	70-130
67	Hexane	50.000	49.483	98.97	70-130
71	1,1-Dichloroethan	50.000	50.618	101.24	70-130
72	Isopropyl ether	50.000	49.070	98.14	70-130
73	Vinyl Acetate	50.000	50.899	101.80	70-130
79	Ethyl-tert-butyl	50.000	48.821	97.64	70-130
84	2,2-Dichloropropa	50.000	49.293	98.59	70-130
85	cis-1,2-Dichloroe	50.000	49.927	99.85	70-130
86	2-Butanone	50.000	48.034	96.07	70-130
87	Ethyl Acetate	50.000	49.597	99.19	70-130
89	Tetrahydrofuran	50.000	49.825	99.65	70-130
92	Chloroform	50.000	50.443	100.89	70-130
94	Cyclohexane	50.000	48.380	96.76	70-130
96	1,1,1-Trichloroet	50.000	48.564	97.13	70-130
99	1,1-Dichloroprope	50.000	49.799	99.60	70-130
97	Carbon Tetrachlor	50.000	50.755	101.51	70-130
101	2,2,4-Trimethylpe	50.000	49.284	98.57	70-130
102	Benzene	50.000	50.970	101.94	70-130
105	tert-Amyl methyl	50.000	49.694	99.39	70-130
106	1,2-Dichloroethan	50.000	52.448	104.90	70-130
107	Heptane	50.000	51.580	103.16	70-130
110	n-Butanol	50.000	48.581	97.16	70-130
111	Trichloroethene	50.000	50.774	101.55	70-130
118	Dibromomethane	50.000	52.944	105.89	70-130
127	Methylcyclohexane	50.000	49.828	99.66	70-130
114	1,2-Dichloropropa	50.000	49.488	98.98	70-130
116	Methyl Methacryla	50.000	49.523	99.05	70-130
117	1,4-Dioxane	50.000	48.242	96.48	70-130
122	Bromodichlorometh	50.000	51.751	103.50	70-130
126	cis-1,3-Dichlorop	50.000	50.602	101.20	70-130
131	4-Methyl-2-pentan	50.000	46.708	93.42	70-130
136	Octane	50.000	48.682	97.36	70-130
137	Toluene	50.000	49.242	98.48	70-130
139	trans-1,3-Dichlor	50.000	52.312	104.62	70-130
141	1,1,2-Trichloroet	50.000	50.232	100.47	70-130
142	Tetrachloroethene	50.000	51.400	102.80	70-130
143	2-Hexanone	50.000	48.564	97.13	70-130
144	1,3-Dichloropropa	50.000	50.154	100.31	70-130
146	Dibromochlorometh	50.000	52.044	104.09	70-130
148	1,2-Dibromoethane	50.000	51.519	103.04	70-130
151	1-Bromo-2-Chloroe	50.000	49.482	98.97	70-130
154	Chlorobenzene	50.000	50.547	101.09	70-130
155	Ethyl Benzene	50.000	50.406	100.81	70-130
156	Nonane	50.000	48.458	96.92	70-130
157	1,1,1,2-Tetrachlo	50.000	41.103	82.21	70-130
158	m,p-Xylene	50.000	50.174	100.35	70-130
164	o-Xylene	50.000	49.832	99.66	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	48.631	97.26	70-130
167 Bromoform	50.000	51.908	103.82	70-130
168 Cumene	50.000	49.649	99.30	70-130
169 Cyclohexanone	50.000	46.055	92.11	70-130
175 1,1,2,2-Tetrachlo	50.000	49.903	99.81	70-130
177 Bromobenzene	50.000	51.318	102.64	70-130
178 Propylbenzene	50.000	49.792	99.58	70-130
179 1,2,3-Trichloropr	50.000	48.922	97.84	70-130
181 trans-1,4-Dichlor	50.000	73.151	146.30*	70-130
182 Decane	50.000	47.752	95.50	70-130
183 4-Ethyltoluene	50.000	49.032	98.07	70-130
184 2-Chlorotoluene	50.000	49.506	99.01	70-130
185 1,3,5-Trimethylbe	50.000	50.300	100.60	70-130
188 alpha Methyl Styr	50.000	50.239	100.48	70-130
189 tert-Butylbenzene	50.000	48.255	96.51	70-130
190 1,2,4-Trimethylbe	50.000	50.751	101.50	70-130
192 sec-Butylbenzene	50.000	49.857	99.71	70-130
194 p-Cymene	50.000	49.802	99.60	70-130
195 1,3-Dichlorobenze	50.000	50.491	100.98	70-130
196 1,4-Dichlorobenze	50.000	51.096	102.19	70-130
199 alpha-Chlorotolue	50.000	51.409	102.82	70-130
201 Undecane	50.000	52.224	104.45	70-130
202 Butylbenzene	50.000	49.858	99.72	70-130
204 1,2-Dichlorobenze	50.000	49.900	99.80	70-130
206 1,2-Dibromo-3-chl	50.000	52.035	104.07	70-130
207 Dodecane	50.000	76.665	153.33*	70-130
213 1,2,4-Trichlorobe	58.000	71.254	122.85	70-130
215 Hexachlorobutadie	58.000	72.089	124.29	70-130
216 Naphthalene	5.800	6.790	117.08	60-140
222 1,2,3-Trichlorobe	58.000	76.972	132.71*	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.723	98.89	70-130
$ 134 Toluene-d8	25.000	24.912	99.65	70-130
$ 170 4-Bromofluorobenz	25.000	25.126	100.50	70-130

Data File: /chem/msdp.i/19MAY21.b/p051925.d

Page 1

Date : 20-MAY-2021 00:33

Client ID: ICV

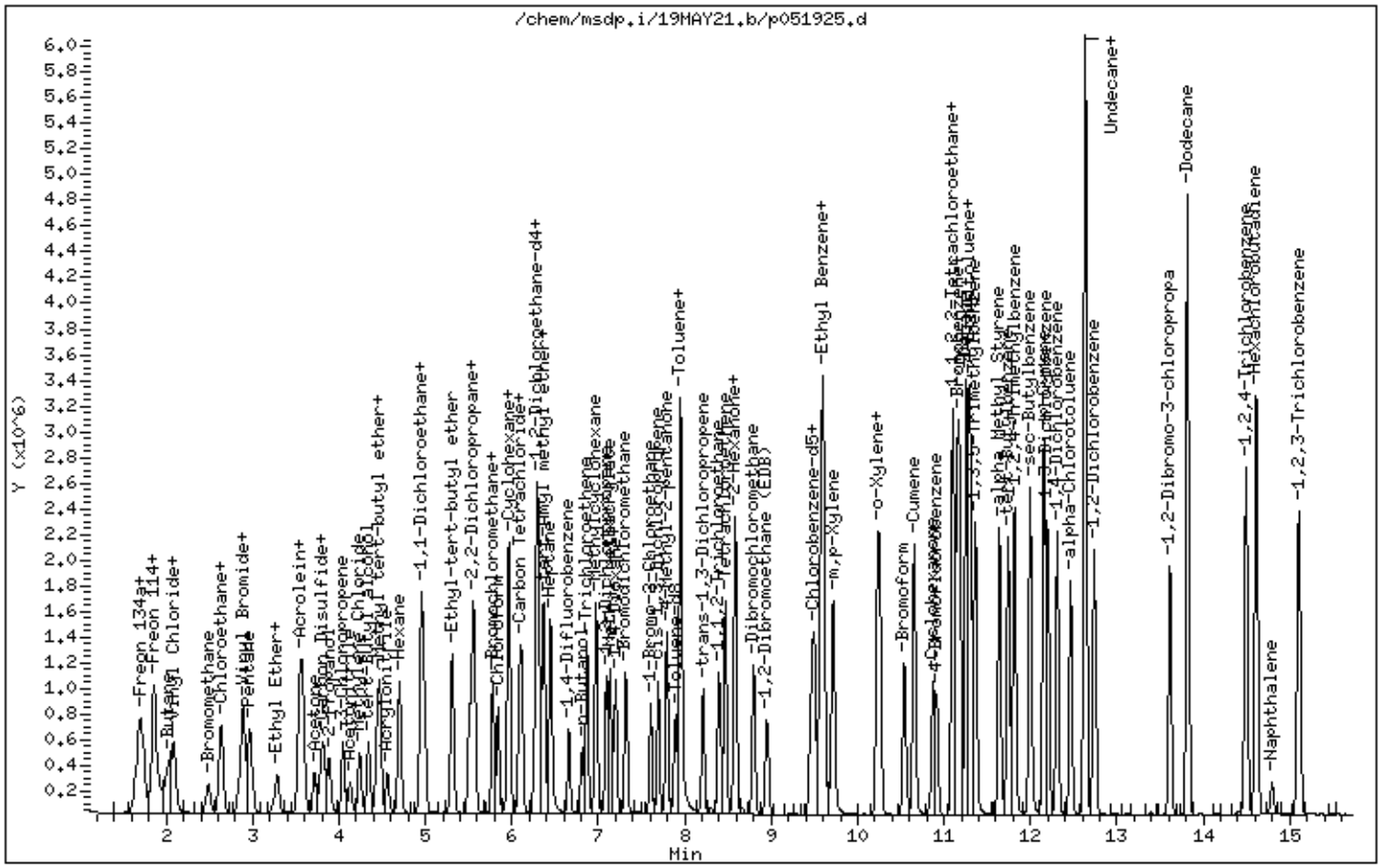
Instrument: msdp.i

Sample Info: 50mL 3018-2016

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



MSD-3 MDL Case Narrative

A Method Detection Limit Study for TO-15 method was performed on 05/03/21, 05/04/24, and 05/05/21, 06/01/21, 06/02/22, 06/03/21, 06/04/21, 06/07/21 and 06/08/21.

The MDL spikes were performed at:

- 0.3 ppbv (5.0ppbv->0.3ppbv); spike load of 12mL of standard #3018-2045
- 0.4 ppbv (5.0ppbv->0.4ppbv); spike load of 16mL of standard #3018-2045
- 0.8 ppbv (5.0ppbv->0.8ppbv); spike load of 32ml of standard #3018-2045 and #3018-1973
- 2.0 ppbv (5.0ppbv->2.0ppbv); spike load of 80ml of standard #3018-2045 and #3018-1973

The MDL verifications were analyzed on 6/15/21:

- 3061507: (0.3ppbv spike compounds). 5.0ppbv->0.25ppbv; spike load of 10ml of standard #3018-1973
- 3061508: (0.4ppbv spike compounds). 5.0ppbv->0.30ppbv; spike load of 12ml of standard #3018-1973
- 3061509: (0.8ppbv RL compounds). 5.0ppbv->0.50ppbv; spike load of 20ml of standard #3018-1973
- 3061510: (2.0 ppbv RL compounds). 5.0ppbv->1.25ppbv; spike load of 50ml of standard #3018-1973
- 3061510a (Naph only). 5.0ppbv->0.125ppbv; spike load of 50ml of standard #3018-1973

Notes:

1) **The MDL values for the following compounds were taken from the MDL blank:**
   - Toluene (0.12097ppbv)
   - Tetrachloroethane (0.08847ppbv)
   - m-p-Xylene (0.27315ppbv)
   - o-Xylene (0.13368ppbv)
   - 4-Ethyltoluene (0.12694ppbv)
   - 1,3,5-Trimethylbenzene (0.07763ppbv)
   - 1,2,4-Trimethylbenzene (0.18507ppbv)
   - Acetone (0.35944ppbv)
   - Carbon Disulfide (0.46909ppbv)

2) Dodecane mean recovered concentration and MDL ratio <1.

3) MDL verification for Naphthalene was less than 2-4X the MDL value.

4) The concentrations for Dodecane, 1,2,4-TCB, Hexachlorobutadiene, 1,2,3-TCB, and Naphthalene were adjusted in the MDL spikes due to the certified concentration exceeding more than 15% of the nominal concentration.

MDL expires 6/08/22

01 JUN21: 0.4ppbv - mdl.rp

MSD-3 TO15 Quad MDL

Standard 3018-2045

Report Date : 04-Jun-2021 15:53

16 ml load volume

Spike concentration

0.4ppbv

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060109	3060110	3060111	3060209	3060210	3060211	3060312	3060313	3060314
INJ.DATE:	01-JUN-2021	01-JUN-2021	01-JUN-2021	02-JUN-2021	02-JUN-2021	02-JUN-2021	03-JUN-2021	03-JUN-2021	03-JUN-2021
INJ.TIME:	14:01	14:29	14:56	14:10	14:38	15:05	16:50	17:18	17:45

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Freon 12	454.29	450.99	459.72	449.89	450.96	521.90	520.12	437.40	476.88	469.13	31.20	90.37	500 400
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
10 Freon 114	470.39	474.93	474.26	523.77	487.91	489.27	456.20	442.84	499.62	479.91	23.84	69.05	500 400
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Reviewer 1 _____ Date: 6/16/21
Reviewer 2 _____ Date: 6/16/21

Ratio of the mean recovered concentration and MDL value is between 1-20.

$\bar{X} = 90.78$
$2\bar{X} = 181.56$
$3\bar{X} = 272.34$
$4\bar{X} = 363.12$

MDL verification
Standard # 3018-1973 (5.0ppbv)
12 mL volume file # 3061508
spike concentration 0.3 ppbv

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PQTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	520.09	567.60	562.12	528.99	641.59	506.36	653.03	614.57	703.97	588.70	68.09	197.20
20 1,3-Butadiene	538.14	632.50	627.40	629.38	532.48	659.05	526.06	637.99	669.42	605.83	56.97	164.99
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	467.18	475.49	444.90	493.51	456.60	484.61	495.38	482.36	507.43	478.61	19.83	57.42
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 400
500 400
500 400

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SpRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	400
43 Freon 113	490.98	485.04	500.15	532.82	449.70	514.81	533.10	480.82	478.98	496.27	27.18	78.72	500
44 1,1-Dichloroethene	471.23	417.05	403.58	502.55	401.29	415.87	413.26	466.25	453.20	438.25	36.01	104.27	500
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	800
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
64 trans-1,2-Dichloroethe	434.58	437.36	418.44	594.77	392.87	379.26	366.41	352.78	407.49	420.44	71.59	207.33	500	400
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
66 Acrylonitrile	460.96	500.76	523.53	501.36	329.25	401.49	385.40	412.03	485.66	444.49	65.47	189.59	2000	500
67 Hexane	397.44	390.85	381.15	396.45	393.83	395.15	352.61	358.99	301.22	374.19	32.03	92.77	500	800
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
85 cis-1,2-Dichloroethene	406.23	339.12	394.79	410.43	459.76	386.12	407.07	400.11	391.34	399.44	31.16	90.23	500	400
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPTV RL	SPRL
87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
89 Tetrahydrofuran	392.28	308.18	375.81	351.30	382.02	278.79	368.88	354.69	374.96	354.10	37.34	108.12	500	800
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00		
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
94 Cyclohexane	421.16	433.62	432.47	402.30	353.96	357.57	385.82	409.64	331.39	391.99	37.05	107.30	500	400
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
97 Carbon Tetrachloride	441.86	416.57	401.45	496.61	437.54	450.66	466.79	463.29	457.40	448.02	28.17	81.57	500	800
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
99 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
101 2,2,4-Trimethylpentane	366.02	354.98	374.91	364.34	345.24	369.91	351.32	336.42	342.33	356.16	13.37	38.72	500	400
102 Benzene	384.25	373.46	379.77	375.64	382.39	357.76	403.13	391.89	370.25	379.84	13.00	37.64	500	400
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$ 104 1,2-Dichloroethane-d4	26012.80	24530.93	25455.22	26543.26	27108.49	26931.37	27307.04	27270.32	27019.49	26464.32	953.12	2760.23		
105 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
106 1,2-Dichloroethane	446.36	440.55	473.99	465.84	483.48	500.97	507.75	551.39	507.50	486.43	34.69	100.46	500	800
107 Heptane	324.96	372.59	369.77	307.08	314.82	300.27	322.25	312.99	378.20	333.66	30.85	89.34	500	800
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00		
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
110 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	432.98	412.78	434.49	426.79	398.78	467.28	457.60	449.98	423.39	433.78	21.72	62.91	500	400	
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	424.16	543.68	543.45	628.55	524.98	560.69	610.59	571.80	548.48	550.71	58.07	168.16	500	400	
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
118 Dibromomethane	446.54	507.68	505.31	536.64	539.78	466.69	488.20	467.21	461.00	491.00	33.52	97.07	2000	400	80.81
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	390.26	427.63	436.33	364.46	404.43	422.02	431.56	402.29	441.35	413.37	25.12	72.75	500	400	
127 Methylcyclohexane	417.04	384.70	372.53	399.47	414.30	328.78	407.36	381.08	343.60	383.21	30.84	89.33	2000	400	
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	413.22	394.54	380.31	389.13	424.63	366.34	345.26	397.08	356.29	385.20	25.97	75.20	500	400	
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24812.98	25037.79	24745.78	24544.93	25002.36	24499.33	25124.77	25292.63	25011.02	24896.84	265.60	769.17			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	377.73	417.60	441.05	395.95	398.25	394.68	417.99	394.54	399.15	404.11	18.51	53.61
137 Toluene	429.11	406.62	421.60	411.51	455.86	399.72	402.79	379.76	426.55	414.84	21.66	62.72
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	396.13	376.83	443.62	416.16	438.65	440.75	424.09	396.52	433.45	418.47	23.75	68.78
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	407.47	393.54	461.94	440.32	433.21	437.85	458.30	451.48	414.88	433.22	23.54	68.17
142 Tetrachloroethene	477.52	458.32	462.79	462.43	455.71	485.11	442.27	451.47	408.16	455.97	22.08	63.95
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	458.56	380.29	433.12	408.65	450.25	410.65	424.12	460.15	431.47	428.58	26.14	75.69
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	440.26	428.71	428.43	472.03	460.96	428.50	419.84	468.80	486.20	448.19	24.04	69.63
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	417.98	426.05	414.82	421.18	435.58	444.67	448.51	411.32	408.04	425.35	14.55	42.14
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	364.58	412.70	432.65	359.94	359.32	405.37	382.39	428.89	405.19	394.56	28.89	83.66
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	375.42	350.56	433.73	402.14	412.55	398.21	362.11	362.61	368.10	385.05	27.82	80.56

PPTV RL | SPRL | MDL Blank

2000 | 400
500 | 400 | 120.97
500 | 400
500 | 400 | 88.4
500 | 400
2000 | 500
500 | 400
500 | 800
400
500 | 800 | 273.15

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PDTV RL SPRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
164 o-Xylene	360.39	357.64	385.95	366.63	386.16	380.27	370.40	340.52	352.46	366.71	15.64	45.30	500	400	133.6
165 Styrene	364.41	347.64	373.59	377.48	380.05	357.02	333.96	350.60	321.00	356.20	20.09	58.19	500	400	
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
167 Bromoform	426.94	444.59	437.91	458.93	427.02	434.01	459.30	458.58	464.41	445.74	14.90	43.14	500	400	
168 Cumene	378.24	397.47	397.21	383.06	374.09	375.05	349.86	337.74	344.12	370.76	22.04	63.84	500	800	
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 170 4-Bromofluorobenzene	26228.51	26286.57	26715.37	26196.73	26575.59	26324.98	26555.74	26222.00	26548.37	26405.98	192.72	558.13			
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
175 1,1,2,2-Tetrachloroeth	411.22	443.64	429.40	426.37	424.84	397.72	422.71	437.17	422.96	424.00	13.47	39.00	500	400	
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
178 Propylbenzene	415.18	403.90	410.25	417.37	402.47	409.14	387.22	403.40	417.91	407.43	9.63	27.88	500	400	
179 1,2,3-Trichloropropane	353.67	411.55	459.65	457.83	494.33	423.20	519.48	502.45	418.17	448.93	52.65	152.48	2000	400	
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	416.23	451.66	409.49	400.58	423.84	452.96	393.29	403.12	379.99	414.57	24.85	71.96
184 2-Chlorotoluene	399.81	443.34	404.82	459.95	412.16	455.86	417.43	432.16	434.47	428.89	21.74	62.95
185 1,3,5-Trimethylbenzene	386.43	396.74	425.00	409.73	396.70	401.73	440.80	357.16	387.96	400.25	23.91	69.24
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	368.66	361.27	347.68	364.57	378.24	362.63	327.92	352.95	373.95	359.76	15.26	44.18
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	371.01	404.88	382.39	386.33	381.42	368.31	349.08	354.63	367.82	373.98	16.98	49.18
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	374.76	355.04	391.28	426.93	393.20	338.76	390.14	364.61	386.77	380.17	25.60	74.12
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	395.01	369.71	354.29	381.01	387.47	358.95	362.91	369.07	330.28	367.63	19.36	56.08
195 1,3-Dichlorobenzene	420.15	448.97	452.39	479.41	459.18	441.28	450.12	496.82	465.52	457.09	22.09	63.97
196 1,4-Dichlorobenzene	436.69	444.02	449.75	444.21	448.35	427.96	448.94	422.21	457.05	442.13	11.18	32.39
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	387.37	418.08	392.75	402.39	415.91	404.49	414.03	404.91	376.73	401.85	13.92	40.31
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	377.98	409.21	399.32	376.58	371.53	391.53	321.56	388.79	377.51	379.33	24.85	71.97
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	459.79	458.84	436.36	432.09	432.68	452.83	459.30	470.11	467.48	452.16	14.76	42.75
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

PPTV RL | SPRL | MDL Blank

500	400	126.94
2000	400	
500	400	77.63
2000	400	
500	800	185.10
2000	800	
2000	800	
500	400	
500	400	
500	800	
2000	400	27.37
500	400	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

01JUN21: 0.3 ppbv - mdl.rp

MSD3 TO1S Quad MDL
standard 3018-2045
12mL load volume
Spike concentration
0.3 ppbv

Report Date : 04-Jun-2021 14:34

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060106	3060107	3060108	3060206	3060207	3060208	3060309	3060310	3060311
INJ.DATE:	01-JUN-2021	01-JUN-2021	01-JUN-2021	02-JUN-2021	02-JUN-2021	02-JUN-2021	03-JUN-2021	03-JUN-2021	03-JUN-2021
INJ.TIME:	12:41	13:07	13:34	12:50	13:16	13:42	15:30	15:56	16:22

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 6/16/21
Reviewer 2 _____ Date: 6/16/21

$\bar{X} = 64.88$
$2\bar{X} = 129.76$
$3\bar{X} = 194.64$
$4\bar{X} = 259.52$

MDL verification
Standard # 3018-1973 (5.0 ppbv)
10mL volume file # 3061507
spike concentration 0.25 ppbv

Ratio of the mean recovered concentration and MDL value is between 1-20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	280.63	334.31	330.88	297.77	269.25	303.07	316.30	316.38	326.08	308.30	22.53	65.24
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SpRL

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
87	Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89	Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
92	Chloroform	332.42	287.99	325.03	322.59	329.86	365.62	317.23	340.28	326.41	327.49	20.45	59.21
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94	Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96	1,1,1-Trichloroethane	376.39	307.03	323.45	312.86	337.84	322.48	318.64	338.31	316.45	328.16	20.87	60.45
97	Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101	2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102	Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 104	1,2-Dichloroethane-d4	24732.82	24483.61	25193.83	26660.74	26303.99	26435.23	27396.85	27274.45	26821.81	26144.82	1080.25	3128.41
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106	1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107	Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 300

500 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PQTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	331.20	340.69	267.31	336.16	334.24	360.49	378.74	377.83	341.91	340.95	33.09	95.82
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	25052.44	25009.73	24504.59	24843.88	25083.33	24789.81	25111.34	25186.81	25305.54	24987.50	240.58	696.71

500 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

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Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	334.43	330.38	345.54	321.64	328.85	348.25	311.55	354.66	354.62	336.66	15.09	43.69
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 700

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
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Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	26639.07	26542.32	26711.43	26659.23	26349.17	26729.05	26446.99	26674.80	26523.06	26586.12	129.20	374.17
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
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Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/01JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/01JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

04JUN21: 0.8ppbv - mdl.rp.

MSD-3 TO15 Quad MDL
Standards 3018-2045
& 3018-1973

Report Date : 15-Jun-2021 11:33

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

32ml load volume
Spike concentration 0.8ppbv and Napka 0.08

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060406	3060407	3060408	3060707	3060708	3060709	3060808	3060809	3060810
INJ.DATE:	04-JUN-2021	04-JUN-2021	04-JUN-2021	07-JUN-2021	07-JUN-2021	07-JUN-2021	08-JUN-2021	08-JUN-2021	08-JUN-2021
INJ.TIME:	13:05	13:31	13:58	13:00	13:27	13:53	14:43	15:09	15:36

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPBV RL	SPRL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
4 Freon 134a	1020.23	880.17	1137.26	943.95	891.36	853.33	1032.03	892.71	1006.14	961.91	93.26	270.08	2000	800
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Chlorodifluoromethane	1361.40	1219.84	962.01	1224.96	1173.73	979.39	1194.48	1247.62	1008.83	1152.47	137.65	398.63	2000	800
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
12 Isobutane	878.19	794.03	684.12	845.10	813.74	808.70	782.30	774.87	774.82	795.10	53.90	156.08	2000	800
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Reviewer 1 _____ Date: 6/16/21
Reviewer 2 _____ Date: 6/17/21

$\bar{X}$ = 18.136
$2\bar{X}$ = 362.73
$3\bar{X}$ = 544.08
$4\bar{X}$ = 725.44

MDL verification
Napka file #3061510a
spike concentration 0.125ppbv
Standard # 3018-1973 (5.0 ppbv)
20ml Value file # 3061509
spike concentration 0.50 ppbv

Ratio of the mean recovered concentration and MDL value is between 1-20 minus Dodecane.

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Inst ID: msd3.i

PQTVRL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
32 Vinyl Bromide	783.68	843.96	823.06	874.54	969.30	862.75	804.65	796.67	834.38	843.67	55.83	161.70	2000	800
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
34 Dichlorofluoromethane	905.08	894.83	906.95	913.77	843.49	898.09	850.30	875.24	837.60	880.59	29.74	86.12	2000	800
35 Pentane	740.14	744.53	796.56	870.47	692.97	855.75	768.27	787.27	794.77	783.42	55.81	161.64	2000	800
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
38 Ethyl Ether	803.87	833.64	752.75	1085.11	920.17	831.38	749.95	878.33	685.15	837.82	116.75	338.12	2000	800
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

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PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
54 3-Chloropropene	901.59	898.26	821.32	851.78	966.60	747.03	805.43	779.77	900.80	852.51	70.23	203.39	2000	800
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
63 Methyl tert-butyl ethe	778.85	724.05	719.70	833.74	759.76	807.87	747.85	783.09	830.76	776.18	42.32	122.57	2000	800

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PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	871.58	818.11	897.42	892.83	834.53	857.33	830.86	860.00	863.58	858.47	27.07	78.41
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

2000 800

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PDTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 1,1-Dichloropropene	899.88	905.84	829.55	980.05	897.19	789.24	789.83	884.79	788.68	862.78	67.06	194.21
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 104 1,2-Dichloroethane-d4	27490.57	26926.33	27656.30	27169.14	26370.11	26940.63	26165.27	26835.14	27387.76	26993.47	497.45	1440.61
105 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

2000 800

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PPTV RL SPRL

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111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	655.66	687.48	633.20	608.87	671.67	722.86	704.74	698.78	655.65	670.99	36.45	105.57
117 1,4-Dioxane	772.62	846.73	843.41	798.64	795.20	863.42	854.90	857.64	796.94	825.50	34.20	99.05
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	24688.19	25025.38	24938.39	25296.89	25010.04	25129.01	24732.71	24853.10	24734.30	24934.22	203.48	589.28

2000 800
2000 800

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PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	768.89	759.40	673.44	706.68	690.61	692.59	714.72	748.57	723.94	719.87	33.10	95.85
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

2000 300

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
169 Cyclohexanone	717.42	667.63	709.26	677.52	710.73	716.14	753.63	864.92	825.56	738.09	66.24	191.82	2000 800
$ 170 4-Bromofluorobenzene	26725.29	26946.13	26904.46	26509.83	26650.79	26586.99	26867.07	26857.17	26525.59	26730.37	169.23	490.09	
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
177 Bromobenzene	836.90	856.61	830.42	879.25	816.64	875.30	838.05	875.70	897.36	856.25	27.16	78.67	2000 800
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
181 trans-1,4-Dichloro-2-b	810.42	662.40	714.50	617.17	597.39	694.13	795.48	717.51	707.98	701.88	71.32	206.55	2000 800
182 Decane	881.51	765.94	920.42	810.18	785.49	795.67	690.77	760.67	748.96	795.51	69.41	201.01	2000 800

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	794.34	808.05	771.83	740.78	800.67	812.76	806.77	826.59	806.85	796.51	25.62	74.20
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	477.93	619.00	628.30	482.52	641.52	659.51	448.67	644.95	677.96	586.71	89.82	260.11
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

2000 800

2000 800 94.31 ~~127.04~~ UP 6/17/21

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	140.32	409.60	509.31	198.46	454.37	517.47	291.67	482.12	574.24	397.51	152.33	441.14
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	36.66	67.50	84.44	37.01	70.86	89.41	46.82	88.21	90.79	67.97	22.52	65.21
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

RL SPRL MDLBlank

2000 800 42.10

1000 800 55. ~~32.~~ UD

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

04JUN21: 2.0 ppbv_mdl.rp

MSD-3 TO15 Quad MDL
Standards 3018-2045
&

Report Date : 15-Jun-2021 11:51

 3018-1973
80 mL load volume
Spike concentration
2.0 ppbv

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3060409	3060410	3060411	3060710	3060711	3060712	3060811	3060812	3060813
INJ.DATE:	04-JUN-2021	04-JUN-2021	04-JUN-2021	07-JUN-2021	07-JUN-2021	07-JUN-2021	08-JUN-2021	08-JUN-2021	08-JUN-2021
INJ.TIME:	14:24	14:51	15:18	14:20	14:47	15:14	16:03	16:30	16:57

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PDTV RL	SPRL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
5 Propylene	1895.27	1886.72	2016.75	2124.37	2008.50	2054.54	2262.16	1965.02	1844.81	2006.46	130.51	377.95	2000	2000
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
7 1,1-Difluoroethane	1772.53	1771.55	2123.15	1910.86	1785.64	1982.54	1961.37	1901.37	2087.22	1921.80	130.91	379.11	2000	2000
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
15 Chloromethane	2446.43	2396.33	2229.58	2457.74	2520.19	2184.14	1960.47	2164.84	2410.41	2307.79	182.91	529.72	5000	5000
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Reviewer 1 _____ Date: 6/17/21
Reviewer 2 _____ Date: _____

$\bar{X}$ = 355.52
$2\bar{X}$ = 711.04
$3\bar{X}$ = 1066.56
$4\bar{X}$ = 1422.08

MDL Verification
Standard # 3018-1973 (5.0ppbv)
50 ml volume file # 3061510
Spike concentration 1.25ppbv

Ratio of the mean recovered concentration and MDL value is between 1-20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PQL RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
18 Butane	3183.45	2279.06	3026.36	2558.65	3212.02	2317.47	2489.83	2920.02	2728.77	2746.18	357.09	1034.13	2000	2000
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
24 Bromomethane	2395.51	2439.94	2380.81	2531.05	2511.35	2478.22	2328.68	2332.32	2346.02	2415.99	77.42	224.22	5000	5000
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
30 Chloroethane	1880.59	1938.87	2234.46	2059.51	2192.55	1963.37	2222.99	1965.71	1925.32	2042.60	139.23	403.20	2000	2000
31 Isopentane	1900.93	1823.40	1959.41	1734.97	1927.37	1869.93	1974.60	2015.10	1844.44	1894.46	86.54	250.61	2000	2000
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
39 Ethanol	2224.57	2056.44	2095.67	2045.09	1935.11	2001.72	1584.64	1981.08	1778.21	1966.95	187.50	643.01	5000	5000

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	2183.92	2172.73	1737.46	1732.35	1757.32	1896.96	1777.44	1555.18	1856.45	1852.20	207.71	601.53
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	2147.22	2237.76	2296.68	2131.30	2222.89	2159.67	2322.43	2173.11	2217.20	2212.03	66.27	191.92
48 Carbon Disulfide	1934.24	1985.16	2039.49	2049.09	2040.18	2100.17	2073.16	2126.95	1990.51	2037.66	60.16	174.23
49 Iodomethane	1589.11	1635.17	1581.92	1587.37	1613.22	1691.75	1811.64	1803.18	1757.05	1674.49	94.36	273.27
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	1794.36	1822.54	1711.42	1791.57	1797.78	1796.45	1798.99	1857.55	1717.83	1787.61	46.31	134.12
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	2218.44	1733.46	1851.28	2534.21	2300.44	2012.33	1876.98	2324.73	2139.38	2110.14	261.61	757.62
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	2074.20	1893.47	1964.98	1963.63	1866.35	2124.24	1845.83	1971.89	1853.78	1950.93	98.09	284.07
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	1956.21	1860.61	2011.15	1914.12	2020.15	1968.71	2013.42	1901.20	1866.05	1945.74	62.86	182.05
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
72 Isopropyl ether	1603.29	1674.62	1673.98	1668.64	1676.93	1665.61	1752.29	1740.61	1633.26	1676.58	46.47	134.57	2000	2000
73 Vinyl Acetate	1822.00	1897.09	1775.47	1954.36	1918.14	1849.38	1773.45	1506.56	1930.17	1825.18	136.37	394.94	2000	2000
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
79 Ethyl-tert-butyl ether	1680.62	1698.95	1744.65	1759.02	1820.78	1765.83	1823.59	1807.51	1728.22	1758.80	51.59	149.40	2000	2000
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
86 2-Butanone	1718.93	1997.91	1789.77	1970.41	1908.84	2026.98	1936.14	1728.27	2009.26	1898.50	121.65	352.31	2000	2000

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SpRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL		
87 Ethyl Acetate	1716.25	1997.76	2140.83	2102.54	2320.20	1795.83	2259.67	2103.62	2003.39	2048.90	197.40	571.67	2000	2000
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00		
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
99 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$ 104 1,2-Dichloroethane-d4	27065.78	27211.11	27839.35	26921.86	27261.09	27437.37	27796.97	27288.39	27087.91	27323.31	317.07	918.22		
105 tert-Amyl methyl ether	1898.82	1883.77	1874.83	2063.71	1929.81	2037.46	2151.64	2086.73	2020.48	1994.14	100.27	290.38	2000	2000
106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00		
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
110 n-Butanol	1805.09	1680.56	1702.49	1641.93	1728.46	1636.98	2012.85	1909.70	1958.21	1786.25	141.93	411.03	2000	2000

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	25056.76	24865.10	25701.80	25100.41	24712.41	25001.62	25005.75	25024.33	25090.63	25062.09	269.46	780.36

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SPRL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
143 2-Hexanone	1468.29	1603.58	1609.32	1602.55	1560.39	1549.62	1655.20	1643.82	1638.50	1592.36	58.61	169.75	2000 2000
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
151 1-Bromo-2-Chloroethane	1973.65	1911.11	1988.34	1949.81	1904.01	1949.84	1903.35	1999.37	1964.31	1949.31	36.18	104.78	2000 2000
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	26871.86	26931.67	26614.16	26384.82	26782.21	26706.69	26303.23	26768.32	26674.45	26670.82	209.70	607.29
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

PPTV RL SQRL MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	1951.44	1947.16	1977.57	2027.39	2008.69	1987.45	2081.78	2090.32	2136.24	2023.12	66.36	192.19
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	2631.64	2783.53	2686.74	2587.93	2673.01	2725.71	2667.73	2760.52	2834.63	2705.72	77.71	225.05
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	2747.79	2829.99	2973.42	2724.50	2871.60	2809.93	2783.77	2891.54	2843.95	2830.72	76.41	221.28
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	2702.06	2769.93	2767.74	2604.14	2729.64	2813.98	2773.79	2903.83	2934.27	2777.71	100.04	289.72
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

206: RL 2000, SQRL 2000
213: RL 2000, SQRL 2000, MDL Blank 65.15
215: RL 2000, SQRL 2000, MDL Blank 45.73
222: RL 2000, SQRL 2000, MDL Blank 87.49

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
Batch File: /chem/msd3.i/04JUN21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

03MAY21.EPALB-mdl.rpt

MSD-3 Blank MDL

Can# 35157

Report Date : 17-JUN-2021 13:23

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m

Batch File: /chem/msd3.i/05MAY21.b

Instrument Names: msd3.i

Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3050306EPALB	3050307EPALB	3050308EPALB	3050406EPALB	3050407EPALB	3050408EPALB	3050506EPALB	3050507EPALB	3050508EPALB
INJ.DATE:	03-MAY-2021	03-MAY-2021	03-MAY-2021	04-MAY-2021	04-MAY-2021	04-MAY-2021	05-MAY-2021	05-MAY-2021	05-MAY-2021
INJ.TIME:	11:47	13:00	13:29	13:28	14:13	14:42	12:40	13:28	13:58

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1 Freon 134a	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
2 Propylene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
3 1,1-Difluoroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
4 Freon 12	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
5 Chlorodifluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
6 Freon 114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
7 Isobutane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
8 Chloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000
9 Butane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
10 Vinyl Chloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
11 1,3-Butadiene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
12 Bromomethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000
13 Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
14 Isopentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
15 Vinyl Bromide	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
16 Freon 11	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
17 Dichlorofluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
18 Pentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
19 Ethanol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000
20 Ethyl Ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000
21 Acrolein	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000

Reviewer 1 _____ Date: 6/17/21

Reviewer 2 _____ Date: 6/17/21

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m

Batch File: /chem/msd3.i/05MAY21.b

Instrument Names: msd3.i

PPTV

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
22 Freon 113	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
23 1,1-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
24 Acetone 359.44	298.34	251.09	309.57	0.000000	359.44	92.36	167.90	235.09	194.44	212.03	113.07	0.000000	5.00	0.647	327.46	Ratio 1
25 Iodomethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
26 Carbon Disulfide 469.09	339.14	319.54	300.16	139.62	136.38	122.01	154.39	119.39	122.79	194.82	94.71	0.000000	2.00	0.710	274.27	Ratio 1
27 2-Propanol 112.66	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	112.66	0.000000	0.000000	12.52	37.55	0.000000	2.00	0.115	108.75	Ratio 1
28 3-Chloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
29 Acetonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
30 Methylene Chloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	5.00	1.00	0.000000	
31 tert-Butyl alcohol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
32 Methyl tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
33 trans-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
34 Acrylonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
35 Hexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
36 Isopropyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
37 1,1-Dichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
38 Vinyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
39 Ethyl-tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
40 2,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
41 cis-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
42 2-Butanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
43 Ethyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
44 Tetrahydrofuran	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
* 45 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000	
46 Chloroform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
47 Cyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
48 1,1,1-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
49 Carbon Tetrachloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	

Reviewer 1 _____ Date:_____

Reviewer 2 _____ Date:_____

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m

Batch File: /chem/msd3.i/05MAY21.b

Instrument Names: msd3.i

PPTV

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
50 1,1-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
51 2,2,4-Trimethylpentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
52 Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 53 1,2-Dichloroethane-d4	23867.00	23965.00	25269.00	24324.00	25031.00	24883.00	24739.00	25158.00	25187.00	24713.67	534.92	0.000000	2.00	15.95	1549.11	
54 tert-Amyl methyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
55 1,2-Dichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
56 Heptane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
* 57 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000	
58 n-Butanol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
59 Trichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
60 Methylcyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
61 1,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
62 Methyl Methacrylate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
63 1,4-Dioxane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000	
64 Dibromomethane 80,81	33.73	43.38	30.60	51.13	65.68	44.43	49.34	18.84	35.12	41.36	13.62	0.000000	0.400	1.05	39.45	
65 Bromodichloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000	
66 1-Bromo-2-Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
67 cis-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
68 4-Methyl-2-pentanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 69 Toluene-d8	24542.00	24548.00	25114.00	24548.00	24850.00	24479.00	24603.00	25251.00	25182.00	24790.78	313.26	0.000000	2.00	27.33	907.21	
70 Toluene 120,97	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	120.97	62.39	56.94	26.70	43.81	0.000000	0.400	0.210	126.86	Ratio 1
71 Octane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
72 trans-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
73 1,1,2-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
74 Tetrachloroethene 88,47	88.47	42.69	0.000000	59.53	47.20	0.000000	0.000000	0.000000	0.000000	26.43	33.79	0.000000	0.400	0.270	97.85	Ratio 1
75 1,3-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
76 2-Hexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
77 Dibromochloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
78 1,2-Dibromoethane (EDB)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000	
* 79 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000	

PPTV

80	Chlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.300	1.00	0.000000		
81	Ethyl Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
82	Nonane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
83	1,1,1,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
84	m,p-Xylene 273.15	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	273.15	94.60	44.99	45.86	91.28	0.000000	0.500	0.173	264.35	Ratio 1
85	o-Xylene 133.68	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	133.68	32.71	28.38	21.64	44.06	0.000000	0.400	0.170	127.60	Ratio 1
86	Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
87	Bromoform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
88	Cumene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000		
89	Cyclohexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
$ 90	4-Bromofluorobenzene	25896.00	25913.00	25874.00	25941.00	26040.00	26188.00	26321.00	25639.00	25907.00	25968.78	196.19	0.000000	2.00	45.71	568.17	
91	Bromobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
92	1,1,2,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
93	Propylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
94	1,2,3-Trichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
95	trans-1,4-Dichloro-2-butene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
96	Decane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
97	4-Ethyltoluene 126.94	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	126.94	29.81	0.000000	17.42	42.24	0.000000	0.400	0.142	122.32	Rat:
98	2-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
99	1,3,5-Trimethylbenzene 77.63	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	77.63	5.00	0.000000	9.18	25.72	0.000000	0.400	0.123	74.49	Rat.
100	alpha Methyl Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
101	tert-Butylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.800	1.00	0.000000		
102	1,2,4-Trimethylbenzene 185.07	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	185.07	47.06	23.44	28.40	60.99	0.000000	0.500	0.161	176.63	Rat.
103	sec-Butylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000		
104	p-Cymene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500	1.00	0.000000		
105	1,3-Dichlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
106	1,4-Dichlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
107	alpha-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
108	Undecane 94.31	74.50	80.07	0.000000	85.85	94.31	68.53	77.68	68.54	69.88	68.82	27.19	0.000000	0.500	1.00	0.000000	
109	Butylbenzene 27.37	27.37	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.04	9.12	0.000000	0.800	0.874	78.74	Ratio 1
110	1,2-Dichlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	7.95	0.000000	0.000000	0.884	2.65	0.000000	0.400	0.115	7.68	Ratio 1
111	1,2-Dibromo-3-chloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000		
112	Dodecane 42.10	0.000000	0.000000	0.000000	11.78	13.12	12.16	42.10	17.61	0.000000	10.75	13.70	0.000000	0.800	0.271	39.66	Ratio 1
113	1,2,4-Trichlorobenzene 65.15	65.15	36.30	12.86	45.67	0.000000	0.000000	39.09	14.59	0.000000	23.74	23.67	0.000000	2.00	0.346	68.55	Ratio 1
114	Hexachlorobutadiene 45.73	45.73	14.83	0.000000	14.55	0.000000	0.000000	32.75	12.37	0.000000	13.36	16.36	0.000000	2.00	0.282	47.39	Ratio 1
115	Naphthalene 55.54	15.72	12.13	7.63	12.71	9.23	3.10	32.18	14.80	12.07	13.29	8.07	0.000000	0.800	0.569	23.36	Ratio 1
116	1,2,3-Trichlorobenzene 87.49	87.49	47.85	0.000000	46.72	26.16	23.57	49.71	16.01	0.000000	33.06	27.97	0.000000	2.00	0.408	81.01	Ratio 1

Reviewer 1 _____ Date:_____

Reviewer 2 _____ Date:_____

MSD-3 MDL Case Narrative

A Method Detection Limit study for select TA TO-15 specials was performed on 05/03/21, 05/04/24, and 05/05/21.

The MDL was performed at:

- 0.4ppbv(5.0ppbv->0.4ppbv) for 1,1,1,2-tetrachloroethane;16ml of #3018-1908

MDL verification was analyzed on 06/03/21:

- 3060308: (for 1,1,1,2-tetrachloroethane only). 5.0ppbv->0.25ppbv. 10ml of #3018-2078

No MDL values were taken from the MDL blank.

MDL expires 5/05/22

03MAY21: 1112PCE-mdl.rp

1,1,1,2-Tetrachloroethane only

TO15Quad MDL/MSD

Standard 3018-1908 (5.0ppbv)

16mL load volume

Spike concentration 0.4ppbv

Report Date : 03-Jun-2021 08:29

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3050309	3050310	3050311	3050409	3050410	3050411	3050509	3050510	3050511
INJ.DATE:	03-MAY-2021	03-MAY-2021	03-MAY-2021	04-MAY-2021	04-MAY-2021	04-MAY-2021	05-MAY-2021	05-MAY-2021	05-MAY-2021
INJ.TIME:	13:57	14:24	14:52	15:10	15:38	16:05	14:25	14:53	15:21

PPTV

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 6/3/21
Reviewer 2 _____ Date: 6/7/21

$\bar{X}$ = 73.89
$2\bar{X}$ = 147.78
$3\bar{X}$ = 221.67
$4\bar{X}$ = 295.56

MDL verification
standard # 3018-2078 (5ppbv)
10 mL volume File# 3060309
spike concentration
0.25ppbv

The ratio of the mean recovered concentration & the MDL is between 1-20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

ppTV RL

MDL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	526.98	516.97	486.41	540.40	522.14	530.23	475.21	539.09	553.76	521.24	25.52	73.89
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

400/500/2000

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
*	90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
	91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	99 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	104 1,2-Dichloroethane-d4	24697.90	24426.87	25043.25	25132.82	24889.42	25163.20	24848.38	25046.03	25137.35	24931.69	244.97	709.44
	105 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
*	108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
	109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	110 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 134 Toluene-d8	24676.03	24895.10	24771.68	24765.70	24403.43	24714.67	24398.32	24695.85	24589.38	24656.69	166.82	483.12

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
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Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	26453.98	26346.98	26114.19	26233.78	26044.32	26017.80	26203.48	25748.42	26019.91	26131.43	208.00	602.36
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/03MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/03MAY21.b
Inst ID: msd3.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

03MAY21: EPALB1112PCE_mdl.rp

MSD3 Blank 1,1,1,2 PCE MDL
can # 35157

Report Date : 04-JUN-2021 10:42 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd3.i/05MAY21.b/321q0317a.m
Batch File: /chem/msd3.i/05MAY21.b
Instrument Names: msd3.i
Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	3050306LB1112PCE	3050307LB1112PCE	3050308LB1112PCE	3050406LB1112PCE	3050407LB1112PCE	3050408LB1112PCE	3050506LB1112PCE	3050507LB1112PCE	3050508LB
INJ.DATE:	03-MAY-2021	03-MAY-2021	03-MAY-2021	04-MAY-2021	04-MAY-2021	04-MAY-2021	05-MAY-2021	05-MAY-2021	05-MAY-2021
INJ.TIME:	11:47	13:00	13:29	13:28	14:13	14:42	12:40	13:28	13:58

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
* 1 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 2 1,2-Dichloroethane-d4	23867.00	23965.00	25269.00	24324.00	25031.00	24883.00	24739.00	25158.00	25187.00	24713.67	534.92	0.000000	2.00	15.95	1549.11
* 3 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 4 Toluene-d8	24542.00	24548.00	25114.00	24548.00	24850.00	24479.00	24603.00	25251.00	25182.00	24790.78	313.26	0.000000	2.00	27.33	907.21
* 5 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
6 1,1,1,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
$ 7 4-Bromofluorobenzene	25896.00	25913.00	25873.00	25941.00	26040.00	26188.00	26321.00	25639.00	25907.00	25968.67	196.25	0.000000	2.00	45.69	568.34

Reviewer 1 _____ Date: 6/4/21
Reviewer 2 _____ Date: 6/7/21

MSD-P MDL Case Narrative

A Method Detection Limit study for TO-15 method was performed on 10/19/20-10/23/20,10/26/20-10/29/20 & 11/02/20,11/05/20,11/06/20.

The MDL was performed at:

- 0.3 ppbv (5.0ppbv->0.3ppbv) for the 0.3ppbv RL compounds; 12mL of #3018-1674
- 0.4 ppbv (5.0ppbv->0.4ppbv) for the 0.4ppbv RL compounds; 16mL of #3018-1674
- 0.8 ppbv (5.0ppbv->0.8ppbv) for 0.8ppbv RL compounds; 32ml of #3018-1674
- 1.0ppbv (5.0ppbv->1.0ppbv) for chloroethane & ethanol;40ml of 3018-1674 & 40ml of 3018-1682

A Method Detection Limit study for select TA TO-15 specials was performed on 11/27/20-11/29/20.

The MDL was performed at:

- 0.4ppbv(5.0ppbv->0.4ppbv) for 1,1,1,2-tetrachloroethane;16ml of #3018-1644

MDL verifications were analyzed on 11/03/20 & 11/10/20:

- P110313: (0.3ppbv & 0.4ppbv RL compounds). 5.0ppbv->0.25ppv; 10ml of #3018-1682.
- P110314: (0.8ppbv RL compounds). 5.0ppbv->0.6ppbv. 24ml of #3018-1682.
- P110315: (0.5 for naph only). 5.0->5.0ppbv; 200ml of #3018-1682.
- P110312: (for 1,1,1,2-PCA only). 5.0ppbv->0.25ppbv. 10ml of #3018-1644
- P111017: (for chloroethane, ethanol & vinyl acetate). 5.0ppbv->0.75ppbv. 30ml of 3018-1682.

Notes:

1. **The MDL values for the following compounds were taken from the MDL blank:**
    a. Dibromomethane (0.07607ppbv)
    b. Acetone (0.48647ppbv)
    c. Iodomethane (0.06508ppbv)
    d. Carbon disulfide (0.1958ppbv)
    e. Decane (0.57314ppbv)
    f. Undecane(0.1836ppbv)
    g. Dodecane (0.71923ppbv)
    h. Naphthalene (0.38524ppbv)

2. The ratio of the mean recovered concentration and the MDL value for naphthalene and dodecane recovered outside of 1-20.
3. The MDL verification for chloroethane and ethanol is less than 2X the mean MDL.

MDL Expires 10/29/21

0.3 mdl.rp

TO15 Quad MDL MSD-P
Standard 3018-1674 (5.0ppbv)
12mL load volume
Spike concentration: 0.3ppbv

Report Date : 28-Oct-2020 16:45

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p101908	p101909	p101910	p102008	p102009	p102010	p102107	p102108	p102109
INJ.DATE:	19-OCT-2020	19-OCT-2020	19-OCT-2020	20-OCT-2020	20-OCT-2020	20-OCT-2020	21-OCT-2020	21-OCT-2020	21-OCT-2020
INJ.TIME:	14:06	14:34	15:01	16:26	16:54	17:21	15:23	15:51	16:19

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

$\bar{x} = 70.54$
$2\bar{x} = 141.07$
$3\bar{x} = 211.62$
$4\bar{x} = 282.16$

Ratio of the mean recovered concentration and the MDL value is between 1 & 20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

PPTV RL(PPTV) Sp RL(PPTV) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	217.02	219.07	292.15	253.35	258.29	195.74	292.58	280.15	220.83	247.69	36.00	104.26
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

no spike in 500 — 300 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv	RL (ppbv)	SP RL (ppbv)	Blank
87	Ethyl Acetate	201.00	285.05	246.94	220.66	323.49	229.31	299.26	256.43	286.92	261.01	40.42	117.05		2000	300	—
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
89	Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				—
92	Chloroform	242.52	244.52	264.08	247.68	239.93	283.26	261.71	270.85	264.59	257.68	14.79	42.84		500	300	
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
94	Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
96	1,1,1-Trichloroethane	292.64	289.12	314.87	273.07	292.46	311.97	284.37	293.95	306.68	295.46	13.50	39.11		500	300	—
97	Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
101	2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
102	Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
$ 104	1,2-Dichloroethane-d4	23662.67	23877.71	24079.59	23563.77	24206.96	24182.62	23963.20	24552.71	24218.03	24034.14	305.26	884.02				
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
106	1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
107	Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	248.45	319.45	282.47	291.32	274.66	272.30	278.78	242.30	239.06	272.09	25.76	74.60	500	300	—
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24585.67	24787.41	24622.65	24917.45	24550.68	25002.95	24999.39	25581.69	24685.96	24859.31	321.49	931.02			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ppbv RL(pptv) SpRL(pptv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	274.66	274.06	286.73	307.61	281.73	317.24	284.89	304.85	280.24	290.22	15.66	45.36
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 300 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	24680.65	24394.98	24458.85	24972.60	24217.99	24821.47	24904.35	25061.39	25327.68	24760.00	354.77	1027.42
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

0.4mdl.rp

TO15 Quad MDL - MSD-P
Standard 3018-1674 (5.0ppbv)
16ml load volume
spike concentration: 0.4ppbv

Report Date : 28-Oct-2020 18:51

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102207	p102208	p102209	p102307	p102308	p102309	p102606	p102607	p102608
INJ.DATE:	22-OCT-2020	22-OCT-2020	22-OCT-2020	23-OCT-2020	23-OCT-2020	23-OCT-2020	26-OCT-2020	26-OCT-2020	26-OCT-2020
INJ.TIME:	16:40	17:08	17:35	14:33	15:01	15:28	11:55	12:23	12:51

pptv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(pptv)	SpRL(pptv)	Blank
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
5 Propylene	436.27	459.07	358.71	365.97	442.84	407.04	328.83	315.33	395.64	389.97	51.11	148.02	2,000	400	—
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
8 Freon 12	368.05	362.51	350.90	422.39	382.44	336.13	389.94	336.87	366.98	368.47	27.28	79.01	500	400	—
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
10 Freon 114	402.19	319.34	374.64	343.74	334.54	363.82	297.84	361.33	350.45	349.77	30.80	89.20	500	400	—
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

$\bar{x} = 93.579$
$2\bar{x} = 187.16$
$3\bar{x} = 280.74$
$4\bar{x} = 374.32$

The ratio of the mean recovered concentration & the MDL value is b/w 1 & 20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SP RL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
19 Vinyl Chloride	238.72	286.52	271.11	333.74	362.20	338.00	255.39	295.79	250.02	292.39	43.60	126.26	500	400	—
20 1,3-Butadiene	312.68	378.59	382.05	250.04	280.91	275.23	257.72	279.89	265.49	298.07	49.87	144.41	500	400	—
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
33 Freon 11	457.24	407.10	435.95	369.75	393.31	349.16	378.67	348.37	383.63	391.46	36.91	106.88	500	400	—
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
43 Freon 113	426.15	433.79	441.55	364.87	456.53	443.18	409.02	415.07	401.94	421.35	27.52	79.69	500	400	—
44 1,1-Dichloroethene	411.86	277.89	289.34	245.03	323.41	408.62	342.89	361.09	322.12	331.36	56.67	164.11	500	800	—
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
59 Methylene Chloride	372.76	312.97	335.71	286.43	401.04	334.94	335.25	305.15	310.05	332.70	35.53	102.89	5000	400	60.72
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	pptv RL(pptv)	spRL(pptv)	Blank
64 trans-1,2-Dichloroethe	313.59	405.50	314.93	359.93	369.92	296.05	382.07	269.64	318.20	336.65	44.63	129.25	500	400	—
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
66 Acrylonitrile	340.64	301.35	399.89	330.73	361.11	300.84	267.26	315.86	273.74	321.27	42.21	122.24	2000	800	—
67 Hexane	284.59	274.85	274.18	282.13	331.11	344.69	341.12	289.67	342.62	307.22	31.56	91.39	500	800	—
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
85 cis-1,2-Dichloroethene	364.42	423.15	261.26	309.14	261.64	232.81	264.66	260.96	254.08	292.46	62.51	181.02	500	400	—
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
87	Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
89	Tetrahydrofuran	300.42	300.83	294.38	309.82	323.07	338.59	237.00	237.36	280.14	291.29	34.92	101.13	500	800	—
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
92	Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			—
94	Cyclohexane	333.63	372.37	338.12	334.85	386.70	337.43	317.34	337.97	288.47	338.54	28.42	82.29	500	400	
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
96	1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
97	Carbon Tetrachloride	351.08	365.90	423.66	373.13	342.96	305.44	373.84	266.92	317.12	346.67	45.69	132.32	500	800	—
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
101	2,2,4-Trimethylpentane	355.69	333.15	292.38	297.05	306.33	311.83	333.39	309.71	308.79	316.48	20.28	58.72	500	400	—
102	Benzene	398.55	338.76	371.15	328.61	335.51	376.93	394.84	330.43	306.37	353.46	32.62	94.47	500	400	—
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 104	1,2-Dichloroethane-d4	25538.41	25119.18	24972.96	25310.46	26037.22	25493.94	22898.21	23988.75	24315.92	24852.78	963.98	2791.69			
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
106	1,2-Dichloroethane	368.16	305.97	383.28	351.01	378.61	339.20	327.18	311.28	361.64	347.37	28.30	81.94	500	800	10.4
107	Heptane	377.00	338.49	321.63	237.39	335.69	324.80	348.25	362.21	369.78	335.03	41.40	119.90	500	500	—
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv RL(ppbv)	Sp RL(ppbv)	Blank
111 Trichloroethene	359.98	366.80	369.81	358.75	381.97	420.18	406.91	394.92	420.70	386.67	24.88	72.05	500	400	—
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	367.27	387.51	438.23	349.97	414.12	402.30	315.92	374.28	442.15	387.97	41.24	119.42	500	400	—
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
118 Dibromomethane	363.07	396.21	400.70	375.65	381.51	404.00	384.97	366.62	423.18	388.43	19.37	56.11	2000	400	76.07
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	280.09	346.41	399.61	350.41	326.89	332.36	325.16	374.56	344.71	342.24	33.38	96.67	500	400	—
127 Methylcyclohexane	421.60	402.15	396.00	283.94	356.13	415.49	365.32	368.56	344.41	372.62	42.80	123.96	~000	400	—
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	349.17	342.85	324.09	329.39	448.82	363.24	372.47	304.65	357.29	354.66	41.09	118.99	500	400	—
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24608.41	24757.16	24060.47	24358.97	24799.49	24544.21	24420.57	24318.45	25304.67	24574.71	356.92	1033.64			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	391.51	314.58	349.24	392.86	398.27	317.52	435.75	346.46	343.20	365.49	41.01	118.76
137 Toluene	393.31	369.84	335.47	374.46	391.89	378.56	364.69	361.01	383.40	372.52	17.82	51.60
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	332.51	308.98	399.68	312.19	350.76	343.89	326.55	353.48	301.43	336.61	30.06	87.07
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	359.42	310.37	399.03	326.09	345.12	374.12	325.48	333.64	335.86	345.46	27.67	80.13
142 Tetrachloroethene	368.16	376.49	362.62	383.34	406.92	446.83	425.80	406.87	406.85	398.21	27.87	80.71
143 2-Hexanone	337.34	364.76	359.28	356.16	308.83	350.55	345.40	353.88	353.41	347.73	16.58	48.02
144 1,3-Dichloropropane	379.58	319.29	400.88	326.89	349.89	313.18	370.24	372.04	373.71	356.19	30.43	88.14
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	399.15	402.43	371.98	328.44	351.93	404.39	388.88	370.10	331.22	372.06	29.51	85.45
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	337.27	380.78	399.90	344.59	425.77	356.23	338.97	345.95	323.51	361.44	33.67	97.51
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	350.04	307.75	414.55	382.37	341.21	376.01	421.98	290.14	387.24	363.48	45.10	130.60
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	381.11	385.02	373.70	279.50	328.49	371.80	390.58	345.71	301.63	350.84	39.78	115.22

ppbv RL(ppbv) SpRL(ppbv) Blank

2000 400 —
500 400 —
500 400 —
500 400 —
500 400 7.09
2000 400 —
2000 400 —
500 400 —
500 800 —
500 400 —
500 800 19.29 ~~46.24~~ GH 11/11/20

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	360.35	388.65	360.30	402.22	263.00	381.05	393.85	328.05	343.58	357.89	43.09	124.79
165 Styrene	363.22	358.96	355.97	332.09	332.19	352.82	322.68	355.25	294.72	340.88	22.41	64.90
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	384.81	405.27	406.78	365.38	370.81	375.07	374.03	369.63	351.46	378.14	18.12	52.48
168 Cumene	358.73	319.23	373.24	314.45	325.75	332.23	371.15	349.17	341.49	342.83	21.76	63.02
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	25111.07	24795.31	25807.35	25214.38	25273.17	25304.26	25170.01	25431.80	25249.38	25261.86	269.17	779.51
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	394.75	382.23	361.14	364.24	388.23	395.06	358.67	355.71	362.71	373.64	16.20	46.93
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	358.34	343.23	365.47	348.41	315.89	358.02	401.15	335.02	403.17	358.74	28.65	82.96
179 1,2,3-Trichloropropane	396.36	433.62	361.53	369.60	353.73	433.59	394.94	293.12	372.73	378.80	43.25	125.25
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

PPTV RL(PPTV) SP RL(PPTV) BLANK

164 o-Xylene: 124.79 | 500 | 400 | 8.96
165 Styrene: 64.90 | 500 | 400 | —
166 2-Heptanone: +++++ | | | —
167 Bromoform: 52.48 | 500 | 400 | —
168 Cumene: 63.02 | 500 | 800 | —
175 1,1,2,2-Tetrachloroeth: 46.93 | 500 | 400 | —
178 Propylbenzene: 82.96 | 500 | 400 | —
179 1,2,3-Trichloropropane: 125.25 | 2000 | 400 | —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv	RL(ppbv)	SPRL(ppbv)	Blank
183 4-Ethyltoluene	328.35	323.51	409.88	350.59	394.94	309.53	348.09	311.33	343.67	346.65	35.09	101.62	500		400	—
184 2-Chlorotoluene	367.12	437.45	399.61	324.10	337.68	379.55	388.66	368.97	399.59	378.08	34.12	98.81	2000		400	—
185 1,3,5-Trimethylbenzene	361.70	382.59	305.37	322.46	290.91	333.22	399.63	316.81	339.41	339.12	35.94	104.09	500		400	11.91
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
188 alpha Methyl Styrene	340.84	346.95	357.65	316.13	311.83	307.88	324.63	323.57	342.20	330.19	17.32	50.16	1000		400	—
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
190 1,2,4-Trimethylbenzene	351.77	366.19	384.29	326.05	339.25	336.74	376.07	351.72	372.74	356.09	19.91	57.67	500		800	40.41
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
192 sec-Butylbenzene	326.70	387.27	334.38	303.10	357.00	376.71	377.82	357.98	334.64	350.62	27.86	80.67	2000		400	—
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
194 p-Cymene	329.01	291.99	322.26	303.61	342.86	308.30	363.77	346.10	361.19	329.90	25.52	73.91	2000		800	491
195 1,3-Dichlorobenzene	396.73	395.68	406.80	347.34	383.69	416.48	403.45	401.34	390.46	393.55	19.74	57.16	500		400	6.61
196 1,4-Dichlorobenzene	397.02	396.80	373.82	336.65	380.96	372.10	379.74	387.84	407.73	381.41	20.51	59.40	500		400	10.61
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
199 alpha-Chlorotoluene	355.07	348.38	383.67	358.47	379.84	352.56	372.19	361.56	392.68	367.16	15.53	44.97	500		800	—
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
202 Butylbenzene	358.91	342.67	328.13	333.54	305.09	329.53	365.04	339.04	387.15	343.23	24.06	69.69	1000		400	45.09
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
204 1,2-Dichlorobenzene	405.81	403.04	358.55	356.29	398.25	390.07	392.01	401.55	406.90	390.27	19.48	56.41	500		400	26.05
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

0.8mdl.rp

TO1S Quad MDL MSD-P
standard 3018-16674 (5.0ppbv)
32mL load volume
Spike concentration: 0.8 ppbv
Naph @ 0.08ppbv

Report Date : 30-Oct-2020 15:35

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102713	p102714	p102715	p102812	p102813	p102814	p102913	p102914	p102915
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	16:13	16:41	17:09	16:20	16:48	17:16	16:09	16:37	17:05

ppbv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(pptv)	SPRL(pptv)	Blank
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
4 Freon 134a	782.35	724.88	886.81	836.87	782.13	915.12	890.85	977.30	953.51	861.09	85.21	246.77	2000	800	-
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
7 1,1-Difluoroethane	828.20	1034.35	526.55	766.58	681.54	895.20	701.39	694.22	904.48	781.39	151.42	438.51	2000	800	-
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
9 Chlorodifluoromethane	854.60	805.17	642.55	827.65	687.63	812.52	1041.61	928.38	684.55	809.41	126.85	367.37	2000	800	-
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
12 Isobutane	719.04	711.25	707.49	729.52	689.89	671.33	801.41	778.78	804.87	734.84	48.61	140.77	2000	800	—
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
15 Chloromethane	882.85	931.18	918.86	751.25	728.44	745.41	1061.42	972.38	1001.77	888.17	121.18	350.93	5000	800	—
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

ms 11/03/20

$\bar{X}$ = ~~253.78~~ ~~254.04~~ 243.95
$2\bar{x}$ = 507.56 508.08 487.90
$3\bar{x}$ = 761.34 762.12 731.85
$4\bar{x}$ = ~~1,015.12~~ ~~1,016.16~~ 975.80

The ratio of the mean recovered concentration to the MDL value is b/w 1-20 for all compounds except dodecane and Naphthalene.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPTV RL(PPTV)	SP RL(PPTV)	Blank
18 Butane	898.47	689.60	606.50	714.19	994.52	733.80	751.23	938.98	1233.61	840.10	194.99	564.68	2000	800	—
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
24 Bromomethane	834.50	796.28	852.48	898.11	761.37	815.39	846.32	919.26	1012.42	859.57	74.89	216.88	5000	800	—
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
31 Isopentane	655.87	662.86	650.61	734.81	705.95	701.65	727.87	655.13	699.75	688.28	32.73	94.78	2000	2000	—
32 Vinyl Bromide	737.71	813.81	758.98	757.93	700.24	661.88	709.79	675.94	746.89	729.24	47.22	136.75	2000	800	—
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
34 Dichlorofluoromethane	778.66	732.59	744.21	814.55	761.68	702.11	748.89	790.16	735.31	756.46	33.93	98.25	2000	800	—
35 Pentane	639.53	701.46	729.10	649.67	678.40	698.89	670.06	598.35	821.94	687.49	63.44	183.72	2000	800	—
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
38 Ethyl Ether	564.60	615.24	558.00	800.06	654.88	660.41	744.34	741.00	309.41	627.55	145.03	420.00	2000	800	—
* ~~39 Ethanol~~	~~569.54~~	~~328.32~~	~~497.33~~	~~641.05~~	~~1160.40~~	~~721.07~~	~~599.91~~	~~403.71~~	~~443.84~~	~~596.13~~	~~244.55~~	~~708.23~~	~~2000~~	~~1000~~ 500	— MS 11/10/20

* Ethanol MDL included in 10ppbv spike

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	699.46	712.62	502.97	856.57	794.32	807.25	756.02	655.40	696.07	720.08	103.32	299.22
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	848.22	800.39	727.29	836.77	676.13	837.53	907.31	713.75	735.23	786.96	76.92	222.76
48 Carbon Disulfide	808.80	840.34	749.99	777.80	747.78	684.04	761.31	799.80	776.40	771.81	44.40	128.59
49 Iodomethane	457.35	451.01	440.43	437.13	459.33	452.25	478.66	430.79	399.77	445.19	22.11	64.02
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	666.68	704.84	695.32	785.79	731.69	795.25	734.79	809.37	796.47	746.69	51.78	149.96
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	852.23	979.94	823.74	485.40	620.09	771.94	735.72	607.16	820.37	744.06	150.57	436.06
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	731.86	716.27	660.84	656.65	700.17	610.38	801.87	579.31	812.61	696.66	79.25	229.52
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	740.42	784.24	698.11	749.56	863.98	769.73	738.29	787.50	724.28	761.79	47.82	138.48
63 Methyl tert-butyl ethe	732.79	675.63	767.02	757.40	730.51	793.25	764.89	693.44	732.19	738.57	37.05	107.30

ppbv RL(ppbv) SpRL(ppbv) Blank

42 2000 2000 —
47 5000 500 497.4
48 1000 800 195.8
49 2000 800 ~~456.4~~ 45.45 ms 11/03/20
52 2000 800 137.2
54 2000 800 —
57 2000 800 —
62 2000 800 —
63 2000 800 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	pptv RL(pptv)	SpRL(pptv)	Blank
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
72 Isopropyl ether	682.23	642.03	666.75	695.31	656.63	696.37	661.77	656.86	696.19	672.68	20.37	58.98	2000	800	—
73 Vinyl Acetate	379.16	510.38	679.89	456.28	594.69	817.23	865.96	319.67	628.92	583.57	186.68	540.62	2000	800	—
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
79 Ethyl-tert-butyl ether	732.15	735.05	698.72	703.42	678.14	735.97	721.12	633.77	751.04	709.93	36.40	105.41	2000	800	—
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
84 2,2-Dichloropropane	856.50	766.31	748.03	737.62	810.23	833.08	893.06	935.10	891.13	830.12	69.98	202.65	2000	800	—
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
86 2-Butanone	494.27	680.84	630.20	636.77	695.03	636.19	496.57	833.87	704.79	645.39	104.97	303.98	2000	800	—

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
99 1,1-Dichloropropene	691.47	788.20	695.94	788.42	758.83	619.78	822.02	955.67	776.77	766.35	94.95	274.96	2000	800	—
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 104 1,2-Dichloroethane-d4	26542.98	25336.38	25035.81	26773.65	27060.55	27089.31	28110.69	28004.75	27657.60	26845.75	1081.60	3132.31			
105 tert-Amyl methyl ether	672.84	754.03	800.25	749.08	911.69	801.21	750.86	870.59	838.98	794.39	72.44	209.80	2000	2000	—
106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
110 n-Butanol	818.67	808.84	787.27	836.16	856.92	901.90	852.85	807.79	844.38	834.98	34.16	98.92	2000	800	68.07

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SP RL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	757.87	628.93	710.27	777.16	558.68	667.00	648.50	874.39	750.66	708.16	93.91	271.96	2000	800	—
117 1,4-Dioxane	765.97	849.41	952.34	642.09	797.15	771.61	800.61	642.99	673.24	766.16	101.84	294.93	2000	800	—
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24078.61	24335.63	24036.51	23516.55	23802.94	23773.37	23590.02	23613.19	24343.15	23898.89	313.75	908.62			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
151 1-Bromo-2-Chloroethane	657.71	773.71	721.48	656.34	733.70	677.29	720.22	717.61	692.34	705.60	38.30	110.92	2000	800	—
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
156 Nonane	649.99	615.89	662.19	649.94	671.72	581.89	713.24	665.35	674.53	653.86	37.29	108.00	2000	800	46.24
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(ppbv)	SPRL(ppbv)	Blank
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
169 Cyclohexanone	848.24	767.43	798.03	808.84	844.16	792.72	752.74	812.64	890.64	812.83	42.72	123.73	2000	800	—
$ 170 4-Bromofluorobenzene	26008.20	26019.99	26097.96	26091.99	26069.47	25566.33	25848.37	26700.26	25817.70	26024.47	306.72	888.26			
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
177 Bromobenzene	806.33	851.30	818.09	815.14	762.80	818.62	765.09	884.18	735.55	806.35	46.17	133.72	2000	800	—
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
181 trans-1,4-Dichloro-2-b	696.47	780.58	811.00	821.84	756.32	754.81	776.59	738.59	930.39	785.18	66.13	191.51	2000	800	
182 Decane	665.03	678.56	590.12	632.67	602.85	585.50	637.99	632.02	612.73	626.39	31.92	92.43	2000	800	573.14

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

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Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(ppbv)	SPRL(ppbv)	Blank
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
189 tert-Butylbenzene	777.35	746.78	784.01	732.15	775.27	697.75	724.53	721.59	728.65	743.12	29.77	86.20	2000	300	32.20
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
201 Undecane	543.26	526.15	549.31	522.63	565.63	525.07	573.32	541.49	521.46	540.92	19.10	55.32	2000	800	183.60
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv RL(ppbv)	SpRL(ppbv)	Blank
206 1,2-Dibromo-3-chloropr	776.96	766.33	816.70	748.77	742.97	795.65	764.63	775.37	776.17	773.73	22.51	65.19	2000	800	—
207 Dodecane	669.70	747.33	708.32	688.30	749.03	735.59	633.57	674.71	655.94	695.83	41.64	120.59	2000	800	719.23
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
213 1,2,4-Trichlorobenzene	1024.36	1024.97	1115.91	982.45	1070.32	954.95	934.25	1004.44	1088.59	1022.25	60.90	176.36	2000	2000	65.11
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
215 Hexachlorobutadiene	1087.27	1049.68	989.99	1016.98	1194.77	1118.77	1104.49	1141.26	1112.79	1090.67	63.37	183.51	2000	2000	38.6
216 Naphthalene	96.82	117.03	115.70	96.98	95.10	96.49	94.23	93.62	93.19	99.91	9.44	27.33	1000	800	385.
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
222 1,2,3-Trichlorobenzene	1001.11	1201.96	1141.79	1103.14	1149.53	1158.53	1177.05	1141.75	1245.42	1146.70	68.02	196.98	2000	800	129.49
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

1.0mdl.rp

Chloroethane & Ethanol only

TO15 Quad MDL MSD-P
Standards: 3018-1674 & 3018-1682
40mL load volume
Spike concentration: 1.0ppbv (5.0ppbv)

Report Date : 12-NOV-2020 16:23 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/06NOV20.b/p20q1012a.m
Batch File: /chem/msdp.i/06NOV20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

Spiked ID(s) Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p110206	p110207	p110208	p110513	p110514	p110515	p110609	p110610	p110611
INJ.DATE:	02-NOV-2020	02-NOV-2020	02-NOV-2020	05-NOV-2020	05-NOV-2020	05-NOV-2020	06-NOV-2020	06-NOV-2020	06-NOV-2020
INJ.TIME:	14:13	14:41	15:09	20:32	21:00	21:28	14:11	14:39	15:06

ppbv PL Blar

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1 Chloroethane	949.12	1022.70	806.30	825.92	1224.10	964.54	1180.50	905.28	1303.10	1020.17	177.54	0.000000	2.00	1.98	514.16
2 Ethanol	794.28	1176.80	541.34	587.68	928.34	802.22	478.16	696.21	766.27	752.37	213.76	0.000000	2.00	1.22	619.05
* 3 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 4 1,2-Dichloroethane-d4	27635.00	26462.00	27301.00	26650.00	26719.00	27118.00	27404.00	26779.00	27199.00	27029.67	394.08	0.000000	0.400	23.68	1141.26
* 5 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 6 Toluene-d8	24478.00	23898.00	24046.00	24964.00	25032.00	24902.00	24547.00	25074.00	25358.00	24699.89	492.08	0.000000	0.400	17.33	1425.08
* 7 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 8 4-Bromofluorobenzene	26376.00	26376.00	25359.00	23859.00	24195.00	23898.00	24336.00	24526.00	24254.00	24797.67	995.84	0.000000	0.400	8.60	2883.95

Reviewer 1 _____ Date: 11/12/20
Reviewer 2 _____ Date: 11/12/20

The ratio of the mean recovered concentration & the MDL is b/w 1-20.

$\bar{x} = 566.60$

$2\bar{x} = 1133.21$

1112pca_mdl.rp

TO15 Quad MDL MSD-P
Standard 3018-1644 (5.0ppbv)

1,1,1,2-Tetrachloroethane only

16mL load volume
Spike Concentration 0.4ppbv

Report Date : 10-NOV-2020 15:36 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102710	p102711	p102712	p102809	p102810	p102811	p102910	p102911	p102912
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	14:49	15:17	15:45	14:57	15:25	15:53	14:46	15:14	15:42

RTV RL Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
* 1 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 2 1,2-Dichloroethane-d4	24573.00	24807.00	24616.00	25011.00	26208.00	26456.00	27161.00	26313.00	27385.00	25836.67	1102.74	0.000000	2.00	8.09	3193.55
* 3 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$ 4 Toluene-d8	24075.00	24304.00	24661.00	24305.00	23479.00	23880.00	24032.00	24417.00	23597.00	24083.33	385.46	0.000000	2.00	21.57	1116.30
* 5 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
6 1,1,1,2-Tetrachloroethane	379.06	447.57	427.78	423.52	384.11	446.89	435.94	349.79	387.48	409.13	34.82	0.000000	2.00	4.06	100.83
$ 7 4-Bromofluorobenzene	25482.00	25724.00	25783.00	26216.00	25959.00	25799.00	26068.00	25824.00	25833.00	25854.22	209.93	0.000000	2.00	42.53	607.95

80

Reviewer 1 _____ Date: 11/10/20
Reviewer 2 _____ Date: 11/12/20

The ratio of the mean recovered concentration & the MDL is b/w 1-20.

$\bar{x} = 100.83$

$2\bar{x} = 201.66$

$3\bar{x} = 302.49$

$4\bar{x} = 403.32$

blank_mdl.rp

MSD-P Blank MDL
can #s 33665 & 497

Report Date : 03-NOV-2020 17:44

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102707EPALB	p102708EPALB	p102709EPALB	p102806EPALB	p102807EPALB	p102808EPALB	p102907EPALB	p102908EPALB	p102909EPALB
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	13:05	13:52	14:22	12:51	14:00	14:29	12:51	13:49	14:18

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1	Freon 134a	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
2	Propylene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
3	1,1-Difluoroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
4	Freon 12	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
5	Chlorodifluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
6	Freon 114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
7	Isobutane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
8	Chloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
9	Butane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
10	Vinyl Chloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
11	1,3-Butadiene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
12	Bromomethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
13	Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
14	Isopentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
15	Vinyl Bromide	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
16	Freon 11	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
17	Dichlorofluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
18	Pentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
19	Ethanol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
20	Ethyl Ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
21	Acrolein	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000

Reviewer 1 _____ Date: 11/03/20
Reviewer 2 _____ Date: 11/11/20

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m

Batch File: /chem/msdp.i/29OCT20.b

Instrument Names: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
22 Freon 113	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
23 1,1-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
24 Acetone 497.49	331.00	354.71	246.63	201.44	376.96	233.77	173.33	355.39	249.83	280.34	74.98	0.000000	0.400	1.29	217.15	
25 Iodomethane 65.08	65.08	27.98	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	10.34	22.52	0.000000	2.00	0.159	65.21	Ratio 1 t
26 Carbon Disulfide 195.78	151.31	148.10	133.40	158.96	153.20	166.49	113.13	146.20	117.68	143.16	18.17	0.000000	0.400	2.72	52.62	
27 2-Propanol 137.20	69.67	88.64	14.84	42.56	56.13	41.38	31.21	93.32	82.38	57.79	27.42	0.000000	0.400	0.728	79.41	Ratio 1 t
28 3-Chloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
29 Acetonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
30 Methylene Chloride 60.72	0.000000	0.000000	0.000000	60.72	0.000000	0.000000	0.000000	0.000000	0.000000	6.75	20.24	0.000000	0.400	0.115	58.61	Rat
31 tert-Butyl alcohol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
32 Methyl tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
33 trans-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
34 Acrylonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
35 Hexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
36 Isopropyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
37 1,1-Dichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
38 Vinyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
39 Ethyl-tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
40 2,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
41 cis-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
42 2-Butanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
43 Ethyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 44 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	
45 Tetrahydrofuran	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
46 Chloroform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
47 Cyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
48 1,1,1-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
49 Carbon Tetrachloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	

Reviewer 1 _____ Date:_____

Reviewer 2 _____ Date:_____

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
50 1,1-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
51 2,2,4-Trimethylpentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
52 Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 53 1,2-Dichloroethane-d4	25449.00	26875.00	26033.00	28600.00	27056.00	27244.00	27238.00	27582.00	27588.00	27073.89	913.17	0.000000	0.400	10.24	2644.53	
54 tert-Amyl methyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
55 1,2-Dichloroethane 10.40	0.000000	0.000000	0.000000	0.000000	10.40	0.000000	0.000000	0.000000	0.000000	1.16	3.47	0.000000	0.400	0.115	10.04	Rati
56 Heptane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 57 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	
58 n-Butanol 68.07	52.43	0.000000	39.24	68.07	0.000000	0.000000	38.26	54.00	0.000000	28.00	27.94	0.000000	0.400	0.346	80.92	Rati
59 Trichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
60 Methylcyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
61 1,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
62 Methyl Methacrylate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
63 1,4-Dioxane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
64 Dibromomethane 76.07	0.000000	0.000000	50.85	30.83	0.000000	0.000000	76.07	28.33	20.27	22.93	26.94	0.000000	0.400	0.294	78.01	Ratio 1 t
65 Bromodichloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
66 1-Bromo-2-Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
67 cis-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
68 4-Methyl-2-pentanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 69 Toluene-d8	24332.00	24851.00	24110.00	24640.00	24909.00	24437.00	24430.00	24025.00	23792.00	24391.78	374.29	0.000000	0.400	22.50	1083.95	
70 Octane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
71 Toluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
72 trans-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
73 1,1,2-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
74 Tetrachloroethene 7.09	7.09	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.788	2.36	0.000000	0.400	0.115	6.85	Ratio 1 t
75 1,3-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
76 2-Hexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
77 Dibromochloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
78 1,2-Dibromoethane (EDB)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 79 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	

80	Chlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
81	Ethyl Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
82	Nonane 46.24	0.000000	0.000000	0.000000	46.24	0.000000	0.000000	0.000000	0.000000	0.000000	5.14	15.41	0.000000	0.400	0.115	44.64	Ratio 1 t	
83	1,1,1,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
84	m,p-Xylene 19.29	0.000000	0.000000	0.000000	19.29	0.000000	0.000000	0.000000	0.000000	0.000000	2.14	6.43	0.000000	0.400	0.115	18.62	Ratio 1 t	
85	o-Xylene 8.96	0.000000	0.000000	0.000000	8.96	0.000000	0.000000	0.000000	0.000000	0.000000	0.996	2.99	0.000000	0.400	0.115	8.65	Ratio 1 t	
86	Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
87	Bromoform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
88	Cumene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
89	Cyclohexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
$ 90	4-Bromofluorobenzene	26249.00	25487.00	25699.00	25494.00	25682.00	25924.00	26381.00	25900.00	26007.00	25869.22	312.25	0.000000	5.00	1.00	0.000000		
91	1,1,2,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	28.61	904.27		
92	Bromobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
93	Propylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000		
94	1,2,3-Trichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
95	trans-1,4-Dichloro-2-butene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000		
96	4-Ethyltoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
97	Decane 573.14	491.02	405.05	339.69	573.14	403.12	0.000000	563.04	396.70	325.06	388.54	170.65	0.000000	0.400	0.786	494.19	Rati	
98	2-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
99	1,3,5-Trimethylbenzene 11.91	7.14	11.91	0.000000	0.000000	0.000000	0.000000	10.79	0.000000	0.000000	3.32	5.13	0.000000	0.400	0.223	14.85	Rati	
100	alpha Methyl Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
101	tert-Butylbenzene 32.20	32.20	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.58	10.73	0.000000	0.400	0.115	31.09	Rati	
102	1,2,4-Trimethylbenzene 40.41	0.000000	11.59	3.17	40.41	0.000000	0.000000	0.000000	20.21	0.000000	8.38	13.94	0.000000	0.400	0.207	40.37	Rati	
103	sec-Butylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
104	p-Cymene 4.91	4.91	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.545	1.64	0.000000	0.400	0.115	4.74	Ratio 1 t	
105	1,3-Dichlorobenzene 6.61	0.000000	6.61	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.735	2.20	0.000000	0.400	0.115	6.38	Ratio 1 t	
106	1,4-Dichlorobenzene 10.61	0.000000	0.000000	0.000000	10.61	0.000000	0.000000	0.000000	0.000000	0.000000	1.18	3.54	0.000000	0.400	0.115	10.25	Ratio 1 t	
107	alpha-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000		
108	Undecane 183.60	0.000000	0.000000	106.80	130.26	91.15	137.17	174.19	146.33	183.60	107.72	67.57	0.000000	0.400	0.551	195.68	Ratio 1 t	
109	Butylbenzene 45.09	26.38	12.90	0.000000	45.09	0.000000	0.000000	14.12	0.000000	0.000000	10.94	15.88	0.000000	0.400	0.238	45.98	Ratio 1 t	
110	1,2-Dichlorobenzene 26.05	26.05	0.000000	0.000000	13.71	0.000000	0.000000	0.000000	0.000000	0.000000	4.42	9.29	0.000000	0.400	0.164	26.91	Ratio 1 t	
111	1,2-Dibromo-3-chloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000		
112	Dodecane 719.23	0.000000	66.26	60.12	719.23	236.24	131.75	184.35	143.99	116.87	184.31	212.46	0.000000	0.400	0.300	615.27	Ratio 1 t	
113	1,2,4-Trichlorobenzene 65.18	65.18	48.80	15.77	46.15	24.18	0.000000	13.22	59.47	0.000000	30.31	25.09	0.000000	0.400	0.417	72.67	Ratio 1 t	
114	Hexachlorobutadiene 38.61	0.000000	0.000000	0.000000	38.61	0.000000	0.000000	0.000000	0.000000	0.000000	4.29	12.87	0.000000	0.400	0.115	37.27	Ratio 1 t	
115	Naphthalene 385.24	42.99	32.63	22.36	385.24	178.02	96.40	0.000000	0.000000	34.33	88.00	124.65	0.000000	0.400	0.244	360.98	Ratio 1 t	
116	1,2,3-Trichlorobenzene 129.49	129.49	0.000000	0.000000	74.71	47.26	0.000000	0.000000	0.000000	0.000000	27.94	46.85	0.000000	0.400	0.206	135.67	Ratio 1 t	

Reviewer 1 _____ Date: 11/03/20

Reviewer 2 _____ Date: _____

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 2107260A-26A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072502**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 10:46 AM**

Compound	%Recovery
1,1,1,2-Tetrachloroethane	101
1,1,1-Trichloroethane	91
1,1,2,2-Tetrachloroethane	99
1,1,2-Trichloroethane	98
1,1-Dichloroethane	97
1,1-Dichloroethene	96
1,1-Difluoroethane	104
1,2,3-Trichloropropane	103
1,2,4-Trichlorobenzene	80
1,2,4-Trimethylbenzene	99
1,2-Dibromo-3-chloropropane	96
1,2-Dibromoethane (EDB)	101
1,2-Dichlorobenzene	102
1,2-Dichloroethane	102
1,2-Dichloropropane	78
1,3,5-Trimethylbenzene	100
1,3-Butadiene	103
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	102
1,4-Dioxane	100
2,2,4-Trimethylpentane	91
2-Butanone (Methyl Ethyl Ketone)	95
2-Hexanone	97
2-Propanol	98
3-Chloropropene	94
4-Ethyltoluene	100
4-Methyl-2-pentanone	83
Acetone	99
Acrolein	96
Acrylonitrile	84
alpha-Chlorotoluene	94
Benzene	99
Bromodichloromethane	100
Bromoform	106
Bromomethane	103
Carbon Disulfide	106
Carbon Tetrachloride	99
Chlorobenzene	99
Chloroethane	103
Chloroform	96
Chloromethane	122
cis-1,2-Dichloroethene	91

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Client Sample ID: CCV

Lab ID#: 2107260A-26A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072502**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 10:46 AM**

Compound	%Recovery
cis-1,3-Dichloropropene	91
Cumene	100
Cyclohexane	87
Dibromochloromethane	107
Dibromomethane	119
Ethanol	88
Ethyl Acetate	96
Ethyl Benzene	102
Ethyl-tert-butyl ether	91
Freon 11	110
Freon 12	108
Freon 113	104
Freon 114	107
Freon 134a	110
Heptane	89
Hexachlorobutadiene	83
Hexachloroethane	100
Hexane	94
Iodomethane	116
Isopropyl ether	93
m,p-Xylene	99
Methyl tert-butyl ether	95
Methylene Chloride	102
Naphthalene	60
o-Xylene	98
Propylbenzene	101
Propylene	99
Styrene	101
tert-Amyl methyl ether	94
tert-Butyl alcohol	94
Tetrachloroethene	105
Tetrahydrofuran	87
Toluene	94
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	91
trans-1,3-Dichloropropene	98
Trichloroethene	101
Vinyl Acetate	94
Vinyl Bromide	103
Vinyl Chloride	110

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107260A-26A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 10:46 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072502.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2021 10:46
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2031
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 26-Jul-2021 10:56 ugdc Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	266266	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	204903			48.46- 108.46	76.95
5.270	5.270 (1.000)	49	381544			120.39- 180.39	143.29
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.166	6.166 (1.000)	114	910055	25.0000		80.00- 120.00	100.00
6.166	6.166 (1.000)	88	136893			0.00- 45.52	15.04
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	785948	25.0000		80.00- 120.00	100.00
8.612	8.612 (1.000)	82	416738			25.46- 85.46	53.02
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	354245	25.0000	24.176	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	187494			21.66- 81.66	52.93
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	873625	25.0000	23.307	80.00- 120.00	100.00
7.387	7.387 (1.198)	70	97550			0.00- 41.47	11.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	584943			36.47- 96.47	66.96
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	518103	25.0000	24.922	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	595838			93.06- 153.06	115.00
9.601	9.601 (1.115)	176	484150			62.87- 122.87	93.45
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	349826	50.0000	55.215	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	278348			51.82- 111.82	79.57
1.479	1.479 (0.280)	51	786082			194.91- 254.91	224.71
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	318314	50.0000	49.492	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	212013			35.61- 95.61	66.60
1.423	1.423 (0.269)	39	238842			42.66- 102.66	75.03
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	217211	50.0000	51.810	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	786082			321.86- 381.86	361.90
1.451	1.451 (0.275)	47	168893			45.34- 105.34	77.76
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	999436	50.0000	53.882	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	321374			2.63- 62.63	32.16
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	107053	50.0000	52.514	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	786082			719.76- 779.76	734.29
10 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.296)	135	737419	50.0000	53.655	80.00- 120.00	100.00
1.563	1.563 (0.296)	137	236421			2.12- 62.12	32.06
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	738886	50.0000	51.114	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	240693			2.44- 62.44	32.58
1.577	1.577 (0.298)	58	25638			0.00- 33.26	3.47
15 Chloromethane					CAS #: 74-87-3		
1.647	1.647 (0.312)	50	470612	50.0000	61.045	80.00- 120.00	100.00
1.647	1.647 (0.312)	52	150421			2.41- 62.41	31.96
18 Butane					CAS #: 106-97-8		
1.703	1.703 (0.322)	58	97490	50.0000	53.547	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.703	1.703 (0.322)	43	734674			727.41- 787.41	753.59
19 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.745 (0.330)	62	454079	50.0000	55.042	80.00- 120.00	100.00
1.745	1.745 (0.330)	64	134418			1.28- 61.28	29.60
20 1,3-Butadiene					CAS #: 106-99-0		
1.759	1.759 (0.333)	54	388933	50.0000	51.442	80.00- 120.00	100.00
1.759	1.759 (0.333)	39	357595			69.23- 129.23	91.94
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	337317	50.0000	51.700	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	317192			62.78- 122.78	94.03
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	198780	50.0000	51.330	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	61074			1.44- 61.44	30.72
2.206	2.206 (0.417)	49	66247			4.12- 64.12	33.33
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	492436	50.0000	49.726	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	344959			38.82- 98.82	70.05
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	366831	50.0000	51.711	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	343251			63.14- 123.14	93.57
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	1075836	50.0000	54.819	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	698910			35.12- 95.12	64.96
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	855384	50.0000	54.523	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	261434			0.74- 60.74	30.56
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	777952	50.0000	49.308	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	129210			0.00- 45.97	16.61
2.500	2.500 (0.473)	72	65682			0.00- 38.10	8.44
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	170588	50.0000	48.224	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	301085			147.68- 207.68	176.50
2.780	2.780 (0.526)	45	389012			206.40- 266.40	228.04

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	69574	50.0000	43.822	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	390416			523.01- 583.01	561.15
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	126650	50.0000	48.071	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	179381			110.33- 170.33	141.64
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	694639	50.0000	51.777	80.00- 120.00	100.00
3.032	3.032 (0.574)	153	443156			33.72- 93.72	63.80
3.032	3.032 (0.574)	101	845298			89.67- 149.67	121.69
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	387461	50.0000	47.949	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	238074			33.39- 93.39	61.44
3.074	3.074 (0.582)	61	763869			163.82- 223.82	197.15
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	221626	50.0000	49.639	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	754088			299.66- 359.66	340.25
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	1061384	50.0000	52.792	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	1004798	50.0000	57.796	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	472344			14.58- 74.58	47.01
52 2-Propanol					CAS #: 67-63-0		
3.396	3.396 (0.643)	45	788877	50.0000	49.130	80.00- 120.00	100.00
3.396	3.396 (0.643)	43	165202			0.00- 48.61	20.94
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	163590	50.0000	47.262	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	565603			338.06- 398.06	345.74
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	341919	50.0000	48.634	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	184623			21.81- 81.81	54.00
3.633	3.633 (0.688)	38	42528			0.00- 41.86	12.44
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	545646	50.0000	51.065	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	331745			30.77- 90.77	60.80
3.717	3.717 (0.703)	51	170474			1.39- 61.39	31.24

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	945655	50.0000	46.921	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	221585			0.00- 51.05	23.43
3.857	3.857 (0.730)	57	102963			0.00- 41.68	10.89
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	1029263	50.0000	47.316	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	304038			0.00- 58.86	29.54
3.941	3.941 (0.746)	41	299975			0.00- 57.27	29.14
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	248696	50.0000	45.733	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	670763			244.59- 304.59	269.71
3.969	3.969 (0.751)	96	389342			129.84- 189.84	156.55
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	275979	50.0000	42.287	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	331739			88.50- 148.50	120.20
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	696078	50.0000	47.208	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	429689			32.99- 92.99	61.73
4.179	4.179 (0.791)	86	87295			0.00- 42.56	12.54
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	737757	50.0000	48.653	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	225468			0.76- 60.76	30.56
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1444722	50.0000	46.428	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	319206			0.00- 51.37	22.09
4.445	4.445 (0.841)	59	166651			0.00- 41.09	11.54
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	87699	50.0000	47.041	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1218940			1391.63-1451.63	1389.91
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1370193	50.0000	45.610	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	464110			3.22- 63.22	33.87
4.809	4.809 (0.910)	41	272933			0.00- 48.12	19.92
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	660877	50.0000	46.783	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	213957			2.00- 62.00	32.37
5.005	5.005 (0.947)	97	155224			0.00- 53.36	23.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.047 (0.955)	98	245559	50.0000	45.553	80.00- 120.00	100.00
5.047	5.047 (0.955)	96	381634			127.22- 187.22	155.41
5.047	5.047 (0.955)	61	737722			283.85- 343.85	300.43
86 2-Butanone					CAS #: 78-93-3		
5.061	5.061 (0.958)	72	178555	50.0000	47.421	80.00- 120.00	100.00
5.075	5.075 (0.960)	43	1860768			1055.75-1115.75	1042.13
5.061	5.061 (0.958)	57	72659			10.59- 70.59	40.69
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.089 (0.963)	45	148453	50.0000	47.825	80.00- 120.00	100.00
5.047	5.047 (0.955)	61	737722			450.31- 510.31	496.94
5.089	5.089 (0.963)	70	84709			30.42- 90.42	57.06
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	463837	50.0000	43.685	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	152625			2.92- 62.92	32.90
5.270	5.270 (0.997)	72	161185			3.54- 63.54	34.75
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	801198	50.0000	47.993	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	515993			34.71- 94.71	64.40
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	461309	50.0000	43.718	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	680088			120.40- 180.40	147.43
5.438	5.438 (1.029)	41	382247			54.20- 114.20	82.86
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.452 (1.032)	97	856832	50.0000	45.662	80.00- 120.00	100.00
5.452	5.452 (1.032)	99	544649			33.76- 93.76	63.57
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	856666	50.0000	49.568	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	898974			73.68- 133.68	104.94
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	203561	50.0000	49.151	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	535195			231.09- 291.09	262.92
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2093171	50.0000	45.394	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	658591			1.12- 61.12	31.46
5.774	5.774 (1.093)	41	594060			0.00- 57.49	28.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	1025322	50.0000	49.372	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	245340			0.00- 53.80	23.93
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	261639	50.0000	47.250	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	1032457			365.20- 425.20	394.61
5.858	5.858 (0.950)	55	340008			91.31- 151.31	129.95
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	608662	50.0000	50.907	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	191015			1.20- 61.20	31.38
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	365989	50.0000	44.743	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	725864			179.02- 239.02	198.33
5.942	5.942 (0.964)	57	422356			84.85- 144.85	115.40
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.030)	56	307642	50.0000	46.217	80.00- 120.00	100.00
6.348	6.348 (1.030)	41	214113			40.21- 100.21	69.60
6.348	6.348 (1.030)	43	168631			25.00- 85.00	54.81
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.032)	95	526769	50.0000	50.561	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	566679			74.96- 134.96	107.58
6.362	6.362 (1.032)	97	339428			34.80- 94.80	64.44
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	186868	50.0000	38.819	80.00- 120.00	100.00
6.586	6.586 (1.068)	62	138380			52.03- 112.03	74.05
6.586	6.586 (1.068)	41	188120			79.97- 139.97	100.67
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	506415	50.0000	66.951	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	633701			134.02- 194.02	125.13
6.664	6.664 (0.774)	100	154365			9.54- 69.54	30.48
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.087)	88	262547	50.0000	49.907	80.00- 120.00	100.00
6.700	6.700 (1.087)	58	228940			55.80- 115.80	87.20
6.692	6.692 (1.085)	57	83504			8.68- 68.68	31.81
118 Dibromomethane					CAS #: 74-95-3		
6.714	6.714 (0.780)	174	500641	50.0000	59.432	80.00- 120.00	100.00
6.714	6.714 (0.780)	93	483930			67.27- 127.27	96.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.714	6.714 (0.780)	95	402412			50.92- 110.92	80.38
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	874109	50.0000	50.082	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	564004			34.31- 94.31	64.52
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.169)	75	589982	50.0000	45.479	80.00- 120.00	100.00
7.208	7.208 (1.169)	77	188150			1.42- 61.42	31.89
7.208	7.208 (1.169)	39	401443			38.56- 98.56	68.04
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	658849	50.0000	47.291	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	306116			15.60- 75.60	46.46
6.460	6.460 (1.048)	55	662286			78.53- 138.53	100.52
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	365384	50.0000	41.423	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	946355			231.30- 291.30	259.00
7.316	7.316 (1.186)	85	138550			8.94- 68.94	37.92
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	1317966	50.0000	47.298	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	747741			28.30- 88.30	56.73
136 Octane					CAS #: 111-65-9		
7.445	7.445 (1.207)	57	417556	50.0000	45.039	80.00- 120.00	100.00
7.445	7.445 (1.207)	85	400305			67.11- 127.11	95.87
7.445	7.445 (1.207)	43	945808			214.21- 274.21	226.51
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	566953	50.0000	48.978	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	181050			2.15- 62.15	31.93
7.688	7.688 (0.893)	39	368249			36.09- 96.09	64.95
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	438825	50.0000	49.293	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	275543			31.62- 91.62	62.79
7.846	7.846 (0.911)	83	385452			56.35- 116.35	87.84
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.882 (0.915)	166	648258	50.0000	52.649	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	499394			48.71- 108.71	77.04
7.874	7.874 (0.914)	131	482713			46.55- 106.55	74.46

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	494242	50.0000	48.333	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	912165			157.91- 217.91	184.56
8.003	8.003 (0.929)	100	90147			0.00- 47.86	18.24
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	597825	50.0000	44.966	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	631108			82.96- 142.96	105.57
7.989	7.989 (1.296)	78	194041			2.55- 62.55	32.46
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.947)	129	906763	50.0000	53.690	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	700215			47.77- 107.77	77.22
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.261	8.261 (0.959)	107	698583	50.0000	50.530	80.00- 120.00	100.00
8.261	8.261 (0.959)	109	661477			64.60- 124.60	94.69
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.154)	63	829038	50.0000	49.220	80.00- 120.00	100.00
7.115	7.115 (1.154)	65	248901			0.95- 60.95	30.02
7.115	7.115 (1.154)	144	89150			0.00- 40.45	10.75
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	1066358	50.0000	49.642	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	340795			2.13- 62.13	31.96
8.641	8.641 (1.003)	77	573738			26.35- 86.35	53.80
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	545715	50.0000	50.805	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	1685291			282.48- 342.48	308.82
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	944204	50.0000	45.352	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	879299			59.52- 119.52	93.13
8.705	8.705 (1.011)	85	302099			0.00- 59.76	32.00
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	662462	50.0000	49.574	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	1317141			171.36- 231.36	198.83
164 o-Xylene					CAS #: 95-47-6		
9.121	9.121 (1.059)	106	624158	50.0000	49.200	80.00- 120.00	100.00
9.121	9.121 (1.059)	91	1304953			179.99- 239.99	209.07
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.062)	104	1106293	50.0000	50.334	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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165 Styrene (continued)							
9.142	9.142 (1.062)	78	521009			19.09- 79.09	47.10
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	850390	50.0000	53.101	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	437742			21.45- 81.45	51.48
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.093)	105	1999286	50.0000	49.847	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	542814			0.00- 56.99	27.15
9.407	9.407 (1.092)	51	229026			0.00- 41.77	11.46
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	547359	50.0000	43.365	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	213277			9.22- 69.22	38.96
9.579	9.579 (1.112)	42	383314			42.60- 102.60	70.03
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	982534	50.0000	49.409	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	636080			34.35- 94.35	64.74
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.730 (1.130)	156	648035	50.0000	51.974	80.00- 120.00	100.00
9.730	9.730 (1.130)	158	635086			67.29- 127.29	98.00
9.730	9.730 (1.130)	77	989722			132.41- 192.41	152.73
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	2369381	50.0000	50.628	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	569549			0.00- 53.77	24.04
9.758	9.758 (1.133)	105	90248			0.00- 33.81	3.81
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	309234	50.0000	51.623	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	920416			285.00- 345.00	297.64
9.787	9.787 (1.136)	61	255551			54.06- 114.06	82.64
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	225689	50.0000	47.613	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	110366			21.19- 81.19	48.90
9.787	9.787 (1.136)	75	920416			372.45- 432.45	407.82
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	1126004	50.0000	46.532	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	387799			4.13- 64.13	34.44
9.816	9.816 (1.140)	142	58297			0.00- 34.73	5.18

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	609845	50.0000	50.273	80.00- 120.00	100.00
9.851	9.851 (1.144)	105	1972021			296.79- 356.79	323.36
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	512938	50.0000	52.040	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	1788377			336.29- 396.29	348.65
9.873	9.873 (1.146)	65	278855			38.83- 98.83	54.36
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.902	9.902 (1.150)	120	850147	50.0000	49.897	80.00- 120.00	100.00
9.902	9.902 (1.150)	105	1722913			176.40- 236.40	202.66
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	869003	50.0000	49.800	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	489885			26.64- 86.64	56.37
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.181)	119	1598571	50.0000	50.992	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	401659			0.00- 54.82	25.13
10.174	10.174 (1.181)	91	1030164			36.92- 96.92	64.44
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	1659074	50.0000	49.381	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	784431			16.58- 76.58	47.28
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.203)	134	513937	50.0000	50.756	80.00- 120.00	100.00
10.353	10.353 (1.202)	105	2433416			451.53- 511.53	473.49
10.353	10.353 (1.202)	91	382781			46.48- 106.48	74.48
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	2149310	50.0000	50.686	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	581482			0.00- 56.79	27.05
10.467	10.467 (1.215)	91	499603			0.00- 54.04	23.24
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.518 (1.221)	146	1203491	50.0000	52.725	80.00- 120.00	100.00
10.518	10.518 (1.221)	148	763552			33.53- 93.53	63.44
10.518	10.518 (1.221)	111	478509			11.05- 71.05	39.76
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	1194665	50.0000	50.812	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	764232			33.47- 93.47	63.97
10.596	10.596 (1.230)	111	457784			9.65- 69.65	38.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	1525223	50.0000	47.182	80.00- 120.00	100.00
10.711	10.711 (1.244)	126	341003			0.00- 52.04	22.36
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	1249186	50.0000	43.807	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	1064064			55.86- 115.86	85.18
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	557751	50.0000	50.729	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	2011433			331.99- 391.99	360.63
10.818	10.818 (1.256)	92	1035164			161.01- 221.01	185.60
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	1129670	50.0000	51.215	80.00- 120.00	100.00
10.926	10.926 (1.269)	148	720267			33.23- 93.23	63.76
10.919	10.919 (1.268)	111	462559			12.36- 72.36	40.95
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	615807	50.0000	48.148	80.00- 120.00	100.00
11.606	11.606 (1.348)	75	503813			58.96- 118.96	81.81
11.606	11.606 (1.348)	155	477716			47.82- 107.82	77.58
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	917068	61.8000	38.033	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	721235			50.85- 110.85	78.65
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.308	12.308 (1.429)	180	792162	62.9500	50.563	80.00- 120.00	100.00
12.308	12.308 (1.429)	182	759879			65.40- 125.40	95.92
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	629414	64.3500	53.185	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	403967			33.70- 93.70	64.18
216 Naphthalene					CAS #: 91-20-3		
12.559	12.559 (1.458)	128	180482	6.35000	3.772	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	23076			0.00- 43.10	12.79
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.810	12.810 (1.487)	180	685018	66.5500	47.782	80.00- 120.00	100.00
12.810	12.810 (1.487)	182	656029			65.67- 125.67	95.77
12.810	12.810 (1.487)	145	236012			6.02- 66.02	34.45

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 25-JUL-2021 10:46
Lab File ID: 3072502.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/25JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37578	1.33042	0.010	3.29691	30.00000	Averaged
$ 134 Toluene-d8	1.02971	0.95997	0.010	6.77260	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.66126	0.65921	0.010	0.31062	30.00000	Averaged
4 Freon 134a	0.59487	0.65691	0.010	-10.43021	30.00000	Averaged
5 Propylene	0.60387	0.59774	0.010	1.01506	30.00000	Averaged
7 1,1-Difluoroethane	0.39363	0.40788	0.010	-3.61991	30.00000	Averaged
8 Freon 12	1.74153	1.87676	0.010	-7.76489	30.00000	Averaged
9 Chlorodifluoromethane	0.19140	0.20103	0.010	-5.02820	30.00000	Averaged
10 Freon 114	1.29040	1.38474	0.010	-7.31064	30.00000	Averaged
12 Isobutane	1.35725	1.38750	0.010	-2.22881	30.00000	Averaged
15 Chloromethane	0.72383	0.88373	0.010	-22.08942	30.00000	Averaged
18 Butane	0.17094	0.18307	0.010	-7.09444	30.00000	Averaged
19 Vinyl Chloride	0.77458	0.85268	0.010	-10.08338	30.00000	Averaged
20 1,3-Butadiene	0.70987	0.73035	0.010	-2.88444	30.00000	Averaged
24 Bromomethane	0.61260	0.63342	0.010	-3.39956	30.00000	Averaged
30 Chloroethane	0.36360	0.37327	0.010	-2.66045	30.00000	Averaged
31 Isopentane	0.92980	0.92471	0.010	0.54757	30.00000	Averaged
32 Vinyl Bromide	0.66605	0.68884	0.010	-3.42284	30.00000	Averaged
33 Freon 11	1.84264	2.02023	0.010	-9.63774	30.00000	Averaged
34 Dichlorofluoromethane	1.47301	1.60626	0.010	-9.04635	30.00000	Averaged
35 Pentane	1.48134	1.46085	0.010	1.38312	30.00000	Averaged
38 Ethyl Ether	0.33213	0.32033	0.010	3.55152	30.00000	Averaged
39 Ethanol	0.14907	0.13065	0.010	12.35536	30.00000	Averaged
42 Acrolein	0.24737	0.23783	0.010	3.85796	30.00000	Averaged
43 Freon 113	1.25964	1.30441	0.010	-3.55419	30.00000	Averaged
44 1,1-Dichloroethene	0.75871	0.72758	0.010	4.10272	30.00000	Averaged
47 Acetone	0.41920	0.41617	0.010	0.72104	30.00000	Averaged
48 Carbon Disulfide	1.88768	1.99309	0.010	-5.58430	30.00000	Averaged
49 Iodomethane	1.63230	1.88683	0.010	-15.59315	30.00000	Averaged
52 2-Propanol	1.50759	1.48137	0.010	1.73903	30.00000	Averaged
54 3-Chloropropene	0.32499	0.30719	0.010	5.47698	30.00000	Averaged
57 Acetonitrile	0.66010	0.64206	0.010	2.73275	30.00000	Averaged
59 Methylene Chloride	1.00325	1.02463	0.010	-2.13088	30.00000	Averaged
62 tert-Butyl alcohol	1.89229	1.77577	0.010	6.15745	30.00000	Averaged
63 Methyl tert-butyl ether	2.04241	1.93277	0.010	5.36820	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 25-JUL-2021 10:46
Lab File ID: 3072502.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/25JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
64 trans-1,2-Dichloroethene	0.51058	0.46701	0.010	8.53419	30.00000	Averaged	
66 Acrylonitrile	0.61277	0.51824	0.010	15.42658	30.00000	Averaged	
67 Hexane	1.38442	1.30711	0.010	5.58411	30.00000	Averaged	
71 1,1-Dichloroethane	1.42374	1.38538	0.010	2.69470	30.00000	Averaged	
72 Isopropyl ether	2.92166	2.71293	0.010	7.14427	30.00000	Averaged	
73 Vinyl Acetate	0.17504	0.16468	0.010	5.91754	30.00000	Averaged	
79 Ethyl-tert-butyl ether	2.82061	2.57298	0.010	8.77946	30.00000	Averaged	
84 2,2-Dichloropropane	1.32635	1.24101	0.010	6.43423	30.00000	Averaged	
85 cis-1,2-Dichloroethene	0.50614	0.46112	0.010	8.89479	30.00000	Averaged	
86 2-Butanone	0.35353	0.33529	0.010	5.15759	30.00000	Averaged	
87 Ethyl Acetate	0.29145	0.27877	0.010	4.35044	30.00000	Averaged	
89 Tetrahydrofuran	0.99690	0.87100	0.010	12.62928	30.00000	Averaged	
92 Chloroform	1.56743	1.50451	0.010	4.01464	30.00000	Averaged	
94 Cyclohexane	0.99074	0.86626	0.010	12.56485	30.00000	Averaged	
96 1,1,1-Trichloroethane	1.76184	1.60898	0.010	8.67615	30.00000	Averaged	
97 Carbon Tetrachloride	1.62268	1.60867	0.010	0.86341	30.00000	Averaged	
99 1,1-Dichloropropene	0.11377	0.11184	0.010	1.69860	30.00000	Averaged	
101 2,2,4-Trimethylpentane	4.32938	3.93060	0.010	9.21091	30.00000	Averaged	
102 Benzene	0.57049	0.56333	0.010	1.25585	30.00000	Averaged	
105 tert-Amyl methyl ether	0.15212	0.14375	0.010	5.49988	30.00000	Averaged	
106 1,2-Dichloroethane	0.32845	0.33441	0.010	-1.81455	30.00000	Averaged	
107 Heptane	0.22471	0.20108	0.010	10.51375	30.00000	Averaged	
110 n-Butanol	0.18286	0.16902	0.010	7.56589	30.00000	Averaged	
111 Trichloroethene	0.28620	0.28942	0.010	-1.12236	30.00000	Averaged	
114 1,2-Dichloropropane	0.13224	0.10267	0.010	22.36196	30.00000	Averaged	
116 Methyl Methacrylate	0.24060	0.32217	0.010	-33.90298	30.00000	Averaged	<-
117 1,4-Dioxane	0.14452	0.14425	0.010	0.18609	30.00000	Averaged	
118 Dibromomethane	0.26795	0.31849	0.010	-18.86318	30.00000	Averaged	
122 Bromodichloromethane	0.47947	0.48025	0.010	-0.16319	30.00000	Averaged	
126 cis-1,3-Dichloropropene	0.35637	0.32415	0.010	9.04189	30.00000	Averaged	
127 Methylcyclohexane	0.38272	0.36198	0.010	5.41781	30.00000	Averaged	
131 4-Methyl-2-pentanone	0.24232	0.20075	0.010	17.15409	30.00000	Averaged	
137 Toluene	0.76548	0.72411	0.010	5.40453	30.00000	Averaged	
136 Octane	0.25468	0.22941	0.010	9.92188	30.00000	Averaged	
139 trans-1,3-Dichloropropene	0.36821	0.36068	0.010	2.04447	30.00000	Averaged	

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 25-JUL-2021 10:46
Lab File ID: 3072502.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/25JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.28317	0.27917	0.010	1.41455	30.00000	Averaged
142 Tetrachloroethene	0.39165	0.41241	0.010	-5.29844	30.00000	Averaged
143 2-Hexanone	0.32527	0.31442	0.010	3.33341	30.00000	Averaged
144 1,3-Dichloropropane	0.36522	0.32846	0.010	10.06694	30.00000	Averaged
146 Dibromochloromethane	0.53722	0.57686	0.010	-7.37934	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.43975	0.44442	0.010	-1.06103	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.46270	0.45549	0.010	1.55886	30.00000	Averaged
154 Chlorobenzene	0.68328	0.67839	0.010	0.71519	30.00000	Averaged
155 Ethyl Benzene	0.34167	0.34717	0.010	-1.61093	30.00000	Averaged
156 Nonane	0.66223	0.60068	0.010	9.29504	30.00000	Averaged
158 m,p-Xylene	0.42506	0.42144	0.010	0.85131	30.00000	Averaged
164 o-Xylene	0.40353	0.39707	0.010	1.59888	30.00000	Averaged
165 Styrene	0.69912	0.70380	0.010	-0.66845	30.00000	Averaged
167 Bromoform	0.50940	0.54100	0.010	-6.20270	30.00000	Averaged
168 Cumene	1.27581	1.27189	0.010	0.30661	30.00000	Averaged
169 Cyclohexanone	0.40149	0.34822	0.010	13.26962	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.63254	0.62506	0.010	1.18245	30.00000	Averaged
177 Bromobenzene	0.39660	0.41226	0.010	-3.94814	30.00000	Averaged
178 Propylbenzene	1.48863	1.50734	0.010	-1.25712	30.00000	Averaged
179 1,2,3-Trichloropropane	0.19054	0.19673	0.010	-3.24592	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.15077	0.14358	0.010	4.77351	30.00000	Averaged
182 Decane	0.76973	0.71633	0.010	6.93631	30.00000	Averaged
183 4-Ethyltoluene	0.38586	0.38797	0.010	-0.54587	30.00000	Averaged
184 2-Chlorotoluene	0.31353	0.32632	0.010	-4.07994	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.54196	0.54084	0.010	0.20680	30.00000	Averaged
188 alpha Methyl Styrene	0.55506	0.55284	0.010	0.40025	30.00000	Averaged
189 tert-Butylbenzene	0.99718	1.01697	0.010	-1.98505	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.06868	1.05546	0.010	1.23727	30.00000	Averaged
192 sec-Butylbenzene	0.32209	0.32695	0.010	-1.51141	30.00000	Averaged
194 p-Cymene	1.34882	1.36734	0.010	-1.37238	30.00000	Averaged
195 1,3-Dichlorobenzene	0.72606	0.76563	0.010	-5.45005	30.00000	Averaged
196 1,4-Dichlorobenzene	0.74787	0.76002	0.010	-1.62408	30.00000	Averaged
199 alpha-Chlorotoluene	1.02827	0.97031	0.010	5.63650	30.00000	Averaged
201 Undecane	0.90704	0.79470	0.010	12.38521	30.00000	Averaged
202 Butylbenzene	0.34973	0.35483	0.010	-1.45754	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 25-JUL-2021 10:46
Lab File ID: 3072502.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/25JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
204 1,2-Dichlorobenzene	0.70162	0.71867	0.010	-2.43015	30.00000	Averaged	
206 1,2-Dibromo-3-chloropropane	0.40682	0.39176	0.010	3.70284	30.00000	Averaged	
207 Dodecane	0.76699	0.47202	0.010	38.45814	30.00000	Averaged	<-
213 1,2,4-Trichlorobenzene	0.49834	0.40028	0.010	19.67737	30.00000	Averaged	
215 Hexachlorobutadiene	0.37644	0.31112	0.010	17.35049	30.00000	Averaged	
216 Naphthalene	1.52174	0.90408	0.010	40.58913	30.00000	Averaged	<-
222 1,2,3-Trichlorobenzene	0.45602	0.32742	0.010	28.20107	30.00000	Averaged	

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072502.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	266266	0.00
108 1,4-Difluorobenze	910055	546033	1274077	910055	0.00
153 Chlorobenzene-d5	785948	471569	1100327	785948	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/25JUL21.b/3072502.d

Page 1

Date : 25-JUL-2021 10:46

Client ID: CCV

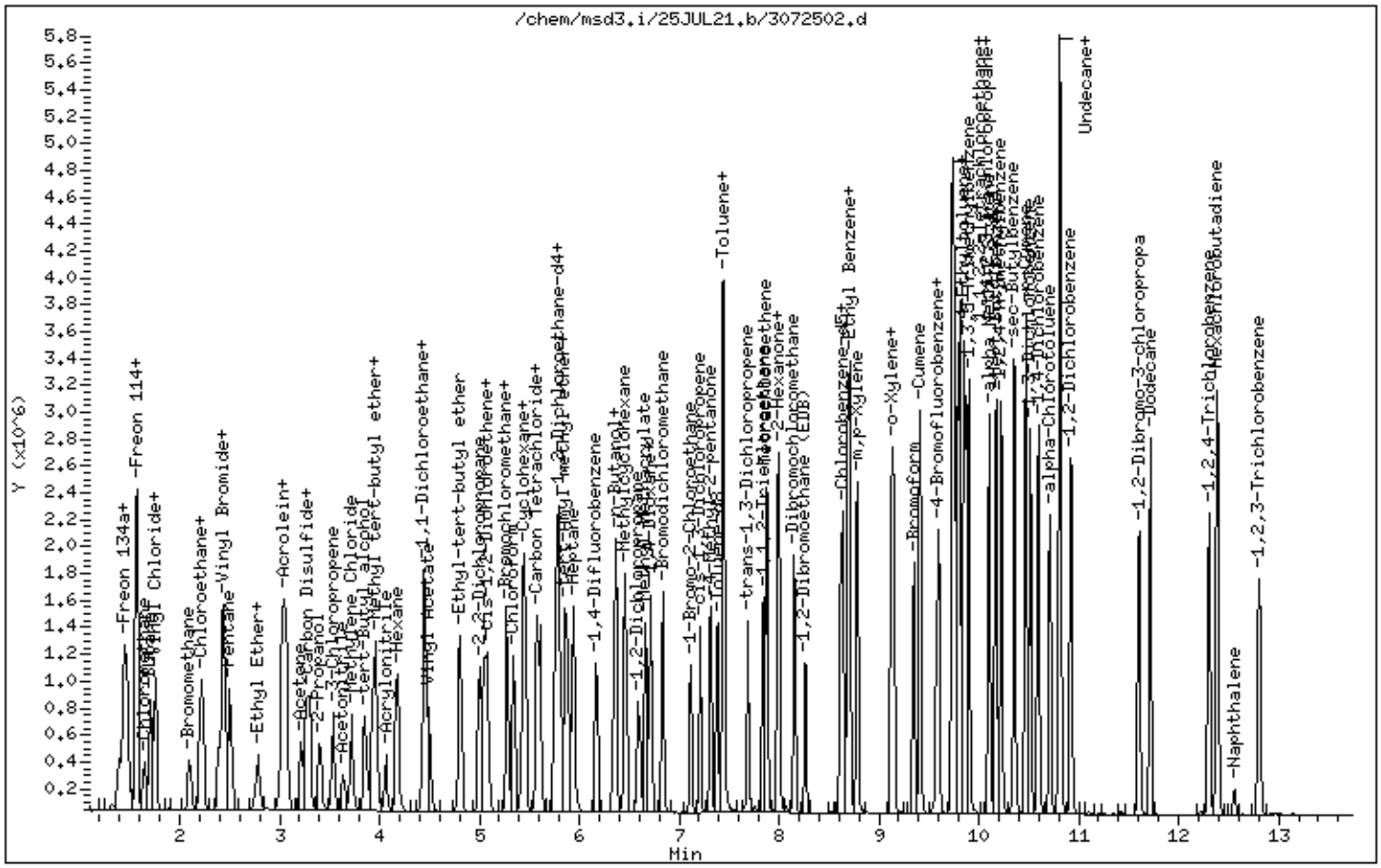
Instrument: msd3.i

Sample Info: 50mL 3018-2031

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: CCV

Lab ID#: 2107260A-26B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:00 AM**	

Compound	%Recovery
1,1,1,2-Tetrachloroethane	102
1,1,1-Trichloroethane	100
1,1,2,2-Tetrachloroethane	105
1,1,2-Trichloroethane	105
1,1-Dichloroethane	104
1,1-Dichloroethene	91
1,1-Difluoroethane	98
1,2,3-Trichloropropane	101
1,2,4-Trichlorobenzene	98
1,2,4-Trimethylbenzene	98
1,2-Dibromo-3-chloropropane	103
1,2-Dibromoethane (EDB)	108
1,2-Dichlorobenzene	102
1,2-Dichloroethane	117
1,2-Dichloropropane	105
1,3,5-Trimethylbenzene	102
1,3-Butadiene	115
1,3-Dichlorobenzene	104
1,4-Dichlorobenzene	103
1,4-Dioxane	102
2,2,4-Trimethylpentane	103
2-Butanone (Methyl Ethyl Ketone)	97
2-Hexanone	110
2-Propanol	109
3-Chloropropene	88
4-Ethyltoluene	99
4-Methyl-2-pentanone	106
Acetone	102
Acrolein	102
Acrylonitrile	108
alpha-Chlorotoluene	99
Benzene	104
Bromodichloromethane	112
Bromoform	105
Bromomethane	93
Carbon Disulfide	94
Carbon Tetrachloride	109
Chlorobenzene	103
Chloroethane	95
Chloroform	106
Chloromethane	114
cis-1,2-Dichloroethene	100

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Client Sample ID: CCV

Lab ID#: 2107260A-26B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:00 AM**	

Compound	%Recovery
cis-1,3-Dichloropropene	106
Cumene	99
Cyclohexane	93
Dibromochloromethane	110
Dibromomethane	110
Ethanol	104
Ethyl Acetate	118
Ethyl Benzene	100
Ethyl-tert-butyl ether	97
Freon 11	104
Freon 12	106
Freon 113	97
Freon 114	103
Freon 134a	109
Heptane	100
Hexachlorobutadiene	102
Hexachloroethane	116
Hexane	99
Iodomethane	110
Isopropyl ether	111
m,p-Xylene	99
Methyl tert-butyl ether	90
Methylene Chloride	118
Naphthalene	88
o-Xylene	99
Propylbenzene	101
Propylene	109
Styrene	97
tert-Amyl methyl ether	96
tert-Butyl alcohol	94
Tetrachloroethene	104
Tetrahydrofuran	114
Toluene	102
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	97
trans-1,3-Dichloropropene	107
Trichloroethene	106
Vinyl Acetate	96
Vinyl Bromide	94
Vinyl Chloride	94

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107260A-26B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:00 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072502.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2021 11:00
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2125
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	154602	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	121732			48.23- 108.23	78.74
5.778	5.778 (1.000)	49	329253			150.57- 210.57	212.97
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	573421	25.0000		80.00- 120.00	100.00
6.666	6.666 (1.000)	88	83321			0.00- 45.71	14.53
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	566079	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	293268			23.78- 83.78	51.81
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.315 (1.093)	65	224693	25.0000	26.335	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	127910			27.21- 87.21	56.93
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	617936	25.0000	24.816	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66298			0.00- 40.44	10.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	406085			34.95- 94.95	65.72
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	368342	25.0000	25.340	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	450442			95.92- 155.92	122.29
10.921	10.921 (1.154)	176	354586			66.89- 126.89	96.27
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	266508	50.0000	54.465	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	217594			59.44- 119.44	81.65
1.744	1.744 (0.302)	51	1318795			419.06- 479.06	494.84
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	386352	50.0000	54.610	80.00- 120.00	100.00
1.688	1.688 (0.292)	42	257658			35.28- 95.28	66.69
1.675	1.675 (0.290)	39	265816			38.35- 98.35	68.80
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	172514	50.0000	49.229	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1318795			597.63- 657.63	764.46
1.702	1.702 (0.295)	47	134301			33.72- 93.72	77.85
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	736520	50.0000	53.116	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	238865			2.37- 62.37	32.43
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.758 (0.304)	67	77385	50.0000	56.498	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1318795			1501.01-1561.01	1704.20
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	699589	50.0000	51.398	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	219234			2.30- 62.30	31.34
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	834338	50.0000	53.269	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	273435			2.44- 62.44	32.77
1.870	1.870 (0.324)	58	23961			0.00- 33.36	2.87
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	459362	50.0000	57.103	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	115216			0.00- 56.26	25.08
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.352)	58	87609	50.0000	47.014	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.352)	43	797320			823.29- 883.29	910.09
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	455805	50.0000	47.099	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	145666			0.00- 59.69	31.96
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	447236	50.0000	57.459	80.00- 120.00	100.00
2.096	2.096 (0.363)	39	399431			52.37- 112.37	89.31
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	289144	50.0000	46.466	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	271358			64.07- 124.07	93.85
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	165194	50.0000	47.470	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	46267			0.04- 60.04	28.01
2.612	2.612 (0.452)	49	68037			4.54- 64.54	41.19
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	574601	50.0000	54.264	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	328784			34.12- 94.12	57.22
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.493)	106	269606	50.0000	46.874	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	268341			69.27- 129.27	99.53
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	768951	50.0000	52.185	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	495527			34.72- 94.72	64.44
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.503)	67	618322	50.0000	48.686	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	191224			0.84- 60.84	30.93
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	922742	50.0000	53.612	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	123395			0.00- 44.98	13.37
2.970	2.970 (0.514)	72	53645			0.00- 37.39	5.81
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	129202	50.0000	44.495	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	273810			163.46- 223.46	211.92
3.285	3.285 (0.569)	45	457051			250.40- 310.40	353.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	79869	50.0000	52.094	80.00- 120.00	100.00
3.285	3.285 (0.569)	45	454452			511.19- 571.19	569.00
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	135133	50.0000	50.794	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	185582			111.10- 171.10	137.33
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	532164	50.0000	48.610	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	340278			33.56- 93.56	63.94
3.550	3.550 (0.614)	101	643492			89.21- 149.21	120.92
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	298111	50.0000	45.582	80.00- 120.00	100.00
3.586	3.586 (0.621)	98	186881			34.02- 94.02	62.69
3.579	3.579 (0.619)	61	635494			168.77- 228.77	213.17
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	206145	50.0000	50.862	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	765064			302.95- 362.95	371.13
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	808904	50.0000	46.947	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	631711	50.0000	55.153	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	293656			12.22- 72.22	46.49
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	887952	50.0000	54.358	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	166969			0.00- 47.19	18.80
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	126177	50.0000	43.835	80.00- 120.00	100.00
4.052	4.052 (0.701)	41	646829			396.19- 456.19	512.64
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	440895	50.0000	57.910	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	228421			20.95- 80.95	51.81
4.123	4.123 (0.714)	38	49146			0.00- 41.17	11.15
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	621464	50.0000	59.032	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	262639			22.03- 82.03	42.26
4.238	4.238 (0.733)	51	184283			0.18- 60.18	29.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	898493	50.0000	47.167	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	221769			0.00- 51.11	24.68
4.338	4.338 (0.751)	57	101387			0.00- 40.49	11.28
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	858658	50.0000	45.225	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	309240			3.10- 63.10	36.01
4.446	4.446 (0.769)	41	337445			1.28- 61.28	39.30
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.776)	98	211417	50.0000	48.380	80.00- 120.00	100.00
4.482	4.482 (0.776)	61	622080			255.84- 315.84	294.24
4.482	4.482 (0.776)	96	330474			127.59- 187.59	156.31
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	330293	50.0000	54.296	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	390024			88.05- 148.05	118.08
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.813)	57	755592	50.0000	49.612	80.00- 120.00	100.00
4.696	4.696 (0.813)	43	565926			37.52- 97.52	74.90
4.696	4.696 (0.813)	86	82339			0.00- 41.48	10.90
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.969 (0.860)	63	681670	50.0000	52.064	80.00- 120.00	100.00
4.969	4.969 (0.860)	65	197978			0.00- 59.70	29.04
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.857)	45	1963464	50.0000	55.432	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	296886			0.00- 48.18	15.12
4.954	4.954 (0.857)	59	179366			0.00- 40.15	9.14
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.865)	86	80510	50.0000	47.846	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2344966			2432.48-2492.48	2912.64
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1484002	50.0000	48.400	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	432130			1.00- 61.00	29.12
5.305	5.305 (0.918)	41	332630			0.00- 48.73	22.41
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.513 (0.954)	77	588269	50.0000	50.597	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	189634			2.28- 62.28	32.24
5.513	5.513 (0.954)	97	138603			0.00- 53.93	23.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.960)	98	227855	50.0000	50.244	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	353007			125.75- 185.75	154.93
5.549	5.549 (0.960)	61	857114			332.40- 392.40	376.17
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	169522	50.0000	48.512	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2548692			1214.50-1274.50	1503.46
5.556	5.556 (0.962)	57	80547			14.68- 74.68	47.51
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	205488	50.0000	59.120	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	857114			452.04- 512.04	417.11
5.578	5.578 (0.965)	70	83588			22.77- 82.77	40.68
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (1.000)	42	663706	50.0000	57.110	80.00- 120.00	100.00
5.778	5.778 (1.000)	71	142259			0.00- 55.82	21.43
5.778	5.778 (1.000)	72	156376			0.00- 57.59	23.56
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.011)	83	711213	50.0000	52.872	80.00- 120.00	100.00
5.843	5.843 (1.011)	85	462443			34.70- 94.70	65.02
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	451728	50.0000	46.450	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	856165			142.57- 202.57	189.53
5.957	5.957 (1.031)	41	508193			62.09- 122.09	112.50
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.971 (1.033)	97	762787	50.0000	50.196	80.00- 120.00	100.00
5.971	5.971 (1.033)	99	488372			34.02- 94.02	64.02
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.055)	119	777646	50.0000	54.562	80.00- 120.00	100.00
6.093	6.093 (1.055)	117	789136			70.64- 130.64	101.48
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	201782	50.0000	51.696	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	505775			226.85- 286.85	250.65
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.287 (1.088)	57	2736490	50.0000	51.694	80.00- 120.00	100.00
6.287	6.287 (1.088)	56	917606			2.24- 62.24	33.53
6.287	6.287 (1.088)	41	747538			0.00- 54.39	27.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	980218	50.0000	51.801	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	225612			0.00- 52.90	23.02
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	256253	50.0000	48.026	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1040741			372.79- 432.79	406.14
6.358	6.358 (0.954)	55	418207			112.09- 172.09	163.20
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	576080	50.0000	58.508	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	173523			0.79- 60.79	30.12
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	373474	50.0000	49.821	80.00- 120.00	100.00
6.451	6.451 (0.968)	43	1133008			226.53- 286.53	303.37
6.451	6.451 (0.968)	57	537207			100.85- 160.85	143.84
110 n-Butanol					CAS #: 71-36-3		
6.817	6.817 (1.023)	56	382355	50.0000	55.577	80.00- 120.00	100.00
6.810	6.810 (1.021)	41	293303			40.99- 100.99	76.71
6.810	6.810 (1.021)	43	240327			27.38- 87.38	62.85
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	486800	50.0000	53.016	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	524670			76.29- 136.29	107.78
6.867	6.867 (1.030)	97	314088			33.63- 93.63	64.52
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	508632	50.0000	52.430	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	369022			41.07- 101.07	72.55
7.096	7.096 (1.064)	41	347603			22.53- 82.53	68.34
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	393687	50.0000	50.615	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	906054			179.84- 239.84	230.15
7.139	7.139 (0.755)	100	147473			9.59- 69.59	37.46
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.182 (1.077)	88	264118	50.0000	51.229	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	278369			68.28- 128.28	105.40
7.175	7.175 (1.076)	57	95948			2.68- 62.68	36.33
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	461661	50.0000	54.958	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	433580			60.09- 120.09	93.92

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.204	7.204 (0.761)	95	380124			48.38- 108.38	82.34
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	800475	50.0000	56.226	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	519551			35.24- 95.24	64.91
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	637849	50.0000	53.032	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	197223			2.42- 62.42	30.92
7.698	7.698 (1.155)	39	478269			37.16- 97.16	74.98
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	651528	50.0000	49.034	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	311094			15.78- 75.78	47.75
6.974	6.974 (1.046)	55	810929			84.64- 144.64	124.47
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	519919	50.0000	52.776	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1578257			242.35- 302.35	303.56
7.798	7.798 (1.170)	85	153379			3.24- 63.24	29.50
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1331798	50.0000	51.013	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	780885			28.38- 88.38	58.63
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.192)	57	591252	50.0000	53.114	80.00- 120.00	100.00
7.948	7.948 (1.192)	85	456928			56.00- 116.00	77.28
7.948	7.948 (1.192)	43	1668037			228.66- 288.66	282.12
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	596893	50.0000	53.582	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	188064			1.24- 61.24	31.51
8.214	8.214 (0.868)	39	429564			34.11- 94.11	71.97
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	484302	50.0000	52.598	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	300140			31.96- 91.96	61.97
8.400	8.400 (0.888)	83	407013			52.93- 112.93	84.04
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	672864	50.0000	52.154	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	526740			47.84- 107.84	78.28
8.464	8.464 (0.895)	131	512101			45.29- 105.29	76.11

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	725636	50.0000	55.160	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1566548			162.87- 222.87	215.89
8.586	8.586 (0.908)	100	104282			0.00- 45.94	14.37
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	668285	50.0000	53.904	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	951887			94.99- 154.99	142.44
8.579	8.579 (1.287)	78	216128			2.05- 62.05	32.34
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	945893	50.0000	54.982	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	729974			47.45- 107.45	77.17
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	796353	50.0000	53.925	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	753266			64.21- 124.21	94.59
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	968593	50.0000	54.416	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	279700			0.00- 59.64	28.88
7.612	7.612 (1.142)	144	92596			0.00- 39.63	9.56
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1153523	50.0000	51.318	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	364485			1.74- 61.74	31.60
9.496	9.496 (1.004)	77	612090			25.04- 85.04	53.06
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	585900	50.0000	49.848	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1774247			273.74- 333.74	302.82
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1679593	50.0000	55.540	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1280813			54.16- 114.16	76.26
9.603	9.603 (1.015)	85	338373			0.00- 53.90	20.15
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	727649	50.0000	49.429	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1391095			163.73- 223.73	191.18
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	699722	50.0000	49.610	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1406488			177.45- 237.45	201.01
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1165539	50.0000	48.320	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
165 Styrene (continued)							
10.255	10.255 (1.084)	78	547927			17.88- 77.88	47.01
167 Bromoform					CAS #: 75-25-2		
10.549	10.549 (1.115)	173	893886	50.0000	52.713	80.00- 120.00	100.00
10.549	10.549 (1.115)	171	461861			21.25- 81.25	51.67
168 Cumene					CAS #: 98-82-8		
10.656	10.656 (1.126)	105	2193046	50.0000	49.497	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	639000			0.00- 58.52	29.14
10.649	10.649 (1.126)	51	338174			0.00- 43.00	15.42
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	899746	50.0000	56.783	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	251822			1.94- 61.94	27.99
10.871	10.871 (1.149)	42	625979			37.89- 97.89	69.57
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1139062	50.0000	52.672	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	735202			35.20- 95.20	64.54
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	708388	50.0000	52.569	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	685430			67.21- 127.21	96.76
11.179	11.179 (1.182)	77	404172			29.02- 89.02	57.06
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	665625	50.0000	50.666	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2616426			366.49- 426.49	393.08
11.150	11.150 (1.179)	105	97689			0.00- 44.85	14.68
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	348253	50.0000	50.526	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1004604			280.55- 340.55	288.47
11.107	11.107 (1.174)	61	168079			15.49- 75.49	48.26
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	189224	50.0000	41.878	80.00- 120.00	100.00
11.172	11.172 (1.181)	89	149242			49.11- 109.11	78.87
11.179	11.179 (1.182)	75	1004604			426.44- 486.44	530.91
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1625857	50.0000	47.176	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	419881			0.00- 57.66	25.83
11.258	11.258 (1.190)	142	60657			0.00- 34.09	3.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.286 (1.193)	120	709993	50.0000	49.695	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2245612			284.55- 344.55	316.29
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.315 (1.196)	126	576834	50.0000	51.567	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1928483			315.17- 375.17	334.32
11.301	11.301 (1.195)	65	290934			21.55- 81.55	50.44
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1004358	50.0000	51.060	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1873056			164.93- 224.93	186.49
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	957850	50.0000	49.018	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	525867			25.30- 85.30	54.90
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1906342	50.0000	51.816	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	464103			0.00- 54.25	24.35
11.745	11.745 (1.242)	91	1121746			31.27- 91.27	58.84
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1829613	50.0000	49.279	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	934425			19.05- 79.05	51.07
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	12.003 (1.269)	134	589896	50.0000	51.588	80.00- 120.00	100.00
12.003	12.003 (1.269)	105	2725406			437.55- 497.55	462.01
12.003	12.003 (1.269)	91	408985			40.76- 100.76	69.33
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2513910	50.0000	49.741	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	657529			0.00- 55.54	26.16
12.160	12.160 (1.285)	91	531493			0.00- 51.48	21.14
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1321061	50.0000	51.984	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	842736			33.21- 93.21	63.79
12.203	12.203 (1.290)	111	524661			11.31- 71.31	39.72
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1322811	50.0000	51.510	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	841479			33.90- 93.90	63.61
12.311	12.311 (1.301)	111	507972			9.45- 69.45	38.40

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.468	12.468 (1.318)	91	1745352	50.0000	49.493	80.00- 120.00	100.00
12.468	12.468 (1.318)	126	411206			0.00- 53.26	23.56
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2064540	50.0000	51.861	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2006708			58.12- 118.12	97.20
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	640515	50.0000	49.899	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2205128			314.79- 374.79	344.27
12.626	12.626 (1.335)	92	1166403			154.29- 214.29	182.10
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1278073	50.0000	51.291	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	808390			33.84- 93.84	63.25
12.741	12.741 (1.347)	111	528172			12.73- 72.73	41.33
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	774525	50.0000	51.319	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	632737			52.48- 112.48	81.69
13.600	13.600 (1.438)	155	603634			47.41- 107.41	77.94
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2009246	61.8000	63.677	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1819645			52.87- 112.87	90.56
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1138087	63.0000	61.817	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1072834			65.33- 125.33	94.27
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	847162	64.4000	65.384	80.00- 120.00	100.00
14.581	14.581 (1.541)	223	533049			33.17- 93.17	62.92
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	264470	6.35000	5.621	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	32731			0.00- 42.88	12.38
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1053197	66.6000	64.712	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	1011018			65.75- 125.75	96.00
15.069	15.069 (1.593)	145	355535			5.23- 65.23	33.76

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.45336	0.010	-5.34047	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.07763	0.010	0.73396	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.65069	0.010	-1.35810	30.00000	Averaged
4 Freon 134a	0.79126	0.86192	0.010	-8.92991	30.00000	Averaged
5 Propylene	1.14402	1.24951	0.010	-9.22069	30.00000	Averaged
7 1,1-Difluoroethane	0.56667	0.55793	0.010	1.54274	30.00000	Averaged
8 Freon 12	2.24223	2.38199	0.010	-6.23296	30.00000	Averaged
9 Chlorodifluoromethane	0.22149	0.25027	0.010	-12.99613	30.00000	Averaged
10 Freon 114	2.20100	2.26255	0.010	-2.79617	30.00000	Averaged
12 Isobutane	2.53275	2.69834	0.010	-6.53801	30.00000	Averaged
15 Chloromethane	1.30082	1.48563	0.010	-14.20696	30.00000	Averaged
18 Butane	0.30133	0.28334	0.010	5.97151	30.00000	Averaged
19 Vinyl Chloride	1.56492	1.47412	0.010	5.80182	30.00000	Averaged
20 1,3-Butadiene	1.25865	1.44641	0.010	-14.91787	30.00000	Averaged
24 Bromomethane	1.00624	0.93512	0.010	7.06742	30.00000	Averaged
30 Chloroethane	0.56273	0.53426	0.010	5.05995	30.00000	Averaged
31 Isopentane	1.71230	1.85832	0.010	-8.52821	30.00000	Averaged
32 Vinyl Bromide	0.93008	0.87194	0.010	6.25167	30.00000	Averaged
33 Freon 11	2.38274	2.48687	0.010	-4.37019	30.00000	Averaged
34 Dichlorofluoromethane	2.05367	1.99972	0.010	2.62693	30.00000	Averaged
35 Pentane	2.78321	2.98425	0.010	-7.22327	30.00000	Averaged
38 Ethyl Ether	0.46955	0.41785	0.010	11.01051	30.00000	Averaged
39 Ethanol	0.24792	0.25831	0.010	-4.18744	30.00000	Averaged
42 Acrolein	0.43020	0.43704	0.010	-1.58855	30.00000	Averaged
43 Freon 113	1.77031	1.72108	0.010	2.78075	30.00000	Averaged
44 1,1-Dichloroethene	1.05757	0.96412	0.010	8.83560	30.00000	Averaged
47 Acetone	0.65540	0.66670	0.010	-1.72310	30.00000	Averaged
48 Carbon Disulfide	2.78620	2.61609	0.010	6.10571	30.00000	Averaged
49 Iodomethane	1.85215	2.04302	0.010	-10.30536	30.00000	Averaged
52 2-Propanol	2.64148	2.87174	0.010	-8.71708	30.00000	Averaged
54 3-Chloropropene	0.46546	0.40807	0.010	12.33016	30.00000	Averaged
57 Acetonitrile	1.23114	1.42590	0.010	-15.81973	30.00000	Averaged
59 Methylene Chloride	1.70236	2.00988	0.010	-18.06443	30.00000	Averaged
62 tert-Butyl alcohol	3.08038	2.90583	0.010	5.66653	30.00000	Averaged
63 Methyl tert-butyl ether	3.07018	2.77700	0.010	9.54950	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.70664	0.68375	0.010	3.23996	30.00000	Averaged
66 Acrylonitrile	0.98368	1.06820	0.010	-8.59212	30.00000	Averaged
67 Hexane	2.46279	2.44367	0.010	0.77637	30.00000	Averaged
71 1,1-Dichloroethane	2.11721	2.20460	0.010	-4.12746	30.00000	Averaged
72 Isopropyl ether	5.72778	6.35006	0.010	-10.86420	30.00000	Averaged
73 Vinyl Acetate	0.27210	0.26038	0.010	4.30683	30.00000	Averaged
79 Ethyl-tert-butyl ether	4.95812	4.79943	0.010	3.20070	30.00000	Averaged
84 2,2-Dichloropropane	1.88008	1.90253	0.010	-1.19370	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.73332	0.73691	0.010	-0.48893	30.00000	Averaged
86 2-Butanone	0.56506	0.54825	0.010	2.97524	30.00000	Averaged
87 Ethyl Acetate	0.56205	0.66457	0.010	-18.24040	30.00000	Averaged
89 Tetrahydrofuran	1.87928	2.14650	0.010	-14.21913	30.00000	Averaged
92 Chloroform	2.17519	2.30014	0.010	-5.74418	30.00000	Averaged
94 Cyclohexane	1.57260	1.46094	0.010	7.10033	30.00000	Averaged
96 1,1,1-Trichloroethane	2.45732	2.46694	0.010	-0.39148	30.00000	Averaged
97 Carbon Tetrachloride	2.30469	2.51499	0.010	-9.12497	30.00000	Averaged
99 1,1-Dichloropropene	0.17017	0.17595	0.010	-3.39211	30.00000	Averaged
101 2,2,4-Trimethylpentane	8.56002	8.85011	0.010	-3.38889	30.00000	Averaged
102 Benzene	0.82499	0.85471	0.010	-3.60267	30.00000	Averaged
105 tert-Amyl methyl ether	0.23262	0.22344	0.010	3.94737	30.00000	Averaged
106 1,2-Dichloroethane	0.42928	0.50232	0.010	-17.01556	30.00000	Averaged
107 Heptane	0.32683	0.32565	0.010	0.35848	30.00000	Averaged
110 n-Butanol	0.29994	0.33340	0.010	-11.15471	30.00000	Averaged
111 Trichloroethene	0.40032	0.42447	0.010	-6.03287	30.00000	Averaged
114 1,2-Dichloropropane	0.42295	0.44351	0.010	-4.86080	30.00000	Averaged
116 Methyl Methacrylate	0.34351	0.34773	0.010	-1.23015	30.00000	Averaged
117 1,4-Dioxane	0.22478	0.23030	0.010	-2.45802	30.00000	Averaged
118 Dibromomethane	0.37098	0.40777	0.010	-9.91653	30.00000	Averaged
122 Bromodichloromethane	0.62070	0.69798	0.010	-12.45135	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.52438	0.55618	0.010	-6.06325	30.00000	Averaged
127 Methylcyclohexane	0.57930	0.56811	0.010	1.93161	30.00000	Averaged
131 4-Methyl-2-pentanone	0.42950	0.45335	0.010	-5.55194	30.00000	Averaged
137 Toluene	1.13821	1.16127	0.010	-2.02648	30.00000	Averaged
136 Octane	0.48532	0.51555	0.010	-6.22920	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.49197	0.52722	0.010	-7.16374	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.40664	0.42777	0.010	-5.19576	30.00000	Averaged
142 Tetrachloroethene	0.56977	0.59432	0.010	-4.30866	30.00000	Averaged
143 2-Hexanone	0.58097	0.64093	0.010	-10.32069	30.00000	Averaged
144 1,3-Dichloropropane	0.54052	0.58272	0.010	-7.80729	30.00000	Averaged
146 Dibromochloromethane	0.75978	0.83548	0.010	-9.96307	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.65220	0.70339	0.010	-7.85009	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.77603	0.84457	0.010	-8.83250	30.00000	Averaged
154 Chlorobenzene	0.99271	1.01887	0.010	-2.63552	30.00000	Averaged
155 Ethyl Benzene	0.51909	0.51751	0.010	0.30481	30.00000	Averaged
156 Nonane	1.33556	1.48353	0.010	-11.07962	30.00000	Averaged
158 m,p-Xylene	0.65013	0.64271	0.010	1.14122	30.00000	Averaged
164 o-Xylene	0.62290	0.61804	0.010	0.77944	30.00000	Averaged
165 Styrene	1.06528	1.02948	0.010	3.35980	30.00000	Averaged
167 Bromoform	0.74891	0.78954	0.010	-5.42562	30.00000	Averaged
168 Cumene	1.95673	1.93705	0.010	1.00582	30.00000	Averaged
169 Cyclohexanone	0.69978	0.79472	0.010	-13.56659	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.95505	1.00610	0.010	-5.34508	30.00000	Averaged
177 Bromobenzene	0.59512	0.62570	0.010	-5.13804	30.00000	Averaged
178 Propylbenzene	0.58019	0.58793	0.010	-1.33288	30.00000	Averaged
179 1,2,3-Trichloropropane	0.30440	0.30760	0.010	-1.05251	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.19955	0.16714	0.010	16.24387	30.00000	Averaged
182 Decane	1.52203	1.43607	0.010	5.64804	30.00000	Averaged
183 4-Ethyltoluene	0.63096	0.62711	0.010	0.60947	30.00000	Averaged
184 2-Chlorotoluene	0.49401	0.50950	0.010	-3.13454	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.86871	0.88712	0.010	-2.11931	30.00000	Averaged
188 alpha Methyl Styrene	0.86300	0.84604	0.010	1.96484	30.00000	Averaged
189 tert-Butylbenzene	1.62480	1.68381	0.010	-3.63186	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.63968	1.61604	0.010	1.44183	30.00000	Averaged
192 sec-Butylbenzene	0.50500	0.52104	0.010	-3.17619	30.00000	Averaged
194 p-Cymene	2.23203	2.22046	0.010	0.51850	30.00000	Averaged
195 1,3-Dichlorobenzene	1.12231	1.16685	0.010	-3.96859	30.00000	Averaged
196 1,4-Dichlorobenzene	1.13414	1.16840	0.010	-3.02038	30.00000	Averaged
199 alpha-Chlorotoluene	1.55742	1.54162	0.010	1.01475	30.00000	Averaged
201 Undecane	1.75810	1.82354	0.010	-3.72266	30.00000	Averaged
202 Butylbenzene	0.56690	0.56575	0.010	0.20252	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
204 1,2-Dichlorobenzene	1.10047	1.12888	0.010	-2.58144	30.00000	Averaged
206 1,2-Dibromo-3-chloropropane	0.66653	0.68411	0.010	-2.63868	30.00000	Averaged
207 Dodecane	1.39351	1.43585	0.010	-3.03774	30.00000	Averaged
213 1,2,4-Trichlorobenzene	0.81307	0.79781	0.010	1.87750	30.00000	Averaged
215 Hexachlorobutadiene	0.57222	0.58096	0.010	-1.52727	30.00000	Averaged
216 Naphthalene	2.07796	1.83936	0.010	11.48273	30.00000	Averaged
222 1,2,3-Trichlorobenzene	0.71877	0.69839	0.010	2.83551	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072502.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 12:26
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	168789	101273	236305	154602	-8.41
108 1,4-Difluorobenze	601487	360892	842082	573421	-4.67
153 Chlorobenzene-d5	599612	359767	839457	566079	-5.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/25JUL21.b/p072502.d

Page 1

Date : 25-JUL-2021 11:00

Client ID: CCV

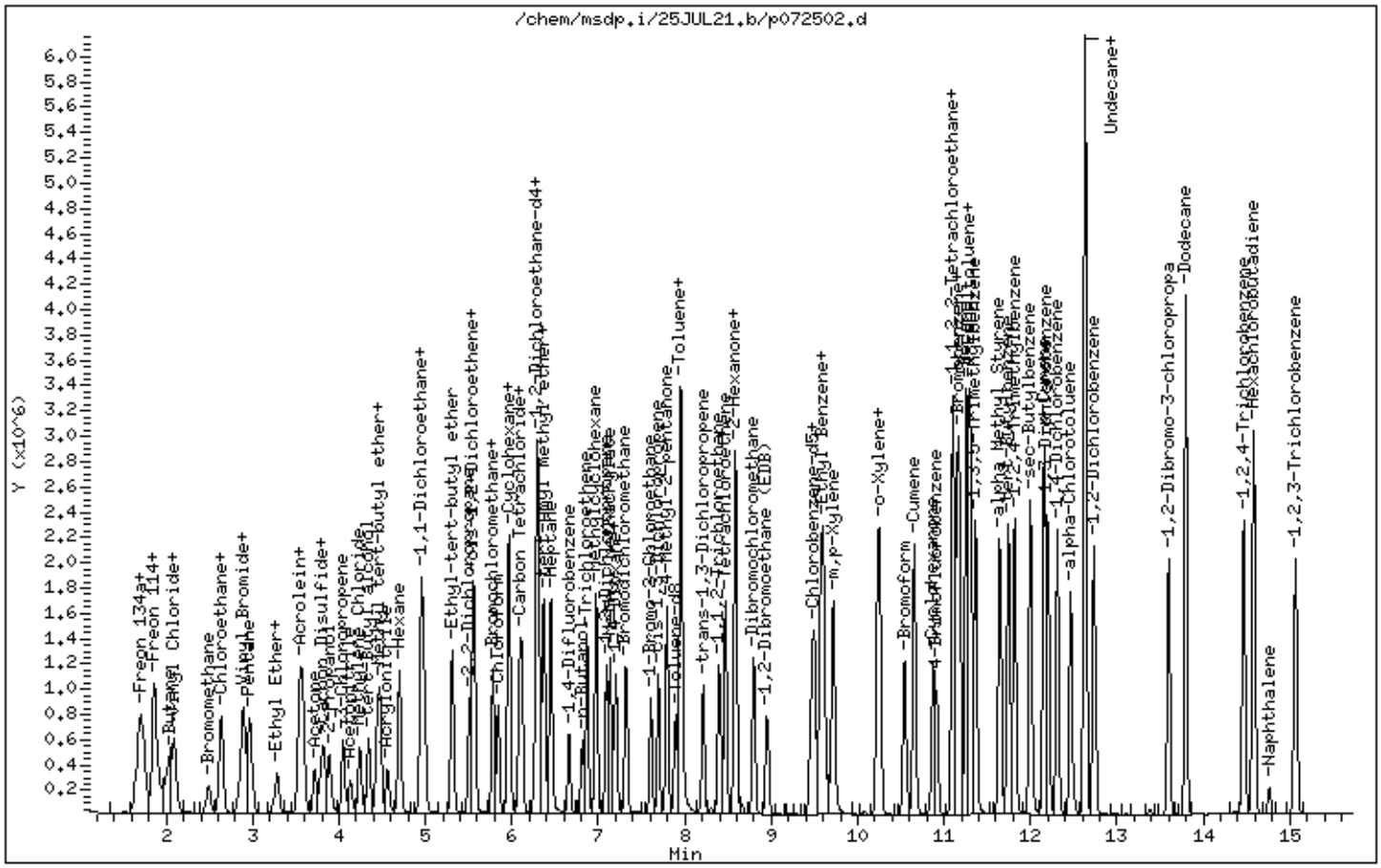
Instrument: msdp.i

Sample Info: 50mL 3018-2125

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107260A-27A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:30 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	91	70-130
1,1,2,2-Tetrachloroethane	97	70-130
1,1,2-Trichloroethane	96	70-130
1,1-Dichloroethane	93	70-130
1,1-Dichloroethene	93	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	103	70-130
1,2,4-Trimethylbenzene	98	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	100	70-130
1,2-Dichlorobenzene	105	70-130
1,2-Dichloroethane	106	70-130
1,2-Dichloropropane	84	70-130
1,3,5-Trimethylbenzene	97	70-130
1,3-Butadiene	96	70-130
1,3-Dichlorobenzene	103	70-130
1,4-Dichlorobenzene	100	70-130
1,4-Dioxane	92	70-130
2,2,4-Trimethylpentane	95	70-130
2-Butanone (Methyl Ethyl Ketone)	93	70-130
2-Hexanone	94	70-130
2-Propanol	98	70-130
3-Chloropropene	92	70-130
4-Ethyltoluene	100	70-130
4-Methyl-2-pentanone	82	70-130
Acetone	96	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	94	70-130
Benzene	106	70-130
Bromodichloromethane	91	70-130
Bromoform	105	70-130
Bromomethane	99	70-130
Carbon Disulfide	102	70-130
Carbon Tetrachloride	98	70-130
Chlorobenzene	98	70-130
Chloroethane	100	70-130
Chloroform	94	70-130
Chloromethane	111	70-130
cis-1,2-Dichloroethene	88	70-130

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Client Sample ID: LCS

Lab ID#: 2107260A-27A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:30 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	90	70-130
Cumene	96	70-130
Cyclohexane	88	70-130
Dibromochloromethane	105	70-130
Dibromomethane	Not Spiked	
Ethanol	72	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	99	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	105	70-130
Freon 12	102	70-130
Freon 113	101	70-130
Freon 114	103	70-130
Freon 134a	Not Spiked	
Heptane	92	70-130
Hexachlorobutadiene	107	70-130
Hexachloroethane	Not Spiked	
Hexane	94	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	98	70-130
Methyl tert-butyl ether	92	70-130
Methylene Chloride	96	70-130
Naphthalene	80	60-140
o-Xylene	96	70-130
Propylbenzene	100	70-130
Propylene	96	60-140
Styrene	96	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	102	70-130
Tetrahydrofuran	89	70-130
Toluene	93	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	88	70-130
trans-1,3-Dichloropropene	97	70-130
Trichloroethene	95	70-130
Vinyl Acetate	92	70-130
Vinyl Bromide	Not Spiked	
Vinyl Chloride	102	70-130

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 2107260A-27A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:30 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072503.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 25-JUL-2021 11:30
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 25-Jul-2021 12:43 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.284	5.284 (1.000)	130	296267	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	231851				48.46- 108.46	78.26
5.270	5.270 (1.000)	49	426809				120.39- 180.39	144.06
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.166	6.166 (1.000)	114	980049	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	143329				0.00- 45.52	14.62
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.612 (1.000)	117	854834	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	447498				25.46- 85.46	52.35
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	416621	25.5535	25.554		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	216862				21.66- 81.66	52.05
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.198)	98	966200	23.9357	23.936		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	104780				0.00- 41.47	10.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	632407			36.47- 96.47	65.45
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	564023	24.9449	24.945	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	644248			93.06- 153.06	114.22
9.601	9.601 (1.115)	176	529884			62.87- 122.87	93.95
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	397491	56.3853	56.385	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	322137			51.82- 111.82	81.04
1.493	1.479 (0.282)	51	900271			194.91- 254.91	226.49
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	344342	48.1179	48.118	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	233234			35.61- 95.61	67.73
1.437	1.423 (0.272)	39	254978			42.66- 102.66	74.05
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	240795	51.6193	51.619	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	900271			321.86- 381.86	373.87
1.451	1.451 (0.275)	47	181049			45.34- 105.34	75.19
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	1048928	50.8242	50.824	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	342825			2.63- 62.63	32.68
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	111671	49.2323	49.232	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	900271			719.76- 779.76	806.18
10 Freon 114					CAS #: 76-14-2		
1.577	1.563 (0.298)	135	790327	51.6818	51.682	80.00- 120.00	100.00
1.577	1.563 (0.298)	137	254973			2.12- 62.12	32.26
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	795406	49.4524	49.452	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	259194			2.44- 62.44	32.59
1.577	1.577 (0.298)	58	27091			0.00- 33.26	3.41
15 Chloromethane					CAS #: 74-87-3		
1.647	1.647 (0.312)	50	475385	55.4196	55.420	80.00- 120.00	100.00
1.647	1.647 (0.312)	52	154928			2.41- 62.41	32.59
18 Butane					CAS #: 106-97-8		
1.702	1.703 (0.322)	58	99890	49.3098	49.310	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.702	1.703 (0.322)	43	738443			727.41- 787.41	739.25
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.745 (0.330)	62	468006	50.9853	50.985	80.00- 120.00	100.00
1.744	1.745 (0.330)	64	142384			1.28- 61.28	30.42
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.759 (0.333)	54	405030	48.1465	48.146	80.00- 120.00	100.00
1.758	1.759 (0.333)	39	372020			69.23- 129.23	91.85
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	360278	49.6273	49.627	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	340916			62.78- 122.78	94.63
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	215635	50.0440	50.044	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	66003			1.44- 61.44	30.61
2.206	2.206 (0.417)	49	70534			4.12- 64.12	32.71
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	526416	47.7747	47.775	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	374812			38.82- 98.82	71.20
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	385448	48.8337	48.834	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	359857			63.14- 123.14	93.36
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	1143401	52.3619	52.362	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	743380			35.12- 95.12	65.01
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	914340	52.3794	52.379	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	277775			0.74- 60.74	30.38
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	809851	46.1324	46.132	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	130684			0.00- 45.97	16.14
2.500	2.500 (0.473)	72	67042			0.00- 38.10	8.28
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	186271	47.3255	47.325	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	336191			147.68- 207.68	180.48
2.780	2.780 (0.526)	45	435852			206.40- 266.40	233.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	73754	41.7511	41.751	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	435336			523.01- 583.01	590.25
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	150329	51.2808	51.281	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	214649			110.33- 170.33	142.79
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	752162	50.3874	50.387	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	476302			33.72- 93.72	63.32
3.032	3.032 (0.574)	101	907362			89.67- 149.67	120.63
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	419778	46.6876	46.688	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	267184			33.39- 93.39	63.65
3.074	3.074 (0.582)	61	827126			163.82- 223.82	197.04
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	238920	48.0942	48.094	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	794812			299.66- 359.66	332.67
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	1141970	51.0486	51.048	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	1068748	55.2498	55.250	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	506607			14.58- 74.58	47.40
52 2-Propanol					CAS #: 67-63-0		
3.410	3.396 (0.645)	45	880061	49.2591	49.259	80.00- 120.00	100.00
3.396	3.396 (0.643)	43	177079			0.00- 48.61	20.12
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	176501	45.8280	45.828	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	614906			338.06- 398.06	348.39
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	364718	46.6234	46.623	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	191962			21.81- 81.81	52.63
3.633	3.633 (0.688)	38	45062			0.00- 41.86	12.36
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	574090	48.2868	48.287	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	348714			30.77- 90.77	60.74
3.717	3.717 (0.703)	51	175227			1.39- 61.39	30.52

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	1022141	45.5806	45.581	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	235839			0.00- 51.05	23.07
3.857	3.857 (0.730)	57	111426			0.00- 41.68	10.90
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	1114611	46.0507	46.051	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	330324			0.00- 58.86	29.64
3.941	3.941 (0.746)	41	314571			0.00- 57.27	28.22
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	267853	44.2679	44.268	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	719505			244.59- 304.59	268.62
3.969	3.969 (0.751)	96	418996			129.84- 189.84	156.43
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	297135	40.9181	40.918	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	354720			88.50- 148.50	119.38
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	769013	46.8731	46.873	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	468290			32.99- 92.99	60.90
4.179	4.179 (0.791)	86	97580			0.00- 42.56	12.69
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	786129	46.5929	46.593	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	240005			0.76- 60.76	30.53
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1567300	45.2667	45.267	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	347936			0.00- 51.37	22.20
4.445	4.445 (0.841)	59	179119			0.00- 41.09	11.43
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	95656	46.1137	46.114	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1335462			1391.63-1451.63	1396.10
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1476022	44.1577	44.158	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	499599			3.22- 63.22	33.85
4.809	4.809 (0.910)	41	282373			0.00- 48.12	19.13
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	709826	45.1597	45.160	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	223588			2.00- 62.00	31.50
5.005	5.005 (0.947)	97	167215			0.00- 53.36	23.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.047	5.047 (0.955)	98	262481	43.7612	43.761	80.00- 120.00	100.00
5.047	5.047 (0.955)	96	413750			127.22- 187.22	157.63
5.047	5.047 (0.955)	61	839629			283.85- 343.85	319.88
86 2-Butanone					CAS #: 78-93-3		
5.061	5.061 (0.958)	72	194344	46.3880	46.388	80.00- 120.00	100.00
5.075	5.075 (0.960)	43	1976390			1055.75-1115.75	1016.95
5.061	5.061 (0.958)	57	78800			10.59- 70.59	40.55
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.089 (0.963)	45	154957	44.8650	44.865	80.00- 120.00	100.00
5.047	5.047 (0.955)	61	839629			450.31- 510.31	541.85
5.089	5.089 (0.963)	70	93309			30.42- 90.42	60.22
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	524108	44.3633	44.363	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	177552			2.92- 62.92	33.88
5.270	5.270 (0.997)	72	183202			3.54- 63.54	34.96
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	875013	47.1067	47.107	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	563099			34.71- 94.71	64.35
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	519206	44.2218	44.222	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	764374			120.40- 180.40	147.22
5.438	5.438 (1.029)	41	423911			54.20- 114.20	81.65
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.452 (1.032)	97	946507	45.3331	45.333	80.00- 120.00	100.00
5.452	5.452 (1.032)	99	603868			33.76- 93.76	63.80
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	946077	49.1985	49.198	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	990942			73.68- 133.68	104.74
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	232401	52.1068	52.107	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	595000			231.09- 291.09	256.02
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2434153	47.4438	47.444	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	766493			1.12- 61.12	31.49
5.774	5.774 (1.093)	41	656974			0.00- 57.49	26.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	1183624	52.9242	52.924	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	280096			0.00- 53.80	23.66
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	303621	50.9158	50.916	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	1187575			365.20- 425.20	391.14
5.858	5.858 (0.950)	55	388997			91.31- 151.31	128.12
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	681334	52.9156	52.916	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	213714			1.20- 61.20	31.37
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	406741	46.1738	46.174	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	817422			179.02- 239.02	200.97
5.942	5.942 (0.964)	57	475068			84.85- 144.85	116.80
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.030)	56	336829	46.9879	46.988	80.00- 120.00	100.00
6.348	6.348 (1.030)	41	231840			40.21- 100.21	68.83
6.348	6.348 (1.030)	43	181100			25.00- 85.00	53.77
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.032)	95	535485	47.7270	47.727	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	577321			74.96- 134.96	107.81
6.362	6.362 (1.032)	97	345652			34.80- 94.80	64.55
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	218412	42.1315	42.131	80.00- 120.00	100.00
6.586	6.586 (1.068)	62	138773			52.03- 112.03	63.54
6.586	6.586 (1.068)	41	194975			79.97- 139.97	89.27
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	474593	57.6882	57.688	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	607697			134.02- 194.02	128.05
6.664	6.664 (0.774)	100	154120			9.54- 69.54	32.47
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.087)	88	259834	45.8638	45.864	80.00- 120.00	100.00
6.692	6.700 (1.085)	58	219756			55.80- 115.80	84.58
6.700	6.692 (1.087)	57	79856			8.68- 68.68	30.73
118 Dibromomethane					CAS #: 74-95-3		
6.714	6.714 (0.780)	174	490177	53.5002	53.500	80.00- 120.00	100.00
6.714	6.714 (0.780)	93	475884			67.27- 127.27	97.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.714	6.714 (0.780)	95	394601			50.92- 110.92	80.50
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	854432	45.4579	45.458	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	554509			34.31- 94.31	64.90
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.169)	75	628808	45.0102	45.010	80.00- 120.00	100.00
7.208	7.208 (1.169)	77	199981			1.42- 61.42	31.80
7.208	7.208 (1.169)	39	428100			38.56- 98.56	68.08
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	652713	43.5047	43.505	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	301151			15.60- 75.60	46.14
6.460	6.460 (1.048)	55	708507			78.53- 138.53	108.55
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	390558	41.1147	41.115	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	996222			231.30- 291.30	255.08
7.316	7.316 (1.186)	85	151069			8.94- 68.94	38.68
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	1392149	46.3918	46.392	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	791553			28.30- 88.30	56.86
136 Octane					CAS #: 111-65-9		
7.445	7.445 (1.207)	57	436865	43.7564	43.756	80.00- 120.00	100.00
7.445	7.445 (1.207)	85	421352			67.11- 127.11	96.45
7.445	7.445 (1.207)	43	994056			214.21- 274.21	227.54
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	612018	48.6103	48.610	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	195099			2.15- 62.15	31.88
7.688	7.688 (0.893)	39	390299			36.09- 96.09	63.77
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	464587	47.9812	47.981	80.00- 120.00	100.00
7.839	7.846 (0.910)	99	290710			31.62- 91.62	62.57
7.839	7.846 (0.910)	83	401161			56.35- 116.35	86.35
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.882 (0.915)	166	684015	51.0765	51.076	80.00- 120.00	100.00
7.881	7.874 (0.915)	129	532628			48.71- 108.71	77.87
7.881	7.874 (0.915)	131	511486			46.55- 106.55	74.78

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	522944	47.0191	47.019	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	958730			157.91- 217.91	183.33
8.003	8.003 (0.929)	100	96203			0.00- 47.86	18.40
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	617238	43.1110	43.111	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	657086			82.96- 142.96	106.46
7.989	7.989 (1.296)	78	200713			2.55- 62.55	32.52
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.947)	129	966700	52.6260	52.626	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	748266			47.77- 107.77	77.40
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.261	8.261 (0.959)	107	753446	50.1072	50.107	80.00- 120.00	100.00
8.261	8.261 (0.959)	109	704133			64.60- 124.60	93.45
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.154)	63	824830	45.4733	45.473	80.00- 120.00	100.00
7.115	7.115 (1.154)	65	256328			0.95- 60.95	31.08
7.115	7.115 (1.154)	144	90654			0.00- 40.45	10.99
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	1142062	48.8823	48.882	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	366473			2.13- 62.13	32.09
8.634	8.641 (1.002)	77	598403			26.35- 86.35	52.40
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	579618	49.6134	49.613	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	1803961			282.48- 342.48	311.23
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	1009385	44.5763	44.576	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	943809			59.52- 119.52	93.50
8.705	8.705 (1.011)	85	324005			0.00- 59.76	32.10
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.705 (1.012)	131	579312	45.0539	45.054	80.00- 120.00	100.00
8.712	8.712 (1.012)	117	393684			38.22- 98.22	67.96
8.712	8.705 (1.012)	95	213685			7.54- 67.54	36.89
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	711626	48.9621	48.962	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	1420967			171.36- 231.36	199.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
9.121	9.121 (1.059)	106	660544	47.8728	47.873	80.00- 120.00	100.00
9.121	9.121 (1.059)	91	1387489			179.99- 239.99	210.05
165 Styrene					CAS #: 100-42-5		
9.142	9.149 (1.062)	104	1144640	47.8822	47.882	80.00- 120.00	100.00
9.142	9.142 (1.062)	78	550773			19.09- 79.09	48.12
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	916376	52.6106	52.610	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	469515			21.45- 81.45	51.24
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	2094597	48.0146	48.015	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	563600			0.00- 56.99	26.91
9.407	9.407 (1.092)	51	238615			0.00- 41.77	11.39
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	579729	42.2285	42.228	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	232873			9.22- 69.22	40.17
9.579	9.579 (1.112)	42	406297			42.60- 102.60	70.08
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	1047023	48.4088	48.409	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	675798			34.35- 94.35	64.54
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.730 (1.130)	156	691487	50.9899	50.990	80.00- 120.00	100.00
9.730	9.730 (1.130)	158	674539			67.29- 127.29	97.55
9.730	9.730 (1.130)	77	1058808			132.41- 192.41	153.12
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	2546342	50.0252	50.025	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	602029			0.00- 53.77	23.64
9.751	9.758 (1.132)	105	94541			0.00- 33.81	3.71
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	323911	49.7158	49.716	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	1075093			285.00- 345.00	331.91
9.787	9.787 (1.136)	61	273059			54.06- 114.06	84.30
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	337963	65.5540	65.554	80.00- 120.00	100.00(R)
9.787	9.787 (1.136)	89	173063			21.19- 81.19	51.21
9.787	9.787 (1.136)	75	1075093			372.45- 432.45	318.11

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	1182322	44.9219	44.922	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	411163			4.13- 64.13	34.78
9.816	9.816 (1.140)	142	60878			0.00- 34.73	5.15
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	659057	49.9516	49.952	80.00- 120.00	100.00
9.851	9.851 (1.144)	105	2130989			296.79- 356.79	323.34
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	540567	50.4236	50.424	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	1899904			336.29- 396.29	351.46
9.873	9.873 (1.146)	65	276984			38.83- 98.83	51.24
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.902 (1.150)	120	895858	48.3424	48.342	80.00- 120.00	100.00
9.901	9.902 (1.150)	105	1816200			176.40- 236.40	202.73
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	870386	45.8596	45.860	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	486670			26.64- 86.64	55.91
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.181)	119	1663880	48.7987	48.799	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	423350			0.00- 54.82	25.44
10.174	10.174 (1.181)	91	1077614			36.92- 96.92	64.77
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	1792560	49.0549	49.055	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	844162			16.58- 76.58	47.09
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.203)	134	548455	49.7999	49.800	80.00- 120.00	100.00
10.353	10.353 (1.202)	105	2599027			451.53- 511.53	473.88
10.353	10.353 (1.202)	91	406901			46.48- 106.48	74.19
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	2296296	49.7886	49.789	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	620030			0.00- 56.79	27.00
10.467	10.467 (1.215)	91	532164			0.00- 54.04	23.17
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.518 (1.221)	146	1278932	51.5149	51.515	80.00- 120.00	100.00
10.518	10.518 (1.221)	148	820260			33.53- 93.53	64.14
10.518	10.518 (1.221)	111	503629			11.05- 71.05	39.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	1280809	50.0861	50.086	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	820424			33.47- 93.47	64.06
10.596	10.596 (1.230)	111	487029			9.65- 69.65	38.03
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	1653905	47.0395	47.040	80.00- 120.00	100.00
10.711	10.711 (1.244)	126	372116			0.00- 52.04	22.50
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	1399982	45.1393	45.139	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	1195939			55.86- 115.86	85.43
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	611267	51.1160	51.116	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	2187839			331.99- 391.99	357.92
10.818	10.818 (1.256)	92	1122065			161.01- 221.01	183.56
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.919	10.926 (1.268)	146	1258192	52.4451	52.445	80.00- 120.00	100.00
10.919	10.926 (1.268)	148	797882			33.23- 93.23	63.41
10.919	10.919 (1.268)	111	518158			12.36- 72.36	41.18
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	749093	53.8501	53.850	80.00- 120.00	100.00
11.599	11.606 (1.347)	75	626330			58.96- 118.96	83.61
11.606	11.606 (1.348)	155	584928			47.82- 107.82	78.08
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	1290874	49.2213	49.221	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	1030653			50.85- 110.85	79.84
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.308 (1.428)	180	1020233	59.8730	59.873	80.00- 120.00	100.00
12.301	12.308 (1.428)	182	980086			65.40- 125.40	96.06
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	798269	62.0174	62.017	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	507726			33.70- 93.70	63.60
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.457)	128	240492	4.62189	4.622	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	30469			0.00- 43.10	12.67
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.810 (1.487)	180	936191	60.0399	60.040	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
12.803	12.810 (1.487)	182	903946			65.67- 125.67	96.56
12.803	12.810 (1.487)	145	325647			6.02- 66.02	34.78

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072503.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	296267	11.27
108 1,4-Difluorobenze	910055	546033	1274077	980049	7.69
153 Chlorobenzene-d5	785948	471569	1100327	854834	8.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	-0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCS
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	56.385	112.77	70-130
5 Propylene	50.000	48.118	96.24	70-130
7 1,1-Difluoroethan	50.000	51.619	103.24	70-130
8 Freon 12	50.000	50.824	101.65	70-130
9 Chlorodifluoromet	50.000	49.232	98.46	70-130
10 Freon 114	50.000	51.682	103.36	70-130
12 Isobutane	50.000	49.452	98.90	70-130
15 Chloromethane	50.000	55.420	110.84	70-130
18 Butane	50.000	49.310	98.62	70-130
19 Vinyl Chloride	50.000	50.985	101.97	70-130
20 1,3-Butadiene	50.000	48.146	96.29	70-130
24 Bromomethane	50.000	49.627	99.25	70-130
30 Chloroethane	50.000	50.044	100.09	70-130
31 Isopentane	50.000	47.775	95.55	70-130
32 Vinyl Bromide	50.000	48.834	97.67	70-130
33 Freon 11	50.000	52.362	104.72	70-130
34 Dichlorofluoromet	50.000	52.379	104.76	70-130
35 Pentane	50.000	46.132	92.26	70-130
38 Ethyl Ether	50.000	47.325	94.65	70-130
39 Ethanol	58.000	41.751	71.98	70-130
42 Acrolein	58.000	51.281	88.42	70-130
43 Freon 113	50.000	50.387	100.77	70-130
44 1,1-Dichloroethen	50.000	46.688	93.38	70-130
47 Acetone	50.000	48.094	96.19	70-130
48 Carbon Disulfide	50.000	51.048	102.10	70-130
49 Iodomethane	50.000	55.250	110.50	70-130
52 2-Propanol	50.000	49.259	98.52	70-130
54 3-Chloropropene	50.000	45.828	91.66	70-130
57 Acetonitrile	50.000	46.623	93.25	70-130
59 Methylene Chlorid	50.000	48.287	96.57	70-130
62 tert-Butyl alcoho	50.000	45.581	91.16	70-130
63 Methyl tert-butyl	50.000	46.051	92.10	70-130
64 trans-1,2-Dichlor	50.000	44.268	88.54	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	40.918	81.84	70-130
67	Hexane	50.000	46.873	93.75	70-130
71	1,1-Dichloroethan	50.000	46.593	93.19	70-130
72	Isopropyl ether	50.000	45.267	90.53	70-130
73	Vinyl Acetate	50.000	46.114	92.23	70-130
79	Ethyl-tert-butyl	50.000	44.158	88.32	70-130
84	2,2-Dichloropropa	50.000	45.160	90.32	70-130
85	cis-1,2-Dichloroe	50.000	43.761	87.52	70-130
86	2-Butanone	50.000	46.388	92.78	70-130
87	Ethyl Acetate	50.000	44.865	89.73	70-130
89	Tetrahydrofuran	50.000	44.363	88.73	70-130
92	Chloroform	50.000	47.107	94.21	70-130
94	Cyclohexane	50.000	44.222	88.44	70-130
96	1,1,1-Trichloroet	50.000	45.333	90.67	70-130
99	1,1-Dichloroprope	50.000	52.107	104.21	70-130
97	Carbon Tetrachlor	50.000	49.198	98.40	70-130
101	2,2,4-Trimethylpe	50.000	47.444	94.89	70-130
102	Benzene	50.000	52.924	105.85	70-130
105	tert-Amyl methyl	50.000	50.916	101.83	70-130
106	1,2-Dichloroethan	50.000	52.916	105.83	70-130
107	Heptane	50.000	46.174	92.35	70-130
110	n-Butanol	50.000	46.988	93.98	70-130
111	Trichloroethene	50.000	47.727	95.45	70-130
118	Dibromomethane	50.000	53.500	107.00	70-130
127	Methylcyclohexane	50.000	43.505	87.01	70-130
114	1,2-Dichloropropa	50.000	42.131	84.26	70-130
116	Methyl Methacryla	50.000	57.688	115.38	70-130
117	1,4-Dioxane	50.000	45.864	91.73	70-130
122	Bromodichlorometh	50.000	45.458	90.92	70-130
126	cis-1,3-Dichlorop	50.000	45.010	90.02	70-130
131	4-Methyl-2-pentan	50.000	41.115	82.23	70-130
136	Octane	50.000	43.756	87.51	70-130
137	Toluene	50.000	46.392	92.78	70-130
139	trans-1,3-Dichlor	50.000	48.610	97.22	70-130
141	1,1,2-Trichloroet	50.000	47.981	95.96	70-130
142	Tetrachloroethene	50.000	51.076	102.15	70-130
143	2-Hexanone	50.000	47.019	94.04	70-130
144	1,3-Dichloropropa	50.000	43.111	86.22	70-130
146	Dibromochlorometh	50.000	52.626	105.25	70-130
148	1,2-Dibromoethane	50.000	50.107	100.21	70-130
151	1-Bromo-2-Chloroe	50.000	45.473	90.95	70-130
154	Chlorobenzene	50.000	48.882	97.76	70-130
155	Ethyl Benzene	50.000	49.613	99.23	70-130
156	Nonane	50.000	44.576	89.15	70-130
157	1,1,1,2-Tetrachlo	50.000	45.054	90.11	70-130
158	m,p-Xylene	50.000	48.962	97.92	70-130
164	o-Xylene	50.000	47.873	95.75	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	47.882	95.76	70-130
167 Bromoform	50.000	52.610	105.22	70-130
168 Cumene	50.000	48.015	96.03	70-130
169 Cyclohexanone	50.000	42.228	84.46	70-130
175 1,1,2,2-Tetrachlo	50.000	48.409	96.82	70-130
177 Bromobenzene	50.000	50.990	101.98	70-130
178 Propylbenzene	50.000	50.025	100.05	70-130
179 1,2,3-Trichloropr	50.000	49.716	99.43	70-130
181 trans-1,4-Dichlor	50.000	65.554	131.11*	70-130
182 Decane	50.000	44.922	89.84	70-130
183 4-Ethyltoluene	50.000	49.952	99.90	70-130
184 2-Chlorotoluene	50.000	50.424	100.85	70-130
185 1,3,5-Trimethylbe	50.000	48.342	96.68	70-130
188 alpha Methyl Styr	50.000	45.860	91.72	70-130
189 tert-Butylbenzene	50.000	48.799	97.60	70-130
190 1,2,4-Trimethylbe	50.000	49.055	98.11	70-130
192 sec-Butylbenzene	50.000	49.800	99.60	70-130
194 p-Cymene	50.000	49.789	99.58	70-130
195 1,3-Dichlorobenze	50.000	51.515	103.03	70-130
196 1,4-Dichlorobenze	50.000	50.086	100.17	70-130
199 alpha-Chlorotolue	50.000	47.040	94.08	70-130
201 Undecane	50.000	45.139	90.28	70-130
202 Butylbenzene	50.000	51.116	102.23	70-130
204 1,2-Dichlorobenze	50.000	52.445	104.89	70-130
206 1,2-Dibromo-3-chl	50.000	53.850	107.70	70-130
207 Dodecane	50.000	49.221	98.44	70-130
213 1,2,4-Trichlorobe	58.000	59.873	103.23	70-130
215 Hexachlorobutadie	58.000	62.017	106.93	70-130
216 Naphthalene	5.800	4.622	79.69	60-140
222 1,2,3-Trichlorobe	58.000	60.040	103.52	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.554	102.21	70-130
$ 134 Toluene-d8	25.000	23.936	95.74	70-130
$ 170 4-Bromofluorobenz	25.000	24.945	99.78	70-130

Data File: /chem/msd3.i/25JUL21.b/3072503.d

Date : 25-JUL-2021 11:30

Client ID: LCS

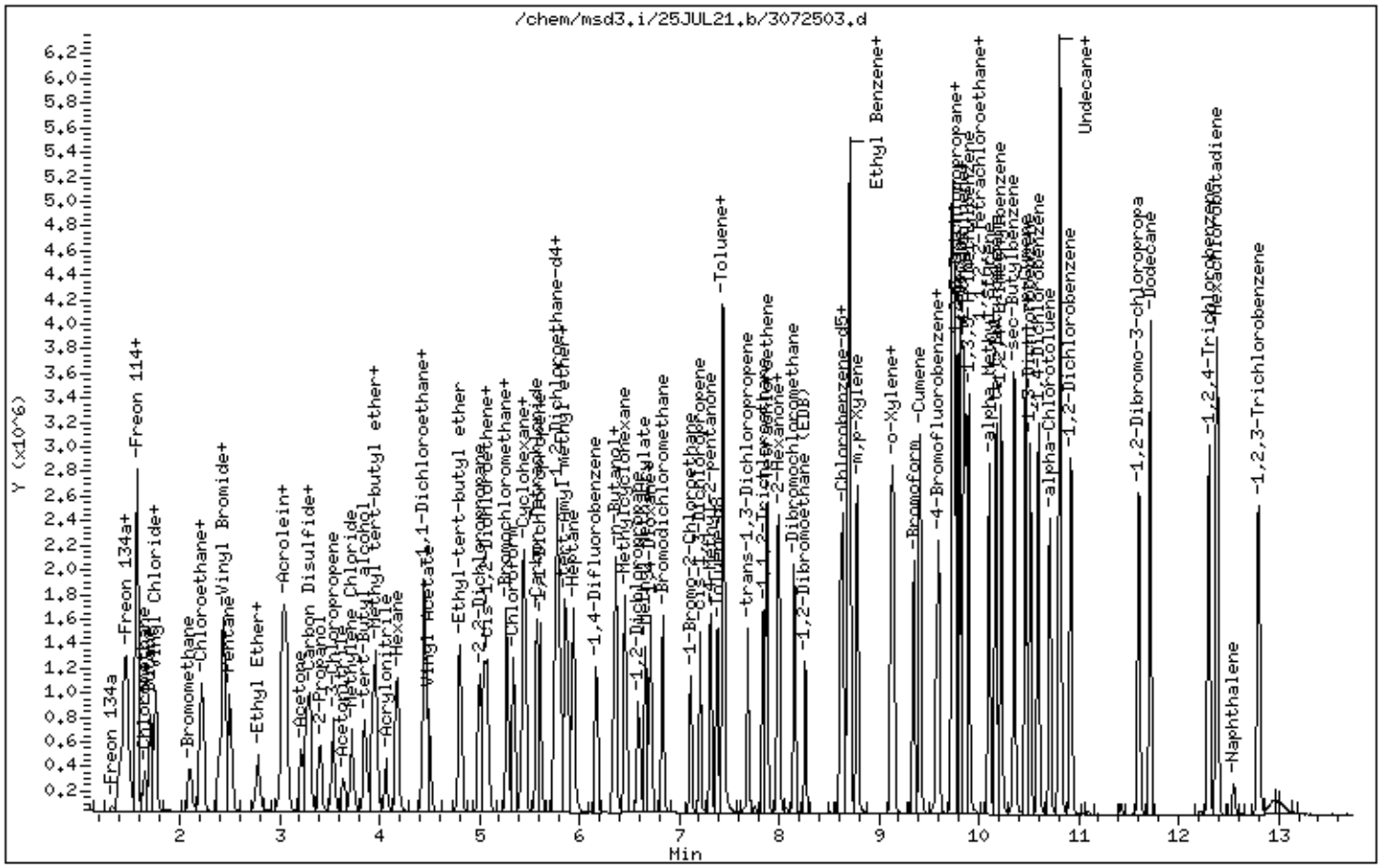
Instrument: msd3.i

Sample Info: 100mL 3018-2121A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCSD

Lab ID#: 2107260A-27AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:57 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	92	70-130
1,1,2,2-Tetrachloroethane	98	70-130
1,1,2-Trichloroethane	98	70-130
1,1-Dichloroethane	97	70-130
1,1-Dichloroethene	99	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	116	70-130
1,2,4-Trimethylbenzene	100	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	102	70-130
1,2-Dichlorobenzene	104	70-130
1,2-Dichloroethane	101	70-130
1,2-Dichloropropane	94	70-130
1,3,5-Trimethylbenzene	99	70-130
1,3-Butadiene	102	70-130
1,3-Dichlorobenzene	106	70-130
1,4-Dichlorobenzene	103	70-130
1,4-Dioxane	100	70-130
2,2,4-Trimethylpentane	91	70-130
2-Butanone (Methyl Ethyl Ketone)	98	70-130
2-Hexanone	96	70-130
2-Propanol	104	70-130
3-Chloropropene	98	70-130
4-Ethyltoluene	102	70-130
4-Methyl-2-pentanone	83	70-130
Acetone	100	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	97	70-130
Benzene	97	70-130
Bromodichloromethane	94	70-130
Bromoform	106	70-130
Bromomethane	101	70-130
Carbon Disulfide	106	70-130
Carbon Tetrachloride	101	70-130
Chlorobenzene	100	70-130
Chloroethane	103	70-130
Chloroform	95	70-130
Chloromethane	114	70-130
cis-1,2-Dichloroethene	93	70-130

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Client Sample ID: LCSD

Lab ID#: 2107260A-27AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:57 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	91	70-130
Cumene	97	70-130
Cyclohexane	90	70-130
Dibromochloromethane	106	70-130
Dibromomethane	Not Spiked	
Ethanol	74	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	101	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	110	70-130
Freon 12	107	70-130
Freon 113	105	70-130
Freon 114	109	70-130
Freon 134a	Not Spiked	
Heptane	88	70-130
Hexachlorobutadiene	119	70-130
Hexachloroethane	Not Spiked	
Hexane	97	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	100	70-130
Methyl tert-butyl ether	97	70-130
Methylene Chloride	99	70-130
Naphthalene	88	60-140
o-Xylene	98	70-130
Propylbenzene	101	70-130
Propylene	100	60-140
Styrene	98	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	105	70-130
Tetrahydrofuran	89	70-130
Toluene	93	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	94	70-130
trans-1,3-Dichloropropene	99	70-130
Trichloroethene	98	70-130
Vinyl Acetate	97	70-130
Vinyl Bromide	Not Spiked	
Vinyl Chloride	106	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2107260A-27AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:57 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072504.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 25-JUL-2021 11:57
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 25-Jul-2021 12:43 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.284	5.284 (1.000)	130	303039	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	236035				48.46- 108.46	77.89
5.270	5.270 (1.000)	49	432452				120.39- 180.39	142.71
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.166	6.166 (1.000)	114	1051372	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	158547				0.00- 45.52	15.08
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.612 (1.000)	117	897232	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	472231				25.46- 85.46	52.63
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	415576	24.9198	24.920		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	216094				21.66- 81.66	52.00
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.198)	98	1008950	23.2991	23.299		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	111804				0.00- 41.47	11.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.198)	100	675081			36.47- 96.47	66.91
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	593397	25.0039	25.004	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	682339			93.06- 153.06	114.99
9.601	9.601 (1.115)	176	551158			62.87- 122.87	92.88
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	423319	58.7071	58.707	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	336252			51.82- 111.82	79.43
1.493	1.479 (0.282)	51	981603			194.91- 254.91	231.88
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	365076	49.8751	49.875	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	242583			35.61- 95.61	66.45
1.437	1.423 (0.272)	39	276467			42.66- 102.66	75.73
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.274)	65	247996	51.9749	51.975	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	981603			321.86- 381.86	395.81
1.451	1.451 (0.274)	47	191459			45.34- 105.34	77.20
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	1129329	53.4971	53.497	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	364091			2.63- 62.63	32.24
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	120967	52.1390	52.139	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	981603			719.76- 779.76	811.46
10 Freon 114					CAS #: 76-14-2		
1.576	1.563 (0.298)	135	853709	54.5790	54.579	80.00- 120.00	100.00
1.576	1.563 (0.298)	137	272719			2.12- 62.12	31.95
12 Isobutane					CAS #: 75-28-5		
1.576	1.577 (0.298)	43	854582	51.9442	51.944	80.00- 120.00	100.00
1.576	1.577 (0.298)	42	276588			2.44- 62.44	32.37
1.576	1.577 (0.298)	58	30242			0.00- 33.26	3.54
15 Chloromethane					CAS #: 74-87-3		
1.646	1.647 (0.312)	50	500985	57.0988	57.099	80.00- 120.00	100.00
1.646	1.647 (0.312)	52	162596			2.41- 62.41	32.46
18 Butane					CAS #: 106-97-8		
1.702	1.703 (0.322)	58	106577	51.4352	51.435	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
1.702	1.703 (0.322)	43	786430			727.41- 787.41	737.89
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.745 (0.330)	62	499438	53.1936	53.194	80.00- 120.00	100.00
1.744	1.745 (0.330)	64	150963			1.28- 61.28	30.23
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.759 (0.333)	54	439986	51.1331	51.133	80.00- 120.00	100.00
1.758	1.759 (0.333)	39	396746			69.23- 129.23	90.17
24 Bromomethane					CAS #: 74-83-9		
2.108	2.094 (0.399)	94	375745	50.6013	50.601	80.00- 120.00	100.00
2.108	2.094 (0.399)	96	352693			62.78- 122.78	93.86
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	227018	51.5085	51.508	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	68927			1.44- 61.44	30.36
2.206	2.206 (0.417)	49	74516			4.12- 64.12	32.82
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	564569	50.0922	50.092	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	402533			38.82- 98.82	71.30
32 Vinyl Bromide					CAS #: 593-60-2		
2.402	2.388 (0.455)	106	411143	50.9250	50.925	80.00- 120.00	100.00
2.402	2.388 (0.455)	108	381923			63.14- 123.14	92.89
33 Freon 11					CAS #: 75-69-4		
2.444	2.430 (0.462)	101	1229990	55.0685	55.068	80.00- 120.00	100.00
2.444	2.430 (0.462)	103	795171			35.12- 95.12	64.65
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.462)	67	964478	54.0169	54.017	80.00- 120.00	100.00
2.444	2.444 (0.462)	69	296115			0.74- 60.74	30.70
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	863876	48.1102	48.110	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	141472			0.00- 45.97	16.38
2.500	2.500 (0.473)	72	73763			0.00- 38.10	8.54
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	199318	49.5088	49.509	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	359046			147.68- 207.68	180.14
2.780	2.780 (0.526)	45	457703			206.40- 266.40	229.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.523)	46	77189	42.7192	42.719	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	457132			523.01- 583.01	592.22
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	161238	53.7730	53.773	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	230673			110.33- 170.33	143.06
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	802091	52.5315	52.531	80.00- 120.00	100.00
3.046	3.032 (0.576)	153	511067			33.72- 93.72	63.72
3.032	3.032 (0.574)	101	966108			89.67- 149.67	120.45
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	453883	49.3525	49.352	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	284451			33.39- 93.39	62.67
3.074	3.074 (0.582)	61	889514			163.82- 223.82	195.98
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	254883	50.1608	50.161	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	847245			299.66- 359.66	332.41
48 Carbon Disulfide					CAS #: 75-15-0		
3.297	3.298 (0.624)	76	1217979	53.2297	53.230	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.269	3.270 (0.619)	142	1150413	58.1426	58.142	80.00- 120.00	100.00
3.269	3.270 (0.619)	127	538595			14.58- 74.58	46.82
52 2-Propanol					CAS #: 67-63-0		
3.409	3.396 (0.645)	45	947126	51.8283	51.828	80.00- 120.00	100.00
3.409	3.396 (0.645)	43	186075			0.00- 48.61	19.65
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	192232	48.7971	48.797	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	655666			338.06- 398.06	341.08
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	386131	48.2576	48.258	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	202998			21.81- 81.81	52.57
3.633	3.633 (0.688)	38	47878			0.00- 41.86	12.40
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	603758	49.6474	49.647	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	370163			30.77- 90.77	61.31
3.717	3.717 (0.703)	51	186206			1.39- 61.39	30.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
3.857	3.857 (0.730)	59	1106596	48.2440	48.244	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	244626			0.00- 51.05	22.11
3.857	3.857 (0.730)	57	118566			0.00- 41.68	10.71
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	1203191	48.5996	48.600	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	357736			0.00- 58.86	29.73
3.941	3.941 (0.746)	41	333793			0.00- 57.27	27.74
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	289807	46.8260	46.826	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	766895			244.59- 304.59	264.62
3.969	3.969 (0.751)	96	449188			129.84- 189.84	155.00
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	318657	42.9011	42.901	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	379956			88.50- 148.50	119.24
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	813843	48.4970	48.497	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	496273			32.99- 92.99	60.98
4.179	4.179 (0.791)	86	101448			0.00- 42.56	12.47
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	836144	48.4498	48.450	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	253973			0.76- 60.76	30.37
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1650586	46.6069	46.607	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	369579			0.00- 51.37	22.39
4.445	4.445 (0.841)	59	189351			0.00- 41.09	11.47
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	103274	48.6735	48.673	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1433949			1391.63-1451.63	1388.49
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1587185	46.4222	46.422	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	530362			3.22- 63.22	33.42
4.809	4.809 (0.910)	41	300170			0.00- 48.12	18.91
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.004	5.005 (0.947)	77	758984	47.2081	47.208	80.00- 120.00	100.00
5.004	5.005 (0.947)	79	246553			2.00- 62.00	32.48
5.004	5.005 (0.947)	97	177121			0.00- 53.36	23.34

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.046	5.047 (0.955)	98	285053	46.4624	46.462	80.00- 120.00	100.00
5.046	5.047 (0.955)	96	432231			127.22- 187.22	151.63
5.046	5.047 (0.955)	61	848366			283.85- 343.85	297.62
86 2-Butanone					CAS #: 78-93-3		
5.074	5.061 (0.960)	72	210072	49.0216	49.022	80.00- 120.00	100.00
5.074	5.075 (0.960)	43	2125781			1055.75-1115.75	1011.93
5.060	5.061 (0.958)	57	82822			10.59- 70.59	39.43
87 Ethyl Acetate					CAS #: 141-78-6		
5.088	5.089 (0.963)	45	166184	47.0406	47.040	80.00- 120.00	100.00
5.046	5.047 (0.955)	61	848366			450.31- 510.31	510.50
5.088	5.089 (0.963)	70	100168			30.42- 90.42	60.28
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	536690	44.4131	44.413	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	182736			2.92- 62.92	34.05
5.270	5.270 (0.997)	72	188552			3.54- 63.54	35.13
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	898678	47.2995	47.300	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	586167			34.71- 94.71	65.23
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	538351	44.8278	44.828	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	778683			120.40- 180.40	144.64
5.438	5.438 (1.029)	41	433034			54.20- 114.20	80.44
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.452	5.452 (1.032)	97	977376	45.7654	45.765	80.00- 120.00	100.00
5.452	5.452 (1.032)	99	629194			33.76- 93.76	64.38
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	990027	50.3334	50.333	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	1030793			73.68- 133.68	104.12
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.909)	110	236536	49.4361	49.436	80.00- 120.00	100.00
5.606	5.606 (0.909)	75	606195			231.09- 291.09	256.28
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2386052	45.4670	45.467	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	747474			1.12- 61.12	31.33
5.774	5.774 (1.093)	41	661402			0.00- 57.49	27.72

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	1168602	48.7079	48.708	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	280769			0.00- 53.80	24.03
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.950)	87	307335	48.0422	48.042	80.00- 120.00	100.00
5.858	5.858 (0.950)	73	1206284			365.20- 425.20	392.50
5.858	5.858 (0.950)	55	374839			91.31- 151.31	121.96
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.955)	62	697322	50.4834	50.483	80.00- 120.00	100.00
5.886	5.886 (0.955)	64	215477			1.20- 61.20	30.90
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	418106	44.2442	44.244	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	826440			179.02- 239.02	197.66
5.942	5.942 (0.964)	57	488120			84.85- 144.85	116.75
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.030)	56	378785	49.2562	49.256	80.00- 120.00	100.00
6.348	6.348 (1.030)	41	258964			40.21- 100.21	68.37
6.348	6.348 (1.030)	43	203828			25.00- 85.00	53.81
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.032)	95	592698	49.2427	49.243	80.00- 120.00	100.00
6.362	6.362 (1.032)	130	636946			74.96- 134.96	107.47
6.362	6.362 (1.032)	97	380502			34.80- 94.80	64.20
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.068)	63	263034	47.2970	47.297	80.00- 120.00	100.00
6.586	6.586 (1.068)	62	153663			52.03- 112.03	58.42
6.586	6.586 (1.068)	41	230287			79.97- 139.97	87.55
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	460435	53.3225	53.322	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	719194			134.02- 194.02	156.20
6.664	6.664 (0.774)	100	181650			9.54- 69.54	39.45
117 1,4-Dioxane					CAS #: 123-91-1		
6.699	6.700 (1.087)	88	303393	49.9196	49.920	80.00- 120.00	100.00
6.699	6.700 (1.087)	58	250598			55.80- 115.80	82.60
6.692	6.692 (1.085)	57	111481			8.68- 68.68	36.74
118 Dibromomethane					CAS #: 74-95-3		
6.714	6.714 (0.780)	174	564635	58.7148	58.715	80.00- 120.00	100.00
6.714	6.714 (0.780)	93	541352			67.27- 127.27	95.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.714	6.714 (0.780)	95	450897			50.92- 110.92	79.86
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	944851	46.8584	46.858	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	607336			34.31- 94.31	64.28
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.169)	75	682617	45.5471	45.547	80.00- 120.00	100.00
7.208	7.208 (1.169)	77	213596			1.42- 61.42	31.29
7.208	7.208 (1.169)	39	461640			38.56- 98.56	67.63
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.048)	83	751228	46.6742	46.674	80.00- 120.00	100.00
6.460	6.460 (1.048)	98	344452			15.60- 75.60	45.85
6.460	6.460 (1.048)	55	737081			78.53- 138.53	98.12
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.186)	58	424261	41.6329	41.633	80.00- 120.00	100.00
7.316	7.316 (1.186)	43	1078403			231.30- 291.30	254.18
7.316	7.316 (1.186)	85	163593			8.94- 68.94	38.56
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	1491624	46.3347	46.335	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	849881			28.30- 88.30	56.98
136 Octane					CAS #: 111-65-9		
7.444	7.445 (1.207)	57	470723	43.9493	43.949	80.00- 120.00	100.00
7.444	7.445 (1.207)	85	458559			67.11- 127.11	97.42
7.444	7.445 (1.207)	43	1064285			214.21- 274.21	226.10
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	656811	49.7028	49.703	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	208453			2.15- 62.15	31.74
7.688	7.688 (0.893)	39	421471			36.09- 96.09	64.17
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.838	7.846 (0.910)	97	498906	49.0908	49.091	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	312314			31.62- 91.62	62.60
7.838	7.846 (0.910)	83	429842			56.35- 116.35	86.16
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.882 (0.915)	166	739759	52.6288	52.629	80.00- 120.00	100.00
7.874	7.874 (0.914)	129	572935			48.71- 108.71	77.45
7.874	7.874 (0.914)	131	559326			46.55- 106.55	75.61

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.003	8.003 (0.929)	58	558804	47.8691	47.869	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	1026116			157.91- 217.91	183.63
8.003	8.003 (0.929)	100	102118			0.00- 47.86	18.27
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.296)	76	661869	43.0922	43.092	80.00- 120.00	100.00
7.989	7.989 (1.296)	41	703952			82.96- 142.96	106.36
7.989	7.989 (1.296)	78	216985			2.55- 62.55	32.78
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.947)	129	1027051	53.2694	53.269	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	804428			47.77- 107.77	78.32
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.261	8.261 (0.959)	107	805775	51.0550	51.055	80.00- 120.00	100.00
8.261	8.261 (0.959)	109	755308			64.60- 124.60	93.74
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.154)	63	892507	45.8664	45.866	80.00- 120.00	100.00
7.115	7.115 (1.154)	65	277200			0.95- 60.95	31.06
7.122	7.115 (1.155)	144	97989			0.00- 40.45	10.98
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	1221004	49.7916	49.792	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	390484			2.13- 62.13	31.98
8.641	8.641 (1.003)	77	658987			26.35- 86.35	53.97
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	617091	50.3249	50.325	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	1926537			282.48- 342.48	312.20
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	1076192	45.2808	45.281	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	1008278			59.52- 119.52	93.69
8.705	8.705 (1.011)	85	352676			0.00- 59.76	32.77
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.705 (1.012)	131	619806	45.9254	45.925	80.00- 120.00	100.00
8.712	8.712 (1.012)	117	417511			38.22- 98.22	67.36
8.705	8.705 (1.011)	95	232182			7.54- 67.54	37.46
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	762648	49.9930	49.993	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	1516679			171.36- 231.36	198.87

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
9.121	9.121 (1.059)	106	710805	49.0812	49.081	80.00- 120.00	100.00
9.121	9.121 (1.059)	91	1486143			179.99- 239.99	209.08
165 Styrene					CAS #: 100-42-5		
9.142	9.149 (1.062)	104	1231261	49.0718	49.072	80.00- 120.00	100.00
9.142	9.142 (1.062)	78	587161			19.09- 79.09	47.69
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	971091	53.1173	53.117	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	505917			21.45- 81.45	52.10
168 Cumene					CAS #: 98-82-8		
9.407	9.414 (1.092)	105	2227860	48.6562	48.656	80.00- 120.00	100.00
9.407	9.414 (1.092)	120	605856			0.00- 56.99	27.19
9.407	9.407 (1.092)	51	254758			0.00- 41.77	11.44
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	621606	43.1393	43.139	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	248069			9.22- 69.22	39.91
9.579	9.579 (1.112)	42	439945			42.60- 102.60	70.78
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	1116706	49.1908	49.191	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	721491			34.35- 94.35	64.61
177 Bromobenzene					CAS #: 108-86-1		
9.729	9.730 (1.130)	156	743283	52.2193	52.219	80.00- 120.00	100.00
9.729	9.730 (1.130)	158	721955			67.29- 127.29	97.13
9.729	9.730 (1.130)	77	1133045			132.41- 192.41	152.44
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	2697880	50.4978	50.498	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	643163			0.00- 53.77	23.84
9.758	9.758 (1.133)	105	98887			0.00- 33.81	3.67
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	346330	50.6448	50.645	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	1163573			285.00- 345.00	335.97
9.787	9.787 (1.136)	61	290040			54.06- 114.06	83.75
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	362698	67.0273	67.027	80.00- 120.00	100.00(R)
9.787	9.787 (1.136)	89	187317			21.19- 81.19	51.65
9.787	9.787 (1.136)	75	1163573			372.45- 432.45	320.81

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	1287126	46.5930	46.593	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	447417			4.13- 64.13	34.76
9.808	9.816 (1.139)	142	64965			0.00- 34.73	5.05
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.144)	120	704068	50.8415	50.842	80.00- 120.00	100.00
9.851	9.851 (1.144)	105	2276109			296.79- 356.79	323.28
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	582316	51.7511	51.751	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	2030995			336.29- 396.29	348.78
9.873	9.873 (1.146)	65	300964			38.83- 98.83	51.68
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.902 (1.150)	120	959958	49.3535	49.354	80.00- 120.00	100.00
9.901	9.902 (1.150)	105	1942575			176.40- 236.40	202.36
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	936478	47.0103	47.010	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	524574			26.64- 86.64	56.02
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.181)	119	1796976	50.2118	50.212	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	453398			0.00- 54.82	25.23
10.174	10.174 (1.181)	91	1156433			36.92- 96.92	64.35
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	1927368	50.2517	50.252	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	910302			16.58- 76.58	47.23
192 sec-Butylbenzene					CAS #: 135-98-8		
10.353	10.360 (1.202)	134	588420	50.9039	50.904	80.00- 120.00	100.00
10.353	10.353 (1.202)	105	2817719			451.53- 511.53	478.86
10.353	10.353 (1.202)	91	438711			46.48- 106.48	74.56
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	2486255	51.3600	51.360	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	668565			0.00- 56.79	26.89
10.467	10.467 (1.215)	91	579789			0.00- 54.04	23.32
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.518 (1.221)	146	1383150	53.0802	53.080	80.00- 120.00	100.00
10.510	10.518 (1.220)	148	880214			33.53- 93.53	63.64
10.510	10.518 (1.220)	111	550002			11.05- 71.05	39.76

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	1388441	51.7293	51.729	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	880768			33.47- 93.47	63.44
10.596	10.596 (1.230)	111	530173			9.65- 69.65	38.18
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	1789408	48.4885	48.488	80.00- 120.00	100.00
10.711	10.711 (1.244)	126	401646			0.00- 52.04	22.45
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	1535311	47.1634	47.163	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	1301650			55.86- 115.86	84.78
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	660804	52.6472	52.647	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	2350064			331.99- 391.99	355.64
10.818	10.818 (1.256)	92	1217098			161.01- 221.01	184.18
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.919	10.926 (1.268)	146	1307987	51.9444	51.944	80.00- 120.00	100.00
10.919	10.926 (1.268)	148	827964			33.23- 93.23	63.30
10.919	10.919 (1.268)	111	531803			12.36- 72.36	40.66
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	767433	52.5616	52.562	80.00- 120.00	100.00
11.599	11.606 (1.347)	75	628034			58.96- 118.96	81.84
11.606	11.606 (1.348)	155	596479			47.82- 107.82	77.72
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	1579248	57.3716	57.372	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	1249147			50.85- 110.85	79.10
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.308 (1.428)	180	1207549	67.5170	67.517	80.00- 120.00	100.00
12.301	12.308 (1.428)	182	1150341			65.40- 125.40	95.26
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	932668	69.0348	69.035	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	589895			33.70- 93.70	63.25
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.457)	128	279174	5.11176	5.112	80.00- 120.00	100.00
12.552	12.552 (1.457)	127	38111			0.00- 43.10	13.65
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.802	12.810 (1.487)	180	1146875	70.0760	70.076	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
12.802	12.810 (1.487)	182	1095694			65.67- 125.67	95.54
12.802	12.810 (1.487)	145	399205			6.02- 66.02	34.81

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072504.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	303039	13.81
108 1,4-Difluorobenze	910055	546033	1274077	1051372	15.53
153 Chlorobenzene-d5	785948	471569	1100327	897232	14.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.17	-0.00
153 Chlorobenzene-d5	8.61	8.28	8.94	8.61	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	58.707	117.41	70-130
5 Propylene	50.000	49.875	99.75	70-130
7 1,1-Difluoroethan	50.000	51.975	103.95	70-130
8 Freon 12	50.000	53.497	106.99	70-130
9 Chlorodifluoromet	50.000	52.139	104.28	70-130
10 Freon 114	50.000	54.579	109.16	70-130
12 Isobutane	50.000	51.944	103.89	70-130
15 Chloromethane	50.000	57.099	114.20	70-130
18 Butane	50.000	51.435	102.87	70-130
19 Vinyl Chloride	50.000	53.194	106.39	70-130
20 1,3-Butadiene	50.000	51.133	102.27	70-130
24 Bromomethane	50.000	50.601	101.20	70-130
30 Chloroethane	50.000	51.508	103.02	70-130
31 Isopentane	50.000	50.092	100.18	70-130
32 Vinyl Bromide	50.000	50.925	101.85	70-130
33 Freon 11	50.000	55.068	110.14	70-130
34 Dichlorofluoromet	50.000	54.017	108.03	70-130
35 Pentane	50.000	48.110	96.22	70-130
38 Ethyl Ether	50.000	49.509	99.02	70-130
39 Ethanol	58.000	42.719	73.65	70-130
42 Acrolein	58.000	53.773	92.71	70-130
43 Freon 113	50.000	52.531	105.06	70-130
44 1,1-Dichloroethen	50.000	49.352	98.71	70-130
47 Acetone	50.000	50.161	100.32	70-130
48 Carbon Disulfide	50.000	53.230	106.46	70-130
49 Iodomethane	50.000	58.142	116.29	70-130
52 2-Propanol	50.000	51.828	103.66	70-130
54 3-Chloropropene	50.000	48.797	97.59	70-130
57 Acetonitrile	50.000	48.258	96.52	70-130
59 Methylene Chlorid	50.000	49.647	99.29	70-130
62 tert-Butyl alcoho	50.000	48.244	96.49	70-130
63 Methyl tert-butyl	50.000	48.600	97.20	70-130
64 trans-1,2-Dichlor	50.000	46.826	93.65	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	42.901	85.80	70-130
67	Hexane	50.000	48.497	96.99	70-130
71	1,1-Dichloroethan	50.000	48.450	96.90	70-130
72	Isopropyl ether	50.000	46.607	93.21	70-130
73	Vinyl Acetate	50.000	48.673	97.35	70-130
79	Ethyl-tert-butyl	50.000	46.422	92.84	70-130
84	2,2-Dichloropropa	50.000	47.208	94.42	70-130
85	cis-1,2-Dichloroe	50.000	46.462	92.92	70-130
86	2-Butanone	50.000	49.022	98.04	70-130
87	Ethyl Acetate	50.000	47.040	94.08	70-130
89	Tetrahydrofuran	50.000	44.413	88.83	70-130
92	Chloroform	50.000	47.300	94.60	70-130
94	Cyclohexane	50.000	44.828	89.66	70-130
96	1,1,1-Trichloroet	50.000	45.765	91.53	70-130
99	1,1-Dichloroprope	50.000	49.436	98.87	70-130
97	Carbon Tetrachlor	50.000	50.333	100.67	70-130
101	2,2,4-Trimethylpe	50.000	45.467	90.93	70-130
102	Benzene	50.000	48.708	97.42	70-130
105	tert-Amyl methyl	50.000	48.042	96.08	70-130
106	1,2-Dichloroethan	50.000	50.483	100.97	70-130
107	Heptane	50.000	44.244	88.49	70-130
110	n-Butanol	50.000	49.256	98.51	70-130
111	Trichloroethene	50.000	49.243	98.49	70-130
118	Dibromomethane	50.000	58.715	117.43	70-130
127	Methylcyclohexane	50.000	46.674	93.35	70-130
114	1,2-Dichloropropa	50.000	47.297	94.59	70-130
116	Methyl Methacryla	50.000	53.322	106.65	70-130
117	1,4-Dioxane	50.000	49.920	99.84	70-130
122	Bromodichlorometh	50.000	46.858	93.72	70-130
126	cis-1,3-Dichlorop	50.000	45.547	91.09	70-130
131	4-Methyl-2-pentan	50.000	41.633	83.27	70-130
136	Octane	50.000	43.949	87.90	70-130
137	Toluene	50.000	46.335	92.67	70-130
139	trans-1,3-Dichlor	50.000	49.703	99.41	70-130
141	1,1,2-Trichloroet	50.000	49.091	98.18	70-130
142	Tetrachloroethene	50.000	52.629	105.26	70-130
143	2-Hexanone	50.000	47.869	95.74	70-130
144	1,3-Dichloropropa	50.000	43.092	86.18	70-130
146	Dibromochlorometh	50.000	53.269	106.54	70-130
148	1,2-Dibromoethane	50.000	51.055	102.11	70-130
151	1-Bromo-2-Chloroe	50.000	45.866	91.73	70-130
154	Chlorobenzene	50.000	49.792	99.58	70-130
155	Ethyl Benzene	50.000	50.325	100.65	70-130
156	Nonane	50.000	45.281	90.56	70-130
157	1,1,1,2-Tetrachlo	50.000	45.925	91.85	70-130
158	m,p-Xylene	50.000	49.993	99.99	70-130
164	o-Xylene	50.000	49.081	98.16	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	49.072	98.14	70-130
167 Bromoform	50.000	53.117	106.23	70-130
168 Cumene	50.000	48.656	97.31	70-130
169 Cyclohexanone	50.000	43.139	86.28	70-130
175 1,1,2,2-Tetrachlo	50.000	49.191	98.38	70-130
177 Bromobenzene	50.000	52.219	104.44	70-130
178 Propylbenzene	50.000	50.498	101.00	70-130
179 1,2,3-Trichloropr	50.000	50.645	101.29	70-130
181 trans-1,4-Dichlor	50.000	67.027	134.05*	70-130
182 Decane	50.000	46.593	93.19	70-130
183 4-Ethyltoluene	50.000	50.842	101.68	70-130
184 2-Chlorotoluene	50.000	51.751	103.50	70-130
185 1,3,5-Trimethylbe	50.000	49.354	98.71	70-130
188 alpha Methyl Styr	50.000	47.010	94.02	70-130
189 tert-Butylbenzene	50.000	50.212	100.42	70-130
190 1,2,4-Trimethylbe	50.000	50.252	100.50	70-130
192 sec-Butylbenzene	50.000	50.904	101.81	70-130
194 p-Cymene	50.000	51.360	102.72	70-130
195 1,3-Dichlorobenze	50.000	53.080	106.16	70-130
196 1,4-Dichlorobenze	50.000	51.729	103.46	70-130
199 alpha-Chlorotolue	50.000	48.488	96.98	70-130
201 Undecane	50.000	47.163	94.33	70-130
202 Butylbenzene	50.000	52.647	105.29	70-130
204 1,2-Dichlorobenze	50.000	51.944	103.89	70-130
206 1,2-Dibromo-3-chl	50.000	52.562	105.12	70-130
207 Dodecane	50.000	57.372	114.74	70-130
213 1,2,4-Trichlorobe	58.000	67.517	116.41	70-130
215 Hexachlorobutadie	58.000	69.035	119.03	70-130
216 Naphthalene	5.800	5.112	88.13	60-140
222 1,2,3-Trichlorobe	58.000	70.076	120.82	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.920	99.68	70-130
$ 134 Toluene-d8	25.000	23.299	93.20	70-130
$ 170 4-Bromofluorobenz	25.000	25.004	100.02	70-130

Data File: /chem/msd3.i/25JUL21.b/3072504.d

Page 1

Date : 25-JUL-2021 11:57

Client ID: LCSD

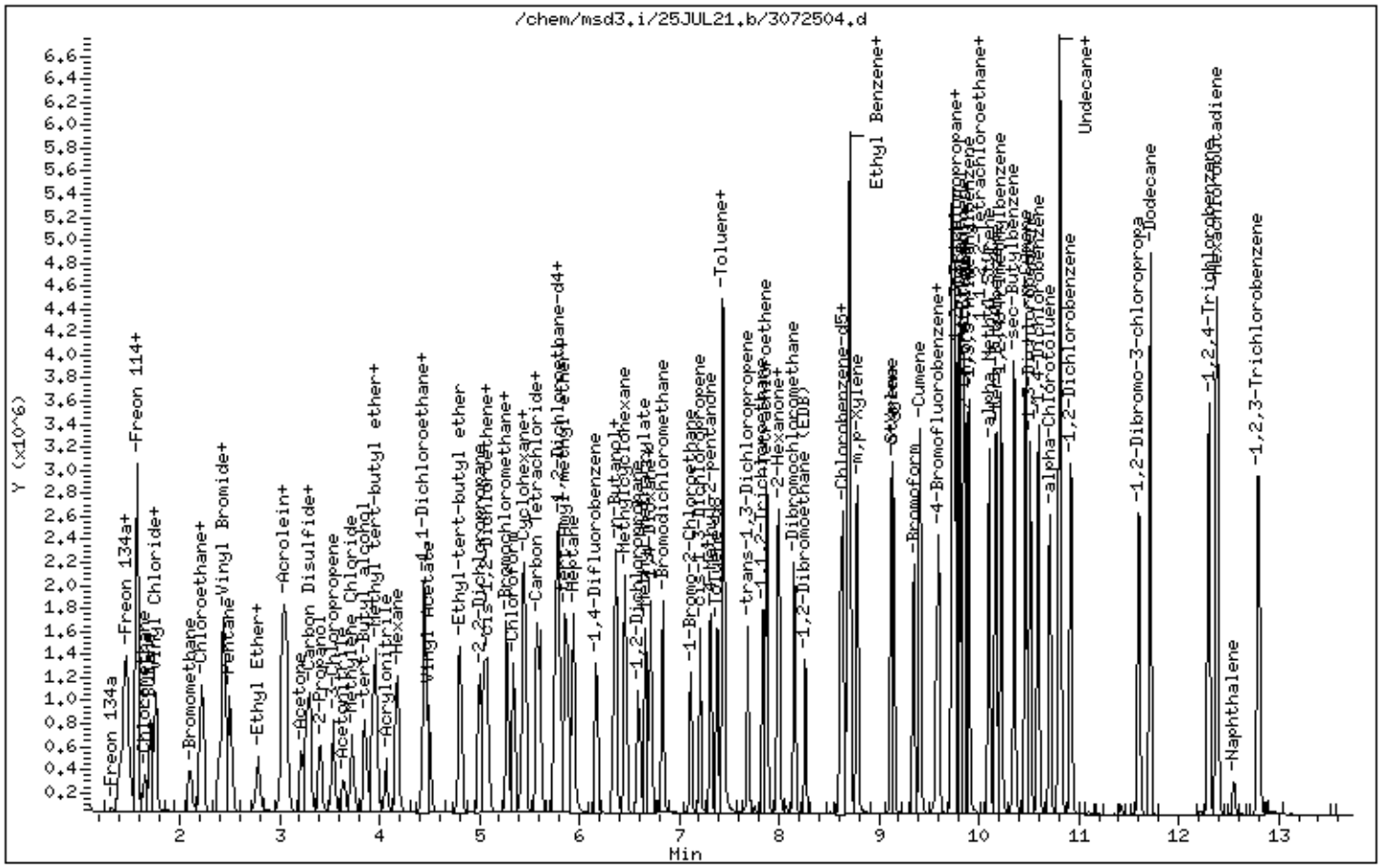
Instrument: msd3.i

Sample Info: 100mL 3018-2121A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107260A-27B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:29 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	102	70-130
1,1,2,2-Tetrachloroethane	104	70-130
1,1,2-Trichloroethane	104	70-130
1,1-Dichloroethane	106	70-130
1,1-Dichloroethene	97	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	118	70-130
1,2,4-Trimethylbenzene	100	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	109	70-130
1,2-Dichlorobenzene	102	70-130
1,2-Dichloroethane	115	70-130
1,2-Dichloropropane	105	70-130
1,3,5-Trimethylbenzene	100	70-130
1,3-Butadiene	119	70-130
1,3-Dichlorobenzene	104	70-130
1,4-Dichlorobenzene	104	70-130
1,4-Dioxane	98	70-130
2,2,4-Trimethylpentane	105	70-130
2-Butanone (Methyl Ethyl Ketone)	97	70-130
2-Hexanone	102	70-130
2-Propanol	113	70-130
3-Chloropropene	93	70-130
4-Ethyltoluene	99	70-130
4-Methyl-2-pentanone	101	70-130
Acetone	106	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	98	70-130
Benzene	103	70-130
Bromodichloromethane	111	70-130
Bromoform	107	70-130
Bromomethane	92	70-130
Carbon Disulfide	97	70-130
Carbon Tetrachloride	112	70-130
Chlorobenzene	103	70-130
Chloroethane	96	70-130
Chloroform	108	70-130
Chloromethane	108	70-130
cis-1,2-Dichloroethene	103	70-130

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Client Sample ID: LCS

Lab ID#: 2107260A-27B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:29 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	104	70-130
Cumene	97	70-130
Cyclohexane	95	70-130
Dibromochloromethane	110	70-130
Dibromomethane	Not Spiked	
Ethanol	91	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	100	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	108	70-130
Freon 12	109	70-130
Freon 113	100	70-130
Freon 114	107	70-130
Freon 134a	Not Spiked	
Heptane	99	70-130
Hexachlorobutadiene	125	70-130
Hexachloroethane	Not Spiked	
Hexane	103	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	100	70-130
Methyl tert-butyl ether	93	70-130
Methylene Chloride	120	70-130
Naphthalene	104	60-140
o-Xylene	98	70-130
Propylbenzene	101	70-130
Propylene	110	60-140
Styrene	94	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	105	70-130
Tetrahydrofuran	117	70-130
Toluene	101	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	97	70-130
trans-1,3-Dichloropropene	107	70-130
Trichloroethene	107	70-130
Vinyl Acetate	100	70-130
Vinyl Bromide	Not Spiked	
Vinyl Chloride	96	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2107260A-27B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:29 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	103	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072503.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 25-JUL-2021 11:29
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 15:21 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	155314	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	124299				48.23- 108.23	80.03
5.778	5.778 (1.000)	49	330998				150.57- 210.57	213.11
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	592829	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	87093				0.00- 45.71	14.69
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	584610	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	307591				23.78- 83.78	52.61
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.315 (1.092)	65	227174	26.5037	26.504		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	128980				27.21- 87.21	56.78
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	645297	25.0670	25.067		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66810				0.00- 40.44	10.35

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	422140			34.95- 94.95	65.42
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	388358	25.8697	25.870	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	464888			95.92- 155.92	119.71
10.921	10.921 (1.154)	176	367529			66.89- 126.89	94.64
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	291161	59.2302	59.230	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	240518			59.44- 119.44	82.61
1.744	1.744 (0.302)	51	1322051			419.06- 479.06	454.06
5 Propylene					CAS #: 115-07-1		
1.688	1.675 (0.292)	41	392410	55.2122	55.212	80.00- 120.00	100.00
1.688	1.688 (0.292)	42	267899			35.28- 95.28	68.27
1.688	1.675 (0.292)	39	269227			38.35- 98.35	68.61
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.294)	65	181420	51.5328	51.533	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1322051			597.63- 657.63	728.72
1.702	1.702 (0.294)	47	140672			33.72- 93.72	77.54
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	757371	54.3696	54.370	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	246314			2.37- 62.37	32.52
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.758 (0.304)	67	77308	56.1834	56.183	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1322051			1501.01-1561.01	1710.09
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	734656	53.7268	53.727	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	226259			2.30- 62.30	30.80
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	870360	55.3139	55.314	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	290328			2.44- 62.44	33.36
1.870	1.870 (0.323)	58	25411			0.00- 33.36	2.92
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	435687	53.9119	53.912	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	107052			0.00- 56.26	24.57
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.352)	58	89662	47.8954	47.895	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.351)	43	857992			823.29- 883.29	956.91
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	467617	48.0980	48.098	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	134089			0.00- 59.69	28.67
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	466488	59.6574	59.657	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	412778			52.37- 112.37	88.49
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	288912	46.2161	46.216	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	276842			64.07- 124.07	95.82
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.451)	64	168656	48.2425	48.242	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	49528			0.04- 60.04	29.37
2.612	2.612 (0.451)	49	68624			4.54- 64.54	40.69
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	582012	54.7118	54.712	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	344288			34.12- 94.12	59.15
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.492)	106	276006	47.7668	47.767	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	274102			69.27- 129.27	99.31
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	802322	54.2000	54.200	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	522661			34.72- 94.72	65.14
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	638494	50.0442	50.044	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	194948			0.84- 60.84	30.53
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	909251	52.5854	52.585	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	123985			0.00- 44.98	13.64
2.970	2.970 (0.513)	72	55373			0.00- 37.39	6.09
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	138493	47.4758	47.476	80.00- 120.00	100.00
3.292	3.285 (0.569)	59	286893			163.46- 223.46	207.15
3.285	3.285 (0.568)	45	472028			250.40- 310.40	340.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.560)	46	81485	52.9043	52.904	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	471111			511.19- 571.19	578.15
42 Acrolein					CAS #: 107-02-8		
3.543	3.536 (0.612)	55	147344	55.1302	55.130	80.00- 120.00	100.00
3.543	3.536 (0.612)	56	202470			111.10- 171.10	137.41
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	553026	50.2835	50.284	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	354829			33.56- 93.56	64.16
3.558	3.550 (0.615)	101	670618			89.21- 149.21	121.26
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	318892	48.5361	48.536	80.00- 120.00	100.00
3.586	3.586 (0.620)	98	201435			34.02- 94.02	63.17
3.586	3.579 (0.620)	61	678258			168.77- 228.77	212.69
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	215196	52.8512	52.851	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	785751			302.95- 362.95	365.13
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	841176	48.5962	48.596	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	693007	60.2266	60.227	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	314391			12.22- 72.22	45.37
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	924582	56.3413	56.341	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	173840			0.00- 47.19	18.80
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	134707	46.5837	46.584	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	665274			396.19- 456.19	493.87
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	435113	56.8882	56.888	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	231741			20.95- 80.95	53.26
4.131	4.123 (0.714)	38	48092			0.00- 41.17	11.05
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	635355	60.0749	60.075	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	268215			22.03- 82.03	42.21
4.238	4.238 (0.733)	51	189351			0.18- 60.18	29.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	913384	47.7285	47.728	80.00- 120.00	100.00
4.345	4.338 (0.751)	41	223964			0.00- 51.11	24.52
4.345	4.338 (0.751)	57	99210			0.00- 40.49	10.86
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	886363	46.4703	46.470	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	318491			3.10- 63.10	35.93
4.446	4.446 (0.768)	41	333865			1.28- 61.28	37.67
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	213515	48.6361	48.636	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	633005			255.84- 315.84	296.47
4.482	4.482 (0.775)	96	342204			127.59- 187.59	160.27
66 Acrylonitrile					CAS #: 107-13-1		
4.567	4.560 (0.789)	52	345041	56.4603	56.460	80.00- 120.00	100.00
4.567	4.560 (0.789)	53	404201			88.05- 148.05	117.15
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	786487	51.4034	51.403	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	586806			37.52- 97.52	74.61
4.696	4.696 (0.812)	86	85206			0.00- 41.48	10.83
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.969 (0.859)	63	698524	53.1062	53.106	80.00- 120.00	100.00
4.969	4.969 (0.859)	65	204114			0.00- 59.70	29.22
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.856)	45	1981885	55.6954	55.695	80.00- 120.00	100.00
4.954	4.954 (0.856)	87	299521			0.00- 48.18	15.11
4.954	4.954 (0.856)	59	183023			0.00- 40.15	9.23
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	84825	50.1797	50.180	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1793285			2432.48-2492.48	2114.10
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1508892	48.9856	48.986	80.00- 120.00	100.00
5.305	5.305 (0.917)	87	437731			1.00- 61.00	29.01
5.305	5.305 (0.917)	41	333949			0.00- 48.73	22.13
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.513 (0.953)	77	594961	50.9377	50.938	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	189080			2.28- 62.28	31.78
5.513	5.513 (0.953)	97	142069			0.00- 53.93	23.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	234866	51.5530	51.553	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	368259			125.75- 185.75	156.80
5.549	5.549 (0.959)	61	889212			332.40- 392.40	378.60
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	170069	48.4458	48.446	80.00- 120.00	100.00
5.570	5.563 (0.963)	43	2601203			1214.50-1274.50	1529.49
5.556	5.556 (0.960)	57	84209			14.68- 74.68	49.51
87 Ethyl Acetate					CAS #: 141-78-6		
5.577	5.570 (0.964)	45	208470	59.7030	59.703	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	889212			452.04- 512.04	426.54
5.577	5.578 (0.964)	70	85362			22.77- 82.77	40.95
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (0.999)	42	682176	58.4296	58.430	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	147411			0.00- 55.82	21.61
5.778	5.778 (0.999)	72	155324			0.00- 57.59	22.77
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	728186	53.8855	53.886	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	469219			34.70- 94.70	64.44
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	463508	47.4425	47.442	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	875141			142.57- 202.57	188.81
5.957	5.957 (1.030)	41	511755			62.09- 122.09	110.41
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.971 (1.032)	97	777166	50.9073	50.907	80.00- 120.00	100.00
5.971	5.971 (1.032)	99	500808			34.02- 94.02	64.44
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.053)	119	801511	55.9789	55.979	80.00- 120.00	100.00
6.093	6.093 (1.053)	117	802505			70.64- 130.64	100.12
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	198178	49.1107	49.111	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	524019			226.85- 286.85	264.42
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.287 (1.085)	57	2786365	52.3951	52.395	80.00- 120.00	100.00
6.279	6.287 (1.085)	56	894597			2.24- 62.24	32.11
6.279	6.287 (1.085)	41	746774			0.00- 54.39	26.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	1012030	51.7316	51.732	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	235921			0.00- 52.90	23.31
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	265871	48.1976	48.198	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1072764			372.79- 432.79	403.49
6.358	6.358 (0.954)	55	416565			112.09- 172.09	156.68
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	583501	57.3214	57.321	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	178403			0.79- 60.79	30.57
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	383802	49.5225	49.522	80.00- 120.00	100.00
6.444	6.451 (0.967)	43	1150826			226.53- 286.53	299.85
6.451	6.451 (0.968)	57	551817			100.85- 160.85	143.78
110 n-Butanol					CAS #: 71-36-3		
6.817	6.817 (1.023)	56	347418	48.8459	48.846	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	263315			40.99- 100.99	75.79
6.817	6.810 (1.023)	43	217927			27.38- 87.38	62.73
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	506344	53.3397	53.340	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	549841			76.29- 136.29	108.59
6.867	6.867 (1.030)	97	323551			33.63- 93.63	63.90
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	527806	52.6258	52.626	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	375837			41.07- 101.07	71.21
7.096	7.096 (1.064)	41	343408			22.53- 82.53	65.06
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	393850	49.0310	49.031	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	920715			179.84- 239.84	233.77
7.139	7.139 (0.755)	100	156493			9.59- 69.59	39.73
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.182 (1.077)	88	260230	48.8226	48.822	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	271550			68.28- 128.28	104.35
7.182	7.175 (1.077)	57	96825			2.68- 62.68	37.21
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	482940	55.6691	55.669	80.00- 120.00	100.00
7.211	7.204 (0.762)	93	448933			60.09- 120.09	92.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.211	7.204 (0.762)	95	391296			48.38- 108.38	81.02
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	820477	55.7440	55.744	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	530646			35.24- 95.24	64.68
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	649542	52.2359	52.236	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	201829			2.42- 62.42	31.07
7.698	7.698 (1.155)	39	485141			37.16- 97.16	74.69
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	667917	48.6220	48.622	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	309014			15.78- 75.78	46.27
6.974	6.974 (1.046)	55	827996			84.64- 144.64	123.97
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	515280	50.5928	50.593	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1549340			242.35- 302.35	300.68
7.798	7.798 (1.170)	85	152735			3.24- 63.24	29.64
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1358820	50.3444	50.344	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	792196			28.38- 88.38	58.30
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.192)	57	594016	51.6160	51.616	80.00- 120.00	100.00
7.948	7.948 (1.192)	85	465064			56.00- 116.00	78.29
7.948	7.948 (1.192)	43	1703359			228.66- 288.66	286.75
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	616397	53.5787	53.579	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	188294			1.24- 61.24	30.55
8.213	8.214 (0.868)	39	440166			34.11- 94.11	71.41
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	497104	52.2769	52.277	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	312111			31.96- 91.96	62.79
8.400	8.400 (0.888)	83	415042			52.93- 112.93	83.49
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	701966	52.6854	52.685	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	545423			47.84- 107.84	77.70
8.471	8.464 (0.895)	131	524212			45.29- 105.29	74.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	690925	50.8568	50.857	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1468802			162.87- 222.87	212.58
8.593	8.586 (0.908)	100	99084			0.00- 45.94	14.34
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	672747	52.4871	52.487	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	932765			94.99- 154.99	138.65
8.579	8.579 (1.287)	78	216554			2.05- 62.05	32.19
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	974355	54.8406	54.841	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	765373			47.45- 107.45	78.55
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	828421	54.3184	54.318	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	775962			64.21- 124.21	93.67
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	982292	53.3792	53.379	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	284041			0.00- 59.64	28.92
7.612	7.612 (1.142)	144	94408			0.00- 39.63	9.61
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1200210	51.7022	51.702	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	381117			1.74- 61.74	31.75
9.496	9.496 (1.004)	77	628706			25.04- 85.04	52.38
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	610236	50.2723	50.272	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1821353			273.74- 333.74	298.47
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1800060	57.6365	57.636	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1364809			54.16- 114.16	75.82
9.603	9.603 (1.015)	85	363634			0.00- 53.90	20.20
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.603	9.603 (1.015)	131	582457	44.8143	44.814	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	584610			57.42- 117.42	100.37
9.596	9.596 (1.014)	95	211280			5.70- 65.70	36.27
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	763665	50.2316	50.232	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1461876			163.73- 223.73	191.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	713422	48.9782	48.978	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1423267			177.45- 237.45	199.50
165 Styrene					CAS #: 100-42-5		
10.262	10.255 (1.085)	104	1175326	47.1813	47.181	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	553716			17.88- 77.88	47.11
167 Bromoform					CAS #: 75-25-2		
10.549	10.549 (1.115)	173	939374	53.6393	53.639	80.00- 120.00	100.00
10.549	10.549 (1.115)	171	478934			21.25- 81.25	50.98
168 Cumene					CAS #: 98-82-8		
10.656	10.656 (1.126)	105	2221922	48.5591	48.559	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	640302			0.00- 58.52	28.82
10.649	10.649 (1.126)	51	339298			0.00- 43.00	15.27
169 Cyclohexanone					CAS #: 108-94-1		
10.878	10.871 (1.150)	55	722986	44.1815	44.182	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	205067			1.94- 61.94	28.36
10.878	10.871 (1.150)	42	493220			37.89- 97.89	68.22
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1161589	52.0115	52.012	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	752820			35.20- 95.20	64.81
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	732652	52.6462	52.646	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	712077			67.21- 127.21	97.19
11.179	11.179 (1.182)	77	448702			29.02- 89.02	61.24
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	686242	50.5800	50.580	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2680740			366.49- 426.49	390.64
11.150	11.150 (1.179)	105	101122			0.00- 44.85	14.74
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	360346	50.6236	50.624	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1152237			280.55- 340.55	319.76
11.107	11.107 (1.174)	61	179199			15.49- 75.49	49.73
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	336628	72.1391	72.139	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	223795			49.11- 109.11	66.48
11.179	11.179 (1.182)	75	1152237			426.44- 486.44	342.29

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1791914	50.3461	50.346	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	458761			0.00- 57.66	25.60
11.258	11.258 (1.190)	142	66842			0.00- 34.09	3.73
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.286 (1.193)	120	732412	49.6394	49.639	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2320251			284.55- 344.55	316.80
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.315 (1.196)	126	591110	51.1685	51.168	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1972681			315.17- 375.17	333.72
11.301	11.301 (1.195)	65	297161			21.55- 81.55	50.27
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1014772	49.9538	49.954	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1908196			164.93- 224.93	188.04
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	886458	43.9261	43.926	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	494874			25.30- 85.30	55.83
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1946961	51.2425	51.242	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	474065			0.00- 54.25	24.35
11.745	11.745 (1.242)	91	1144002			31.27- 91.27	58.76
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	1910291	49.8211	49.821	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	973859			19.05- 79.05	50.98
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	12.003 (1.269)	134	611030	51.7425	51.742	80.00- 120.00	100.00
12.003	12.003 (1.269)	105	2815269			437.55- 497.55	460.74
12.003	12.003 (1.269)	91	426353			40.76- 100.76	69.78
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2614151	50.0845	50.084	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	680829			0.00- 55.54	26.04
12.160	12.160 (1.285)	91	544245			0.00- 51.48	20.82
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1364763	52.0016	52.002	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	871009			33.21- 93.21	63.82
12.203	12.203 (1.290)	111	546753			11.31- 71.31	40.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1379552	52.0168	52.017	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	866628			33.90- 93.90	62.82
12.311	12.311 (1.301)	111	522963			9.45- 69.45	37.91
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.468 (1.317)	91	1789217	49.1282	49.128	80.00- 120.00	100.00
12.468	12.468 (1.318)	126	422542			0.00- 53.26	23.62
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2201410	53.5466	53.546	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2148519			58.12- 118.12	97.60
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	665311	50.1875	50.188	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2290623			314.79- 374.79	344.29
12.626	12.626 (1.335)	92	1198133			154.29- 214.29	180.09
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1308151	50.8336	50.834	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	839471			33.84- 93.84	64.17
12.741	12.741 (1.347)	111	543115			12.73- 72.73	41.52
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	805556	51.6835	51.683	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	658995			52.48- 112.48	81.81
13.600	13.600 (1.438)	155	632567			47.41- 107.41	78.53
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2325576	71.3662	71.366	80.00- 120.00	100.00(R)
13.801	13.801 (1.459)	43	2093990			52.87- 112.87	90.04
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1300717	68.4111	68.411	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1247330			65.33- 125.33	95.90
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	968994	72.4158	72.416	80.00- 120.00	100.00
14.581	14.581 (1.541)	223	605598			33.17- 93.17	62.50
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	291982	6.00887	6.009	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	36767			0.00- 42.88	12.59
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1238068	73.6592	73.659	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.069	15.069 (1.593)	182	1174739			65.75- 125.75	94.88
15.069	15.069 (1.593)	145	416823			5.23- 65.23	33.67

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072503.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	155314	0.46
108 1,4-Difluorobenze	573421	344053	802789	592829	3.38
153 Chlorobenzene-d5	566079	339647	792511	584610	3.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCS
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	59.230	118.46	70-130
5 Propylene	50.000	55.212	110.42	70-130
7 1,1-Difluoroethan	50.000	51.533	103.07	70-130
8 Freon 12	50.000	54.370	108.74	70-130
9 Chlorodifluoromet	50.000	56.183	112.37	70-130
10 Freon 114	50.000	53.727	107.45	70-130
12 Isobutane	50.000	55.314	110.63	70-130
15 Chloromethane	50.000	53.912	107.82	70-130
18 Butane	50.000	47.895	95.79	70-130
19 Vinyl Chloride	50.000	48.098	96.20	70-130
20 1,3-Butadiene	50.000	59.657	119.31	70-130
24 Bromomethane	50.000	46.216	92.43	70-130
30 Chloroethane	50.000	48.242	96.48	70-130
31 Isopentane	50.000	54.712	109.42	70-130
32 Vinyl Bromide	50.000	47.767	95.53	70-130
33 Freon 11	50.000	54.200	108.40	70-130
34 Dichlorofluoromet	50.000	50.044	100.09	70-130
35 Pentane	50.000	52.585	105.17	70-130
38 Ethyl Ether	50.000	47.476	94.95	70-130
39 Ethanol	58.000	52.904	91.21	70-130
42 Acrolein	58.000	55.130	95.05	70-130
43 Freon 113	50.000	50.284	100.57	70-130
44 1,1-Dichloroethen	50.000	48.536	97.07	70-130
47 Acetone	50.000	52.851	105.70	70-130
48 Carbon Disulfide	50.000	48.596	97.19	70-130
49 Iodomethane	50.000	60.227	120.45	70-130
52 2-Propanol	50.000	56.341	112.68	70-130
54 3-Chloropropene	50.000	46.584	93.17	70-130
57 Acetonitrile	50.000	56.888	113.78	70-130
59 Methylene Chlorid	50.000	60.075	120.15	70-130
62 tert-Butyl alcoho	50.000	47.728	95.46	70-130
63 Methyl tert-butyl	50.000	46.470	92.94	70-130
64 trans-1,2-Dichlor	50.000	48.636	97.27	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	56.460	112.92	70-130
67	Hexane	50.000	51.403	102.81	70-130
71	1,1-Dichloroethan	50.000	53.106	106.21	70-130
72	Isopropyl ether	50.000	55.695	111.39	70-130
73	Vinyl Acetate	50.000	50.180	100.36	70-130
79	Ethyl-tert-butyl	50.000	48.986	97.97	70-130
84	2,2-Dichloropropa	50.000	50.938	101.88	70-130
85	cis-1,2-Dichloroe	50.000	51.553	103.11	70-130
86	2-Butanone	50.000	48.446	96.89	70-130
87	Ethyl Acetate	50.000	59.703	119.41	70-130
89	Tetrahydrofuran	50.000	58.430	116.86	70-130
92	Chloroform	50.000	53.886	107.77	70-130
94	Cyclohexane	50.000	47.442	94.88	70-130
96	1,1,1-Trichloroet	50.000	50.907	101.81	70-130
99	1,1-Dichloroprope	50.000	49.111	98.22	70-130
97	Carbon Tetrachlor	50.000	55.979	111.96	70-130
101	2,2,4-Trimethylpe	50.000	52.395	104.79	70-130
102	Benzene	50.000	51.732	103.46	70-130
105	tert-Amyl methyl	50.000	48.198	96.40	70-130
106	1,2-Dichloroethan	50.000	57.321	114.64	70-130
107	Heptane	50.000	49.522	99.04	70-130
110	n-Butanol	50.000	48.846	97.69	70-130
111	Trichloroethene	50.000	53.340	106.68	70-130
118	Dibromomethane	50.000	55.669	111.34	70-130
127	Methylcyclohexane	50.000	48.622	97.24	70-130
114	1,2-Dichloropropa	50.000	52.626	105.25	70-130
116	Methyl Methacryla	50.000	49.031	98.06	70-130
117	1,4-Dioxane	50.000	48.822	97.65	70-130
122	Bromodichlorometh	50.000	55.744	111.49	70-130
126	cis-1,3-Dichlorop	50.000	52.236	104.47	70-130
131	4-Methyl-2-pentan	50.000	50.593	101.19	70-130
136	Octane	50.000	51.616	103.23	70-130
137	Toluene	50.000	50.344	100.69	70-130
139	trans-1,3-Dichlor	50.000	53.579	107.16	70-130
141	1,1,2-Trichloroet	50.000	52.277	104.55	70-130
142	Tetrachloroethene	50.000	52.685	105.37	70-130
143	2-Hexanone	50.000	50.857	101.71	70-130
144	1,3-Dichloropropa	50.000	52.487	104.97	70-130
146	Dibromochlorometh	50.000	54.841	109.68	70-130
148	1,2-Dibromoethane	50.000	54.318	108.64	70-130
151	1-Bromo-2-Chloroe	50.000	53.379	106.76	70-130
154	Chlorobenzene	50.000	51.702	103.40	70-130
155	Ethyl Benzene	50.000	50.272	100.54	70-130
156	Nonane	50.000	57.636	115.27	70-130
157	1,1,1,2-Tetrachlo	50.000	44.814	89.63	70-130
158	m,p-Xylene	50.000	50.232	100.46	70-130
164	o-Xylene	50.000	48.978	97.96	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	47.181	94.36	70-130
167 Bromoform	50.000	53.639	107.28	70-130
168 Cumene	50.000	48.559	97.12	70-130
169 Cyclohexanone	50.000	44.182	88.36	70-130
175 1,1,2,2-Tetrachlo	50.000	52.012	104.02	70-130
177 Bromobenzene	50.000	52.646	105.29	70-130
178 Propylbenzene	50.000	50.580	101.16	70-130
179 1,2,3-Trichloropr	50.000	50.624	101.25	70-130
181 trans-1,4-Dichlor	50.000	72.139	144.28*	70-130
182 Decane	50.000	50.346	100.69	70-130
183 4-Ethyltoluene	50.000	49.639	99.28	70-130
184 2-Chlorotoluene	50.000	51.168	102.34	70-130
185 1,3,5-Trimethylbe	50.000	49.954	99.91	70-130
188 alpha Methyl Styr	50.000	43.926	87.85	70-130
189 tert-Butylbenzene	50.000	51.242	102.48	70-130
190 1,2,4-Trimethylbe	50.000	49.821	99.64	70-130
192 sec-Butylbenzene	50.000	51.742	103.48	70-130
194 p-Cymene	50.000	50.084	100.17	70-130
195 1,3-Dichlorobenze	50.000	52.002	104.00	70-130
196 1,4-Dichlorobenze	50.000	52.017	104.03	70-130
199 alpha-Chlorotolue	50.000	49.128	98.26	70-130
201 Undecane	50.000	53.546	107.09	70-130
202 Butylbenzene	50.000	50.188	100.38	70-130
204 1,2-Dichlorobenze	50.000	50.834	101.67	70-130
206 1,2-Dibromo-3-chl	50.000	51.683	103.37	70-130
207 Dodecane	50.000	71.366	142.73*	70-130
213 1,2,4-Trichlorobe	58.000	68.411	117.95	70-130
215 Hexachlorobutadie	58.000	72.416	124.85	70-130
216 Naphthalene	5.800	6.009	103.60	60-140
222 1,2,3-Trichlorobe	58.000	73.659	127.00	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.504	106.01	70-130
$ 134 Toluene-d8	25.000	25.067	100.27	70-130
$ 170 4-Bromofluorobenz	25.000	25.870	103.48	70-130

Data File: /chem/msdp.i/25JUL21.b/p072503.d

Page 1

Date : 25-JUL-2021 11:29

Client ID: LCS

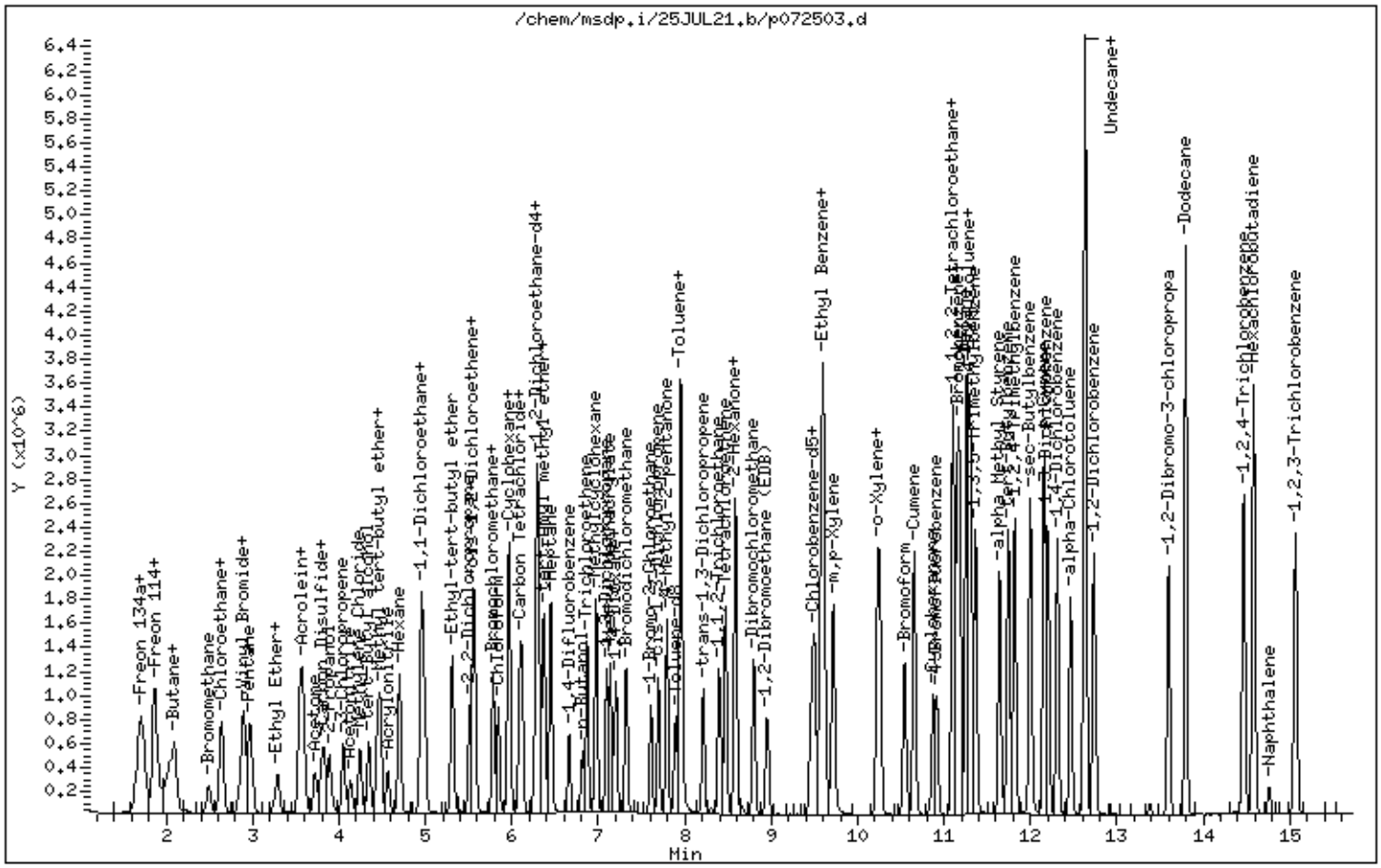
Instrument: msdp.i

Sample Info: 100mL 3018-2122A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCSD

Lab ID#: 2107260A-27BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:58 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	101	70-130
1,1,2,2-Tetrachloroethane	103	70-130
1,1,2-Trichloroethane	102	70-130
1,1-Dichloroethane	105	70-130
1,1-Dichloroethene	97	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	121	70-130
1,2,4-Trimethylbenzene	98	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	106	70-130
1,2-Dichlorobenzene	100	70-130
1,2-Dichloroethane	115	70-130
1,2-Dichloropropane	104	70-130
1,3,5-Trimethylbenzene	98	70-130
1,3-Butadiene	114	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	102	70-130
1,4-Dioxane	96	70-130
2,2,4-Trimethylpentane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
2-Hexanone	100	70-130
2-Propanol	110	70-130
3-Chloropropene	91	70-130
4-Ethyltoluene	98	70-130
4-Methyl-2-pentanone	102	70-130
Acetone	102	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	98	70-130
Benzene	102	70-130
Bromodichloromethane	111	70-130
Bromoform	106	70-130
Bromomethane	91	70-130
Carbon Disulfide	95	70-130
Carbon Tetrachloride	110	70-130
Chlorobenzene	101	70-130
Chloroethane	95	70-130
Chloroform	105	70-130
Chloromethane	104	70-130
cis-1,2-Dichloroethene	103	70-130

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Client Sample ID: LCSD

Lab ID#: 2107260A-27BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:58 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	104	70-130
Cumene	96	70-130
Cyclohexane	95	70-130
Dibromochloromethane	108	70-130
Dibromomethane	Not Spiked	
Ethanol	92	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	98	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	107	70-130
Freon 12	106	70-130
Freon 113	99	70-130
Freon 114	101	70-130
Freon 134a	Not Spiked	
Heptane	99	70-130
Hexachlorobutadiene	124	70-130
Hexachloroethane	Not Spiked	
Hexane	101	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	99	70-130
Methyl tert-butyl ether	91	70-130
Methylene Chloride	116	70-130
Naphthalene	108	60-140
o-Xylene	96	70-130
Propylbenzene	98	70-130
Propylene	110	60-140
Styrene	93	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	104	70-130
Tetrahydrofuran	115	70-130
Toluene	100	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	96	70-130
trans-1,3-Dichloropropene	105	70-130
Trichloroethene	107	70-130
Vinyl Acetate	96	70-130
Vinyl Bromide	Not Spiked	
Vinyl Chloride	96	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2107260A-27BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:58 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072504.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 25-JUL-2021 11:58
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 15:21 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	160685	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	121494				48.23- 108.23	75.61
5.785	5.778 (1.000)	49	336957				150.57- 210.57	209.70
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	609536	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	91060				0.00- 45.71	14.94
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	603321	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	311083				23.78- 83.78	51.56
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.315 (1.092)	65	234887	26.4876		26.488	80.00- 120.00	100.00
6.315	6.308 (1.092)	67	128979				27.21- 87.21	54.91
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	672229	25.3974		25.397	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68304				0.00- 40.44	10.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	433195			34.95- 94.95	64.44
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	390572	25.2103	25.210	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	485299			95.92- 155.92	124.25
10.921	10.921 (1.154)	176	380353			66.89- 126.89	97.38
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	292021	57.4195	57.420	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	238454			59.44- 119.44	81.66
1.745	1.744 (0.302)	51	1352263			419.06- 479.06	463.07
5 Propylene					CAS #: 115-07-1		
1.689	1.675 (0.292)	41	403709	54.9034	54.903	80.00- 120.00	100.00
1.689	1.688 (0.292)	42	269397			35.28- 95.28	66.73
1.689	1.675 (0.292)	39	276592			38.35- 98.35	68.51
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.702 (0.294)	65	184486	50.6519	50.652	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1352263			597.63- 657.63	732.99
1.703	1.702 (0.294)	47	139204			33.72- 93.72	75.46
8 Freon 12					CAS #: 75-71-8		
1.717	1.716 (0.297)	85	765029	53.0837	53.084	80.00- 120.00	100.00
1.717	1.716 (0.297)	87	245710			2.37- 62.37	32.12
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.758 (0.304)	67	80183	56.3247	56.325	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1352263			1501.01-1561.01	1686.47
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	714686	50.5194	50.519	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	225858			2.30- 62.30	31.60
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	871537	53.5374	53.537	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	286918			2.44- 62.44	32.92
1.870	1.870 (0.323)	58	25875			0.00- 33.36	2.97
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	437234	52.2951	52.295	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	111109			0.00- 56.26	25.41
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.352)	58	93000	48.0180	48.018	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.351)	43	853458			823.29- 883.29	917.69
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	481198	47.8406	47.841	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	134939			0.00- 59.69	28.04
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	459991	56.8603	56.860	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	416060			52.37- 112.37	90.45
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	294214	45.4910	45.491	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	274527			64.07- 124.07	93.31
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	172189	47.6071	47.607	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	49845			0.04- 60.04	28.95
2.612	2.612 (0.452)	49	67044			4.54- 64.54	38.94
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	588252	53.4501	53.450	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	347045			34.12- 94.12	59.00
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.492)	106	281018	47.0086	47.009	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	281126			69.27- 129.27	100.04
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	817655	53.3896	53.390	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	531817			34.72- 94.72	65.04
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	646695	48.9928	48.993	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	199813			0.84- 60.84	30.90
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	927929	51.8719	51.872	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	122539			0.00- 44.98	13.21
2.970	2.970 (0.513)	72	54038			0.00- 37.39	5.82
38 Ethyl Ether					CAS #: 60-29-7		
3.293	3.285 (0.569)	74	142128	47.0933	47.093	80.00- 120.00	100.00
3.285	3.285 (0.568)	59	298512			163.46- 223.46	210.03
3.285	3.285 (0.568)	45	481122			250.40- 310.40	338.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.250	3.242 (0.562)	46	84958	53.3153	53.315	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	478445			511.19- 571.19	563.15
42 Acrolein					CAS #: 107-02-8		
3.543	3.536 (0.612)	55	150922	54.5816	54.582	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	207090			111.10- 171.10	137.22
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	562825	49.4640	49.464	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	364623			33.56- 93.56	64.78
3.550	3.550 (0.614)	101	684047			89.21- 149.21	121.54
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	329316	48.4473	48.447	80.00- 120.00	100.00
3.586	3.586 (0.620)	98	205080			34.02- 94.02	62.27
3.586	3.579 (0.620)	61	692670			168.77- 228.77	210.34
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	214332	50.8795	50.880	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	791854			302.95- 362.95	369.45
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	850565	47.4962	47.496	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	719038	60.4003	60.400	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	323856			12.22- 72.22	45.04
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	934728	55.0557	55.056	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	174172			0.00- 47.19	18.63
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	135690	45.3554	45.355	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	682163			396.19- 456.19	502.73
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	428011	54.0894	54.089	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	233741			20.95- 80.95	54.61
4.131	4.123 (0.714)	38	48767			0.00- 41.17	11.39
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	637462	58.2594	58.259	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	273999			22.03- 82.03	42.98
4.238	4.238 (0.733)	51	188880			0.18- 60.18	29.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.346	4.338 (0.751)	59	935508	47.2506	47.251	80.00- 120.00	100.00
4.346	4.338 (0.751)	41	221169			0.00- 51.11	23.64
4.346	4.338 (0.751)	57	101390			0.00- 40.49	10.84
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	901443	45.6813	45.681	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	325953			3.10- 63.10	36.16
4.446	4.446 (0.768)	41	331361			1.28- 61.28	36.76
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	217678	47.9271	47.927	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	641595			255.84- 315.84	294.74
4.482	4.482 (0.775)	96	349354			127.59- 187.59	160.49
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.789)	52	349424	55.2664	55.266	80.00- 120.00	100.00
4.568	4.560 (0.789)	53	408741			88.05- 148.05	116.98
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	800294	50.5576	50.558	80.00- 120.00	100.00
4.697	4.696 (0.812)	43	596878			37.52- 97.52	74.58
4.697	4.696 (0.812)	86	84211			0.00- 41.48	10.52
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.969 (0.859)	63	712173	52.3342	52.334	80.00- 120.00	100.00
4.969	4.969 (0.859)	65	206026			0.00- 59.70	28.93
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.856)	45	2000687	54.3446	54.344	80.00- 120.00	100.00
4.954	4.954 (0.856)	87	305609			0.00- 48.18	15.28
4.954	4.954 (0.856)	59	187543			0.00- 40.15	9.37
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	83901	47.9742	47.974	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1838971			2432.48-2492.48	2191.83
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1541951	48.3857	48.386	80.00- 120.00	100.00
5.313	5.305 (0.918)	87	450535			1.00- 61.00	29.22
5.305	5.305 (0.917)	41	333773			0.00- 48.73	21.65
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.513 (0.953)	77	605028	50.0682	50.068	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	193984			2.28- 62.28	32.06
5.513	5.513 (0.953)	97	143559			0.00- 53.93	23.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	243408	51.6422	51.642	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	374175			125.75- 185.75	153.72
5.549	5.549 (0.959)	61	902509			332.40- 392.40	370.78
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	174780	48.1235	48.124	80.00- 120.00	100.00
5.570	5.563 (0.963)	43	2627246			1214.50-1274.50	1503.17
5.556	5.556 (0.960)	57	84487			14.68- 74.68	48.34
87 Ethyl Acetate					CAS #: 141-78-6		
5.578	5.570 (0.964)	45	210368	58.2330	58.233	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	902509			452.04- 512.04	429.01
5.578	5.578 (0.964)	70	88465			22.77- 82.77	42.05
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (0.999)	42	694938	57.5331	57.533	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	151212			0.00- 55.82	21.76
5.778	5.778 (0.999)	72	157443			0.00- 57.59	22.66
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	735664	52.6193	52.619	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	484007			34.70- 94.70	65.79
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	479099	47.3992	47.399	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	895167			142.57- 202.57	186.84
5.957	5.957 (1.030)	41	516625			62.09- 122.09	107.83
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.971 (1.032)	97	795525	50.3682	50.368	80.00- 120.00	100.00
5.972	5.971 (1.032)	99	511468			34.02- 94.02	64.29
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.053)	119	814837	55.0075	55.008	80.00- 120.00	100.00
6.093	6.093 (1.053)	117	816129			70.64- 130.64	100.16
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	208483	50.2482	50.248	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	525840			226.85- 286.85	252.22
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.287 (1.087)	57	2817456	51.2090	51.209	80.00- 120.00	100.00
6.287	6.287 (1.087)	56	935013			2.24- 62.24	33.19
6.287	6.287 (1.087)	41	750062			0.00- 54.39	26.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	1031207	51.2670	51.267	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	241073			0.00- 52.90	23.38
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	266159	46.9274	46.927	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1074600			372.79- 432.79	403.74
6.358	6.358 (0.954)	55	423672			112.09- 172.09	159.18
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	601512	57.4711	57.471	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	180006			0.79- 60.79	29.93
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	393530	49.3858	49.386	80.00- 120.00	100.00
6.451	6.451 (0.968)	43	1182701			226.53- 286.53	300.54
6.451	6.451 (0.968)	57	561305			100.85- 160.85	142.63
110 n-Butanol					CAS #: 71-36-3		
6.817	6.817 (1.023)	56	355559	48.6203	48.620	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	262421			40.99- 100.99	73.81
6.817	6.810 (1.023)	43	219354			27.38- 87.38	61.69
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	521224	53.4021	53.402	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	558805			76.29- 136.29	107.21
6.867	6.867 (1.030)	97	335751			33.63- 93.63	64.42
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	538422	52.2127	52.213	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	389118			41.07- 101.07	72.27
7.096	7.096 (1.064)	41	345495			22.53- 82.53	64.17
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	401717	48.4594	48.459	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	932012			179.84- 239.84	232.01
7.139	7.139 (0.755)	100	157297			9.59- 69.59	39.16
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.182 (1.077)	88	264407	48.2464	48.246	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	277622			68.28- 128.28	105.00
7.182	7.175 (1.077)	57	99712			2.68- 62.68	37.71
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	491695	54.9205	54.920	80.00- 120.00	100.00
7.211	7.204 (0.762)	93	449227			60.09- 120.09	91.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.211	7.204 (0.762)	95	396281			48.38- 108.38	80.59
122 Bromodichloromethane					CAS #: 75-27-4		
7.325	7.318 (1.099)	83	840430	55.5344	55.534	80.00- 120.00	100.00
7.325	7.318 (1.099)	85	542733			35.24- 95.24	64.58
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	665629	52.0623	52.062	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	207655			2.42- 62.42	31.20
7.698	7.698 (1.155)	39	494122			37.16- 97.16	74.23
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	673617	47.6928	47.693	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	323033			15.78- 75.78	47.95
6.974	6.974 (1.046)	55	838513			84.64- 144.64	124.48
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	532789	50.8780	50.878	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1569982			242.35- 302.35	294.67
7.798	7.798 (1.170)	85	156107			3.24- 63.24	29.30
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1388456	50.0323	50.032	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	805579			28.38- 88.38	58.02
136 Octane					CAS #: 111-65-9		
7.949	7.948 (1.192)	57	604679	51.1023	51.102	80.00- 120.00	100.00
7.949	7.948 (1.192)	85	474299			56.00- 116.00	78.44
7.949	7.948 (1.192)	43	1714284			228.66- 288.66	283.50
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	625359	52.6719	52.672	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	191998			1.24- 61.24	30.70
8.214	8.214 (0.868)	39	446287			34.11- 94.11	71.36
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	501344	51.0877	51.088	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	309175			31.96- 91.96	61.67
8.400	8.400 (0.888)	83	425550			52.93- 112.93	84.88
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	717357	52.1707	52.171	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	548719			47.84- 107.84	76.49
8.471	8.464 (0.895)	131	534952			45.29- 105.29	74.57

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	701341	50.0226	50.023	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1480670			162.87- 222.87	211.12
8.586	8.586 (0.908)	100	99772			0.00- 45.94	14.23
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	681256	51.6941	51.694	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	955023			94.99- 154.99	140.19
8.579	8.579 (1.287)	78	220198			2.05- 62.05	32.32
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	993279	54.1720	54.172	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	770568			47.45- 107.45	77.58
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	830510	52.7665	52.766	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	785456			64.21- 124.21	94.58
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	999028	52.8006	52.800	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	293337			0.00- 59.64	29.36
7.612	7.612 (1.142)	144	95972			0.00- 39.63	9.61
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1214154	50.6808	50.681	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	386471			1.74- 61.74	31.83
9.496	9.496 (1.004)	77	636740			25.04- 85.04	52.44
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	615288	49.1165	49.116	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1846364			273.74- 333.74	300.08
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1810732	56.1802	56.180	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1373141			54.16- 114.16	75.83
9.603	9.603 (1.015)	85	363823			0.00- 53.90	20.09
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.603	9.603 (1.015)	131	588843	43.9007	43.901	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	603321			57.42- 117.42	102.46
9.596	9.596 (1.014)	95	214536			5.70- 65.70	36.43
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	776780	49.5097	49.510	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1480718			163.73- 223.73	190.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	723848	48.1529	48.153	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1462783			177.45- 237.45	202.08
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1191593	46.3508	46.351	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	564026			17.88- 77.88	47.33
167 Bromoform					CAS #: 75-25-2		
10.549	10.549 (1.115)	173	957708	52.9902	52.990	80.00- 120.00	100.00
10.549	10.549 (1.115)	171	493550			21.25- 81.25	51.53
168 Cumene					CAS #: 98-82-8		
10.656	10.656 (1.126)	105	2256556	47.7866	47.787	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	658610			0.00- 58.52	29.19
10.649	10.649 (1.126)	51	343372			0.00- 43.00	15.22
169 Cyclohexanone					CAS #: 108-94-1		
10.878	10.871 (1.150)	55	724750	42.9158	42.916	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	209466			1.94- 61.94	28.90
10.871	10.871 (1.149)	42	494705			37.89- 97.89	68.26
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1188367	51.5604	51.560	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	765293			35.20- 95.20	64.40
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	737052	51.3199	51.320	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	725107			67.21- 127.21	98.38
11.179	11.179 (1.182)	77	459909			29.02- 89.02	62.40
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	690222	49.2956	49.296	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2726586			366.49- 426.49	395.03
11.150	11.150 (1.179)	105	101943			0.00- 44.85	14.77
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	368199	50.1226	50.123	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1173146			280.55- 340.55	318.62
11.107	11.107 (1.174)	61	174594			15.49- 75.49	47.42
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	349393	72.5526	72.553	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	227138			49.11- 109.11	65.01
11.179	11.179 (1.182)	75	1173146			426.44- 486.44	335.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1856457	50.5419	50.542	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	477753			0.00- 57.66	25.73
11.258	11.258 (1.190)	142	70909			0.00- 34.09	3.82
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.286 (1.193)	120	750431	49.2834	49.283	80.00- 120.00	100.00
11.287	11.286 (1.193)	105	2354621			284.55- 344.55	313.77
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.315 (1.196)	126	599052	50.2477	50.248	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2000391			315.17- 375.17	333.93
11.301	11.301 (1.195)	65	296158			21.55- 81.55	49.44
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1031205	49.1884	49.188	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1937934			164.93- 224.93	187.93
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	903839	43.3984	43.398	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	498515			25.30- 85.30	55.16
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1984033	50.5988	50.599	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	482516			0.00- 54.25	24.32
11.745	11.745 (1.242)	91	1164980			31.27- 91.27	58.72
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1945100	49.1557	49.156	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	984601			19.05- 79.05	50.62
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	12.003 (1.269)	134	619515	50.8340	50.834	80.00- 120.00	100.00
12.003	12.003 (1.269)	105	2871922			437.55- 497.55	463.58
11.996	12.003 (1.268)	91	435898			40.76- 100.76	70.36
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2657529	49.3366	49.336	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	696060			0.00- 55.54	26.19
12.160	12.160 (1.285)	91	557372			0.00- 51.48	20.97
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1387686	51.2353	51.235	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	893691			33.21- 93.21	64.40
12.203	12.203 (1.290)	111	557213			11.31- 71.31	40.15

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1401608	51.2095	51.209	80.00- 120.00		100.00
12.311	12.311 (1.301)	148	896788			33.90- 93.90		63.98
12.311	12.311 (1.301)	111	533811			9.45- 69.45		38.09
199 alpha-Chlorotoluene						CAS #: 100-44-7		
12.461	12.468 (1.317)	91	1835877	48.8461	48.846	80.00- 120.00		100.00
12.468	12.468 (1.318)	126	429032			0.00- 53.26		23.37
201 Undecane						CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2267431	53.4420	53.442	80.00- 120.00		100.00
12.640	12.640 (1.336)	43	2199836			58.12- 118.12		97.02
202 Butylbenzene						CAS #: 104-51-8		
12.626	12.626 (1.335)	134	669048	48.9042	48.904	80.00- 120.00		100.00
12.626	12.626 (1.335)	91	2321452			314.79- 374.79		346.98
12.626	12.626 (1.335)	92	1219376			154.29- 214.29		182.26
204 1,2-Dichlorobenzene						CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1334574	50.2521	50.252	80.00- 120.00		100.00
12.741	12.741 (1.347)	148	850192			33.84- 93.84		63.71
12.741	12.741 (1.347)	111	547798			12.73- 72.73		41.05
206 1,2-Dibromo-3-chloropropane						CAS #: 96-12-8		
13.600	13.600 (1.438)	157	833260	51.8030	51.803	80.00- 120.00		100.00
13.600	13.600 (1.438)	75	675768			52.48- 112.48		81.10
13.600	13.600 (1.438)	155	651512			47.41- 107.41		78.19
207 Dodecane						CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2418611	71.9194	71.919	80.00- 120.00		100.00(R)
13.801	13.801 (1.459)	43	2188887			52.87- 112.87		90.50
213 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1376490	70.1512	70.151	80.00- 120.00		100.00
14.467	14.467 (1.529)	182	1309706			65.33- 125.33		95.15
215 Hexachlorobutadiene						CAS #: 87-68-3		
14.582	14.581 (1.541)	225	996073	72.1310	72.131	80.00- 120.00		100.00
14.582	14.581 (1.541)	223	632514			33.17- 93.17		63.50
216 Naphthalene						CAS #: 91-20-3		
14.768	14.768 (1.561)	128	313825	6.25809	6.258	80.00- 120.00		100.00
14.768	14.768 (1.561)	127	39470			0.00- 42.88		12.58
222 1,2,3-Trichlorobenzene						CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1324140	76.3369	76.337	80.00- 120.00		100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.069	15.069 (1.593)	182	1262336			65.75- 125.75	95.33
15.069	15.069 (1.593)	145	439542			5.23- 65.23	33.19

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072504.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	160685	3.93
108 1,4-Difluorobenze	573421	344053	802789	609536	6.30
153 Chlorobenzene-d5	566079	339647	792511	603321	6.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	57.420	114.84	70-130
5 Propylene	50.000	54.903	109.81	70-130
7 1,1-Difluoroethan	50.000	50.652	101.30	70-130
8 Freon 12	50.000	53.084	106.17	70-130
9 Chlorodifluoromet	50.000	56.325	112.65	70-130
10 Freon 114	50.000	50.519	101.04	70-130
12 Isobutane	50.000	53.537	107.07	70-130
15 Chloromethane	50.000	52.295	104.59	70-130
18 Butane	50.000	48.018	96.04	70-130
19 Vinyl Chloride	50.000	47.841	95.68	70-130
20 1,3-Butadiene	50.000	56.860	113.72	70-130
24 Bromomethane	50.000	45.491	90.98	70-130
30 Chloroethane	50.000	47.607	95.21	70-130
31 Isopentane	50.000	53.450	106.90	70-130
32 Vinyl Bromide	50.000	47.009	94.02	70-130
33 Freon 11	50.000	53.390	106.78	70-130
34 Dichlorofluoromet	50.000	48.993	97.99	70-130
35 Pentane	50.000	51.872	103.74	70-130
38 Ethyl Ether	50.000	47.093	94.19	70-130
39 Ethanol	58.000	53.315	91.92	70-130
42 Acrolein	58.000	54.582	94.11	70-130
43 Freon 113	50.000	49.464	98.93	70-130
44 1,1-Dichloroethen	50.000	48.447	96.89	70-130
47 Acetone	50.000	50.880	101.76	70-130
48 Carbon Disulfide	50.000	47.496	94.99	70-130
49 Iodomethane	50.000	60.400	120.80	70-130
52 2-Propanol	50.000	55.056	110.11	70-130
54 3-Chloropropene	50.000	45.355	90.71	70-130
57 Acetonitrile	50.000	54.089	108.18	70-130
59 Methylene Chlorid	50.000	58.259	116.52	70-130
62 tert-Butyl alcoho	50.000	47.251	94.50	70-130
63 Methyl tert-butyl	50.000	45.681	91.36	70-130
64 trans-1,2-Dichlor	50.000	47.927	95.85	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	55.266	110.53	70-130
67	Hexane	50.000	50.558	101.12	70-130
71	1,1-Dichloroethan	50.000	52.334	104.67	70-130
72	Isopropyl ether	50.000	54.344	108.69	70-130
73	Vinyl Acetate	50.000	47.974	95.95	70-130
79	Ethyl-tert-butyl	50.000	48.386	96.77	70-130
84	2,2-Dichloropropa	50.000	50.068	100.14	70-130
85	cis-1,2-Dichloroe	50.000	51.642	103.28	70-130
86	2-Butanone	50.000	48.124	96.25	70-130
87	Ethyl Acetate	50.000	58.233	116.47	70-130
89	Tetrahydrofuran	50.000	57.533	115.07	70-130
92	Chloroform	50.000	52.619	105.24	70-130
94	Cyclohexane	50.000	47.399	94.80	70-130
96	1,1,1-Trichloroet	50.000	50.368	100.74	70-130
99	1,1-Dichloroprope	50.000	50.248	100.50	70-130
97	Carbon Tetrachlor	50.000	55.008	110.02	70-130
101	2,2,4-Trimethylpe	50.000	51.209	102.42	70-130
102	Benzene	50.000	51.267	102.53	70-130
105	tert-Amyl methyl	50.000	46.927	93.85	70-130
106	1,2-Dichloroethan	50.000	57.471	114.94	70-130
107	Heptane	50.000	49.386	98.77	70-130
110	n-Butanol	50.000	48.620	97.24	70-130
111	Trichloroethene	50.000	53.402	106.80	70-130
118	Dibromomethane	50.000	54.920	109.84	70-130
127	Methylcyclohexane	50.000	47.693	95.39	70-130
114	1,2-Dichloropropa	50.000	52.213	104.43	70-130
116	Methyl Methacryla	50.000	48.459	96.92	70-130
117	1,4-Dioxane	50.000	48.246	96.49	70-130
122	Bromodichlorometh	50.000	55.534	111.07	70-130
126	cis-1,3-Dichlorop	50.000	52.062	104.12	70-130
131	4-Methyl-2-pentan	50.000	50.878	101.76	70-130
136	Octane	50.000	51.102	102.20	70-130
137	Toluene	50.000	50.032	100.06	70-130
139	trans-1,3-Dichlor	50.000	52.672	105.34	70-130
141	1,1,2-Trichloroet	50.000	51.088	102.18	70-130
142	Tetrachloroethene	50.000	52.171	104.34	70-130
143	2-Hexanone	50.000	50.023	100.05	70-130
144	1,3-Dichloropropa	50.000	51.694	103.39	70-130
146	Dibromochlorometh	50.000	54.172	108.34	70-130
148	1,2-Dibromoethane	50.000	52.766	105.53	70-130
151	1-Bromo-2-Chloroe	50.000	52.800	105.60	70-130
154	Chlorobenzene	50.000	50.681	101.36	70-130
155	Ethyl Benzene	50.000	49.116	98.23	70-130
156	Nonane	50.000	56.180	112.36	70-130
157	1,1,1,2-Tetrachlo	50.000	43.901	87.80	70-130
158	m,p-Xylene	50.000	49.510	99.02	70-130
164	o-Xylene	50.000	48.153	96.31	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	46.351	92.70	70-130
167 Bromoform	50.000	52.990	105.98	70-130
168 Cumene	50.000	47.787	95.57	70-130
169 Cyclohexanone	50.000	42.916	85.83	70-130
175 1,1,2,2-Tetrachlo	50.000	51.560	103.12	70-130
177 Bromobenzene	50.000	51.320	102.64	70-130
178 Propylbenzene	50.000	49.296	98.59	70-130
179 1,2,3-Trichloropr	50.000	50.123	100.25	70-130
181 trans-1,4-Dichlor	50.000	72.553	145.11*	70-130
182 Decane	50.000	50.542	101.08	70-130
183 4-Ethyltoluene	50.000	49.283	98.57	70-130
184 2-Chlorotoluene	50.000	50.248	100.50	70-130
185 1,3,5-Trimethylbe	50.000	49.188	98.38	70-130
188 alpha Methyl Styr	50.000	43.398	86.80	70-130
189 tert-Butylbenzene	50.000	50.599	101.20	70-130
190 1,2,4-Trimethylbe	50.000	49.156	98.31	70-130
192 sec-Butylbenzene	50.000	50.834	101.67	70-130
194 p-Cymene	50.000	49.336	98.67	70-130
195 1,3-Dichlorobenze	50.000	51.235	102.47	70-130
196 1,4-Dichlorobenze	50.000	51.209	102.42	70-130
199 alpha-Chlorotolue	50.000	48.846	97.69	70-130
201 Undecane	50.000	53.442	106.88	70-130
202 Butylbenzene	50.000	48.904	97.81	70-130
204 1,2-Dichlorobenze	50.000	50.252	100.50	70-130
206 1,2-Dibromo-3-chl	50.000	51.803	103.61	70-130
207 Dodecane	50.000	71.919	143.84*	70-130
213 1,2,4-Trichlorobe	58.000	70.151	120.95	70-130
215 Hexachlorobutadie	58.000	72.131	124.36	70-130
216 Naphthalene	5.800	6.258	107.90	60-140
222 1,2,3-Trichlorobe	58.000	76.337	131.62*	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.488	105.95	70-130
$ 134 Toluene-d8	25.000	25.397	101.59	70-130
$ 170 4-Bromofluorobenz	25.000	25.210	100.84	70-130

Data File: /chem/msdp.i/25JUL21.b/p072504.d

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Date : 25-JUL-2021 11:58

Client ID: LCSD

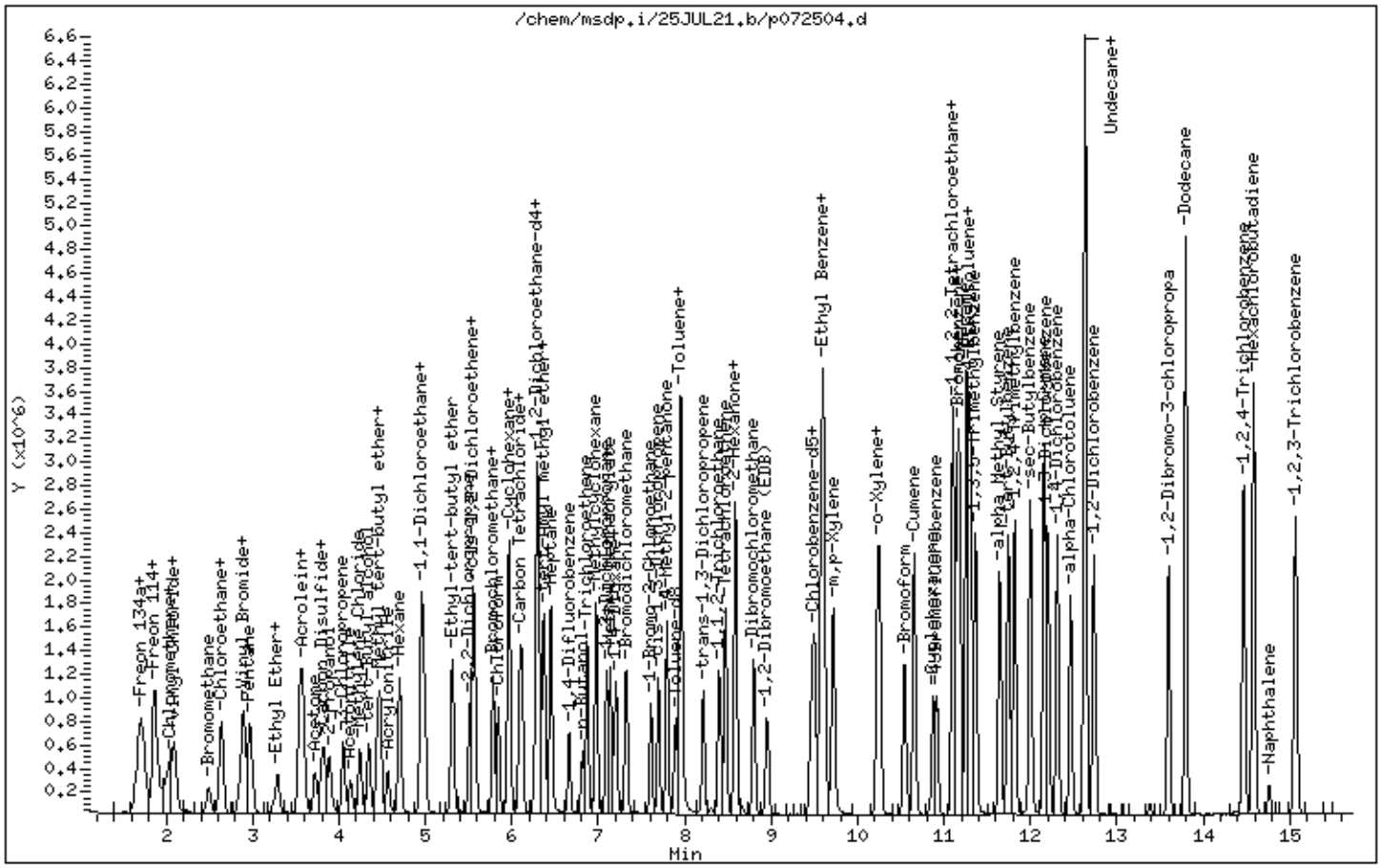
Instrument: msdp.i

Sample Info: 100mL 3018-2122A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



MSD3

							Method TO-15/TO-14					
BFB Tune Verification: (277248/295488) * 100 = 93.83%							SOP# 6					
	3234-42	Exp. Date:	9/22/2021			Vacuum:	NA					
BCM	266266			Surrogate # 3234-42		Exp Date:	9/22/2021			Exp Date		
1,4-DFB	910055			CCV	3018-2031	Exp Date:	8/17/2021	LCS	3018-2121A	Exp Date	9/22/2021	
CB-d5	785948			CCV SP 1 #	NA	Exp Date:	NA	LCS Sp #1	NA	Exp Date	NA	
				CCV SP 2 #	NA	Exp Date:	NA	LCS Sp #2	NA	Exp Date	NA	
				CCV SP 3#	NA	Exp Date:	NA	LCS Sp #3	NA	Exp Date	NA	
Verified CCV vs. ICAL midpoint (-40%): LD				CCV SP 4#	NA	Exp Date:	NA					
Method: 321q0622a.m												

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init.	Date Analyzed	Time	Review Init	Comments
√	3072501	BFB Tune Check	3234-42	3	36ng	200mL	1.00	LD	LD	07/25/21	1000	LD	Exp. 9/22/21;
√	3072502	CCV	3018-2031	13	50ppbv (200ppbv)	50mL	1.00	LD	LD	07/25/21	1046	LD	Exp.8/17/21; 2 out AT-20, Naph @ 40%
√	3072503	LCS	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/25/21	1130	LD	Exp. 9/22/21; 1 out AT-20
√	3072504	LCSD	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/25/21	1157	LD	Exp. 9/22/21; RPD ok
√	3072505	CCVsp	3018-2013	12	50ppbv (200ppbv)	50mL	1.00	LD	LD	07/25/21	1225	LD	Exp. 8/04/21;
√	3072506	TPHg Calib	3234-26A	11	500ppbv (625ppbv)	160mL	1.00	LD	LD	07/25/21	1253	LD	Exp. 9/3/21;
√	3072507	Lab Blank	34353	11	Humid	200ml	1.00	LD	LD	07/25/21	1343	LD	leg validation
√	3072508	2107260-01A	LC559	1	6.9 Hg->9.9 psi	200ml	2.17	AB	LD	07/25/21	1509	AB	
√	3072509	2107260-02A	N3077	2	12.6 Hg->9.8 psi	200ml	2.87	AB	LD	07/25/21	1539	AB	
√	3072510	2107260-03A	1L2720	4	8.6 Hg->9.9 psi	200ml	2.34	AB	LD	07/25/21	1608	AB	
√	3072511	2107260-04A	34000667	5	8.6 Hg->9.9 psi	200ml	2.34	AB	LD	07/25/21	1637	AB	
√	3072512	2107260-05A	N2576	6	8 Hg->9.9 psi	200ml	2.28	AB	LD	07/25/21	1706	AB	
√	3072513	2107260-06A	1358	7	6.9 Hg->10 psi	200ml	2.18	AB	LD	07/25/21	1736	AB	
√	3072514	2107260-07A	N5539	9	8.4 Hg->9.9 psi	200ml	2.32	AB	LD	07/25/21	1805	AB	
√	3072515	2107260-13A	3030	10	6.1 Hg->9.9 psi	200ml	2.10	AB	LD	07/25/21	1834	AB	
√	3072516	2107233-01A	N5915	3	5.7 Hg->1.9 psi	50ml	558	AB	LD	07/25/21	1902	AB	Can dilution 100X, DF=558; DIL Matrix, no impact
√	3072517	2107233-02A	N0603	8	2.8 Hg->1.8 psi	100ml	49.6	AB	LD	07/25/21	1929	AB	Can dilution 20X, DF=49.6; Dil Matrix
√	3072518	2107233-02AA	N0603	8	2.8 Hg->1.8 psi	100ml	49.6	AB	LD	07/25/21	1956	AB	Can dilution 20X, DF=49.6, Dil Matrix, DupAnB
√	3072519	CCV	3018-2031	13	50ppbv (200ppbv)	50mL	1.00	AB	AB	07/25/21	2138	AB	End Check; pass for Methylene Chloride
√	3072520	System Blank	34353	3	humid	200mL	1.00	LD	AB	07/25/21	2249	LD	
√	3072521	System Blank	34353	3	humid	200mL	1.00	LD	AB	07/25/21	2318	LD	Leg Validation
√	3072522	2107260-14A	N5151	1	4.9 Hg->10 psi	200mL	2.01	LD	AB	07/25/21	2347	LD	
√	3072523	2107260-15A	N3109	2	5.3 Hg->9.9 psi	200mL	2.03	LD	AB	07/26/21	0017	LD	
√	3072524	2107260-16A	sh3031	4	5.5 Hg->9.9 psi	200mL	2.05	LD	AB	07/26/21	0046	LD	
√	3072525	2107260-17A	O0877	5	5.5 Hg->10 psi	200mL	2.06	LD	AB	07/26/21	0115	LD	
√	3072526	2107260-18A	1L1906	6	5.9 Hg->9.9 psi	200mL	2.08	LD	AB	07/26/21	0145	LD	
√	3072527	2107260-19A	LC021	7	5.1 Hg->10 psi	200mL	2.02	LD	AB	07/26/21	0214	LD	
√	3072528	2107260-20A	34000601	9	6.9 Hg->9.9 psi	200mL	2.17	LD	AB	07/26/21	0243	LD	
√	3072529	2107260-21A	1L1766	10	6.3 Hg->10 psi	200mL	2.13	LD	AB	07/26/21	0313	LD	
√	3072530	2107260-22A	N2002	11	6.3 Hg->9.9 psi	200mL	2.12	LD	AB	07/26/21	0342	LD	

LD 7/27/21

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init.	Date Analyzed	Time	Review Init	Comments
√	3072531	2107260-23A	O0725	3	8.4 Hg->10 psi	200mL	2.33	LD	LD	07/26/21	0742	LD	

7/27/21

MSDP

								Method TO-15/TO-14					
	BFB Verification of 176/174 ratio: (122720/127040) * 100 = 96.60%							SOP# 6					
		3234-10	Exp. Date:		8/17/21			Vacuum:	NA				
	BCM	154,602						Please check all standards					
	1,4-DFB	573,421				Surr.# 3234-10		Exp. Date:	8/17/21	Surrogate# NA		Exp. Date:	NA
	CB-d5	566,079				CCV: 3018-2125		Exp. Date:	9/28/21	LCS: 3018-2122A		Exp. Date:	9/23/21
						CCV sp1#		Exp. Date:		LCS sp1 #		Exp. Date:	
						CCV sp2#		Exp. Date:		LCS sp2 #		Exp. Date:	
	Verified CCV vs ICAL mid-point(-40%): LD					CCV sp3#		Exp. Date:		LCS sp3 #		Exp. Date:	
	Method: p21q0519a.m												

	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	mL	DF	Verify Load	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P072501	BFB Tune Check	3234-10	12	36ng	50ml	1.00	LD	LD	7/25/2021	1013	LD	Exp. 8/17/21. leg validation
√	P072502	CCV	3018-2125	13	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/25/2021	1100	LD	Exp. 9/28/21; 0 out
√	P072503	LCS	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/25/2021	1129	LD	Exp. 9/23/21. 2 out AT-20
√	P072504	LCSD	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/25/2021	1158	LD	Exp. 9/23/21; RPD ok
√	P072505	CCVsp	3018-2127	11	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/25/2021	1226	LD	Exp. 9/26/21; 0 out
√	P072506	TPHg Calib	3234-26A	12	500ppbv (625ppbv)	160mL	1.00	LD	LD	7/25/2021	1328	LD	Exp. 9/3/21
√	P072507	Lab Blank	35157	12	Humid	200ml	1.00	LD	LD	7/25/2021	1425	LD	leg validation
√	P072508	2107282-01A	N5655	1	7.8 Hg->10 psi	200ml	2.27	kk	LD	7/25/2021	1527	kk	"E" chlorodifl (NTC) > 400ppbv
√	P072509	2107282-02A	N3465	2	6.3 Hg->9.9 psi	200ml	2.12	kk	LD	7/25/2021	1556	kk	"E" chlorodifl (NTC) <400ppbv
√	P072510	2107262-01A	N3454	3	5.5 Hg->10 psi	200ml	2.06	kk	LD	7/25/2021	1626	kk	
√	P072511	2107262-02A	N3829	4	7.0 Hg->10 psi	200ml	2.19	kk	LD	7/25/2021	1655	kk	
√	P072512	2107262-04A	40867	5	6.5 Hg->10.4 psi	200ml	2.18	kk	LD	7/25/2021	1724	kk	
√	P072513	2107262-05A	1L1614	6	6.5 Hg->10 psi	200ml	2.14	kk	LD	7/25/2021	1754	kk	
√	P072514	2107262-07A	1040	7	7.5 Hg->10 psi	200ml	2.24	kk	LD	7/25/2021	1823	kk	
√	P072515	2107262-03A	3033	8	5.5 Hg->10 psi	140ml	2.94	kk	LD	7/25/2021	1853	kk	dil ntc; "E" THF (NTC) < 400ppbv
√	P072516	2107262-06A	N2621	9	7.0 Hg->10 psi	200ml	2.19	kk	LD	7/25/2021	1922	kk	"E" THF (NTC) <400ppbv, matrix
√	P072517	System Blank	35157	1	Humid	200ml	1.00	kk	kk	7/25/2021	2008	kk	leg validation
√	P072518	System Blank	35157	11	Humid	200ml	1.00	LD	kk	7/25/2021	2224	LD	leg validation
√	P072519	2107260A-24A	1L1929	1	7.8 Hg->9.9 psi	200ml	2.26	LD	kk	7/25/2021	2253	LD	
√	P072520	2107282-03A	8019	2	7.1 Hg->10 psi	200ml	2.20	LD	kk	7/25/2021	2322	LD	
√	P072521	2107282-04A	N3422	3	7.1 Hg->9.8 psi	200ml	2.18	LD	kk	7/25/2021	2352	LD	
√	P072522	2107282-05A	N3419	4	5.1 Hg->9.9 psi	200ml	2.02	LD	kk	7/26/2021	0021	LD	
√	P072523	2107282-07A	N5535	5	7.1 Hg->9.7 psi	200ml	2.17	LD	kk	7/26/2021	0051	LD	
√	P072524	2107282-08A	1L1923	6	5.9 Hg->9.6 psi	200ml	2.06	LD	LD	7/26/2021	0727	LD	

7/27/21

US32TAR1

Data file : /chem/msd3.i/22JUN21.b/3062204.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 22-JUN-2021 14:28
Operator : LD Inst ID: msd3.i
Smp Info : 200mL #3234-42;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msd3.i/22JUN21.b/bfb30.m
Meth Date : 03-Sep-2019 11:54 u7js Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 3 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.601	9.729	-0.128	95	429760			100.00- 100.00	100.00
9.601	9.729	-0.128	50	101149			8.00- 40.00	23.54
9.601	9.729	-0.128	75	210688			30.00- 66.00	49.02
9.601	9.729	-0.128	96	28103			5.00- 9.00	6.54
9.601	9.729	-0.128	173	2948			0.00- 1.99	0.86
9.601	9.729	-0.128	174	343594			50.01- 120.00	79.95
9.601	9.729	-0.128	175	25293			4.00- 9.00	7.36
9.601	9.729	-0.128	176	322005			93.00- 101.00	93.72
9.601	9.729	-0.128	177	20616			5.00- 9.00	6.40

Data File: /chem/msd3.i/22JUN21.b/3062204.d

Date : 22-JUN-2021 14:28

Client ID: BFB

Instrument: msd3.i

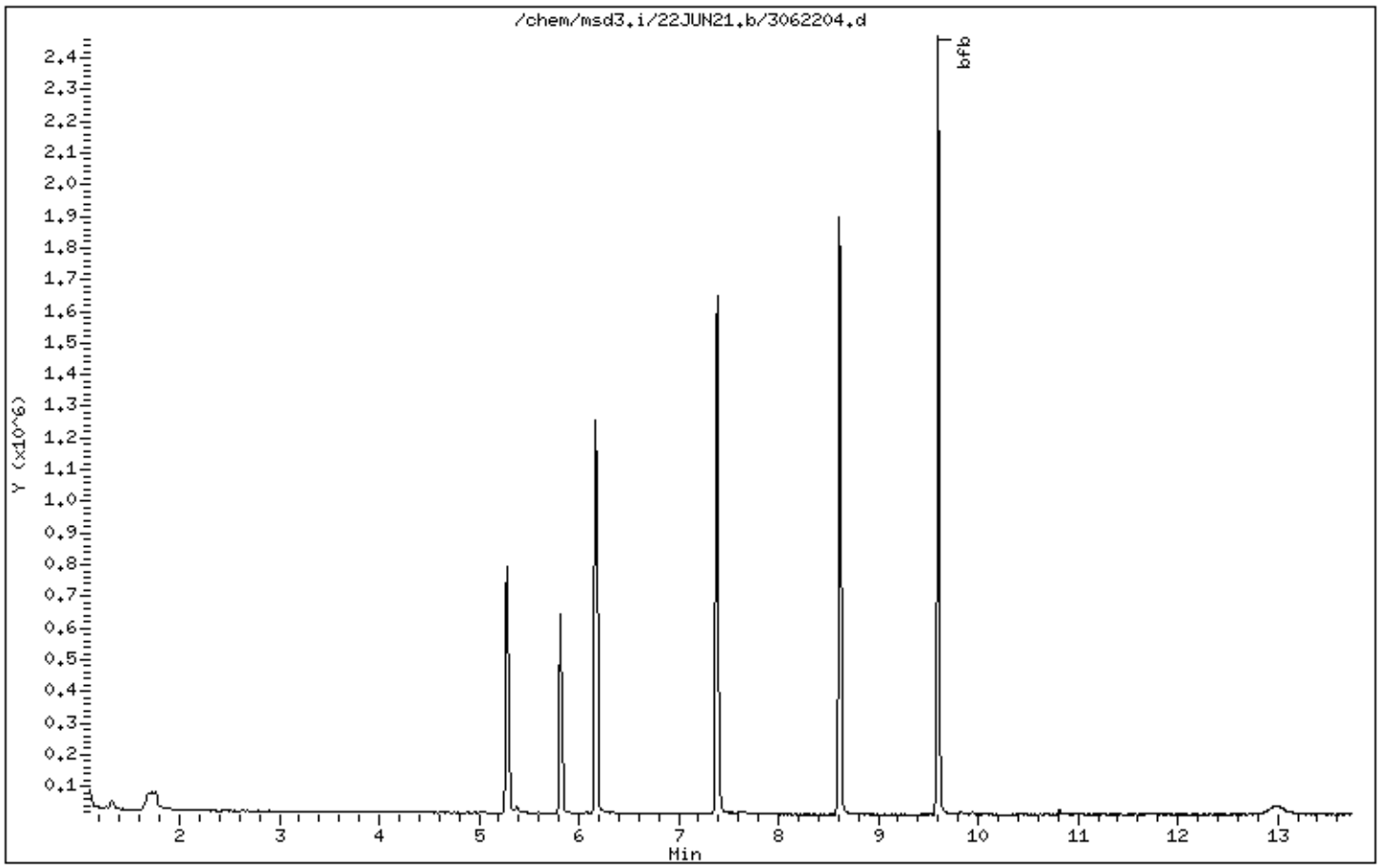
Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msd3.i/22JUN21.b/3062204.d

Date : 22-JUN-2021 14:28

Client ID: BFB

Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

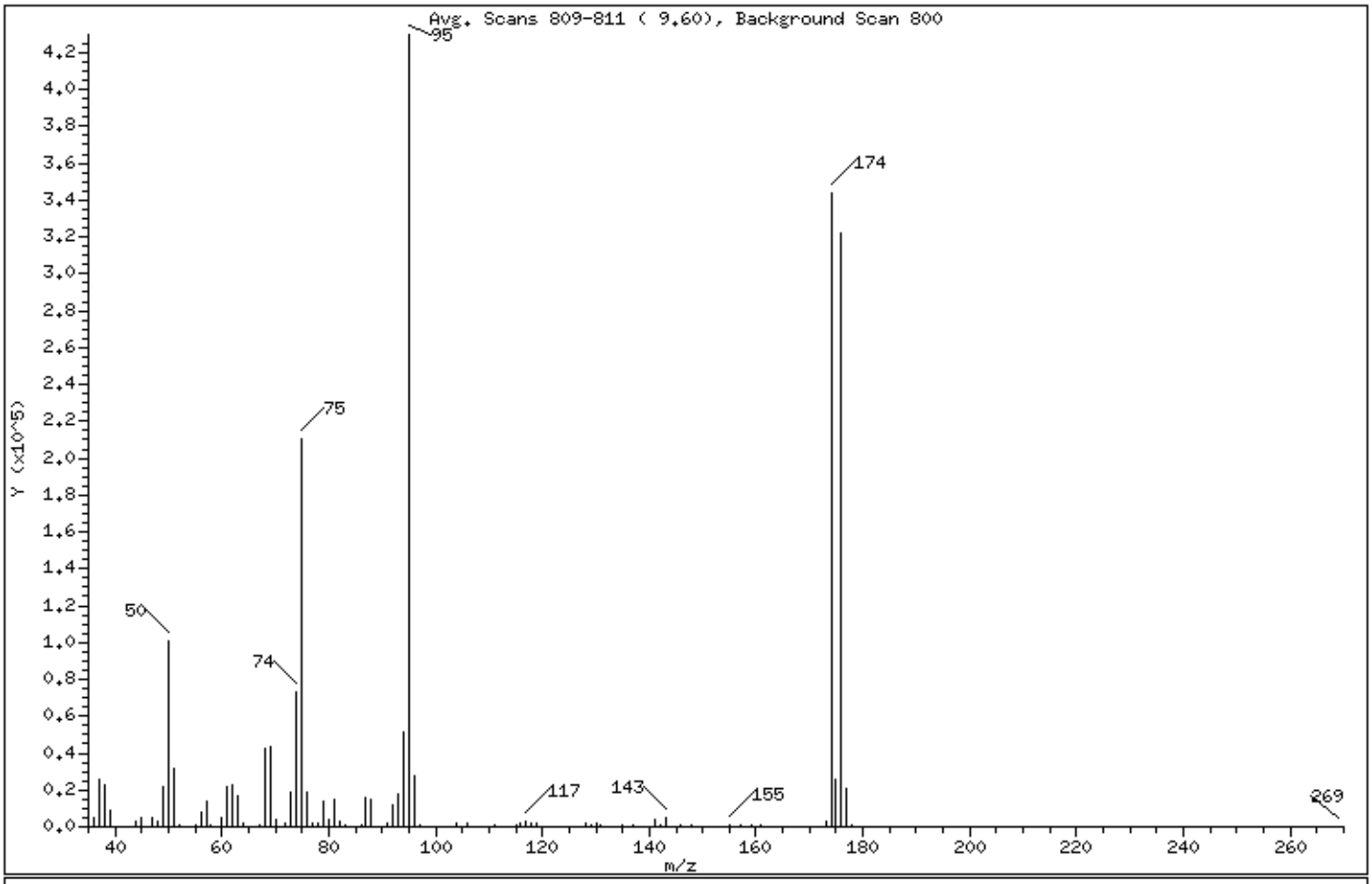
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.54
75	30.00 - 66.00% of mass 95	49.02
96	5.00 - 9.00% of mass 95	6.54
173	Less than 1.99% of mass 174	0.69 (0.86)
174	50.01 - 120.00% of mass 95	79.95
175	4.00 - 9.00% of mass 174	5.89 (7.36)
176	93.00 - 101.00% of mass 174	74.93 (93.72)
177	5.00 - 9.00% of mass 176	4.80 (6.40)

Date : 22-JUN-2021 14:28

Client ID: BFB Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: 3062204.d
Spectrum: Avg. Scans 809-811 (9.60), Background Scan 800
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4504	68.00	42848	103.00	330	141.00	4396
37.00	25512	69.00	43752	104.00	2056	142.00	523
38.00	22744	70.00	3773	105.00	469	143.00	4590
39.00	8447	71.00	269	106.00	2024	144.00	322
40.00	157	72.00	2366	107.00	483	145.00	433
41.00	69	73.00	18816	109.00	67	146.00	637
43.00	165	74.00	72928	110.00	353	147.00	396
44.00	2826	75.00	210688	111.00	572	148.00	1053
45.00	4597	76.00	18984	112.00	355	149.00	356
46.00	419	77.00	2253	113.00	447	150.00	452
47.00	5056	78.00	1535	115.00	628	152.00	327
48.00	3443	79.00	13872	116.00	1822	153.00	320
49.00	22064	80.00	4129	117.00	2804	154.00	254
50.00	101144	81.00	14515	118.00	1705	155.00	1016
51.00	31392	82.00	3092	119.00	2266	156.00	163
52.00	1423	83.00	528	122.00	76	157.00	761
54.00	251	84.00	226	124.00	368	159.00	512
55.00	1464	85.00	44	125.00	72	161.00	510
56.00	7902	86.00	505	126.00	144	170.00	139
57.00	14003	87.00	15958	127.00	236	171.00	290
58.00	781	88.00	14979	128.00	1617	173.00	2948
59.00	267	91.00	1747	129.00	757	174.00	343552
60.00	4525	92.00	12126	130.00	1780	175.00	25288
61.00	22168	93.00	17944	131.00	715	176.00	321984
62.00	22640	94.00	51824	135.00	920	177.00	20616
63.00	17000	95.00	429760	136.00	240	178.00	598
64.00	1668	96.00	28096	137.00	858	269.00	86
65.00	146	97.00	1066	139.00	79		
67.00	968	98.00	262	140.00	326		

US32TAR1

Data file : /chem/msd3.i/25JUL21.b/3072501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JUL-2021 10:00
Operator : LD Inst ID: msd3.i
Smp Info : 200mL #3234-42;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msd3.i/25JUL21.b/bfb30.m
Meth Date : 03-Sep-2019 11:54 u7js Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 3 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.600	9.729	-0.129	95	334422			100.00- 100.00	100.00
9.600	9.729	-0.129	50	84824			8.00- 40.00	25.36
9.600	9.729	-0.129	75	170385			30.00- 66.00	50.95
9.600	9.729	-0.129	96	22677			5.00- 9.00	6.78
9.600	9.729	-0.129	173	4286			0.00- 1.99	1.45
9.600	9.729	-0.129	174	295488			50.01- 120.00	88.36
9.600	9.729	-0.129	175	22365			4.00- 9.00	7.57
9.600	9.729	-0.129	176	277269			93.00- 101.00	93.83
9.600	9.729	-0.129	177	17672			5.00- 9.00	6.37

Data File: /chem/msd3.i/25JUL21.b/3072501.d

Date : 25-JUL-2021 10:00

Client ID: BFB

Instrument: msd3.i

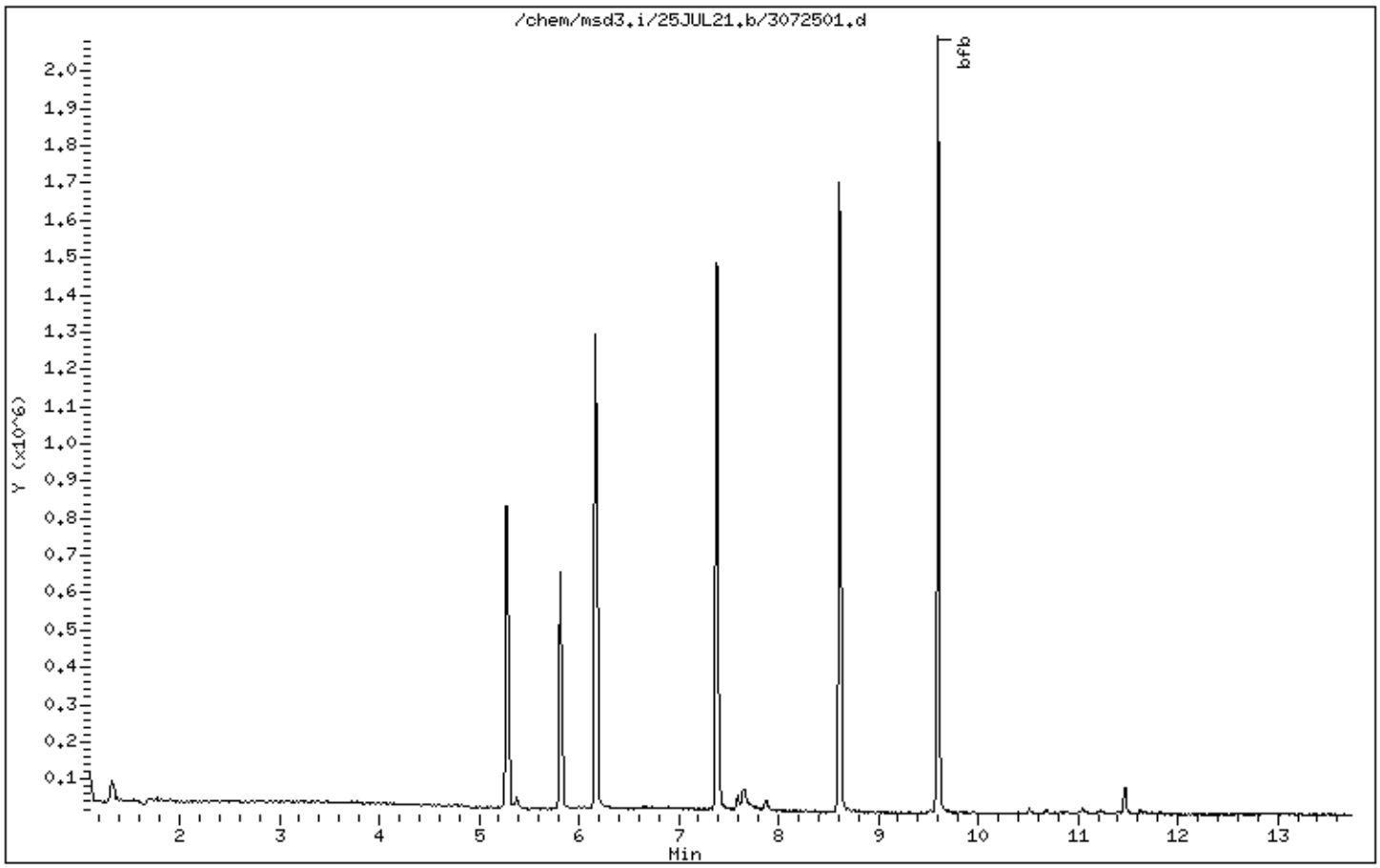
Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msd3.i/25JUL21.b/3072501.d

Date : 25-JUL-2021 10:00

Client ID: BFB

Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

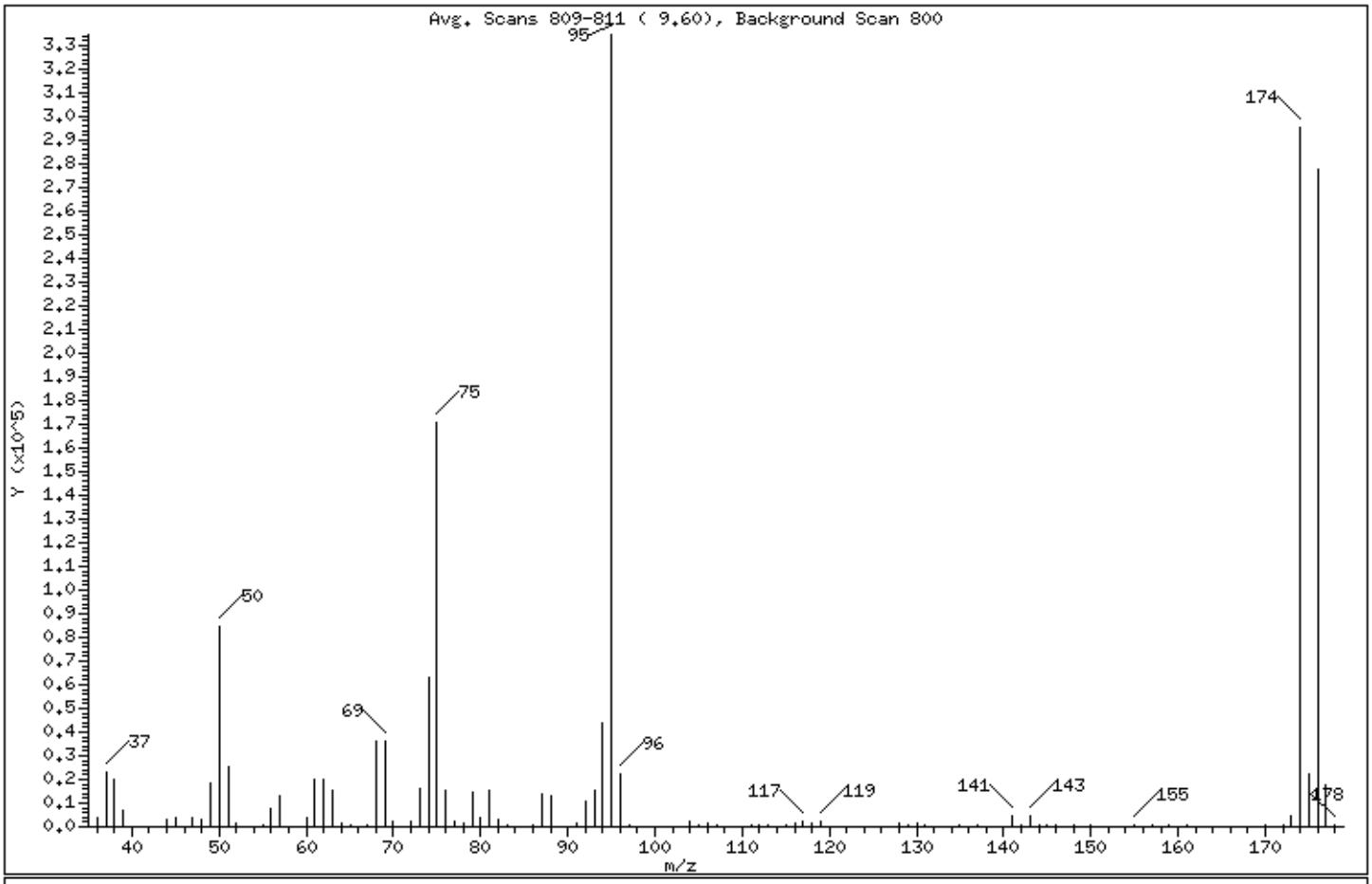
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	25.36
75	30.00 - 66.00% of mass 95	50.95
96	5.00 - 9.00% of mass 95	6.78
173	Less than 1.99% of mass 174	1.28 (1.45)
174	50.01 - 120.00% of mass 95	88.36
175	4.00 - 9.00% of mass 174	6.69 (7.57)
176	93.00 - 101.00% of mass 174	82.91 (93.83)
177	5.00 - 9.00% of mass 176	5.28 (6.37)

Date : 25-JUL-2021 10:00

Client ID: BFB Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: 3072501.d
Spectrum: Avg. Scans 809-811 (9.60), Background Scan 800
Location of Maximum: 95.00
Number of points: 120

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3807	68.00	35880	106.00	1846	144.00	441
37.00	22832	69.00	36024	107.00	512	145.00	546
38.00	19728	70.00	2612	108.00	96	146.00	624
39.00	7262	71.00	313	110.00	353	147.00	303
40.00	293	72.00	2084	111.00	574	148.00	912
41.00	193	73.00	15809	112.00	469	149.00	362
42.00	123	74.00	62968	113.00	496	150.00	476
43.00	43	75.00	170368	115.00	386	152.00	240
44.00	2964	76.00	15010	116.00	1601	153.00	272
45.00	3892	77.00	2155	117.00	2307	154.00	265
46.00	268	78.00	1273	118.00	1837	155.00	939
47.00	4065	79.00	14383	119.00	2293	156.00	304
48.00	2877	80.00	4169	120.00	75	157.00	781
49.00	18736	81.00	15033	122.00	137	159.00	517
50.00	84824	82.00	3160	123.00	186	161.00	412
51.00	25680	83.00	404	124.00	295	162.00	67
52.00	1293	85.00	71	126.00	232	163.00	72
54.00	289	86.00	518	127.00	74	169.00	175
55.00	1078	87.00	13462	128.00	1549	170.00	436
56.00	7621	88.00	13049	129.00	842	171.00	225
57.00	12989	90.00	169	130.00	1362	172.00	1003
58.00	339	91.00	1366	131.00	631	173.00	4286
59.00	154	92.00	10499	134.00	80	174.00	295488
60.00	4169	93.00	15626	135.00	788	175.00	22360
61.00	20048	94.00	43664	136.00	165	176.00	277248
62.00	19880	95.00	334400	137.00	872	177.00	17672
63.00	15000	96.00	22672	139.00	166	178.00	640
64.00	1607	97.00	732	140.00	363		
65.00	792	103.00	312	141.00	4672		
66.00	92	104.00	2065	142.00	624		
67.00	1055	105.00	576	143.00	4594		

US32TAR1

Data file : /chem/msdp.i/19MAY21.b/p051901.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 19-MAY-2021 11:39
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/19MAY21.b/bfb30.m
Meth Date : 18-Nov-2019 14:14 ushn Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 4 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.921	10.993	-0.072	95	186911			100.00- 100.00	100.00
10.921	10.993	-0.072	50	42709			8.00- 40.00	22.85
10.921	10.993	-0.072	75	81216			30.00- 66.00	43.45
10.921	10.993	-0.072	96	12084			5.00- 9.00	6.47
10.921	10.993	-0.072	173	1196			0.00- 1.99	0.82
10.921	10.993	-0.072	174	146453			50.01- 120.00	78.35
10.921	10.993	-0.072	175	10521			4.00- 9.00	7.18
10.921	10.993	-0.072	176	142592			93.00- 101.00	97.36
10.921	10.993	-0.072	177	9138			5.00- 9.00	6.41

Data File: /chem/msdp.i/19MAY21.b/p051901.d

Date : 19-MAY-2021 11:39

Client ID: BFB

Instrument: msdp.i

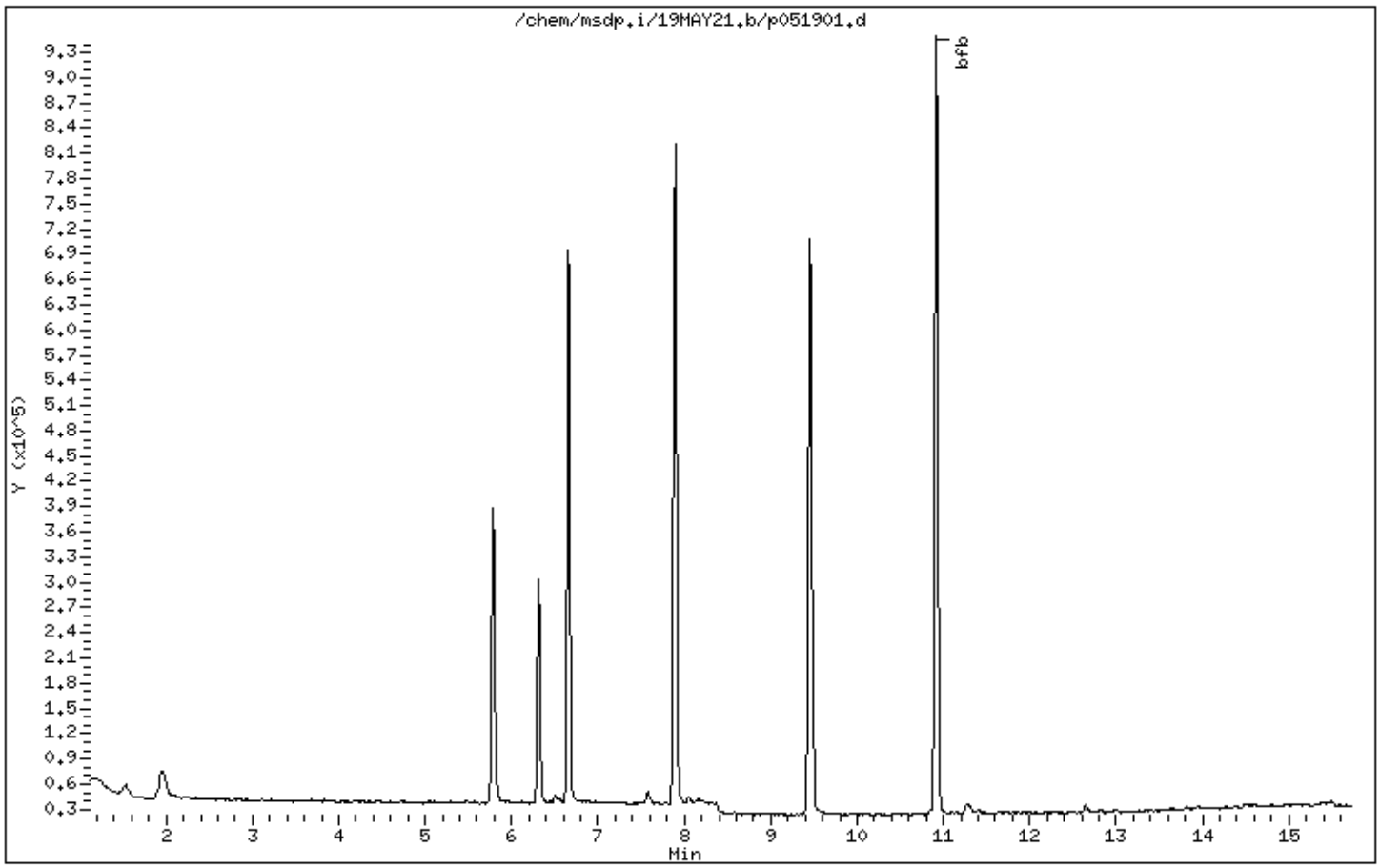
Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/19MAY21.b/p051901.d

Date : 19-MAY-2021 11:39

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

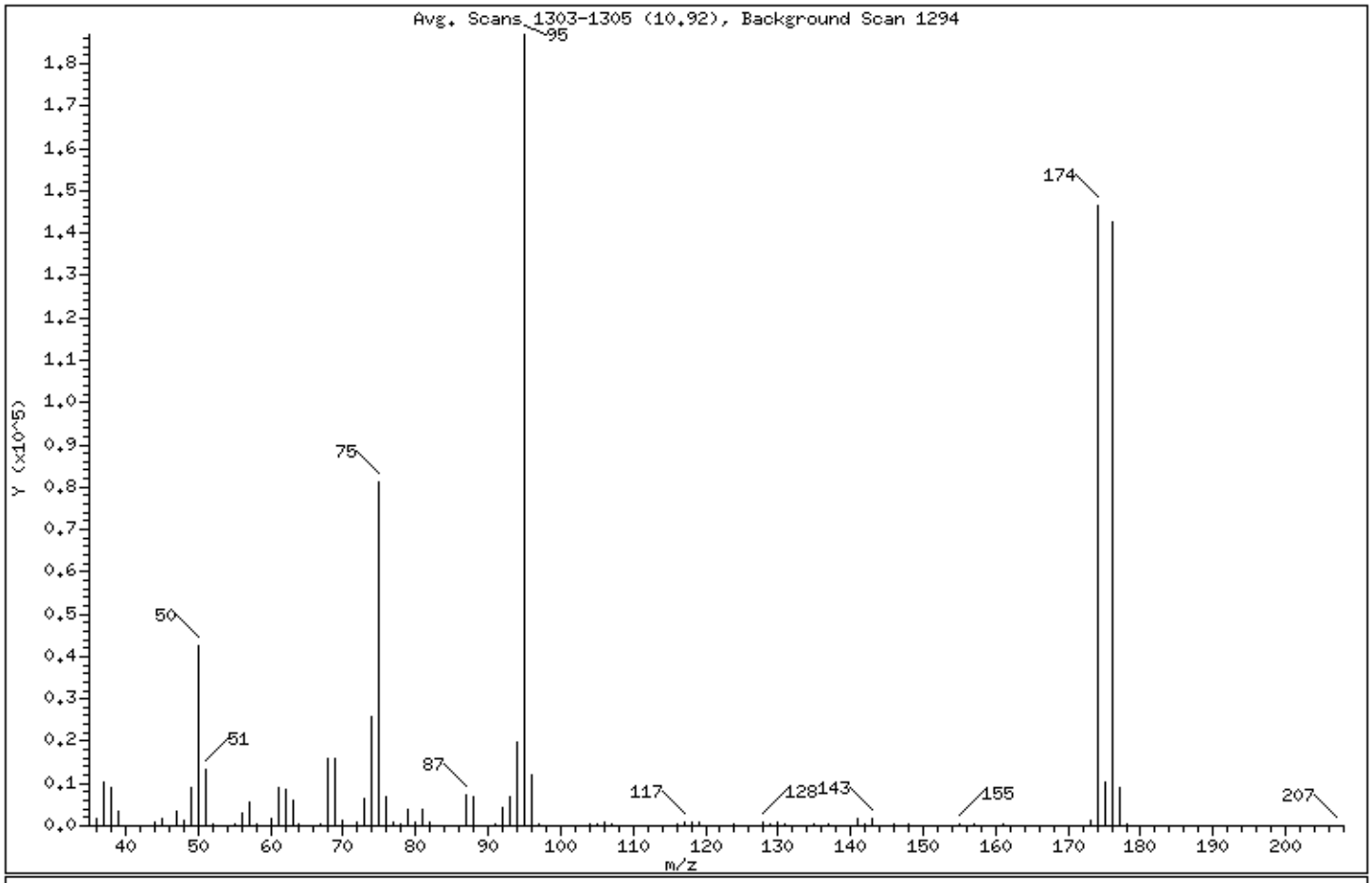
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.85
75	30.00 - 66.00% of mass 95	43.45
96	5.00 - 9.00% of mass 95	6.47
173	Less than 1.99% of mass 174	0.64 (0.82)
174	50.01 - 120.00% of mass 95	78.35
175	4.00 - 9.00% of mass 174	5.63 (7.18)
176	93.00 - 101.00% of mass 174	76.29 (97.36)
177	5.00 - 9.00% of mass 176	4.89 (6.41)

Date : 19-MAY-2021 11:39

Client ID: BFB Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: p051901.d
Spectrum: Avg. Scans 1303-1305 (10.92), Background Scan 1294
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1868	70.00	1283	104.00	572	144.00	34
37.00	10229	71.00	45	105.00	269	145.00	194
38.00	8812	72.00	868	106.00	645	146.00	291
39.00	3495	73.00	6642	107.00	260	147.00	74
40.00	164	74.00	25736	110.00	56	148.00	464
44.00	917	75.00	81216	111.00	52	149.00	159
45.00	1818	76.00	7007	112.00	153	150.00	194
46.00	106	77.00	923	113.00	102	152.00	130
47.00	3380	78.00	552	115.00	151	153.00	181
48.00	1430	79.00	3744	116.00	557	154.00	159
49.00	9200	80.00	918	117.00	965	155.00	433
50.00	42704	81.00	3849	118.00	686	157.00	324
51.00	13167	82.00	684	119.00	932	159.00	214
52.00	589	83.00	51	123.00	100	161.00	241
55.00	241	85.00	29	124.00	227	165.00	33
56.00	2844	86.00	166	126.00	88	172.00	143
57.00	5428	87.00	7358	127.00	87	173.00	1196
58.00	256	88.00	6801	128.00	774	174.00	146432
59.00	71	91.00	377	129.00	295	175.00	10521
60.00	1820	92.00	4204	130.00	668	176.00	142592
61.00	9042	93.00	6703	131.00	353	177.00	9138
62.00	8617	94.00	19944	135.00	237	178.00	285
63.00	5849	95.00	186880	137.00	246	207.00	79
64.00	483	96.00	12084	140.00	173		
67.00	360	97.00	281	141.00	1745		
68.00	16023	98.00	26	142.00	230		
69.00	15790	103.00	189	143.00	1755		

US32TAR1

Data file : /chem/msdp.i/25JUL21.b/p072501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JUL-2021 10:13
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/25JUL21.b/bfb30.m
Meth Date : 25-Jul-2021 13:15 lk8g Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.921	10.993	-0.072	95	155392			100.00- 100.00	100.00
10.921	10.993	-0.072	50	43037			8.00- 40.00	27.70
10.921	10.993	-0.072	75	73781			30.00- 66.00	47.48
10.921	10.993	-0.072	96	9825			5.00- 9.00	6.32
10.921	10.993	-0.072	173	1141			0.00- 1.99	0.90
10.921	10.993	-0.072	174	127042			50.01- 120.00	81.76
10.921	10.993	-0.072	175	9487			4.00- 9.00	7.47
10.921	10.993	-0.072	176	122725			93.00- 101.00	96.60
10.921	10.993	-0.072	177	7992			5.00- 9.00	6.51

Data File: /chem/msdp.i/25JUL21.b/p072501.d

Date : 25-JUL-2021 10:13

Client ID: BFB

Instrument: msdp.i

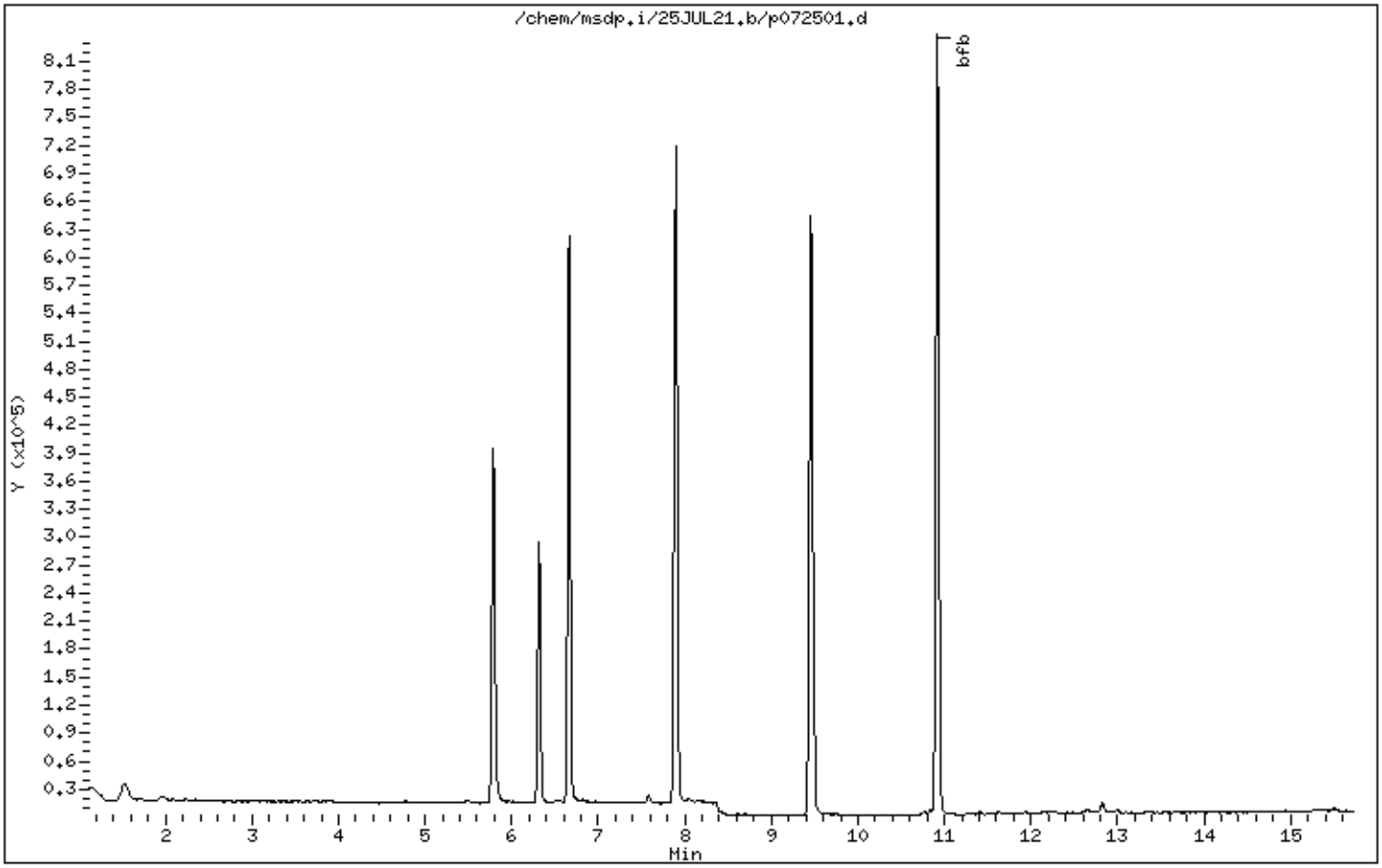
Sample Info: 200ml #3234-10

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/25JUL21.b/p072501.d

Date : 25-JUL-2021 10:13

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10

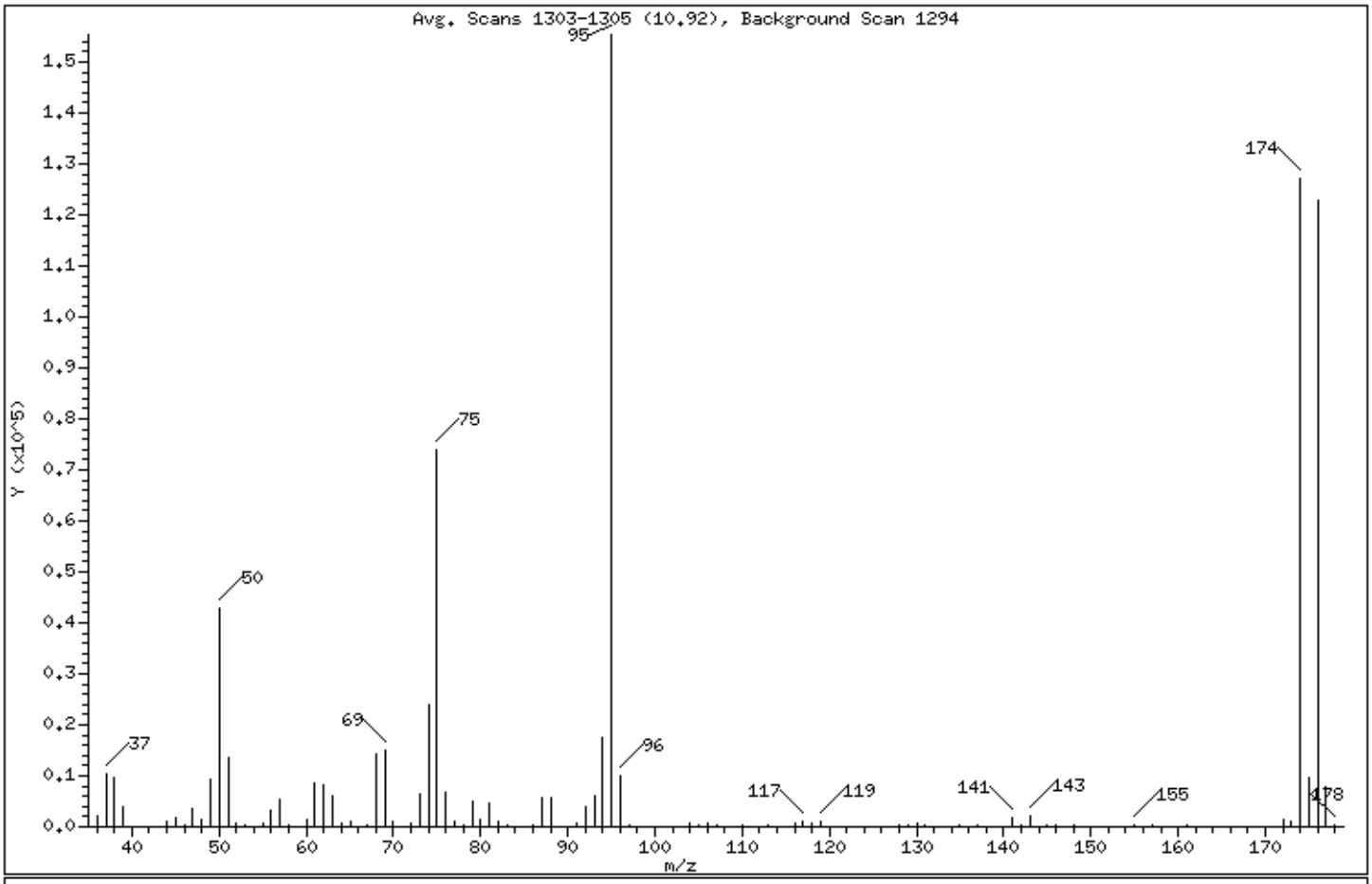
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	27.70
75	30.00 - 66.00% of mass 95	47.48
96	5.00 - 9.00% of mass 95	6.32
173	Less than 1.99% of mass 174	0.73 (0.90)
174	50.01 - 120.00% of mass 95	81.76
175	4.00 - 9.00% of mass 174	6.11 (7.47)
176	93.00 - 101.00% of mass 174	78.98 (96.60)
177	5.00 - 9.00% of mass 176	5.14 (6.51)

Date : 25-JUL-2021 10:13

Client ID: BFB Instrument: msdp.i

Sample Info: 200ml #3234-10

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: p072501.d
Spectrum: Avg. Scans 1303-1305 (10.92), Background Scan 1294
Location of Maximum: 95.00
Number of points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1994	64.00	809	94.00	17392	141.00	1745
37.00	10387	65.00	1239	95.00	155392	142.00	200
38.00	9700	67.00	352	96.00	9825	143.00	2027
39.00	3973	68.00	14384	97.00	346	145.00	418
40.00	107	69.00	14979	104.00	696	146.00	236
41.00	58	70.00	1143	105.00	283	147.00	95
43.00	29	71.00	41	106.00	718	148.00	347
44.00	1060	72.00	873	107.00	185	150.00	171
45.00	1832	73.00	6328	110.00	197	153.00	125
46.00	272	74.00	23912	111.00	152	154.00	35
47.00	3484	75.00	73776	112.00	36	155.00	365
48.00	1346	76.00	6664	113.00	215	157.00	273
49.00	9372	77.00	895	115.00	146	159.00	81
50.00	43032	78.00	522	116.00	723	161.00	212
51.00	13540	79.00	5050	117.00	1049	171.00	146
52.00	642	80.00	1569	118.00	583	172.00	1473
53.00	246	81.00	4756	119.00	1127	173.00	1141
55.00	697	82.00	1197	124.00	87	174.00	127040
56.00	3062	83.00	182	128.00	526	175.00	9487
57.00	5375	86.00	203	129.00	286	176.00	122720
58.00	316	87.00	5762	130.00	571	177.00	7992
60.00	1540	88.00	5703	131.00	333	178.00	217
61.00	8524	91.00	703	135.00	267		
62.00	8122	92.00	4043	137.00	283		
63.00	6216	93.00	6059	140.00	142		

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/25JUL21.b/3072505.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2021 12:25
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/25JUL21.b/321q0622a.m
Meth Date : 25-Jul-2021 12:42 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spCCV.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.284	5.284 (1.000)	130	262369	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	205663			48.46- 108.46	78.39
5.270	5.270 (1.000)	49	369802			120.39- 180.39	140.95
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	896033	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	132931			0.00- 45.52	14.84
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.619	8.619 (1.000)	117	827475	25.0000		80.00- 120.00	100.00
8.619	8.619 (1.000)	82	438694			25.46- 85.46	53.02
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	355021	25.0000	24.588	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	170953			21.66- 81.66	48.15
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	866353	25.0000	23.474	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	96134			0.00- 41.47	11.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	565158			36.47- 96.47	65.23
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	500183	25.0000	22.853	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	569395			93.06- 153.06	113.84
9.601	9.601 (1.114)	176	471583			62.87- 122.87	94.28
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	262482	50.0000	59.807	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	608094			217.09- 277.09	231.67
1.353	1.353 (0.256)	64	66048			0.00- 55.87	25.16
6 Propane					CAS #: 74-98-6		
1.423	1.423 (0.269)	43	120536	50.0000	50.413	80.00- 120.00	100.00
1.423	1.423 (0.269)	39	88720			41.62- 101.62	73.60
1.423	1.423 (0.269)	41	68040			22.97- 82.97	56.45
13 Freon 142b					CAS #: 75-68-3		
1.604	1.604 (0.304)	65	844965	50.0000	60.543	80.00- 120.00	100.00
1.604	1.604 (0.304)	45	227288			0.00- 58.17	26.90
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.462)	55	500192	50.0000	56.435	80.00- 120.00	100.00
2.444	2.444 (0.462)	42	614903			99.17- 159.17	122.93
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	612536	50.0000	59.351	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	806330			103.13- 163.13	131.64
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	874265	50.0000	57.757	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	196817			0.00- 51.81	22.51
2.976	2.976 (0.563)	85	592413			37.13- 97.13	67.76
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	864868	50.0000	53.677	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	325986			7.90- 67.90	37.69
3.549	3.549 (0.672)	53	216889			0.00- 54.87	25.08
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	858279	50.0000	51.688	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	149315			0.00- 47.15	17.40
74 Chloroprene					CAS #: 126-99-8		
4.515	4.515 (0.854)	53	734168	50.0000	52.212	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
74 Chloroprene (continued)							
4.515	4.515 (0.854)	88	304300			12.33- 72.33	41.45
4.515	4.515 (0.854)	50	207831			0.00- 57.62	28.31
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	97407	50.0000	44.809	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	78958			53.89- 113.89	81.06
4.613	4.613 (0.873)	41	53337			24.09- 84.09	54.76
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	791945	50.0000	46.864	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	105979			0.00- 43.24	13.38
5.130	5.130 (0.971)	58	66087			0.00- 38.83	8.34
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	120355	50.0000	38.756	80.00- 120.00	100.00
5.774	5.774 (1.093)	43	361658			327.69- 387.69	300.49
5.774	5.774 (1.093)	41	281289			237.56- 297.56	233.71
113 Ethyl acrylate					CAS #: 140-88-5		
6.474	6.474 (0.751)	99	61584	50.0000	46.573	80.00- 120.00	100.00
6.460	6.460 (0.749)	45	85273			124.67- 184.67	138.47
6.460	6.460 (0.749)	55	968246			1601.30-1661.30	1572.21
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.558 (0.761)	43	1372627	50.0000	44.378	80.00- 120.00	100.00
6.558	6.558 (0.761)	58	113440			0.00- 37.25	8.26
6.558	6.558 (0.761)	86	224970			0.00- 45.08	16.39
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.305)	56	490373	50.0000	41.515	80.00- 120.00	100.00
8.068	8.068 (1.305)	73	179133			5.16- 65.16	36.53
8.068	8.068 (1.305)	43	1167171			214.00- 274.00	238.02
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	630580	50.0000	50.662	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	426889			38.22- 98.22	67.70
8.712	8.712 (1.011)	95	230622			7.54- 67.54	36.57
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	724910	50.0000	37.640	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	1124203			133.36- 193.36	155.08
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.209)	68	698914	50.0000	46.490	80.00- 120.00	100.00
10.424	10.424 (1.209)	93	512688			42.08- 102.08	73.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
186 4-Chlorotoluene					CAS #: 106-43-4		
9.973	9.973 (1.157)	126	525106	50.0000	48.465	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1701771			305.94- 365.94	324.08
9.966	9.966 (1.156)	63	238461			15.44- 75.44	45.41
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.229)	120	713447	50.0000	48.038	80.00- 120.00	100.00
10.596	10.596 (1.229)	105	1649442			206.43- 266.43	231.19
10.596	10.596 (1.229)	77	196293			0.00- 58.29	27.51
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.288)	201	452030	50.0000	49.855	80.00- 120.00	100.00
11.098	11.098 (1.288)	117	622320			109.77- 169.77	137.67
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.728	11.728 (1.361)	180	807836	50.0000	40.863	80.00- 120.00	100.00
11.728	11.728 (1.361)	182	774941			65.79- 125.79	95.93
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.087)	93	1209382	50.0000	47.265	80.00- 120.00	100.00
9.371	9.371 (1.087)	77	364498			0.13- 60.13	30.14
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.154)	93	938003	50.0000	46.682	80.00- 120.00	100.00
9.966	9.966 (1.156)	91	1701771			145.95- 205.95	181.42

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 25-JUL-2021 12:25
Lab File ID: 3072505.d Init. Cal. Date(s): 22-JUN-2021 23-JUN-2021
Analysis Type: AIR Init. Cal. Times: 15:51 00:09
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd3.i/25JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37578	1.35314	0.010	1.64563	30.00000	Averaged
$ 134 Toluene-d8	1.02971	0.96688	0.010	6.10188	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.66126	0.60447	0.010	8.58849	30.00000	Averaged
3 Freon 143a	0.41819	0.50022	0.010	-19.61358	30.00000	Averaged
6 Propane	0.22783	0.22971	0.010	-0.82650	30.00000	Averaged
13 Freon 142b	1.32985	1.61026	0.010	-21.08572	30.00000	Averaged
36 1-Pentene	0.84453	0.95322	0.010	-12.86973	30.00000	Averaged
40 Freon 123a	0.98340	1.16732	0.010	-18.70182	30.00000	Averaged
41 Freon 123	1.44234	1.66610	0.010	-15.51385	30.00000	Averaged
55 Cyclopentene	1.53527	1.64819	0.010	-7.35476	30.00000	Averaged
56 Methyl Acetate	1.58221	1.63563	0.010	-3.37640	30.00000	Averaged
74 Chloroprene	1.33982	1.39911	0.010	-4.42511	30.00000	Averaged
75 1-Propanol	0.20714	0.18563	0.010	10.38230	30.00000	Averaged
88 Methyl Acrylate	1.61021	1.50922	0.010	6.27186	30.00000	Averaged
103 Isobutanol	0.29591	0.22936	0.010	22.48790	30.00000	Averaged
113 Ethyl acrylate	0.03995	0.03721	0.010	6.85459	30.00000	Averaged
115 2-Pentanone	0.93447	0.82941	0.010	11.24310	30.00000	Averaged
145 Butyl Acetate	0.32956	0.27364	0.010	16.96996	30.00000	Averaged
157 1,1,1,2-Tetrachloroethane	0.37604	0.38103	0.010	-1.32491	30.00000	Averaged
166 2-Heptanone	1.83512	1.38147	0.010	24.72030	30.00000	Averaged
172 D-Limonene	0.45421	0.42232	0.010	7.02079	30.00000	Averaged
186 4-Chlorotoluene	0.32734	0.31729	0.010	3.07043	30.00000	Averaged
197 1,2,3-Trimethylbenzene	0.44871	0.43110	0.010	3.92466	30.00000	Averaged
205 Hexachloroethane	0.27393	0.27314	0.010	0.28902	30.00000	Averaged
208 1,3,5-Trichlorobenzene	0.59728	0.48813	0.010	18.27433	30.00000	Averaged
210 alpha-Pinene	0.77304	0.73077	0.010	5.46910	30.00000	Averaged
214 beta-Pinene	0.60708	0.56679	0.010	6.63677	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072505.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/25JUL21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 10:46
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	266266	159760	372772	262369	-1.46
108 1,4-Difluorobenze	910055	546033	1274077	896033	-1.54
153 Chlorobenzene-d5	785948	471569	1100327	827475	5.28

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.17	5.84	6.50	6.18	0.22
153 Chlorobenzene-d5	8.61	8.28	8.94	8.62	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd3.i/25JUL21.b/3072505.d

Page 1

Date : 25-JUL-2021 12:25

Client ID: CCV

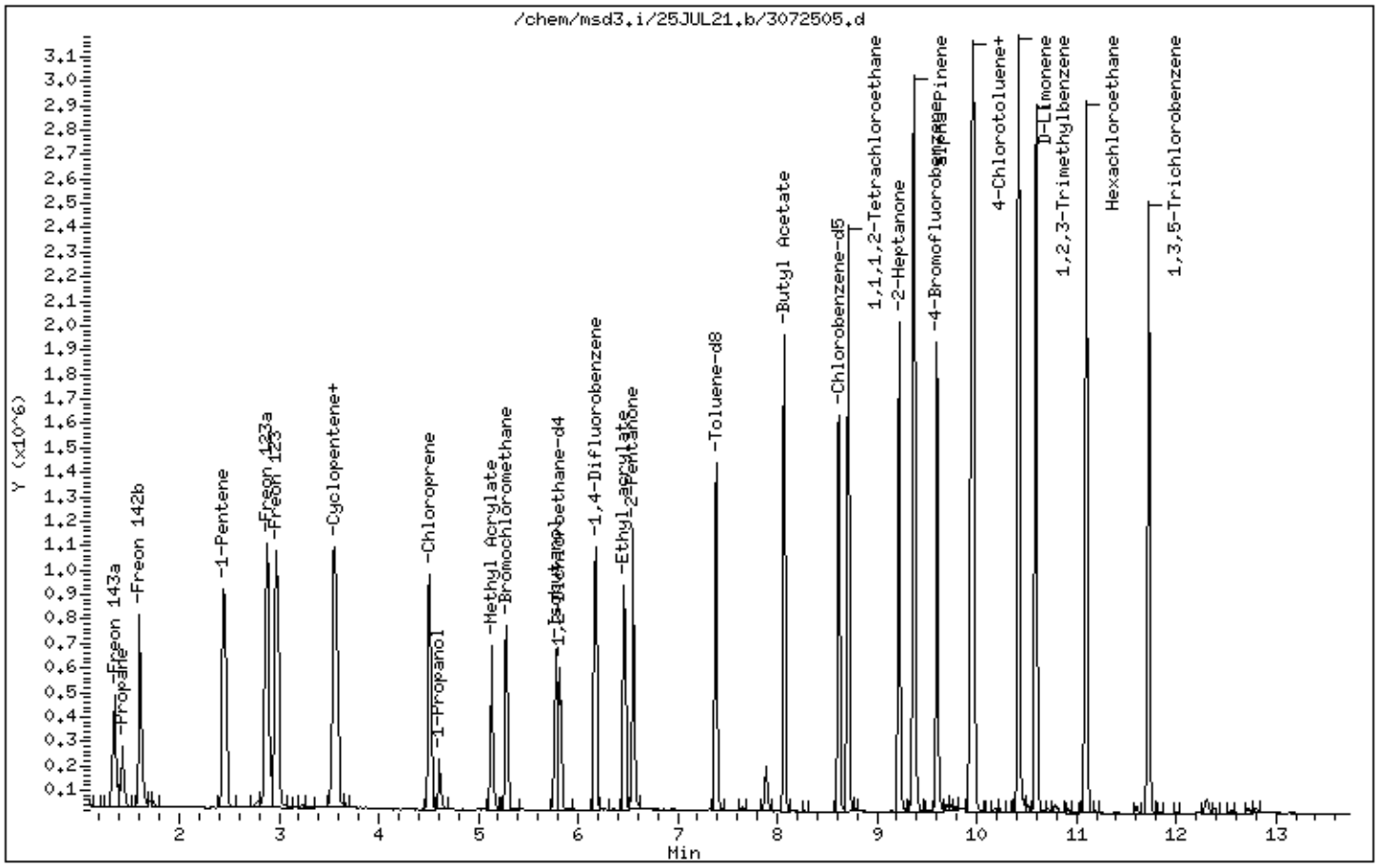
Instrument: msd3.i

Sample Info: 50mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072505.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2021 12:26
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2127
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 15:23 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spCCV.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	168789	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	131325			48.23- 108.23	77.80
5.778	5.778 (1.000)	49	343355			150.57- 210.57	203.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	601487	25.0000		80.00- 120.00	100.00
6.666	6.666 (1.000)	88	88600			0.00- 45.71	14.73
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	599612	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	314073			23.78- 83.78	52.38
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.315 (1.093)	65	231457	25.0000	24.848	80.00- 120.00	100.00
6.315	6.315 (1.093)	67	113143			27.21- 87.21	48.88
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	648773	25.0000	24.839	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67552			0.00- 40.44	10.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	421752			34.95- 94.95	65.01
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	383707	25.0000	24.920	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	474628			95.92- 155.92	123.70
10.921	10.921 (1.154)	176	367715			66.89- 126.89	95.83
3 Freon 143a					CAS #: 420-46-2		
1.590	1.590 (0.275)	65	194908	50.0000	59.760	80.00- 120.00	100.00
1.590	1.590 (0.275)	69	463783			243.50- 303.50	237.95
1.590	1.590 (0.275)	64	44796			0.00- 54.06	22.98
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	147503	50.0000	49.366	80.00- 120.00	100.00
1.674	1.674 (0.290)	39	89342			34.98- 94.98	60.57
1.688	1.688 (0.292)	41	75262			25.22- 85.22	51.02
13 Freon 142b					CAS #: 75-68-3		
1.898	1.898 (0.329)	65	775968	50.0000	47.047	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	240789			0.00- 59.77	31.03
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	480812	50.0000	44.543	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	695999			105.17- 165.17	144.75
40 Freon 123a					CAS #: 354-23-4		
3.385	3.385 (0.586)	117	456007	50.0000	43.181	80.00- 120.00	100.00
3.385	3.385 (0.586)	67	600211			104.69- 164.69	131.62
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	672554	50.0000	44.823	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	151314			0.00- 50.87	22.50
3.479	3.479 (0.602)	85	450708			36.08- 96.08	67.01
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	693825	50.0000	42.975	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	252632			6.76- 66.76	36.41
4.073	4.073 (0.705)	53	221431			0.00- 57.54	31.91
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.080 (0.706)	43	1027746	50.0000	54.435	80.00- 120.00	100.00
4.080	4.080 (0.706)	74	119684			0.00- 44.13	11.65
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	760989	50.0000	50.461	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
74 Chloroprene (continued)							
5.019	5.019 (0.869)	88	264334			9.21- 69.21	34.74
5.019	5.019 (0.869)	50	189341			0.00- 54.25	24.88
75 1-Propanol					CAS #: 71-23-8		
5.090	5.090 (0.881)	59	94850	50.0000	42.539	80.00- 120.00	100.00
5.090	5.090 (0.881)	42	98098			63.23- 123.23	103.42
5.090	5.090 (0.881)	41	58743			24.74- 84.74	61.93
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.628 (0.974)	55	1002447	50.0000	50.603	80.00- 120.00	100.00
5.628	5.628 (0.974)	85	101351			0.00- 41.28	10.11
5.628	5.628 (0.974)	58	76932			0.00- 38.22	7.67
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	116063	50.0000	48.561	80.00- 120.00	100.00
6.244	6.244 (1.081)	43	558696			448.18- 508.18	481.37
6.244	6.244 (1.081)	41	388564			299.99- 359.99	334.79
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.946 (0.734)	99	64527	50.0000	46.627	80.00- 120.00	100.00
6.946	6.946 (0.734)	45	136134			149.95- 209.95	210.97
6.946	6.946 (0.734)	55	1364561			1849.07-1909.07	2114.69
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.032 (0.743)	43	1723470	50.0000	56.614	80.00- 120.00	100.00
7.032	7.032 (0.743)	58	118450			0.00- 37.44	6.87
7.032	7.032 (0.743)	86	189246			0.00- 42.78	10.98
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.300)	56	776671	50.0000	51.263	80.00- 120.00	100.00
8.665	8.665 (1.300)	73	210929			0.00- 59.10	27.16
8.665	8.665 (1.300)	43	2076827			215.30- 275.30	267.40
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.603	9.603 (1.015)	131	683545	50.0000	51.276	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	599612			57.42- 117.42	87.72
9.603	9.603 (1.015)	95	248218			5.70- 65.70	36.31
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	1194340	50.0000	48.191	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	2106999			136.03- 196.03	176.42
172 D-Limonene					CAS #: 5989-27-5		
12.096	12.096 (1.279)	68	836019	50.0000	61.742	80.00- 120.00	100.00
12.096	12.096 (1.279)	93	580896			39.41- 99.41	69.48

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	645655	50.0000	52.580	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1985988			295.02- 355.02	307.59
11.444	11.444 (1.210)	63	282458			11.82- 71.82	43.75
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	907524	50.0000	50.759	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	1953593			192.40- 252.40	215.27
12.318	12.318 (1.302)	77	227746			0.00- 54.69	25.10
205 Hexachloroethane					CAS #: 67-72-1		
12.984	12.984 (1.373)	201	409699	50.0000	58.287	80.00- 120.00	100.00
12.977	12.977 (1.372)	117	563991			102.99- 162.99	137.66
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.786	13.786 (1.457)	180	1242566	50.0000	49.434	80.00- 120.00	100.00
13.786	13.786 (1.457)	182	1183140			65.24- 125.24	95.22
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	1290368	50.0000	52.025	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	385104			0.00- 58.21	29.84
214 beta-Pinene					CAS #: 127-91-3		
11.422	11.422 (1.207)	93	1018960	50.0000	62.749	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1985988			153.57- 213.57	194.90

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 12:26
Lab File ID: p072505.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.37128	0.010	0.60906	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.07861	0.010	0.64329	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.63993	0.010	0.31874	30.00000	Averaged
3 Freon 143a	0.48307	0.57737	0.010	-19.52068	30.00000	Averaged
6 Propane	0.44256	0.43695	0.010	1.26828	30.00000	Averaged
13 Freon 142b	2.44292	2.29862	0.010	5.90664	30.00000	Averaged
36 1-Pentene	1.59878	1.42430	0.010	10.91387	30.00000	Averaged
40 Freon 123a	1.56413	1.35082	0.010	13.63768	30.00000	Averaged
41 Freon 123	2.22241	1.99228	0.010	10.35465	30.00000	Averaged
55 Cyclopentene	2.39124	2.05529	0.010	14.04902	30.00000	Averaged
56 Methyl Acetate	2.79640	3.04446	0.010	-8.87066	30.00000	Averaged
74 Chloroprene	2.23364	2.25425	0.010	-0.92263	30.00000	Averaged
75 1-Propanol	0.33025	0.28097	0.010	14.92188	30.00000	Averaged
88 Methyl Acrylate	2.93415	2.96952	0.010	-1.20525	30.00000	Averaged
103 Isobutanol	0.35400	0.34381	0.010	2.87840	30.00000	Averaged
113 Ethyl acrylate	0.05770	0.05381	0.010	6.74601	30.00000	Averaged
115 2-Pentanone	1.26926	1.43715	0.010	-13.22729	30.00000	Averaged
145 Butyl Acetate	0.62971	0.64563	0.010	-2.52684	30.00000	Averaged
157 1,1,1,2-Tetrachloroethane	0.55580	0.56999	0.010	-2.55244	30.00000	Averaged
166 2-Heptanone	3.67076	3.53795	0.010	3.61796	30.00000	Averaged
172 D-Limonene	0.56456	0.69713	0.010	-23.48345	30.00000	Averaged
186 4-Chlorotoluene	0.51198	0.53839	0.010	-5.15916	30.00000	Averaged
197 1,2,3-Trimethylbenzene	0.74544	0.75676	0.010	-1.51833	30.00000	Averaged
205 Hexachloroethane	0.29306	0.34164	0.010	-16.57434	30.00000	Averaged
208 1,3,5-Trichlorobenzene	1.04801	1.03614	0.010	1.13218	30.00000	Averaged
210 alpha-Pinene	1.03411	1.07600	0.010	-4.05086	30.00000	Averaged
214 beta-Pinene	0.67705	0.84968	0.010	-25.49753	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072505.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	168789	9.18
108 1,4-Difluorobenze	573421	344053	802789	601487	4.89
153 Chlorobenzene-d5	566079	339647	792511	599612	5.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/25JUL21.b/p072505.d

Date : 25-JUL-2021 12:26

Client ID: CCV

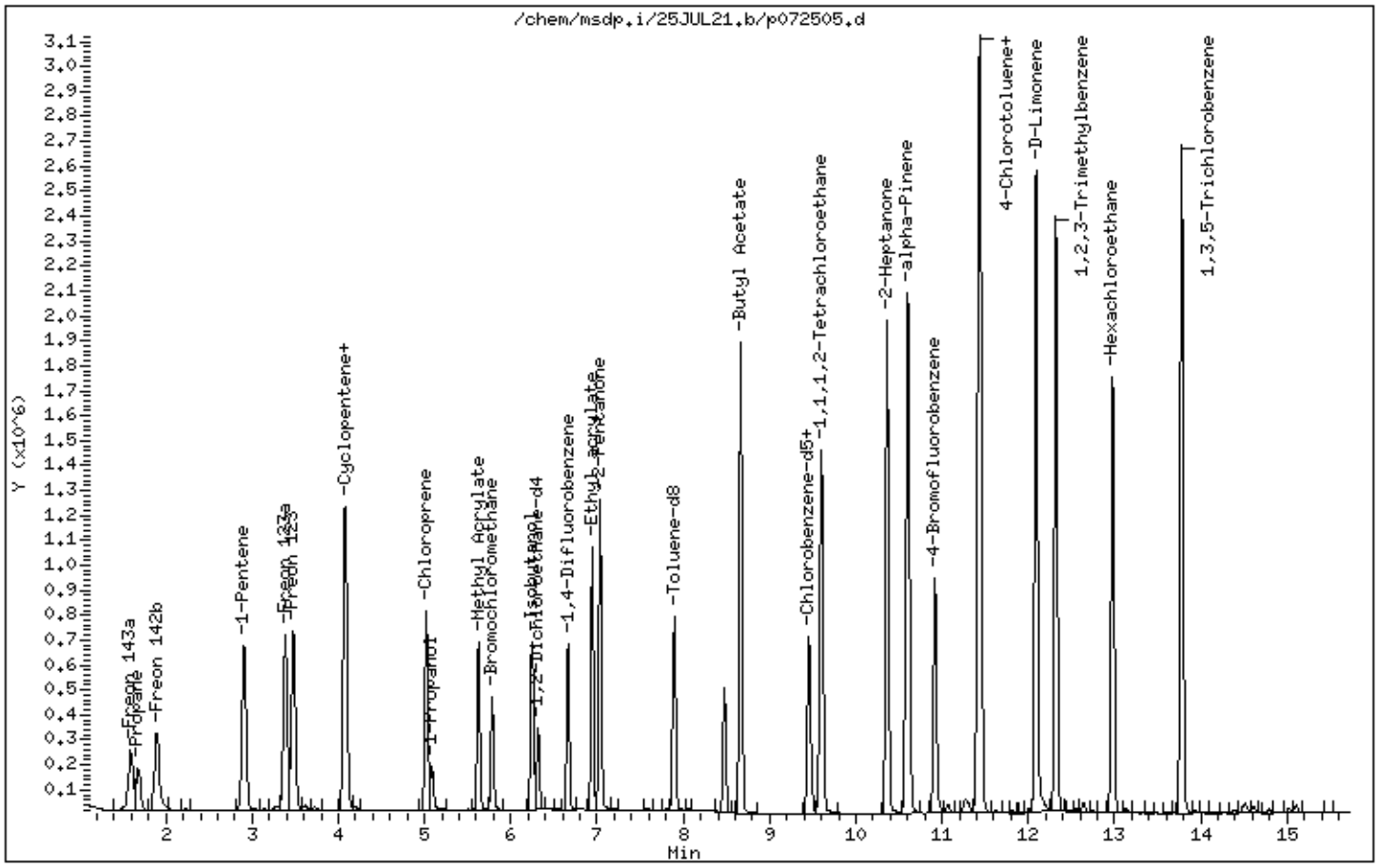
Instrument: msdp.i

Sample Info: 50mL 3018-2127

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Shipping/Receiving Documents

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Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Air Toxics, Ltd. at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

Samples SG-VW50B-02, SG-VW50A-02, SG-VW50A-03, SG-VW35B-02 and SG-VW35A-02 were placed on hold at your request.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID _____ Workorder # 2107260

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

page--of-- 1 of 3

Client: AECOM
Project Name: SMUD 59th ST.
Project Manager: Robert Kohlhardt Project # 60637836
Sampler: T. Donley
Site Name:

Special Instructions/Notes
Invoicing To: Level IV Reporting
SWPP Queen
Report Email to:
Robert.Kohlhardt@AECOM.com

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information Date	Start Sampling Information Time	Stop Sampling Information Date	Stop Sampling Information Time	Canister Vacuum/Pressure Initial (in Hg)	Canister Vacuum/Pressure Final (in Hg)	Lab Use Only Receipt	Lab Use Only Final (psig) Gas: N_2 / He	Requested Analyses TO-15	Requested Analyses ASTM D1946		
01A	SG-VW32B-02	IL2074	22448	7/12/21	1026	7/12/21	1031	-25	-5			X			
02A	SG-VW32A-03	IL3075	25279	7/12/21	1119	7/12/21	1126	-16	-5			X			
03A	SG-VW36B-02	IL2720	25360	7/12/21	1208	7/12/21	1218	-25	-5			X			
04A	SG-VW36B-03	34000667	25360	7/12/21	1208	7/12/21	1219	-25	-5			X			
05A	SG-VW36A-02	IL2689	25282	7/12/21	1258	7/12/21	1303	-27	-5			X			
06A	SG-VW51B-02	1358	20535	7/12/21	1333	7/12/21	1342	-28	-5			X			
07A	SG-VW51A-03	IL3216	25342	7/12/21	1418	7/12/21	1428	-28	-5			X			
~~08A~~ HW 07/15/21	SG-VW50B-02	IL1639	30614	7/12/21	1455	7/12/21	1506	-27	-5			X			
09A	SG-VW50A-02	IL2975	30521	7/12/21	1542	7/12/21	1554	-25	-5			X			
10A	SG-VW50A-03	IL3189	30521	7/12/21	1542	7/12/21	1554	-25	-5			X			
11A	SG-VW35B-02	IL1565	20287	7/12/21	1620	7/12/21	1628	-25	-5			X			
~~12A~~	SG-VW35A-02	IL2679	29975	7/13/21	0623	7/13/21	0631	-27	-5			X			
13A	SG-VW40B-02	3030	30716	7/13/21	0658	7/13/21	0705	-26	-5			X			
14A	SG-VW40A-02	IL3322	24602	7/13/21	0740	7/13/21	0746	-26	-5			X			
15A	SG-VW37B-03	IL3073	25348	7/13/21	0815	7/13/21	0826	-28	-5			X			
16A	SG-VW37B-04	3031	25348	7/13/21	0815	7/13/21	0826	-28	-5			X			

HOLD ANALYSIS

Relinquished by: (Signature/Affiliation) C.E.T.	Date 7/13/21	Time	Received by: (Signature/Affiliation)
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)

Lab Use Only

Shipper Name: Custody Seals Intact? Yes No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

Revised COC 7/14/21

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Analysis Request / Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: _____

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955: Fax (916) 351-8279

Client: AECOM
Project Name: SMUD 59th ST.
Project Manager: Robert Kohlhardt Project # 60637793.6
Sampler: T. Donley
Site Name:

Special Instructions/Notes:
Invoicing To': Level IV Reporting
SWPP Queen
Report Email To':
Robert.Kohlhardt@AECOM.com

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15			
17A	SG-VW37A-02	IL2464	22443	7/13/21	0904	7/13/21	0912	-26	-5			X			
18A	SG-VW41B-02	IL1906	20133	7/13/21	0935	7/13/21	0945	-27	-5			X			
19A	SG-VW41A-03	IL2052	24572	7/13/21	1023	7/13/21	1030	-26	-5			X			
20A	SG-VW42B-02	34000601	24585	7/13/21	1058	7/13/21	1103	-28	-5			X			
21A	SG-VW42A-03	IL1766	20288	7/13/21	1142	7/13/21	1156	-27	-5			X			
22A	SG-VW42A-04	IL2659	20288	7/13/21	1142	7/13/21	1156	-27	-5			X			
23A	SG-VW37B-04	IL2378	25343	7/13/21	1241	7/13/21	1252	-27	-5			X			
24A	SG-VW37B-05	IL1929	25343	7/13/21	1241	7/13/21	1252	-27	-5			X			

Relinquished by: (Signature/Affiliation) C.E.T	Date 7/13/21	Time	Received by: (Signature/Affiliation)
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)

Lab Use Only

Shipper Name: Custody Seals Intact? Yes No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

Revised COC 7/14/21

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Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2107260

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: AECOM
Project Name: SMUD 59th ST.
Project Manager: Robert Kohlhardt Project # 60632936
Sampler: T. Donley
Site Name:

Special Instructions/Notes:
Invoicing To: Level IV Reporting
SWPP Queen
Report Email to:
Robert.Kohlhardt@AECOM.com

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15	ASTM D1946		
	SG-VW32B-02	IL2074	22448	7/12/21	1026	7/12/21	1031	-25	-5			X			
	SG-VW32A-03	IL3075	25279	7/12/21	1119	7/12/21	1126	-16	-5			X			
	SG-VW36B-02	IL2720	25360	7/12/21	1208	7/12/21	1218	-25	-5			X			
	SG-VW36B-03	34000667	25360	7/12/21	1208	7/12/21	1218	-25	-5			X			
	SG-VW36A-02	IL2689	25282	7/12/21	1258	7/12/21	1303	-27	-5			X			
	SG-VW51B-02	1358	20535	7/12/21	1333	7/12/21	1342	-28	-5			X			
	SG-VW51A-02	IL3216	25342	7/12/21	1418	7/12/21	1428	-28	-5			X			
	SG-VW50B-02	IL1639	30614	7/12/21	1455	7/12/21	1506	-27	-5			X			
	SG-VW50A-02	IL2975	30521	7/12/21	1542	7/12/21	1554	-25	-5			X			
	SG-VW50A-03	IL3189	30521	7/12/21	1542	7/12/21	1554	-25	-5			X			
	SG-VW35B-02	IL1565	20287	7/12/21	1620	7/12/21	1628	-25	-5			X			
	SG-VW35A-02	IL2679	29975	7/13/21	0623	7/13/21	0631	-27	-5			X			
	SG-VW40B-02	3030	30716	7/13/21	0658	7/13/21	0705	-26	-5			X			
	SG-VW40A-02	IL3322	24602	7/13/21	0740	7/13/21	0746	-26	-5			X			
	SG-VW37B-03	IL3073	25348	7/13/21	0815	7/13/21	0826	-28	-5			X			
	SG-VW37B-04	3031	25348	7/13/21	0815	7/13/21	0826	-28	-5			X			

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
C.F.T.	7/13/21	1446		7-13-21	1446
	7-13-21	1544	FAV	07/13/21	1544

Lab Use Only

Shipper Name: COURIER Custody Seals Intact? Yes No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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Analysis Request /Canister Chain of Custody

For Laboratory Use Only
PID: _____ Workorder #: 2107260

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: AECOM
Project Name: SMUD 59th ST.
Project Manager: Robert Kohlhandt Project # 60632793.6
Sampler: T. Donley
Site Name:

Special Instructions/Notes:
Invoicing To': Level IV Reporting
SWPP Queen
Report Email To':
Robert.Kohlhandt@AECOM.com

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15			
	SG-VW37A-02	IL2464	22443	7/13/21	0904	7/13/21	0912	-26	-5			X			
	SG-VW41B-02	IL1906	20133	7/13/21	0935	7/13/21	0945	-27	-5			X			
	SG-VW41A-03	IL2052	24572	7/13/21	1023	7/13/21	1030	-26	-5			X			
	SG-VW42B-02	34000601	24585	7/13/21	1058	7/13/21	1103	-28	-5			X			
	SG-VW42A-03	IL1766	20288	7/13/21	1142	7/13/21	1156	-27	-5			X			
	SG-VW42A-04	IL2659	20288	7/13/21	1142	7/13/21	1156	-27	-5			X			
	SG-VW57B-04	IL2378	25343	7/13/21	1241	7/13/21	1252	-27	-5			X			
	SG-VW57B-05	IL1929	25343	7/13/21	1241	7/13/21	1252	-27	-5			X			

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
C.E.T	7/13/21	1446		7-13-21	1446
	7-13-21	1544	ZATV	07/13/21	1544

Lab Use Only
Shipper Name: COURIER. Custody Seals Intact? Yes No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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SAMPLE RECEIPT SUMMARY

WORKORDER 2107260A

Client

Mr. Robert Kohlhardt
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

Phone

916-679-2000

Fax

916-679-2900

Sales Rep: DaV

Date Promised: 07/27/21
Date Completed:
Date Received: 7/13/21
PO#:
Project#: 60632793.6 SMUD 59th ST.

Total $: $ 3,987.00
Logged By: JYW

Fraction	Sample #	Analysis	Collected	Amount$
01A	SG-VW32B-02	TO-15	7/12/2021	$150.00
02A	SG-VW32A-03	TO-15	7/12/2021	$150.00
03A	SG-VW36B-02	TO-15	7/12/2021	$150.00
04A	SG-VW36B-03	TO-15	7/12/2021	$150.00
05A	SG-VW36A-02	TO-15	7/12/2021	$150.00
06A	SG-VW51B-02	TO-15	7/12/2021	$150.00
07A	SG-VW51A-02	TO-15	7/12/2021	$150.00
13A	SG-VW40B-02	TO-15	7/13/2021	$150.00
14A	SG-VW40A-02	TO-15	7/13/2021	$150.00
15A	SG-VW37B-03	TO-15	7/13/2021	$150.00
16A	SG-VW37B-04	TO-15	7/13/2021	$150.00
17A	SG-VW37A-02	TO-15	7/13/2021	$150.00
18A	SG-VW41B-02	TO-15	7/13/2021	$150.00
19A	SG-VW41A-03	TO-15	7/13/2021	$150.00
20A	SG-VW42B-02	TO-15	7/13/2021	$150.00
21A	SG-VW42A-03	TO-15	7/13/2021	$150.00
22A	SG-VW42A-04	TO-15	7/13/2021	$150.00
23A	SG-VW57B-04	TO-15	7/13/2021	$150.00
24A	SG-VW57B-05	TO-15	7/13/2021	$150.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: SMUD 59th Street Corporation Yard/25677

BILL TO: Mr. Jerry Montgomery
SWPPQueen
7202 Gloria Drive #25
Sacramento, CA 95831

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sp)-AECOM (SMUD 59th)

Other Records

Air Toxics Ltd.

Curve Response Factors
3072506.d

Compound	Ave. RF	% RSD
TPH	46192	0.00051

LD 7/25/22

Air Toxics Ltd.

File Response Factors

Data File: 3072506.d
Sample #: 3234-26
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	46192.235239860	

LD. 7/25/21

Air Toxics Ltd.

List of Selected Compounds

Data File: 3072506.d
Sample #: 3234-26
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 1.3247	0.28	1.325	103937	
✓	Unknown Peak 1.5765	0.13	1.577	48674	
✓	Butane	0.89	1.702	331741	
✓	Unknown Peak 1.8844	0.11	1.884	42427	
✓	Isopentane	3.32	2.220	1236197	
✓	Unknown Peak 2.5000	1.16	2.500	431270	
✓	Unknown Peak 2.6679	0.20	2.668	73377	
✓	Ethanol	1.40	2.766	520976	
✓	Unknown Peak 2.8778	0.35	2.878	128451	
✓	Unknown Peak 3.0177	0.14	3.018	50829	
✓	Unknown Peak 3.2556	0.05	3.256	17044	
✓	Unknown Peak 3.5494	1.39	3.549	518696	
✓	Unknown Peak 3.5914	1.08	3.591	401395	
✓	Unknown Peak 3.8712	0.64	3.871	237924	
✓	Unknown Peak 4.1091	0.11	4.109	41363	
✓	Hexane	0.76	4.179	283891	
✓	Unknown Peak 4.3049	0.13	4.305	47496	
✓	Unknown Peak 4.3609	0.15	4.361	55904	
✓	Unknown Peak 4.4169	0.14	4.417	53643	
✓	Unknown Peak 4.5008	0.08	4.501	29977	
✓	Unknown Peak 4.5708	0.08	4.571	29495	
✓	Unknown Peak 4.7107	1.31	4.711	487646	
✓	Unknown Peak 4.8086	0.57	4.809	212357	
✓	Unknown Peak 4.8786	0.14	4.879	50402	
✓	Unknown Peak 5.2144	0.06	5.214	22883	
✓	Bromochloromethane	3.90	5.284	1450306	
✓	Tetrahydrofuran	0.60	5.382	224472	
✓	Cyclohexane	1.39	5.438	515978	
✓	Unknown Peak 5.5502	0.62	5.550	230877	
	2,2,4-Trimethylpentane	5.48	5.774	2038708	
	Benzene	0.09	5.788	34219	
✓	1,2-Dichloroethane-d4	15.12	5.816	5622500	
✓	Heptane	0.56	5.942	209017	
✓	Unknown Peak 6.0959	0.22	6.096	82480	
✓	1,4-Difluorobenzene	5.35	6.180	1991612	
✓	Unknown Peak 6.2778	0.04	6.278	15364	
✓	Methylcyclohexane	1.38	6.460	513625	
✓	Unknown Peak 6.4877	1.54	6.488	572411	
✓	Unknown Peak 6.5436	0.63	6.544	235889	
✓	Unknown Peak 6.6208	0.05	6.621	20145	
✓	Unknown Peak 6.8070	3.62	6.807	1345679	
✓	Unknown Peak 6.9144	5.43	6.914	2020120	
✓	Unknown Peak 7.0864	0.49	7.086	183119	
✓	Unknown Peak 7.2153	1.28	7.215	475244	
✓	Unknown Peak 7.2798	0.20	7.280	74966	
✓	Toluene-d8	6.10	7.387	2268779	
	4-Methyl-2-pentanone	0.03	7.387	9545	
✓	Toluene	3.80	7.445	1412232	
✓	Unknown Peak 7.5090	0.08	7.509	28311	
✓	Unknown Peak 7.5949	0.17	7.595	64780	
✓	Unknown Peak 7.6522	0.21	7.652	78843	
✓	Unknown Peak 7.6952	0.38	7.695	140537	

List of Selected Compounds

Data File: 3072506.d
Sample #: 3234-26
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compounds	% Area	RT	Peak Area	10
Unknown Peak 7.7597	0.05	7.760	19193	
Unknown Peak 7.8385	0.07	7.839	25137	
Unknown Peak 7.9316	0.09	7.932	32346	
Unknown Peak 8.0892	0.08	8.089	28160	
Unknown Peak 8.2253	0.05	8.225	19062	
Unknown Peak 8.2826	0.15	8.283	54994	
Unknown Peak 8.3900	0.08	8.390	30956	
Unknown Peak 8.4617	0.09	8.462	34116	
Unknown Peak 8.5548	0.11	8.555	40459	
Chlorobenzene-d5	6.45	8.619	2400150	
Ethyl Benzene	0.84	8.691	313773	
m,p-Xylene	2.50	8.784	930171	
Unknown Peak 8.9344	0.05	8.934	16892	
o-Xylene	0.94	9.128	349921	
Unknown Peak 9.3212	0.04	9.321	15062	
Cumene	0.28	9.414	103782	
Unknown Peak 9.4573	0.34	9.457	126276	
Unknown Peak 9.5218	0.10	9.522	37484	
4-Bromofluorobenzene	7.87	9.601	2926534	
Propylbenzene	0.17	9.758	64052	
4-Ethyltoluene	1.10	9.830	410495	
1,3,5-Trimethylbenzene	0.30	9.901	112724	
Unknown Peak 9.9516	0.04	9.952	14449	
Unknown Peak 10.080	0.57	10.081	211472	
1,2,4-Trimethylbenzene	1.03	10.224	384325	
Unknown Peak 10.302	0.35	10.303	130749	
Unknown Peak 10.431	0.12	10.432	44153	
Unknown Peak 10.517	0.52	10.518	192077	
Unknown Peak 10.596	0.24	10.596	91025	
Unknown Peak 10.689	0.21	10.689	77813	
Unknown Peak 10.746	0.15	10.747	57631	
Unknown Peak 10.796	0.44	10.797	164183	
Unknown Peak 10.889	0.05	10.890	19196	
Unknown Peak 10.968	0.06	10.969	22008	
Unknown Peak 11.054	0.19	11.055	72101	
Unknown Peak 11.126	0.13	11.126	47425	
Unknown Peak 11.197	0.04	11.198	13328	
Unknown Peak 11.248	0.10	11.248	36285	
Unknown Peak 11.398	0.06	11.399	22709	
Unknown Peak 11.470	0.15	11.470	57477	
Unknown Peak 11.520	0.06	11.520	21839	
Unknown Peak 11.720	0.04	11.721	14270	
Unknown Peak 11.763	0.06	11.764	22434	
Unknown Peak 11.828	0.04	11.828	14736	
Unknown Peak 11.907	0.09	11.907	35204	
Unknown Peak 12.558	0.06	12.559	21270	

Air Toxics Ltd.

Curve Response Factors
p072506.d

Compound	Ave. RF	% RSD
TPH	65533	0.00048

LD 7/25/24

Air Toxics Ltd.

File Response Factors

Data File: p072506.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	65532.6838202710	

Air Toxics Ltd.

List of Selected Compounds

Data File: p072506.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 1.5344	0.26	1.534	115565	
✓	Unknown Peak 1.8702	0.06	1.870	24868	
✓	Butane	0.68	2.046	307509	
✓	Unknown Peak 2.2465	0.07	2.247	32928	
✓	Isopentane	3.30	2.640	1487563	
✓	Unknown Peak 2.9699	1.11	2.970	502032	
✓	Unknown Peak 3.1705	0.17	3.171	74539	
✓	Ethanol	1.42	3.249	638253	
✓	Unknown Peak 3.3925	0.38	3.393	170160	
✓	Unknown Peak 3.5358	0.14	3.536	64122	
✓	Unknown Peak 4.0802	1.56	4.080	703755	
✓	Unknown Peak 4.1088	1.24	4.109	560030	
✓	Unknown Peak 4.1876	0.20	4.188	89055	
✓	Unknown Peak 4.4025	0.68	4.403	305450	
✓	Unknown Peak 4.6174	0.10	4.617	47104	
✓	Hexane	0.74	4.696	331942	
✓	Unknown Peak 4.8180	0.06	4.818	25588	
✓	Unknown Peak 4.8825	0.07	4.883	31871	
✓	Unknown Peak 4.9254	0.09	4.925	39114	
✓	Unknown Peak 5.0114	0.04	5.011	17665	
✓	Unknown Peak 5.0830	0.05	5.083	23540	
✓	Unknown Peak 5.2263	1.39	5.226	626843	
✓	Unknown Peak 5.3266	0.58	5.327	260955	
✓	Unknown Peak 5.3839	0.12	5.384	52364	
✓	Bromochloromethane	2.49	5.785	1122833	
✓	Tetrahydrofuran	0.67	5.892	301966	
✓	Cyclohexane	1.57	5.964	708657	
✓	Unknown Peak 6.0644	0.74	6.064	331369	
	2,2,4-Trimethylpentane	6.71	6.286	3025263	
	Benzene	0.08	6.301	36773	
✓	1,2-Dichloroethane-d4	16.55	6.315	7460326	
✓	Heptane	0.83	6.451	372152	
✓	Unknown Peak 6.5801	0.19	6.580	84127	
✓	1,4-Difluorobenzene	3.56	6.666	1604103	
✓	Unknown Peak 6.7807	0.24	6.781	106908	
✓	Unknown Peak 6.9382	1.31	6.938	589692	
✓	Methylcyclohexane	2.28	6.974	1025546	
✓	Unknown Peak 7.0529	0.93	7.053	421097	
✓	Unknown Peak 7.1245	0.21	7.125	93040	
✓	Unknown Peak 7.1746	0.14	7.175	64422	
✓	Unknown Peak 7.3036	4.68	7.304	2107273	
✓	Unknown Peak 7.4110	7.14	7.411	3218117	
✓	Unknown Peak 7.5758	0.94	7.576	424967	
✓	4-Methyl-2-pentanone	1.89	7.712	852334	
✓	Unknown Peak 7.7978	0.32	7.798	143094	
✓	Toluene-d8	4.44	7.891	1999980	
✓	Toluene	4.15	7.955	1870707	
✓	Unknown Peak 8.0342	0.24	8.034	106922	
✓	Unknown Peak 8.156	0.31	8.156	137705	
✓	Unknown Peak 8.2491	0.80	8.249	360604	
✓	Unknown Peak 8.5213	0.12	8.521	53644	
✓	Unknown Peak 8.7147	0.07	8.715	30380	

Air Toxics Ltd.

List of Selected Compounds

Data File: p072506.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compounds	% Area	RT	Peak Area	10
Unknown Peak 8.7791	0.03	8.779	15656	
Unknown Peak 8.9009	0.04	8.901	15897	
Unknown Peak 8.9797	0.14	8.980	63578	
Unknown Peak 9.1230	0.07	9.123	31563	
Unknown Peak 9.2376	0.06	9.238	26981	
Unknown Peak 9.3737	0.09	9.374	39204	
Chlorobenzene-d5	4.47	9.460	2013632	
Ethyl Benzene	0.84	9.567	379996	
m,p-Xylene	2.65	9.718	1196328	
Unknown Peak 9.9539	0.05	9.954	20382	
Unknown Peak 10.068	0.02	10.069	11164	
o-Xylene	0.93	10.233	420804	
Unknown Peak 10.498	0.04	10.498	20014	
Cumene	0.25	10.656	114614	
Unknown Peak 10.741	0.21	10.742	95613	
4-Bromofluorobenzene	5.52	10.921	2489783	
Propylbenzene	0.19	11.150	83975	
4-Ethyltoluene	1.29	11.258	582218	
1,3,5-Trimethylbenzene	0.42	11.365	187439	
Unknown Peak 11.622	0.51	11.623	231057	
1,2,4-Trimethylbenzene	1.01	11.816	453670	
Unknown Peak 11.952	0.38	11.952	170981	
Unknown Peak 12.124	0.16	12.124	73583	
Unknown Peak 12.238	0.44	12.239	196355	
Unknown Peak 12.317	0.23	12.318	104086	
Unknown Peak 12.482	0.17	12.482	78557	
Unknown Peak 12.554	0.21	12.554	96847	
Unknown Peak 12.597	0.22	12.597	98622	
Unknown Peak 12.647	0.15	12.647	66088	
Unknown Peak 12.740	0.06	12.740	25817	
Unknown Peak 12.826	0.14	12.826	61964	
Unknown Peak 12.919	0.09	12.919	41693	
Unknown Peak 12.955	0.11	12.955	49198	
Unknown Peak 13.034	0.12	13.034	52848	
Unknown Peak 13.134	0.04	13.134	17968	
Unknown Peak 13.184	0.07	13.184	30325	
Unknown Peak 13.377	0.05	13.378	24263	
Unknown Peak 13.521	0.21	13.521	92676	
Unknown Peak 13.836	0.06	13.836	28796	
Unknown Peak 14.022	0.07	14.023	31825	
Unknown Peak 14.366	0.02	14.366	10024	
Unknown Peak 14.545	0.03	14.545	14993	
Unknown Peak 14.803	0.04	14.803	17037	

Air Toxics Ltd.

File Results

Data File: File Information: 3072508.d
Sample #: 2107260A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	1100	(35435879.5262693 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072508.d
Sample #: 2107260A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

Compounds	RT	Peak Area	10
Unknown Peak 1.3106	1.311	19332368	
1,1-Difluoroethane	1.451	920612	
Unknown Peak 1.6464	1.646	122944	
Unknown Peak 1.7164	1.716	52093	
Unknown Peak 1.8983	1.898	244453	
Unknown Peak 2.2201	2.220	319823	
Unknown Peak 2.3320	2.332	25505	
Unknown Peak 2.3880	2.388	58347	
Unknown Peak 2.4999	2.500	212984	
Unknown Peak 2.8777	2.878	63624	
Acetone	3.228	288857	
2-Propanol	3.409	126782	
Unknown Peak 3.5913	3.591	396147	
Unknown Peak 3.8851	3.885	236446	
Unknown Peak 4.0950	4.095	22367	
Hexane	4.179	180302	
Unknown Peak 4.7106	4.711	71132	
Unknown Peak 4.7946	4.795	263377	
Unknown Peak 4.8925	4.893	56456	
Unknown Peak 4.9485	4.949	43881	
Unknown Peak 5.0884	5.088	23388	
Bromochloromethane	5.284	1651848	
Unknown Peak 5.3822	5.382	618176	
Cyclohexane	5.438	417777	
Unknown Peak 5.5501	5.550	291749	
2,2,4-Trimethylpentane	5.774	106615	
Benzene	5.788	74847	
1,2-Dichloroethane-d4	5.816	1975403	
Heptane	5.942	197626	
Unknown Peak 6.0818	6.082	137352	
1,4-Difluorobenzene	6.166	2509097	
Unknown Peak 6.3057	6.306	30021	
Unknown Peak 6.4596	6.460	580945	
Unknown Peak 6.6207	6.621	122143	
Unknown Peak 6.6708	6.671	123639	
Unknown Peak 6.7998	6.800	311365	
Unknown Peak 6.9144	6.914	326145	
Unknown Peak 6.9573	6.957	406892	
Unknown Peak 7.0863	7.086	415042	
Unknown Peak 7.2224	7.222	133169	
Unknown Peak 7.2868	7.287	252572	
Toluene-d8	7.387	2806771	
Toluene	7.437	1058733	
Unknown Peak 7.5232	7.523	55505	
Unknown Peak 7.5949	7.595	124997	
Unknown Peak 7.6951	7.695	460326	
Unknown Peak 7.7596	7.760	71953	
Unknown Peak 7.8312	7.831	29783	
Tetrachloroethene	7.881	402847	
Unknown Peak 7.9244	7.924	175603	
Unknown Peak 8.0175	8.018	101789	
Unknown Peak 8.0819	8.082	220840	

List of Selected Compounds

Data File: File Information: 3072508.d
Sample #: 2107260A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

Compounds	RT	Peak Area	10
Unknown Peak 8.1464	8.146	241762	
Unknown Peak 8.2109	8.211	101958	
Unknown Peak 8.2825	8.283	454603	
Unknown Peak 8.3828	8.383	168679	
Unknown Peak 8.4759	8.476	159920	
Unknown Peak 8.5547	8.555	22392	
Chlorobenzene-d5	8.612	3010191	
Ethyl Benzene	8.684	951086	
m,p-Xylene	8.784	2117381	
Unknown Peak 8.9272	8.927	35787	
Unknown Peak 9.0060	9.006	135269	
o-Xylene	9.121	626830	
Unknown Peak 9.2280	9.228	70493	
Unknown Peak 9.2567	9.257	37382	
Unknown Peak 9.2997	9.300	59881	
Unknown Peak 9.4143	9.414	216514	
Unknown Peak 9.5217	9.522	77563	
4-Bromofluorobenzene	9.601	3709396	
Propylbenzene	9.758	217826	
4-Ethyltoluene	9.830	1013915	
1,3,5-Trimethylbenzene	9.901	308871	
Unknown Peak 10.080	10.080	340824	
1,2,4-Trimethylbenzene	10.224	705728	
Unknown Peak 10.331	10.331	42770	
Unknown Peak 10.359	10.360	54543	
Unknown Peak 10.417	10.417	79865	
Unknown Peak 10.460	10.460	27813	
Unknown Peak 10.596	10.596	220950	
Unknown Peak 10.746	10.747	146745	
Unknown Peak 10.789	10.790	540910	
Unknown Peak 10.904	10.904	24352	
Unknown Peak 10.968	10.969	62465	
Unknown Peak 11.033	11.033	112923	
Unknown Peak 11.061	11.062	65542	
Unknown Peak 11.126	11.126	121361	
Unknown Peak 11.190	11.191	47953	
Unknown Peak 11.248	11.248	139235	
Unknown Peak 11.362	11.363	31917	
Unknown Peak 11.391	11.391	75594	
Unknown Peak 11.470	11.470	53666	
Unknown Peak 11.520	11.520	91620	
Unknown Peak 11.713	11.714	62406	
Unknown Peak 11.763	11.764	75573	
Unknown Peak 11.914	11.914	118307	
Unknown Peak 12.071	12.072	35000	
Unknown Peak 12.179	12.179	25244	
Unknown Peak 12.229	12.229	32061	
Unknown Peak 12.322	12.322	54277	
Unknown Peak 12.551	12.552	95064	
Unknown Peak 13.676	13.676	31481	

Air Toxics Ltd.

File Results

Data File: File Information: 3072509.d
Sample #: 2107260A-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.87

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	56	(12920026.7697471 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072509.d
Sample #: 2107260A-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.87

Compounds	RT	Peak Area	10
Unknown Peak 1.3108	1.311	8067728	
Unknown Peak 1.6186	1.619	18691	
Unknown Peak 1.7025	1.703	44856	
Unknown Peak 1.7445	1.745	45070	
Unknown Peak 1.8984	1.898	32222	
Unknown Peak 2.3462	2.346	17161	
Unknown Peak 2.8639	2.864	29977	
Unknown Peak 2.9338	2.934	17166	
Unknown Peak 3.1577	3.158	16362	
Unknown Peak 3.2276	3.228	66508	
Unknown Peak 3.3116	3.312	57058	
Unknown Peak 3.4095	3.410	24833	
Unknown Peak 3.5914	3.591	34277	
Unknown Peak 3.8853	3.885	33175	
Hexane	4.179	98849	
Unknown Peak 4.2910	4.291	27016	
Unknown Peak 4.8087	4.809	50852	
Unknown Peak 4.9626	4.963	21981	
Bromochloromethane	5.284	1376469	
Unknown Peak 5.3824	5.382	284925	
Unknown Peak 5.6482	5.648	22155	
1,2-Dichloroethane-d4	5.816	937818	
1,4-Difluorobenzene	6.180	1985712	
Unknown Peak 6.7856	6.786	27216	
Unknown Peak 7.1509	7.151	31384	
Toluene-d8	7.387	2215056	
Unknown Peak 7.4589	7.459	46598	
Unknown Peak 7.5950	7.595	72040	
Unknown Peak 7.6523	7.652	188323	
Unknown Peak 7.7239	7.724	31167	
Tetrachloroethene	7.882	576444	
Unknown Peak 8.0821	8.082	43085	
Unknown Peak 8.1537	8.154	72154	
Unknown Peak 8.2039	8.204	24152	
Unknown Peak 8.2755	8.276	66714	
Unknown Peak 8.4761	8.476	98834	
Chlorobenzene-d5	8.619	2664436	
Unknown Peak 8.7912	8.791	25362	
Unknown Peak 9.3141	9.314	15300	
Unknown Peak 9.4144	9.414	34437	
Unknown Peak 9.5147	9.515	23557	
4-Bromofluorobenzene	9.601	2802395	
Unknown Peak 9.7797	9.780	19989	
Unknown Peak 9.8299	9.830	13314	
Unknown Peak 10.324	10.324	16625	
Unknown Peak 10.610	10.611	19713	
Unknown Peak 10.811	10.811	14459	
Unknown Peak 10.961	10.962	24446	
Unknown Peak 11.090	11.091	12876	
Unknown Peak 11.355	11.356	10052	
Unknown Peak 11.534	11.535	34997	
Unknown Peak 11.713	11.714	40245	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072509.d
Sample #: 2107260A-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.87

	Compounds	RT	Peak Area	10
☑	Unknown Peak 11.842	11.843	12935	☐
☑	Unknown Peak 11.885	11.886	34552	☐
☑	Unknown Peak 12.014	12.015	26349	☐
☑	Unknown Peak 12.086	12.086	18474	☐
☑	Unknown Peak 12.229	12.230	14514	☐
☑	Unknown Peak 12.308	12.308	26965	☐
☑	Unknown Peak 12.322	12.323	20780	☐
☑	Unknown Peak 12.473	12.473	13902	☐
☑	Unknown Peak 12.602	12.602	24350	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072510.d
Sample #: 2107260A-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.34

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	48	(12967113.7127217 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072510.d
Sample #: 2107260A-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.34

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3107	1.311	21995784	☐
☑	Propylene	1.437	56113	☐
☐	Unknown Peak 1.6325	1.633	26930	☐
☐	Unknown Peak 1.7444	1.744	60131	☐
☐	Unknown Peak 1.8984	1.898	114848	☐
☐	Unknown Peak 2.2342	2.234	56733	☐
☐	Unknown Peak 2.3461	2.346	16586	☐
☐	Unknown Peak 2.8638	2.864	59175	☐
☐	Unknown Peak 2.9198	2.920	29236	☐
☐	Unknown Peak 3.1296	3.130	19947	☐
☐	Acetone	3.228	246731	☐
☐	2-Propanol	3.424	98917	☐
☐	Unknown Peak 3.8852	3.885	25852	☐
☐	Unknown Peak 3.9412	3.941	28467	☐
☑	Hexane	4.179	73885	☐
☐	Unknown Peak 4.8087	4.809	21456	☐
☐	Unknown Peak 4.9066	4.907	24306	☐
☐	Unknown Peak 4.9486	4.949	59054	☐
☐	Unknown Peak 5.0745	5.075	25511	☐
☑	Bromochloromethane	5.284	1441660	☐
☐	Unknown Peak 5.3823	5.382	486654	☐
☑	1,2-Dichloroethane-d4	5.816	1013958	☐
☑	Unknown Peak 6.0679	6.068	19031	☐
☑	1,4-Difluorobenzene	6.180	2093389	☐
☑	Unknown Peak 6.6423	6.642	28070	☐
☑	Unknown Peak 6.7927	6.793	36017	☐
☑	Unknown Peak 7.0864	7.086	12386	☐
☑	Unknown Peak 7.1508	7.151	61295	☐
☑	Toluene-d8	7.387	2312229	☐
☐	Unknown Peak 7.4588	7.459	74871	☐
☐	Unknown Peak 7.5949	7.595	74318	☐
☐	Unknown Peak 7.6522	7.652	328515	☐
☑	Unknown Peak 7.7310	7.731	53269	☐
☐	Tetrachloroethene	7.882	964292	☐
☐	Unknown Peak 7.9817	7.982	11811	☐
☐	Unknown Peak 8.0032	8.003	23219	☐
☐	Unknown Peak 8.0892	8.089	68550	☐
☐	Unknown Peak 8.1537	8.154	102906	☐
☐	Unknown Peak 8.2038	8.204	33514	☐
☐	Unknown Peak 8.2754	8.275	110214	☐
☐	Unknown Peak 8.4760	8.476	125700	☐
☑	Chlorobenzene-d5	8.619	2586614	☐
☑	Unknown Peak 8.7553	8.755	18456	☐
☑	Unknown Peak 8.7983	8.798	30111	☐
☑	Unknown Peak 9.0777	9.078	10980	☐
☑	Unknown Peak 9.2281	9.228	10677	☐
☑	Unknown Peak 9.2997	9.300	12545	☐
☑	Unknown Peak 9.5218	9.522	100306	☐
☑	4-Bromofluorobenzene	9.601	2978321	☐
☑	Unknown Peak 9.8298	9.830	17802	☐
☐	Unknown Peak 9.9444	9.944	18779	☐
☐	Unknown Peak 10.324	10.324	12806	☐

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072510.d
Sample #: 2107260A-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.34

Compounds	RT	Peak Area	10
Unknown Peak 10.402	10.403	12616	
Unknown Peak 10.675	10.675	10825	
Unknown Peak 11.047	11.048	17839	
Unknown Peak 11.112	11.112	13068	
Unknown Peak 12.831	12.831	24519	

Air Toxics Ltd.

File Results

Data File: File Information: 3072511.d
Sample #: 2107260A-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.34

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	100	(14037846.0953508 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072511.d
Sample #: 2107260A-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.34

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3107	1.311	22192225	☐
☑	Unknown Peak 1.5206	1.521	73608	☐
☑	Unknown Peak 1.6325	1.633	111591	☐
☑	Unknown Peak 1.6745	1.675	60364	☐
☑	Unknown Peak 1.7585	1.759	93998	☐
☑	Unknown Peak 1.8984	1.898	68034	☐
☑	Unknown Peak 1.9544	1.954	23068	☐
☑	Unknown Peak 2.2342	2.234	43360	☐
☑	Unknown Peak 2.3321	2.332	24657	☐
☑	Unknown Peak 2.4021	2.402	48764	☐
☑	Unknown Peak 2.5840	2.584	16692	☐
☑	Unknown Peak 2.6679	2.668	21703	☐
☑	Unknown Peak 2.8778	2.878	27831	☐
☑	Unknown Peak 3.2416	3.242	99952	☐
☑	Unknown Peak 3.3116	3.312	25402	☐
☐	2-Propanol	3.424	65298	☐
☑	Unknown Peak 3.7173	3.717	14611	☐
☑	Unknown Peak 3.9132	3.913	46428	☐
☑	Unknown Peak 4.9206	4.921	26200	☐
☑	Unknown Peak 5.0046	5.005	43841	☐
☑	Bromochloromethane	5.284	1492727	☐
☑	Unknown Peak 5.3824	5.382	209777	☐
☑	1,2-Dichloroethane-d4	5.816	1009578	☐
☑	Unknown Peak 6.068	6.068	21617	☐
☑	1,4-Difluorobenzene	6.180	2098506	☐
☐	Trichloroethene	6.376	46870	☐
☑	Unknown Peak 6.628	6.628	18749	☐
☑	Toluene-d8	7.387	2343251	☐
☑	Unknown Peak 7.6093	7.609	16889	☐
☑	Unknown Peak 7.6523	7.652	128713	☐
☐	Tetrachloroethene	7.882	869644	☐
☑	Unknown Peak 8.0892	8.089	25372	☐
☑	Chlorobenzene-d5	8.619	2687092	☐
☑	Unknown Peak 8.6981	8.698	24288	☐
☑	Unknown Peak 8.7840	8.784	18393	☐
☑	Unknown Peak 9.5218	9.522	35577	☐
☑	4-Bromofluorobenzene	9.601	2985352	☐
☑	Unknown Peak 9.8155	9.816	13755	☐
☑	Unknown Peak 9.9588	9.959	14912	☐
☑	Unknown Peak 11.541	11.542	10356	☐
☑	Unknown Peak 12.766	12.767	12840	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072512.d
Sample #: 2107260A-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	~~140~~	(14878291.9877632 - 12019065.8531911 / 46192

inaccurate
due to high IS recovery
ND ED 7/27/21

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072512.d
Sample #: 2107260A-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compounds	RT	Peak Area	10
Unknown Peak 1.3107	1.311	12258871	
Unknown Peak 1.6885	1.689	34938	
Unknown Peak 1.7585	1.759	49707	
Unknown Peak 1.8844	1.884	143043	
Unknown Peak 2.4161	2.416	73780	
Unknown Peak 2.8918	2.892	17290	
Unknown Peak 3.0597	3.060	17759	
Acetone	3.242	332348	
Carbon Disulfide	3.284	124223	
Unknown Peak 3.3955	3.396	63676	
Unknown Peak 3.4655	3.466	69635	
Unknown Peak 3.5774	3.577	22357	
Unknown Peak 3.9132	3.913	107342	
Unknown Peak 4.1371	4.137	16203	
Unknown Peak 4.7947	4.795	15381	
Unknown Peak 4.8926	4.893	28182	
Unknown Peak 4.9626	4.963	24836	
Bromochloromethane	5.270	1719794	
Unknown Peak 5.3823	5.382	87719	
Unknown Peak 5.4243	5.424	246003	
Unknown Peak 5.5363	5.536	69568	
Unknown Peak 5.6062	5.606	28544	
Unknown Peak 5.6482	5.648	20212	
1,2-Dichloroethane-d4	5.816	1108237	
1,4-Difluorobenzene	6.166	2525810	
Unknown Peak 6.3618	6.362	41327	
Unknown Peak 6.6638	6.664	39062	
Unknown Peak 6.7927	6.793	23943	
Unknown Peak 7.1580	7.158	16522	
Toluene-d8	7.380	2829233	
Unknown Peak 7.4589	7.459	38422	
Unknown Peak 7.6523	7.652	83622	
Unknown Peak 7.7311	7.731	13324	
Tetrachloroethene	7.874	1383760	
Unknown Peak 8.0892	8.089	47347	
Unknown Peak 8.1465	8.147	56761	
Unknown Peak 8.2110	8.211	23416	
Unknown Peak 8.2683	8.268	61253	
Unknown Peak 8.4760	8.476	77710	
Chlorobenzene-d5	8.612	3097345	
Unknown Peak 9.2210	9.221	11470	
Unknown Peak 9.2926	9.293	10035	
Unknown Peak 9.3141	9.314	16064	
Unknown Peak 9.3642	9.364	24184	
Unknown Peak 9.5218	9.522	184180	
4-Bromofluorobenzene	9.601	3597874	
Unknown Peak 9.8155	9.816	18408	
Unknown Peak 9.9373	9.937	24808	
Unknown Peak 10.216	10.217	11244	
Unknown Peak 10.402	10.403	25773	
Unknown Peak 10.510	10.510	12277	
Unknown Peak 10.689	10.689	14826	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072512.d
Sample #: 2107260A-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compounds	RT	Peak Area	10
Unknown Peak 10.968	10.969	21068	
Unknown Peak 11.047	11.048	36302	
Unknown Peak 11.391	11.391	19987	
Unknown Peak 11.599	11.599	30623	
Unknown Peak 11.713	11.714	32005	
Unknown Peak 12.623	12.623	79880	
Unknown Peak 13.132	13.132	10291	
Unknown Peak 13.676	13.676	68488	

Air Toxics Ltd.

File Results

Data File: File Information: 3072513.d
Sample #: 2107260A-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	91	(13951292.9496785 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072513.d
Sample #: 2107260A-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3108	1.311	11259931	☐
☐	Unknown Peak 1.6745	1.675	18579	☐
☐	Unknown Peak 1.7725	1.773	56373	☐
☐	Unknown Peak 1.8984	1.898	100701	☐
☐	Unknown Peak 2.2062	2.206	16702	☐
☐	Acetone	3.228	149161	☐
☐	Unknown Peak 3.8852	3.885	18586	☐
☐	Unknown Peak 3.9832	3.983	21721	☐
☐	Unknown Peak 4.9626	4.963	23685	☐
☐	Unknown Peak 5.1025	5.103	80922	☐
☑	Bromochloromethane	5.284	1605623	☐
☐	Unknown Peak 5.3824	5.382	110052	☐
☑	1,2-Dichloroethane-d4	5.816	1043035	☐
☐	Unknown Peak 5.9560	5.956	22501	☐
☑	Unknown Peak 6.0680	6.068	36338	☐
☑	1,4-Difluorobenzene	6.180	2259420	☐
☑	Unknown Peak 6.6566	6.657	13572	☐
☑	Unknown Peak 6.9646	6.965	11153	☐
☑	Toluene-d8	7.387	2542055	☐
☑	Unknown Peak 7.5950	7.595	42000	☐
☑	Unknown Peak 7.6523	7.652	89622	☐
☐	Tetrachloroethene	7.882	454692	☐
☑	Unknown Peak 8.0892	8.089	22844	☐
☑	Chlorobenzene-d5	8.619	2737069	☐
☑	Unknown Peak 8.999	8.999	18412	☐
☑	Unknown Peak 9.2282	9.228	16095	☐
☑	Unknown Peak 9.3141	9.314	10361	☐
☑	Unknown Peak 9.5219	9.522	63498	☐
☑	4-Bromofluorobenzene	9.601	3235008	☐
☑	Unknown Peak 9.9301	9.930	18313	☐
☑	Unknown Peak 10.001	10.002	11972	☐
☑	Unknown Peak 10.324	10.324	61325	☐
☑	Unknown Peak 10.402	10.403	10036	☐
☑	Unknown Peak 10.517	10.518	10308	☐
☑	Unknown Peak 10.610	10.611	13307	☐
☑	Unknown Peak 10.968	10.969	15332	☐
☑	Unknown Peak 11.054	11.055	17959	☐
☑	Unknown Peak 11.391	11.391	23142	☐
☑	Unknown Peak 11.420	11.420	12956	☐
☑	Unknown Peak 12.208	12.208	10539	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072514.d
Sample #: 2107260A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.32

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(11973250.4675026 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072514.d
Sample #: 2107260A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.32

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2966	1.297	11080683	☐
☑	Unknown Peak 1.5905	1.591	21891	☐
☑	Unknown Peak 1.7164	1.716	71860	☐
☑	Unknown Peak 1.7863	1.786	35720	☐
☑	Unknown Peak 1.8843	1.884	24824	☐
☑	Unknown Peak 2.8217	2.822	25643	☐
☐	Unknown Peak 3.2415	3.242	106784	☐
☐	2-Propanol	3.465	42640	☐
☑	Unknown Peak 3.9131	3.913	24667	☐
☑	Unknown Peak 4.9765	4.977	20071	☐
☑	Bromochloromethane	5.284	1387714	☐
☐	Unknown Peak 5.4242	5.424	119193	☐
☐	Unknown Peak 5.5501	5.550	36152	☐
☑	1,2-Dichloroethane-d4	5.816	872674	☐
☐	Unknown Peak 5.9839	5.984	20569	☐
☑	1,4-Difluorobenzene	6.166	1932534	☐
☐	Unknown Peak 6.3337	6.334	25476	☐
☑	Unknown Peak 6.6350	6.635	10996	☐
☑	Toluene-d8	7.387	2276609	☐
☐	Unknown Peak 7.6522	7.652	18921	☐
☐	Unknown Peak 7.6808	7.681	15567	☐
☐	Unknown Peak 7.7525	7.753	28257	☐
☐	Tetrachloroethene	7.881	590679	☐
☐	Unknown Peak 7.9602	7.960	14846	☐
☑	Chlorobenzene-d5	8.619	2438515	☐
☑	4-Bromofluorobenzene	9.601	2793600	☐
☑	Unknown Peak 10.968	10.969	10319	☐
☑	Unknown Peak 11.226	11.227	10614	☐
☑	Unknown Peak 13.146	13.146	15002	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072515.d
Sample #: 2107260A-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	86	(13902185.0191973 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072515.d
Sample #: 2107260A-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compounds	RT	Peak Area	10
Unknown Peak 1.3106	1.311	3608902	
Unknown Peak 1.4365	1.437	55932	
Unknown Peak 1.5205	1.521	25334	
Unknown Peak 1.6184	1.618	33585	
Unknown Peak 1.6744	1.674	48543	
Unknown Peak 1.7583	1.758	38037	
Unknown Peak 1.9123	1.912	62917	
Unknown Peak 2.402	2.402	115372	
Unknown Peak 2.8497	2.850	52961	
Unknown Peak 3.1435	3.144	22686	
Unknown Peak 3.2275	3.228	76591	
Unknown Peak 3.4234	3.423	33515	
Unknown Peak 3.9271	3.927	86918	
Unknown Peak 4.4448	4.445	19499	
Unknown Peak 4.9065	4.907	51634	
Bromochloromethane	5.284	1495804	
Unknown Peak 5.3822	5.382	239460	
Unknown Peak 5.5361	5.536	25407	
1,2-Dichloroethane-d4	5.816	1098693	
1,4-Difluorobenzene	6.180	2152037	
Unknown Peak 6.3756	6.376	28851	
Unknown Peak 6.6636	6.664	10894	
Unknown Peak 6.8714	6.871	13177	
Unknown Peak 7.1436	7.144	33230	
Toluene-d8	7.387	2379976	
Unknown Peak 7.4516	7.452	53100	
Unknown Peak 7.6450	7.645	38997	
Unknown Peak 7.7309	7.731	22825	
Unknown Peak 7.8814	7.881	36046	
Unknown Peak 8.0891	8.089	15088	
Unknown Peak 8.1464	8.146	23161	
Unknown Peak 8.1894	8.189	15552	
Unknown Peak 8.2682	8.268	39801	
Unknown Peak 8.4687	8.469	11073	
Chlorobenzene-d5	8.619	2614692	
Unknown Peak 9.3713	9.371	20572	
Unknown Peak 9.5217	9.522	19975	
4-Bromofluorobenzene	9.601	3028398	
Unknown Peak 9.6865	9.687	18245	
Unknown Peak 9.8369	9.837	18934	
Unknown Peak 9.9515	9.952	25686	
Unknown Peak 10.409	10.410	12643	
Unknown Peak 10.610	10.611	19105	
Unknown Peak 10.682	10.682	15987	
Unknown Peak 10.968	10.969	17426	
Unknown Peak 11.599	11.599	13544	

Air Toxics Ltd.

File Results

Data File: File Information: 3072522.d
Sample #: 2107260A-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.01

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	120	(14682060.3049794 - 12019065.8531911 / 46192

Inaccurate due to IS recovery
ND

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072522.d
Sample #: 2107260A-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.01

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3108	1.311	3662298	☐
☐	Unknown Peak 1.4368	1.437	93544	☐
☐	Unknown Peak 1.5207	1.521	24354	☐
☐	Unknown Peak 1.6187	1.619	49530	☐
☐	Unknown Peak 1.6746	1.675	33454	☐
☐	Unknown Peak 1.7586	1.759	56468	☐
☐	Unknown Peak 1.8985	1.899	108322	☐
☐	Unknown Peak 2.2203	2.220	22374	☐
☐	Unknown Peak 2.3322	2.332	18736	☐
☐	Unknown Peak 2.4022	2.402	75140	☐
☐	Unknown Peak 2.8639	2.864	32598	☐
☐	Unknown Peak 2.9479	2.948	16307	☐
☐	Unknown Peak 3.1158	3.116	17879	☐
☐	Unknown Peak 3.2417	3.242	57235	☐
☐	Unknown Peak 3.4236	3.424	28227	☐
☐	Unknown Peak 3.6755	3.676	21533	☐
☐	Unknown Peak 3.9133	3.913	49632	☐
☐	Unknown Peak 4.1792	4.179	24838	☐
☐	Unknown Peak 4.4590	4.459	39000	☐
☐	Unknown Peak 4.8927	4.893	83463	☐
☐	Unknown Peak 5.1306	5.131	18551	☐
☑	Bromochloromethane	5.285	1659893	☐
☐	Unknown Peak 5.3825	5.383	167843	☐
☑	1,2-Dichloroethane-d4	5.816	1097356	☐
☑	1,4-Difluorobenzene	6.166	2494971	☐
☐	Unknown Peak 6.6567	6.657	73106	☐
☐	Unknown Peak 6.9862	6.986	12834	☐
☐	Unknown Peak 7.1438	7.144	24792	☐
☑	Toluene-d8	7.387	2936977	☐
☐	Unknown Peak 7.5951	7.595	16335	☐
☐	Unknown Peak 7.6524	7.652	39870	☐
☐	Unknown Peak 7.7240	7.724	15717	☐
☐	Tetrachloroethene	7.882	103960	☐
☐	Unknown Peak 8.0893	8.089	21778	☐
☐	Unknown Peak 8.1538	8.154	11949	☐
☐	Unknown Peak 8.2684	8.268	31220	☐
☑	Chlorobenzene-d5	8.612	3099996	☐
☐	Unknown Peak 8.7841	8.784	20513	☐
☐	Unknown Peak 8.9632	8.963	37171	☐
☐	Unknown Peak 9.1351	9.135	111564	☐
☐	Unknown Peak 9.2211	9.221	54562	☐
☐	Unknown Peak 9.5291	9.529	14716	☐
☑	4-Bromofluorobenzene	9.601	3392868	☐
☐	Unknown Peak 10.109	10.109	13154	☐
☐	Unknown Peak 10.617	10.618	10482	☐
☐	Unknown Peak 11.040	11.041	20933	☐
☐	Unknown Peak 12.774	12.774	11995	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072523.d
Sample #: 2107260A-15A
Client ID:
Spike Level: 0
Dilution Factor: 2.03

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	75	(13717954.3980611 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072523.d
Sample #: 2107260A-15A
Client ID:
Spike Level: 0
Dilution Factor: 2.03

Compounds	RT	Peak Area	10
Unknown Peak 1.2825	1.283	58445	
Unknown Peak 1.3385	1.339	2664729	
Unknown Peak 1.4784	1.478	60165	
Unknown Peak 1.7163	1.716	39527	
Unknown Peak 1.7722	1.772	44134	
Unknown Peak 1.9122	1.912	27421	
Unknown Peak 2.3599	2.360	19459	
Unknown Peak 2.4299	2.430	20834	
Unknown Peak 2.8916	2.892	30992	
Unknown Peak 2.9476	2.948	17324	
Unknown Peak 3.1434	3.143	22440	
Unknown Peak 3.2554	3.255	44559	
Unknown Peak 3.4373	3.437	42060	
Unknown Peak 3.9270	3.927	15769	
Unknown Peak 4.6546	4.655	24202	
Unknown Peak 4.9204	4.920	42025	
Bromochloromethane	5.284	1467072	
Unknown Peak 5.3961	5.396	199652	
1,2-Dichloroethane-d4	5.830	995832	
1,4-Difluorobenzene	6.180	2149083	
Unknown Peak 6.3616	6.362	35980	
Unknown Peak 6.4875	6.488	19136	
Unknown Peak 6.6278	6.628	18145	
Unknown Peak 6.7853	6.785	32039	
Unknown Peak 7.0933	7.093	12069	
Unknown Peak 7.1507	7.151	38252	
Toluene-d8	7.387	2353407	
Unknown Peak 7.4515	7.452	48635	
Unknown Peak 7.5876	7.588	14644	
Unknown Peak 7.6521	7.652	107358	
Unknown Peak 7.7309	7.731	33214	
Unknown Peak 7.8813	7.881	23683	
Unknown Peak 8.0031	8.003	13765	
Unknown Peak 8.0890	8.089	45292	
Unknown Peak 8.1463	8.146	77145	
Unknown Peak 8.2108	8.211	25820	
Unknown Peak 8.2752	8.275	68340	
Unknown Peak 8.4758	8.476	104488	
Chlorobenzene-d5	8.619	2629042	
Unknown Peak 9.5216	9.522	21126	
4-Bromofluorobenzene	9.600	3159957	
Unknown Peak 9.9442	9.944	11726	
Unknown Peak 10.968	10.969	13051	

Air Toxics Ltd.

File Results

Data File: File Information: 3072524.d
Sample #: 2107260A-16A
Client ID:
Spike Level: 0
Dilution Factor: 2.05

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	44	(13021242.278869 - 12019065.8531911 / 46192)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072524.d
Sample #: 2107260A-16A
Client ID:
Spike Level: 0
Dilution Factor: 2.05

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2546	1.255	53993	☐
☐	Unknown Peak 1.3246	1.325	2540838	☐
☐	Unknown Peak 1.6044	1.604	45281	☐
☐	Unknown Peak 1.7164	1.716	52025	☐
☐	Unknown Peak 1.7583	1.758	32688	☐
☐	Unknown Peak 1.8983	1.898	59463	☐
☐	Unknown Peak 1.9682	1.968	24438	☐
☐	Unknown Peak 2.2201	2.220	24202	☐
☐	Unknown Peak 2.3460	2.346	17120	☐
☐	Unknown Peak 2.416	2.416	16227	☐
☐	Unknown Peak 3.2415	3.242	71282	☐
☐	Unknown Peak 3.4234	3.423	31160	☐
☐	Unknown Peak 4.123	4.123	28158	☐
☐	Unknown Peak 4.8925	4.893	33890	☐
☑	Unknown Peak 4.9625	4.963	29699	☐
☑	Bromochloromethane	5.284	1392747	☐
☑	Unknown Peak 5.3822	5.382	252929	☐
☑	1,2-Dichloroethane-d4	5.816	1014232	☐
☑	1,4-Difluorobenzene	6.180	2008254	☐
☑	Unknown Peak 6.6637	6.664	11415	☐
☑	Unknown Peak 6.7997	6.800	31590	☐
☑	Unknown Peak 7.1507	7.151	20259	☐
☑	Toluene-d8	7.387	2225154	☐
☑	Unknown Peak 7.4587	7.459	57063	☐
☑	Unknown Peak 7.5877	7.588	16072	☐
☑	Unknown Peak 7.6521	7.652	175774	☐
☑	Unknown Peak 7.7381	7.738	26340	☐
☑	Unknown Peak 7.8670	7.867	14493	☐
☑	Unknown Peak 8.0891	8.089	23080	☐
☑	Unknown Peak 8.1536	8.154	39345	☐
☑	Unknown Peak 8.2682	8.268	38810	☐
☑	Unknown Peak 8.4831	8.483	51282	☐
☑	Chlorobenzene-d5	8.619	2461960	☐
☑	Unknown Peak 9.3211	9.321	18501	☐
☑	Unknown Peak 9.5217	9.522	54894	☐
☑	4-Bromofluorobenzene	9.601	2973104	☐
☑	Unknown Peak 9.6793	9.679	16295	☐
☑	Unknown Peak 10.309	10.310	11948	☐
☑	Unknown Peak 10.409	10.410	19800	☐
☑	Unknown Peak 10.682	10.682	10968	☐
☑	Unknown Peak 11.047	11.047	14850	☐
☑	Unknown Peak 11.391	11.391	10385	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072525.d
Sample #: 2107260A-17A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	770	(29394556.1394799 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072525.d
Sample #: 2107260A-17A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

Compounds	RT	Peak Area	10
Unknown Peak 1.2547	1.255	78808	
Unknown Peak 1.3246	1.325	1224748	
Unknown Peak 1.4786	1.479	27787	
Unknown Peak 1.7024	1.702	62423	
Unknown Peak 1.7584	1.758	54468	
Unknown Peak 1.8004	1.800	25658	
Unknown Peak 1.8983	1.898	69197	
Unknown Peak 2.2201	2.220	69735	
Unknown Peak 2.5	2.500	38841	
Unknown Peak 2.6958	2.696	18264	
Unknown Peak 2.8777	2.878	16208	
Unknown Peak 3.1156	3.116	20467	
Unknown Peak 3.2415	3.242	91160	
Unknown Peak 3.5913	3.591	340419	
Unknown Peak 3.6613	3.661	55981	
Unknown Peak 3.8712	3.871	244996	
Methyl tert-butyl ether	3.941	322653	
Unknown Peak 4.1090	4.109	21380	
Hexane	4.179	214074	
Unknown Peak 4.4028	4.403	33528	
Unknown Peak 4.7107	4.711	117555	
Unknown Peak 4.8086	4.809	412166	
Unknown Peak 5.0325	5.033	30691	
Unknown Peak 5.0884	5.088	32724	
Unknown Peak 5.2144	5.214	15168	
Bromochloromethane	5.284	1548143	
Unknown Peak 5.3823	5.382	469787	
Cyclohexane	5.438	662877	
Unknown Peak 5.5502	5.550	491885	
2,2,4-Trimethylpentane	5.774	995634	
Benzene	5.788	41088	
1,2-Dichloroethane-d4	5.816	1649268	
Heptane	5.942	305129	
Unknown Peak 6.0819	6.082	18738	
1,4-Difluorobenzene	6.180	2293035	
Unknown Peak 6.4596	6.460	861822	
Unknown Peak 6.5436	6.544	55379	
Unknown Peak 6.6207	6.621	170390	
Unknown Peak 6.6709	6.671	134444	
Unknown Peak 6.7998	6.800	449627	
Unknown Peak 6.9072	6.907	553431	
Unknown Peak 6.9574	6.957	340529	
Unknown Peak 7.0863	7.086	305036	
Unknown Peak 7.2153	7.215	82684	
Unknown Peak 7.2869	7.287	125882	
Toluene-d8	7.387	2542981	
Toluene	7.437	1215972	
Unknown Peak 7.5949	7.595	31297	
Unknown Peak 7.6522	7.652	162459	
Unknown Peak 7.6880	7.688	180630	
Unknown Peak 7.7596	7.760	21458	
Unknown Peak 7.8313	7.831	11051	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072525.d
Sample #: 2107260A-17A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

Compounds	RT	Peak Area	10
Unknown Peak 7.9244	7.924	67890	
Unknown Peak 7.9602	7.960	26114	
Unknown Peak 8.0247	8.025	51997	
Unknown Peak 8.0820	8.082	102121	
Unknown Peak 8.1464	8.146	92748	
Unknown Peak 8.2252	8.225	36241	
Unknown Peak 8.2825	8.283	181671	
Unknown Peak 8.3828	8.383	77791	
Unknown Peak 8.4759	8.476	49439	
Chlorobenzene-d5	8.619	2711671	
Ethyl Benzene	8.684	619319	
m,p-Xylene	8.784	1717373	
Unknown Peak 8.9272	8.927	14534	
Unknown Peak 9.0060	9.006	36927	
o-Xylene	9.128	471157	
Unknown Peak 9.2281	9.228	17772	
Unknown Peak 9.3140	9.314	17841	
Unknown Peak 9.3642	9.364	19859	
Unknown Peak 9.4143	9.414	68406	
Unknown Peak 9.5218	9.522	120979	
4-Bromofluorobenzene	9.601	3236678	
Propylbenzene	9.751	109324	
4-Ethyltoluene	9.823	512134	
1,3,5-Trimethylbenzene	9.901	144987	
Unknown Peak 9.9444	9.944	24974	
Unknown Peak 10.080	10.081	103993	
1,2,4-Trimethylbenzene	10.224	320238	
Unknown Peak 10.324	10.324	13805	
Unknown Peak 10.417	10.417	26621	
Unknown Peak 10.596	10.596	49608	
Unknown Peak 10.746	10.747	62762	
Unknown Peak 10.782	10.782	95576	
Unknown Peak 10.968	10.969	13062	
Unknown Peak 11.040	11.040	41123	
Unknown Peak 11.126	11.126	23857	
Unknown Peak 11.520	11.520	11274	
Unknown Peak 11.599	11.599	12493	
Unknown Peak 12.623	12.623	20389	
Unknown Peak 13.669	13.669	13610	

Air Toxics Ltd.

File Results

Data File: File Information: 3072526.d
Sample #: 2107260A-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.08

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	55	(13239894.2786993 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072526.d
Sample #: 2107260A-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.08

Compounds	RT	Peak Area	10
Unknown Peak 1.3107	1.311	6198229	
Unknown Peak 1.4367	1.437	59388	
Unknown Peak 1.5206	1.521	47960	
Unknown Peak 1.6325	1.633	49160	
Unknown Peak 1.7025	1.703	39671	
Unknown Peak 1.7585	1.759	40476	
Unknown Peak 1.8984	1.898	58419	
Unknown Peak 2.2342	2.234	19206	
Unknown Peak 2.3321	2.332	21458	
Unknown Peak 2.4161	2.416	21464	
Unknown Peak 2.7239	2.724	17719	
Unknown Peak 2.8638	2.864	53294	
Unknown Peak 3.2416	3.242	71968	
Unknown Peak 3.4235	3.424	27201	
Unknown Peak 3.5634	3.563	20842	
Unknown Peak 3.9272	3.927	50462	
Unknown Peak 4.8227	4.823	17276	
Unknown Peak 4.9066	4.907	34429	
Unknown Peak 4.9486	4.949	44014	
Bromochloromethane	5.284	1380115	
Unknown Peak 5.3824	5.382	548084	
Unknown Peak 5.6482	5.648	28888	
1,2-Dichloroethane-d4	5.816	1072350	
Unknown Peak 5.9140	5.914	32331	
1,4-Difluorobenzene	6.180	2065919	
Unknown Peak 6.4877	6.488	18608	
Unknown Peak 6.6638	6.664	36017	
Unknown Peak 6.7927	6.793	32984	
Unknown Peak 7.0004	7.000	16774	
Unknown Peak 7.0864	7.086	12199	
Unknown Peak 7.1509	7.151	53406	
Toluene-d8	7.387	2177695	
Unknown Peak 7.4589	7.459	95003	
Unknown Peak 7.5448	7.545	12629	
Unknown Peak 7.6594	7.659	33201	
Unknown Peak 7.7382	7.738	24204	
Tetrachloroethene	7.874	59922	
Unknown Peak 7.9746	7.975	11350	
Unknown Peak 8.0104	8.010	20497	
Unknown Peak 8.0892	8.089	56709	
Unknown Peak 8.1537	8.154	61772	
Unknown Peak 8.2683	8.268	74827	
Unknown Peak 8.4760	8.476	84917	
Chlorobenzene-d5	8.619	2400178	
Unknown Peak 9.5147	9.515	22507	
4-Bromofluorobenzene	9.601	2781850	
Unknown Peak 9.9301	9.930	10159	
Unknown Peak 10.975	10.976	14798	

Air Toxics Ltd.

File Results

Data File: File Information: 3072527.d
Sample #: 2107260A-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	94	(14163648.4280164 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072527.d
Sample #: 2107260A-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compounds	RT	Peak Area	10
Unknown Peak 1.3246	1.325	3420103	
Unknown Peak 1.4506	1.451	84740	
Unknown Peak 1.5905	1.591	28102	
Unknown Peak 1.7164	1.716	40434	
Unknown Peak 1.7724	1.772	39296	
Unknown Peak 1.9123	1.912	92682	
Unknown Peak 2.7378	2.738	17318	
Unknown Peak 2.7658	2.766	14711	
Unknown Peak 3.2415	3.242	91160	
Unknown Peak 3.4234	3.423	19146	
Unknown Peak 4.5568	4.557	23891	
Unknown Peak 4.6267	4.627	17679	
Unknown Peak 4.9625	4.963	27786	
Bromochloromethane	5.284	1533307	
Unknown Peak 5.3823	5.382	131478	
Unknown Peak 5.6061	5.606	19820	
1,2-Dichloroethane-d4	5.816	1050095	
Unknown Peak 6.0819	6.082	16271	
1,4-Difluorobenzene	6.180	2262943	
Unknown Peak 6.3617	6.362	17606	
Unknown Peak 6.6637	6.664	17649	
Unknown Peak 6.7926	6.793	11988	
Unknown Peak 7.1508	7.151	13013	
Toluene-d8	7.387	2434384	
Unknown Peak 7.4445	7.445	55446	
Unknown Peak 7.5949	7.595	37358	
Unknown Peak 7.6594	7.659	61231	
Unknown Peak 7.7382	7.738	15246	
Tetrachloroethene	7.881	229698	
Unknown Peak 8.0175	8.018	16031	
Unknown Peak 8.0963	8.096	48584	
Unknown Peak 8.1536	8.154	48158	
Unknown Peak 8.2038	8.204	22520	
Unknown Peak 8.2682	8.268	55072	
Unknown Peak 8.4759	8.476	55861	
Chlorobenzene-d5	8.619	2687730	
Unknown Peak 9.2209	9.221	11761	
Unknown Peak 9.3713	9.371	10338	
Unknown Peak 9.5217	9.522	61573	
4-Bromofluorobenzene	9.601	3115488	
Unknown Peak 9.9444	9.944	18062	
Unknown Peak 10.331	10.331	18483	
Unknown Peak 10.41	10.410	23919	
Unknown Peak 10.610	10.611	10849	
Unknown Peak 10.682	10.682	16874	
Unknown Peak 11.391	11.391	12167	
Unknown Peak 11.599	11.599	12213	
Unknown Peak 13.131	13.132	10433	

Air Toxics Ltd.

File Results

Data File: File Information: 3072528.d
Sample #: 2107260A-20A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	11	(12249711.1831589 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072528.d
Sample #: 2107260A-20A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

Compounds	RT	Peak Area	10
Unknown Peak 1.3106	1.311	6236601	
Unknown Peak 1.4365	1.437	85331	
Unknown Peak 1.5204	1.520	41988	
Unknown Peak 1.6324	1.632	63613	
Unknown Peak 1.6883	1.688	35931	
Unknown Peak 1.7583	1.758	44253	
Unknown Peak 1.8982	1.898	102655	
Unknown Peak 2.2200	2.220	27855	
Unknown Peak 2.3599	2.360	44520	
Unknown Peak 2.4019	2.402	104021	
Unknown Peak 2.6678	2.668	24542	
Unknown Peak 2.8637	2.864	50732	
Unknown Peak 3.2414	3.241	54004	
Carbon Disulfide	3.311	287693	
2-Propanol	3.423	144195	
Unknown Peak 3.7032	3.703	20192	
Unknown Peak 3.9130	3.913	69239	
Unknown Peak 4.4587	4.459	28623	
Unknown Peak 4.9624	4.962	38578	
Unknown Peak 5.1023	5.102	37740	
Bromochloromethane	5.284	1409661	
Unknown Peak 5.3822	5.382	196576	
1,2-Dichloroethane-d4	5.816	983938	
1,4-Difluorobenzene	6.180	1930136	
Unknown Peak 6.3756	6.376	28802	
Unknown Peak 7.1364	7.136	14566	
Toluene-d8	7.387	2204180	
Unknown Peak 7.6521	7.652	41734	
Tetrachloroethene	7.881	37199	
Chlorobenzene-d5	8.619	2428132	
Unknown Peak 9.3856	9.386	26477	
4-Bromofluorobenzene	9.601	2738644	
Unknown Peak 9.6721	9.672	15295	

Air Toxics Ltd.

File Results

Data File: File Information: 3072529.d
Sample #: 2107260A-21A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	88	(13927463.341606 - 12019065.8531911 / 46192)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072529.d
Sample #: 2107260A-21A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compounds	RT	Peak Area	10
Unknown Peak 1.3105	1.311	7237934	
Unknown Peak 1.6883	1.688	57491	
Unknown Peak 1.8842	1.884	86808	
Unknown Peak 1.9402	1.940	24338	
Unknown Peak 2.2200	2.220	23522	
Unknown Peak 2.276	2.276	56604	
Unknown Peak 2.3319	2.332	22268	
Ethanol	2.794	38965	
Unknown Peak 3.2414	3.241	94104	
Unknown Peak 3.4373	3.437	61183	
Unknown Peak 3.8850	3.885	44743	
Hexane	4.165	31846	
Unknown Peak 5.1023	5.102	74461	
Bromochloromethane	5.284	1493639	
Unknown Peak 5.3961	5.396	211980	
Unknown Peak 5.4521	5.452	95842	
Unknown Peak 5.5361	5.536	35803	
1,2-Dichloroethane-d4	5.816	954068	
1,4-Difluorobenzene	6.166	2147778	
Unknown Peak 6.3616	6.362	16655	
Unknown Peak 6.6707	6.671	12141	
Unknown Peak 6.9	6.900	10738	
Unknown Peak 7.1507	7.151	16776	
Toluene-d8	7.387	2374485	
Unknown Peak 7.4443	7.444	56467	
Unknown Peak 7.6306	7.631	268698	
Tetrachloroethene	7.874	192509	
Unknown Peak 8.0890	8.089	34135	
Unknown Peak 8.1535	8.154	27115	
Unknown Peak 8.1965	8.197	15481	
Unknown Peak 8.2681	8.268	42988	
Unknown Peak 8.4830	8.483	29271	
Chlorobenzene-d5	8.619	2613394	
Unknown Peak 8.7982	8.798	15322	
Unknown Peak 9.2208	9.221	15932	
Unknown Peak 9.3712	9.371	12206	
Unknown Peak 9.5216	9.522	44880	
4-Bromofluorobenzene	9.600	2995431	
Unknown Peak 9.7867	9.787	17342	
Unknown Peak 9.8010	9.801	14073	
Unknown Peak 9.9442	9.944	19213	
Unknown Peak 10.331	10.331	22519	
Unknown Peak 10.402	10.403	18329	
Unknown Peak 10.610	10.610	31575	
Unknown Peak 10.682	10.682	30303	
Unknown Peak 10.968	10.969	15320	
Unknown Peak 11.384	11.384	16087	
Unknown Peak 11.598	11.599	21611	
Unknown Peak 11.713	11.714	15082	
Unknown Peak 12.616	12.616	19511	

Air Toxics Ltd.

File Results

Data File: File Information: 3072530.d
Sample #: 2107260A-22A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	64	(13407966.3866125 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072530.d
Sample #: 2107260A-22A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2967	1.297	6545049	☐
☐	Unknown Peak 1.5905	1.591	40131	☐
☐	Unknown Peak 1.7025	1.702	40561	☐
☐	Unknown Peak 1.8843	1.884	80908	☐
☐	Unknown Peak 2.1782	2.178	15922	☐
☐	Unknown Peak 2.4160	2.416	34263	☐
☐	Unknown Peak 2.7938	2.794	17322	☐
☐	Unknown Peak 3.1296	3.130	22958	☐
☐	Unknown Peak 3.2416	3.242	201193	☐
☐	Unknown Peak 3.4654	3.465	16386	☐
☐	Unknown Peak 3.9132	3.913	30730	☐
☐	Unknown Peak 4.5708	4.571	16053	☐
☐	Unknown Peak 4.9626	4.963	39001	☐
☐	Unknown Peak 5.0885	5.089	26254	☐
☑	Bromochloromethane	5.270	1516478	☐
☑	Unknown Peak 5.4243	5.424	138405	☐
☑	Unknown Peak 5.5782	5.578	35345	☐
☑	1,2-Dichloroethane-d4	5.816	956329	☐
☑	1,4-Difluorobenzene	6.166	2158378	☐
☑	Unknown Peak 6.3338	6.334	52562	☐
☑	Unknown Peak 7.1437	7.144	17719	☐
☑	Unknown Peak 7.2654	7.265	11280	☐
☑	Toluene-d8	7.380	2417262	☐
☑	Unknown Peak 7.4445	7.445	31155	☐
☑	Unknown Peak 7.6522	7.652	51551	☐
☑	Unknown Peak 7.7310	7.731	17865	☐
☐	Tetrachloroethene	7.874	181272	☐
☑	Unknown Peak 8.0892	8.089	18138	☐
☑	Unknown Peak 8.1536	8.154	21920	☐
☑	Unknown Peak 8.2038	8.204	11347	☐
☑	Unknown Peak 8.2683	8.268	39475	☐
☑	Unknown Peak 8.4831	8.483	26947	☐
☑	Chlorobenzene-d5	8.612	2671790	☐
☑	Unknown Peak 8.7625	8.763	27176	☐
☑	Unknown Peak 9.3642	9.364	18475	☐
☑	Unknown Peak 9.5146	9.515	13038	☐
☑	4-Bromofluorobenzene	9.601	3062233	☐
☑	Unknown Peak 9.9516	9.952	13606	☐
☑	Unknown Peak 10.410	10.410	13639	☐
☑	Unknown Peak 10.675	10.675	10394	☐
☑	Unknown Peak 11.599	11.599	18050	☐
☑	Unknown Peak 12.623	12.623	21304	☐
☑	Unknown Peak 13.690	13.691	16106	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072531.d
Sample #: 2107260A-23A
Client ID:
Spike Level: 0
Dilution Factor: 2.33

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	18	(12387125.9912798 - 12019065.8531911 / 46192

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072531.d
Sample #: 2107260A-23A
Client ID:
Spike Level: 0
Dilution Factor: 2.33

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3108	1.311	9990525	☐
☐	1,1-Difluoroethane	1.451	68484	☐
☐	Unknown Peak 1.5206	1.521	55163	☐
☐	Unknown Peak 1.6886	1.689	42923	☐
☐	Unknown Peak 1.8844	1.884	30937	☐
☐	Unknown Peak 2.5840	2.584	18499	☐
☐	Unknown Peak 3.1297	3.130	18526	☐
☐	Unknown Peak 3.2416	3.242	77483	☐
☐	Unknown Peak 3.2976	3.298	21343	☐
☑	Unknown Peak 4.9486	4.949	16511	☐
☑	Bromochloromethane	5.285	1473217	☐
☑	Unknown Peak 5.3824	5.382	47901	☐
☑	1,2-Dichloroethane-d4	5.816	954667	☐
☑	Unknown Peak 5.9561	5.956	27804	☐
☑	1,4-Difluorobenzene	6.166	2054675	☐
☑	Unknown Peak 6.4878	6.488	19380	☐
☑	Toluene-d8	7.387	2298807	☐
☑	Unknown Peak 7.5950	7.595	12822	☐
☑	Unknown Peak 7.6452	7.645	65683	☐
☐	Tetrachloroethene	7.882	111734	☐
☑	Chlorobenzene-d5	8.612	2476287	☐
☑	4-Bromofluorobenzene	9.601	2882500	☐
☑	Unknown Peak 9.9445	9.945	19551	☐
☑	Unknown Peak 10.102	10.102	21231	☐
☑	Unknown Peak 10.324	10.324	16090	☐

Air Toxics Ltd.

File Results

Data File: File Information: p072519.d
Sample #: 2107260A-24A
Client ID:
Spike Level: 0
Dilution Factor: 2.26

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9178415.998161 - 9236552.34008662 / 65533) *

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072519.d
Sample #: 2107260A-24A
Client ID:
Spike Level: 0
Dilution Factor: 2.26

Compounds	RT	Peak Area	10
Unknown Peak 1.2408	1.241	70965	
Unknown Peak 1.5066	1.507	5792251	
Unknown Peak 2.2395	2.240	24457	
Unknown Peak 3.7295	3.729	51700	
Unknown Peak 3.8942	3.894	17591	
Unknown Peak 5.4343	5.434	12980	
Bromochloromethane	5.785	992586	
1,2-Dichloroethane-d4	6.315	636984	
Unknown Peak 6.5087	6.509	33850	
1,4-Difluorobenzene	6.666	1348039	
Unknown Peak 7.1247	7.125	10187	
Unknown Peak 7.5832	7.583	29683	
Toluene-d8	7.891	1681638	
Unknown Peak 8.0488	8.049	17952	
Unknown Peak 8.1562	8.156	143654	
Unknown Peak 8.3854	8.385	15892	
Tetrachloroethene	8.471	120727	
Unknown Peak 8.7006	8.701	14013	
Chlorobenzene-d5	9.460	1827514	
Unknown Peak 10.842	10.842	40216	
4-Bromofluorobenzene	10.921	2141985	
Unknown Peak 11.644	11.645	50974	
Unknown Peak 11.931	11.931	14998	
Unknown Peak 12.067	12.067	10738	
Unknown Peak 12.633	12.633	20607	
Unknown Peak 12.812	12.812	11062	
Unknown Peak 12.991	12.991	10833	
Unknown Peak 13.370	13.371	18285	

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi –[Init. Pressure (“Hg))*(14.7psi/30”Hg)]}}$

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi +Initial Pressure (psi)}}$

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
0.0	**1.14**	1.34	**1.68**	2.02
0.2	**1.14**	1.35	**1.69**	2.03
0.4	**1.15**	1.36	**1.70**	2.05
0.5	**1.16**	1.36	**1.71**	2.05
0.6	**1.16**	1.37	**1.71**	2.06
0.8	**1.17**	1.38	**1.73**	2.08
1.0	**1.18**	1.39	**1.74**	2.09
1.2	**1.18**	1.40	**1.75**	2.10
1.4	**1.19**	1.40	**1.76**	2.12
1.5	**1.20**	1.41	**1.77**	2.13
1.6	**1.20**	1.42	**1.77**	2.13
1.8	**1.21**	1.42	**1.79**	2.15
2.0	**1.22**	1.44	**1.80**	2.16
2.2	**1.23**	1.45	**1.81**	2.18
2.4	**1.23**	1.46	**1.83**	2.20
2.5	**1.24**	1.46	**1.83**	2.20
2.6	**1.24**	1.47	**1.84**	2.21
2.8	**1.25**	1.48	**1.85**	2.23
3.0	**1.26**	1.49	**1.87**	2.24
3.2	**1.27**	1.50	**1.88**	2.26
3.4	**1.28**	1.51	**1.90**	2.28
3.5	**1.29**	1.52	**1.90**	2.29
3.6	**1.29**	1.52	**1.91**	2.30
3.8	**1.30**	1.53	**1.92**	2.31
4.0	**1.31**	1.55	**1.94**	2.33
4.2	**1.32**	1.56	**1.95**	2.35
4.4	**1.33**	1.57	**1.97**	2.37
4.5	**1.34**	1.58	**1.98**	2.38
4.6	**1.34**	1.58	**1.98**	2.39
4.8	**1.35**	1.60	**2.00**	2.40
5.0	**1.36**	1.61	**2.02**	2.42
5.2	**1.37**	1.62	**2.03**	2.44
5.4	**1.39**	1.63	**2.05**	2.46
5.5	**1.39**	1.64	**2.06**	2.47
5.6	**1.40**	1.65	**2.07**	2.48
5.8	**1.41**	1.66	**2.08**	2.50
6.0	**1.42**	1.68	**2.10**	2.52
6.2	**1.43**	1.69	**2.12**	2.55
6.4	**1.44**	1.70	**2.14**	2.57
6.5	**1.45**	1.71	**2.15**	2.58
6.6	**1.46**	1.72	**2.15**	2.59
6.8	**1.47**	1.73	**2.17**	2.61
7.0	**1.48**	1.75	**2.19**	2.64
7.2	**1.49**	1.76	**2.21**	2.66
7.4	**1.51**	1.78	**2.23**	2.68
7.5	**1.51**	1.79	**2.24**	2.69
7.6	**1.52**	1.79	**2.25**	2.70

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
7.7	**1.53**	1.80	**2.26**	2.72
7.8	**1.54**	1.81	**2.27**	2.73
8.0	**1.55**	1.83	**2.29**	2.76
8.2	**1.56**	1.84	**2.31**	2.78
8.4	**1.58**	1.86	**2.33**	2.81
8.5	**1.59**	1.87	**2.34**	2.82
8.6	**1.59**	1.88	**2.36**	2.83
8.8	**1.61**	1.90	**2.38**	2.86
9.0	**1.62**	1.91	**2.40**	2.89
9.2	**1.64**	1.93	**2.42**	2.91
9.4	**1.65**	1.95	**2.45**	2.94
9.5	**1.66**	1.96	**2.46**	2.96
9.6	**1.67**	1.97	**2.47**	2.97
9.8	**1.69**	1.99	**2.50**	3.00
10.0	**1.70**	2.01	**2.52**	3.03
10.2	**1.72**	2.03	**2.55**	3.06
10.4	**1.74**	2.05	**2.57**	3.09
10.5	**1.75**	2.06	**2.59**	3.11
10.6	**1.76**	2.07	**2.60**	3.12
10.8	**1.78**	2.09	**2.63**	3.16
11.0	**1.79**	2.12	**2.65**	3.19
11.2	**1.81**	2.14	**2.68**	3.22
11.4	**1.83**	2.16	**2.71**	3.26
11.5	**1.84**	2.17	**2.72**	3.28
11.6	**1.85**	2.18	**2.74**	3.29
11.8	**1.87**	2.21	**2.77**	3.33
12.0	**1.89**	2.23	**2.80**	3.37
12.2	**1.91**	2.26	**2.83**	3.40
12.4	**1.94**	2.28	**2.86**	3.44
12.5	**1.95**	2.30	**2.88**	3.46
12.6	**1.96**	2.31	**2.90**	3.48
12.8	**1.98**	2.34	**2.93**	3.52
13.0	**2.00**	2.36	**2.97**	3.56
13.2	**2.03**	2.39	**3.00**	3.61
13.4	**2.05**	2.42	**3.04**	3.65
13.5	**2.07**	2.44	**3.06**	3.67
13.6	**2.08**	2.45	**3.07**	3.70
13.8	**2.10**	2.48	**3.11**	3.74
14.0	**2.13**	2.51	**3.15**	3.79
14.2	**2.16**	2.54	**3.19**	3.84
14.4	**2.18**	2.58	**3.23**	3.88
14.5	**2.20**	2.59	**3.25**	3.91
14.6	**2.21**	2.61	**3.27**	3.94
14.8	**2.24**	2.64	**3.32**	3.99
15.0	**2.27**	2.68	**3.36**	4.04
15.2	**2.30**	2.72	**3.41**	4.10
15.4	**2.33**	2.75	**3.45**	4.15

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
15.5	**2.35**	2.77	**3.48**	4.18
15.6	**2.37**	2.79	**3.50**	4.21
15.8	**2.40**	2.83	**3.55**	4.27
16.0	**2.43**	2.87	**3.60**	4.33
16.2	**2.47**	2.91	**3.65**	4.39
16.4	**2.51**	2.96	**3.71**	4.46
16.5	**2.52**	2.98	**3.73**	4.49
16.6	**2.54**	3.00	**3.76**	4.52
16.8	**2.58**	3.05	**3.82**	4.59
17.0	**2.62**	3.09	**3.88**	4.66
17.2	**2.66**	3.14	**3.94**	4.74
17.4	**2.70**	3.19	**4.00**	4.81
17.5	**2.73**	3.22	**4.03**	4.85
17.6	**2.75**	3.24	**4.07**	4.89
17.8	**2.79**	3.30	**4.13**	4.97
18.0	**2.84**	3.35	**4.20**	5.05
18.2	**2.89**	3.41	**4.27**	5.14
18.4	**2.94**	3.47	**4.35**	5.22
18.5	**2.96**	3.50	**4.38**	5.27
18.6	**2.99**	3.53	**4.42**	5.32
18.8	**3.04**	3.59	**4.50**	5.41
19.0	**3.10**	3.65	**4.58**	5.51
19.2	**3.16**	3.72	**4.67**	5.61
19.4	**3.22**	3.79	**4.76**	5.72
19.5	**3.25**	3.83	**4.80**	5.77
19.6	**3.28**	3.87	**4.85**	5.83
19.8	**3.34**	3.94	**4.94**	5.94
20.0	**3.41**	4.02	**5.04**	6.06
20.2	**3.48**	4.10	**5.14**	6.18
20.4	**3.55**	4.19	**5.25**	6.31
20.5	**3.59**	4.23	**5.31**	6.38
20.6	**3.63**	4.28	**5.36**	6.45
20.8	**3.70**	4.37	**5.48**	6.59
21.0	**3.79**	4.47	**5.60**	6.73
21.2	**3.87**	4.57	**5.73**	6.89
21.4	**3.96**	4.67	**5.86**	7.05
21.5	**4.01**	4.73	**5.93**	7.13
21.6	**4.06**	4.79	**6.00**	7.22
21.8	**4.16**	4.90	**6.15**	7.39
22.0	**4.26**	5.03	**6.30**	7.58
22.4	**4.48**	5.29	**6.63**	7.98

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
22.5	**4.54**	5.36	**6.72**	8.08
22.6	**4.61**	5.43	**6.81**	8.19
22.8	**4.73**	5.58	**7.00**	8.42
23.0	**4.87**	5.74	**7.20**	8.66
23.2	**5.01**	5.91	**7.41**	8.91
23.4	**5.16**	6.09	**7.64**	9.18
23.5	**5.24**	6.19	**7.76**	9.32
23.6	**5.33**	6.28	**7.88**	9.47
23.8	**5.50**	6.48	**8.13**	9.78
24.0	**5.68**	6.70	**8.40**	10.10
24.2	**5.88**	6.93	**8.69**	10.45
24.4	**6.09**	7.18	**9.00**	10.82
24.5	**6.20**	7.31	**9.17**	11.02
24.6	**6.31**	7.45	**9.33**	11.22
24.8	**6.55**	7.73	**9.69**	11.66
25.0	**6.82**	8.04	**10.08**	12.12
25.2	**7.10**	8.38	**10.50**	12.63
25.4	**7.41**	8.74	**10.96**	13.18
25.5	**7.57**	8.93	**11.20**	13.47
25.6	**7.75**	9.14	**11.46**	13.78
25.8	**8.11**	9.57	**12.00**	14.43
26.0	**8.52**	10.05	**12.60**	15.15
26.2	**8.97**	10.58	**13.27**	15.95
26.4	**9.47**	11.17	**14.00**	16.84
26.5	**9.74**	11.49	**14.40**	17.32
26.6	**10.02**	11.82	**14.83**	17.83
26.8	**10.65**	12.56	**15.75**	18.94
27.0	**11.36**	13.40	**16.80**	20.20
27.2	**12.17**	14.36	**18.00**	21.65
27.4	**13.11**	15.46	**19.39**	23.31
27.5	**13.63**	16.08	**20.16**	24.24
27.6	**14.20**	16.75	**21.00**	25.26
27.8	**15.49**	18.27	**22.91**	27.55
28.0	**17.04**	20.10	**25.20**	30.31
28.2	**18.93**	22.34	**28.00**	33.67
28.4	**21.30**	25.13	**31.51**	37.88
28.5	**22.72**	26.80	**33.61**	40.41
28.6	**24.34**	28.72	**36.01**	43.29
28.8	**28.40**	33.50	**42.01**	50.51
29.0	**34.08**	40.20	**50.41**	60.61

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Method:TO-15 (Sp)-AECOM (SMUD 59th alphanumeric)

CAS Number	Compound	Rpt. Limit(ppbv)
630-20-6	1,1,1,2-Tetrachloroethane	2.0
71-55-6	1,1,1-Trichloroethane	0.5
79-34-5	1,1,2,2-Tetrachloroethane	0.5
79-00-5	1,1,2-Trichloroethane	0.5
75-34-3	1,1-Dichloroethane	0.5
75-35-4	1,1-Dichloroethene	0.5
75-37-6	1,1-Difluoroethane	2.0
96-18-4	1,2,3-Trichloropropane	2.0
120-82-1	1,2,4-Trichlorobenzene	2.0
95-63-6	1,2,4-Trimethylbenzene	0.5
96-12-8	1,2-Dibromo-3-chloropropane	2.0
106-93-4	1,2-Dibromoethane (EDB)	0.5
95-50-1	1,2-Dichlorobenzene	0.5
107-06-2	1,2-Dichloroethane	0.5
78-87-5	1,2-Dichloropropane	0.5
108-67-8	1,3,5-Trimethylbenzene	0.5
106-99-0	1,3-Butadiene	0.5
541-73-1	1,3-Dichlorobenzene	0.5
106-46-7	1,4-Dichlorobenzene	0.5
123-91-1	1,4-Dioxane	2.0
540-84-1	2,2,4-Trimethylpentane	0.5
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2.0
591-78-6	2-Hexanone	2.0
67-63-0	2-Propanol	2.0
107-05-1	3-Chloropropene	2.0
622-96-8	4-Ethyltoluene	0.5
108-10-1	4-Methyl-2-pentanone	0.5
67-64-1	Acetone	5.0
107-02-8	Acrolein	2.0
107-13-1	Acrylonitrile	2.0
100-44-7	alpha-Chlorotoluene	0.5
71-43-2	Benzene	0.5

75-27-4	Bromodichloromethane	0.5
	Method:TO-15 (Sp)-AECOM (SMUD 59th alphanumeric)	

CAS Number	Compound	Rpt. Limit(ppbv)
75-25-2	Bromoform	0.5
74-83-9	Bromomethane	5.0
75-15-0	Carbon Disulfide	2.0
56-23-5	Carbon Tetrachloride	0.5
108-90-7	Chlorobenzene	0.5
75-00-3	Chloroethane	2.0
67-66-3	Chloroform	0.5
74-87-3	Chloromethane	5.0
156-59-2	cis-1,2-Dichloroethene	0.5
10061-01-5	cis-1,3-Dichloropropene	0.5
98-82-8	Cumene	0.5
110-82-7	Cyclohexane	0.5
124-48-1	Dibromochloromethane	0.5
74-95-3	Dibromomethane	2.0
64-17-5	Ethanol	5.0
141-78-6	Ethyl Acetate	2.0
100-41-4	Ethyl Benzene	0.5
637-92-3	Ethyl-tert-butyl ether	2.0
75-69-4	Freon 11	0.5
76-13-1	Freon 113	0.5
76-14-2	Freon 114	0.5
75-71-8	Freon 12	0.5
811-97-2	Freon 134a	2.0
142-82-5	Heptane	0.5
87-68-3	Hexachlorobutadiene	2.0
67-72-1	Hexachloroethane	2.0
110-54-3	Hexane	0.5
74-88-4	Iodomethane	5.0
108-20-3	Isopropyl ether	2.0
108-38-3	m,p-Xylene	0.5
1634-04-4	Methyl tert-butyl ether	2.0
75-09-2	Methylene Chloride	5.0
91-20-3	Naphthalene	1.0
95-47-6	o-Xylene	0.5
103-65-1	Propylbenzene	0.5

115-07-1	Propylene	2.0
100-42-5	Styrene	0.5
994-05-8	tert-Amyl methyl ether	2.0
75-65-0	tert-Butyl alcohol	2.0
127-18-4	Tetrachloroethene	0.5
109-99-9	Tetrahydrofuran	0.5
108-88-3	Toluene	0.5
9999-9999-038	TPH ref. to Gasoline (MW=100)	50.0
156-60-5	trans-1,2-Dichloroethene	0.5
10061-02-6	trans-1,3-Dichloropropene	0.5
79-01-6	Trichloroethene	0.5
108-05-4	Vinyl Acetate	2.0
593-60-2	Vinyl Bromide	2.0
75-01-4	Vinyl Chloride	0.5

	Surrogate	Method Limits
17060-07-0	1,2-Dichloroethane-d4	70-130
460-00-4	4-Bromofluorobenzene	70-130
2037-26-5	Toluene-d8	70-130

Eurofins Air Toxics	Data Review Checklist			Release Date: 10/22/19
Workorder # 2107260A	Form F1.27	Revision #17	Revision Date: 10/22/19	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: MSD3 7/25/21 UD	S2: MSDP 7/25/21 UD	S3:	S4:
✓	✓			■	Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
✓	✓			■	Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
✓	✓			■	Manual Integrations included and approved				
NA	NA			✓	Chain of Custody verified for special comments/notes and analyses requested (add comments below)				
✓	✓			■	Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				
✓	✓			■	Verified standard expiration dates				

Profile, analyses, reporting, special notes and unusual circumstances: S1: QC-last ICAL, ϕ out daily. UB-07 S2: QC-Daily UB-079. Naph rounds in.

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
				✓	Initials/Date	A1: UD 07/25/21	A2: UD 7/26/21	A3:	A4:
✓	✓			NA	IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, Canister #s Verified and dilution ranges are met per SOP (ex. Over-ranged/overdiluted)				
NA	NA				a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
NA	NA			NA	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓	✓			■	12/24 Hr clock time & Hold Time met for all samples				
✓	✓			✓	Re-analysis of sample(s) has been evaluated for comparability and/or sample(s) has/have been checked for trends (Inf/Eff), field dups/trip blanks, samples following bad loads on auto samplers have been verified (system blks, confirmation runs)				
✓	✓			✓	All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes: A1: 01A-07A, 13A full load. A2: 14A-24A-Full loads. 03A/04A duped, 15A/16A duped. 21A/22A duped, 23A/24A duped.

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/ Date	D1: UD 7/29/21	D2:	D3:	D4:
NA					■	CAR # (if applicable)				
✓					■	Spectra Verified *(documentation of spectral defense included if applicable)*				
NA					■	TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
✓					■	TPH/NMOC calculations complete and included in folder				

Special notes:

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: UD 7/29/21	3rd Tier: *(needed only for DOD or per client request)*	
NA		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
✓		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
✓		Appropriate data qualifier flags are applied		
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable

Electronic Comprehensive Validation Package (eCVP)

Vera Belitsky Vera Belitsky 07-28-2021

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WORK ORDER #: 2107282

Work Order Summary

CLIENT:	Mr. Robert Kohlhardt AECOM 2020 L Street, Suite 400 Sacramento, CA 95811	**BILL TO:**	Mr. Jerry Montgomery SWPPQueen 7202 Gloria Drive #25 Sacramento, CA 95831
PHONE:	916-679-2000	**P.O. #**	
FAX:	916-679-2900	**PROJECT #**	60632793.6 SMUD 59th St.
DATE RECEIVED:	07/13/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/27/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-VW16B-02	TO-15	7.8 "Hg	10 psi
02A	SG-VW17A-02	TO-15	6.3 "Hg	9.9 psi
03A	SG-VW17B-03	TO-15	7.1 "Hg	10 psi
04A	SG-VW18B-02	TO-15	7.1 "Hg	9.8 psi
05A	SG-VW19A-02	TO-15	5.1 "Hg	9.9 psi
06A	SG-VW19B-02	TO-15	7.8 "Hg	10.1 psi
07A	SG-VW52A-02	TO-15	7.1 "Hg	9.7 psi
08A	SG-VW52B-02	TO-15	5.9 "Hg	9.6 psi
09A	SG-VW53A-03	TO-15	7.1 "Hg	9.9 psi
10A	SG-VW53B-02	TO-15	5.9 "Hg	10 psi
11A	SG-VW25A-02	TO-15	9.4 "Hg	10 psi
12A	SG-VW25B-02	TO-15	9 "Hg	9.9 psi
13A	Lab Blank	TO-15	NA	NA
14A	CCV	TO-15	NA	NA
15A	LCS	TO-15	NA	NA
15AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/27/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
AECOM
Workorder# 2107282

Twelve 1 Liter Summa Canister samples were received on July 13, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

The US EPA released a document on December 17, 2010 outlining possible data quality concerns for Acrolein measured by EPA Method TO-15. As a result, Acrolein is reported as estimated. Please refer to EPA document tilted "Data Quality Evaluation Guidelines for Ambient Air Acrolein Measurements December 17, 2010" located on-line at www.epa.gov/ttn/amtic/airtox.html for complete details.

Dilution was performed on sample SG-VW53B-02 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.
M - Reported value may be biased due to apparent matrix interferences.
CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified

b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1								
Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
SG-VW16B-02	2107282-01A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW17A-02	2107282-02A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW17B-03	2107282-03A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW18B-02	2107282-04A	07/12/2021	07/13/2021	NA	13	07/25/2021	NA	GOOD
SG-VW19A-02	2107282-05A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW19B-02	2107282-06A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW52A-02	2107282-07A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW52B-02	2107282-08A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW53A-03	2107282-09A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW53B-02	2107282-10A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW25A-02	2107282-11A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
SG-VW25B-02	2107282-12A	07/13/2021	07/13/2021	NA	13	07/26/2021	NA	GOOD
Lab Blank	2107282-13A	NA	NA	NA	NA	07/25/2021	NA	GOOD
CCV	2107282-14A	NA	NA	NA	NA	07/25/2021	NA	GOOD
LCS	2107282-15A	NA	NA	NA	NA	07/25/2021	NA	GOOD
LCSD	2107282-15AA	NA	NA	NA	NA	07/25/2021	NA	GOOD

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW16B-02

Lab ID#: 2107282-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.5	4.7	11	12
Acetone	11	14	27	34
Chloroform	1.1	22	5.5	110
Ethanol	11	33	21	62
Tetrachloroethene	1.1	9.2	7.7	62
Toluene	1.1	6.7	4.3	25
Trichloroethene	1.1	1.6	6.1	8.3

Client Sample ID: SG-VW17A-02

Lab ID#: 2107282-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.2	17	11	45
Acetone	11	12	25	28
Chloroform	1.1	46	5.2	220
Tetrachloroethene	1.1	25	7.2	170
Toluene	1.1	1.2	4.0	4.7

Client Sample ID: SG-VW17B-03

Lab ID#: 2107282-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.4	61	12	170
Acetone	11	14	26	33
Carbon Tetrachloride	1.1	1.4	6.9	9.1
Chloroform	1.1	120	5.4	570
Tetrachloroethene	1.1	30	7.5	200

Client Sample ID: SG-VW18B-02

Lab ID#: 2107282-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW18B-02

Lab ID#: 2107282-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.4	7.4	11	18
Chloroform	1.1	25	5.3	120
Freon 12	1.1	4.4	5.4	22
Tetrachloroethene	1.1	51	7.4	350

Client Sample ID: SG-VW19A-02

Lab ID#: 2107282-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.0	5.7	4.9	28
Freon 11	1.0	1.6	5.7	9.2
Freon 12	1.0	11	5.0	54
Tetrachloroethene	1.0	57	6.8	380

Client Sample ID: SG-VW19B-02

Lab ID#: 2107282-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.6	440	12	1200
Acetone	11	13	27	31
Chloroform	1.1	12	5.6	59
Freon 11	1.1	2.5	6.4	14
Freon 12	1.1	14	5.6	67
Tetrachloroethene	1.1	38	7.7	260

Client Sample ID: SG-VW52A-02

Lab ID#: 2107282-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	11	22	26	53
Chloroform	1.1	3.7	5.3	18
Freon 11	1.1	1.4	6.1	7.8

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW52A-02

Lab ID#: 2107282-07A

Freon 12	1.1	9.0	5.4	45
Tetrachloroethene	1.1	35	7.4	240

Client Sample ID: SG-VW52B-02

Lab ID#: 2107282-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	10	13	24	31
Chloroform	1.0	6.7	5.0	33
Freon 11	1.0	1.6	5.8	8.8
Freon 12	1.0	11	5.1	56
Tetrachloroethene	1.0	25	7.0	170

Client Sample ID: SG-VW53A-03

Lab ID#: 2107282-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Butanone (Methyl Ethyl Ketone)	4.4	8.9	13	26
Acetone	11	68	26	160
Benzene	1.1	2.3	3.5	7.4
Freon 12	1.1	4.9	5.4	24
tert-Butyl alcohol	4.4	8.5	13	26
Tetrachloroethene	1.1	13	7.4	91

Client Sample ID: SG-VW53B-02

Lab ID#: 2107282-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	84	7900	220	21000

Client Sample ID: SG-VW25A-02

Lab ID#: 2107282-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-VW25A-02

Lab ID#: 2107282-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2,4-Trimethylbenzene	1.2	2.9	6.0	14
4-Ethyltoluene	1.2	3.7	6.0	18
Acetone	12	14	29	34
Ethyl Benzene	1.2	3.5	5.3	15
Freon 12	1.2	1.8	6.0	8.8
m,p-Xylene	1.2	13	5.3	56
o-Xylene	1.2	4.4	5.3	19
Tetrachloroethene	1.2	19	8.3	130
Toluene	1.2	13	4.6	49

Client Sample ID: SG-VW25B-02

Lab ID#: 2107282-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	4.1	5.9	20
Tetrachloroethene	1.2	24	8.1	160

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Client Sample ID: SG-VW16B-02

Lab ID#: 2107282-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072508**	**Date of Collection: 7/12/21 1:11:00 PM**	
Dil. Factor:	**2.27**	**Date of Analysis: 7/25/21 03:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.5	Not Detected	31	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
1,1-Difluoroethane	4.5	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.5	Not Detected	27	Not Detected
1,2,4-Trichlorobenzene	4.5	Not Detected	34	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2-Dibromo-3-chloropropane	4.5	Not Detected	44	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.5	Not Detected	13	Not Detected
2-Hexanone	4.5	Not Detected	18	Not Detected
2-Propanol	4.5	4.7	11	12
3-Chloropropene	4.5	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.6	Not Detected
Acetone	11	14	27	34
Acrolein	4.5	Not Detected	10	Not Detected
Acrylonitrile	4.5	Not Detected	9.8	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Carbon Disulfide	4.5	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.1	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Chloroethane	4.5	Not Detected	12	Not Detected
Chloroform	1.1	22	5.5	110
Chloromethane	11	Not Detected	23	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected

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Client Sample ID: SG-VW16B-02

Lab ID#: 2107282-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072508**	**Date of Collection: 7/12/21 1:11:00 PM**	
Dil. Factor:	**2.27**	**Date of Analysis: 7/25/21 03:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Dibromochloromethane	1.1	Not Detected	9.7	Not Detected
Dibromomethane	4.5	Not Detected	32	Not Detected
Ethanol	11	33	21	62
Ethyl Acetate	4.5	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
Ethyl-tert-butyl ether	4.5	Not Detected	19	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Freon 12	1.1	Not Detected	5.6	Not Detected
Freon 113	1.1	Not Detected	8.7	Not Detected
Freon 114	1.1	Not Detected	7.9	Not Detected
Freon 134a	4.5	Not Detected	19	Not Detected
Heptane	1.1	Not Detected	4.6	Not Detected
Hexachlorobutadiene	4.5	Not Detected	48	Not Detected
Hexachloroethane	4.5	Not Detected	44	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Isopropyl ether	4.5	Not Detected	19	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	4.5	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
Propylene	4.5	Not Detected	7.8	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
tert-Amyl methyl ether	4.5	Not Detected	19	Not Detected
tert-Butyl alcohol	4.5	Not Detected	14	Not Detected
Tetrachloroethene	1.1	9.2	7.7	62
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Toluene	1.1	6.7	4.3	25
TPH ref. to Gasoline (MW=100)	110	Not Detected	460	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
Trichloroethene	1.1	1.6	6.1	8.3
Vinyl Acetate	4.5	Not Detected	16	Not Detected
Vinyl Bromide	4.5	Not Detected	20	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-VW16B-02

Lab ID#: 2107282-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072508**	**Date of Collection: 7/12/21 1:11:00 PM**	
Dil. Factor:	**2.27**	**Date of Analysis: 7/25/21 03:27 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072508.d
Lab Smp Id: 2107282-01A
Inj Date : 25-JUL-2021 15:27
Operator : LD Inst ID: msdp.i
Smp Info : 200ml N5655
Misc Info : 7.8 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 1
Dil Factor: 2.27000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	153307	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	119543				48.23- 108.23	77.98
5.785	5.778 (1.000)	49	337369				150.57- 210.57	220.06
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	581653	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	83198				0.00- 45.71	14.30
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	595939	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	315576				23.78- 83.78	52.95
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	228758	27.0380	27.038		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	108904				27.21- 87.21	47.61
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.898	7.891 (1.185)	98	638828	25.2924	25.292		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67027				0.00- 40.44	10.49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	420364			34.95- 94.95	65.80
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	376741	24.6187	24.619	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	463175			95.92- 155.92	122.94
10.921	10.921 (1.154)	176	363124			66.89- 126.89	96.39
39 Ethanol					CAS #: 64-17-5		
3.257	3.242 (0.563)	46	21984	14.4600	32.824	80.00- 120.00	100.00
3.264	3.285 (0.564)	45	60202			511.19- 571.19	273.84
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	25605	6.37081	14.462	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	96827			302.95- 362.95	378.15
52 2-Propanol					CAS #: 67-63-0		
3.909	3.887 (0.676)	45	33452	2.06516	4.688	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	7938			0.00- 47.19	23.73
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	128149	9.60716	21.808	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	83673			34.70- 94.70	65.29
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	6374	0.68436	1.553	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	6399			76.29- 136.29	100.39
6.867	6.867 (1.030)	97	3850			33.63- 93.63	60.41
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	78468	2.96310	6.726	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	44641			28.38- 88.38	56.89
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	54930	4.04434	9.181	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	42792			47.84- 107.84	77.90
8.471	8.464 (0.895)	131	43901			45.29- 105.29	79.92

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072508.d
Lab Smp Id: 2107282-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.8 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	153307	-0.84
108 1,4-Difluorobenze	573421	344053	802789	581653	1.44
153 Chlorobenzene-d5	566079	339647	792511	595939	5.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 09:08

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-01A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.8 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	27.038	108.15	70-130
$ 134 Toluene-d8	25.000	25.292	101.17	70-130
$ 170 4-Bromofluorobenz	25.000	24.619	98.47	70-130

Data File: /chem/msdp.i/25JUL21.b/p072508.d

Date : 25-JUL-2021 15:27

Client ID:

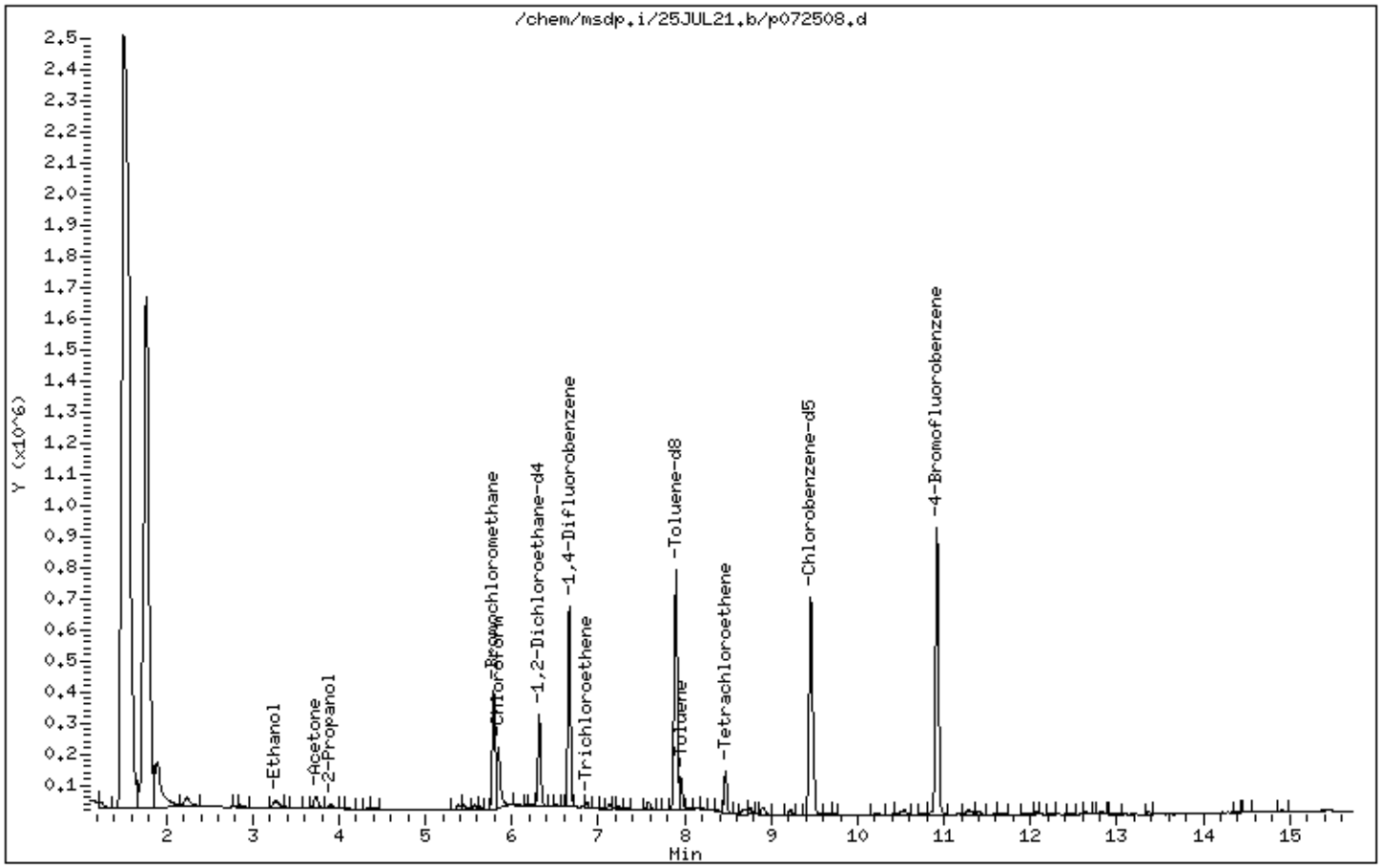
Instrument: msdp.i

Sample Info: 200ml N5655

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072508.d

Date : 25-JUL-2021 15:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5655

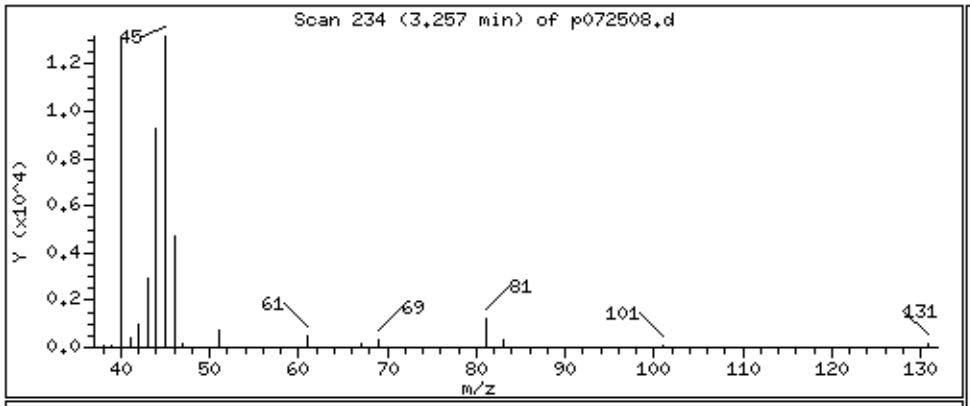
Operator: LD

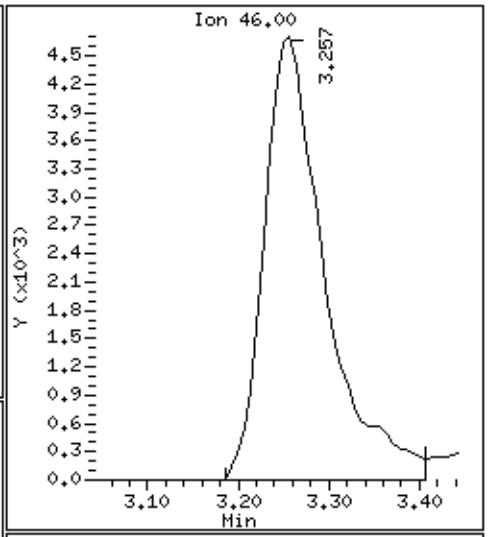
Column phase: RTX-624

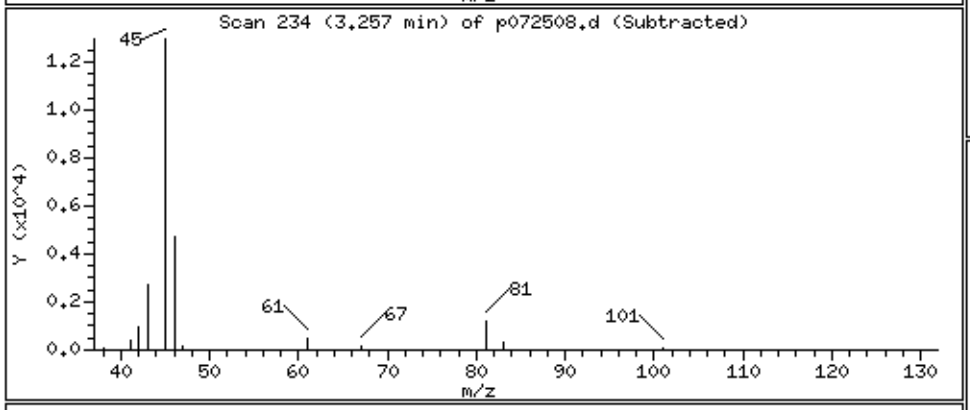
Column diameter: 0.25

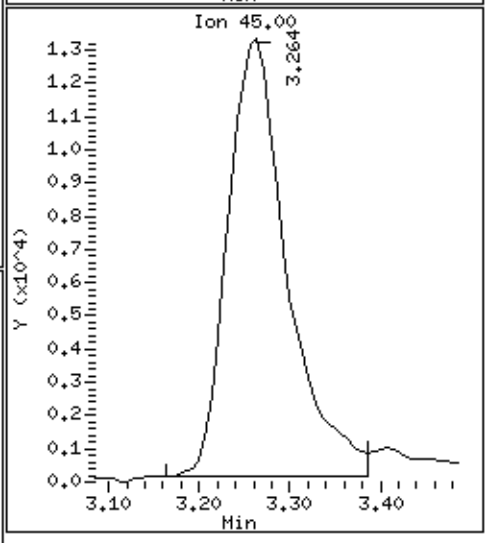
39 Ethanol

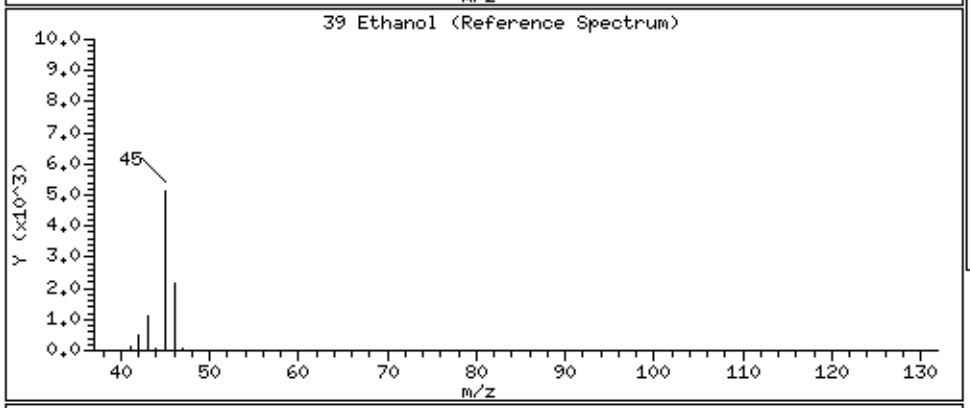
Concentration: 32.824 PPBV

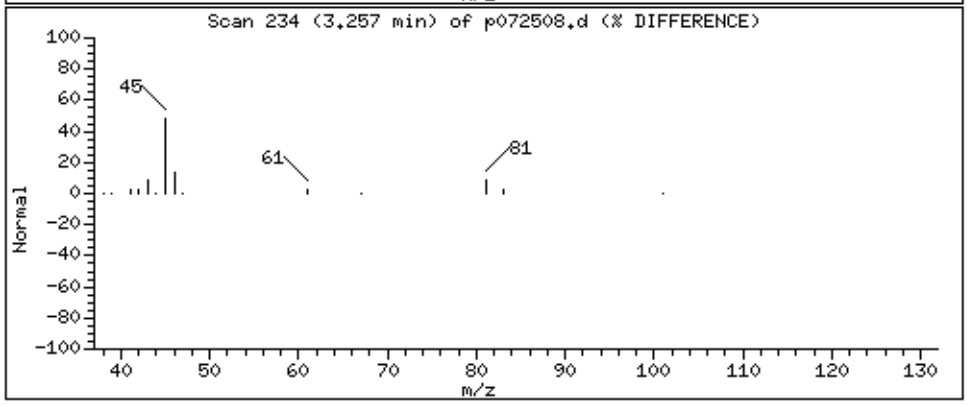












Data File: /chem/msdp.i/25JUL21.b/p072508.d

Date : 25-JUL-2021 15:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5655

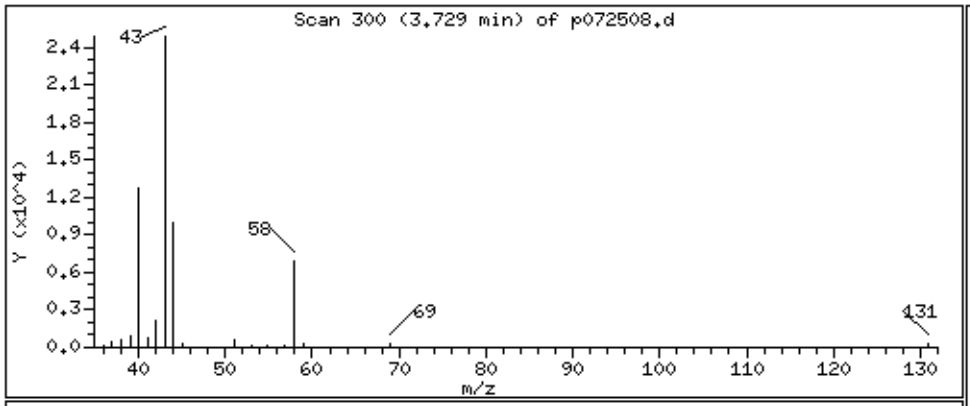
Operator: LD

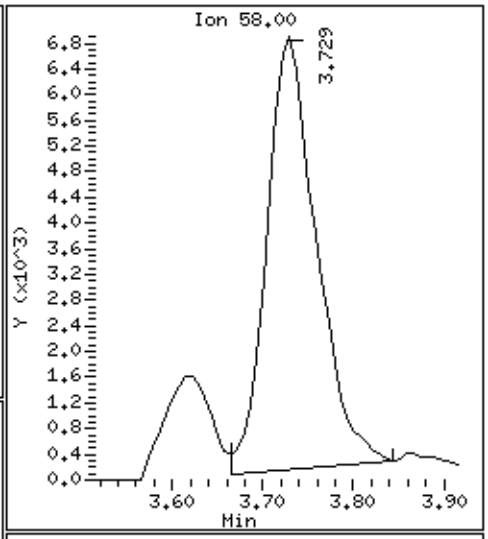
Column phase: RTX-624

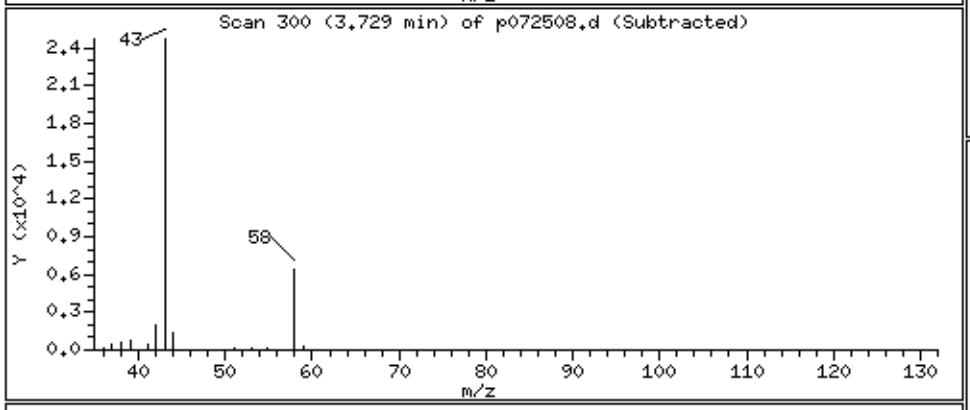
Column diameter: 0.25

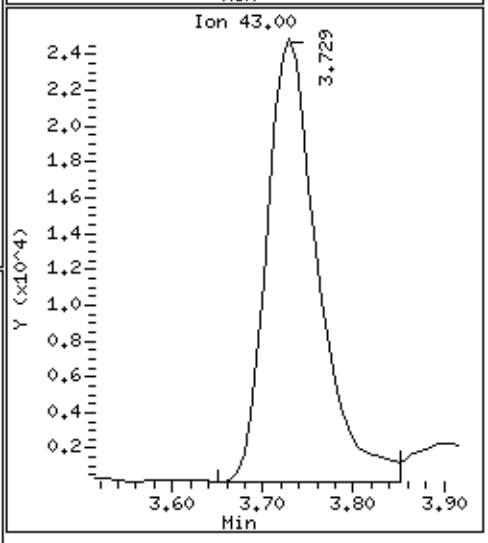
47 Acetone

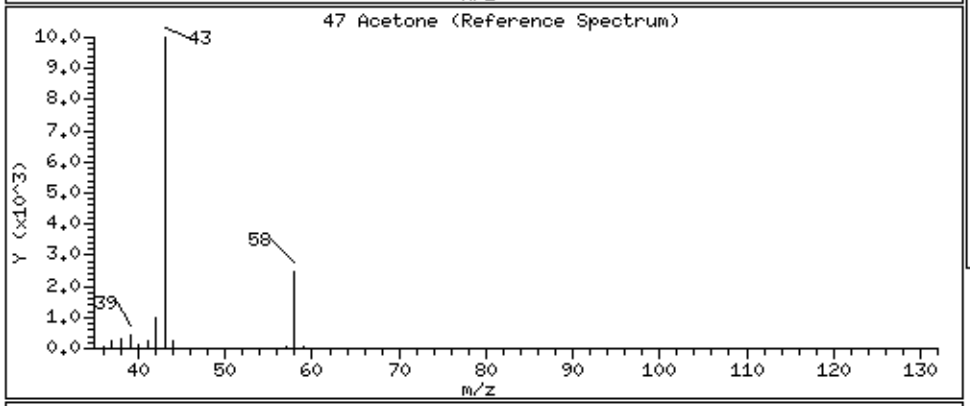
Concentration: 14.462 PPBV

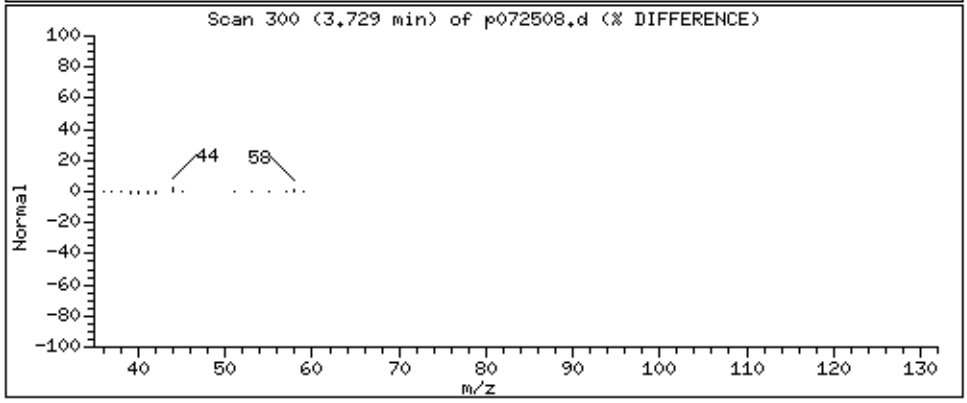












Data File: /chem/msdp.i/25JUL21.b/p072508.d

Date : 25-JUL-2021 15:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5655

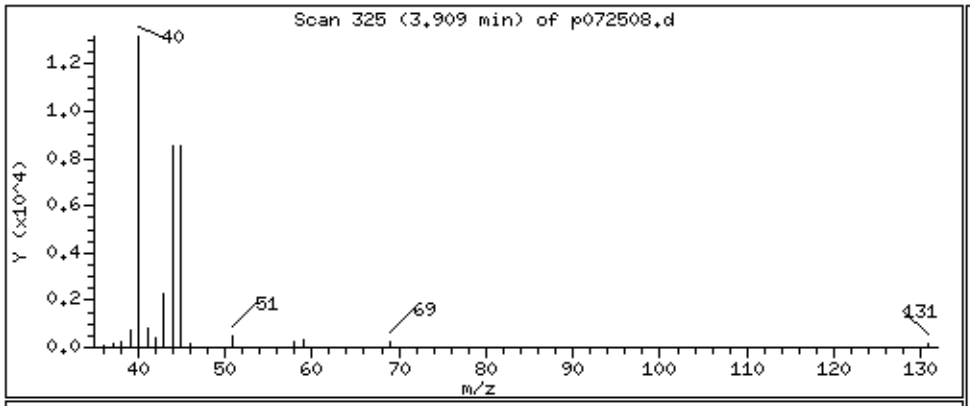
Operator: LD

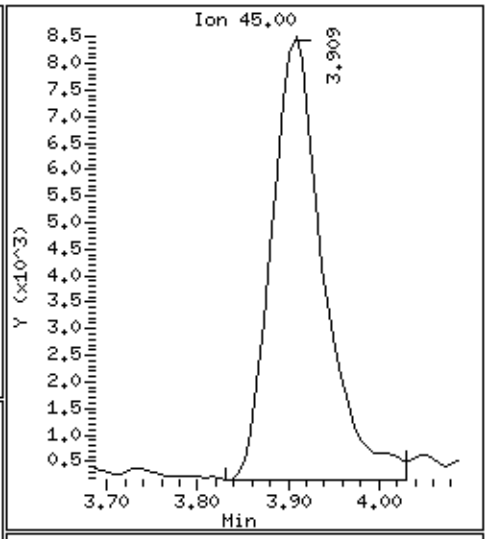
Column phase: RTX-624

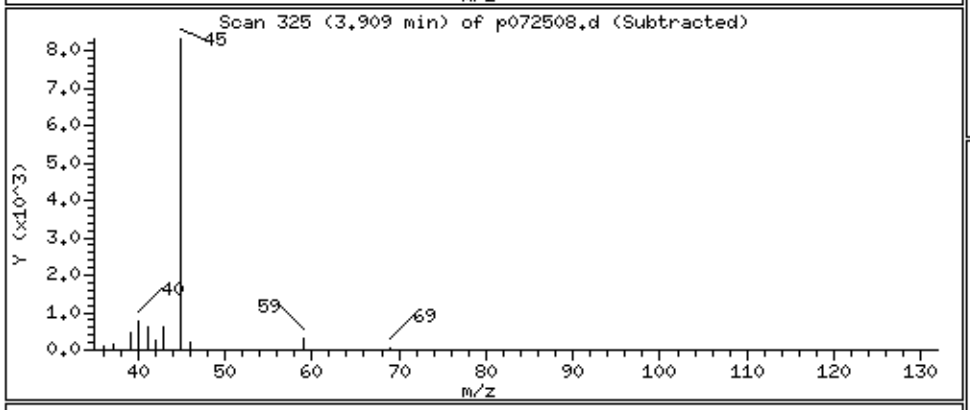
Column diameter: 0.25

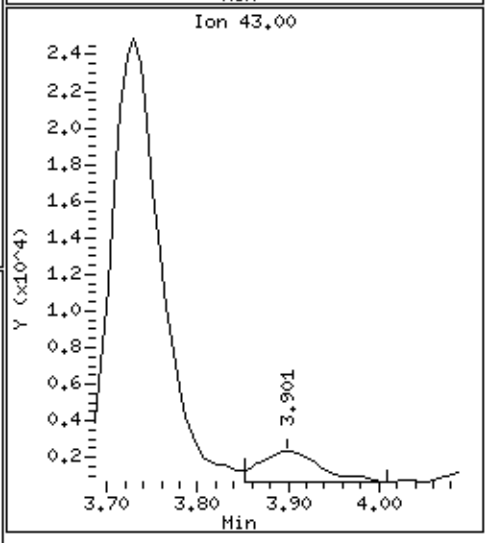
52 2-Propanol

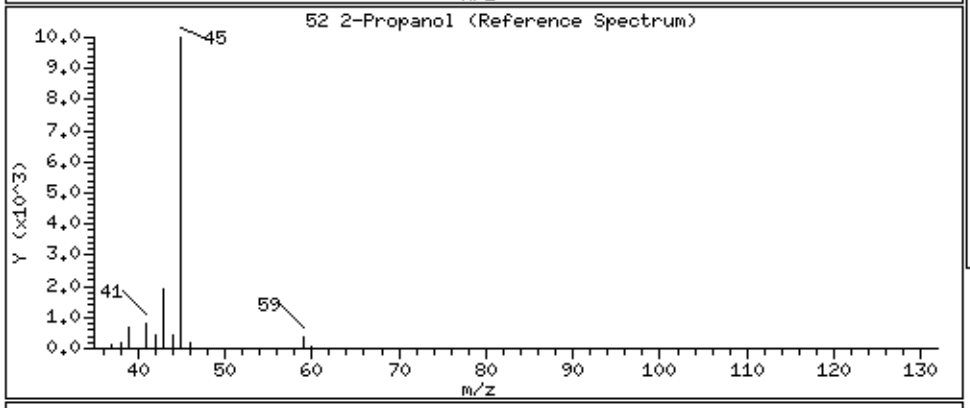
Concentration: 4.688 PPBV

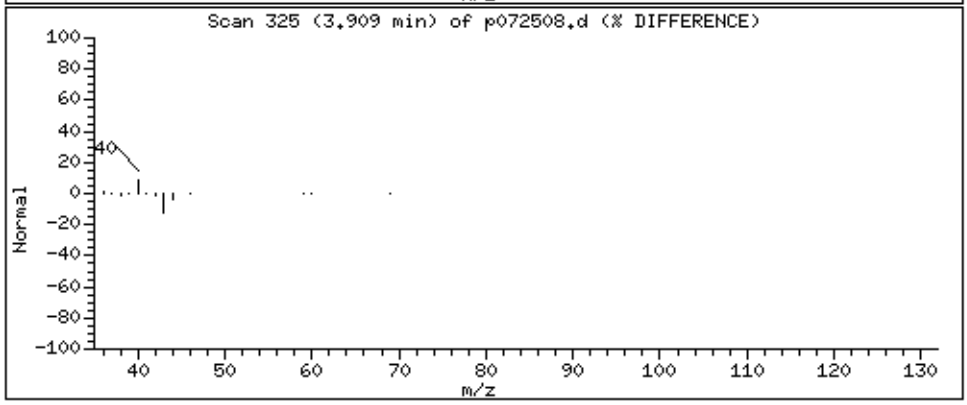












Data File: /chem/msdp.i/25JUL21.b/p072508.d

Date : 25-JUL-2021 15:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5655

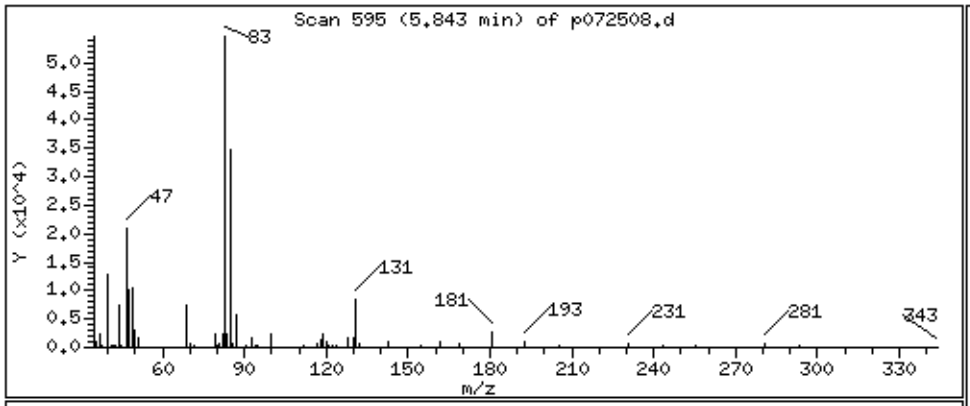
Operator: LD

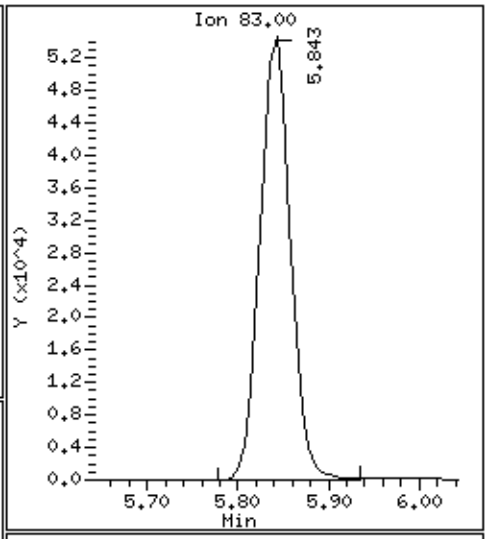
Column phase: RTX-624

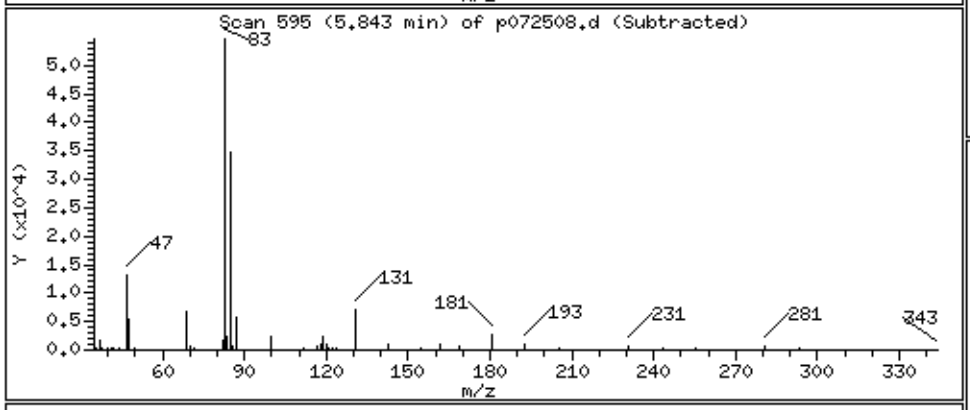
Column diameter: 0.25

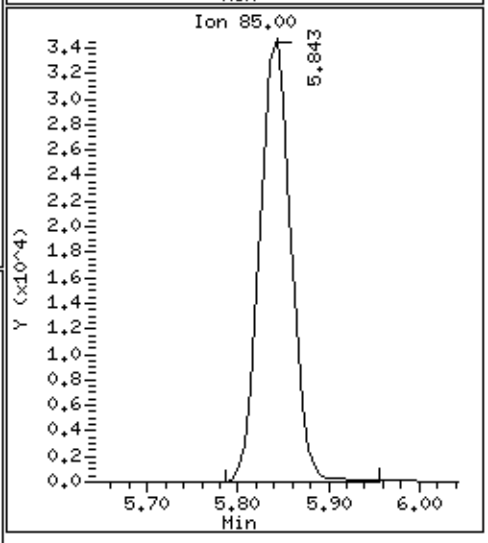
92 Chloroform

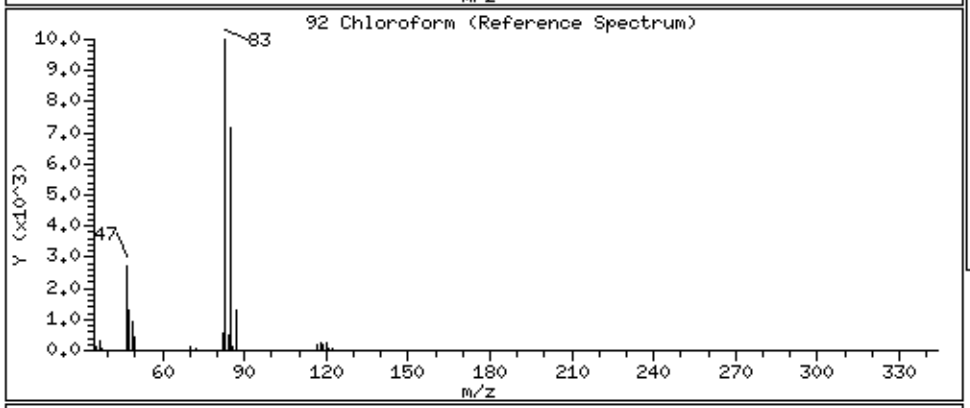
Concentration: 21.808 PPBV

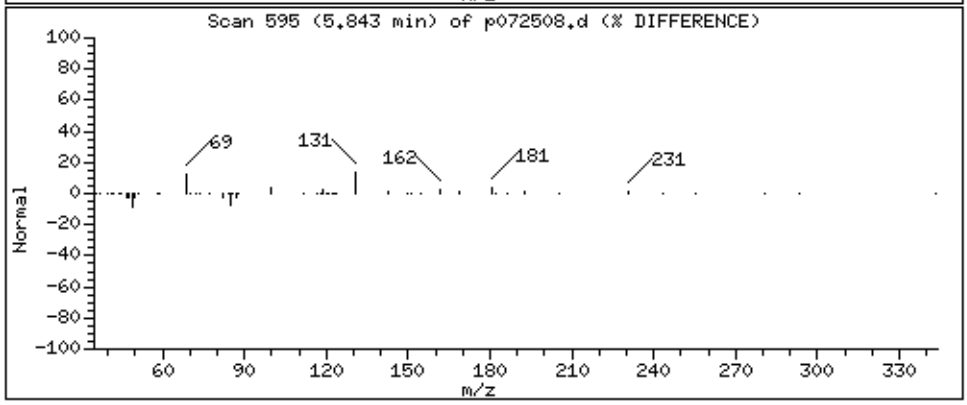












Data File: /chem/msdp.i/25JUL21.b/p072508.d

Date : 25-JUL-2021 15:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5655

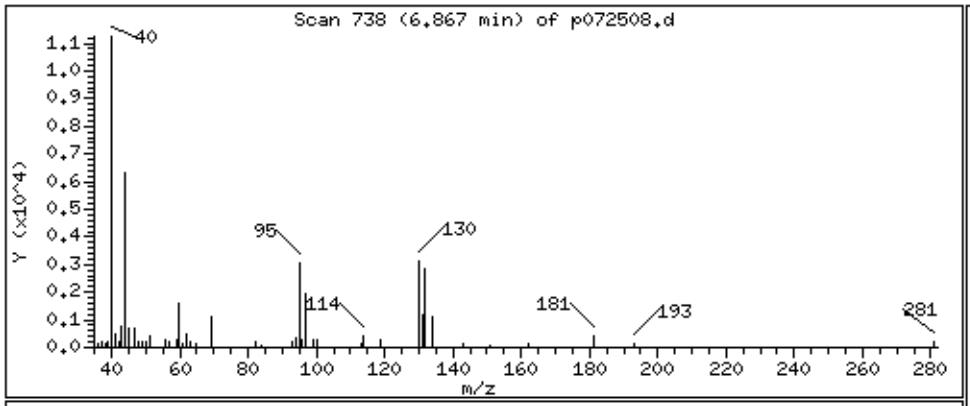
Operator: LD

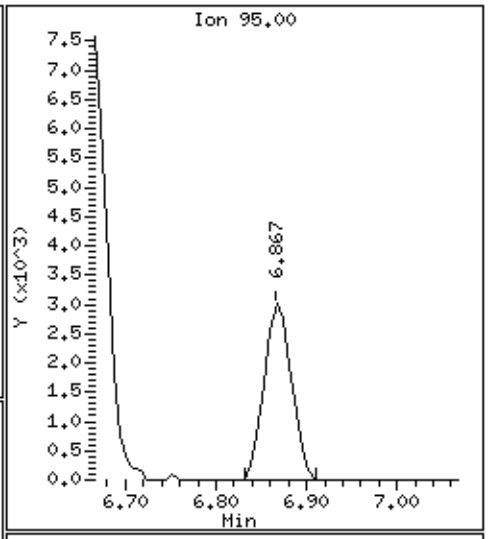
Column phase: RTX-624

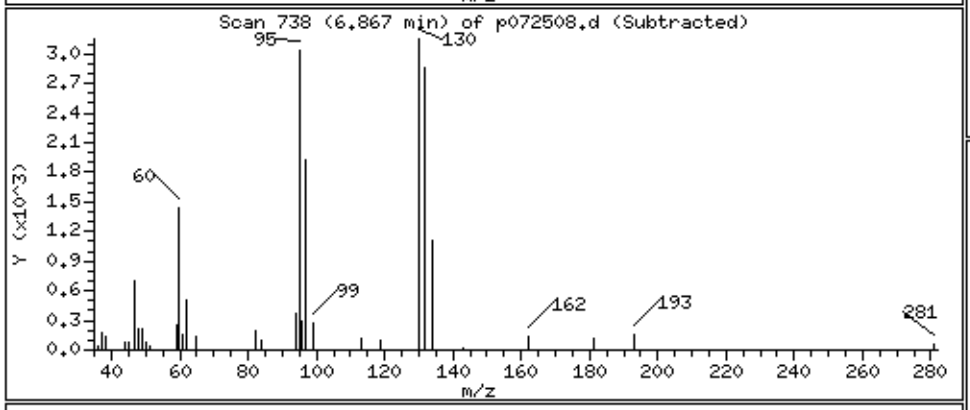
Column diameter: 0.25

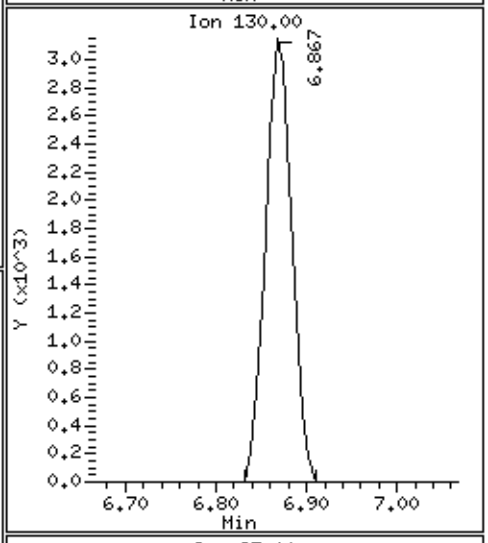
111 Trichloroethene

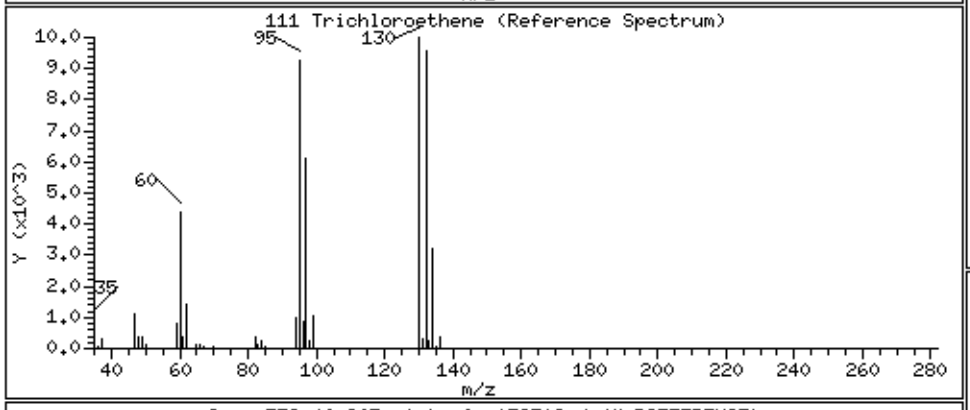
Concentration: 1.553 PPBV

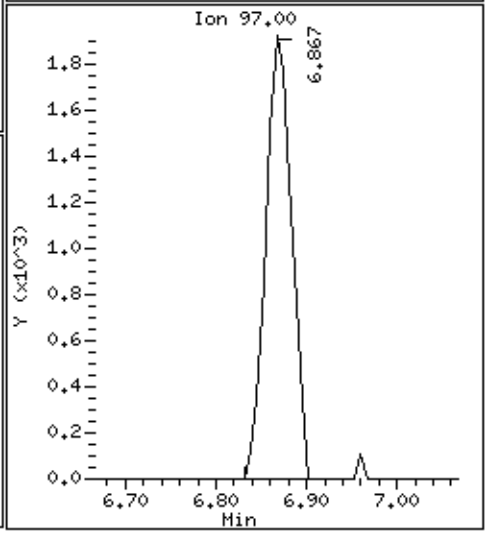


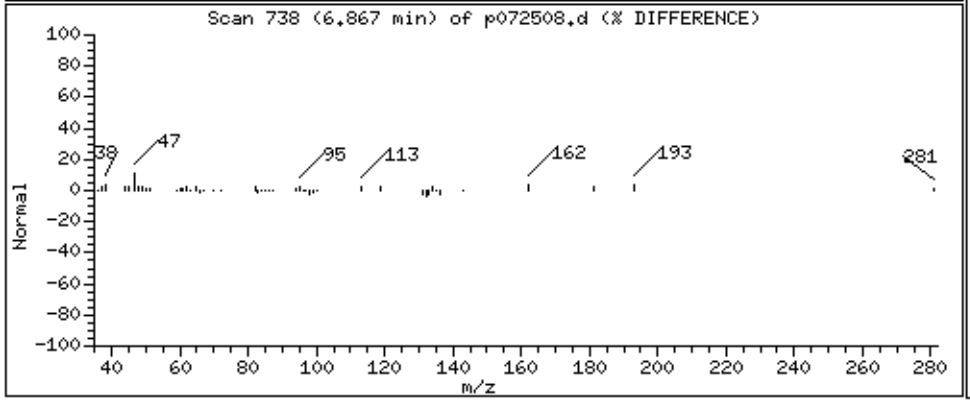












Data File: /chem/msdp.i/25JUL21.b/p072508.d

Date : 25-JUL-2021 15:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5655

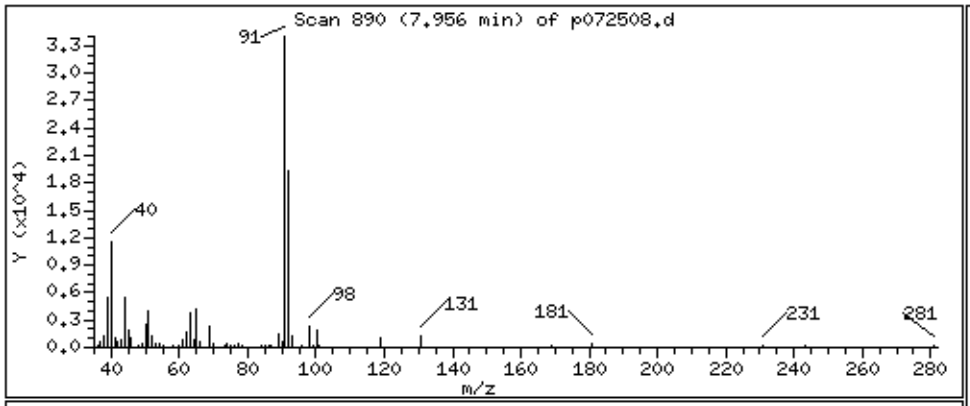
Operator: LD

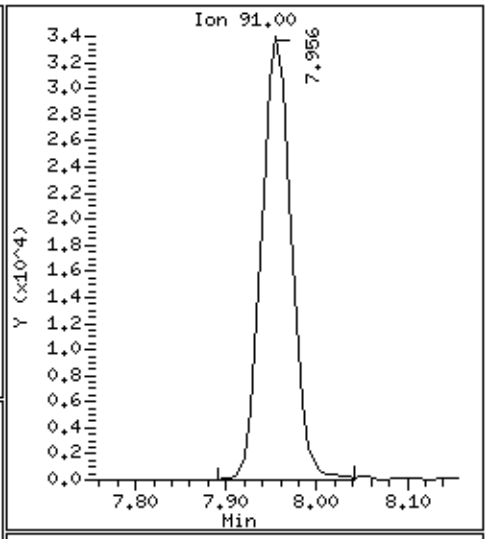
Column phase: RTX-624

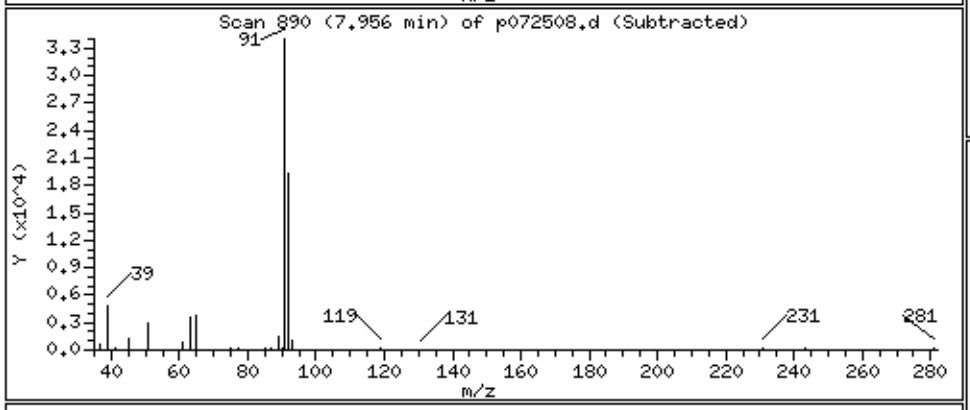
Column diameter: 0.25

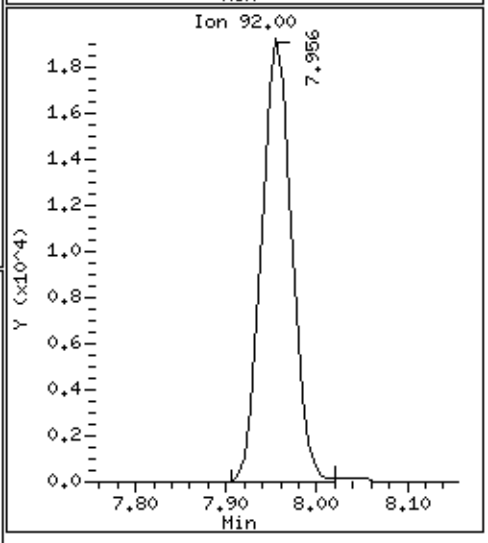
137 Toluene

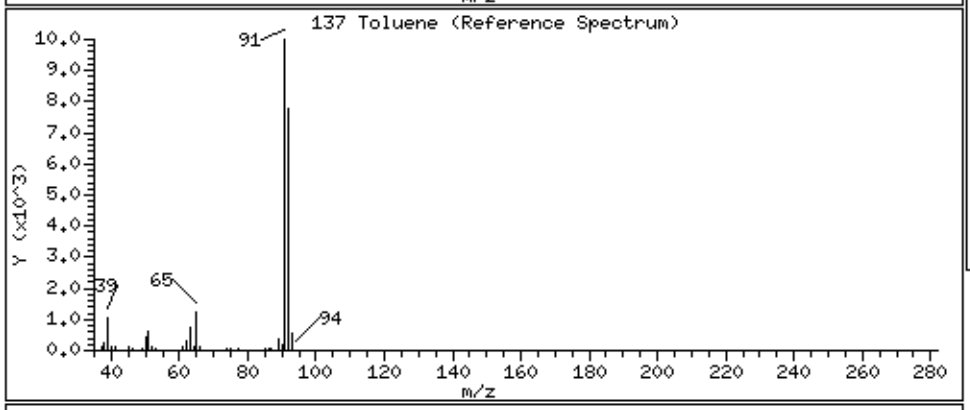
Concentration: 6.726 PPBV

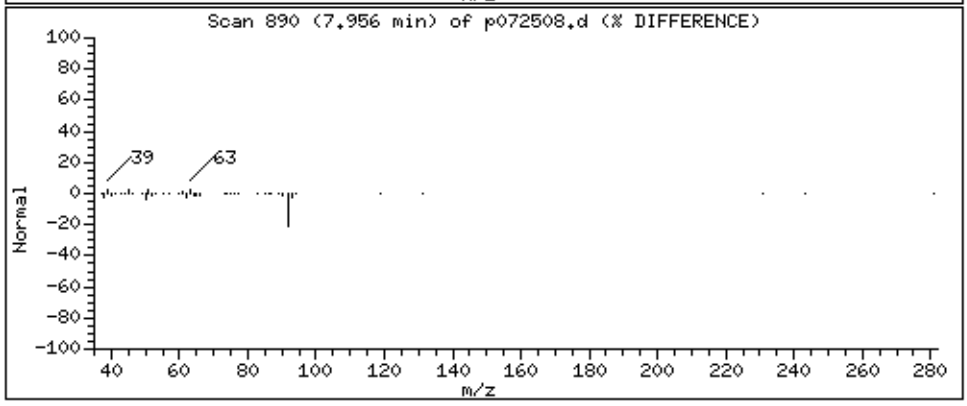












Data File: /chem/msdp.i/25JUL21.b/p072508.d

Page 8

Date : 25-JUL-2021 15:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5655

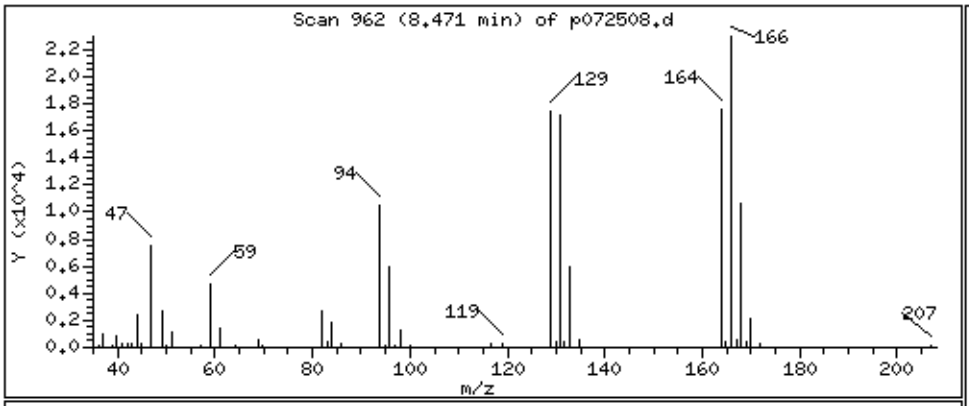
Operator: LD

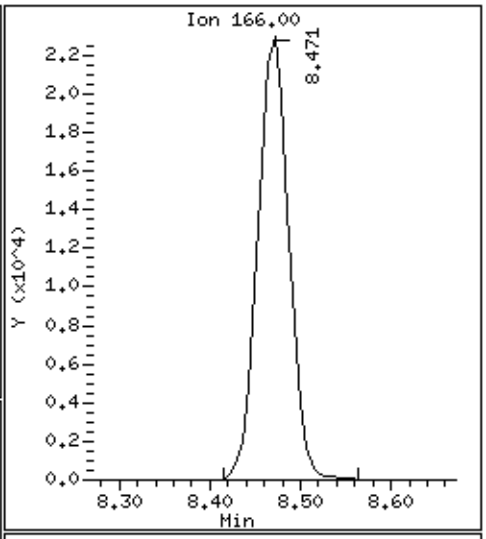
Column phase: RTX-624

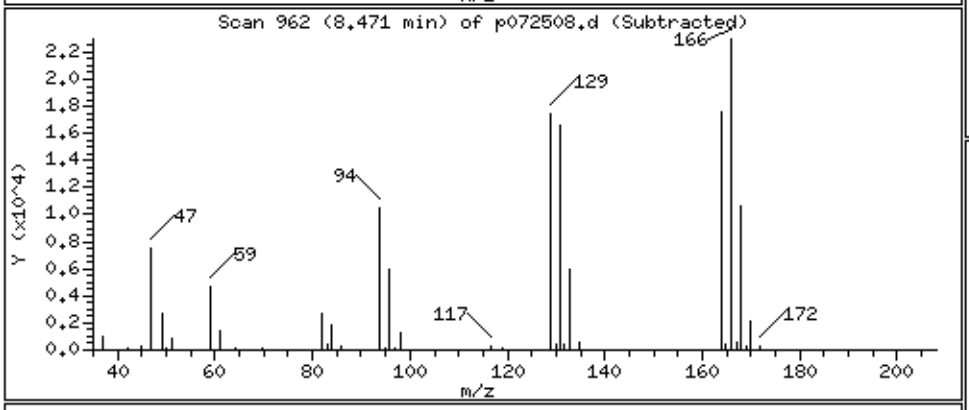
Column diameter: 0.25

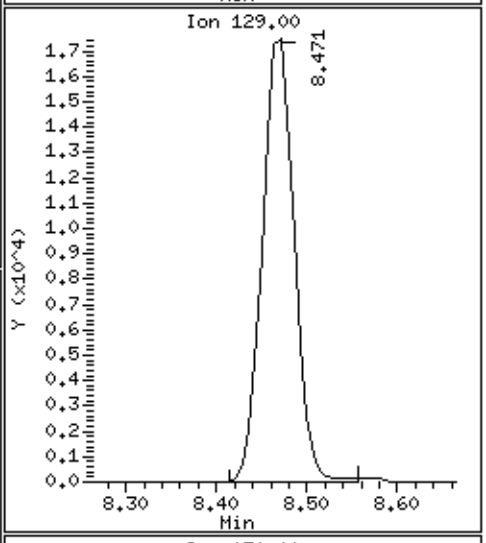
142 Tetrachloroethene

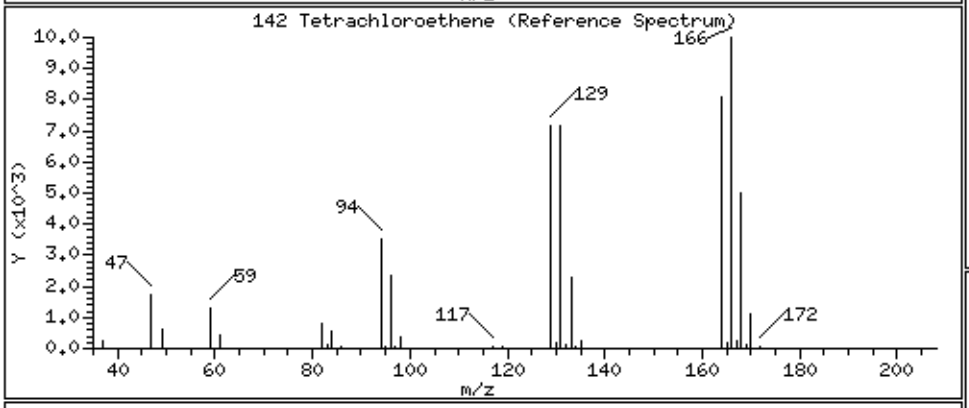
Concentration: 9.181 PPBV

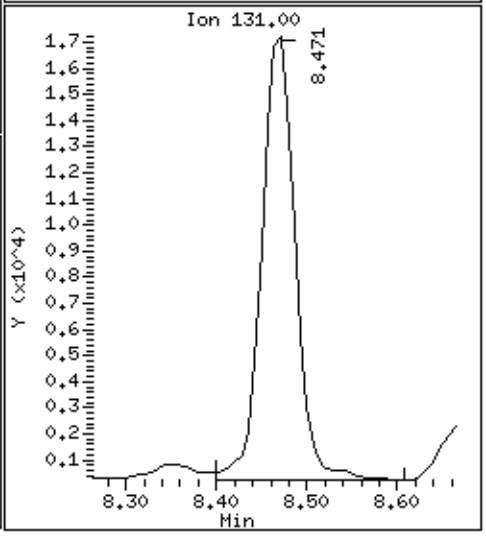


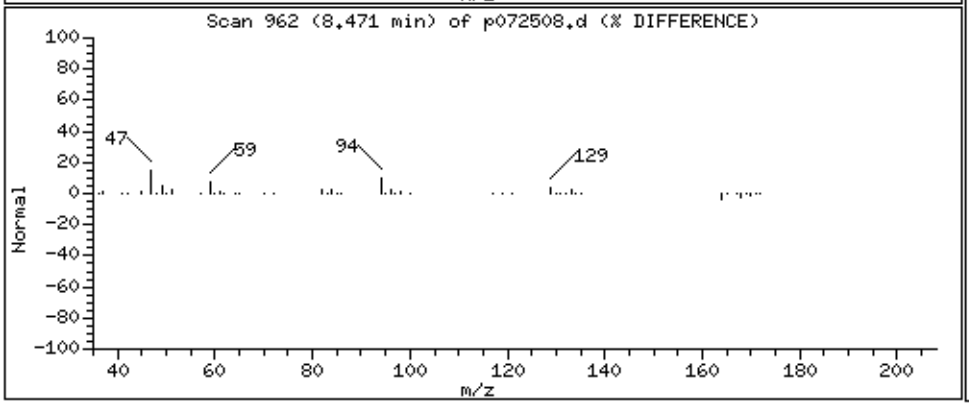












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Client Sample ID: SG-VW17A-02

Lab ID#: 2107282-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072509**	**Date of Collection: 7/12/21 2:07:00 PM**	
Dil. Factor:	**2.12**	**Date of Analysis: 7/25/21 03:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
1,1-Difluoroethane	4.2	17	11	45
1,2,3-Trichloropropane	4.2	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,2-Dibromo-3-chloropropane	4.2	Not Detected	41	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.1	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Butadiene	1.1	Not Detected	2.3	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
2-Hexanone	4.2	Not Detected	17	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.3	Not Detected
Acetone	11	12	25	28
Acrolein	4.2	Not Detected	9.7	Not Detected
Acrylonitrile	4.2	Not Detected	9.2	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
Bromodichloromethane	1.1	Not Detected	7.1	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Chloroform	1.1	46	5.2	220
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected

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Client Sample ID: SG-VW17A-02

Lab ID#: 2107282-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072509**	**Date of Collection: 7/12/21 2:07:00 PM**	
Dil. Factor:	**2.12**	**Date of Analysis: 7/25/21 03:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
Cyclohexane	1.1	Not Detected	3.6	Not Detected
Dibromochloromethane	1.1	Not Detected	9.0	Not Detected
Dibromomethane	4.2	Not Detected	30	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.2	Not Detected	15	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Freon 12	1.1	Not Detected	5.2	Not Detected
Freon 113	1.1	Not Detected	8.1	Not Detected
Freon 114	1.1	Not Detected	7.4	Not Detected
Freon 134a	4.2	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.3	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Hexane	1.1	Not Detected	3.7	Not Detected
Iodomethane	11	Not Detected	62	Not Detected
Isopropyl ether	4.2	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Propylbenzene	1.1	Not Detected	5.2	Not Detected
Propylene	4.2	Not Detected	7.3	Not Detected
Styrene	1.1	Not Detected	4.5	Not Detected
tert-Amyl methyl ether	4.2	Not Detected	18	Not Detected
tert-Butyl alcohol	4.2	Not Detected	13	Not Detected
Tetrachloroethene	1.1	25	7.2	170
Tetrahydrofuran	1.1	Not Detected	3.1	Not Detected
Toluene	1.1	1.2	4.0	4.7
TPH ref. to Gasoline (MW=100)	110	Not Detected	430	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Vinyl Bromide	4.2	Not Detected	18	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW17A-02

Lab ID#: 2107282-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072509**	**Date of Collection: 7/12/21 2:07:00 PM**	
Dil. Factor:	**2.12**	**Date of Analysis: 7/25/21 03:56 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072509.d
Lab Smp Id: 2107282-02A
Inj Date : 25-JUL-2021 15:56
Operator : LD Inst ID: msdp.i
Smp Info : 200ml N3465
Misc Info : 6.3 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
Dil Factor: 2.12000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	150533	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	118594				48.23- 108.23	78.78
5.785	5.778 (1.000)	49	354275				150.57- 210.57	235.35
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	566048	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	83095				0.00- 45.71	14.68
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	580971	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	304588				23.78- 83.78	52.43
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	219509	26.4230	26.423		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	108129				27.21- 87.21	49.26
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.898	7.891 (1.185)	98	624330	25.3999	25.400		80.00- 120.00	100.00
7.898	7.891 (1.185)	70	64904				0.00- 40.44	10.40

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	402583			34.95- 94.95	64.48
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	372326	24.9570	24.957	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	450707			95.92- 155.92	121.05
10.921	10.921 (1.154)	176	355318			66.89- 126.89	95.43
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.717	1.702 (0.297)	65	27041	7.92501	16.801	80.00- 120.00	100.00
1.773	1.744 (0.306)	51	3092587			597.63- 657.63	11436.34
1.759	1.702 (0.304)	47	73255			33.72- 93.72	270.90
47 Acetone					CAS #: 67-64-1		
3.730	3.715 (0.645)	58	21809	5.52632	11.716	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	75390			302.95- 362.95	345.67
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	284926	21.7542	46.119	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	180052			34.70- 94.70	63.19
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	15113	0.58643	1.243	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	9028			28.38- 88.38	59.74
142 Tetrachloroethene					CAS #: 127-18-4		
8.472	8.471 (0.895)	166	154016	11.6319	24.660	80.00- 120.00	100.00
8.472	8.464 (0.895)	129	118086			47.84- 107.84	76.67
8.472	8.464 (0.895)	131	117556			45.29- 105.29	76.33

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072509.d
Lab Smp Id: 2107282-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	150533	-2.63
108 1,4-Difluorobenze	573421	344053	802789	566048	-1.29
153 Chlorobenzene-d5	566079	339647	792511	580971	2.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 09:16

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-02A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.423	105.69	70-130
$ 134 Toluene-d8	25.000	25.400	101.60	70-130
$ 170 4-Bromofluorobenz	25.000	24.957	99.83	70-130

Data File: /chem/msdp.i/25JUL21.b/p072509.d

Date : 25-JUL-2021 15:56

Client ID:

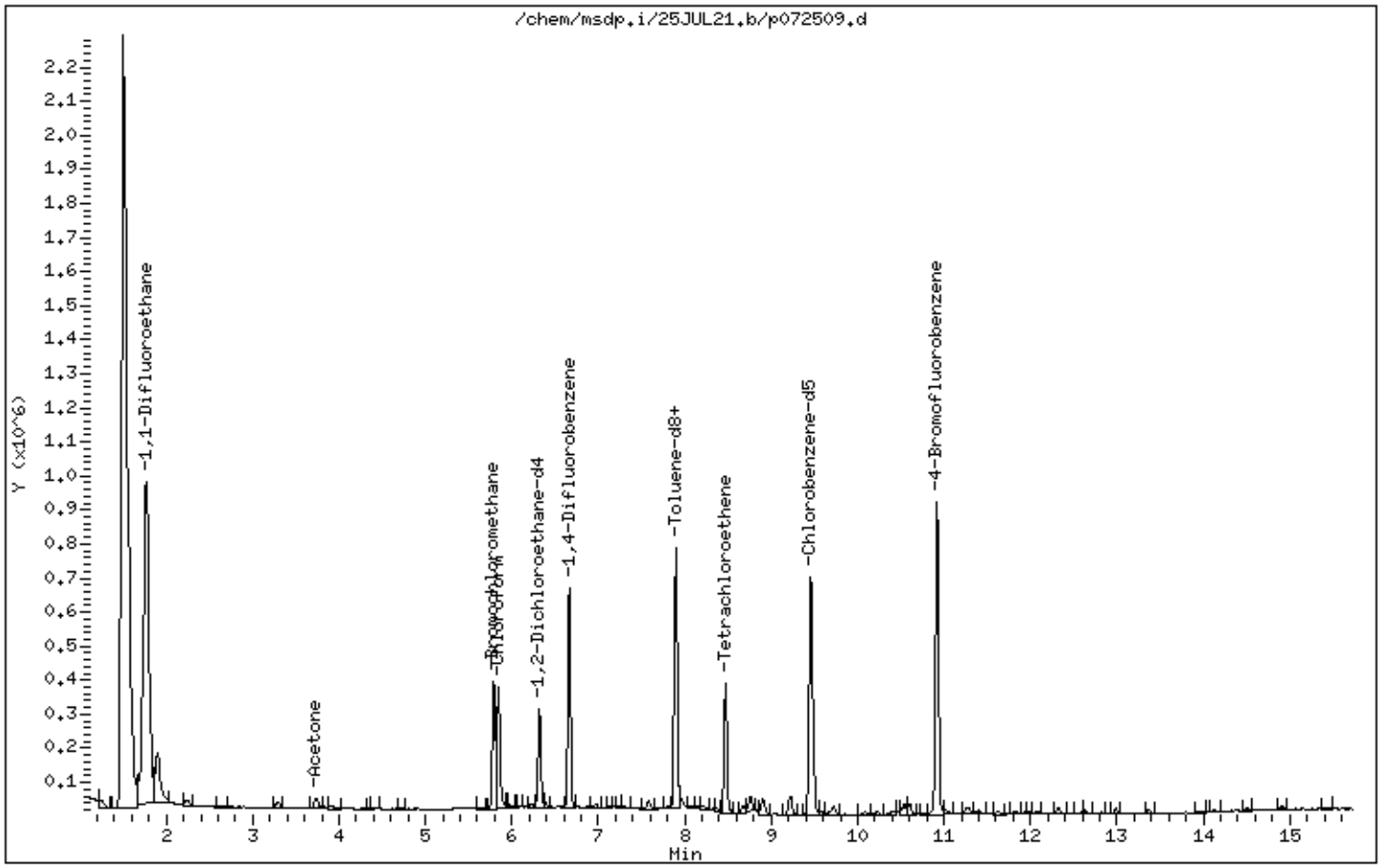
Instrument: msdp.i

Sample Info: 200ml N3465

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072509.d

Date : 25-JUL-2021 15:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3465

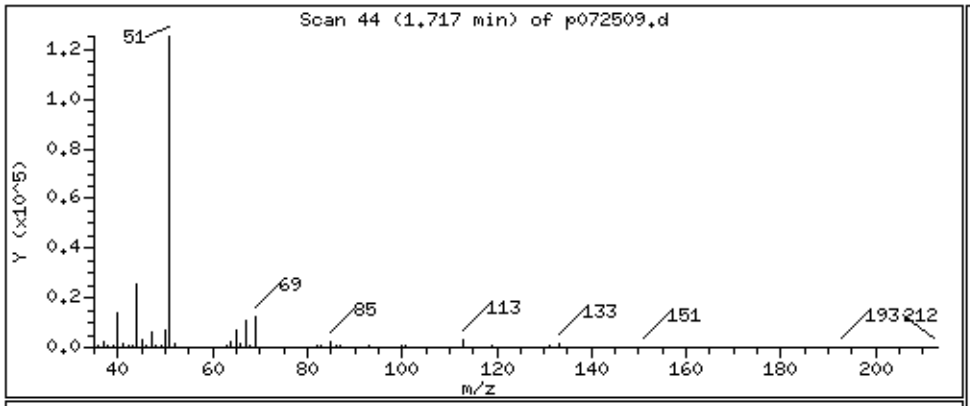
Operator: LD

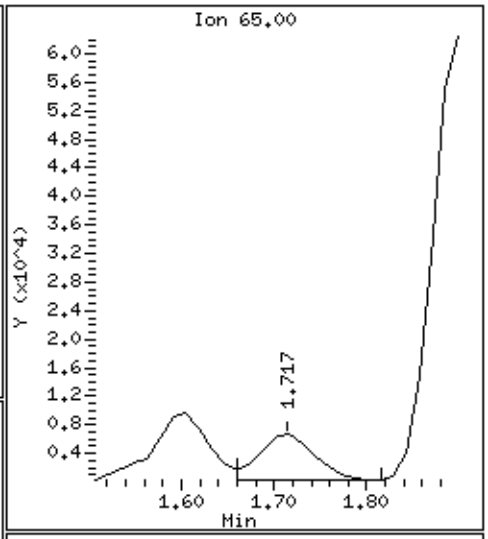
Column phase: RTX-624

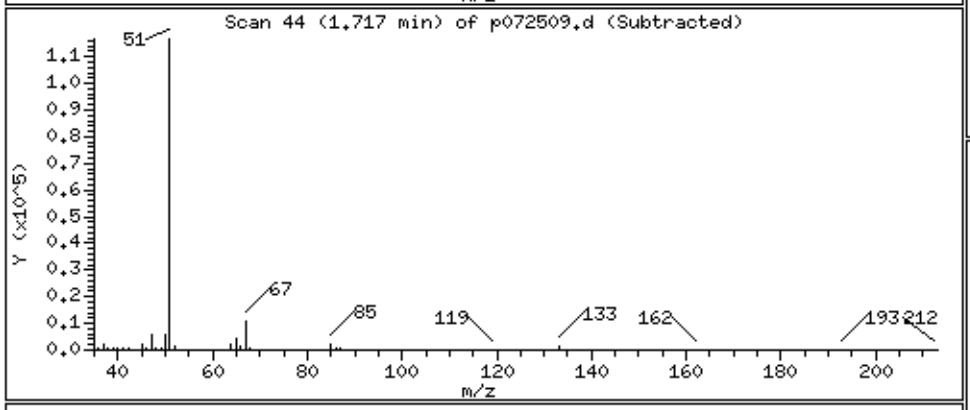
Column diameter: 0.25

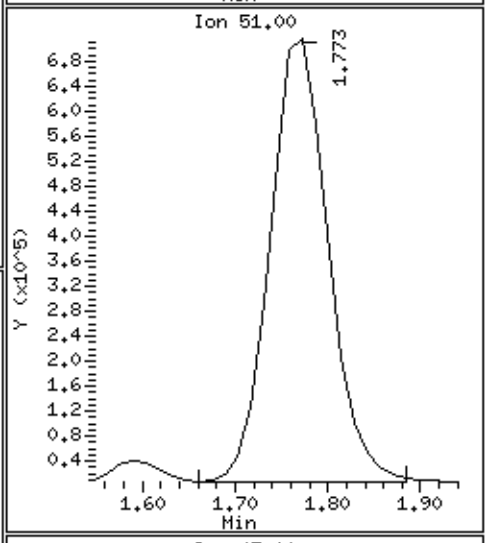
7 1,1-Difluoroethane

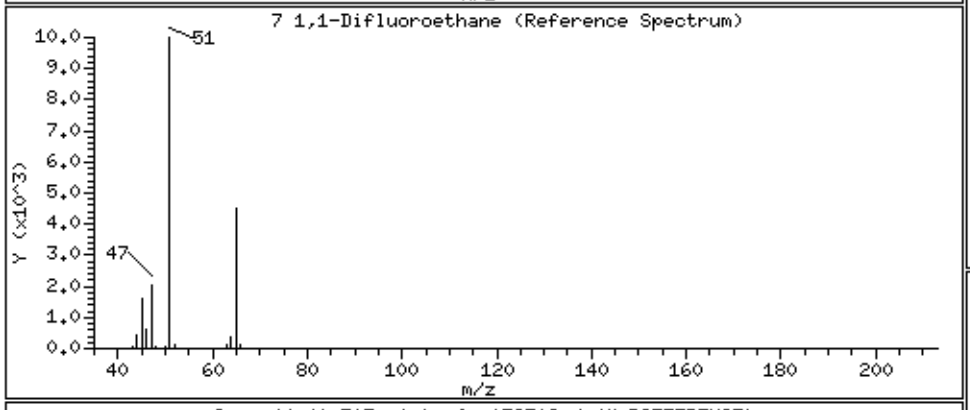
Concentration: 16.801 PPBV

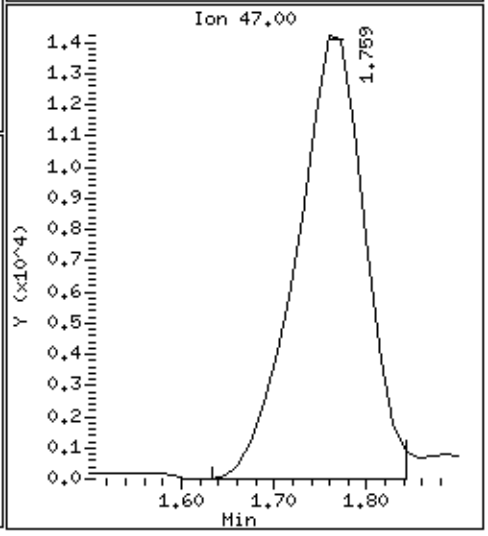


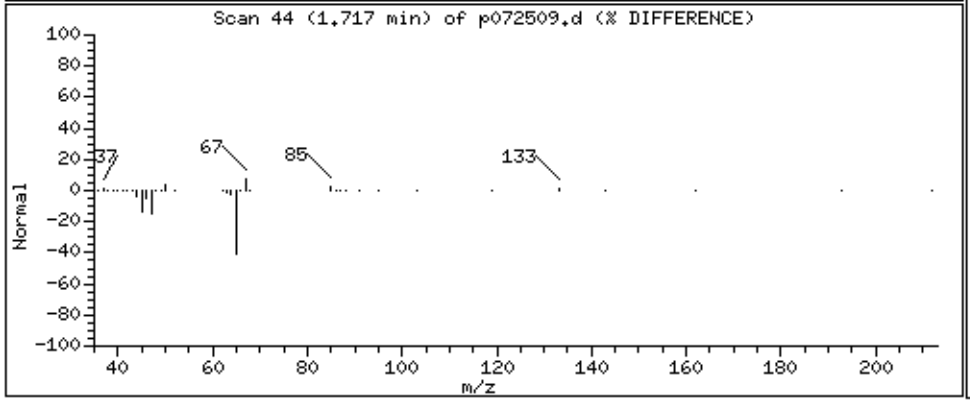












Data File: /chem/msdp.i/25JUL21.b/p072509.d

Date : 25-JUL-2021 15:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3465

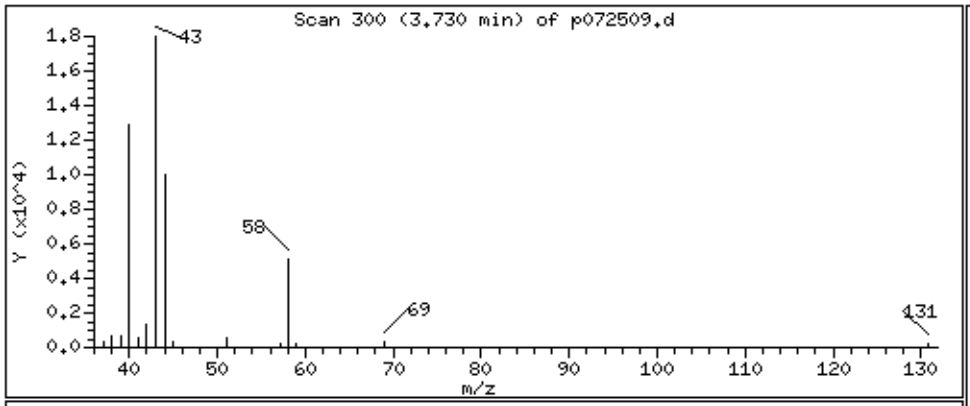
Operator: LD

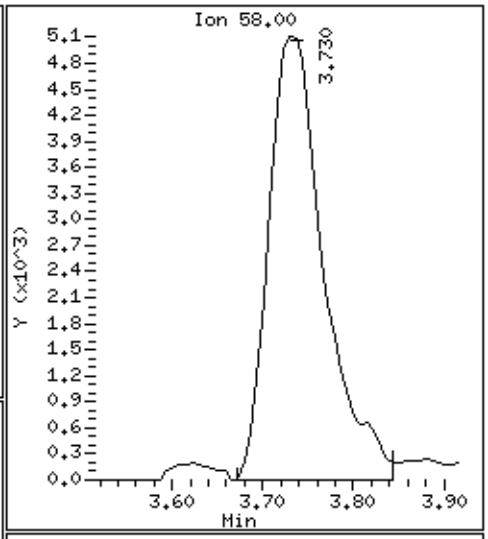
Column phase: RTX-624

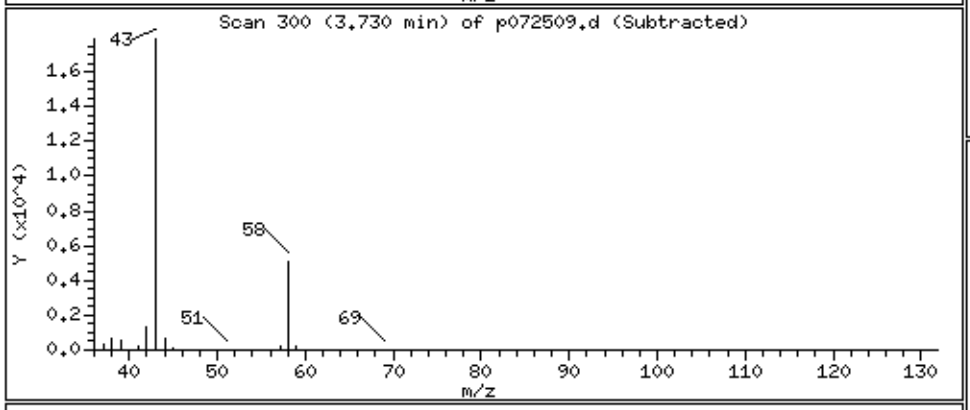
Column diameter: 0.25

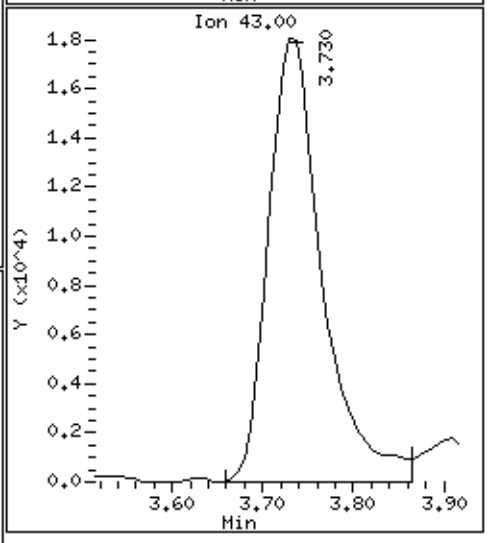
47 Acetone

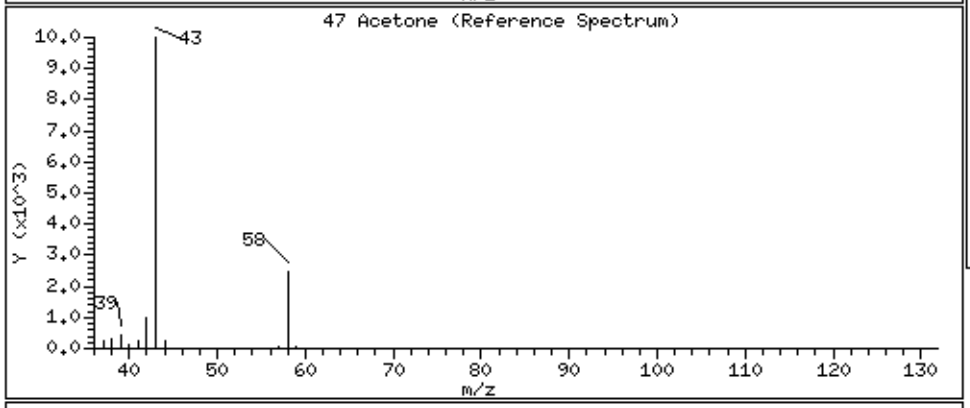
Concentration: 11.716 PPBV

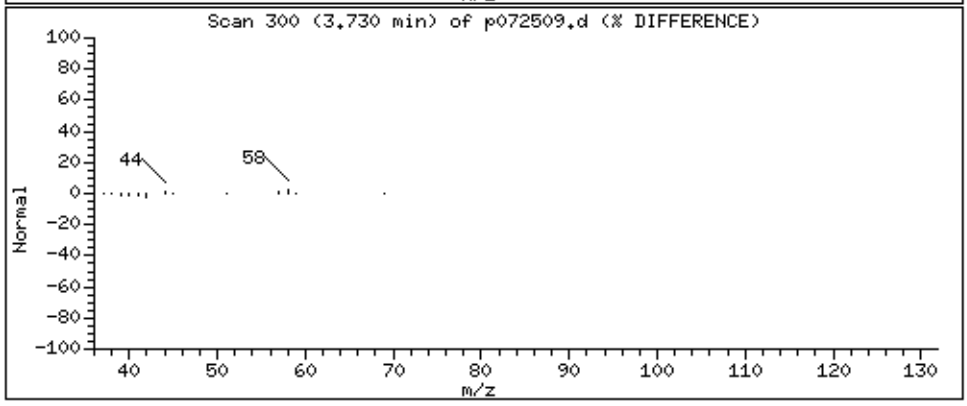












Data File: /chem/msdp.i/25JUL21.b/p072509.d

Date : 25-JUL-2021 15:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3465

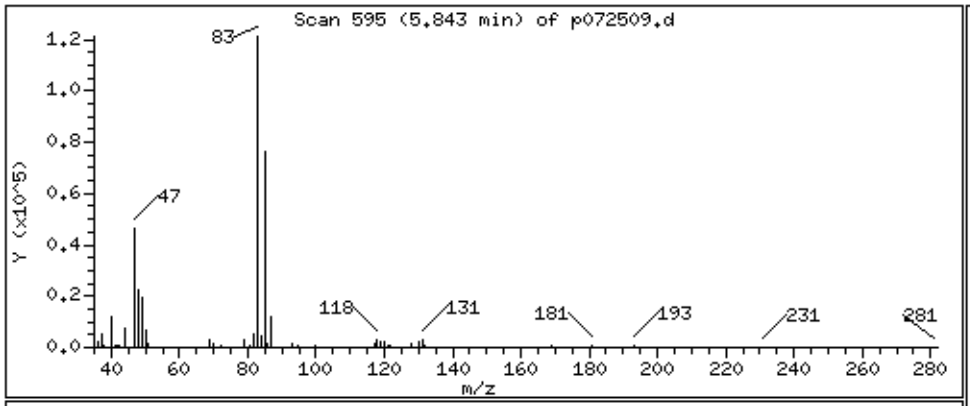
Operator: LD

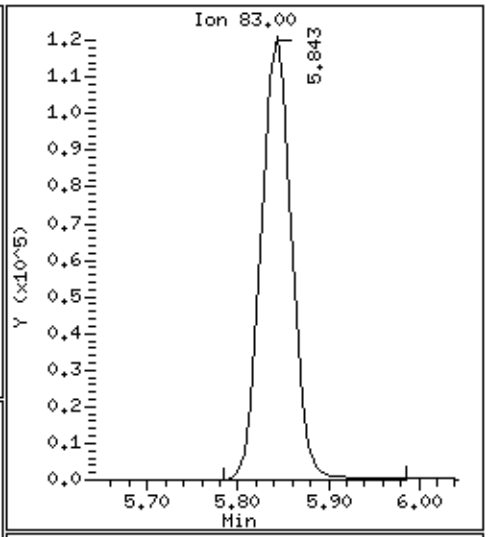
Column phase: RTX-624

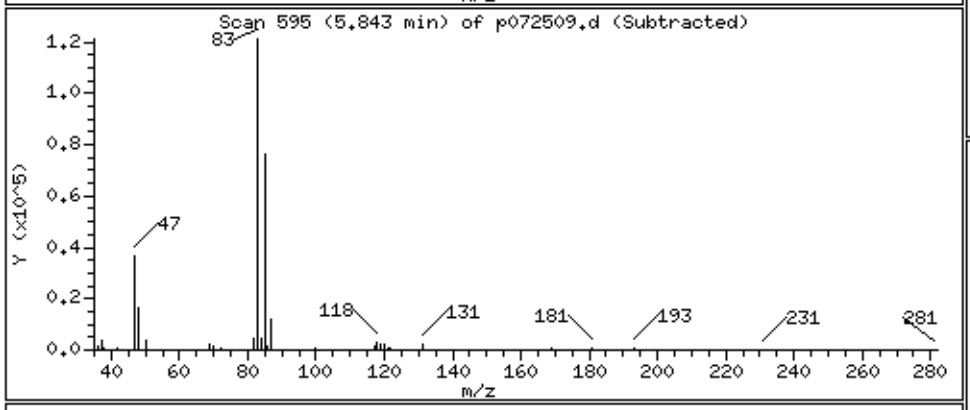
Column diameter: 0.25

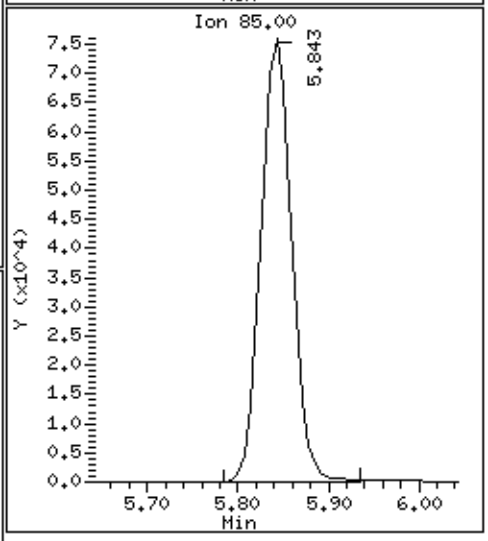
92 Chloroform

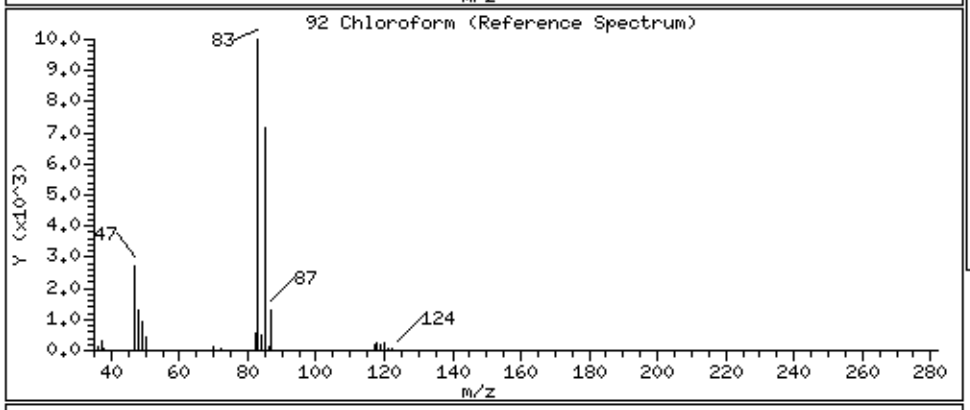
Concentration: 46.119 PPBV

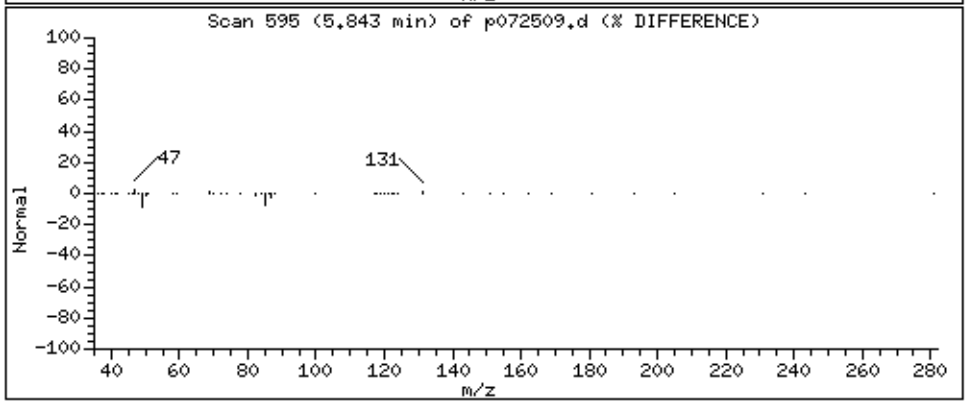












Data File: /chem/msdp.i/25JUL21.b/p072509.d

Date : 25-JUL-2021 15:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3465

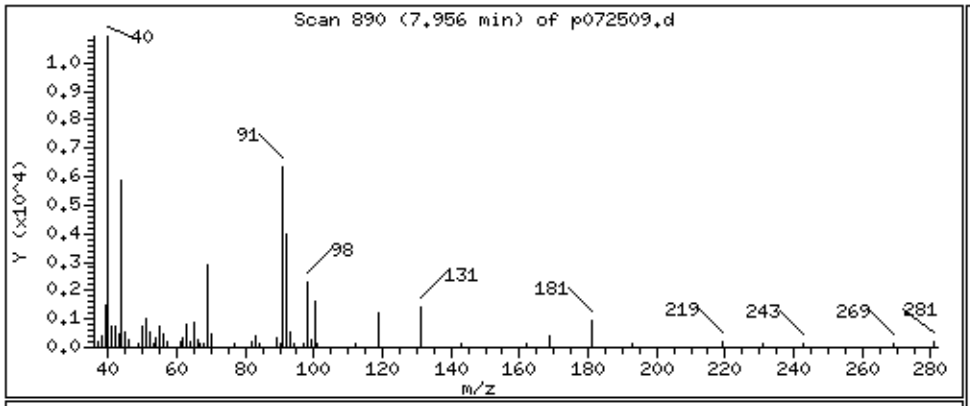
Operator: LD

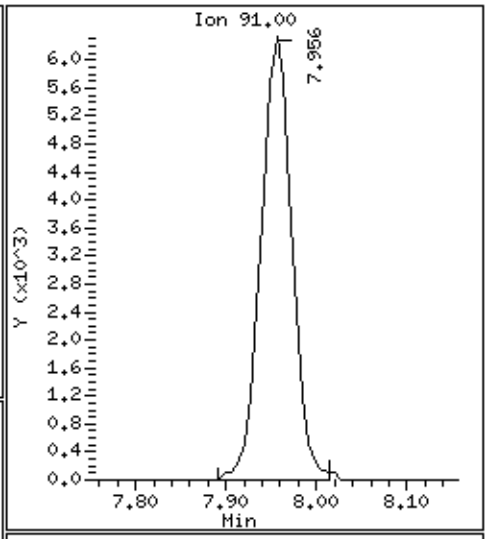
Column phase: RTX-624

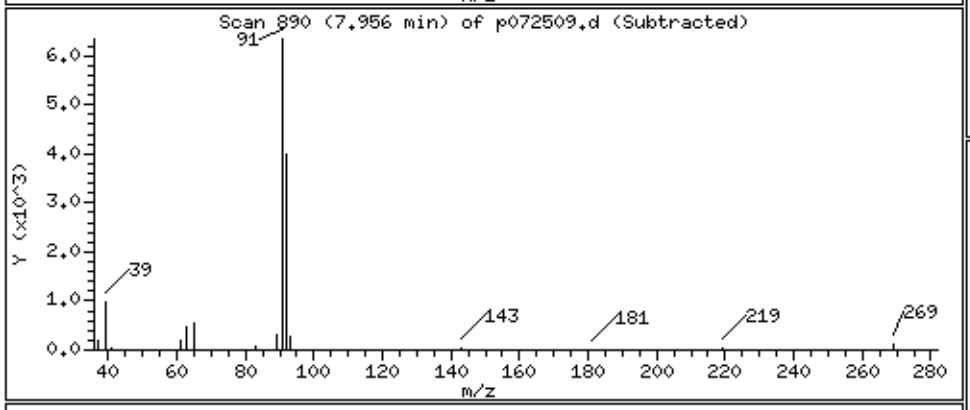
Column diameter: 0.25

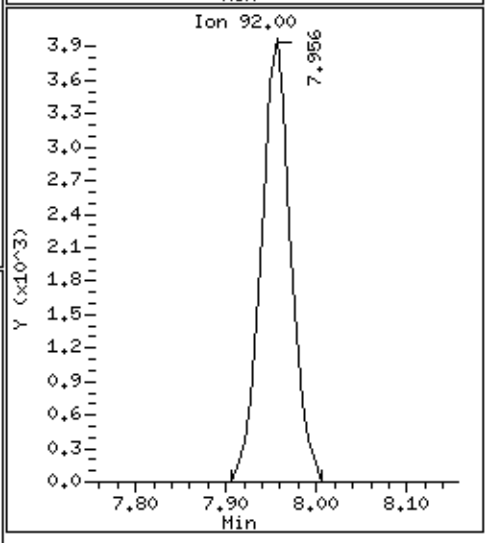
137 Toluene

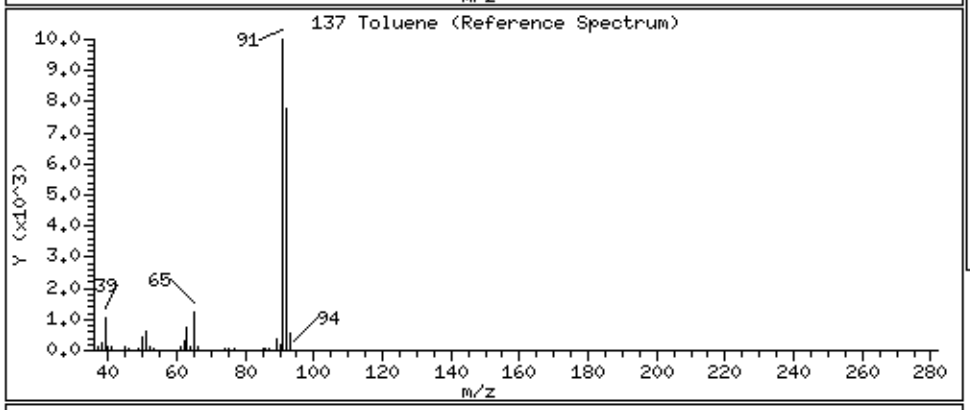
Concentration: 1.243 PPBV

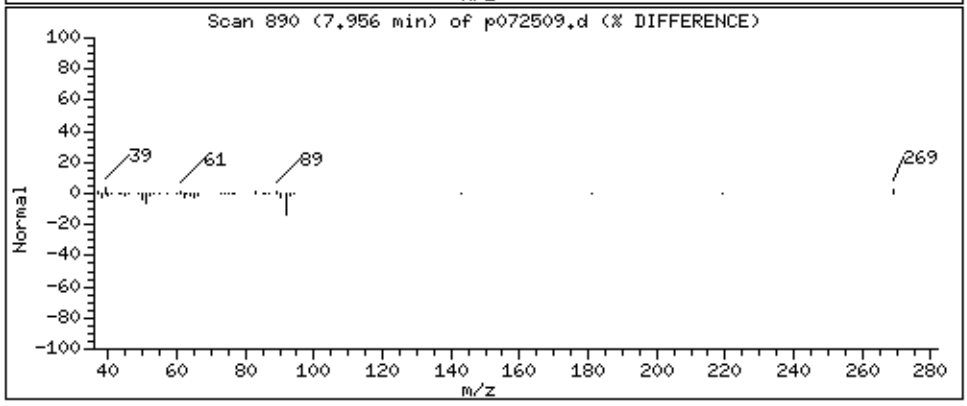












Data File: /chem/msdp.i/25JUL21.b/p072509.d

Date : 25-JUL-2021 15:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3465

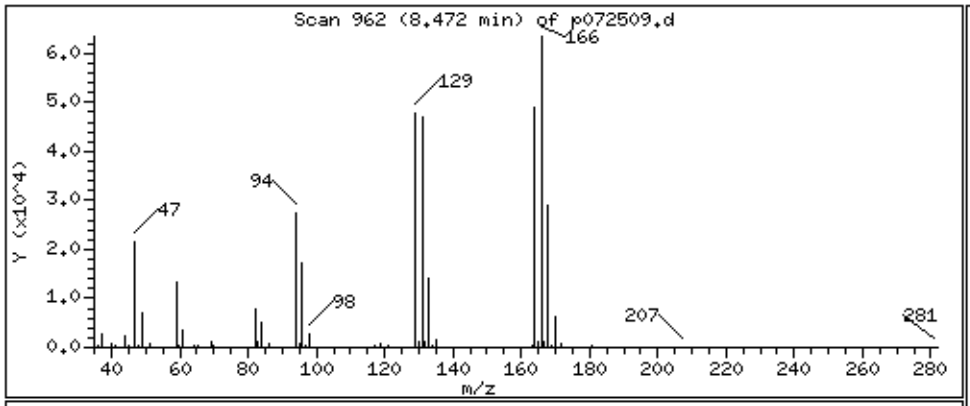
Operator: LD

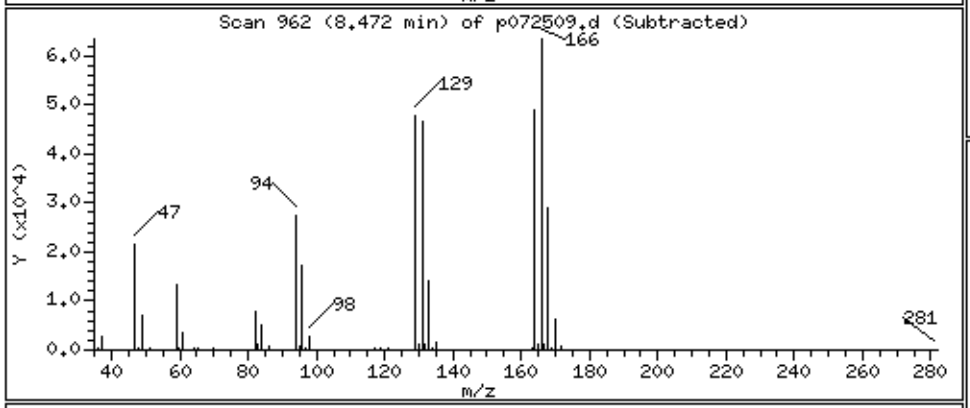
Column phase: RTX-624

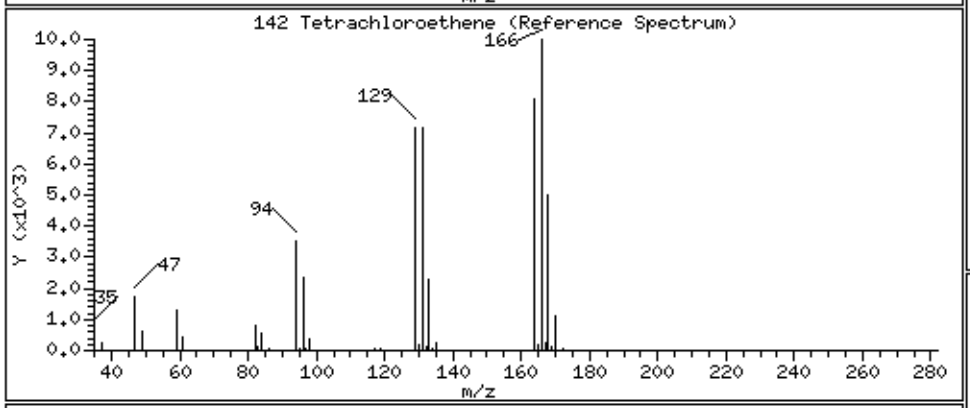
Column diameter: 0.25

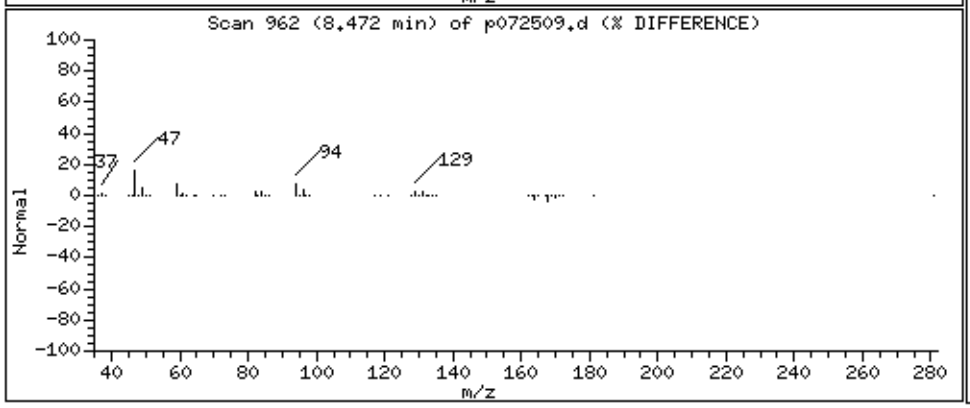
142 Tetrachloroethene

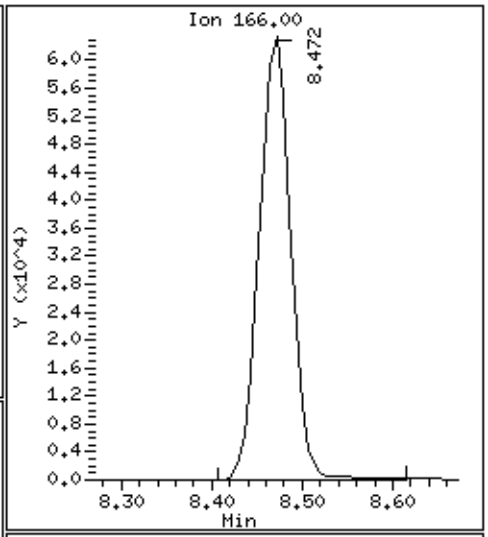
Concentration: 24.660 PPBV

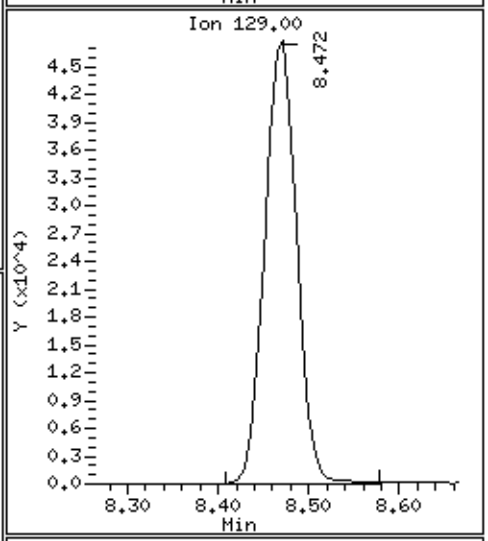


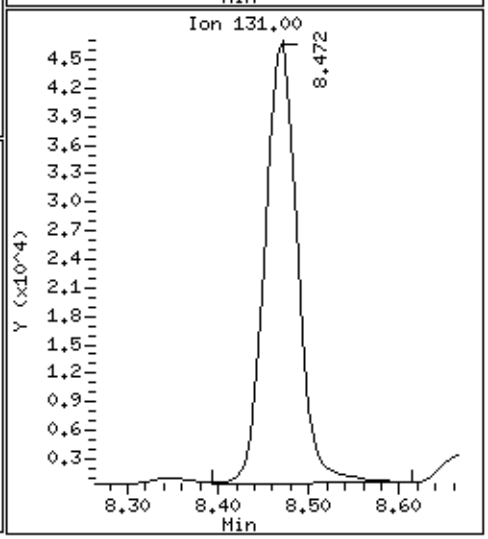












eurofins | Air Toxics

Client Sample ID: SG-VW17B-03

Lab ID#: 2107282-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072520**	**Date of Collection: 7/12/21 2:39:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 7/25/21 11:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.6	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
1,1-Difluoroethane	4.4	61	12	170
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	33	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
2-Hexanone	4.4	Not Detected	18	Not Detected
2-Propanol	4.4	Not Detected	11	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Acetone	11	14	26	33
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
Bromodichloromethane	1.1	Not Detected	7.4	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	1.4	6.9	9.1
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Chloroform	1.1	120	5.4	570
Chloromethane	11	Not Detected	23	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected

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Client Sample ID: SG-VW17B-03

Lab ID#: 2107282-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072520**	**Date of Collection:**	**7/12/21 2:39:00 PM**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/25/21 11:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
Freon 114	1.1	Not Detected	7.7	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected
Hexachloroethane	4.4	Not Detected	43	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
Iodomethane	11	Not Detected	64	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Naphthalene	2.2	Not Detected	12	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
Propylene	4.4	Not Detected	7.6	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected
Tetrachloroethene	1.1	30	7.5	200
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW17B-03

Lab ID#: 2107282-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072520**	**Date of Collection: 7/12/21 2:39:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 7/25/21 11:22 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072520.d
Lab Smp Id: 2107282-03A
Inj Date : 25-JUL-2021 23:22
Operator : kk Inst ID: msdp.i
Smp Info : 200ml 8019
Misc Info : 7.1 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
Dil Factor: 2.20000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.792	5.778 (1.000)	130	147252	25.0000			80.00- 120.00	100.00
5.792	5.778 (1.000)	128	115124				48.23- 108.23	78.18
5.785	5.778 (1.000)	49	308596				150.57- 210.57	209.57
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	545558	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	80928				0.00- 45.71	14.83
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	561368	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	292211				23.78- 83.78	52.05
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.090)	65	210486	25.9014	25.901		80.00- 120.00	100.00
6.315	6.308 (1.090)	67	100884				27.21- 87.21	47.93
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.898	7.891 (1.185)	98	602532	25.4337	25.434		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	62780				0.00- 40.44	10.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	388249			34.95- 94.95	64.44
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	342331	23.7478	23.748	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	427072			95.92- 155.92	124.75
10.921	10.921 (1.154)	176	337726			66.89- 126.89	98.65
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.702 (0.296)	65	93229	27.9318	61.450	80.00- 120.00	100.00
1.772	1.744 (0.306)	51	4151248			597.63- 657.63	4452.74
1.758	1.702 (0.304)	47	124107			33.72- 93.72	133.12
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.644)	58	24424	6.32685	13.919	80.00- 120.00	100.00
3.729	3.715 (0.644)	43	94713			302.95- 362.95	387.79
92 Chloroform					CAS #: 67-66-3		
5.842	5.843 (1.009)	83	685566	53.5094	117.72	80.00- 120.00	100.00
5.842	5.843 (1.009)	85	448948			34.70- 94.70	65.49
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.093 (1.051)	119	8938	0.65843	1.448	80.00- 120.00	100.00
6.093	6.093 (1.052)	117	6560			70.64- 130.64	73.39
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	176512	13.7964	30.352	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	138663			47.84- 107.84	78.56
8.471	8.464 (0.895)	131	141803			45.29- 105.29	80.34

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072520.d
Lab Smp Id: 2107282-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	147252	-4.75
108 1,4-Difluorobenze	573421	344053	802789	545558	-4.86
153 Chlorobenzene-d5	566079	339647	792511	561368	-0.83

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.25
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 09:33

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-03A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.901	103.61	70-130
$ 134 Toluene-d8	25.000	25.434	101.73	70-130
$ 170 4-Bromofluorobenz	25.000	23.748	94.99	70-130

Data File: /chem/msdp.i/25JUL21.b/p072520.d

Date : 25-JUL-2021 23:22

Client ID:

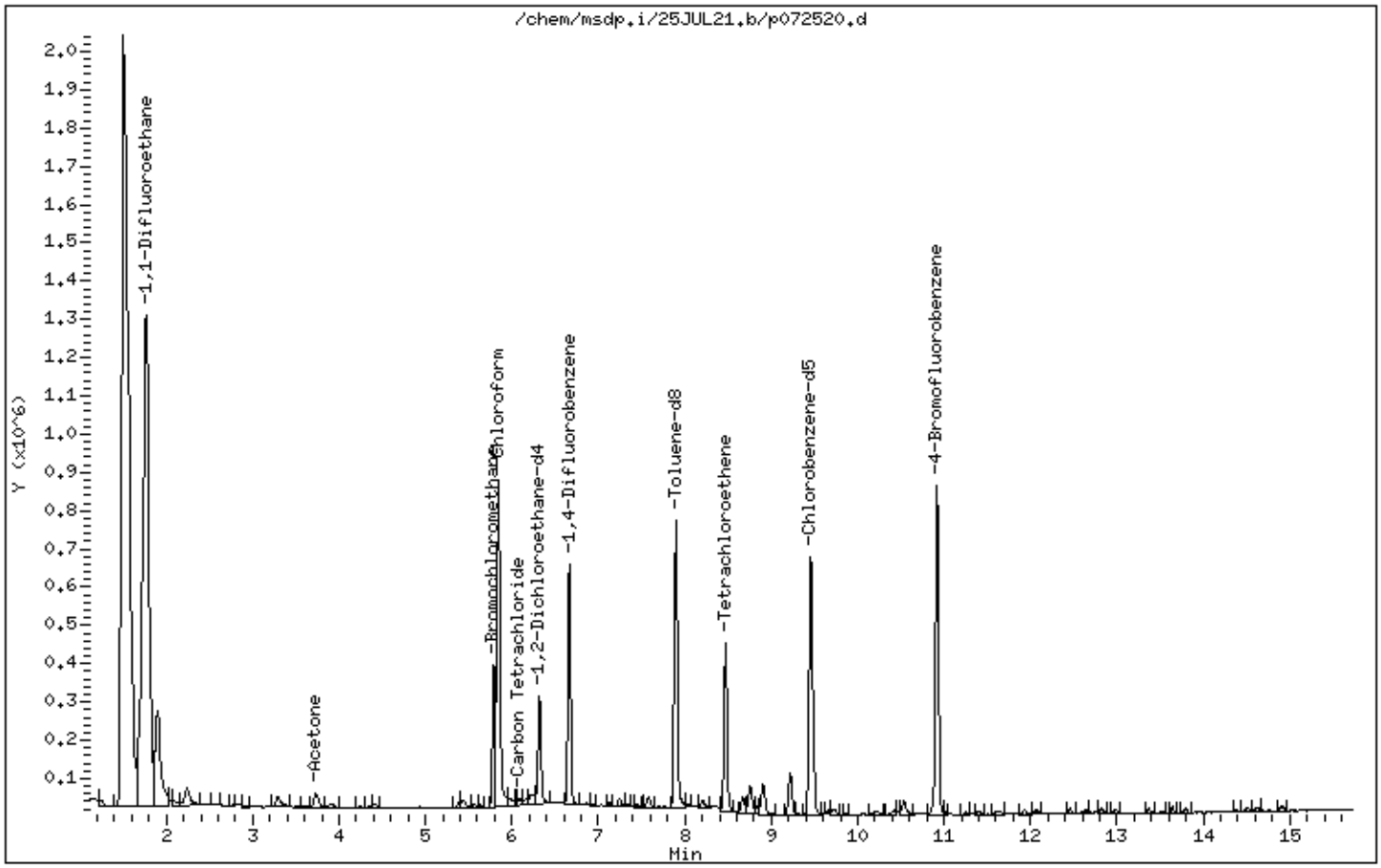
Instrument: msdp.i

Sample Info: 200ml 8019

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072520.d

Date : 25-JUL-2021 23:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 8019

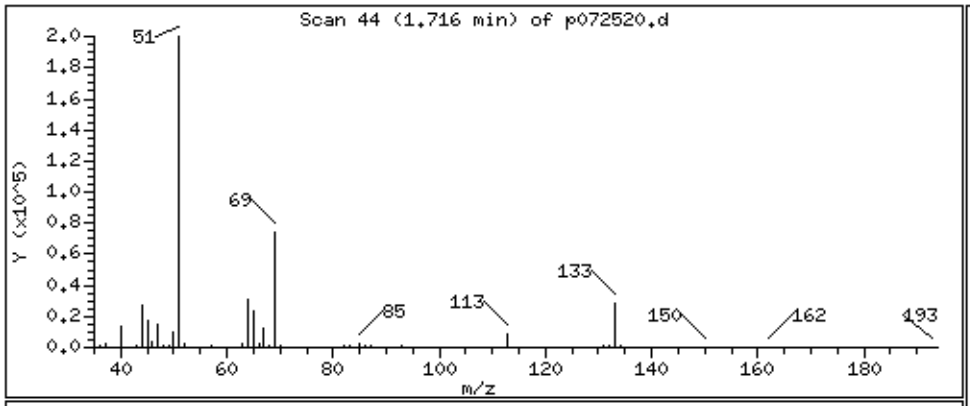
Operator: kk

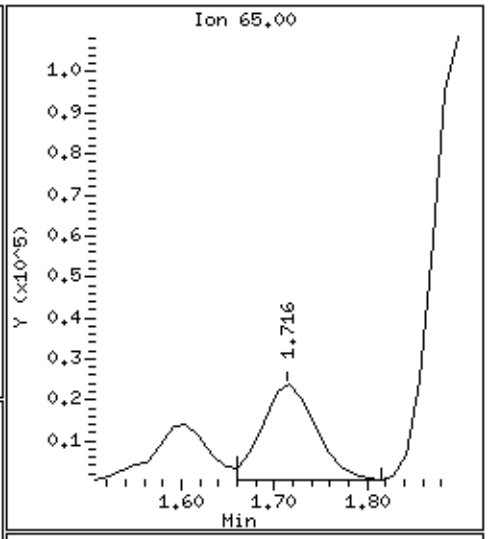
Column phase: RTX-624

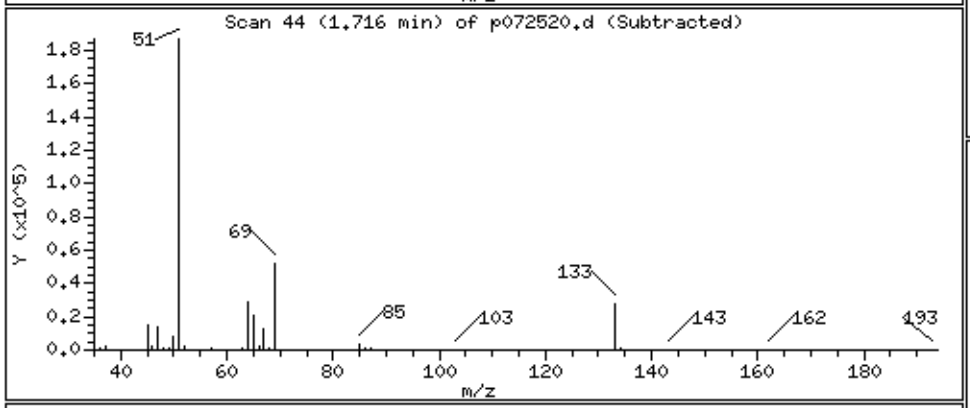
Column diameter: 0.25

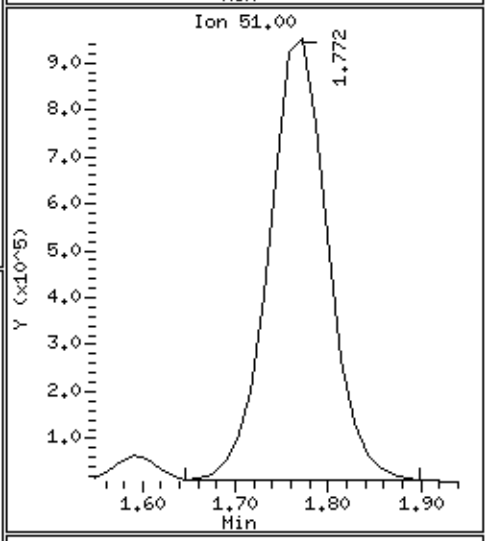
7 1,1-Difluoroethane

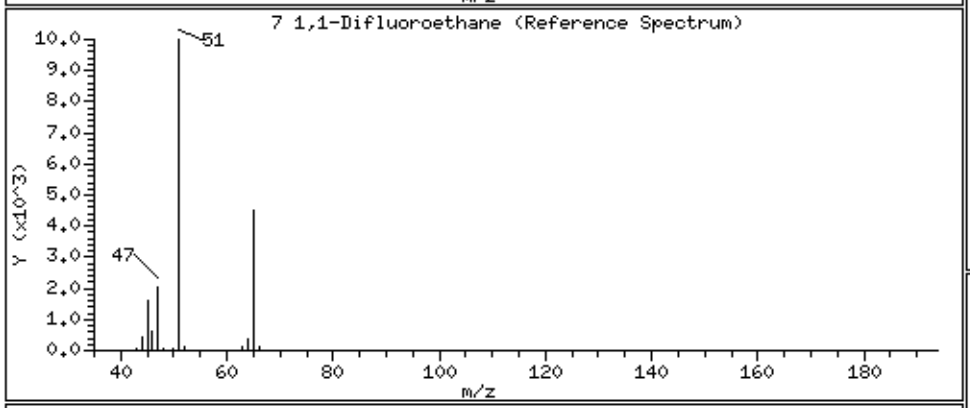
Concentration: 61.450 PPBV

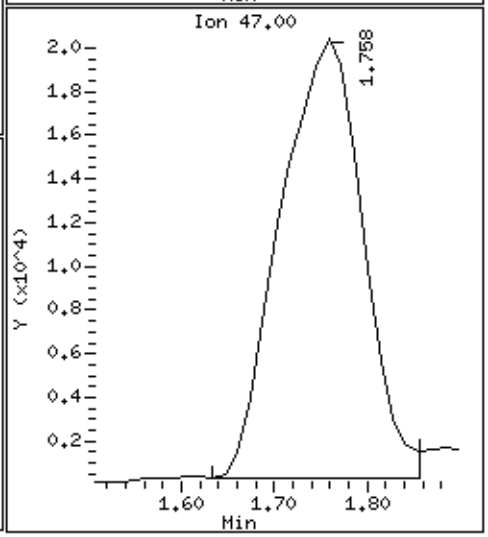


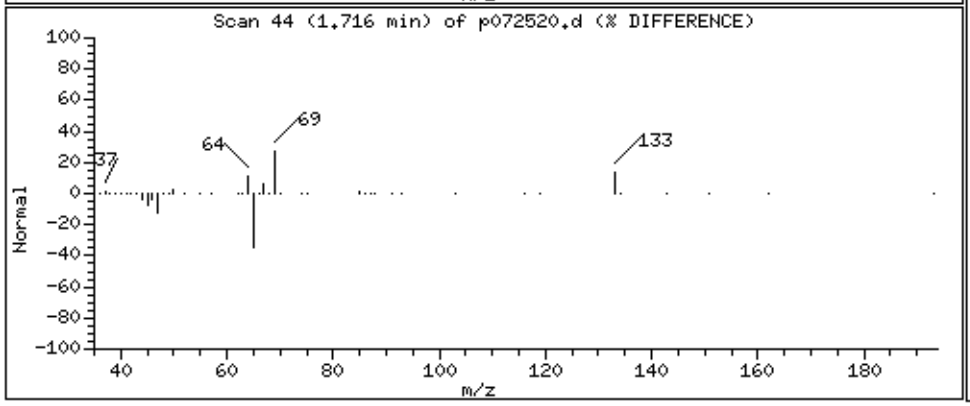












Data File: /chem/msdp.i/25JUL21.b/p072520.d

Date : 25-JUL-2021 23:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 8019

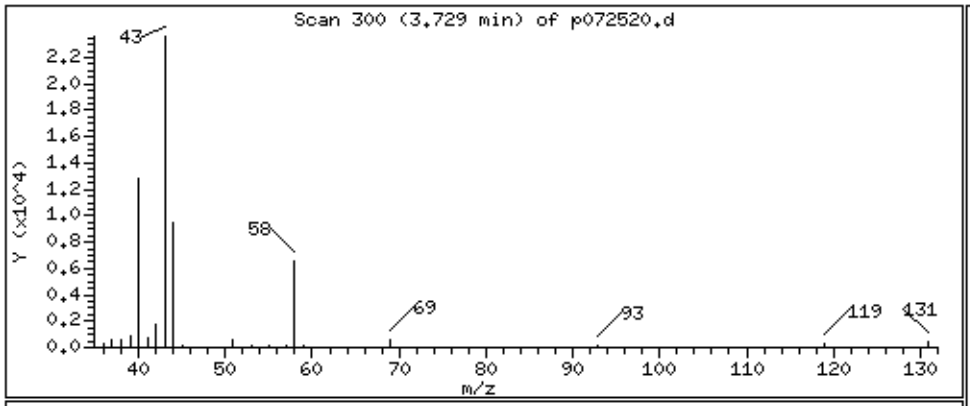
Operator: kk

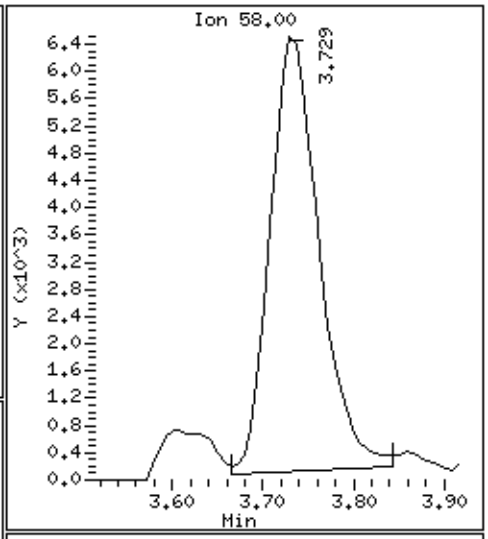
Column phase: RTX-624

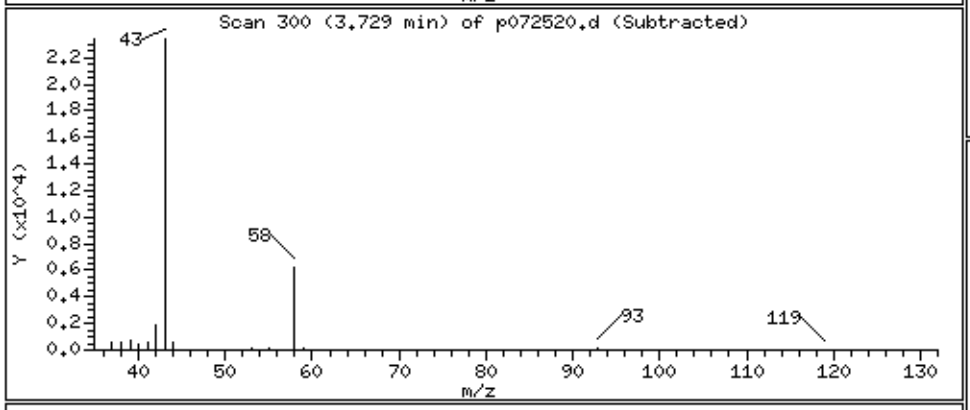
Column diameter: 0.25

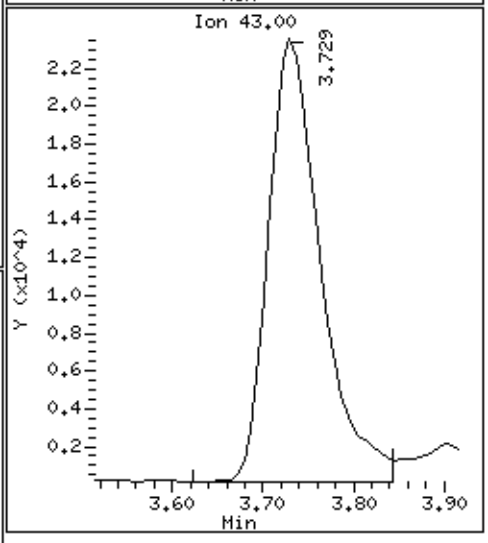
47 Acetone

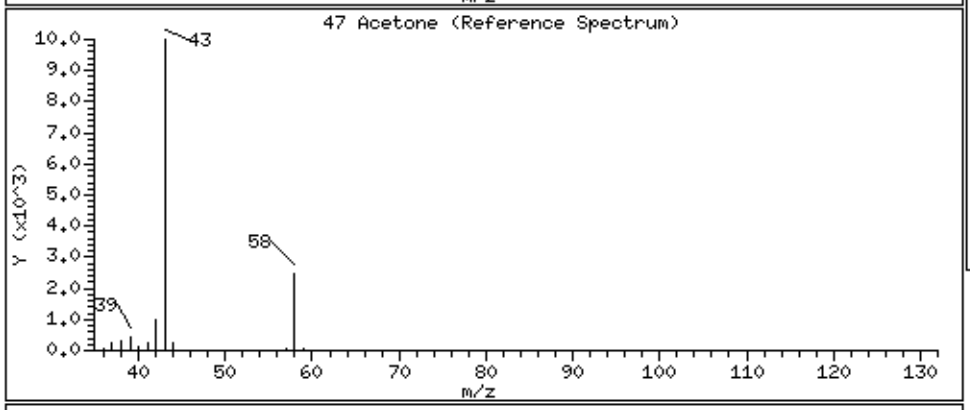
Concentration: 13.919 PPBV

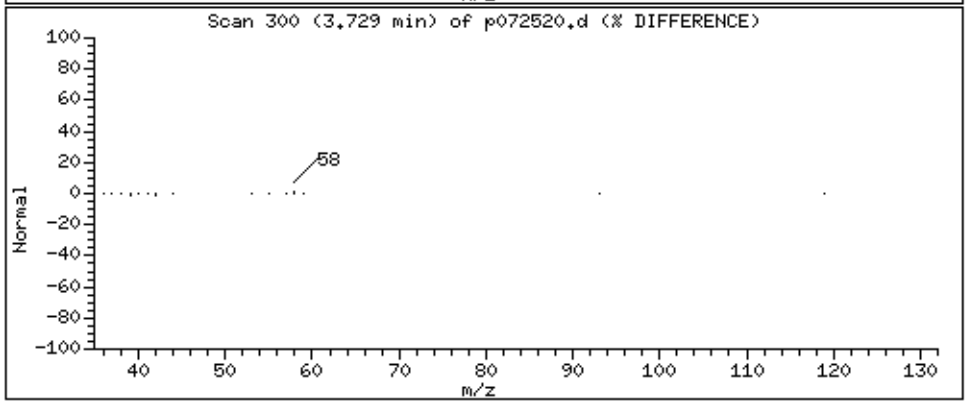












Data File: /chem/msdp.i/25JUL21.b/p072520.d

Date : 25-JUL-2021 23:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 8019

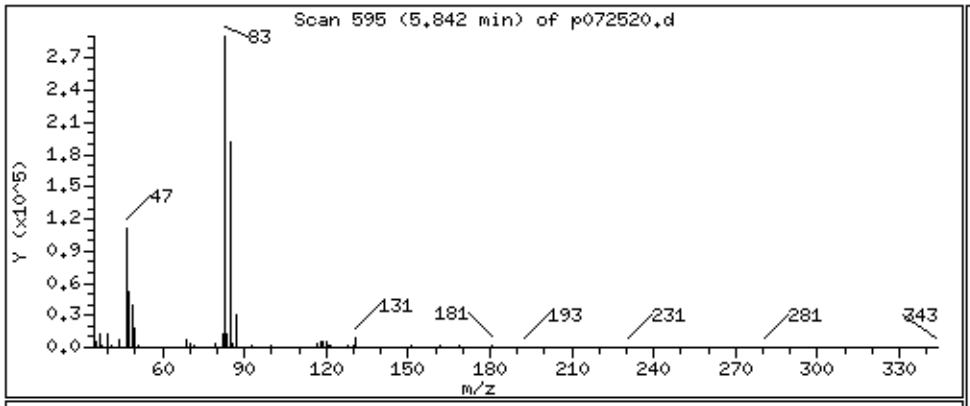
Operator: kk

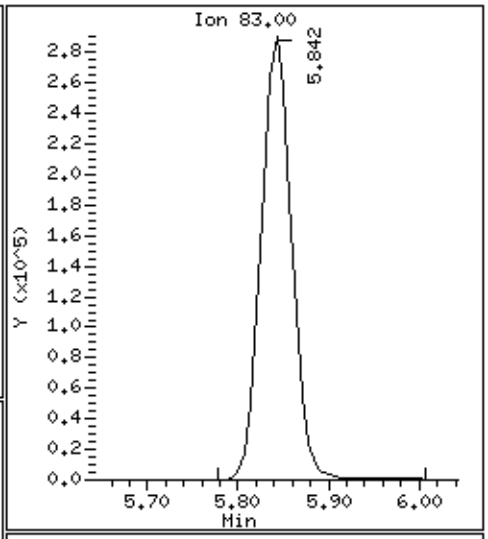
Column phase: RTX-624

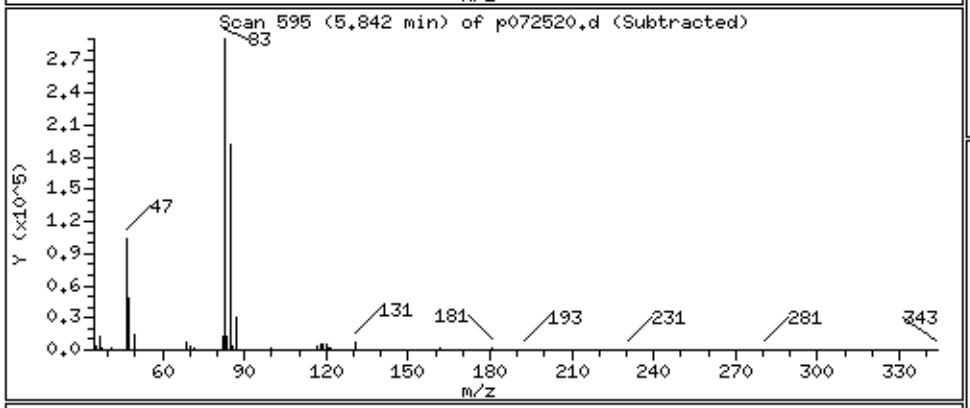
Column diameter: 0.25

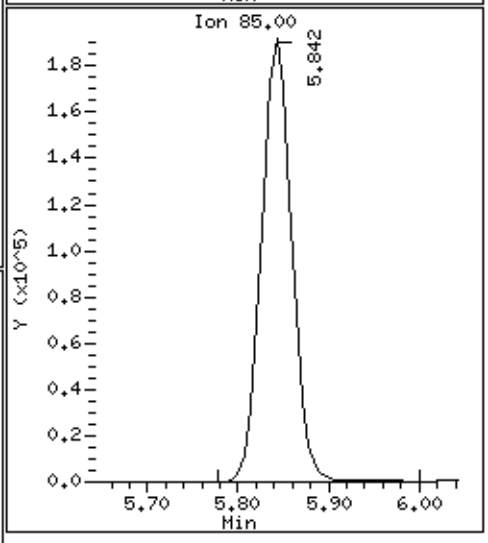
92 Chloroform

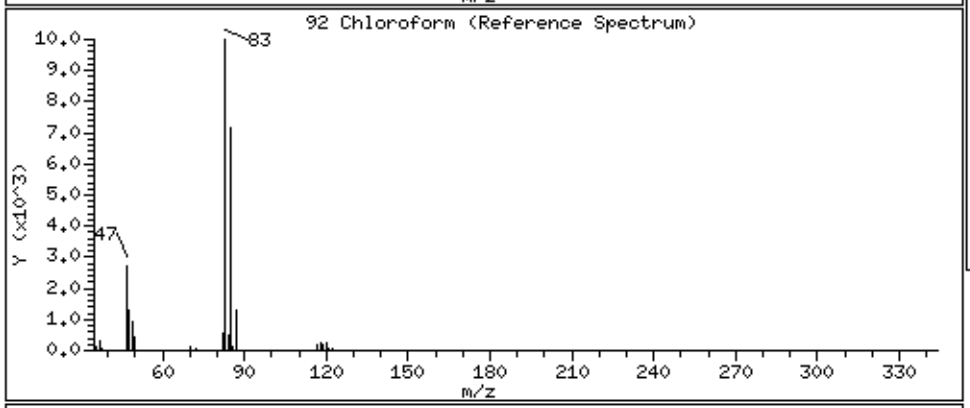
Concentration: 117.72 PPBV

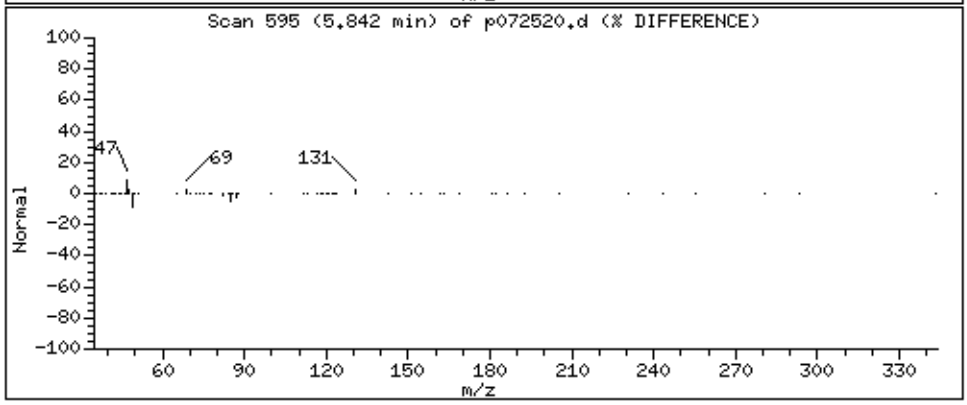












Data File: /chem/msdp.i/25JUL21.b/p072520.d

Date : 25-JUL-2021 23:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 8019

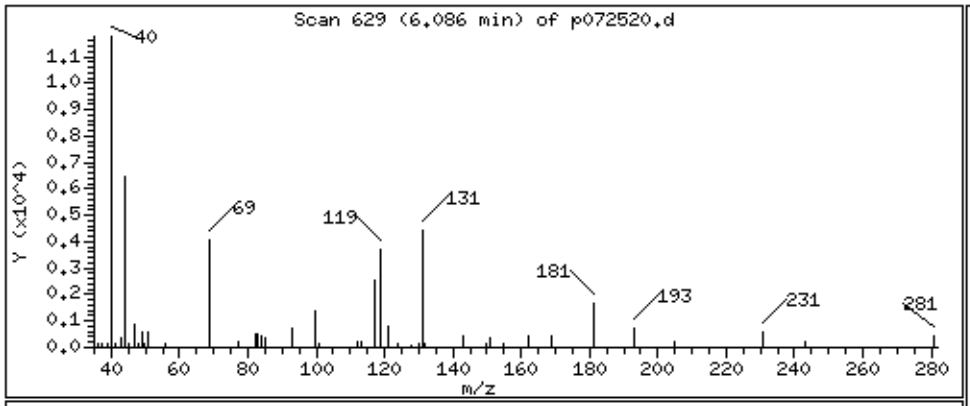
Operator: kk

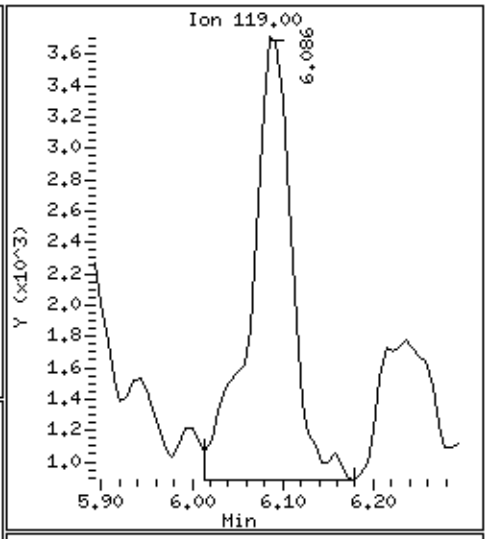
Column phase: RTX-624

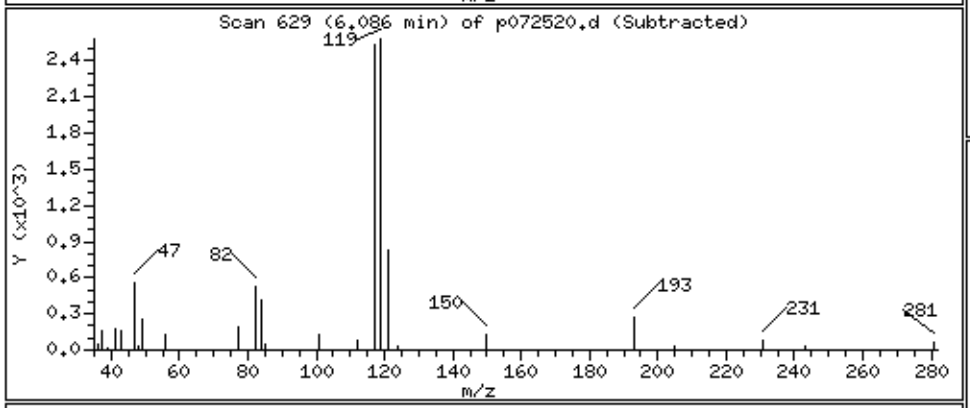
Column diameter: 0.25

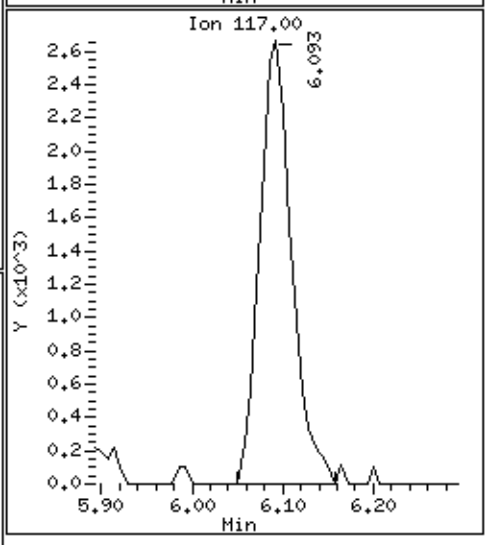
97 Carbon Tetrachloride

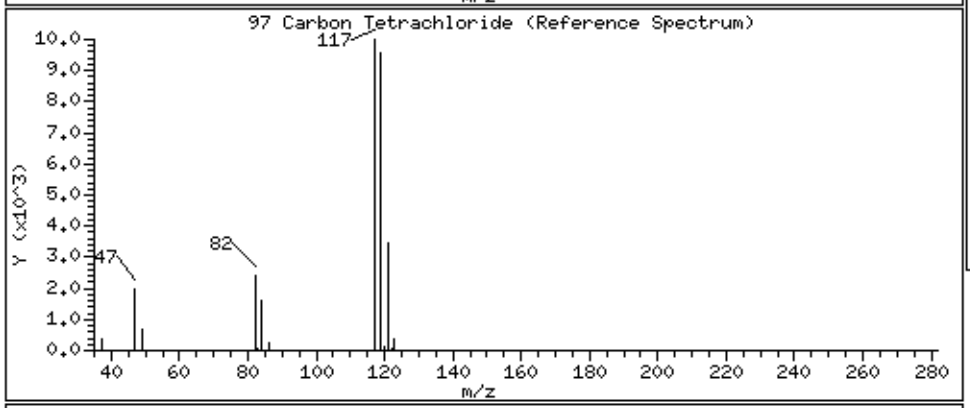
Concentration: 1.448 PPBV

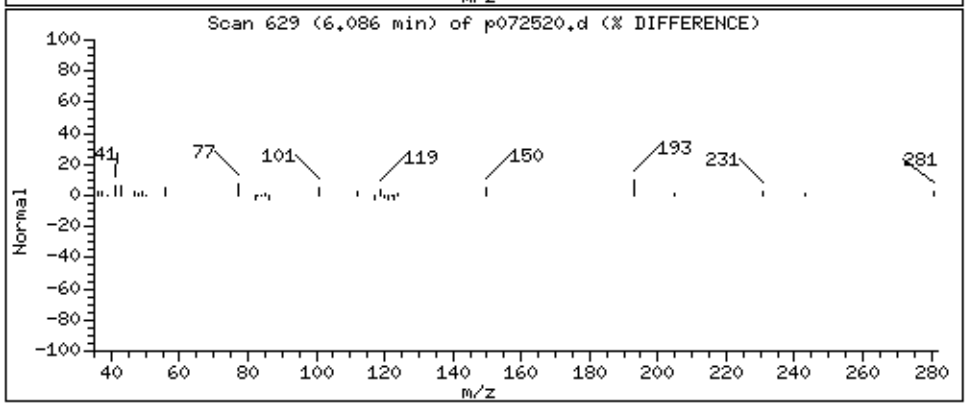












Data File: /chem/msdp.i/25JUL21.b/p072520.d

Date : 25-JUL-2021 23:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 8019

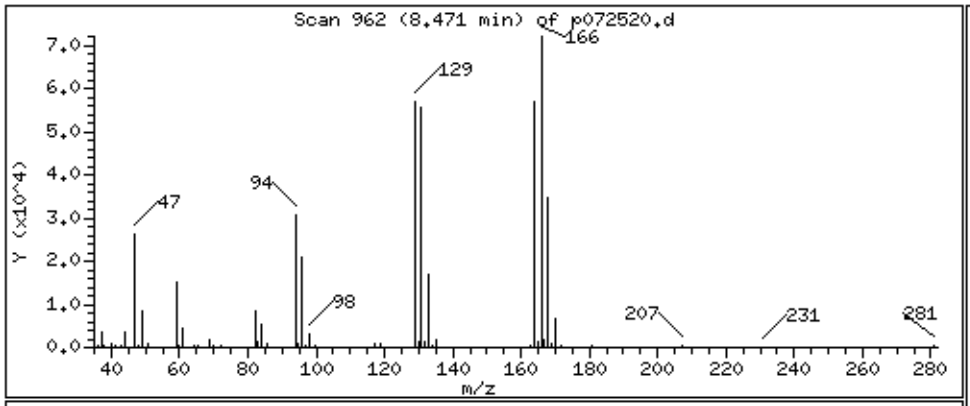
Operator: kk

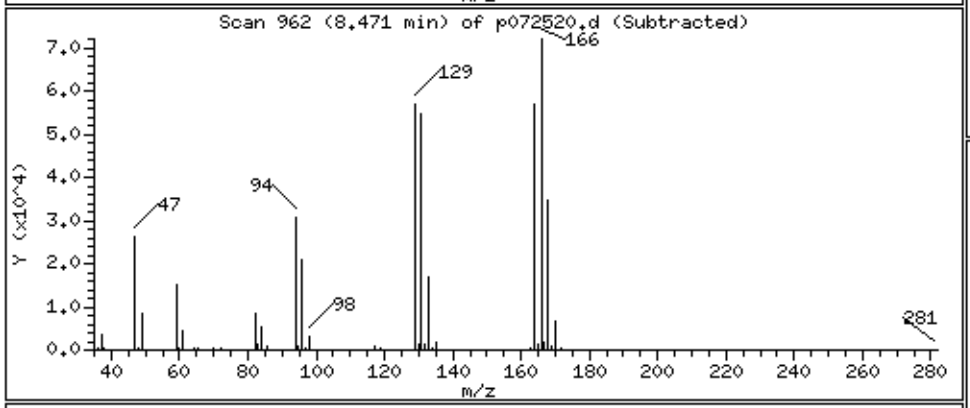
Column phase: RTX-624

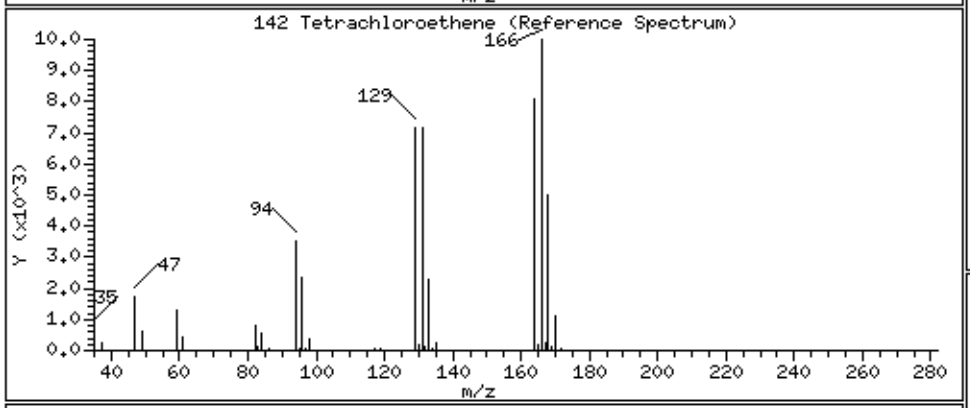
Column diameter: 0.25

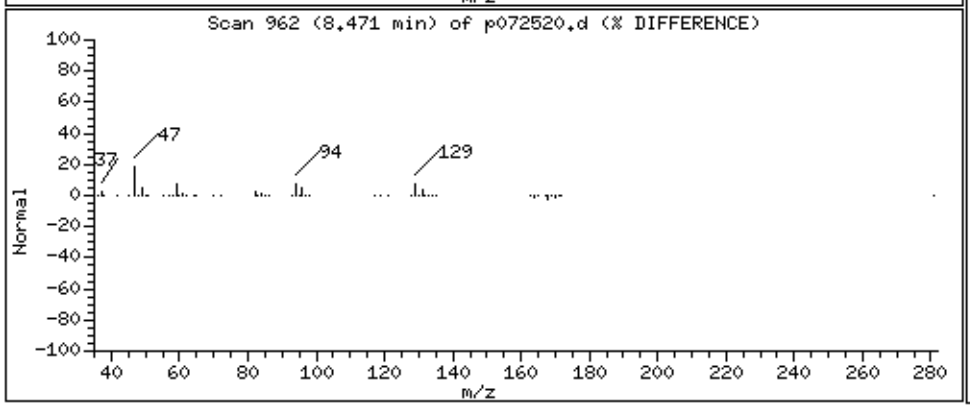
142 Tetrachloroethene

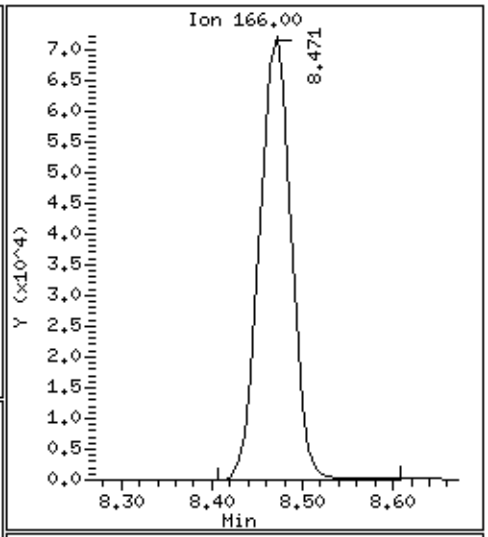
Concentration: 30.352 PPBV

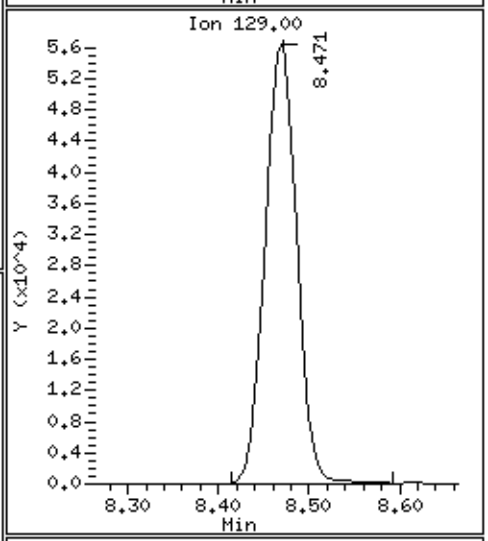


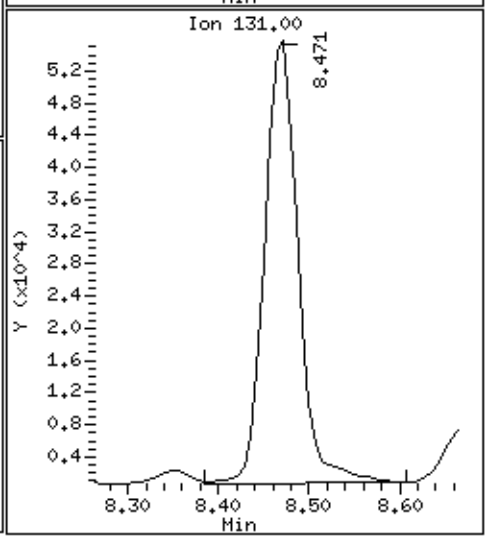












eurofins | Air Toxics

Client Sample ID: SG-VW18B-02

Lab ID#: 2107282-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072521**	**Date of Collection: 7/12/21 3:32:00 PM**	
Dil. Factor:	**2.18**	**Date of Analysis: 7/25/21 11:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.5	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	32	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
2-Hexanone	4.4	Not Detected	18	Not Detected
2-Propanol	4.4	7.4	11	18
3-Chloropropene	4.4	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Acetone	11	Not Detected	26	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Chloroform	1.1	25	5.3	120
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected

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Client Sample ID: SG-VW18B-02

Lab ID#: 2107282-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072521**	**Date of Collection: 7/12/21 3:32:00 PM**	
Dil. Factor:	**2.18**	**Date of Analysis: 7/25/21 11:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Dibromochloromethane	1.1	Not Detected	9.3	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.1	Not Detected
Freon 12	1.1	4.4	5.4	22
Freon 113	1.1	Not Detected	8.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Hexachlorobutadiene	4.4	Not Detected	46	Not Detected
Hexachloroethane	4.4	Not Detected	42	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
Iodomethane	11	Not Detected	63	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
Propylene	4.4	Not Detected	7.5	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected
Tetrachloroethene	1.1	51	7.4	350
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-VW18B-02

Lab ID#: 2107282-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072521**	**Date of Collection:**	**7/12/21 3:32:00 PM**
Dil. Factor:	**2.18**	**Date of Analysis:**	**7/25/21 11:52 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072521.d
Lab Smp Id: 2107282-04A
Inj Date : 25-JUL-2021 23:52
Operator : kk Inst ID: msdp.i
Smp Info : 200ml N3422
Misc Info : 7.1 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 3
Dil Factor: 2.18000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.792	5.778 (1.000)	130	147133	25.0000			80.00- 120.00	100.00
5.792	5.778 (1.000)	128	115769				48.23- 108.23	78.68
5.785	5.778 (1.000)	49	336090				150.57- 210.57	228.43
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	555998	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	81852				0.00- 45.71	14.72
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	568800	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	300259				23.78- 83.78	52.79
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.090)	65	214259	26.3870	26.387		80.00- 120.00	100.00
6.315	6.308 (1.090)	67	105769				27.21- 87.21	49.37
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.898	7.891 (1.185)	98	600512	24.8725	24.872		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	64740				0.00- 40.44	10.78

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	394466			34.95- 94.95	65.69
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	356109	24.3808	24.381	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	437869			95.92- 155.92	122.96
10.921	10.921 (1.154)	176	342975			66.89- 126.89	96.31
8 Freon 12					CAS #: 75-71-8		
1.730	1.716 (0.299)	85	26928	2.04058	4.448	80.00- 120.00	100.00(H)
1.730	1.716 (0.299)	87	8491			2.37- 62.37	31.53
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	52914	3.40372	7.420	80.00- 120.00	100.00
3.908	3.887 (0.675)	43	11056			0.00- 47.19	20.89
92 Chloroform					CAS #: 67-66-3		
5.842	5.843 (1.009)	83	145778	11.3874	24.824	80.00- 120.00	100.00
5.842	5.843 (1.009)	85	97128			34.70- 94.70	66.63
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	304659	23.5014	51.233	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	236162			47.84- 107.84	77.52
8.471	8.464 (0.895)	131	234709			45.29- 105.29	77.04

QC Flag Legend

H - Operator selected an alternate compound hit.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072521.d
Lab Smp Id: 2107282-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.8 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	147133	-4.83
108 1,4-Difluorobenze	573421	344053	802789	555998	-3.04
153 Chlorobenzene-d5	566079	339647	792511	568800	0.48

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.25
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 09:45

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-04A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.387	105.55	70-130
$ 134 Toluene-d8	25.000	24.872	99.49	70-130
$ 170 4-Bromofluorobenz	25.000	24.381	97.52	70-130

Data File: /chem/msdp.i/25JUL21.b/p072521.d

Date : 25-JUL-2021 23:52

Client ID:

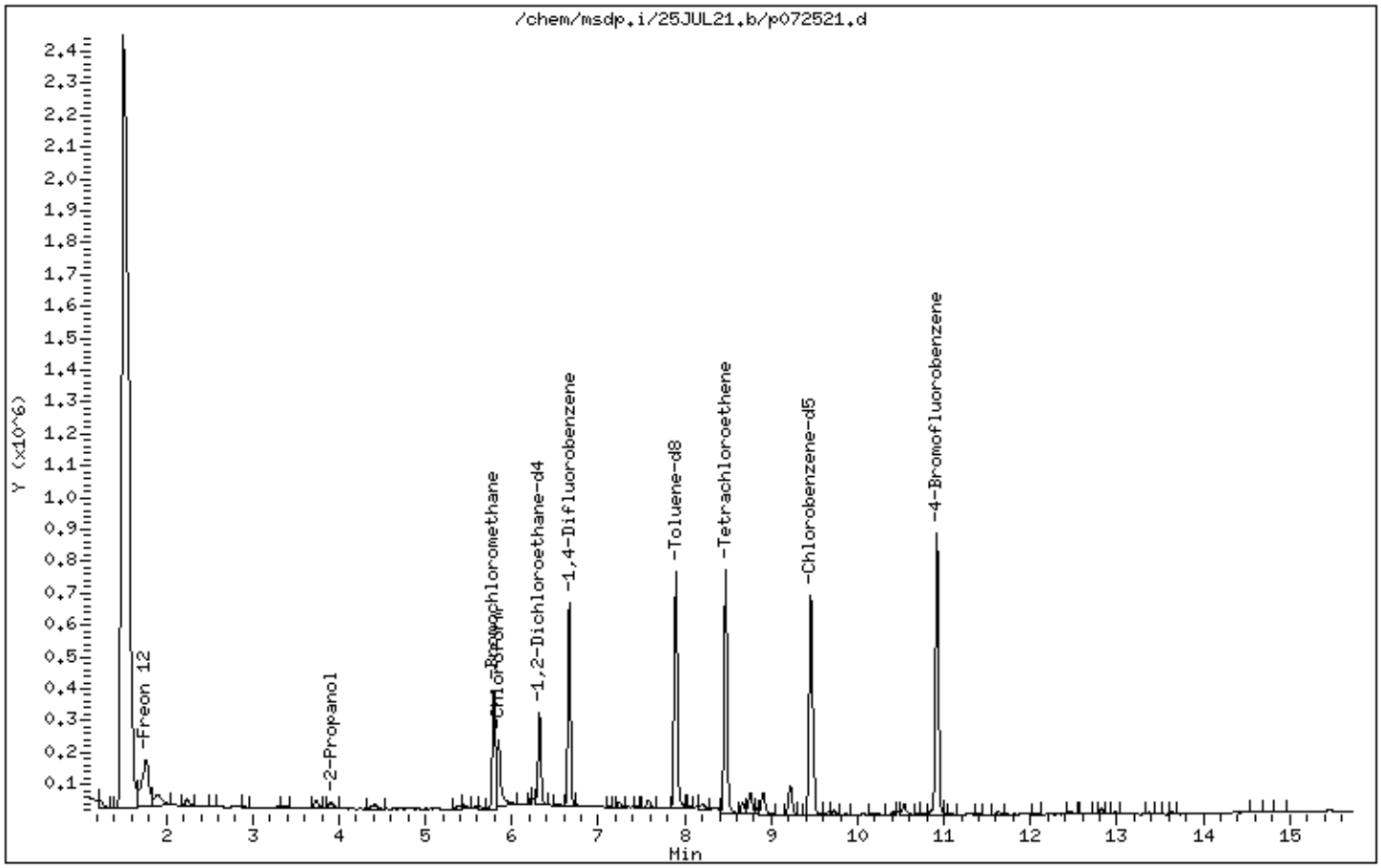
Instrument: msdp.i

Sample Info: 200ml N3422

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072521.d

Date : 25-JUL-2021 23:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3422

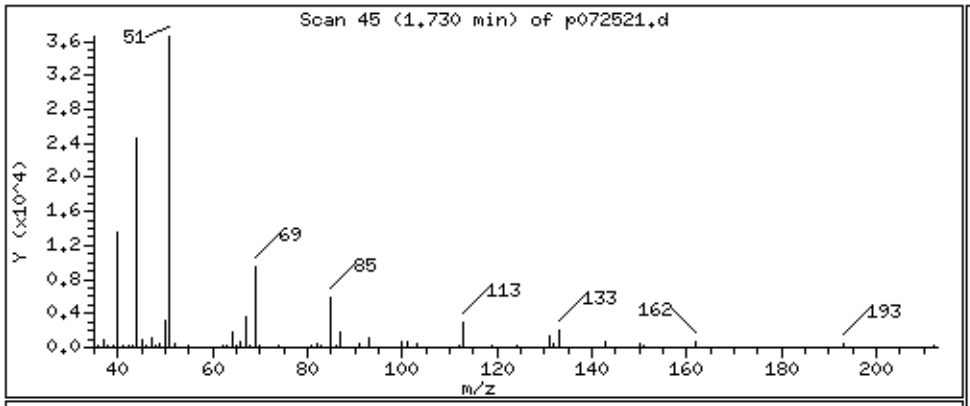
Operator: kk

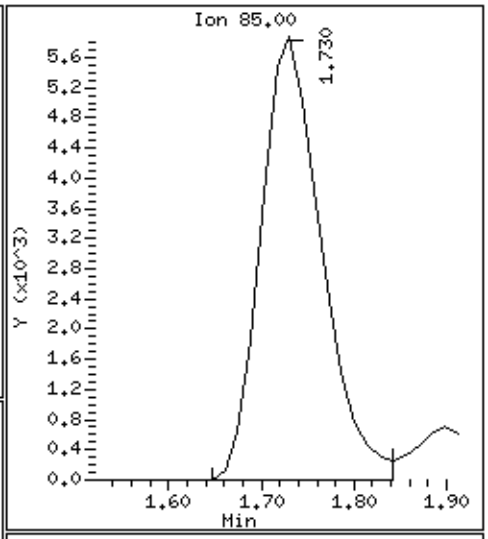
Column phase: RTX-624

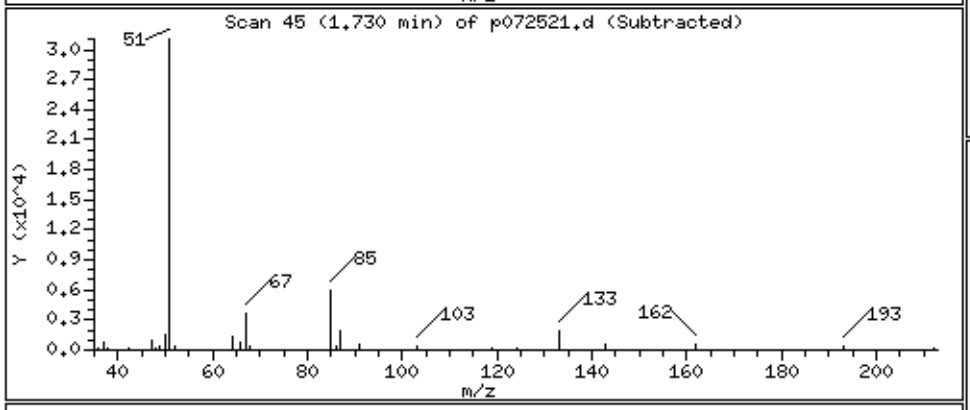
Column diameter: 0.25

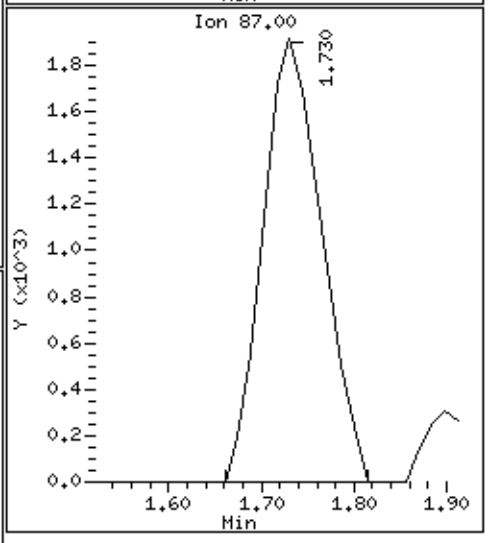
8 Freon 12

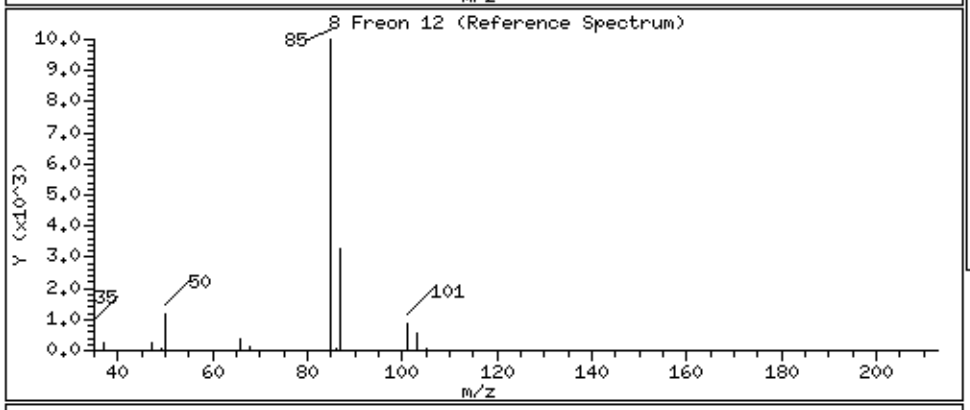
Concentration: 4.448 PPBV

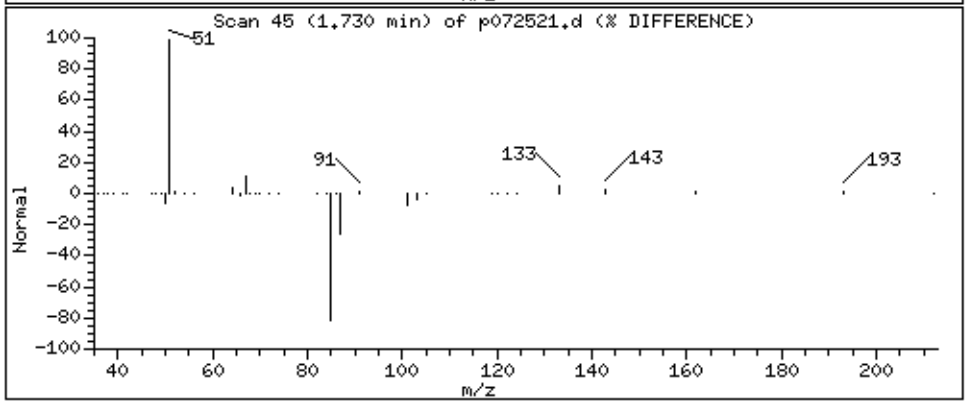












Data File: /chem/msdp.i/25JUL21.b/p072521.d

Date : 25-JUL-2021 23:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3422

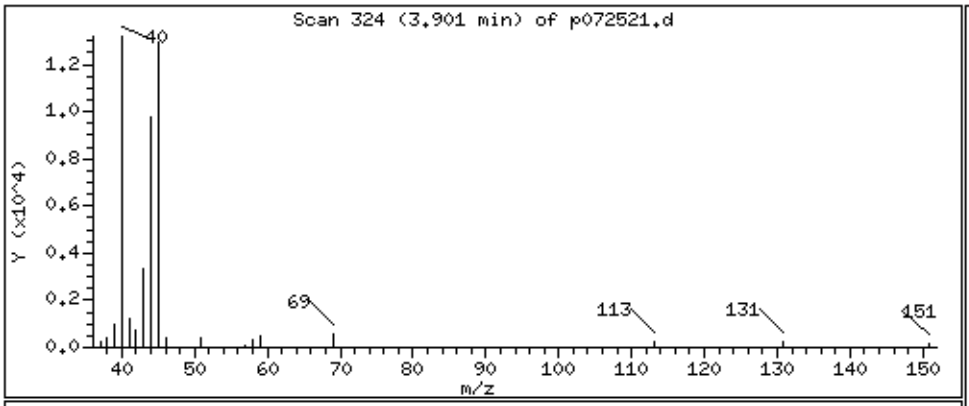
Operator: kk

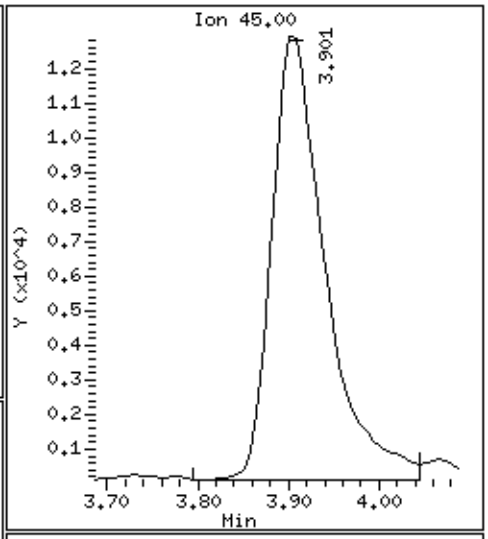
Column phase: RTX-624

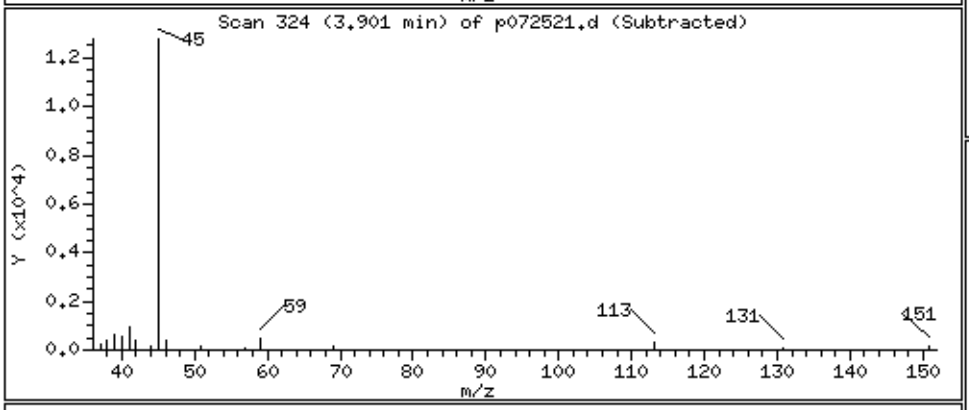
Column diameter: 0.25

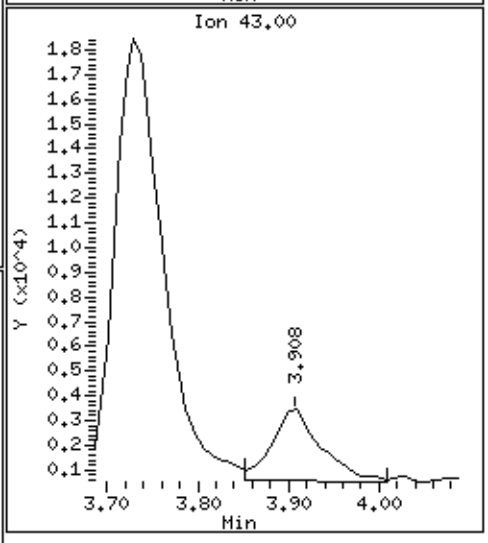
52 2-Propanol

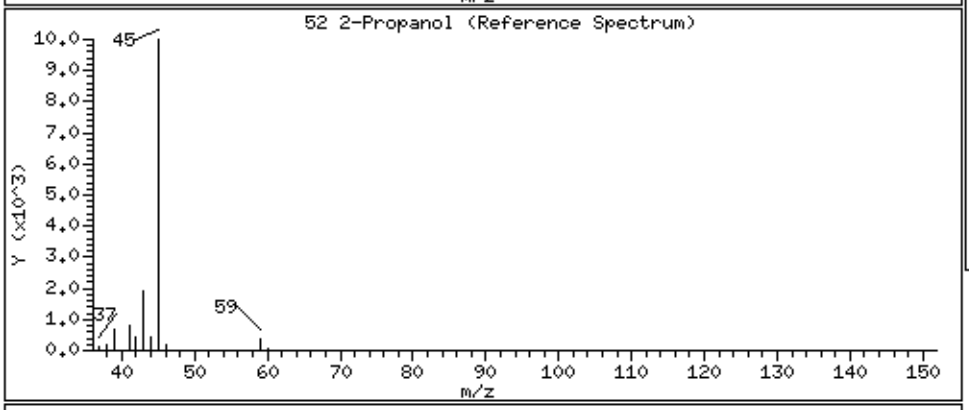
Concentration: 7.420 PPBV

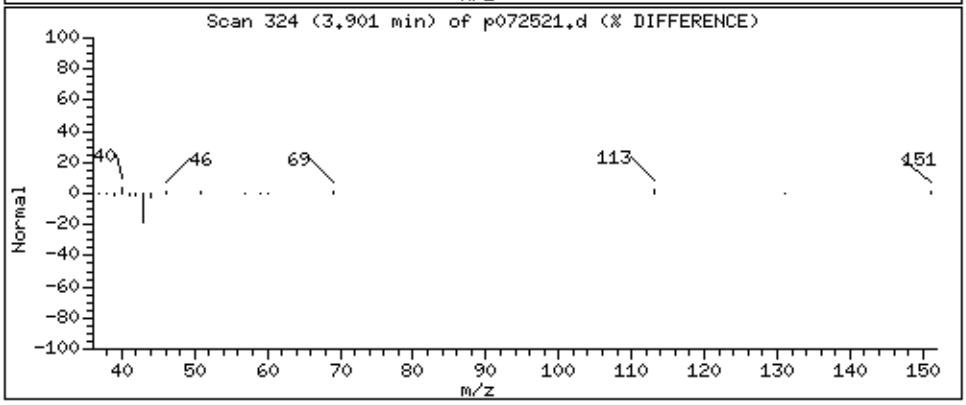












Data File: /chem/msdp.i/25JUL21.b/p072521.d

Date : 25-JUL-2021 23:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3422

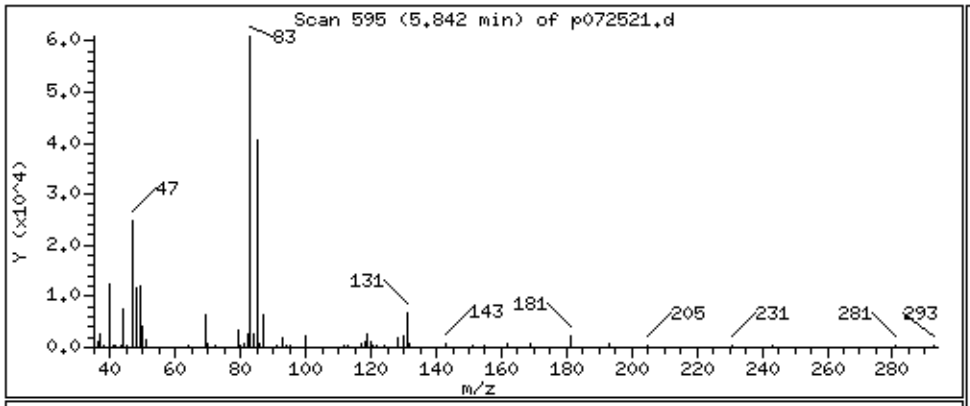
Operator: kk

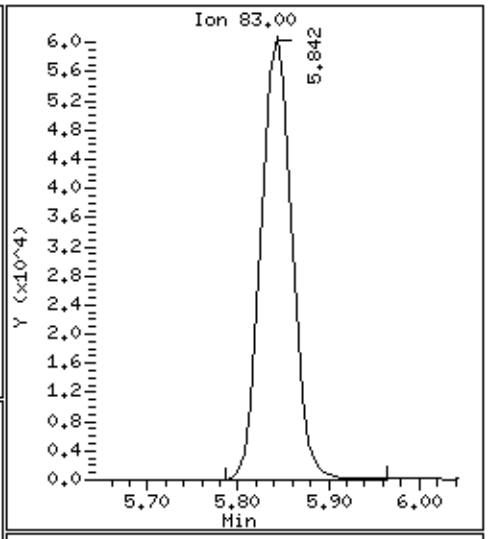
Column phase: RTX-624

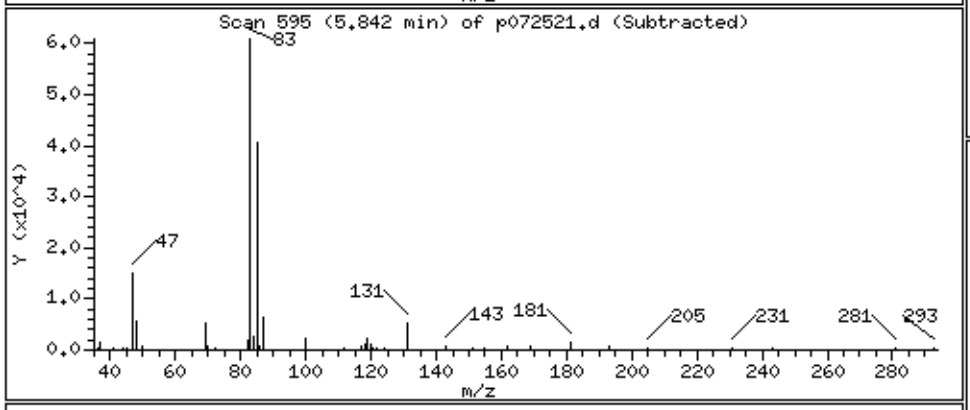
Column diameter: 0.25

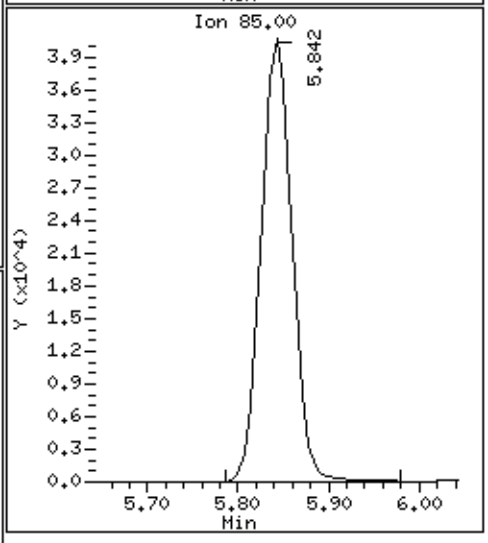
92 Chloroform

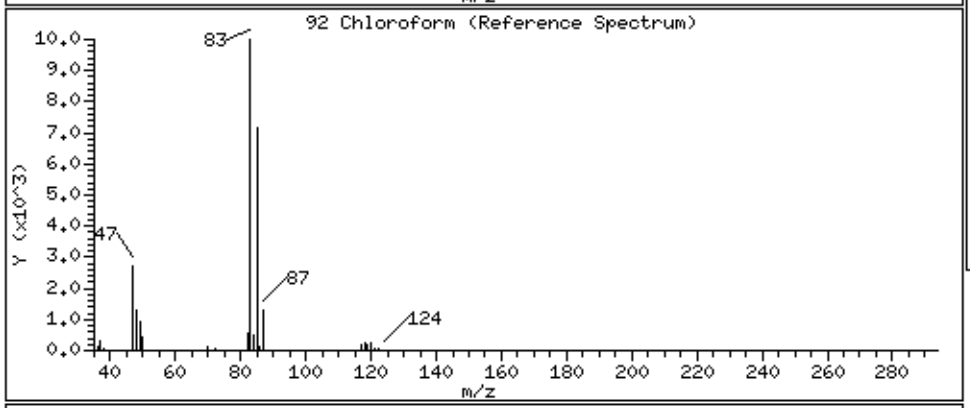
Concentration: 24.824 PPBV

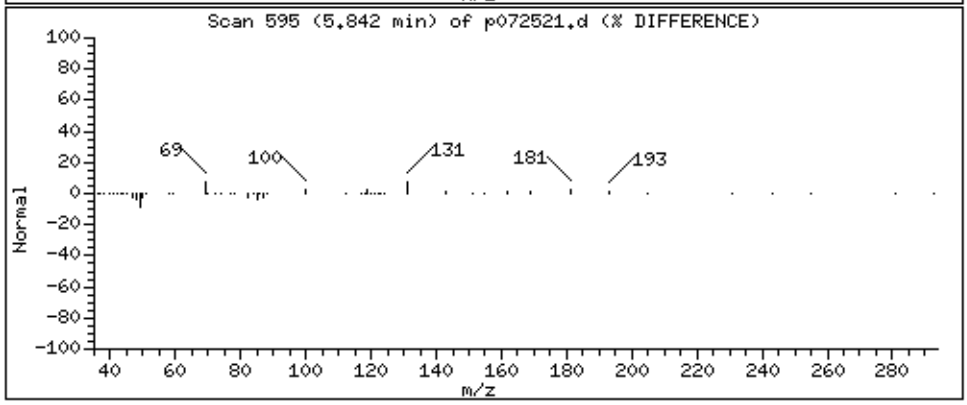












Data File: /chem/msdp.i/25JUL21.b/p072521.d

Date : 25-JUL-2021 23:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3422

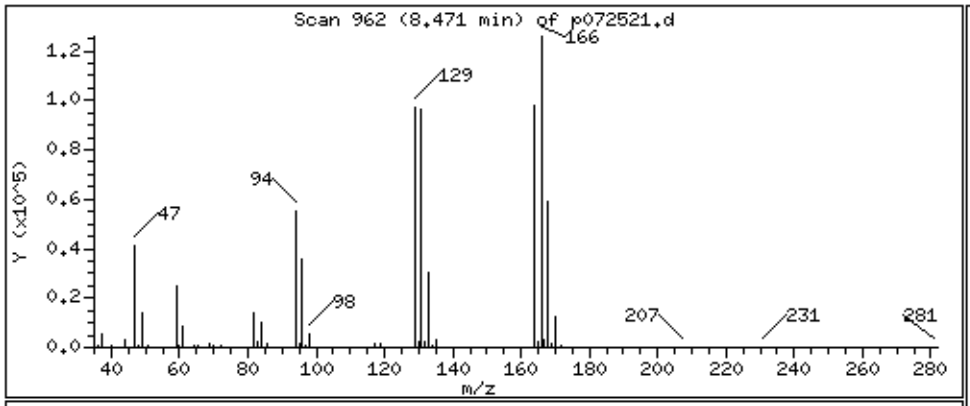
Operator: kk

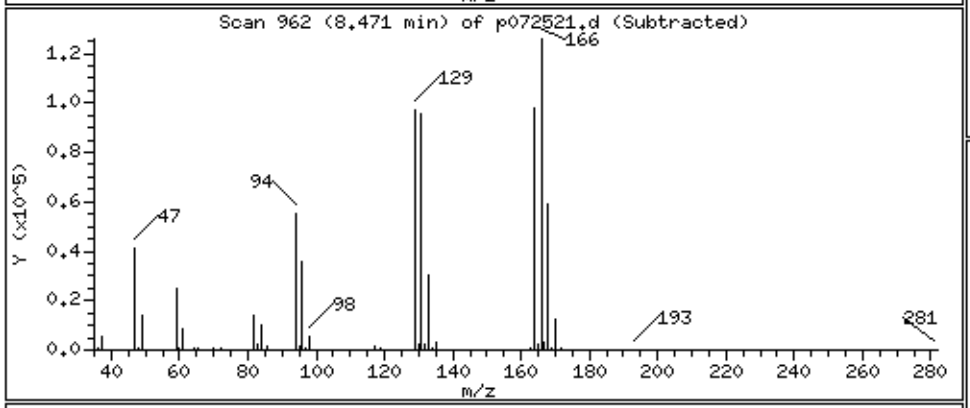
Column phase: RTX-624

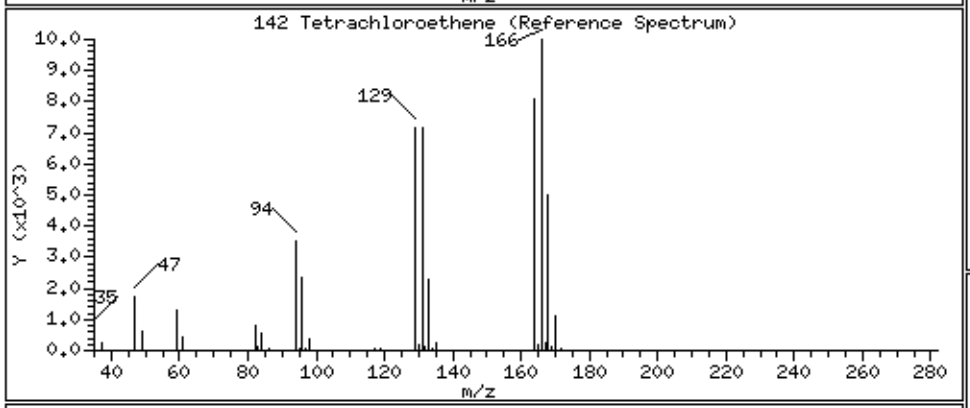
Column diameter: 0.25

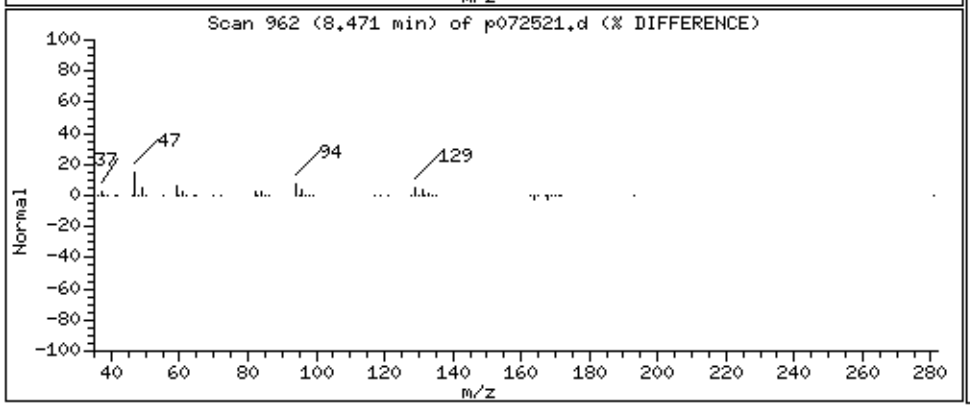
142 Tetrachloroethene

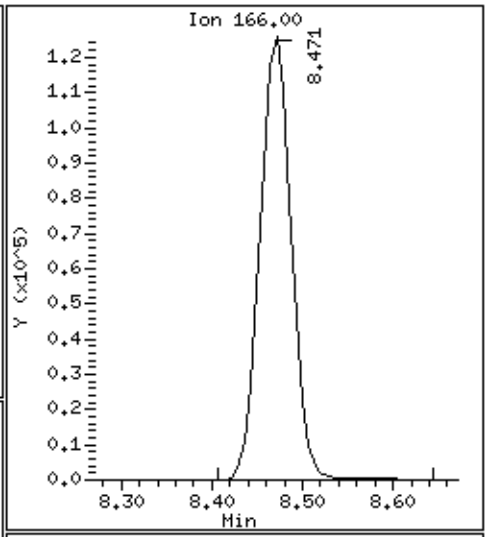
Concentration: 51.233 PPBV

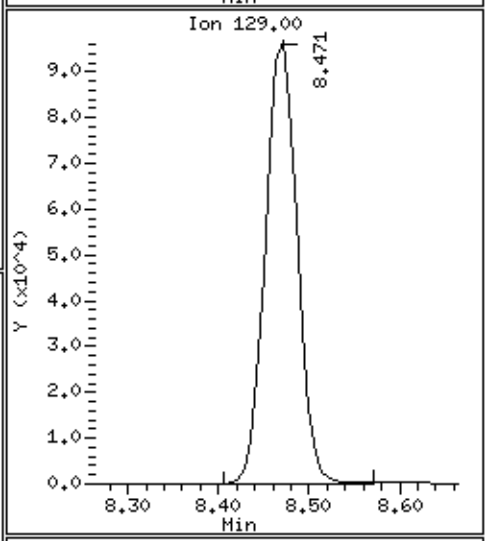


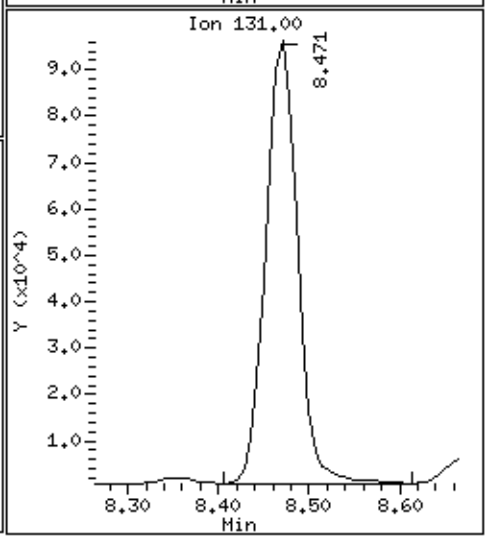












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Client Sample ID: SG-VW19A-02

Lab ID#: 2107282-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072522**	**Date of Collection:**	**7/13/21 7:23:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/26/21 12:21 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.0	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	6.9	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
1,1-Difluoroethane	4.0	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.0	Not Detected	24	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected	30	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,2-Dibromo-3-chloropropane	4.0	Not Detected	39	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.8	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.0	Not Detected	12	Not Detected
2-Hexanone	4.0	Not Detected	16	Not Detected
2-Propanol	4.0	Not Detected	9.9	Not Detected
3-Chloropropene	4.0	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Acetone	10	Not Detected	24	Not Detected
Acrolein	4.0	Not Detected	9.3	Not Detected
Acrylonitrile	4.0	Not Detected	8.8	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
Benzene	1.0	Not Detected	3.2	Not Detected
Bromodichloromethane	1.0	Not Detected	6.8	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Carbon Disulfide	4.0	Not Detected	12	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.4	Not Detected
Chlorobenzene	1.0	Not Detected	4.6	Not Detected
Chloroethane	4.0	Not Detected	11	Not Detected
Chloroform	1.0	5.7	4.9	28
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected

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Client Sample ID: SG-VW19A-02

Lab ID#: 2107282-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072522**	**Date of Collection:**	**7/13/21 7:23:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/26/21 12:21 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Cumene	1.0	Not Detected	5.0	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
Dibromomethane	4.0	Not Detected	29	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Ethyl Acetate	4.0	Not Detected	14	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
Ethyl-tert-butyl ether	4.0	Not Detected	17	Not Detected
Freon 11	1.0	1.6	5.7	9.2
Freon 12	1.0	11	5.0	54
Freon 113	1.0	Not Detected	7.7	Not Detected
Freon 114	1.0	Not Detected	7.1	Not Detected
Freon 134a	4.0	Not Detected	17	Not Detected
Heptane	1.0	Not Detected	4.1	Not Detected
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected
Hexachloroethane	4.0	Not Detected	39	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
Iodomethane	10	Not Detected	59	Not Detected
Isopropyl ether	4.0	Not Detected	17	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
Methyl tert-butyl ether	4.0	Not Detected	14	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Propylbenzene	1.0	Not Detected	5.0	Not Detected
Propylene	4.0	Not Detected	7.0	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
tert-Amyl methyl ether	4.0	Not Detected	17	Not Detected
tert-Butyl alcohol	4.0	Not Detected	12	Not Detected
Tetrachloroethene	1.0	57	6.8	380
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	410	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
Trichloroethene	1.0	Not Detected	5.4	Not Detected
Vinyl Acetate	4.0	Not Detected	14	Not Detected
Vinyl Bromide	4.0	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW19A-02

Lab ID#: 2107282-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072522**	**Date of Collection:**	**7/13/21 7:23:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/26/21 12:21 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072522.d
Lab Smp Id: 2107282-05A
Inj Date : 26-JUL-2021 00:21
Operator : kk Inst ID: msdp.i
Smp Info : 200ml N3419
Misc Info : 5.1 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 4
Dil Factor: 2.02000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	152695	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	116899				48.23- 108.23	76.56
5.785	5.778 (1.000)	49	323178				150.57- 210.57	211.65
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	548091	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	82620				0.00- 45.71	15.07
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	577422	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	299882				23.78- 83.78	51.93
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	216688	25.7141	25.714		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	106574				27.21- 87.21	49.18
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	608451	25.5649	25.565		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67460				0.00- 40.44	11.09

					CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
$ 134 Toluene-d8 (continued)								
7.891	7.891 (1.184)	100	396319				34.95- 94.95	65.14
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	365390	24.6427		24.643	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	447064				95.92- 155.92	122.35
10.921	10.921 (1.154)	176	348148				66.89- 126.89	95.28
8 Freon 12						CAS #: 75-71-8		
1.730	1.716 (0.299)	85	73880	5.39463		10.897	80.00- 120.00	100.00
1.730	1.716 (0.299)	87	25046				2.37- 62.37	33.90
33 Freon 11						CAS #: 75-69-4		
2.891	2.891 (0.500)	101	11811	0.81157		1.639	80.00- 120.00	100.00
2.899	2.891 (0.501)	103	7998				34.72- 94.72	67.71
92 Chloroform						CAS #: 67-66-3		
5.843	5.843 (1.010)	83	37279	2.80596		5.668	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	25978				34.70- 94.70	69.68
142 Tetrachloroethene						CAS #: 127-18-4		
8.471	8.471 (0.895)	166	370209	28.1316		56.826	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	287109				47.84- 107.84	77.55
8.471	8.464 (0.895)	131	274243				45.29- 105.29	74.08

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072522.d
Lab Smp Id: 2107282-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 5.1 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	152695	-1.23
108 1,4-Difluorobenze	573421	344053	802789	548091	-4.42
153 Chlorobenzene-d5	566079	339647	792511	577422	2.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 09:54

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-05A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 5.1 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.714	102.86	70-130
$ 134 Toluene-d8	25.000	25.565	102.26	70-130
$ 170 4-Bromofluorobenz	25.000	24.643	98.57	70-130

Data File: /chem/msdp.i/25JUL21.b/p072522.d

Date : 26-JUL-2021 00:21

Client ID:

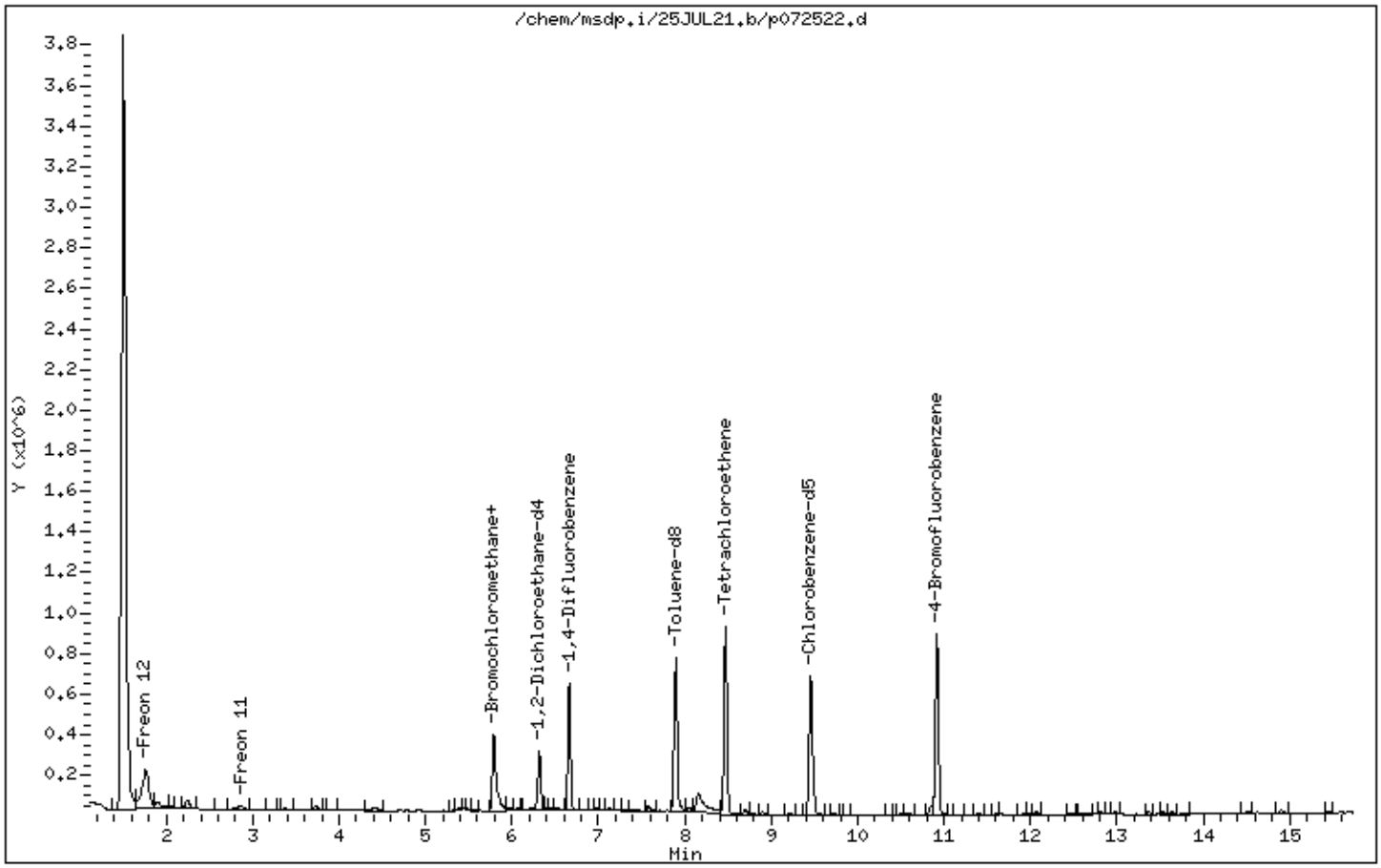
Instrument: msdp.i

Sample Info: 200ml N3419

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072522.d

Date : 26-JUL-2021 00:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3419

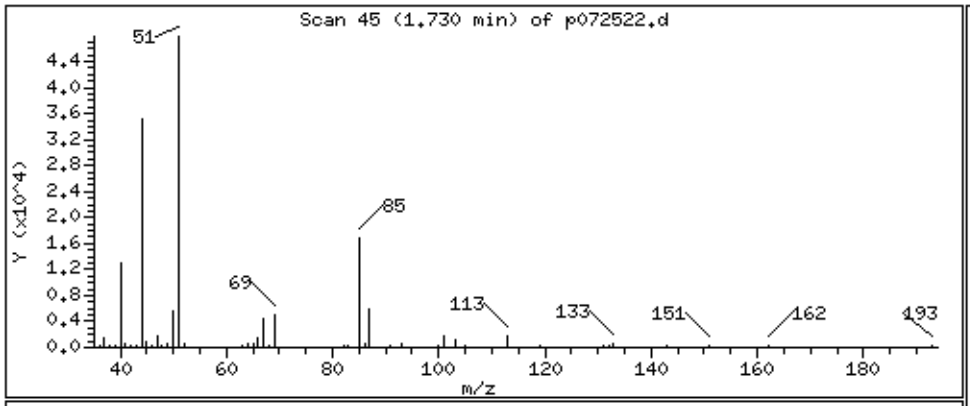
Operator: kk

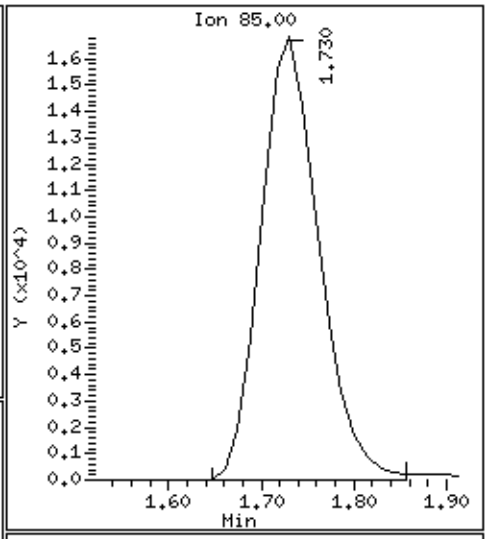
Column phase: RTX-624

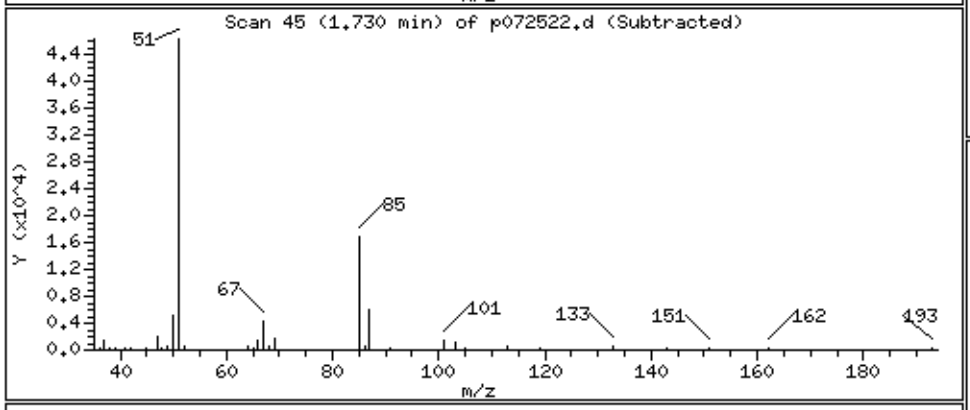
Column diameter: 0.25

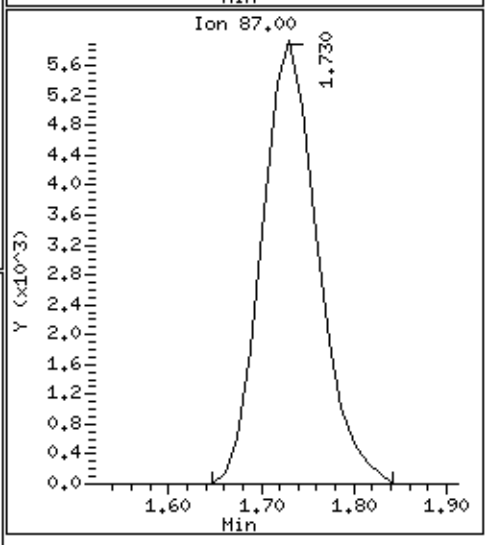
8 Freon 12

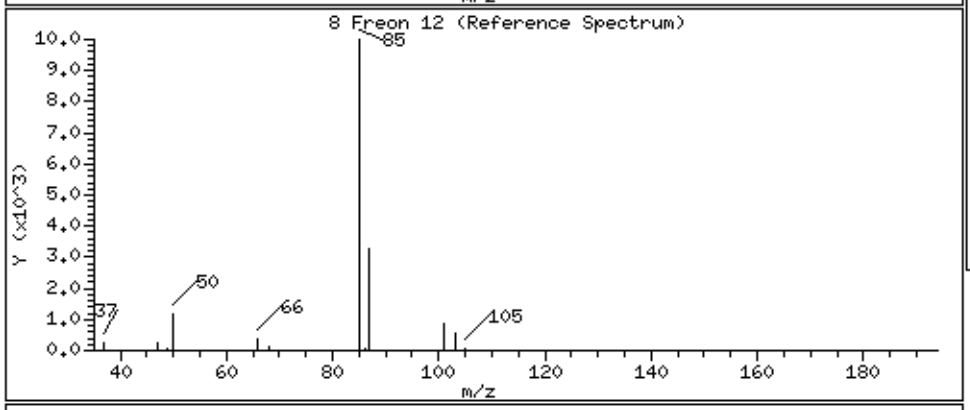
Concentration: 10.897 PPBV

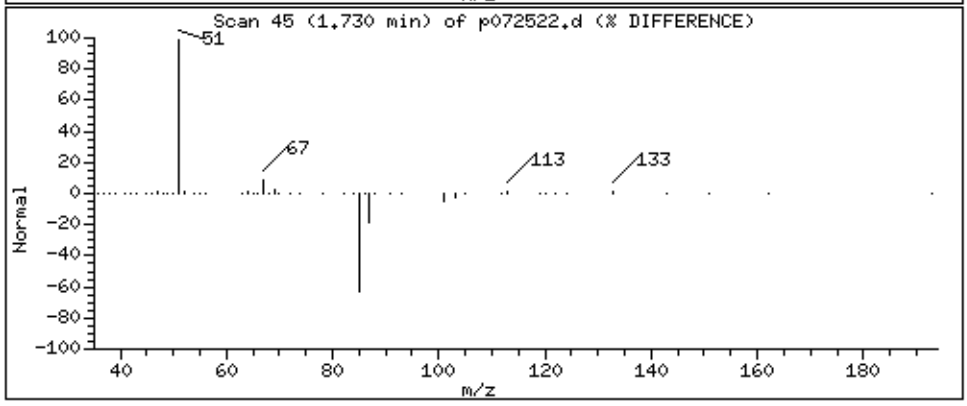












Data File: /chem/msdp.i/25JUL21.b/p072522.d

Date : 26-JUL-2021 00:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3419

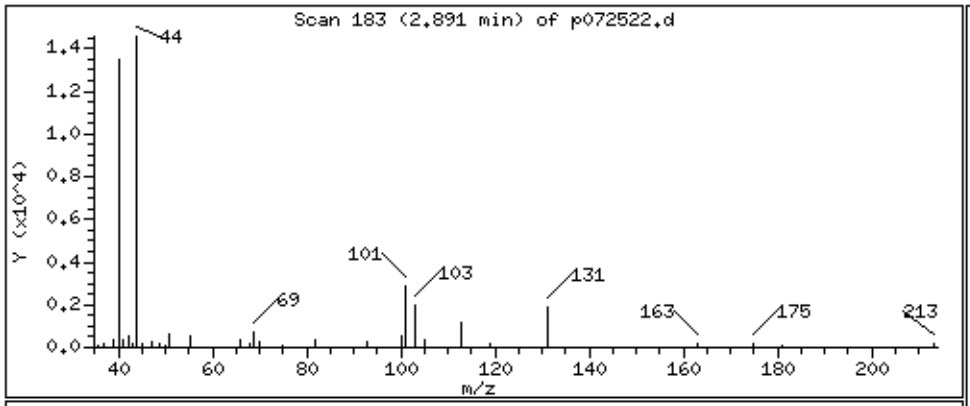
Operator: kk

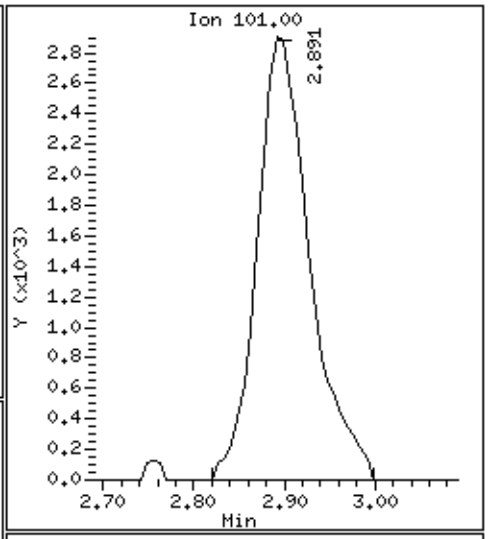
Column phase: RTX-624

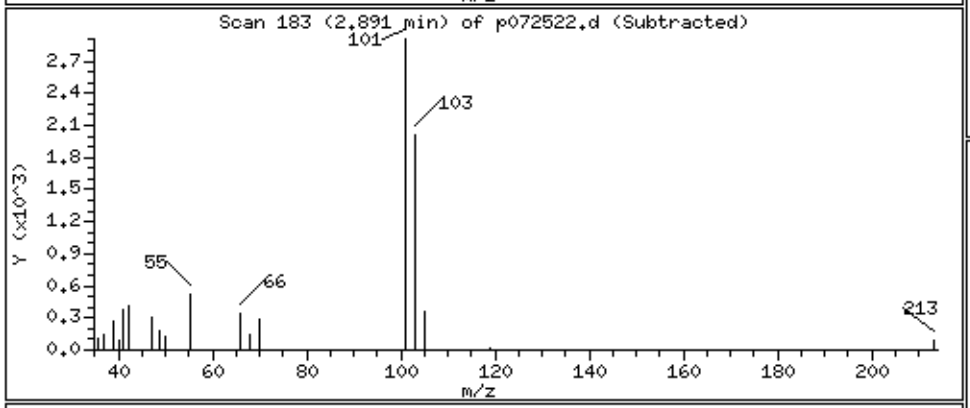
Column diameter: 0.25

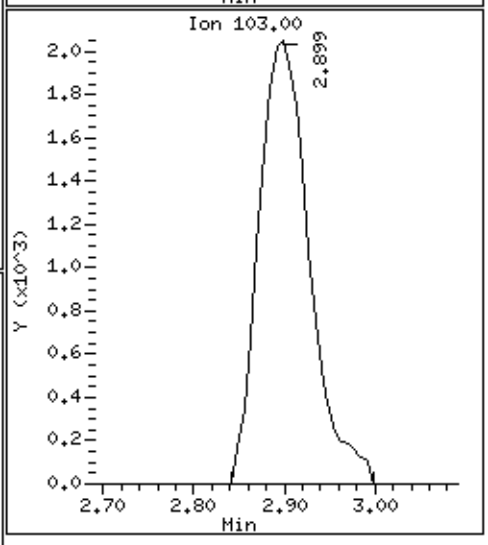
33 Freon 11

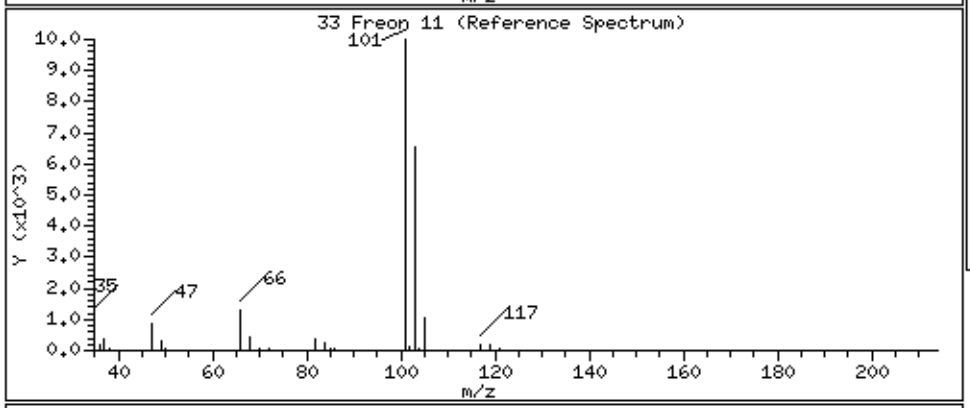
Concentration: 1.639 PPBV

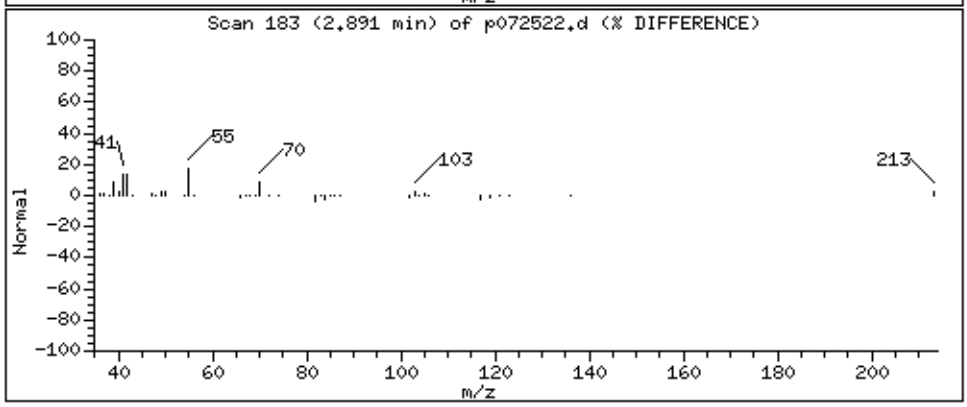












Data File: /chem/msdp.i/25JUL21.b/p072522.d

Date : 26-JUL-2021 00:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3419

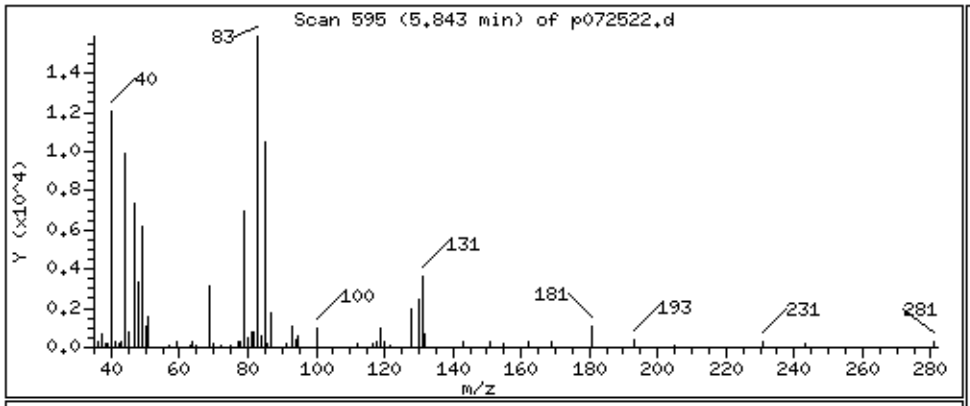
Operator: kk

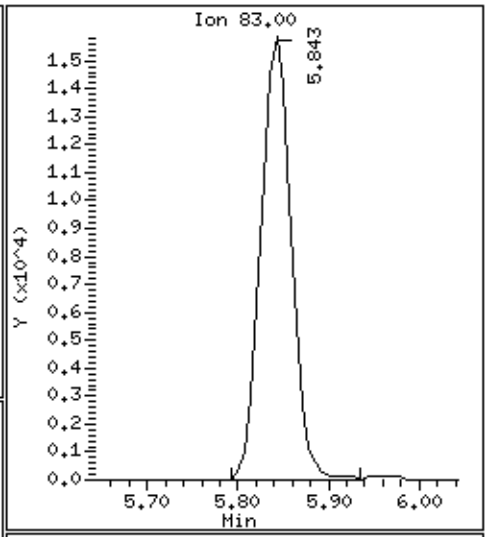
Column phase: RTX-624

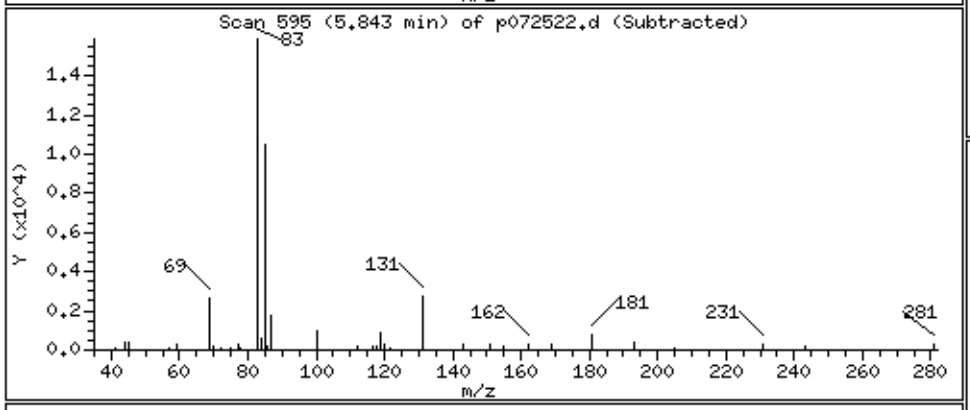
Column diameter: 0.25

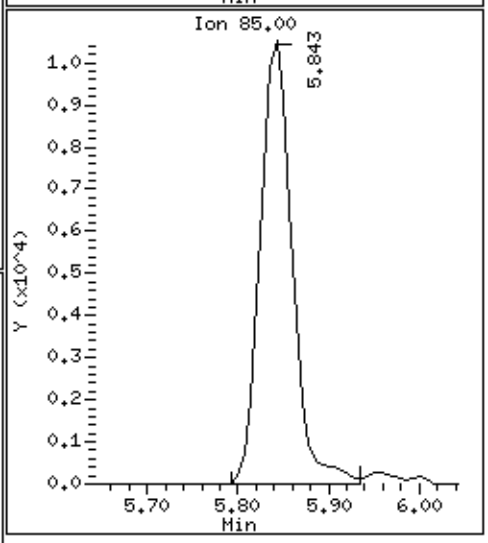
92 Chloroform

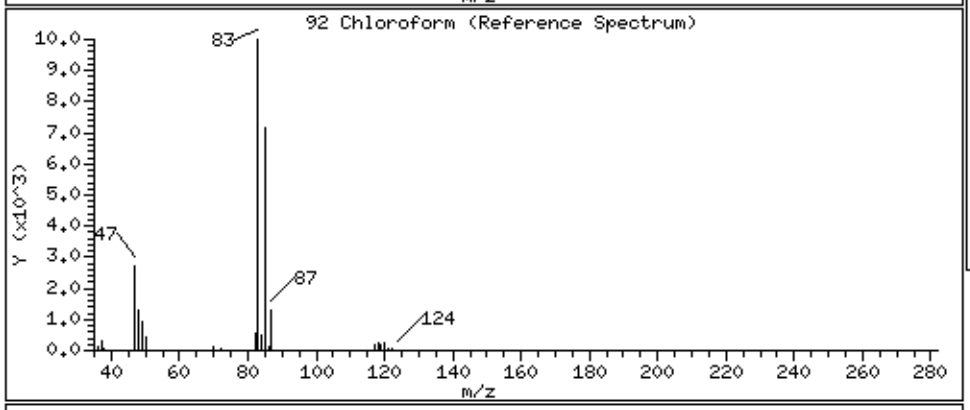
Concentration: 5.668 PPBV

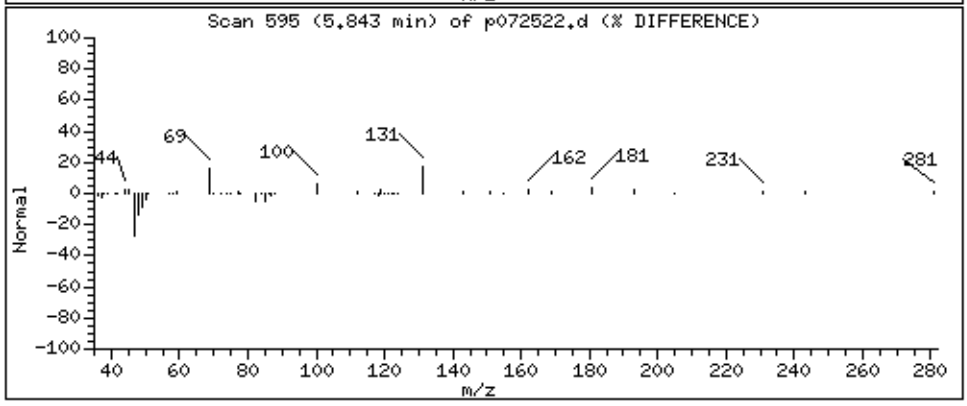












Data File: /chem/msdp.i/25JUL21.b/p072522.d

Date : 26-JUL-2021 00:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3419

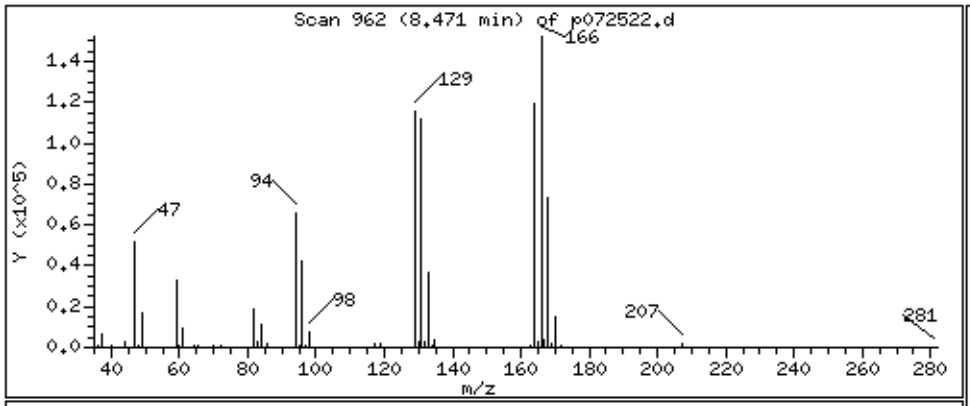
Operator: kk

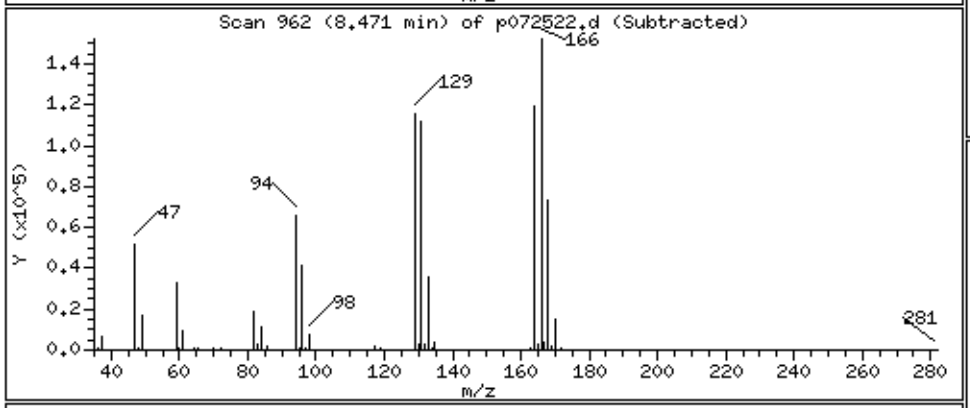
Column phase: RTX-624

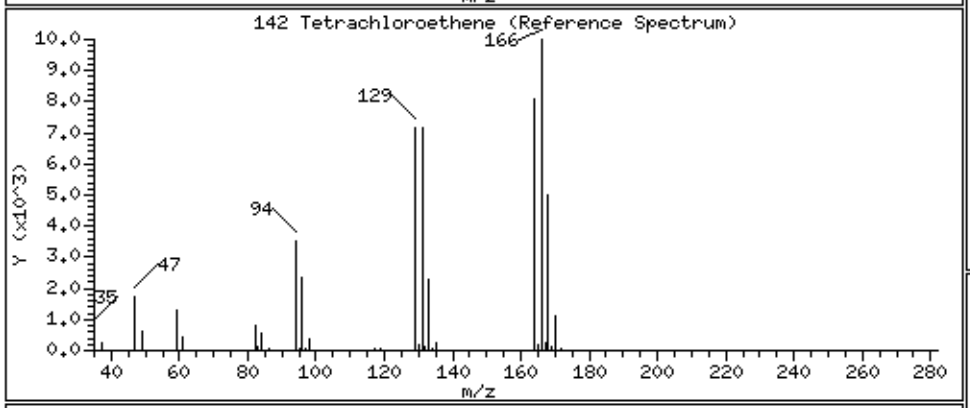
Column diameter: 0.25

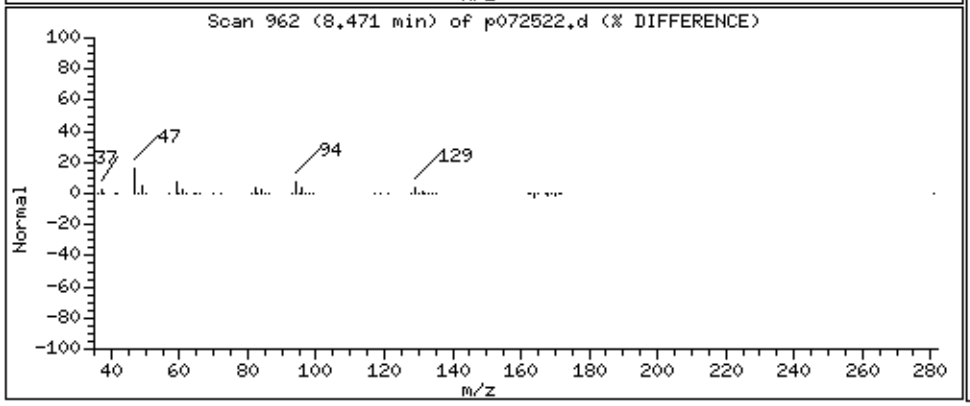
142 Tetrachloroethene

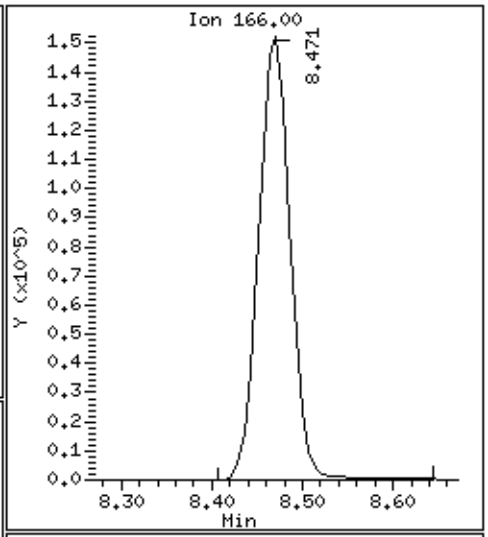
Concentration: 56.826 PPBV

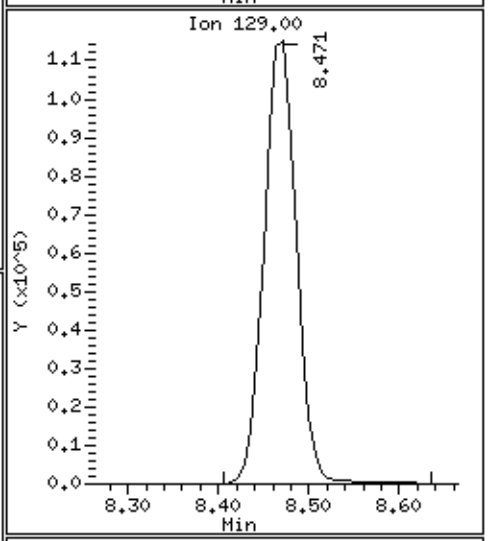


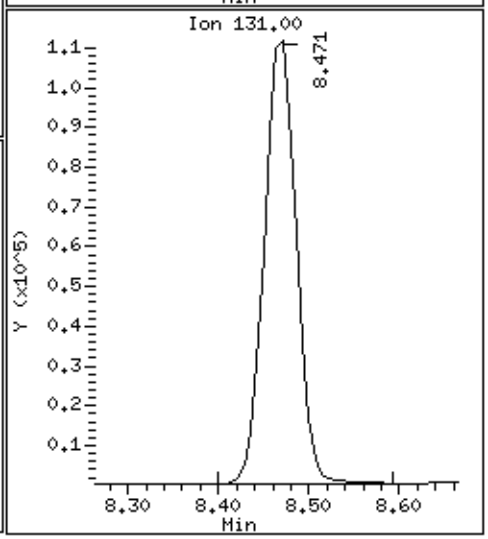












eurofins | Air Toxics

Client Sample ID: SG-VW19B-02

Lab ID#: 2107282-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072528**	**Date of Collection:**	**7/13/21 8:11:00 AM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**7/26/21 09:25 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.6	Not Detected	31	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
1,1-Difluoroethane	4.6	440	12	1200
1,2,3-Trichloropropane	4.6	Not Detected	27	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2-Dibromo-3-chloropropane	4.6	Not Detected	44	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	13	Not Detected
2-Hexanone	4.6	Not Detected	19	Not Detected
2-Propanol	4.6	Not Detected	11	Not Detected
3-Chloropropene	4.6	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Acetone	11	13	27	31
Acrolein	4.6	Not Detected	10	Not Detected
Acrylonitrile	4.6	Not Detected	9.9	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
Bromodichloromethane	1.1	Not Detected	7.6	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Carbon Disulfide	4.6	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
Chloroform	1.1	12	5.6	59
Chloromethane	11	Not Detected	24	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected

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Client Sample ID: SG-VW19B-02

Lab ID#: 2107282-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072528**	**Date of Collection: 7/13/21 8:11:00 AM**	
Dil. Factor:	**2.28**	**Date of Analysis: 7/26/21 09:25 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Dibromochloromethane	1.1	Not Detected	9.7	Not Detected
Dibromomethane	4.6	Not Detected	32	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Ethyl Acetate	4.6	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
Ethyl-tert-butyl ether	4.6	Not Detected	19	Not Detected
Freon 11	1.1	2.5	6.4	14
Freon 12	1.1	14	5.6	67
Freon 113	1.1	Not Detected	8.7	Not Detected
Freon 114	1.1	Not Detected	8.0	Not Detected
Freon 134a	4.6	Not Detected	19	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected
Hexachloroethane	4.6	Not Detected	44	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
Iodomethane	11	Not Detected	66	Not Detected
Isopropyl ether	4.6	Not Detected	19	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
Methyl tert-butyl ether	4.6	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
Naphthalene	2.3	Not Detected	12	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
Propylene	4.6	Not Detected	7.8	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
tert-Amyl methyl ether	4.6	Not Detected	19	Not Detected
tert-Butyl alcohol	4.6	Not Detected	14	Not Detected
Tetrachloroethene	1.1	38	7.7	260
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	470	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Vinyl Acetate	4.6	Not Detected	16	Not Detected
Vinyl Bromide	4.6	Not Detected	20	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW19B-02

Lab ID#: 2107282-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072528**	**Date of Collection: 7/13/21 8:11:00 AM**	
Dil. Factor:	**2.28**	**Date of Analysis: 7/26/21 09:25 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072528.d
Lab Smp Id: 2107282-06A
Inj Date : 26-JUL-2021 09:25
Operator : kk Inst ID: msdp.i
Smp Info : 200ml 1L1555
Misc Info : 7.8 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 12
Dil Factor: 2.28000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	145060	25.0000			80.00- 120.00	100.00
5.792	5.778 (1.000)	128	112240				48.23- 108.23	77.37
5.785	5.778 (1.000)	49	318369				150.57- 210.57	219.47
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	539475	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	79343				0.00- 45.71	14.71
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	526315	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	272768				23.78- 83.78	51.83
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.315 (1.092)	65	209689	26.1932	26.193		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	100051				27.21- 87.21	47.71
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	586442	25.0337	25.034		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	62521				0.00- 40.44	10.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	384118			34.95- 94.95	65.50
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	323178	23.9122	23.912	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	396344			95.92- 155.92	122.64
10.921	10.921 (1.154)	176	303620			66.89- 126.89	93.95
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.702 (0.297)	65	638504	194.189	442.75	80.00- 120.00	100.00
1.716	1.744 (0.297)	51	2538924			597.63- 657.63	397.64
1.716	1.702 (0.297)	47	354128			33.72- 93.72	55.46
8 Freon 12					CAS #: 75-71-8		
1.730	1.716 (0.299)	85	77463	5.95397	13.575	80.00- 120.00	100.00
1.730	1.716 (0.299)	87	24500			2.37- 62.37	31.63
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	15172	1.09738	2.502	80.00- 120.00	100.00
2.898	2.891 (0.501)	103	7745			34.72- 94.72	51.05
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	21608	5.68197	12.955	80.00- 120.00	100.00
3.736	3.715 (0.646)	43	79351			302.95- 362.95	367.23
92 Chloroform					CAS #: 67-66-3		
5.842	5.843 (1.010)	83	67391	5.33945	12.174	80.00- 120.00	100.00
5.842	5.843 (1.010)	85	43469			34.70- 94.70	64.50
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	200790	16.7393	38.166	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	161011			47.84- 107.84	80.19
8.464	8.464 (0.895)	131	156264			45.29- 105.29	77.82

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072528.d
Lab Smp Id: 2107282-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.8 Hg->10.1 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	145060	-6.17
108 1,4-Difluorobenze	573421	344053	802789	539475	-5.92
153 Chlorobenzene-d5	566079	339647	792511	526315	-7.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:04

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-06A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.8 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.193	104.77	70-130
$ 134 Toluene-d8	25.000	25.034	100.13	70-130
$ 170 4-Bromofluorobenz	25.000	23.912	95.65	70-130

Data File: /chem/msdp.i/25JUL21.b/p072528.d

Date : 26-JUL-2021 09:25

Client ID:

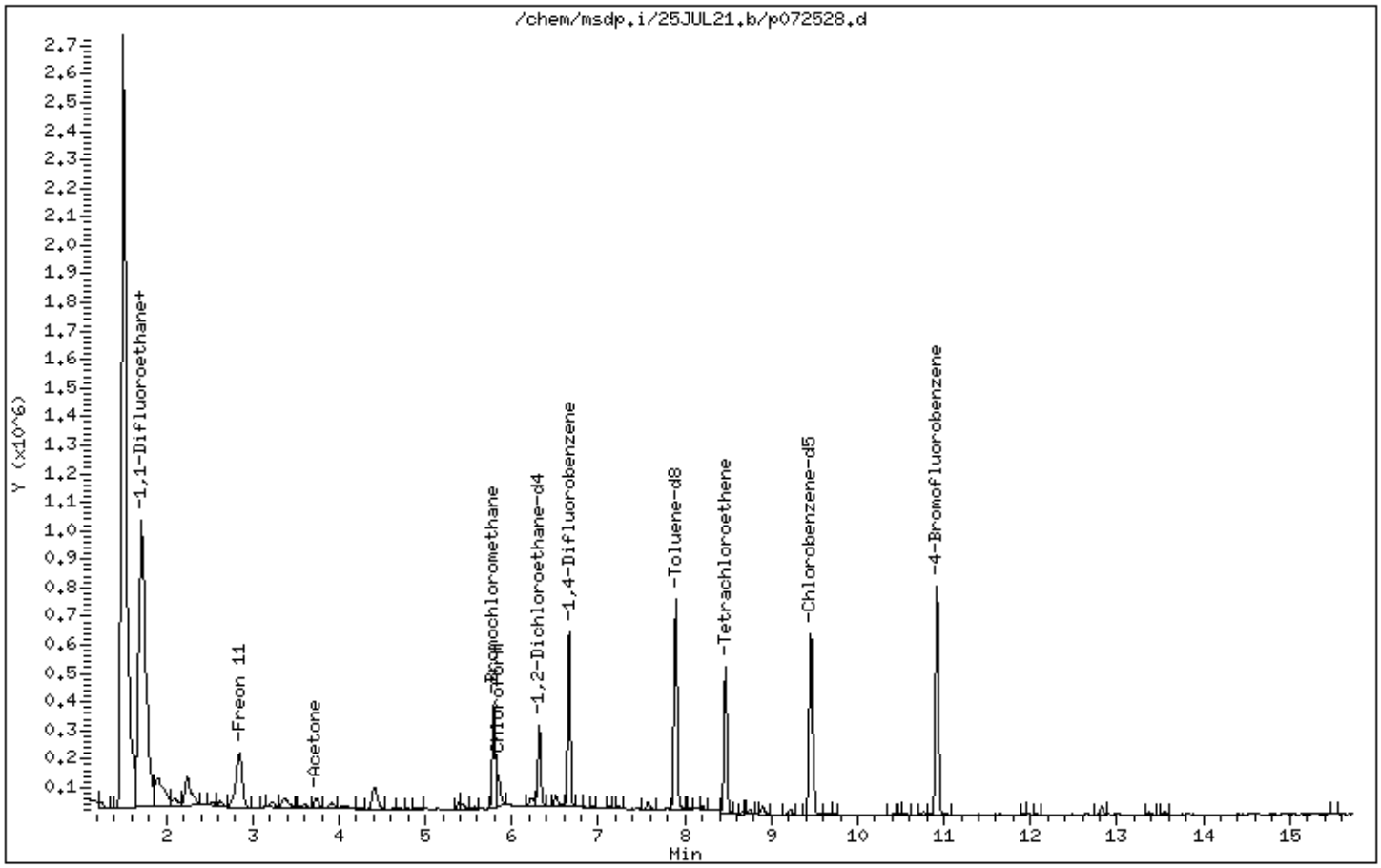
Instrument: msdp.i

Sample Info: 200ml 1L1555

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072528.d

Date : 26-JUL-2021 09:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1555

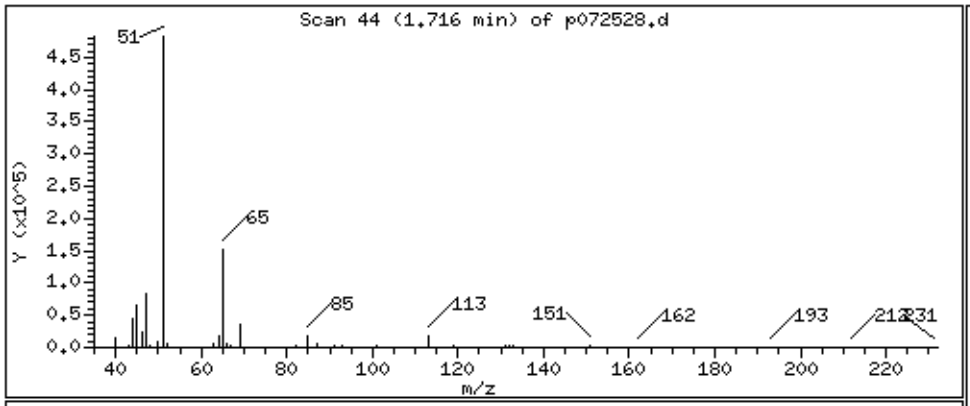
Operator: kk

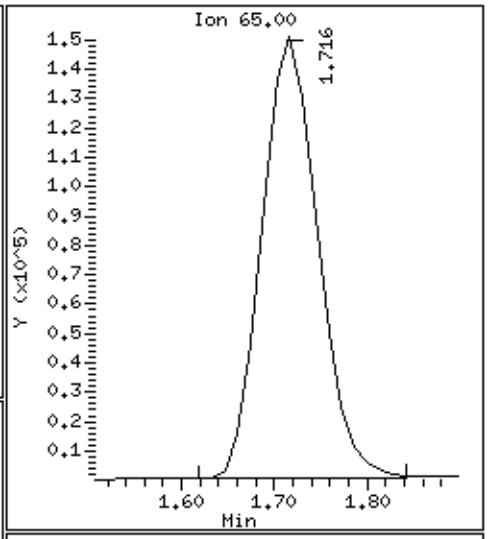
Column phase: RTX-624

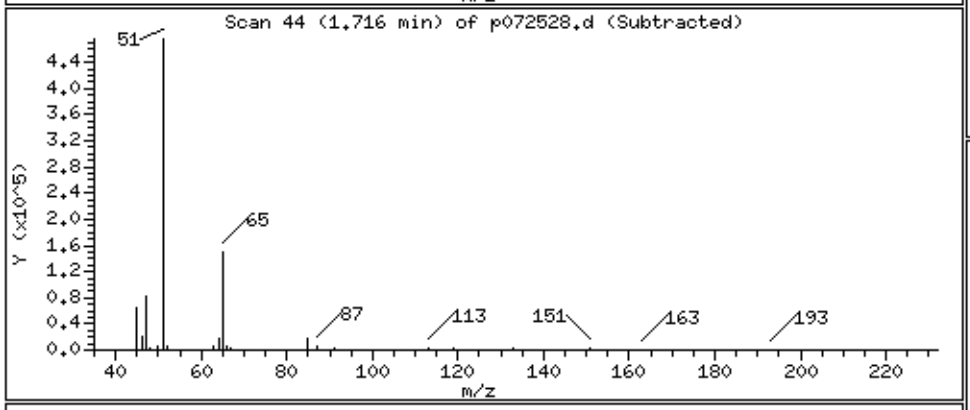
Column diameter: 0.25

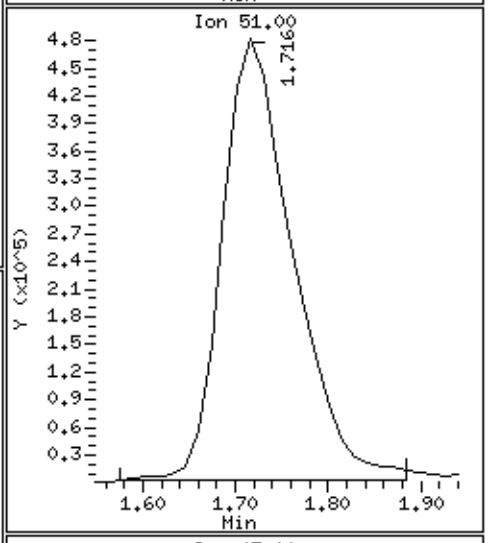
7 1,1-Difluoroethane

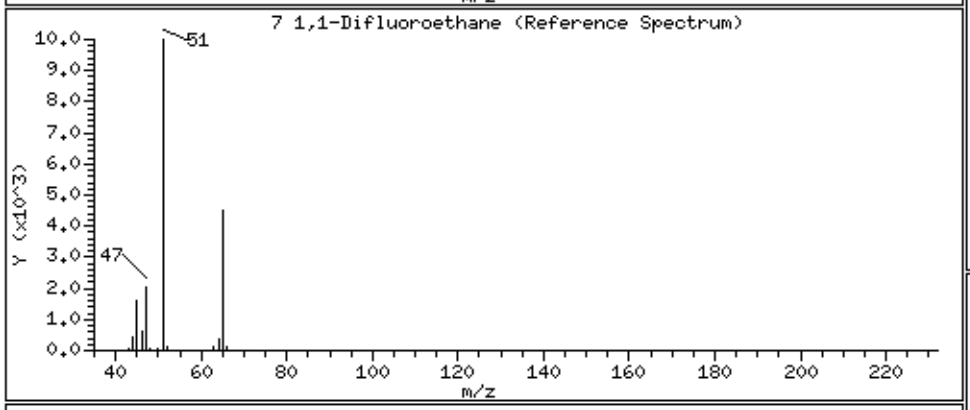
Concentration: 442.75 PPBV

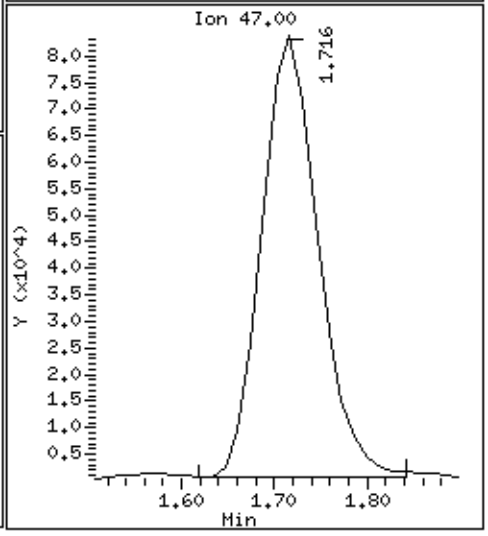


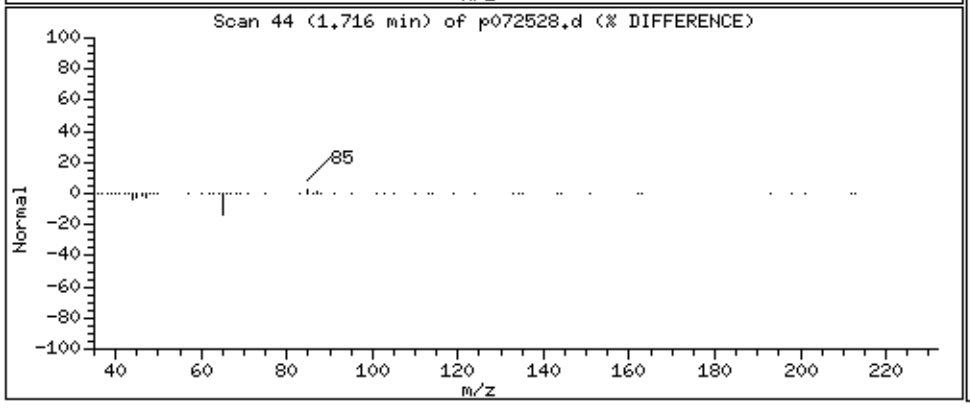












Data File: /chem/msdp.i/25JUL21.b/p072528.d

Date : 26-JUL-2021 09:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1555

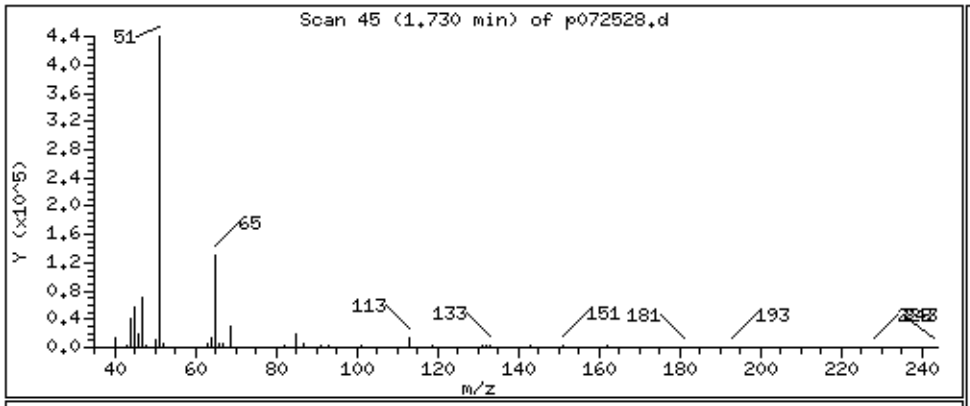
Operator: kk

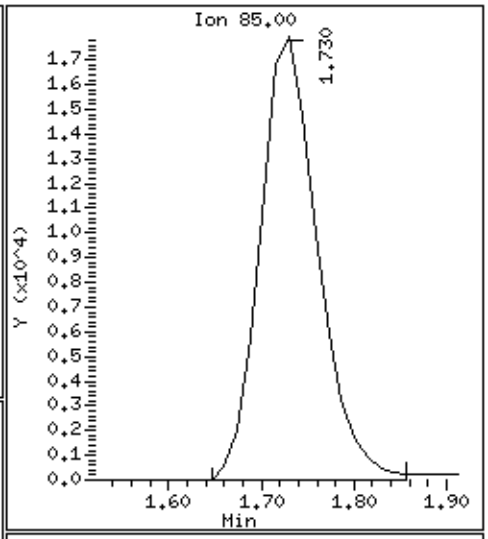
Column phase: RTX-624

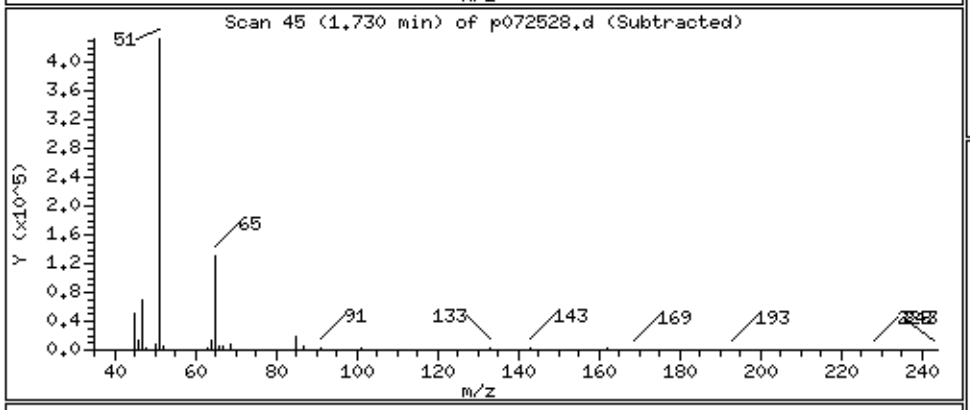
Column diameter: 0.25

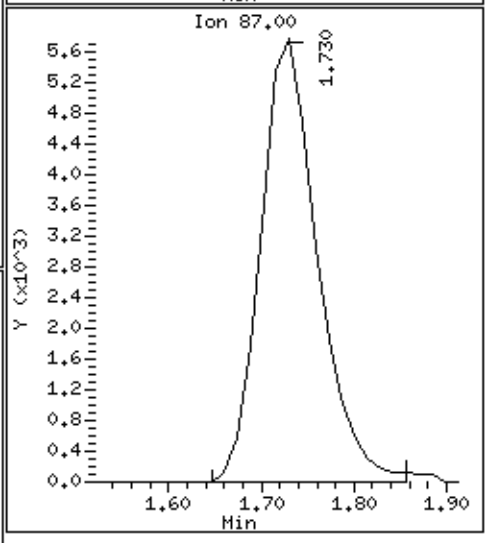
8 Freon 12

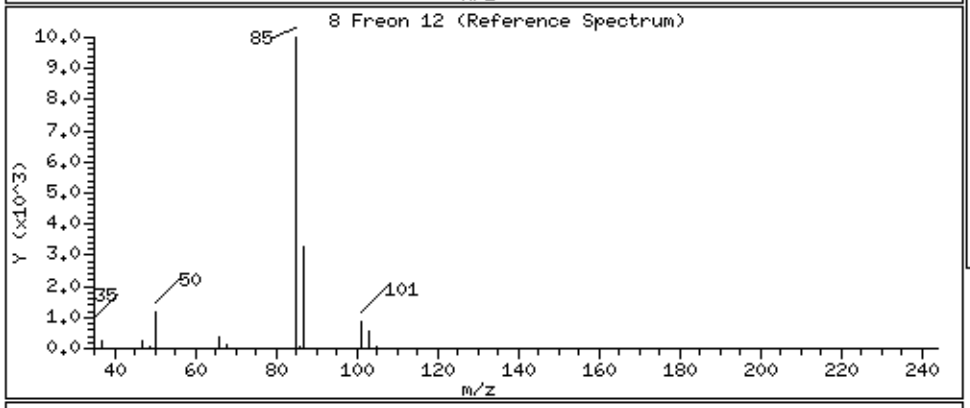
Concentration: 13.575 PPBV

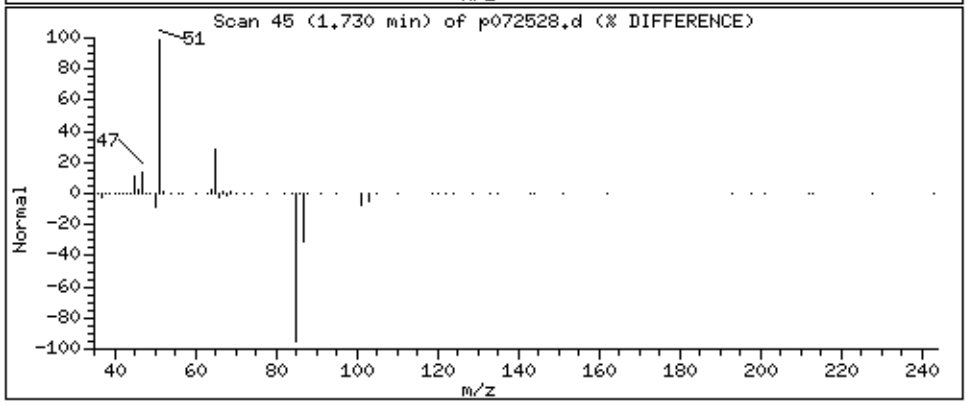












Data File: /chem/msdp.i/25JUL21.b/p072528.d

Date : 26-JUL-2021 09:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1555

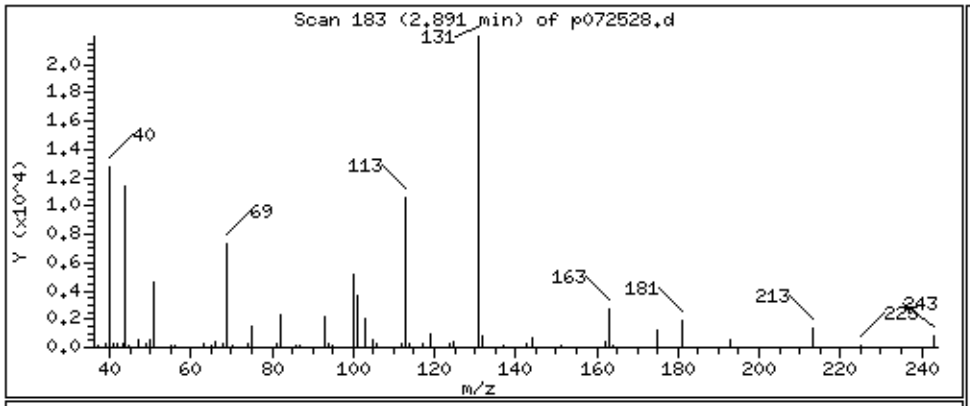
Operator: kk

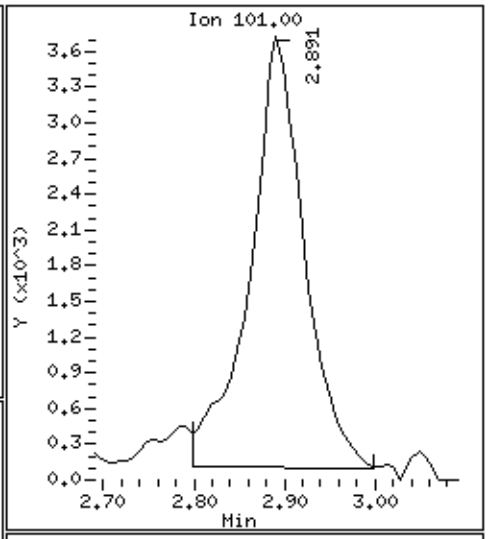
Column phase: RTX-624

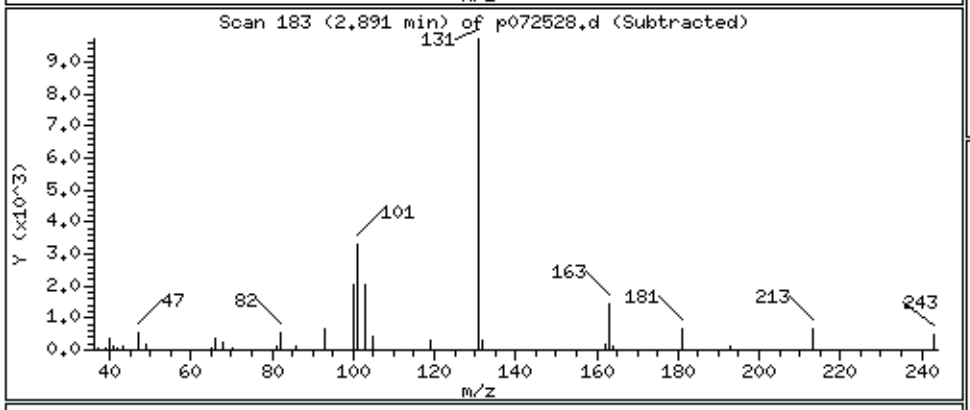
Column diameter: 0.25

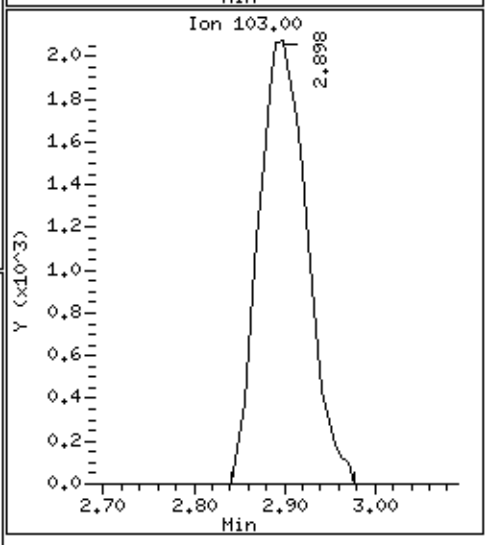
33 Freon 11

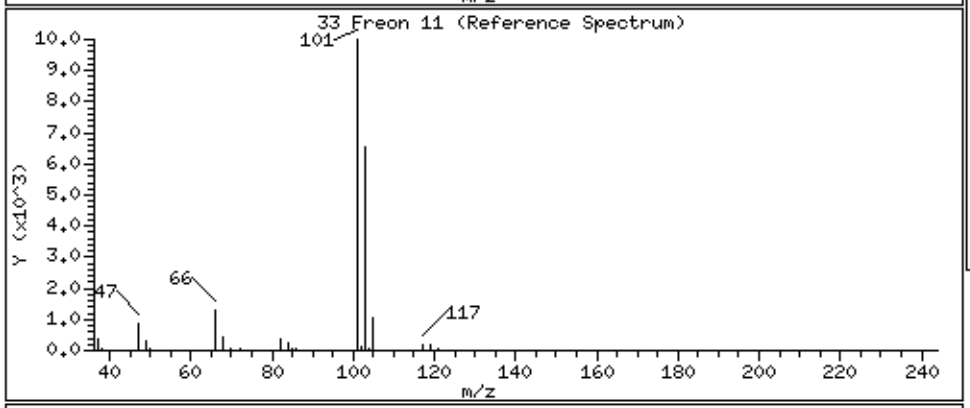
Concentration: 2.502 PPBV

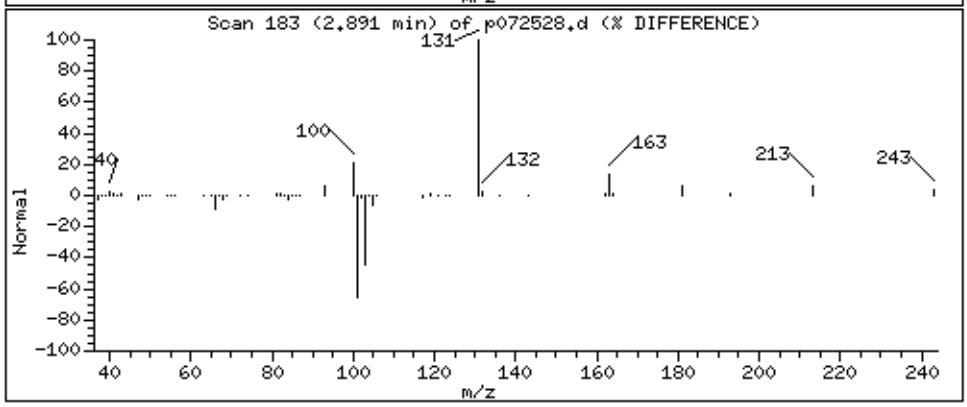












Data File: /chem/msdp.i/25JUL21.b/p072528.d

Date : 26-JUL-2021 09:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1555

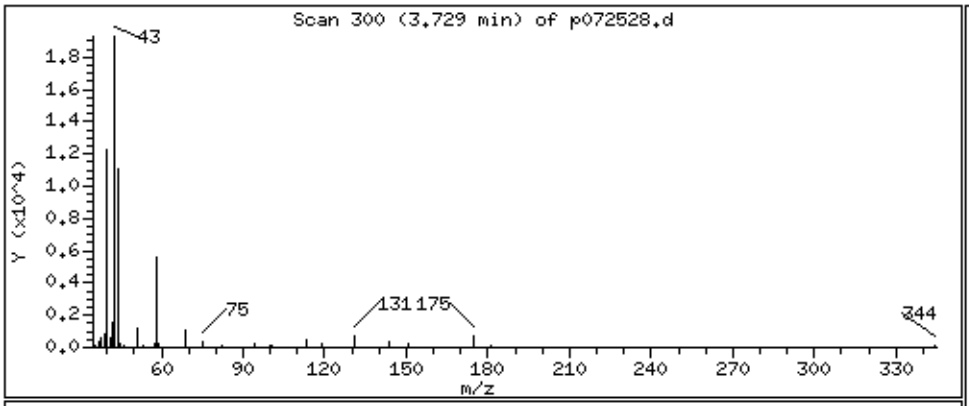
Operator: kk

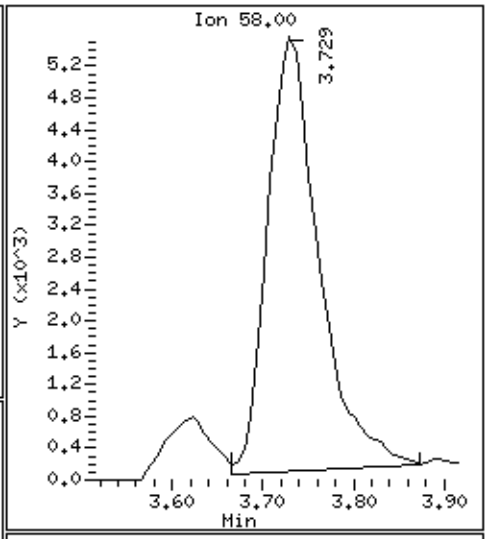
Column phase: RTX-624

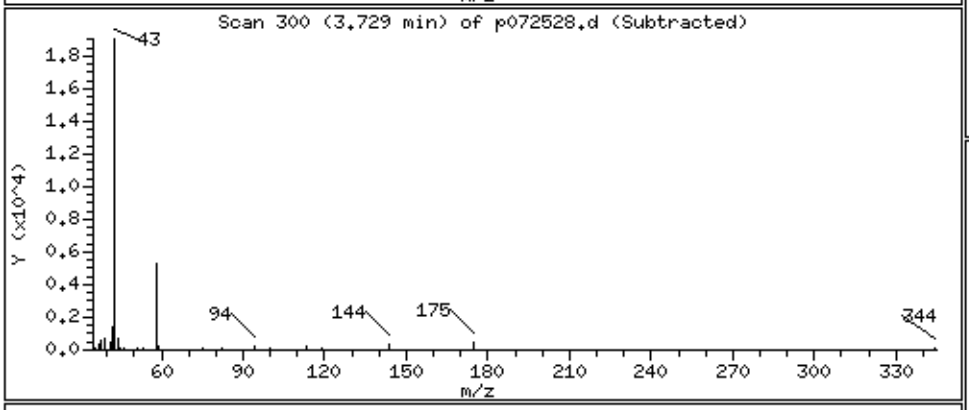
Column diameter: 0.25

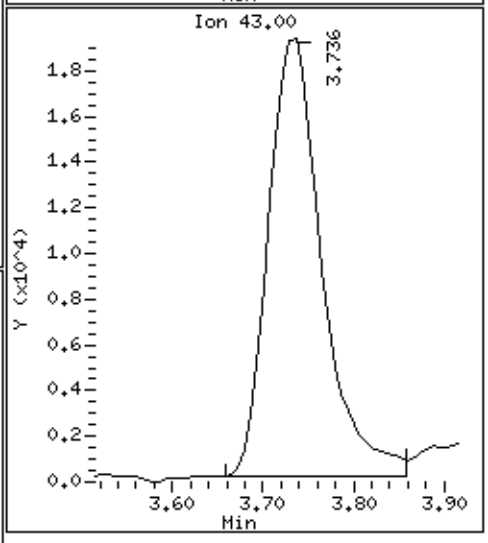
47 Acetone

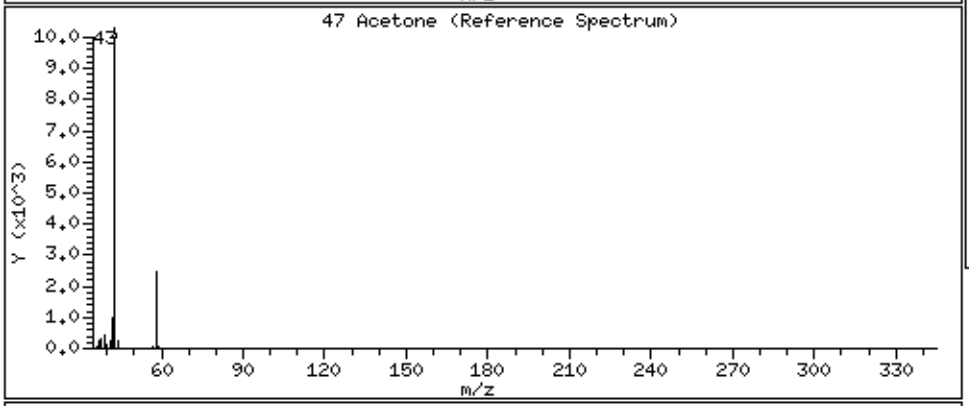
Concentration: 12.955 PPBV

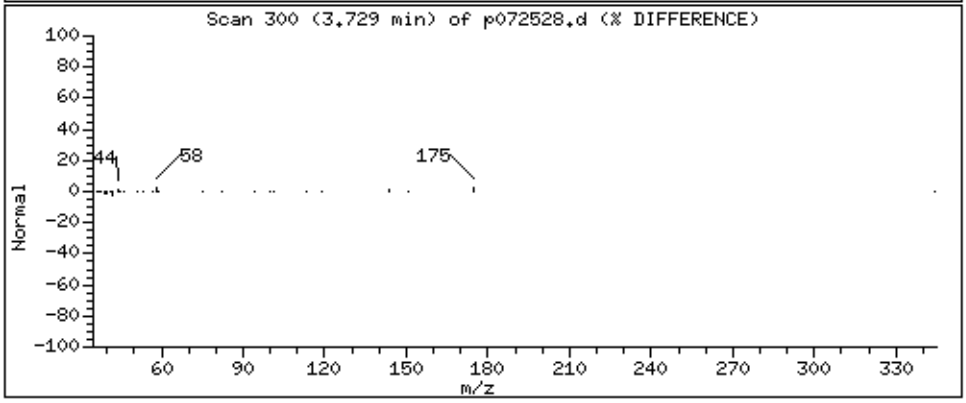












Data File: /chem/msdp.i/25JUL21.b/p072528.d

Date : 26-JUL-2021 09:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1555

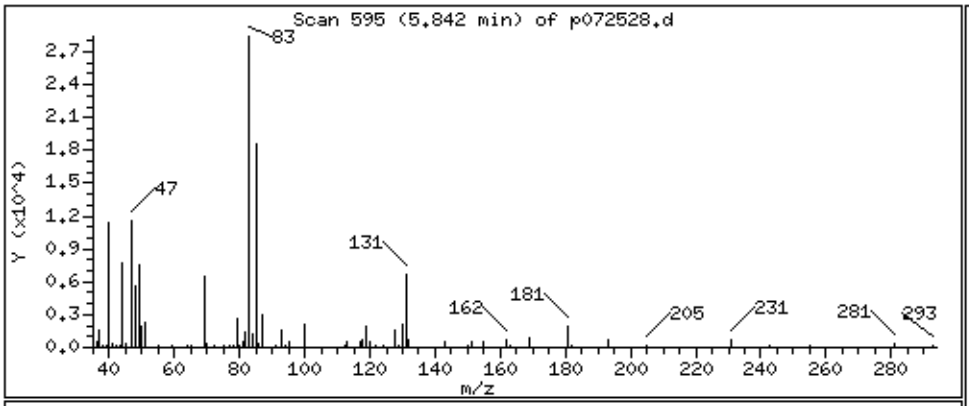
Operator: kk

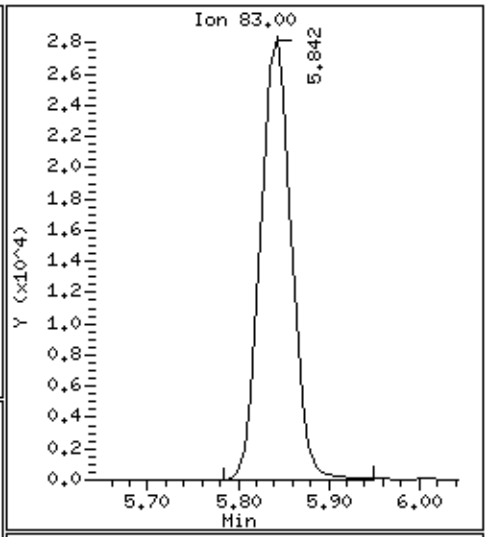
Column phase: RTX-624

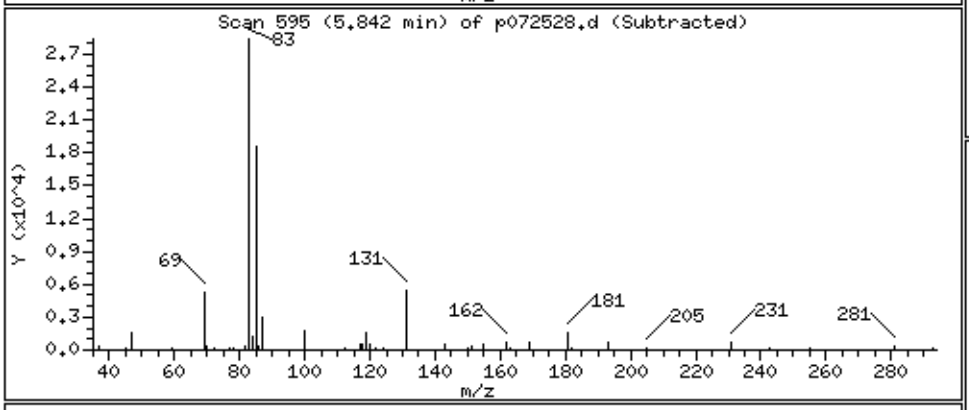
Column diameter: 0.25

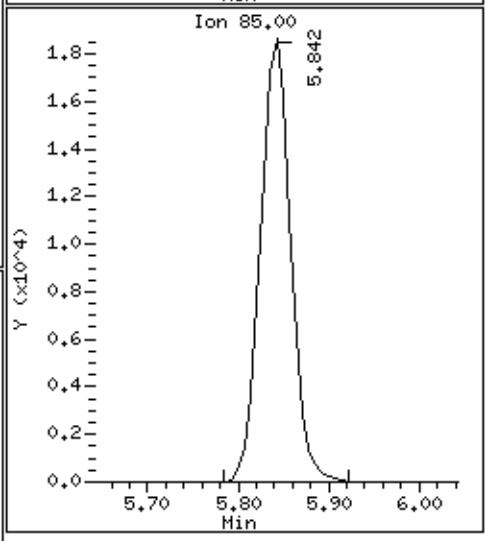
92 Chloroform

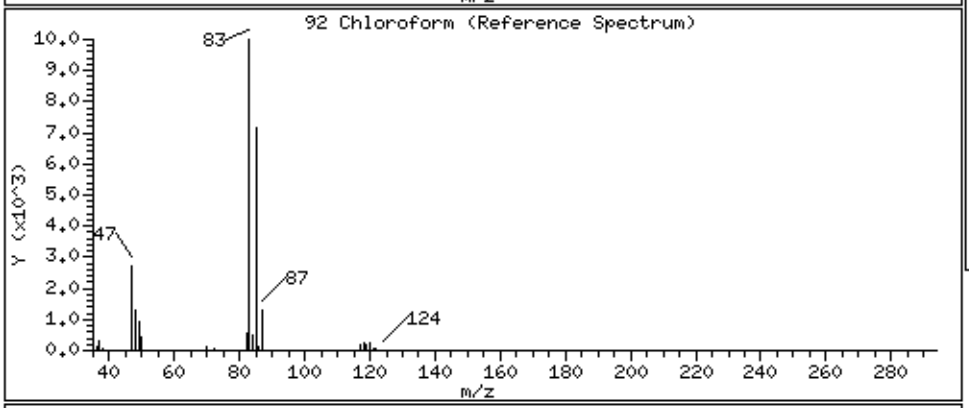
Concentration: 12.174 PPBV

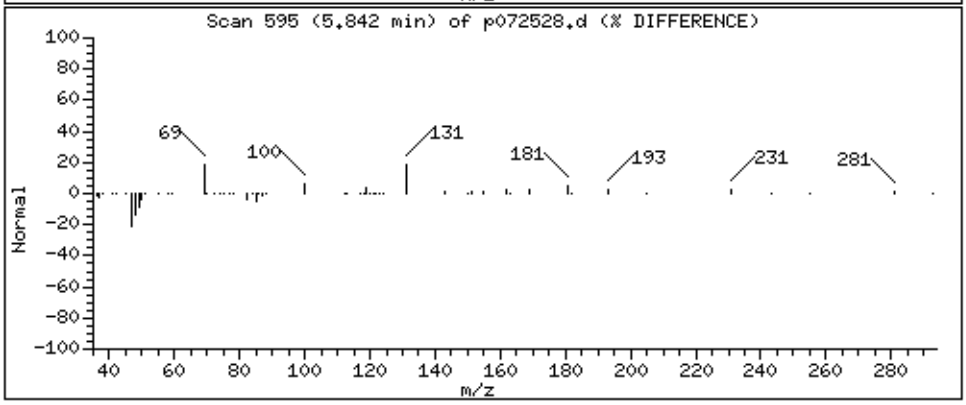












Data File: /chem/msdp.i/25JUL21.b/p072528.d

Date : 26-JUL-2021 09:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1555

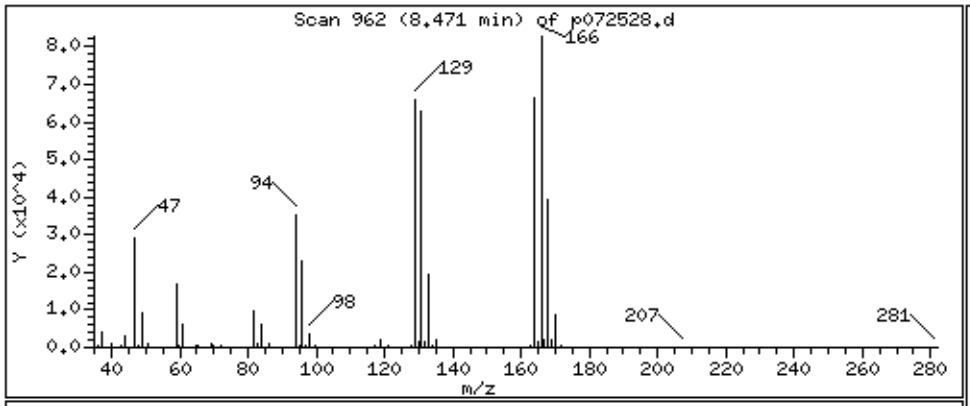
Operator: kk

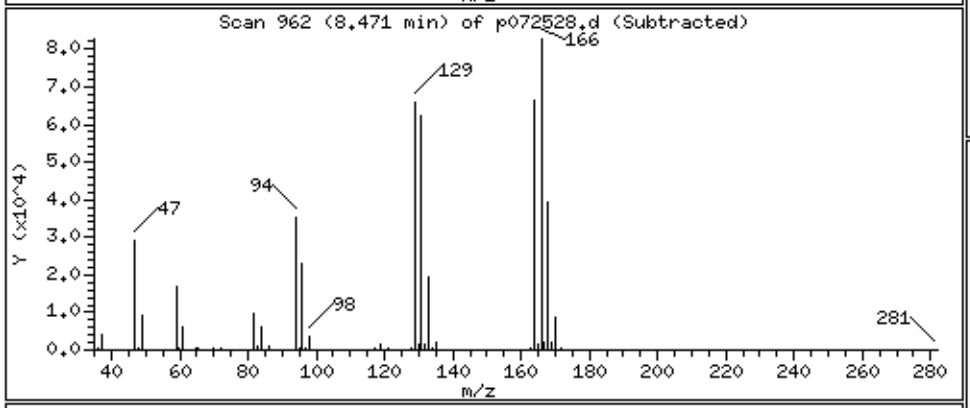
Column phase: RTX-624

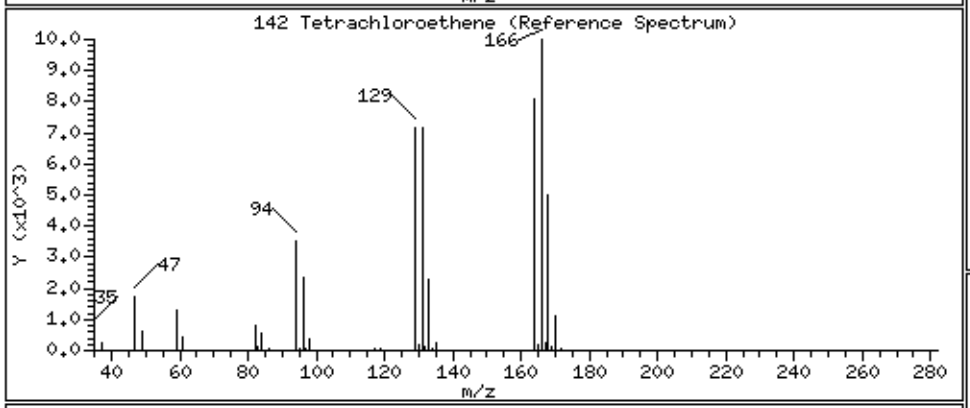
Column diameter: 0.25

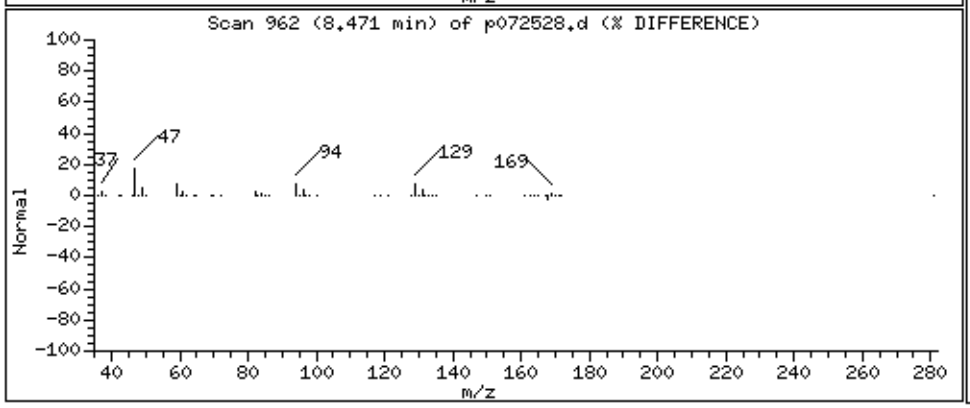
142 Tetrachloroethene

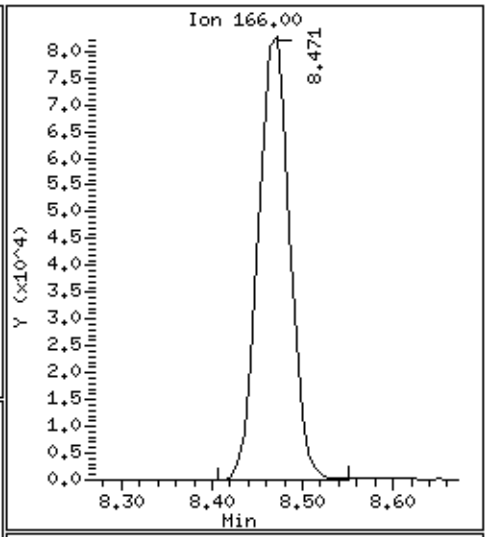
Concentration: 38.166 PPBV

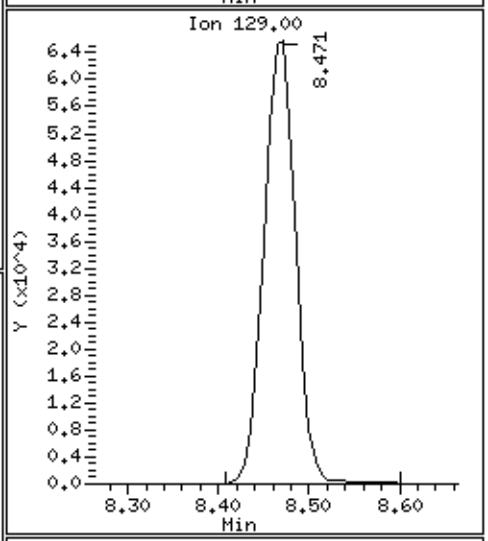


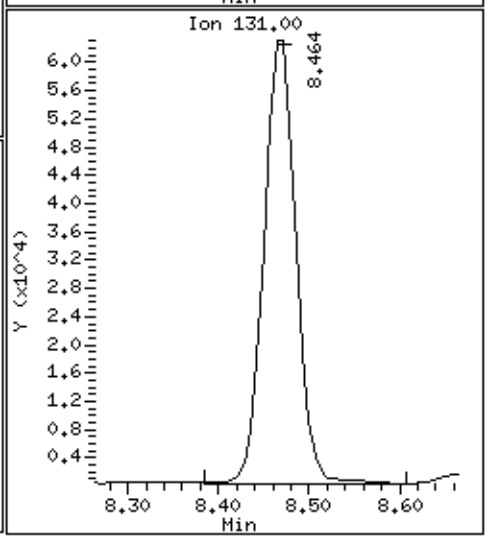












eurofins | Air Toxics

Client Sample ID: SG-VW52A-02

Lab ID#: 2107282-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072523**	**Date of Collection:**	**7/13/21 9:04:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/26/21 12:51 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.3	Not Detected	30	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.4	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
1,1-Difluoroethane	4.3	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.3	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,2-Dibromo-3-chloropropane	4.3	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.3	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.5	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	13	Not Detected
2-Hexanone	4.3	Not Detected	18	Not Detected
2-Propanol	4.3	Not Detected	11	Not Detected
3-Chloropropene	4.3	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.3	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Acetone	11	22	26	53
Acrolein	4.3	Not Detected	10	Not Detected
Acrylonitrile	4.3	Not Detected	9.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.3	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Chloroform	1.1	3.7	5.3	18
Chloromethane	11	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected

eurofins | Air Toxics

Client Sample ID: SG-VW52A-02

Lab ID#: 2107282-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072523**	**Date of Collection:**	**7/13/21 9:04:00 AM**
Dil. Factor:	**2.17**	**Date of Analysis:**	**7/26/21 12:51 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Cumene	1.1	Not Detected	5.3	Not Detected
Cyclohexane	1.1	Not Detected	3.7	Not Detected
Dibromochloromethane	1.1	Not Detected	9.2	Not Detected
Dibromomethane	4.3	Not Detected	31	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.3	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
Ethyl-tert-butyl ether	4.3	Not Detected	18	Not Detected
Freon 11	1.1	1.4	6.1	7.8
Freon 12	1.1	9.0	5.4	45
Freon 113	1.1	Not Detected	8.3	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected
Hexachloroethane	4.3	Not Detected	42	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
Iodomethane	11	Not Detected	63	Not Detected
Isopropyl ether	4.3	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
Methyl tert-butyl ether	4.3	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Propylbenzene	1.1	Not Detected	5.3	Not Detected
Propylene	4.3	Not Detected	7.5	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
tert-Amyl methyl ether	4.3	Not Detected	18	Not Detected
tert-Butyl alcohol	4.3	Not Detected	13	Not Detected
Tetrachloroethene	1.1	35	7.4	240
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.9	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
Vinyl Acetate	4.3	Not Detected	15	Not Detected
Vinyl Bromide	4.3	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW52A-02

Lab ID#: 2107282-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072523**	**Date of Collection: 7/13/21 9:04:00 AM**	
Dil. Factor:	**2.17**	**Date of Analysis: 7/26/21 12:51 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072523.d
Lab Smp Id: 2107282-07A
Inj Date : 26-JUL-2021 00:51
Operator : kk Inst ID: msdp.i
Smp Info : 200ml N5535
Misc Info : 7.1 Hg->9.7 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 5
Dil Factor: 2.17000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	150576	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	117542				48.23- 108.23	78.06
5.785	5.778 (1.000)	49	324331				150.57- 210.57	215.39
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	561589	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	81915				0.00- 45.71	14.59
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	575270	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	300647				23.78- 83.78	52.26
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	212176	25.5330	25.533		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	106031				27.21- 87.21	49.97
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.898	7.891 (1.185)	98	611936	25.0933	25.093		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66063				0.00- 40.44	10.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	393245			34.95- 94.95	64.26
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	363056	24.5768	24.577	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	443656			95.92- 155.92	122.20
10.921	10.921 (1.154)	176	345412			66.89- 126.89	95.14
8 Freon 12					CAS #: 75-71-8		
1.730	1.716 (0.299)	85	56285	4.16770	9.044	80.00- 120.00	100.00
1.730	1.716 (0.299)	87	18245			2.37- 62.37	32.42
33 Freon 11					CAS #: 75-69-4		
2.899	2.891 (0.501)	101	9193	0.64057	1.390	80.00- 120.00	100.00
2.906	2.891 (0.502)	103	3980			34.72- 94.72	43.30
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	40882	10.3564	22.473	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	151121			302.95- 362.95	369.65
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	22189	1.69365	3.675	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	14512			34.70- 94.70	65.40
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	212485	16.2068	35.169	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	165907			47.84- 107.84	78.08
8.471	8.464 (0.895)	131	158875			45.29- 105.29	74.77

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072523.d
Lab Smp Id: 2107282-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.7 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	150576	-2.60
108 1,4-Difluorobenze	573421	344053	802789	561589	-2.06
153 Chlorobenzene-d5	566079	339647	792511	575270	1.62

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 09:57

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-07A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.7 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.533	102.13	70-130
$ 134 Toluene-d8	25.000	25.093	100.37	70-130
$ 170 4-Bromofluorobenz	25.000	24.577	98.31	70-130

Data File: /chem/msdp.i/25JUL21.b/p072523.d

Date : 26-JUL-2021 00:51

Client ID:

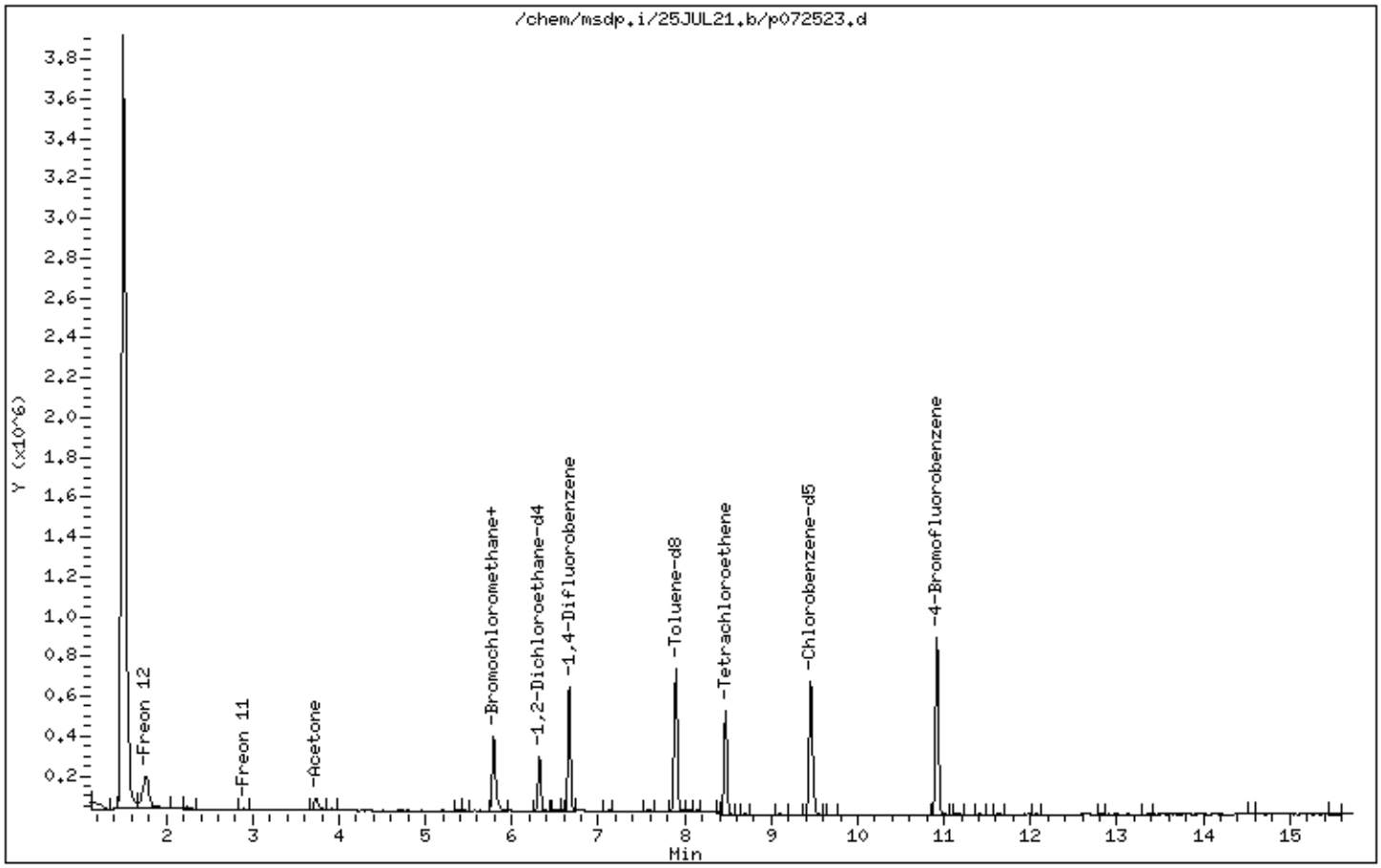
Instrument: msdp.i

Sample Info: 200ml N5535

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072523.d

Date : 26-JUL-2021 00:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5535

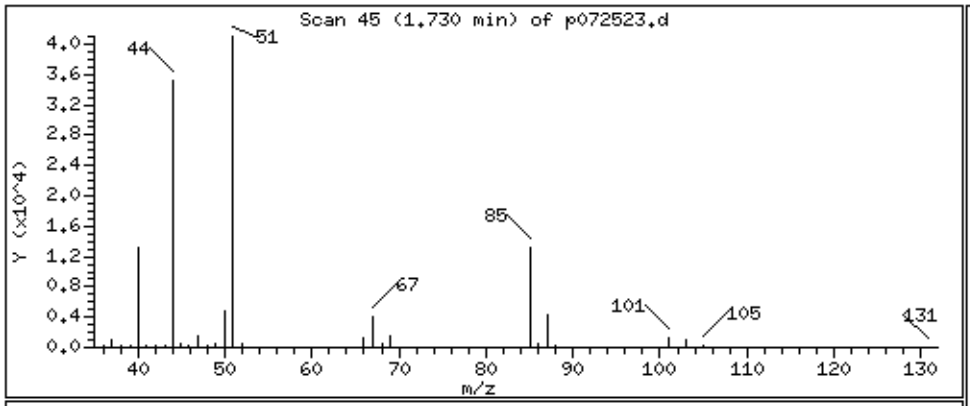
Operator: kk

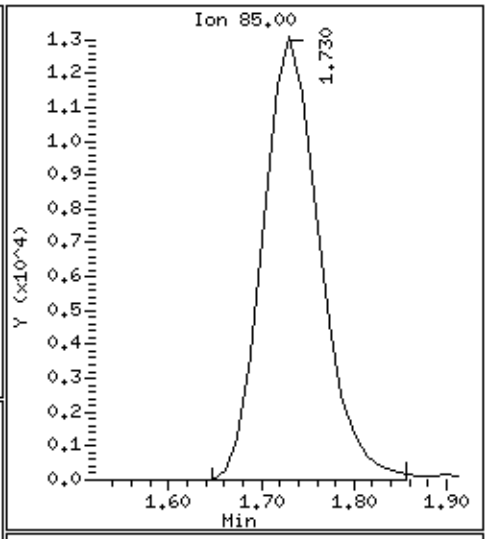
Column phase: RTX-624

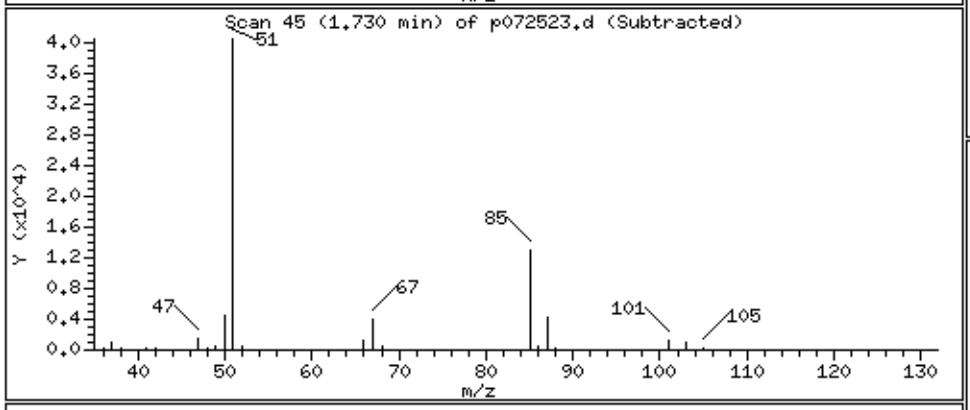
Column diameter: 0.25

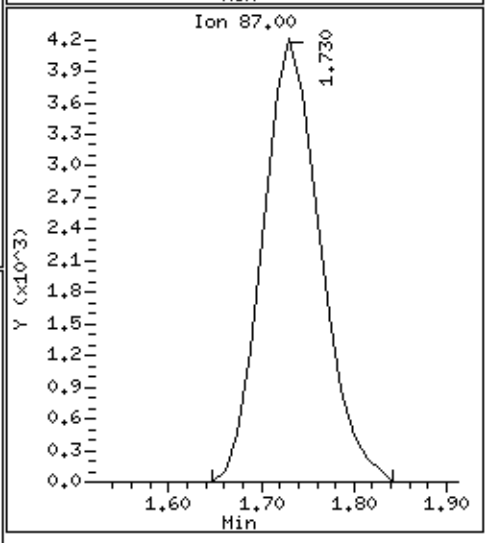
8 Freon 12

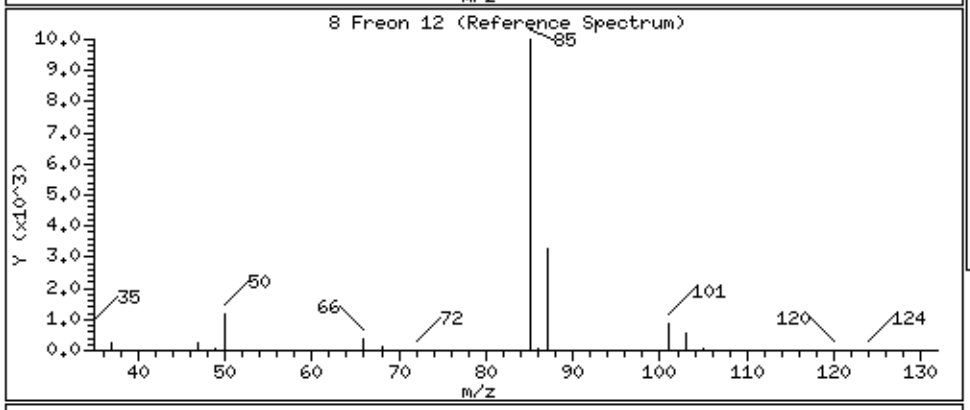
Concentration: 9.044 PPBV

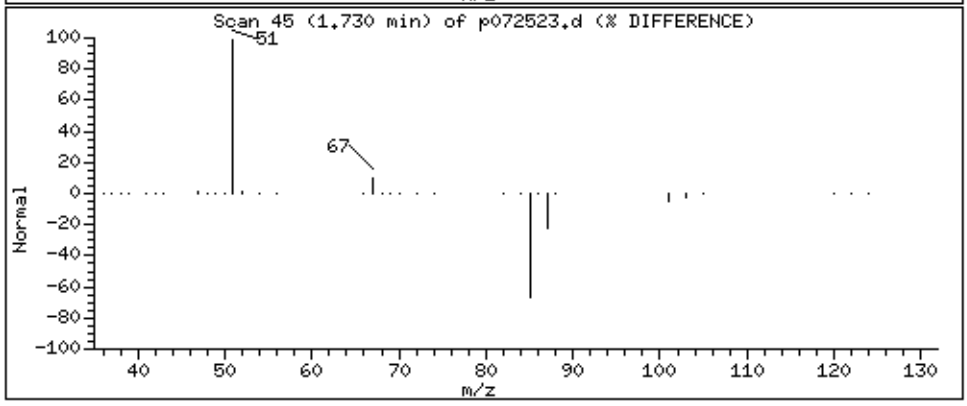












Data File: /chem/msdp.i/25JUL21.b/p072523.d

Date : 26-JUL-2021 00:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5535

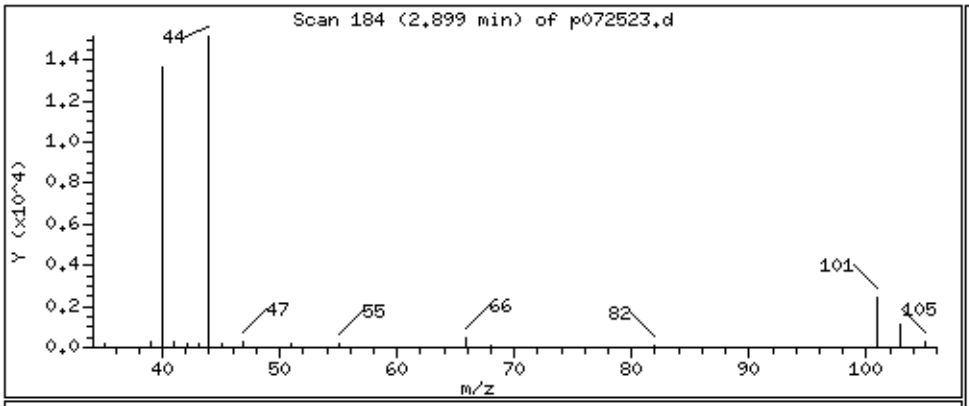
Operator: kk

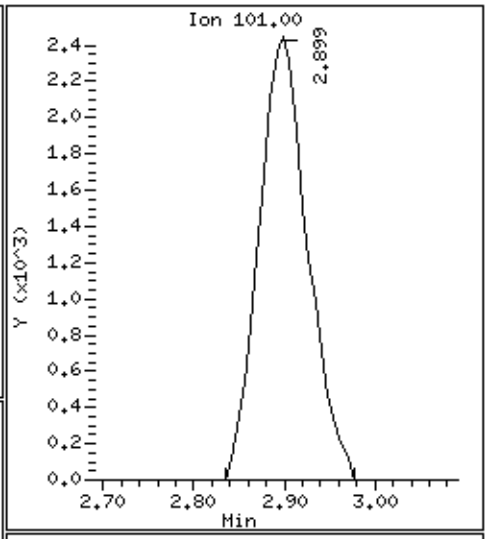
Column phase: RTX-624

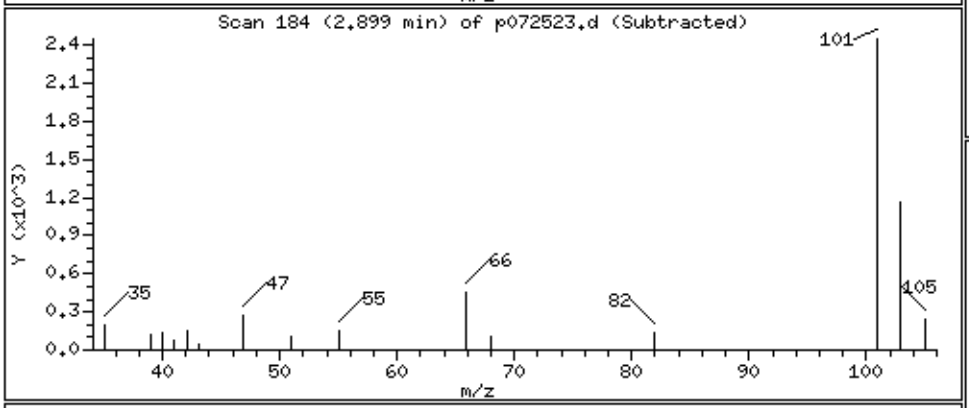
Column diameter: 0.25

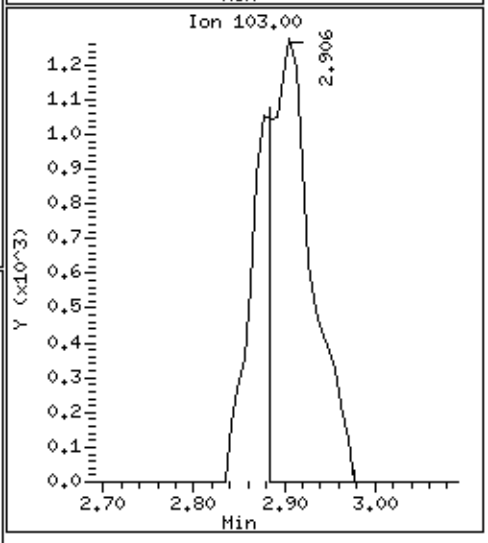
33 Freon 11

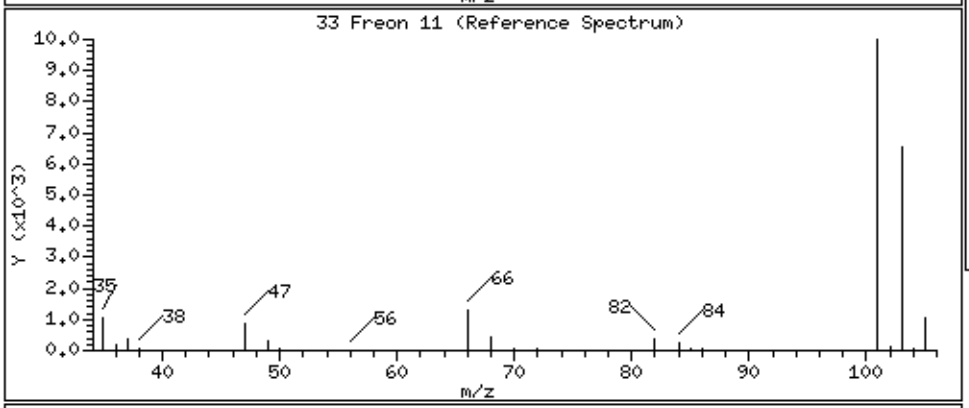
Concentration: 1.390 PPBV

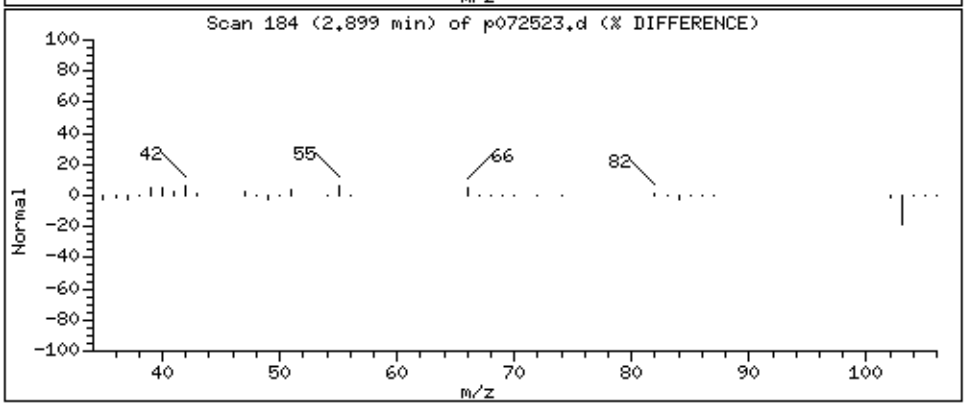












Data File: /chem/msdp.i/25JUL21.b/p072523.d

Date : 26-JUL-2021 00:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5535

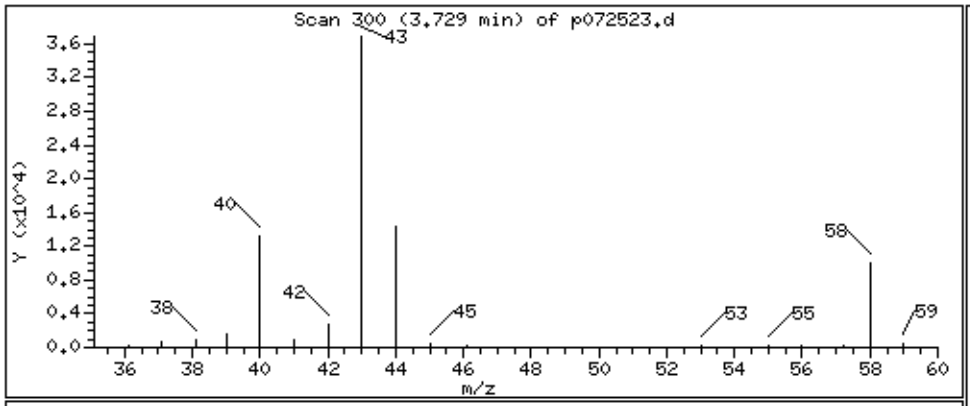
Operator: kk

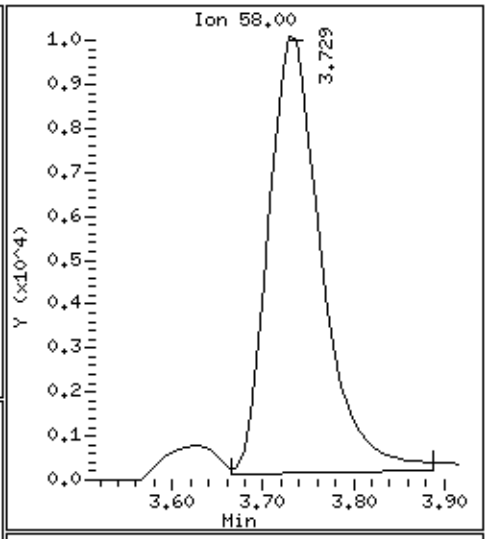
Column phase: RTX-624

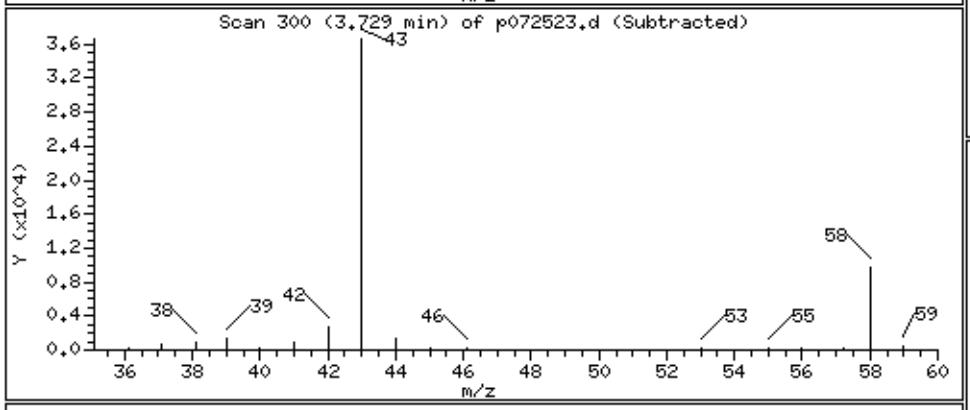
Column diameter: 0.25

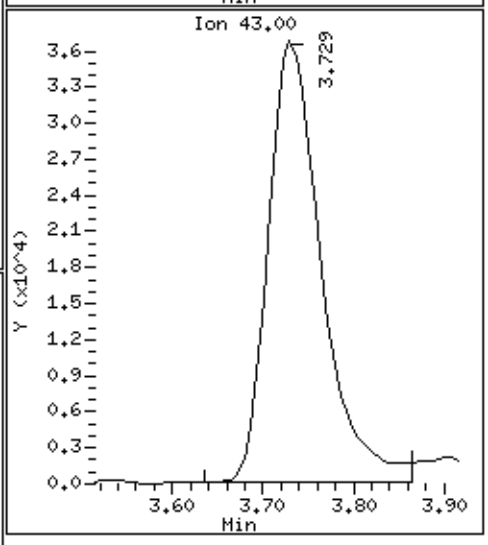
47 Acetone

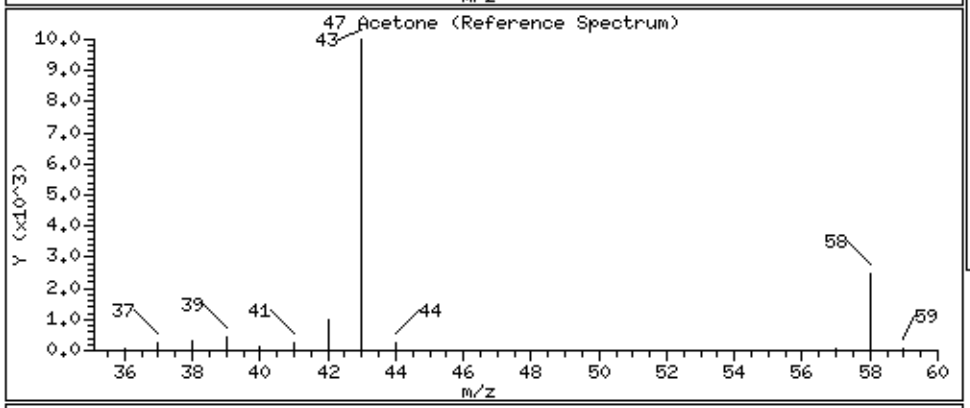
Concentration: 22.473 PPBV

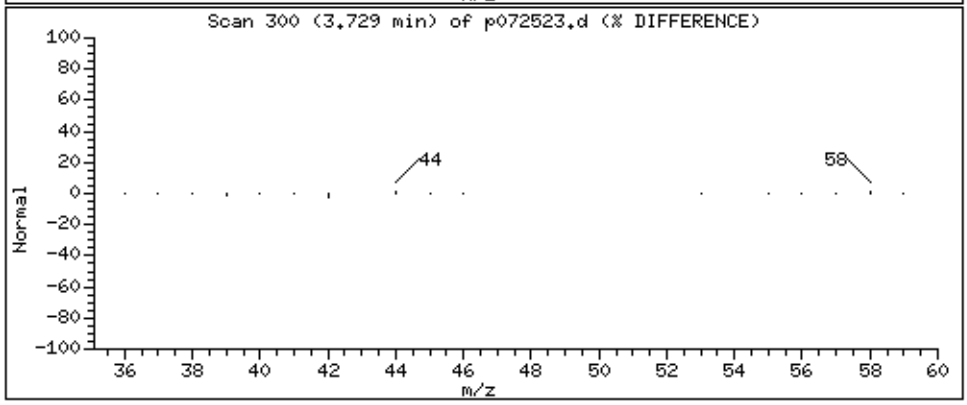












Data File: /chem/msdp.i/25JUL21.b/p072523.d

Date : 26-JUL-2021 00:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5535

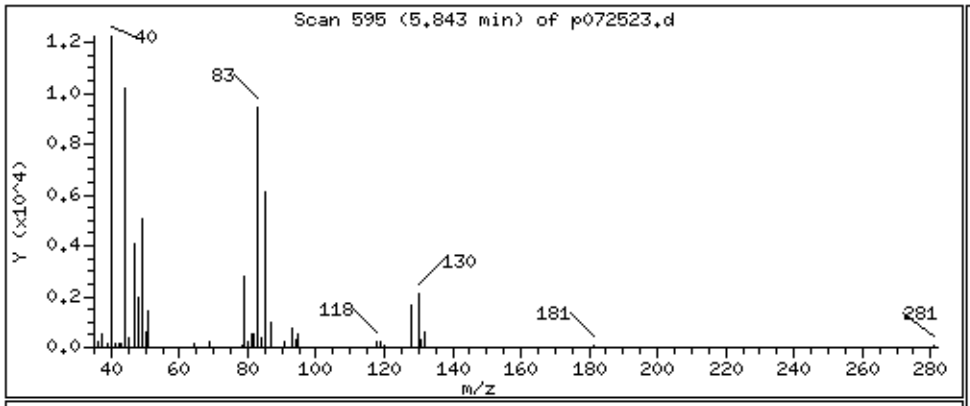
Operator: kk

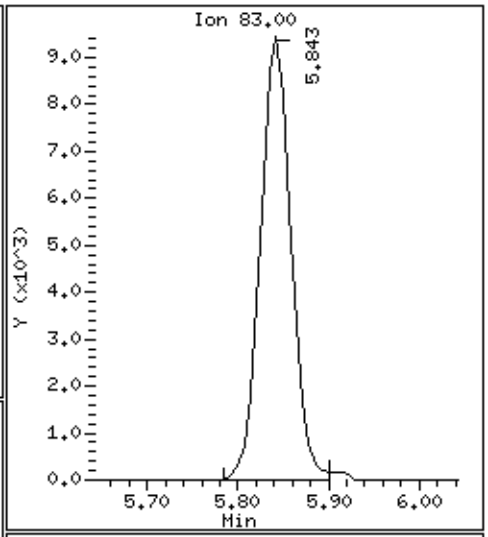
Column phase: RTX-624

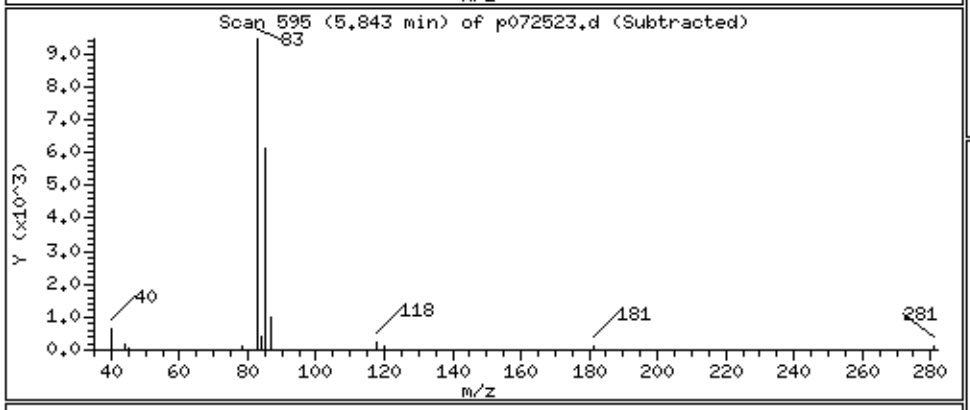
Column diameter: 0.25

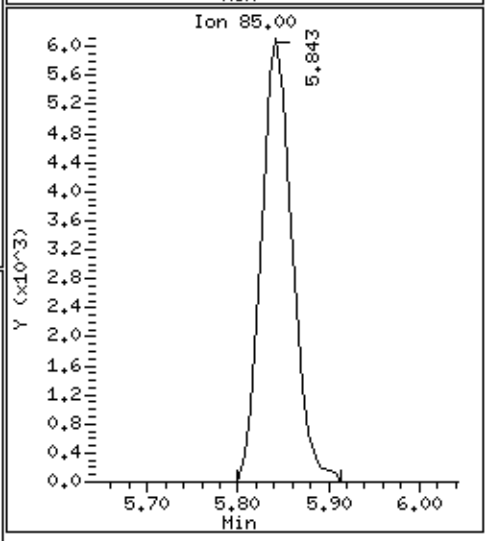
92 Chloroform

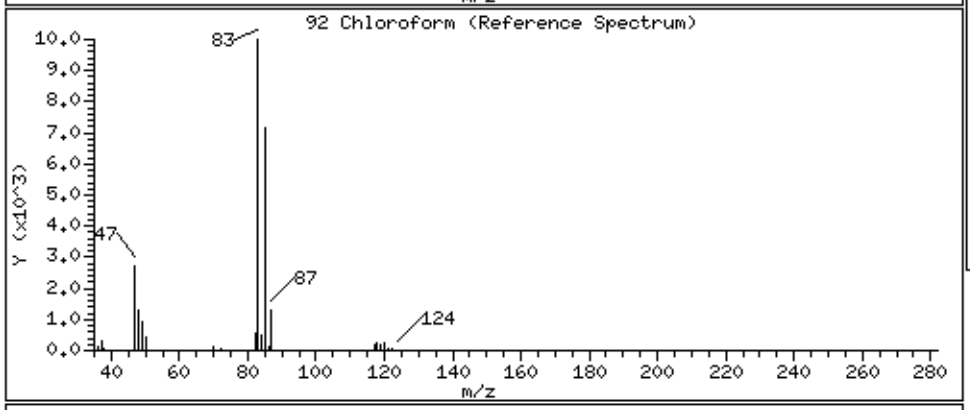
Concentration: 3.675 PPBV

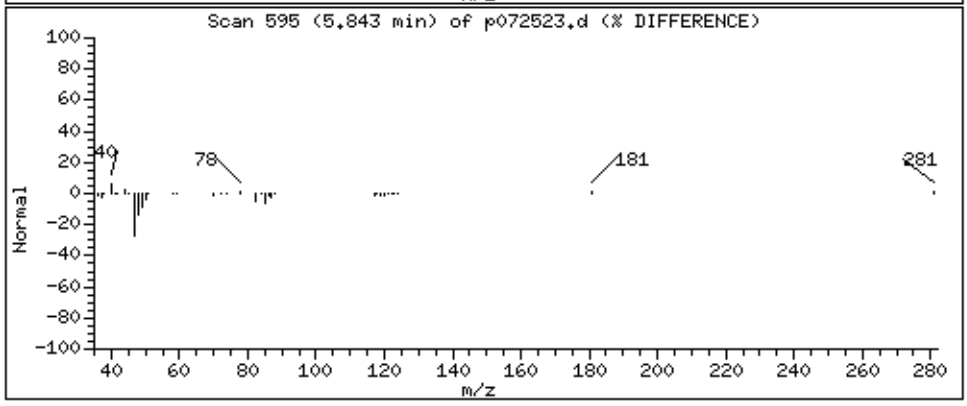












Data File: /chem/msdp.i/25JUL21.b/p072523.d

Date : 26-JUL-2021 00:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5535

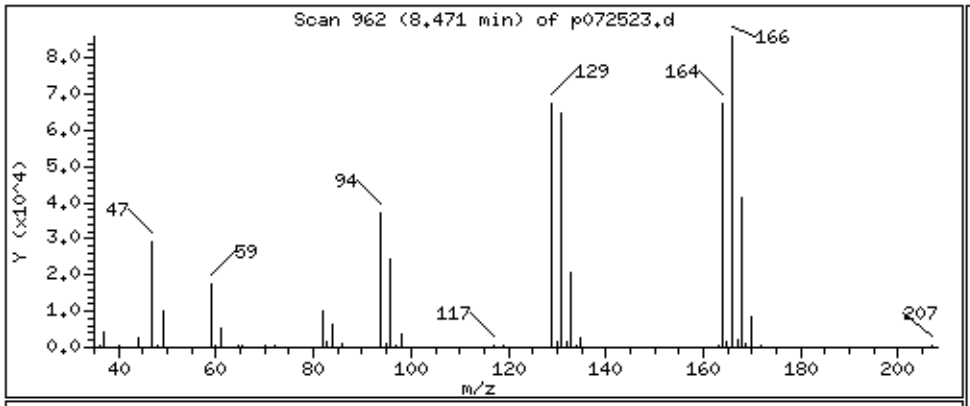
Operator: kk

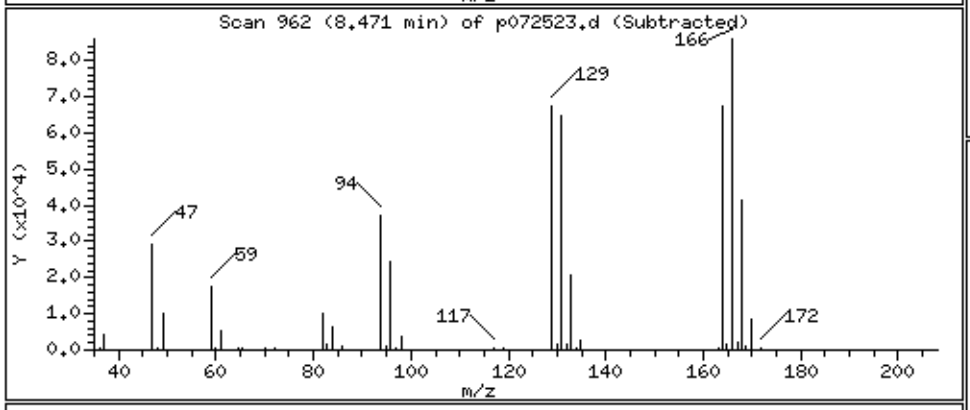
Column phase: RTX-624

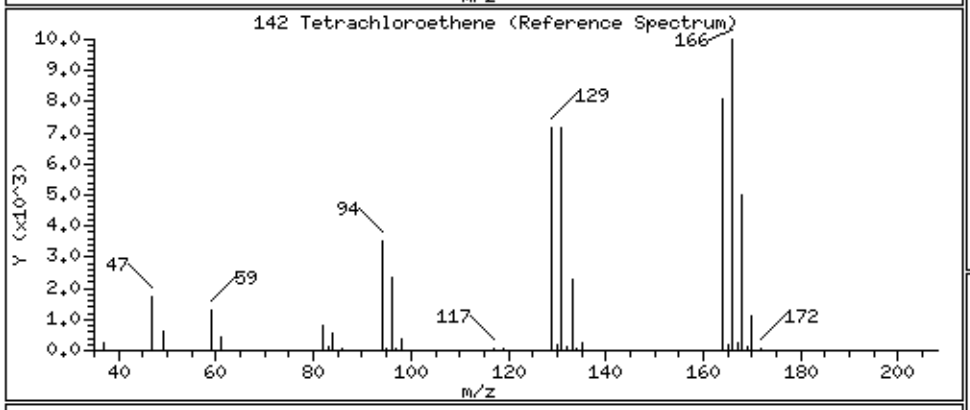
Column diameter: 0.25

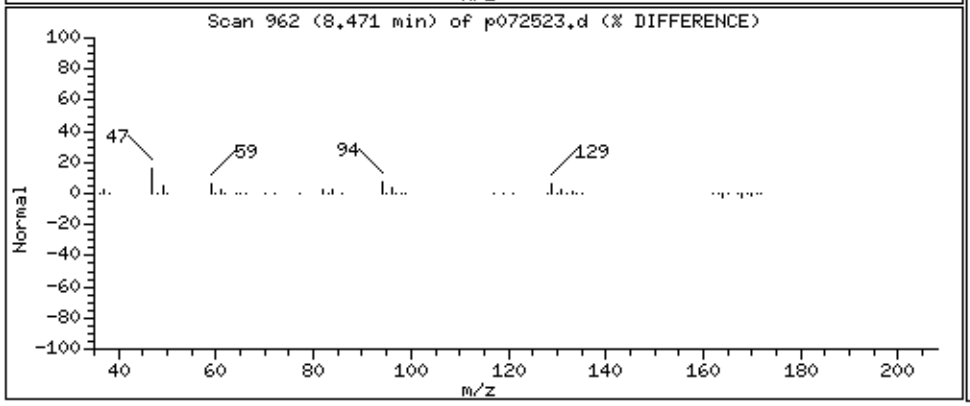
142 Tetrachloroethene

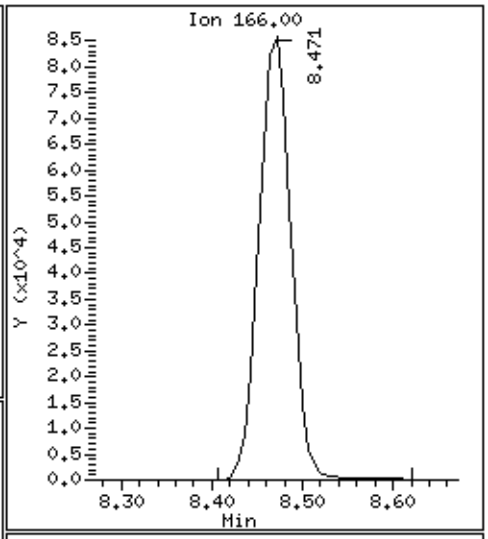
Concentration: 35.169 PPBV

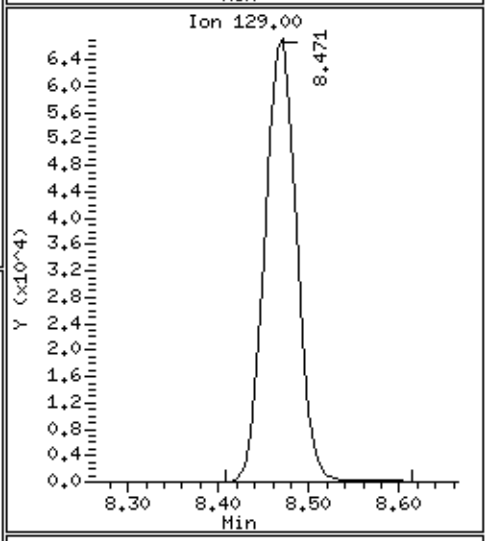


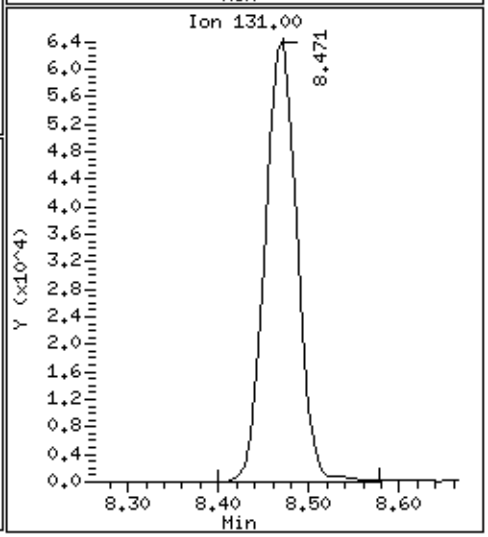












eurofins | Air Toxics

Client Sample ID: SG-VW52B-02

Lab ID#: 2107282-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072524**	**Date of Collection:**	**7/13/21 9:34:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/26/21 07:27 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.1	Not Detected	28	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
1,1-Difluoroethane	4.1	Not Detected	11	Not Detected
1,2,3-Trichloropropane	4.1	Not Detected	25	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2-Dibromo-3-chloropropane	4.1	Not Detected	40	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.9	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected
2-Propanol	4.1	Not Detected	10	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Acetone	10	13	24	31
Acrolein	4.1	Not Detected	9.4	Not Detected
Acrylonitrile	4.1	Not Detected	8.9	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Carbon Disulfide	4.1	Not Detected	13	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Chloroform	1.0	6.7	5.0	33
Chloromethane	10	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected

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Client Sample ID: SG-VW52B-02

Lab ID#: 2107282-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072524**	**Date of Collection:**	**7/13/21 9:34:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/26/21 07:27 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
Dibromomethane	4.1	Not Detected	29	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Ethyl Acetate	4.1	Not Detected	15	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
Ethyl-tert-butyl ether	4.1	Not Detected	17	Not Detected
Freon 11	1.0	1.6	5.8	8.8
Freon 12	1.0	11	5.1	56
Freon 113	1.0	Not Detected	7.9	Not Detected
Freon 114	1.0	Not Detected	7.2	Not Detected
Freon 134a	4.1	Not Detected	17	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Hexachloroethane	4.1	Not Detected	40	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
Iodomethane	10	Not Detected	60	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
Propylene	4.1	Not Detected	7.1	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
tert-Amyl methyl ether	4.1	Not Detected	17	Not Detected
tert-Butyl alcohol	4.1	Not Detected	12	Not Detected
Tetrachloroethene	1.0	25	7.0	170
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	420	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
Vinyl Acetate	4.1	Not Detected	14	Not Detected
Vinyl Bromide	4.1	Not Detected	18	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW52B-02

Lab ID#: 2107282-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072524**	**Date of Collection: 7/13/21 9:34:00 AM**	
Dil. Factor:	**2.06**	**Date of Analysis: 7/26/21 07:27 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072524.d
Lab Smp Id: 2107282-08A
Inj Date : 26-JUL-2021 07:27
Operator : kk Inst ID: msdp.i
Smp Info : 200ml 1L1923
Misc Info : 5.9 Hg->9.6 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 6
Dil Factor: 2.06000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	142541	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	112673				48.23- 108.23	79.05
5.785	5.778 (1.000)	49	301953				150.57- 210.57	211.84
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.666 (1.000)	114	526413	25.0000			80.00- 120.00	100.00
6.659	6.666 (1.000)	88	77270				0.00- 45.71	14.68
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	523624	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	270657				23.78- 83.78	51.69
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.315 (1.092)	65	203948	25.9263	25.926		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	101227				27.21- 87.21	49.63
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	571400	24.9968	24.997		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	60766				0.00- 40.44	10.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	371965			34.95- 94.95	65.10
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	317311	23.5988	23.599	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	391678			95.92- 155.92	123.44
10.921	10.921 (1.154)	176	301415			66.89- 126.89	94.99
8 Freon 12					CAS #: 75-71-8		
1.730	1.716 (0.299)	85	69802	5.45994	11.247	80.00- 120.00	100.00
1.730	1.716 (0.299)	87	23135			2.37- 62.37	33.14
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	10363	0.76280	1.571	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	7397			34.72- 94.72	71.38
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	23896	6.39466	13.173	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	94209			302.95- 362.95	394.23
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	40275	3.24741	6.690	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	26722			34.70- 94.70	66.35
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.471 (0.895)	166	145901	12.2258	25.185	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	110259			47.84- 107.84	75.57
8.464	8.464 (0.895)	131	108917			45.29- 105.29	74.65

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072524.d
Lab Smp Id: 2107282-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->9.6 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	142541	-7.80
108 1,4-Difluorobenze	573421	344053	802789	526413	-8.20
153 Chlorobenzene-d5	566079	339647	792511	523624	-7.50

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.66	-0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:00

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-08A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->9.6 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.926	103.71	70-130
$ 134 Toluene-d8	25.000	24.997	99.99	70-130
$ 170 4-Bromofluorobenz	25.000	23.599	94.40	70-130

Data File: /chem/msdp.i/25JUL21.b/p072524.d

Date : 26-JUL-2021 07:27

Client ID:

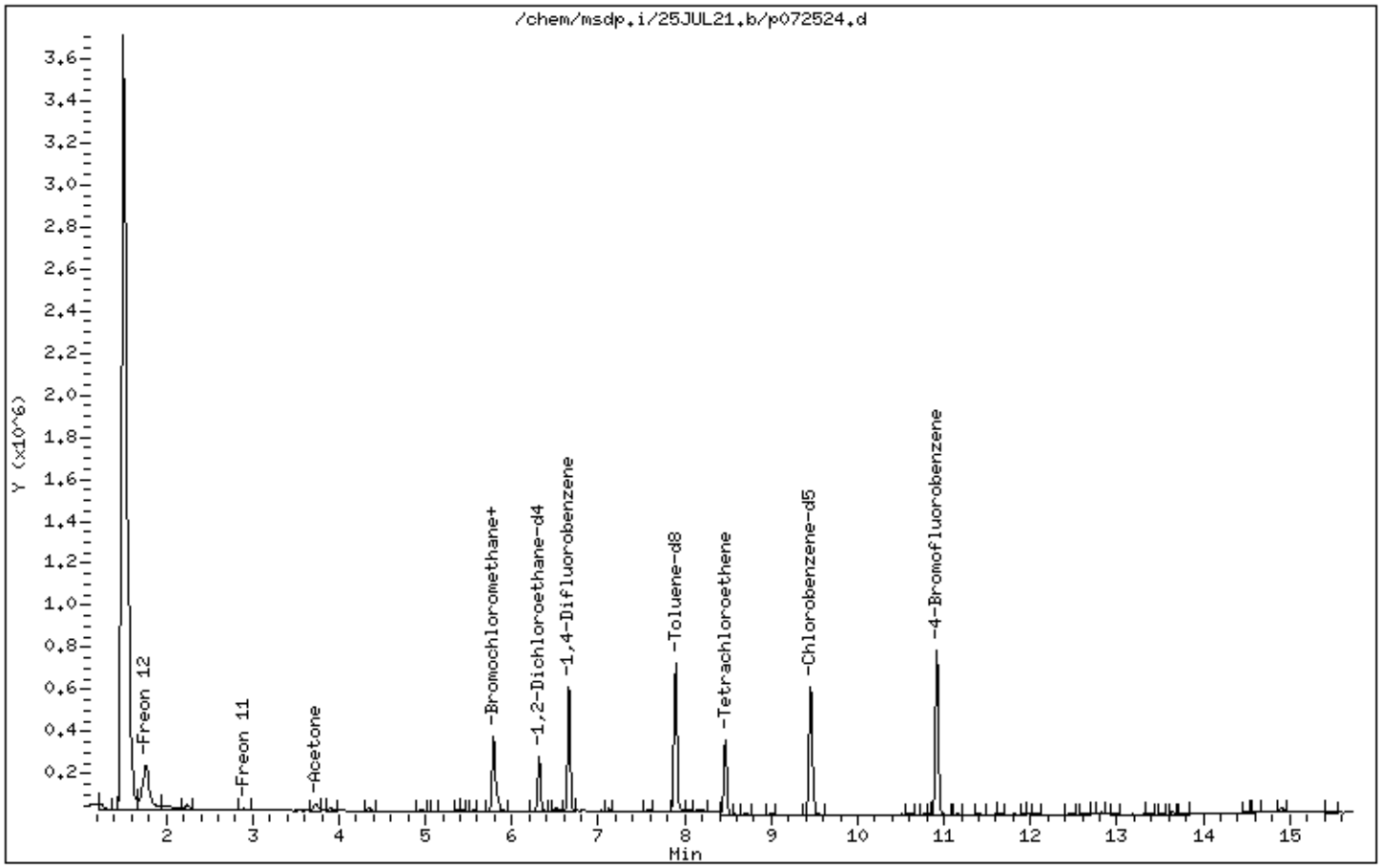
Instrument: msdp.i

Sample Info: 200ml 1L1923

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072524.d

Date : 26-JUL-2021 07:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1923

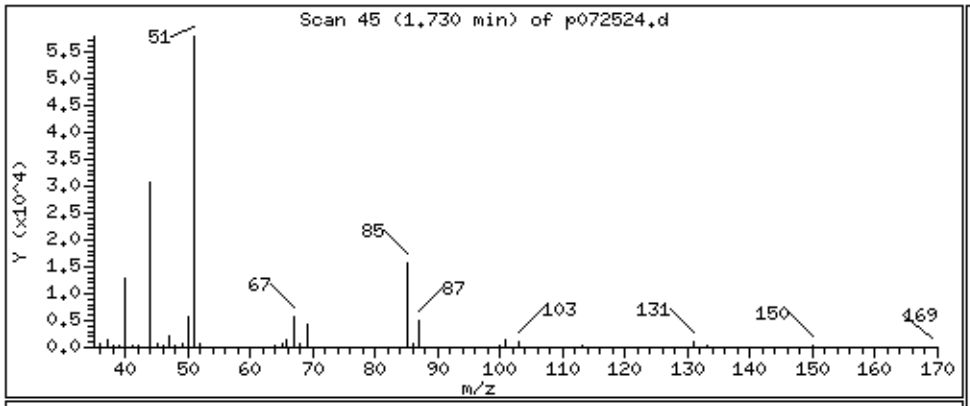
Operator: kk

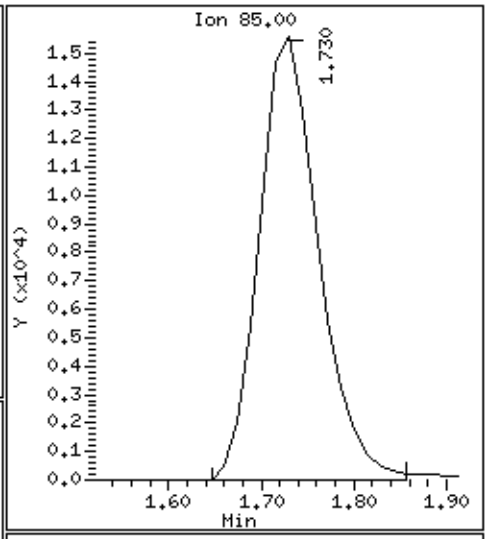
Column phase: RTX-624

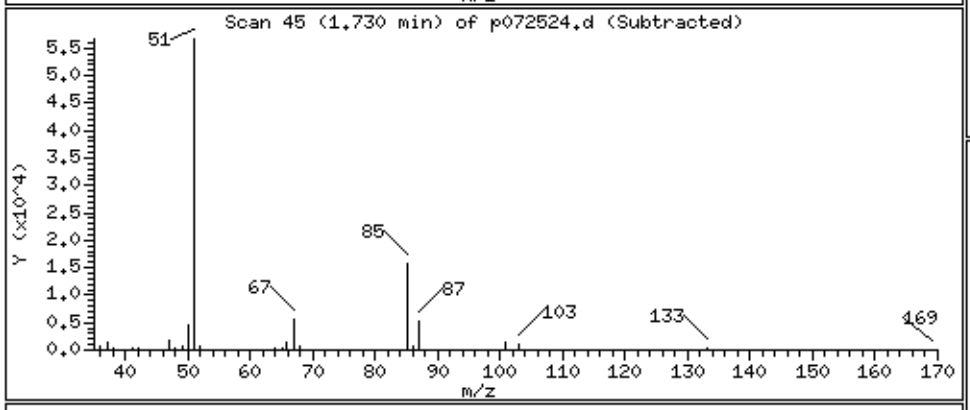
Column diameter: 0.25

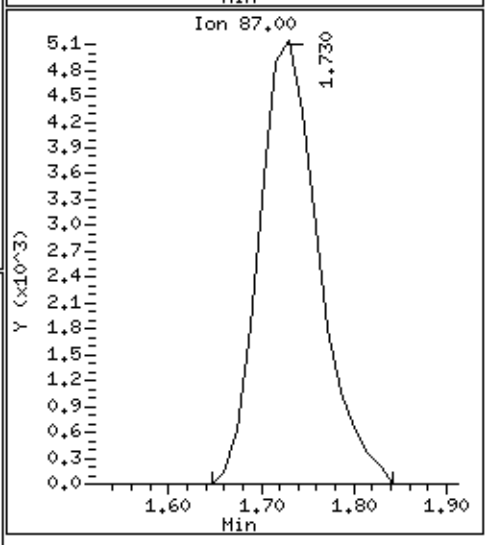
8 Freon 12

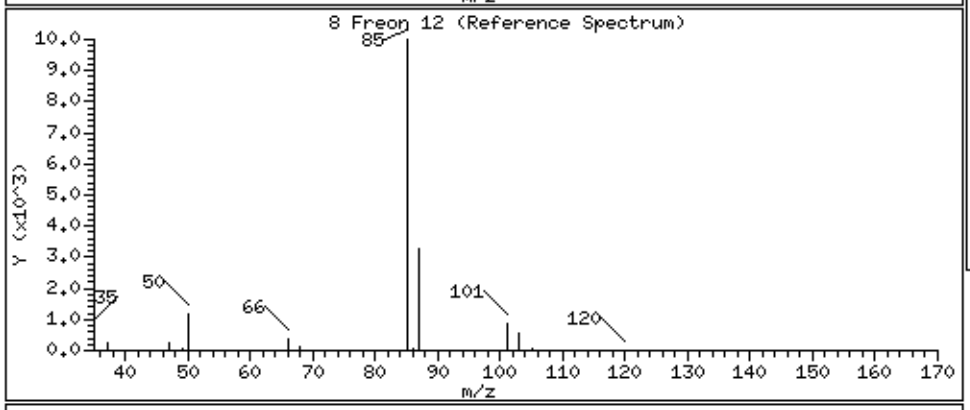
Concentration: 11.247 PPBV

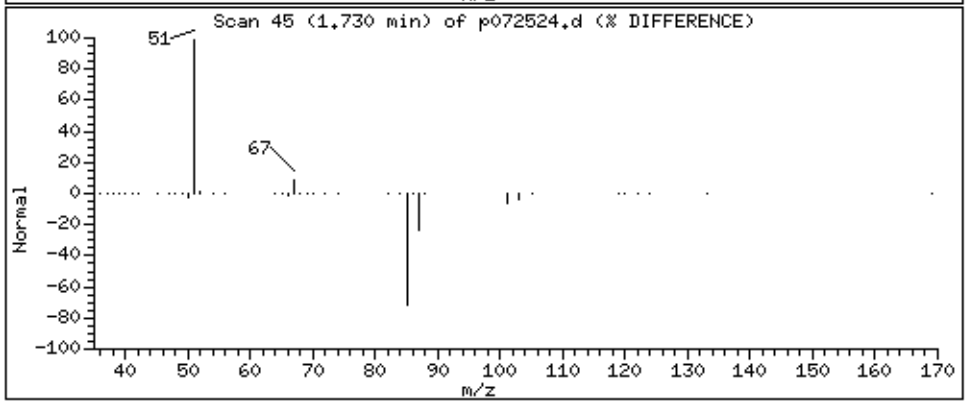












Data File: /chem/msdp.i/25JUL21.b/p072524.d

Date : 26-JUL-2021 07:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1923

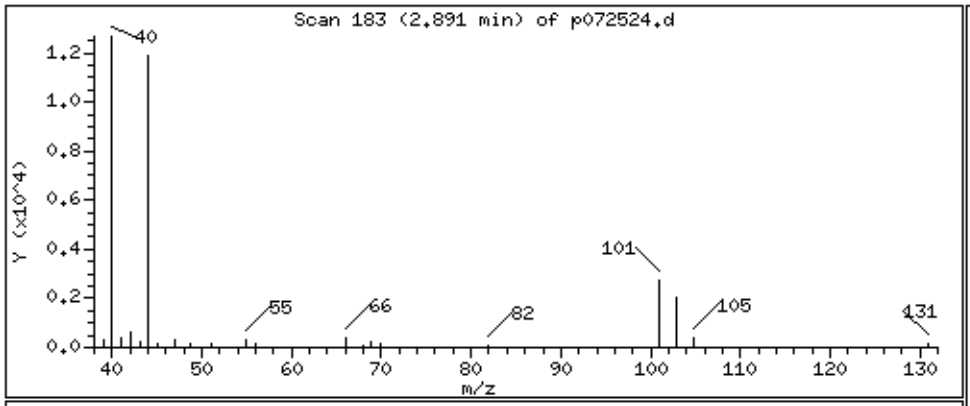
Operator: kk

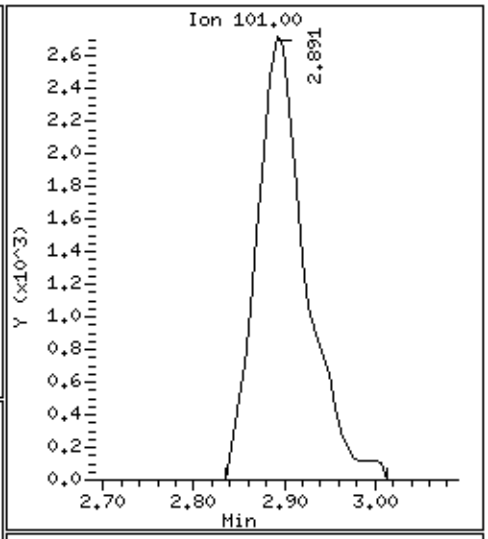
Column phase: RTX-624

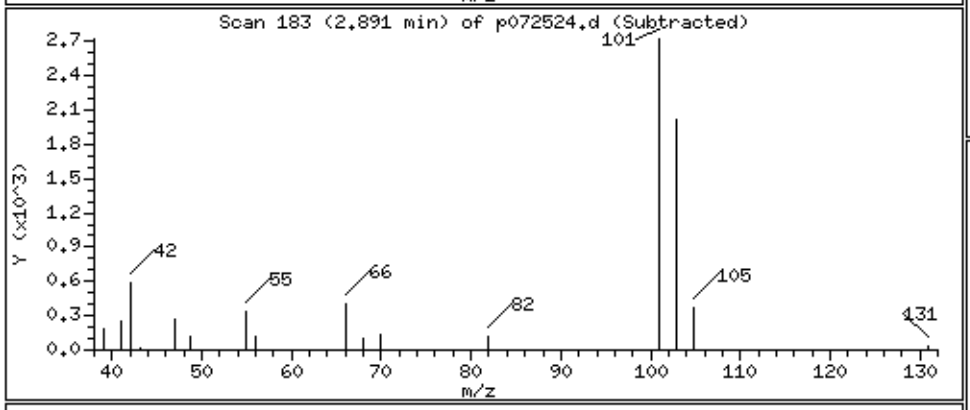
Column diameter: 0.25

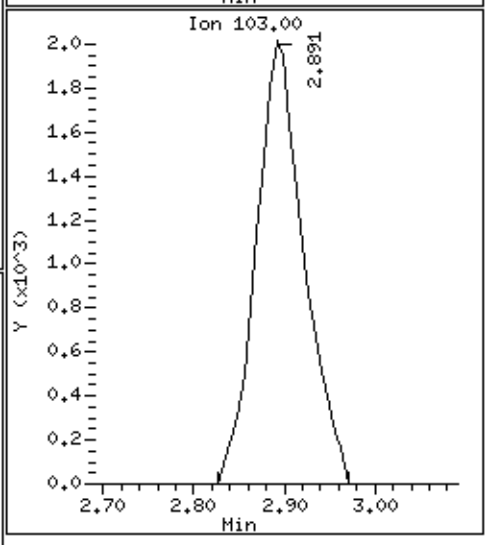
33 Freon 11

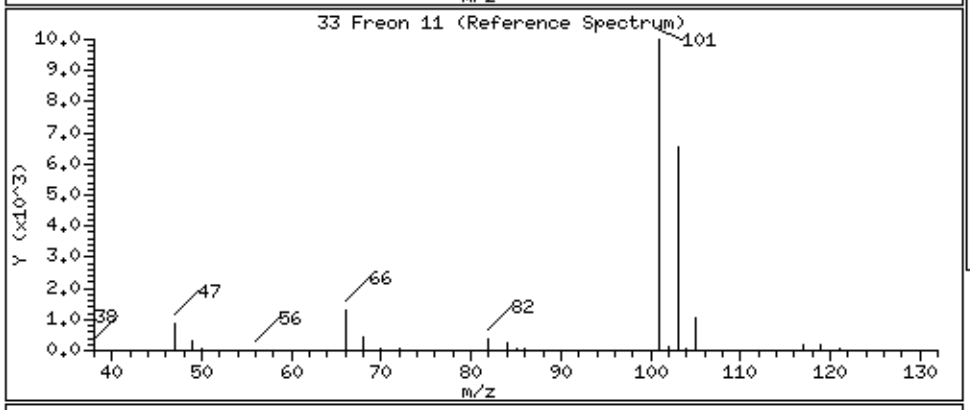
Concentration: 1.571 PPBV

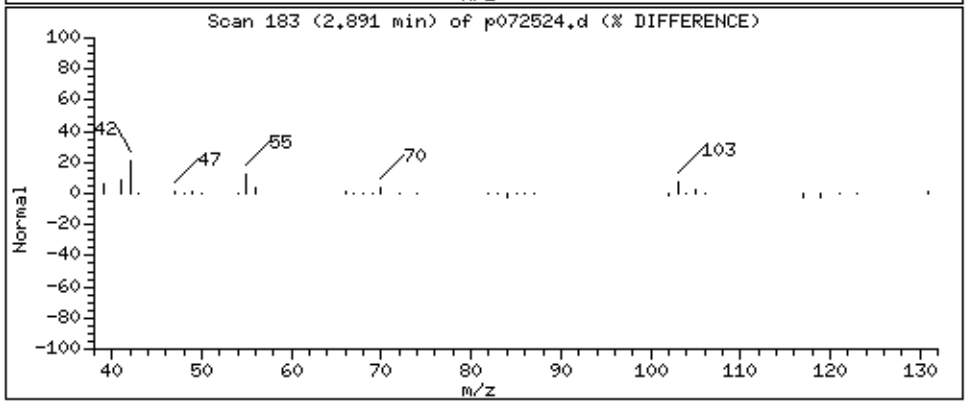












Data File: /chem/msdp.i/25JUL21.b/p072524.d

Date : 26-JUL-2021 07:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1923

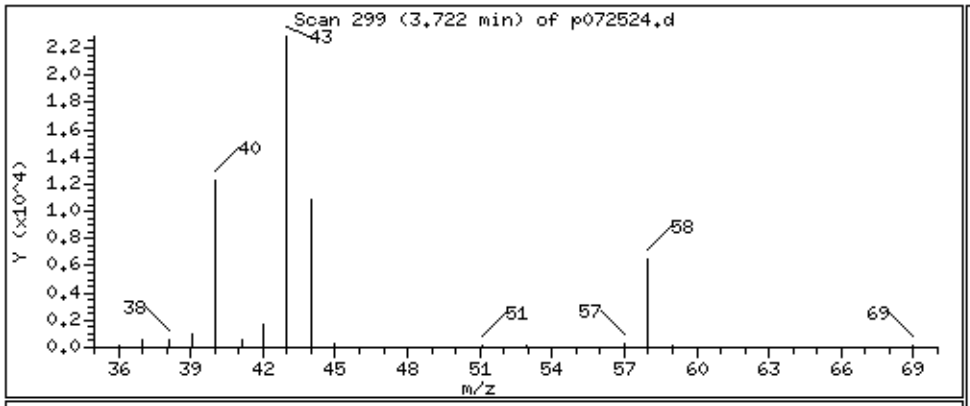
Operator: kk

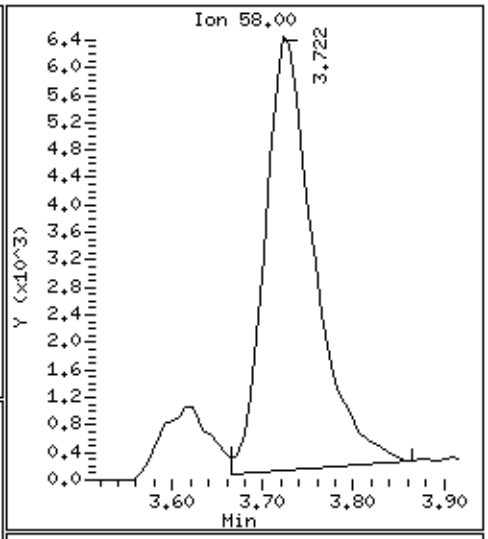
Column phase: RTX-624

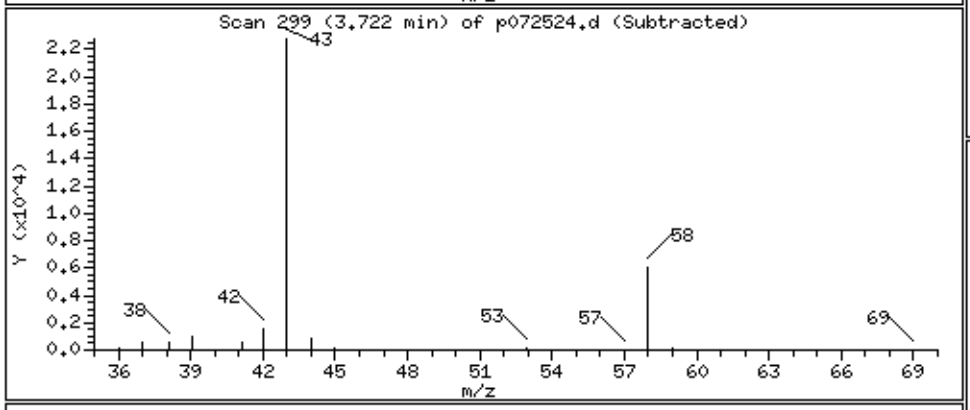
Column diameter: 0.25

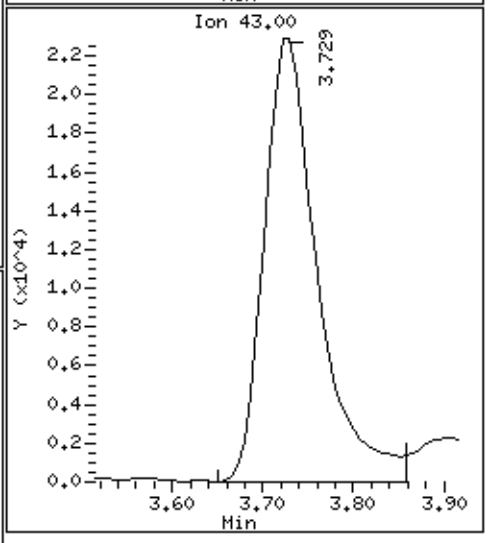
47 Acetone

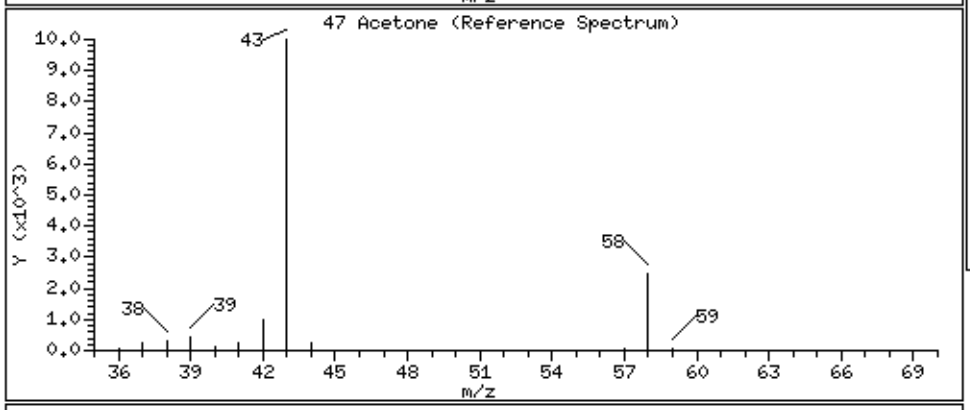
Concentration: 13.173 PPBV

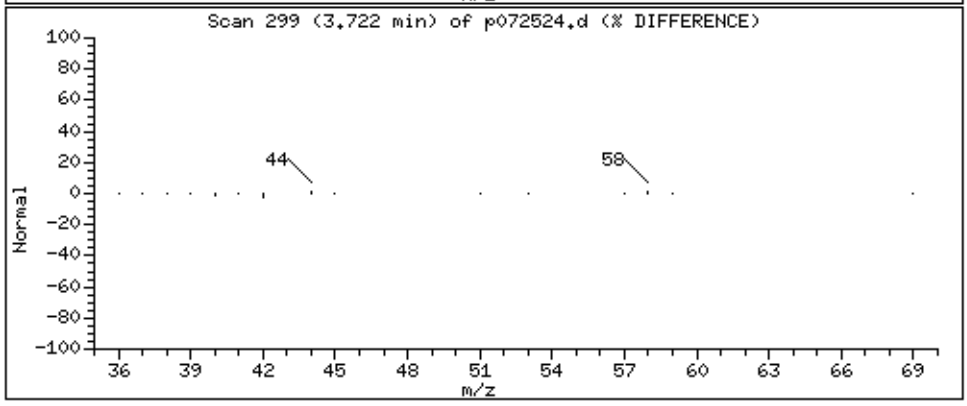












Data File: /chem/msdp.i/25JUL21.b/p072524.d

Page 5

Date : 26-JUL-2021 07:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1923

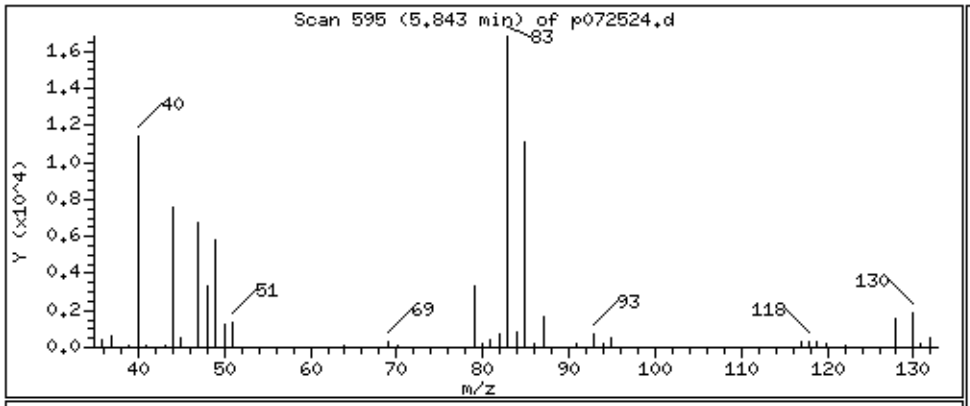
Operator: kk

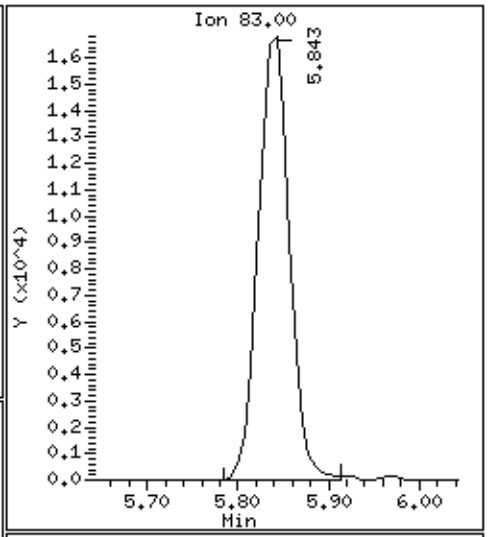
Column phase: RTX-624

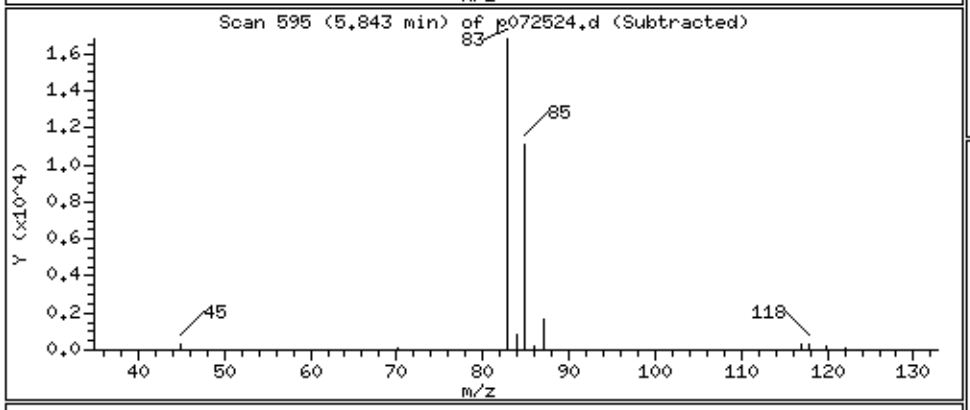
Column diameter: 0.25

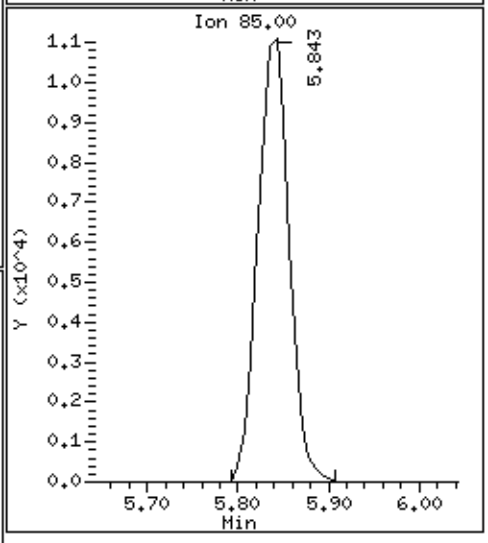
92 Chloroform

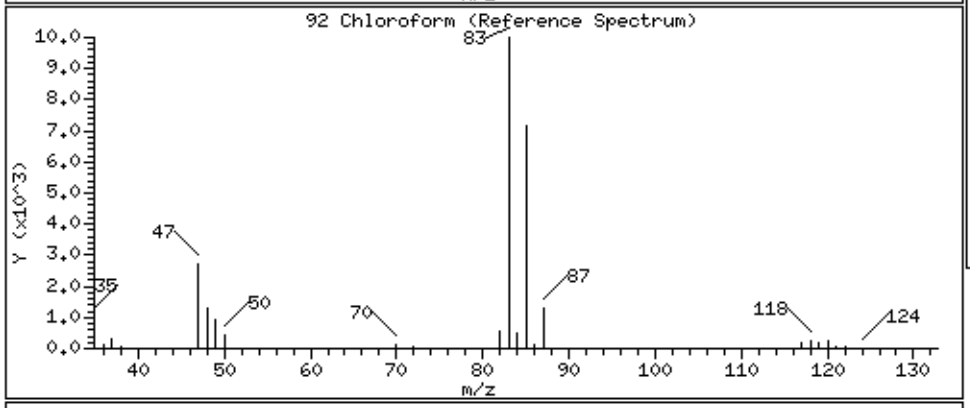
Concentration: 6.690 PPBV

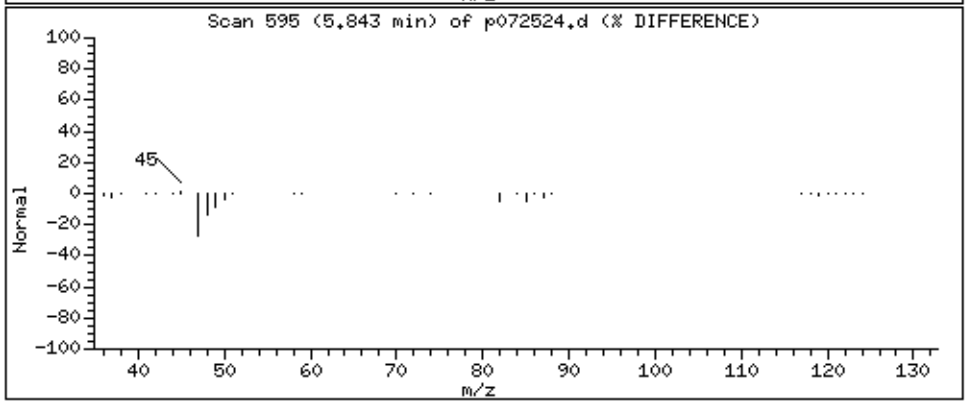












Data File: /chem/msdp.i/25JUL21.b/p072524.d

Date : 26-JUL-2021 07:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1923

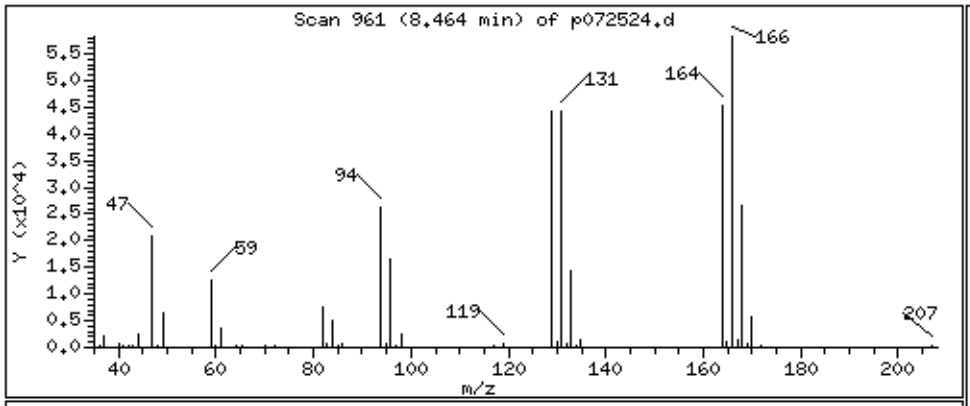
Operator: kk

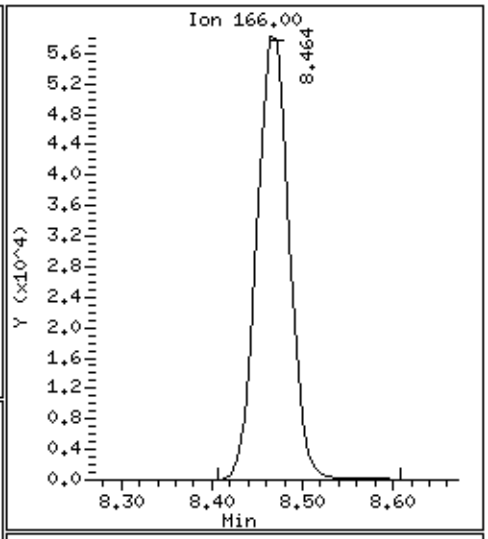
Column phase: RTX-624

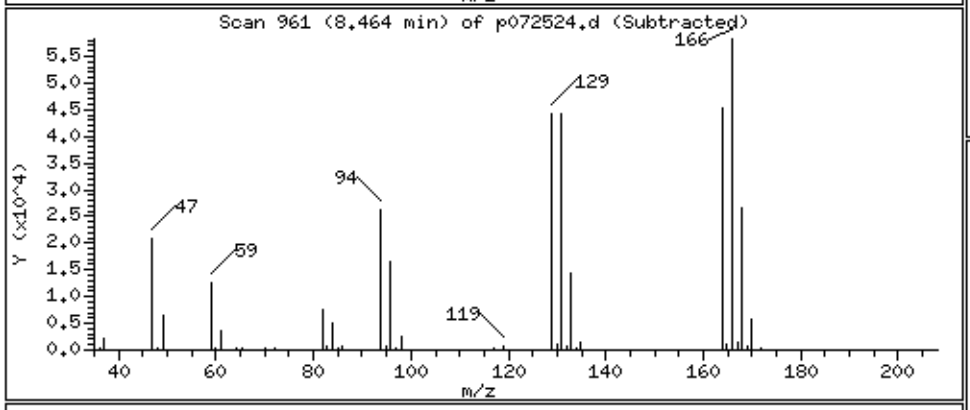
Column diameter: 0.25

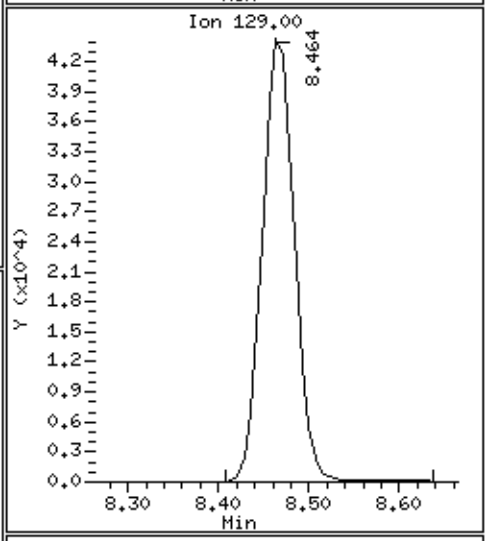
142 Tetrachloroethene

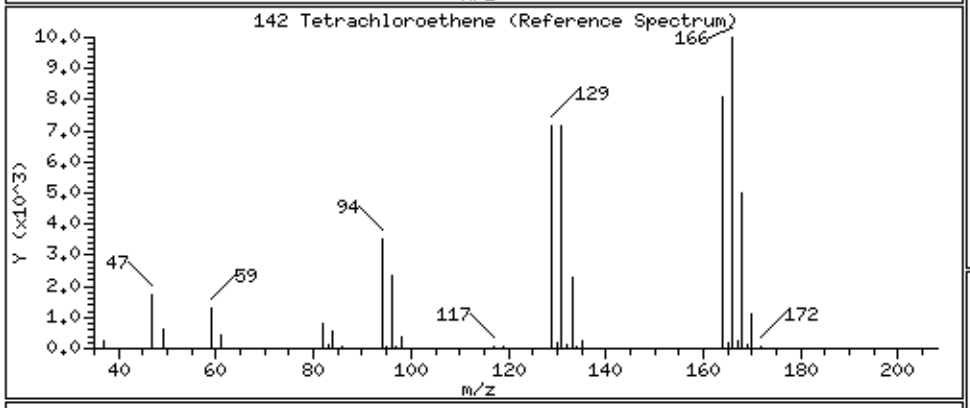
Concentration: 25.185 PPBV

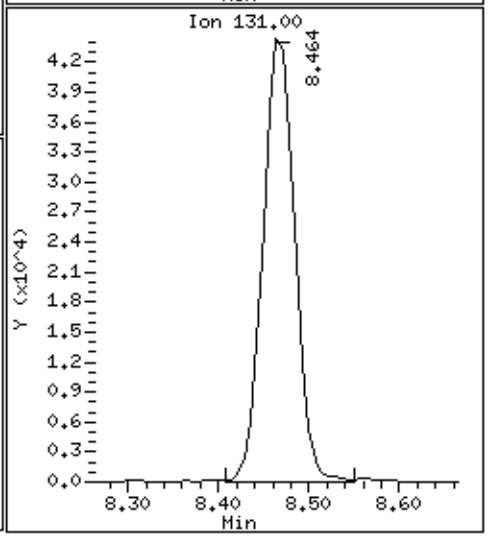


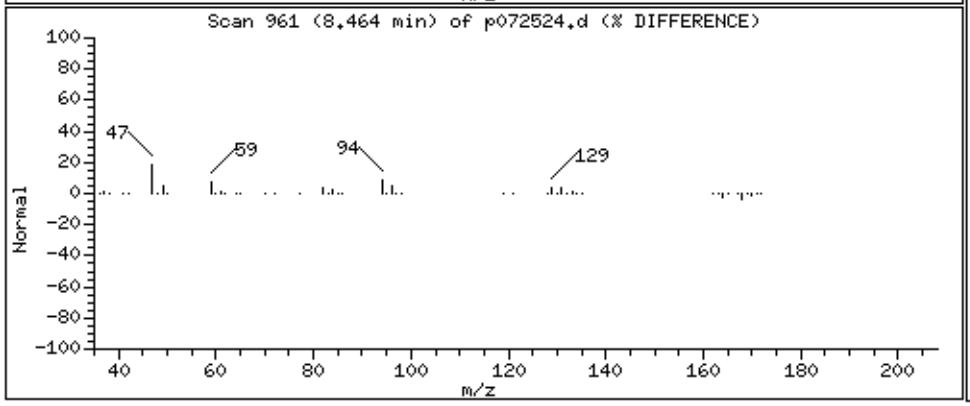












eurofins | Air Toxics

Client Sample ID: SG-VW53A-03

Lab ID#: 2107282-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072525**	**Date of Collection:**	**7/13/21 10:53:00 AM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**7/26/21 07:56 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.4	Not Detected	30	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.5	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	26	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	32	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2-Dibromo-3-chloropropane	4.4	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	8.9	13	26
2-Hexanone	4.4	Not Detected	18	Not Detected
2-Propanol	4.4	Not Detected	11	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Acetone	11	68	26	160
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.5	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
Benzene	1.1	2.3	3.5	7.4
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected

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Client Sample ID: SG-VW53A-03

Lab ID#: 2107282-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072525**	**Date of Collection:**	**7/13/21 10:53:00 AM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**7/26/21 07:56 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Dibromochloromethane	1.1	Not Detected	9.3	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Ethyl Acetate	4.4	Not Detected	16	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
Ethyl-tert-butyl ether	4.4	Not Detected	18	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Freon 12	1.1	4.9	5.4	24
Freon 113	1.1	Not Detected	8.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Freon 134a	4.4	Not Detected	18	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected
Hexachloroethane	4.4	Not Detected	42	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
Iodomethane	11	Not Detected	64	Not Detected
Isopropyl ether	4.4	Not Detected	18	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
Propylene	4.4	Not Detected	7.5	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
tert-Amyl methyl ether	4.4	Not Detected	18	Not Detected
tert-Butyl alcohol	4.4	8.5	13	26
Tetrachloroethene	1.1	13	7.4	91
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Vinyl Bromide	4.4	Not Detected	19	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW53A-03

Lab ID#: 2107282-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072525**	**Date of Collection:**	**7/13/21 10:53:00 AM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**7/26/21 07:56 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072525.d
Lab Smp Id: 2107282-09A
Inj Date : 26-JUL-2021 07:56
Operator : kk Inst ID: msdp.i
Smp Info : 200ml B2628
Misc Info : 7.1 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 7
Dil Factor: 2.19000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	145671	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	109664				48.23- 108.23	75.28
5.785	5.778 (1.000)	49	304797				150.57- 210.57	209.24
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	542832	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	78035				0.00- 45.71	14.38
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	540794	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	285290				23.78- 83.78	52.75
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	204368	25.4215	25.421		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	105438				27.21- 87.21	51.59
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	591290	25.0845	25.084		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	62007				0.00- 40.44	10.49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	384623			34.95- 94.95	65.05
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	332870	23.9699	23.970	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	409308			95.92- 155.92	122.96
10.921	10.921 (1.154)	176	318493			66.89- 126.89	95.68
8 Freon 12					CAS #: 75-71-8		
1.730	1.716 (0.299)	85	29024	2.22149	4.865	80.00- 120.00	100.00
1.730	1.716 (0.299)	87	7816			2.37- 62.37	26.93
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	118034	30.9076	67.688	80.00- 120.00	100.00
3.722	3.715 (0.643)	43	440175			302.95- 362.95	372.92
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	69821	3.89000	8.519	80.00- 120.00	100.00
4.345	4.338 (0.751)	41	19087			0.00- 51.11	27.34
4.345	4.338 (0.751)	57	8448			0.00- 40.49	12.10
86 2-Butanone					CAS #: 78-93-3		
5.563	5.556 (0.962)	72	13426	4.07770	8.930	80.00- 120.00	100.00
5.563	5.563 (0.962)	43	99029			1214.50-1274.50	737.57
5.563	5.556 (0.962)	57	6586			14.68- 74.68	49.06
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	18965	1.05872	2.318	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	4666			0.00- 52.90	24.60
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	75311	6.11036	13.382	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	57106			47.84- 107.84	75.83
8.471	8.464 (0.895)	131	55742			45.29- 105.29	74.02

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072525.d
Lab Smp Id: 2107282-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	145671	-5.78
108 1,4-Difluorobenze	573421	344053	802789	542832	-5.33
153 Chlorobenzene-d5	566079	339647	792511	540794	-4.47

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:06

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-09A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.421	101.69	70-130
$ 134 Toluene-d8	25.000	25.084	100.34	70-130
$ 170 4-Bromofluorobenz	25.000	23.970	95.88	70-130

Data File: /chem/msdp.i/25JUL21.b/p072525.d

Date : 26-JUL-2021 07:56

Client ID:

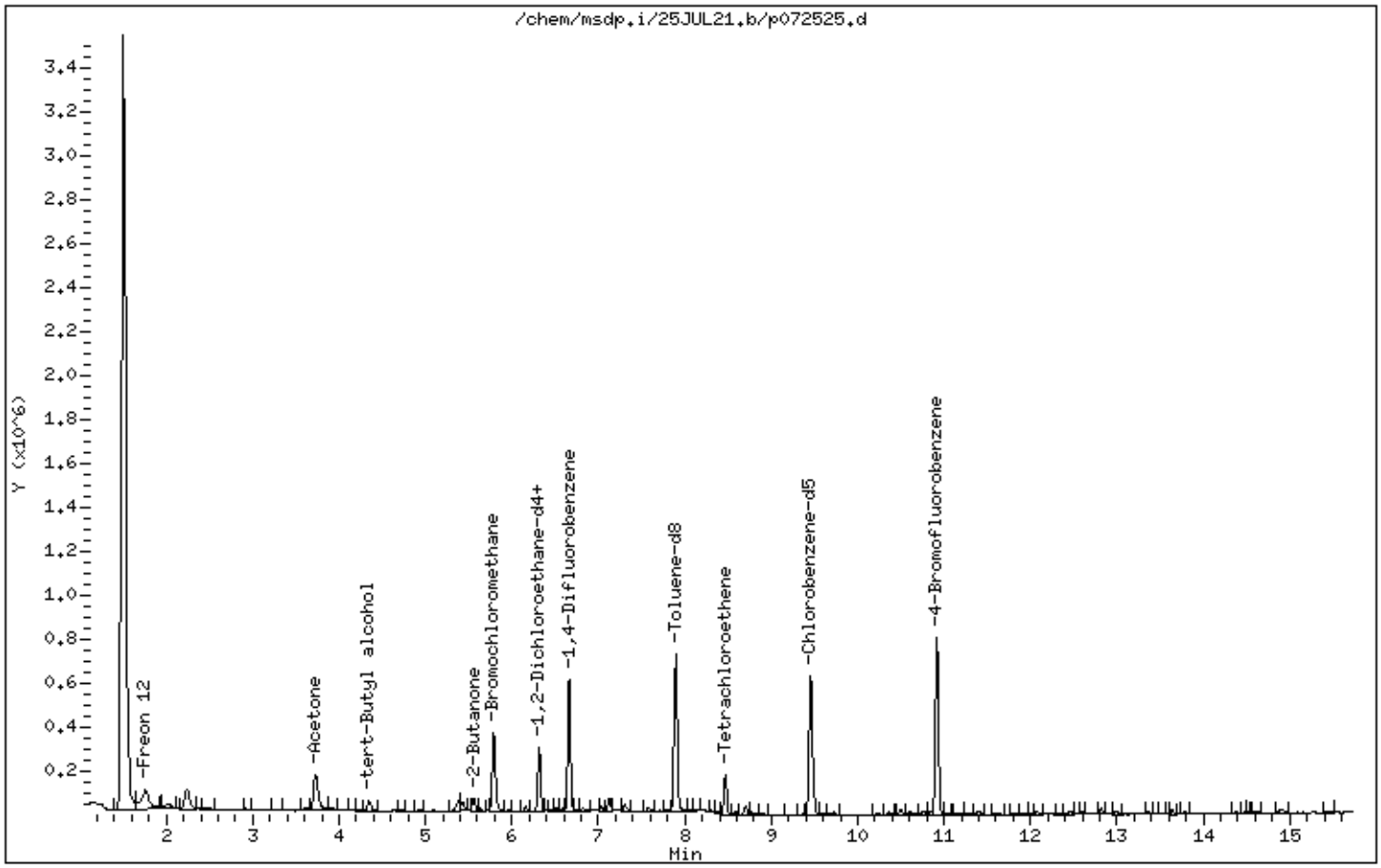
Instrument: msdp.i

Sample Info: 200ml B2628

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072525.d

Date : 26-JUL-2021 07:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2628

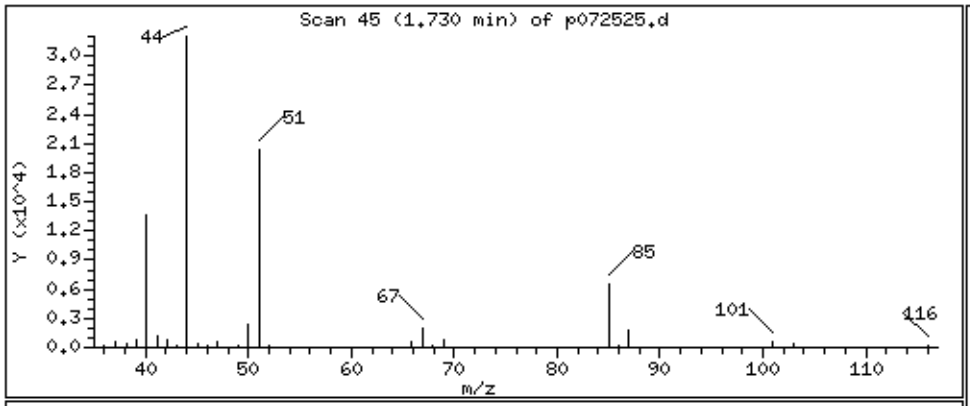
Operator: kk

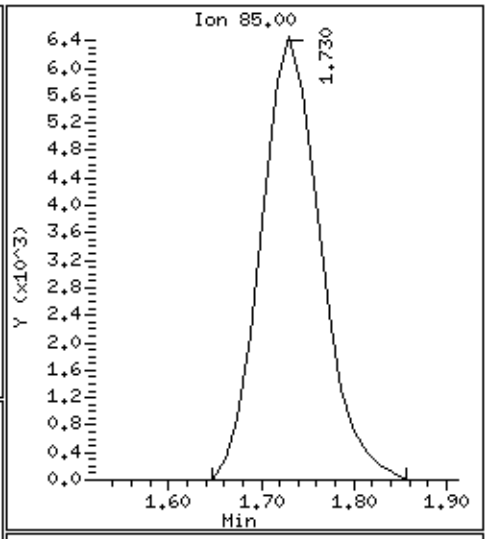
Column phase: RTX-624

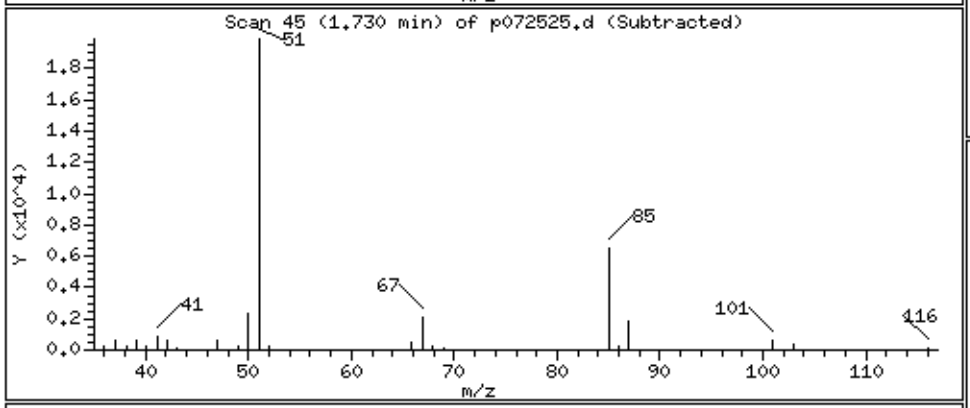
Column diameter: 0.25

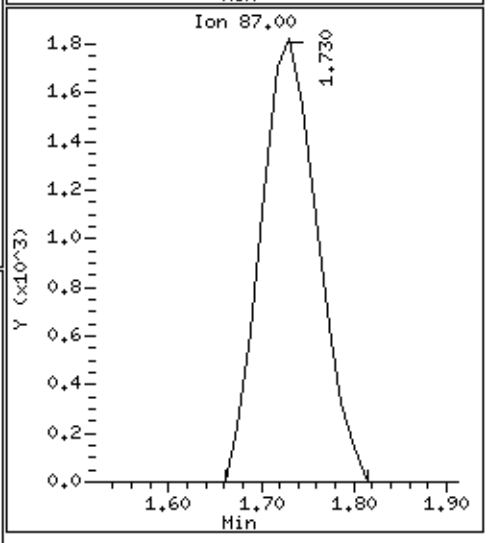
8 Freon 12

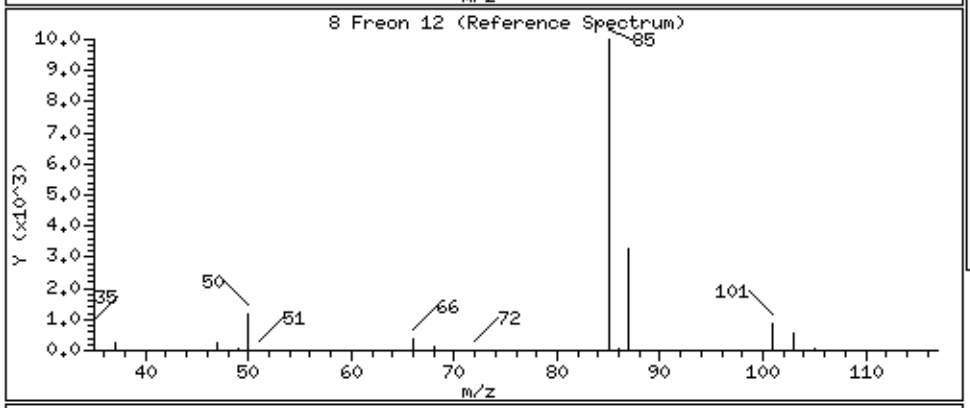
Concentration: 4.865 PPBV

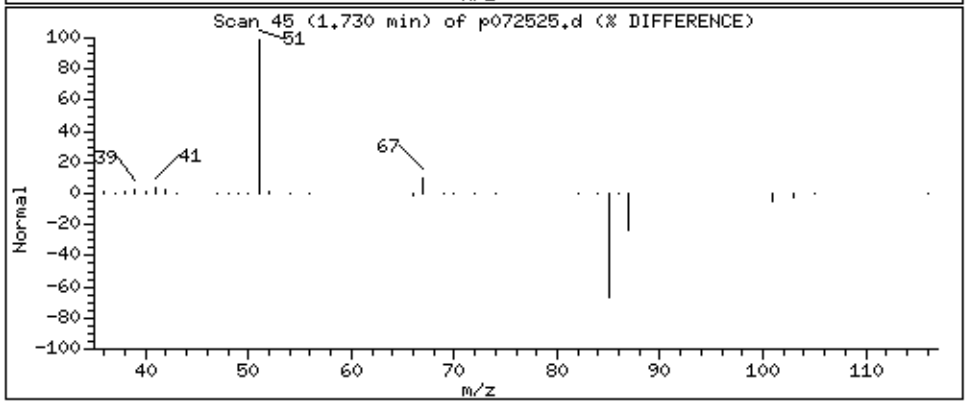












Data File: /chem/msdp.i/25JUL21.b/p072525.d

Date : 26-JUL-2021 07:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2628

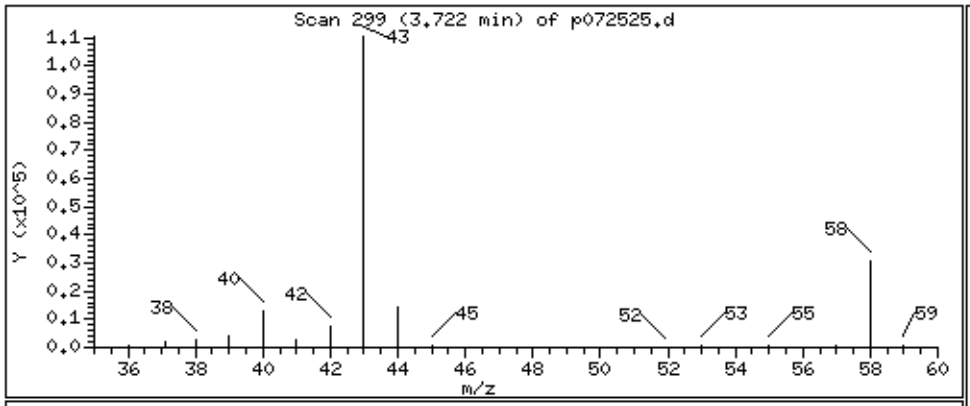
Operator: kk

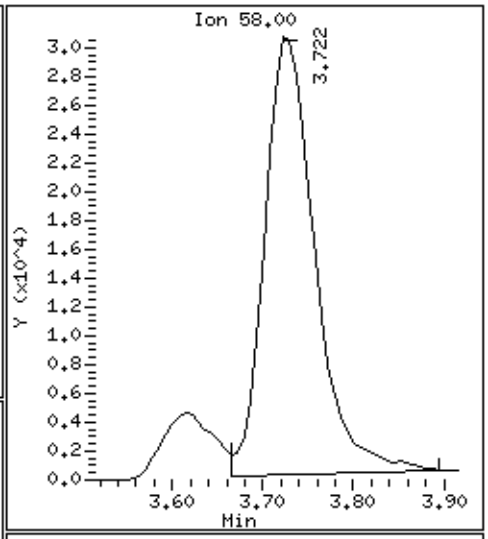
Column phase: RTX-624

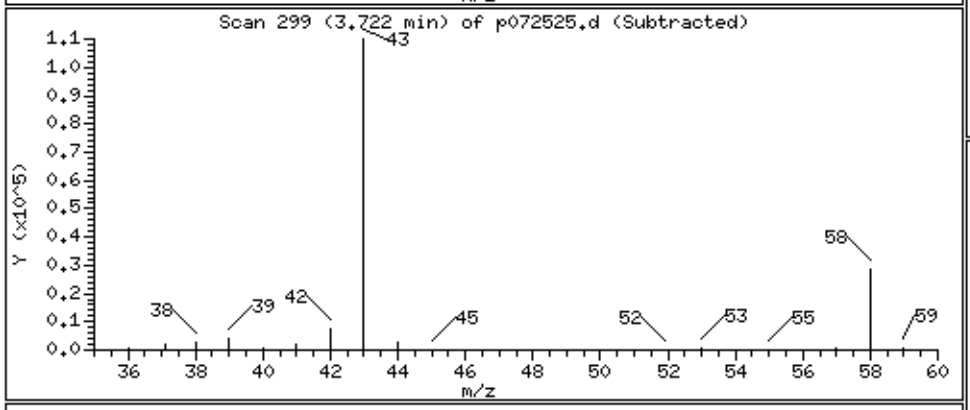
Column diameter: 0.25

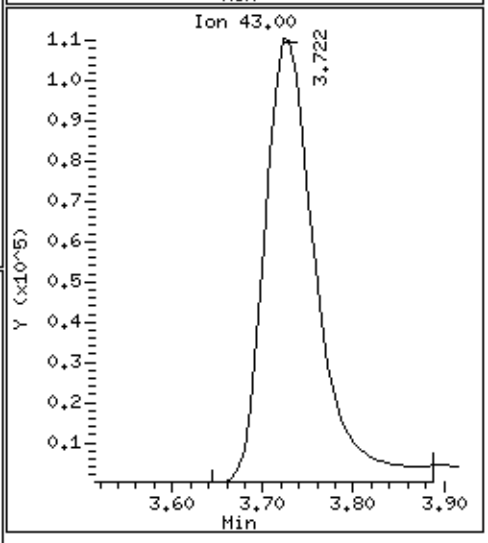
47 Acetone

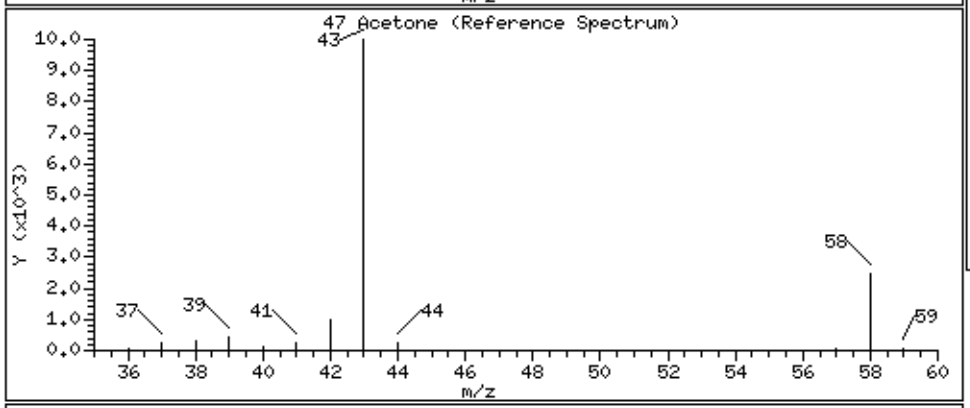
Concentration: 67.688 PPBV

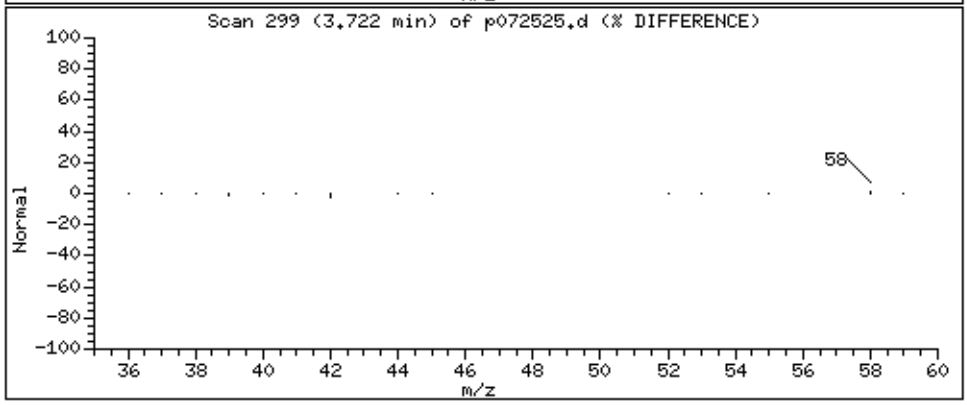












Data File: /chem/msdp.i/25JUL21.b/p072525.d

Date : 26-JUL-2021 07:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2628

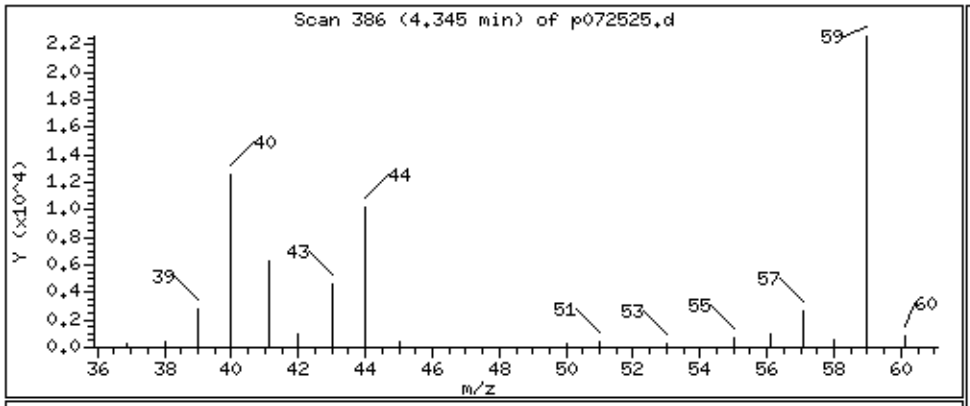
Operator: kk

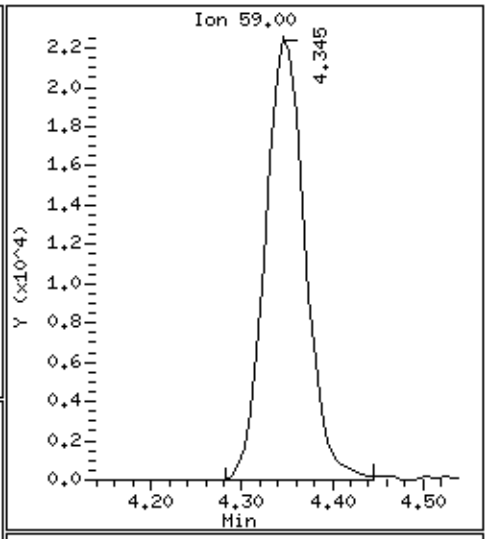
Column phase: RTX-624

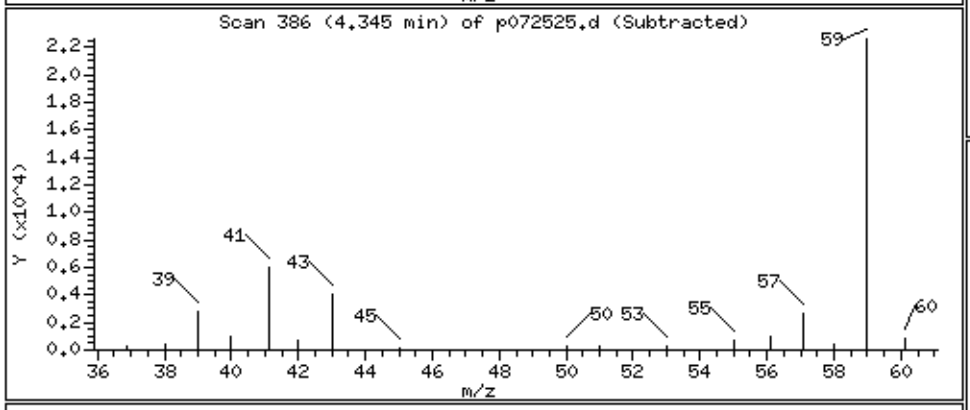
Column diameter: 0.25

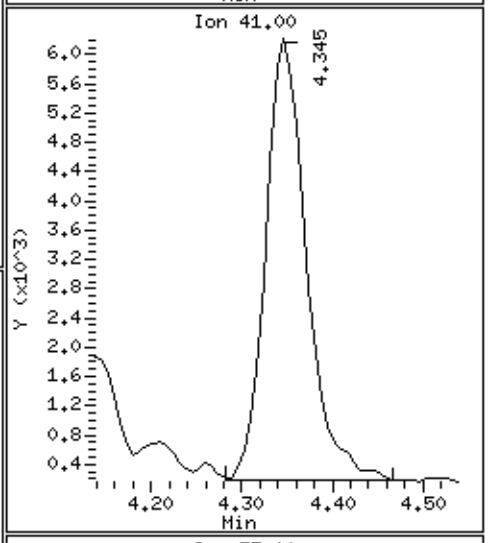
62 tert-Butyl alcohol

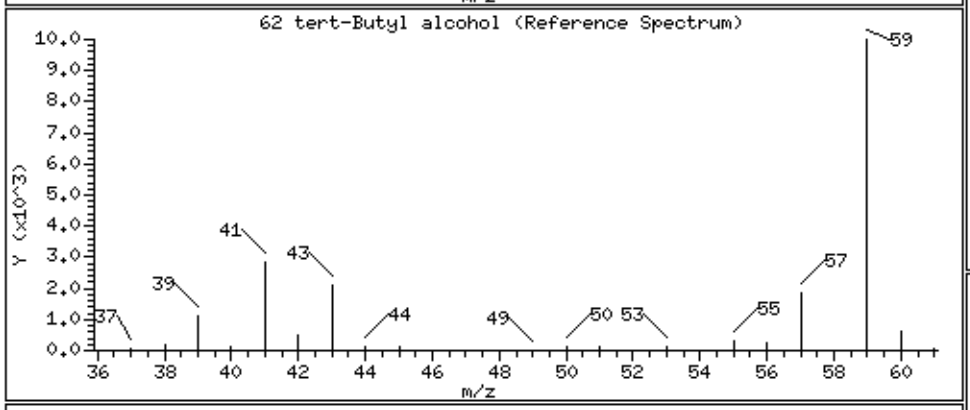
Concentration: 8.519 PPBV

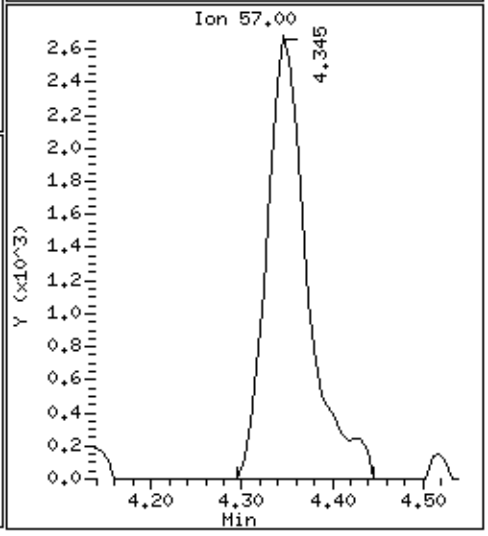


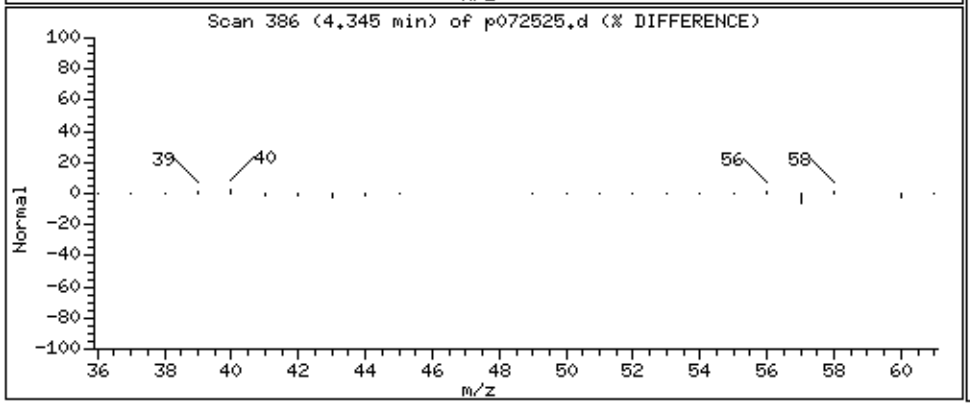












Data File: /chem/msdp.i/25JUL21.b/p072525.d

Date : 26-JUL-2021 07:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2628

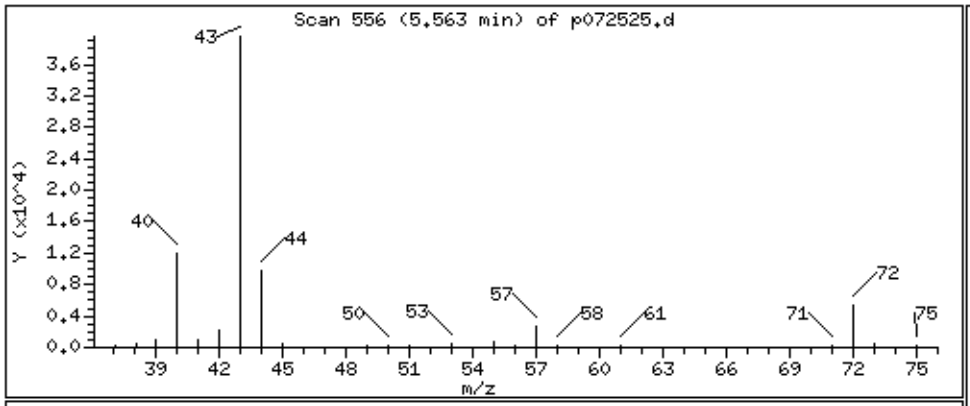
Operator: kk

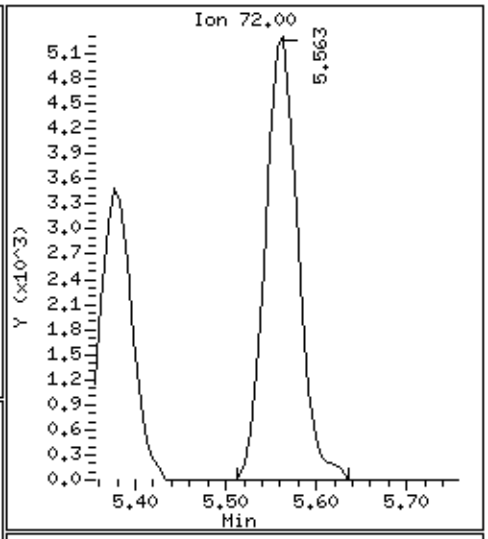
Column phase: RTX-624

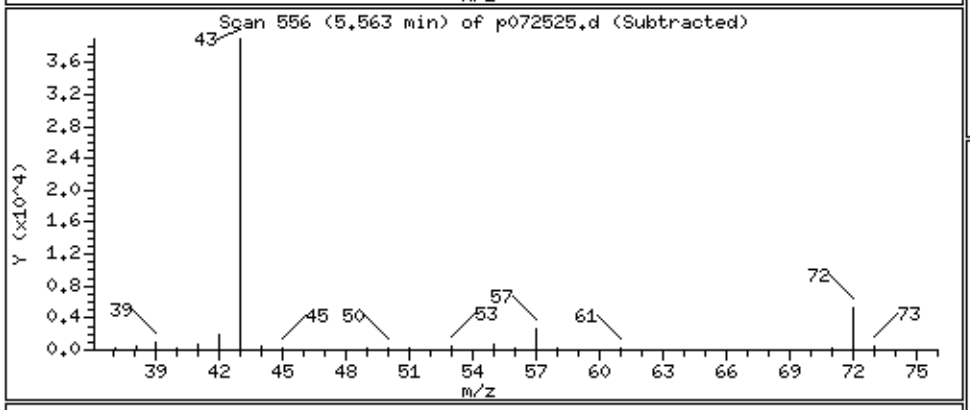
Column diameter: 0.25

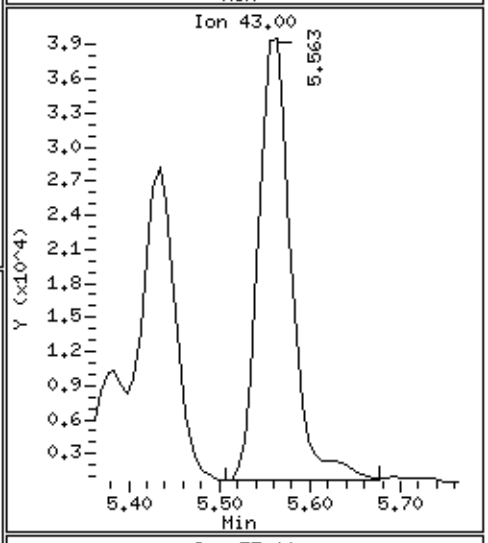
86 2-Butanone

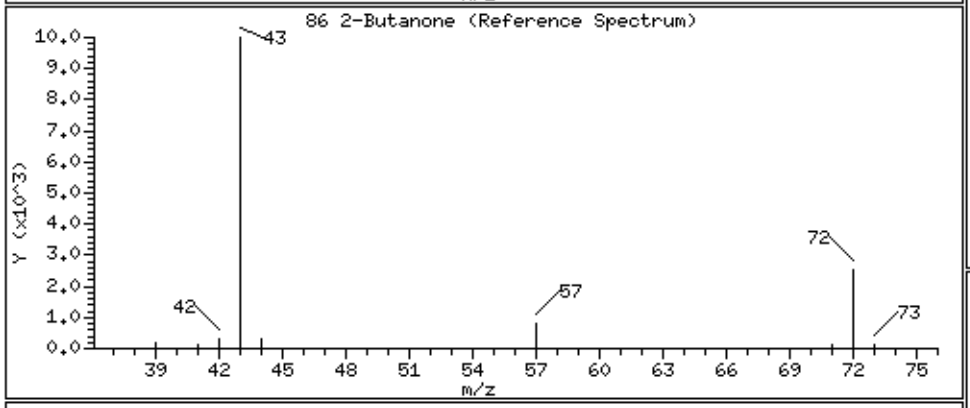
Concentration: 8.930 PPBV

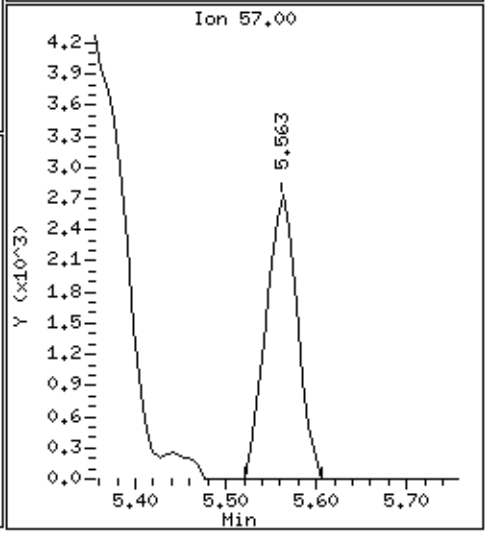


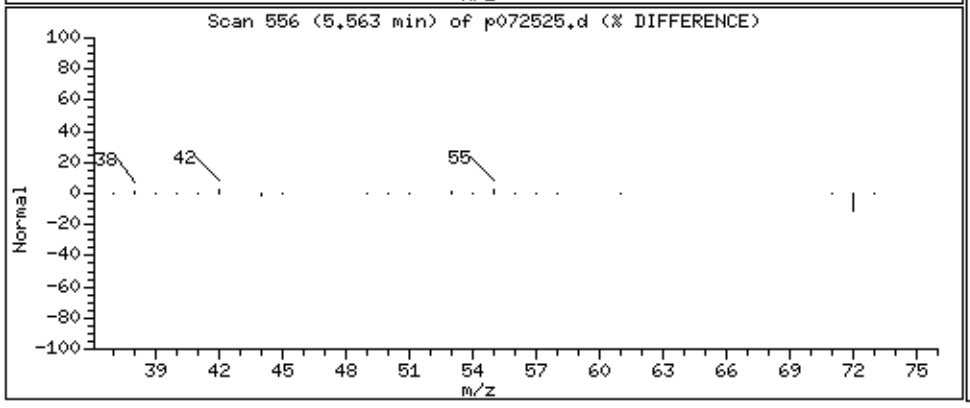












Data File: /chem/msdp.i/25JUL21.b/p072525.d

Date : 26-JUL-2021 07:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2628

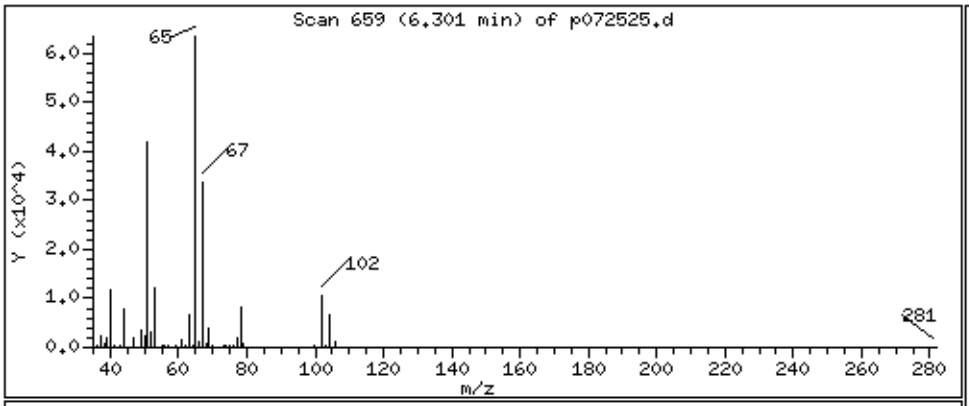
Operator: kk

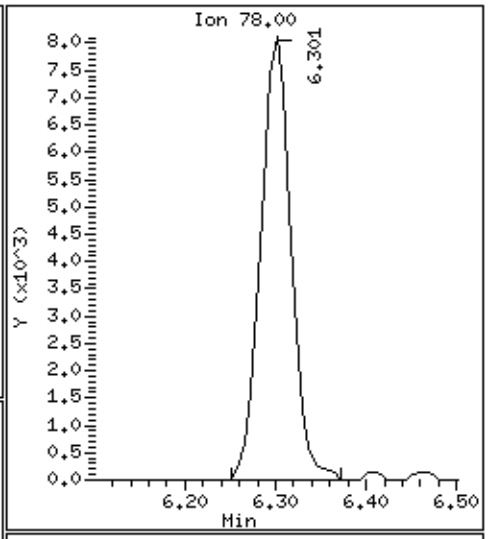
Column phase: RTX-624

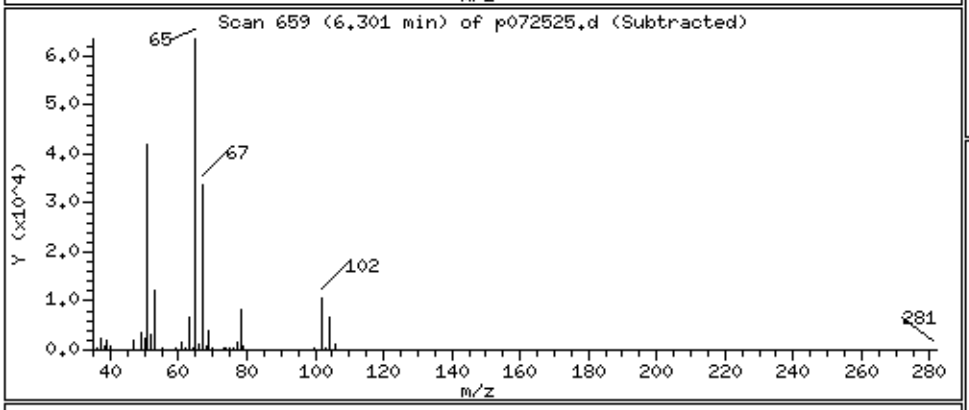
Column diameter: 0.25

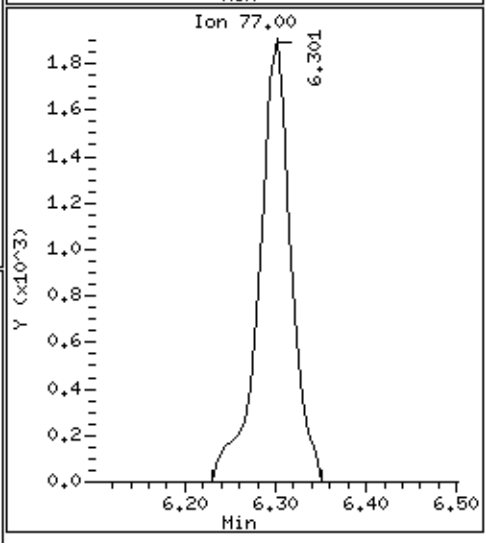
102 Benzene

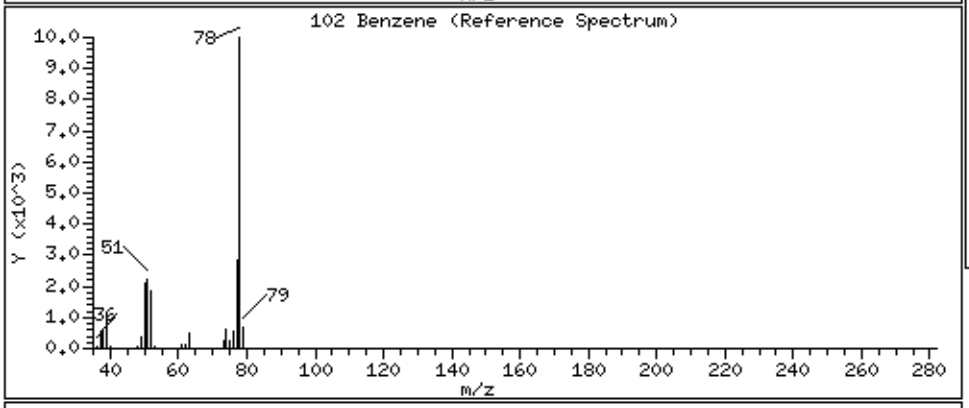
Concentration: 2.318 PPBV

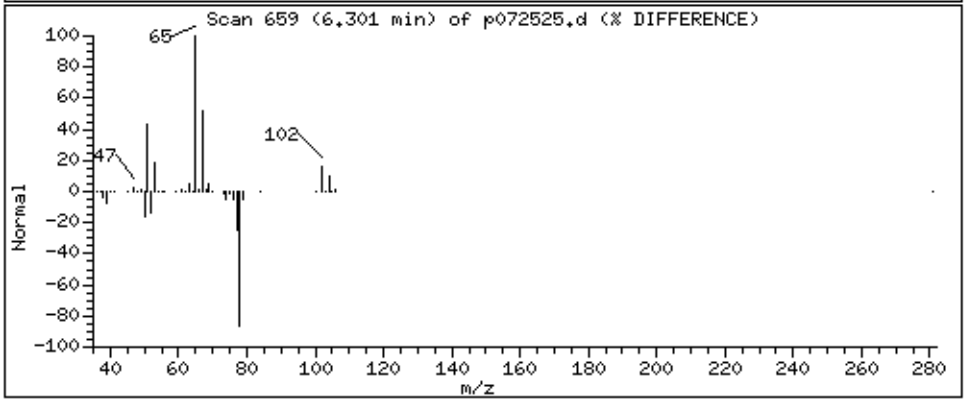












Data File: /chem/msdp.i/25JUL21.b/p072525.d

Date : 26-JUL-2021 07:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2628

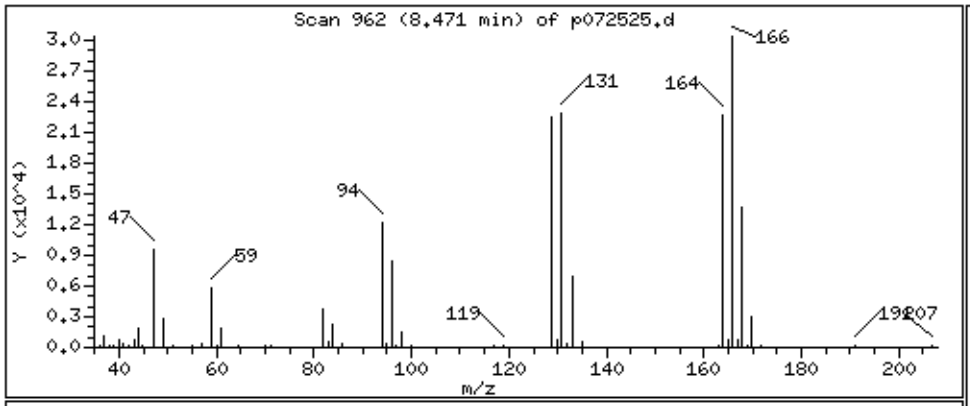
Operator: kk

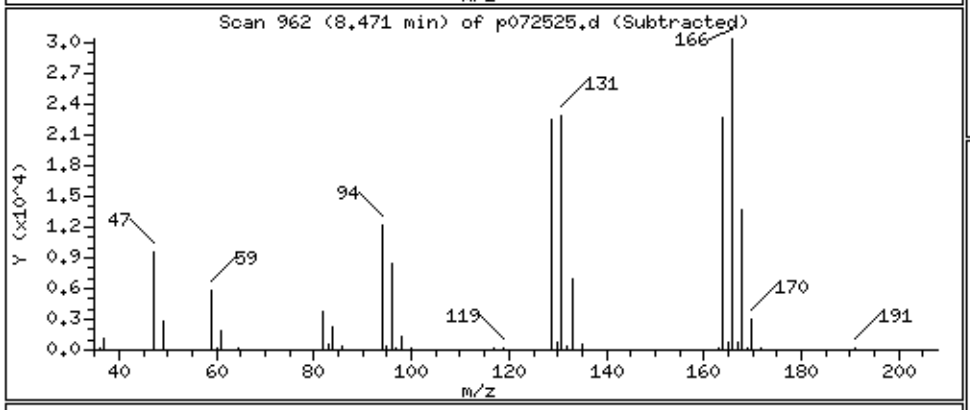
Column phase: RTX-624

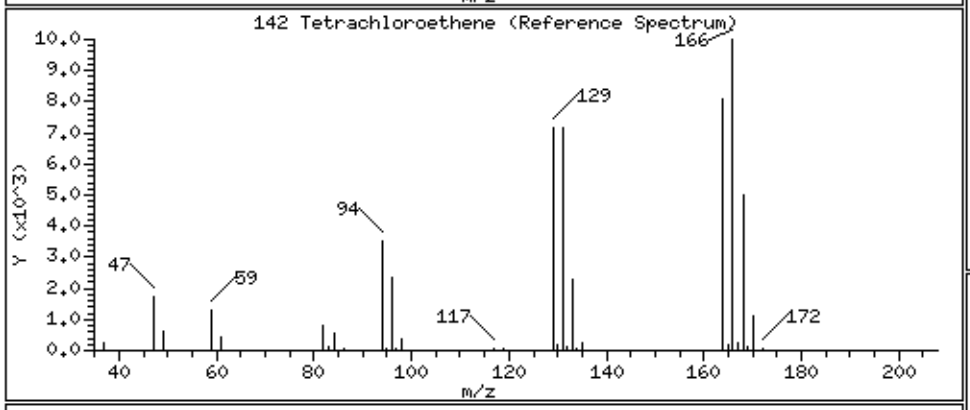
Column diameter: 0.25

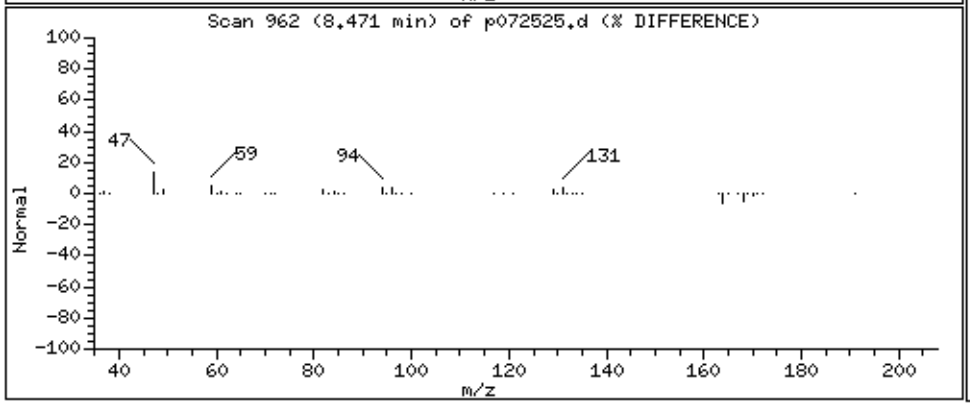
142 Tetrachloroethene

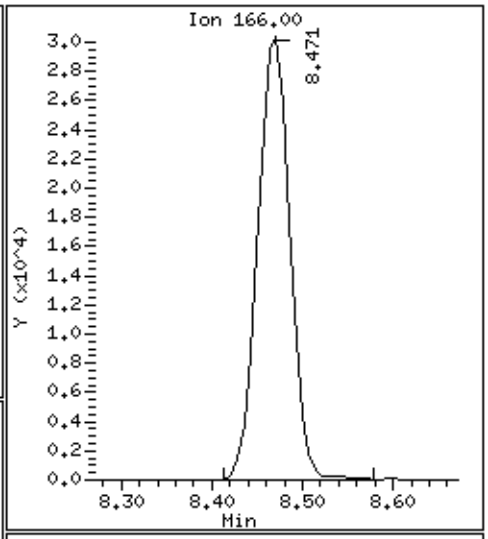
Concentration: 13.382 PPBV

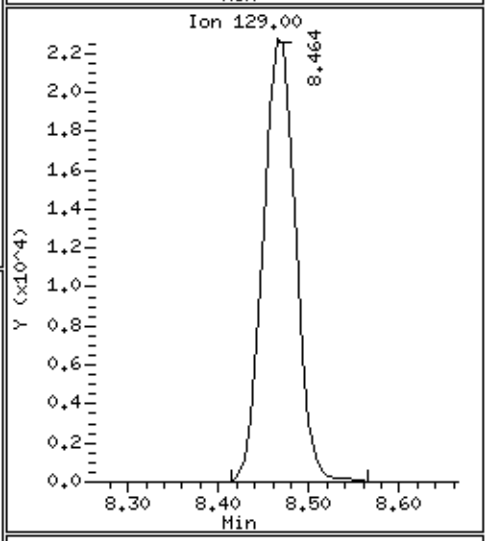


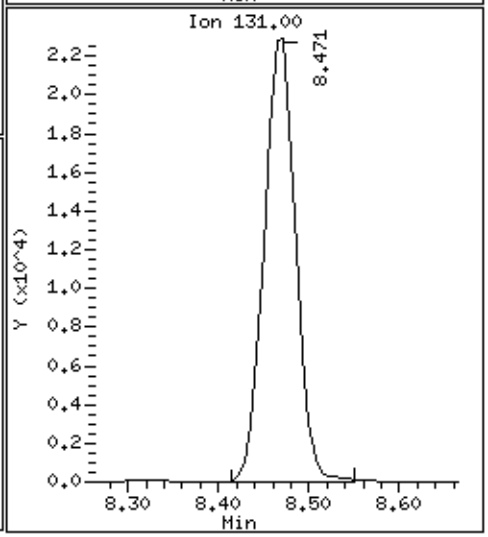












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Client Sample ID: SG-VW53B-02

Lab ID#: 2107282-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072529**	**Date of Collection:**	**7/13/21 11:30:00 AM**
Dil. Factor:	**41.8**	**Date of Analysis:**	**7/26/21 10:02 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	84	Not Detected	570	Not Detected
1,1,1-Trichloroethane	21	Not Detected	110	Not Detected
1,1,2,2-Tetrachloroethane	21	Not Detected	140	Not Detected
1,1,2-Trichloroethane	21	Not Detected	110	Not Detected
1,1-Dichloroethane	21	Not Detected	85	Not Detected
1,1-Dichloroethene	21	Not Detected	83	Not Detected
1,1-Difluoroethane	84	7900	220	21000
1,2,3-Trichloropropane	84	Not Detected	500	Not Detected
1,2,4-Trichlorobenzene	84	Not Detected	620	Not Detected
1,2,4-Trimethylbenzene	21	Not Detected	100	Not Detected
1,2-Dibromo-3-chloropropane	84	Not Detected	810	Not Detected
1,2-Dibromoethane (EDB)	21	Not Detected	160	Not Detected
1,2-Dichlorobenzene	21	Not Detected	120	Not Detected
1,2-Dichloroethane	21	Not Detected	84	Not Detected
1,2-Dichloropropane	21	Not Detected	96	Not Detected
1,3,5-Trimethylbenzene	21	Not Detected	100	Not Detected
1,3-Butadiene	21	Not Detected	46	Not Detected
1,3-Dichlorobenzene	21	Not Detected	120	Not Detected
1,4-Dichlorobenzene	21	Not Detected	120	Not Detected
1,4-Dioxane	84	Not Detected	300	Not Detected
2,2,4-Trimethylpentane	21	Not Detected	98	Not Detected
2-Butanone (Methyl Ethyl Ketone)	84	Not Detected	250	Not Detected
2-Hexanone	84	Not Detected	340	Not Detected
2-Propanol	84	Not Detected	200	Not Detected
3-Chloropropene	84	Not Detected	260	Not Detected
4-Ethyltoluene	21	Not Detected	100	Not Detected
4-Methyl-2-pentanone	21	Not Detected	86	Not Detected
Acetone	210	Not Detected	500	Not Detected
Acrolein	84	Not Detected	190	Not Detected
Acrylonitrile	84	Not Detected	180	Not Detected
alpha-Chlorotoluene	21	Not Detected	110	Not Detected
Benzene	21	Not Detected	67	Not Detected
Bromodichloromethane	21	Not Detected	140	Not Detected
Bromoform	21	Not Detected	220	Not Detected
Bromomethane	210	Not Detected	810	Not Detected
Carbon Disulfide	84	Not Detected	260	Not Detected
Carbon Tetrachloride	21	Not Detected	130	Not Detected
Chlorobenzene	21	Not Detected	96	Not Detected
Chloroethane	84	Not Detected	220	Not Detected
Chloroform	21	Not Detected	100	Not Detected
Chloromethane	210	Not Detected	430	Not Detected
cis-1,2-Dichloroethene	21	Not Detected	83	Not Detected

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Client Sample ID: SG-VW53B-02

Lab ID#: 2107282-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072529**	**Date of Collection:**	**7/13/21 11:30:00 AM**
Dil. Factor:	**41.8**	**Date of Analysis:**	**7/26/21 10:02 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	21	Not Detected	95	Not Detected
Cumene	21	Not Detected	100	Not Detected
Cyclohexane	21	Not Detected	72	Not Detected
Dibromochloromethane	21	Not Detected	180	Not Detected
Dibromomethane	84	Not Detected	590	Not Detected
Ethanol	210	Not Detected	390	Not Detected
Ethyl Acetate	84	Not Detected	300	Not Detected
Ethyl Benzene	21	Not Detected	91	Not Detected
Ethyl-tert-butyl ether	84	Not Detected	350	Not Detected
Freon 11	21	Not Detected	120	Not Detected
Freon 12	21	Not Detected	100	Not Detected
Freon 113	21	Not Detected	160	Not Detected
Freon 114	21	Not Detected	150	Not Detected
Freon 134a	84	Not Detected	350	Not Detected
Heptane	21	Not Detected	86	Not Detected
Hexachlorobutadiene	84	Not Detected	890	Not Detected
Hexachloroethane	84	Not Detected	810	Not Detected
Hexane	21	Not Detected	74	Not Detected
Iodomethane	210	Not Detected	1200	Not Detected
Isopropyl ether	84	Not Detected	350	Not Detected
m,p-Xylene	21	Not Detected	91	Not Detected
Methyl tert-butyl ether	84	Not Detected	300	Not Detected
Methylene Chloride	210	Not Detected	730	Not Detected
Naphthalene	42	Not Detected	220	Not Detected
o-Xylene	21	Not Detected	91	Not Detected
Propylbenzene	21	Not Detected	100	Not Detected
Propylene	84	Not Detected	140	Not Detected
Styrene	21	Not Detected	89	Not Detected
tert-Amyl methyl ether	84	Not Detected	350	Not Detected
tert-Butyl alcohol	84	Not Detected	250	Not Detected
Tetrachloroethene	21	Not Detected	140	Not Detected
Tetrahydrofuran	21	Not Detected	62	Not Detected
Toluene	21	Not Detected	79	Not Detected
TPH ref. to Gasoline (MW=100)	2100	Not Detected	8500	Not Detected
trans-1,2-Dichloroethene	21	Not Detected	83	Not Detected
trans-1,3-Dichloropropene	21	Not Detected	95	Not Detected
Trichloroethene	21	Not Detected	110	Not Detected
Vinyl Acetate	84	Not Detected	290	Not Detected
Vinyl Bromide	84	Not Detected	360	Not Detected
Vinyl Chloride	21	Not Detected	53	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW53B-02

Lab ID#: 2107282-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072529**	**Date of Collection:**	**7/13/21 11:30:00 AM**
Dil. Factor:	**41.8**	**Date of Analysis:**	**7/26/21 10:02 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072529.d
Lab Smp Id: 2107282-10A
Inj Date : 26-JUL-2021 10:02
Operator : LD Inst ID: msdp.i
Smp Info : 10ml O0889
Misc Info : 5.9 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 11
Dil Factor: 41.80000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	152950	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	116008			48.23- 108.23	75.85
5.778	5.778 (1.000)	49	328774			150.57- 210.57	214.95
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	514584	25.0000		80.00- 120.00	100.00
6.666	6.666 (1.000)	88	76428			0.00- 45.71	14.85
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	502953	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	264936			23.78- 83.78	52.68
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.315 (1.092)	65	209546	24.8251	24.825	80.00- 120.00	100.00(a)
6.308	6.308 (1.092)	67	103654			27.21- 87.21	49.47
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	567708	25.4062	25.406	80.00- 120.00	100.00(a)
7.891	7.891 (1.184)	70	60300			0.00- 40.44	10.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	365500			34.95- 94.95	64.38
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	308982	23.9238	23.924	80.00- 120.00	100.00(a)
10.921	10.921 (1.154)	95	376523			95.92- 155.92	121.86
10.921	10.921 (1.154)	176	290435			66.89- 126.89	94.00
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.689	1.702 (0.292)	65	656852	189.464	7919.6	80.00- 120.00	100.00
1.689	1.744 (0.292)	51	1953030			597.63- 657.63	297.33
1.689	1.702 (0.292)	47	356556			33.72- 93.72	54.28

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072529.d
Lab Smp Id: 2107282-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	152950	-1.07
108 1,4-Difluorobenze	573421	344053	802789	514584	-10.26
153 Chlorobenzene-d5	566079	339647	792511	502953	-11.15

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 11:09

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-10A
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 5.9 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.825	99.30	70-130
$ 134 Toluene-d8	25.000	25.406	101.62	70-130
$ 170 4-Bromofluorobenz	25.000	23.924	95.70	70-130

Data File: /chem/msdp.i/25JUL21.b/p072529.d

Date : 26-JUL-2021 10:02

Client ID:

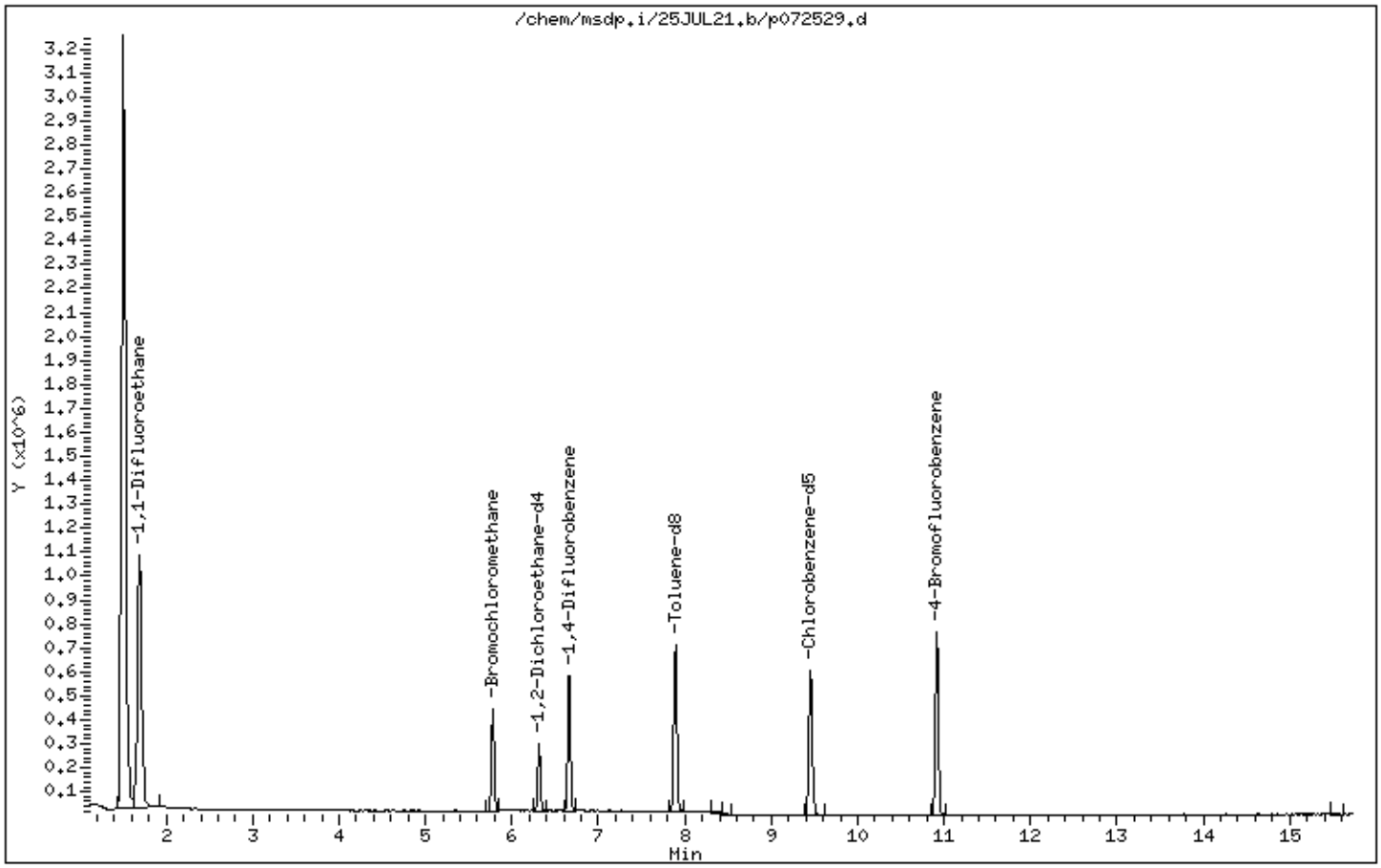
Instrument: msdp.i

Sample Info: 10ml 00889

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072529.d

Date : 26-JUL-2021 10:02

Client ID:

Instrument: msdp.i

Sample Info: 10ml 00889

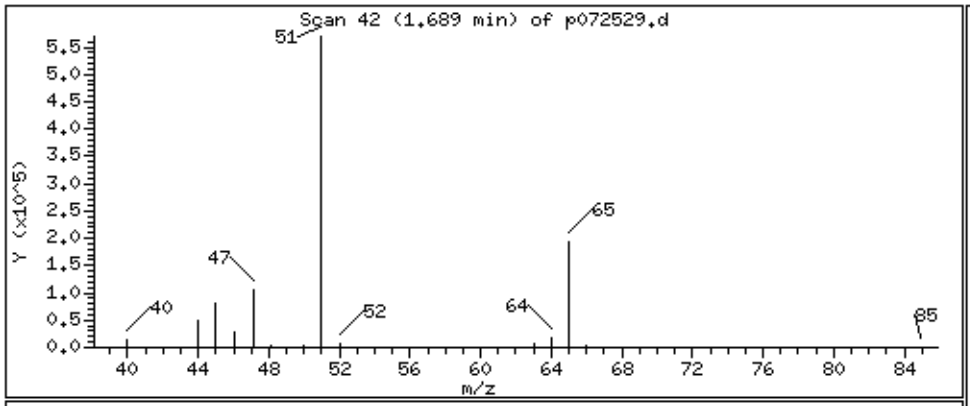
Operator: LD

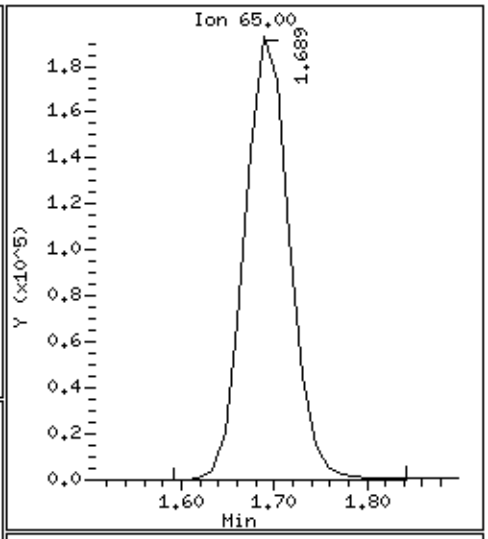
Column phase: RTX-624

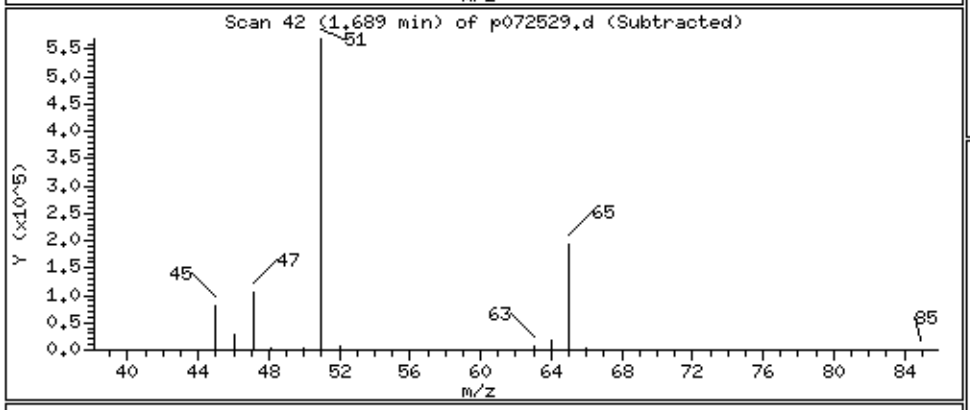
Column diameter: 0.25

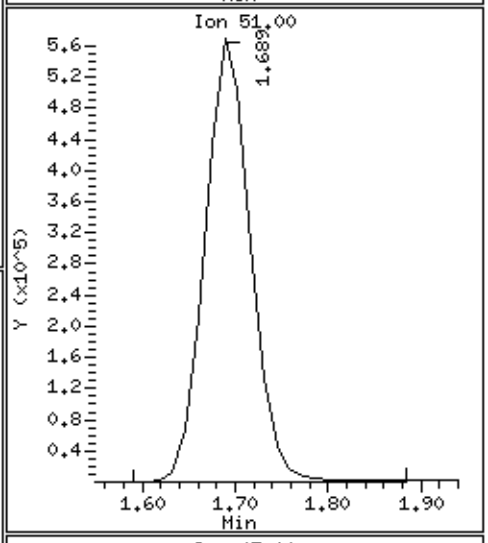
7 1,1-Difluoroethane

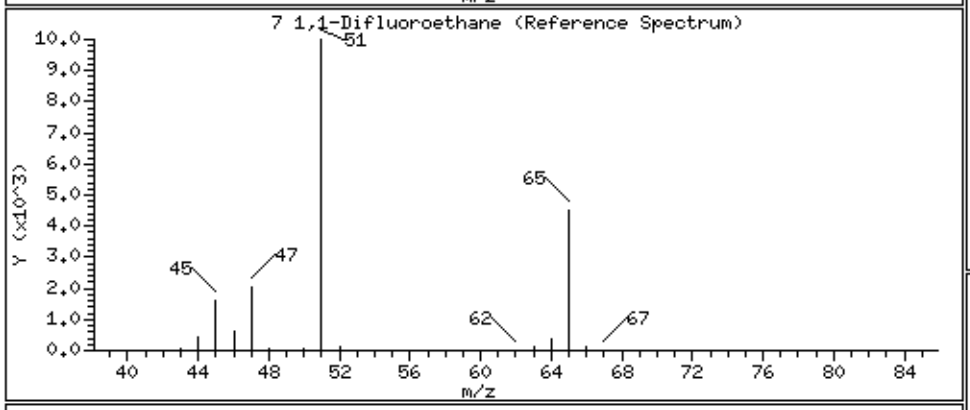
Concentration: 7919.6 PPBV

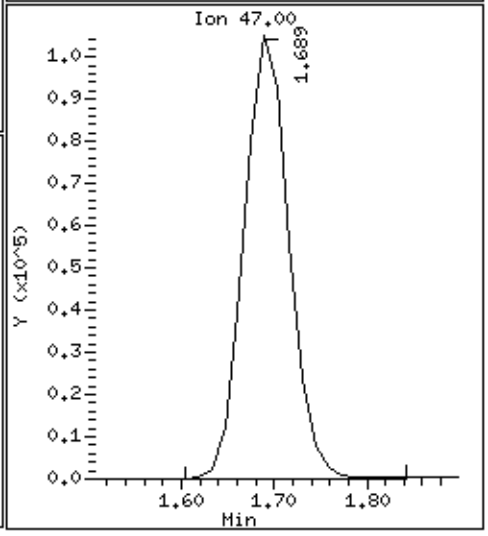


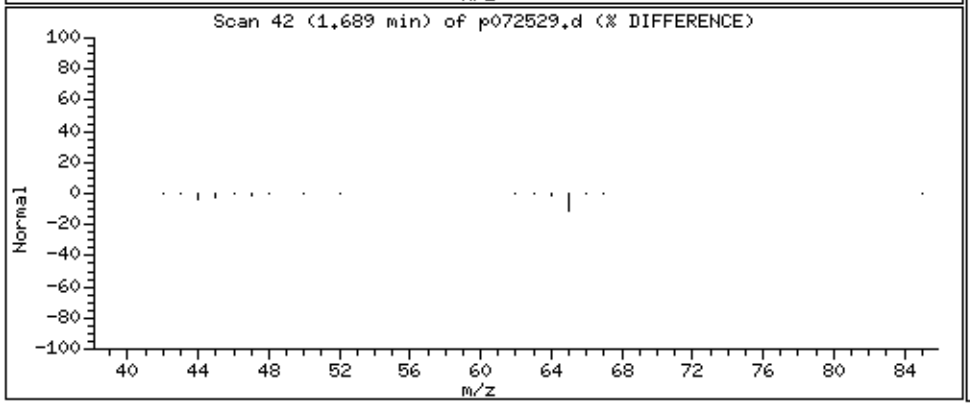












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Client Sample ID: SG-VW25A-02

Lab ID#: 2107282-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072526**	**Date of Collection:**	**7/13/21 12:50:00 PM**
Dil. Factor:	**2.45**	**Date of Analysis:**	**7/26/21 08:26 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.9	Not Detected	34	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.7	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.7	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
1,1-Difluoroethane	4.9	Not Detected	13	Not Detected
1,2,3-Trichloropropane	4.9	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	4.9	Not Detected	36	Not Detected
1,2,4-Trimethylbenzene	1.2	2.9	6.0	14
1,2-Dibromo-3-chloropropane	4.9	Not Detected	47	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.4	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.7	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.7	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	Not Detected	14	Not Detected
2-Hexanone	4.9	Not Detected	20	Not Detected
2-Propanol	4.9	Not Detected	12	Not Detected
3-Chloropropene	4.9	Not Detected	15	Not Detected
4-Ethyltoluene	1.2	3.7	6.0	18
4-Methyl-2-pentanone	1.2	Not Detected	5.0	Not Detected
Acetone	12	14	29	34
Acrolein	4.9	Not Detected	11	Not Detected
Acrylonitrile	4.9	Not Detected	11	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.3	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
Bromodichloromethane	1.2	Not Detected	8.2	Not Detected
Bromoform	1.2	Not Detected	13	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Carbon Disulfide	4.9	Not Detected	15	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
Chlorobenzene	1.2	Not Detected	5.6	Not Detected
Chloroethane	4.9	Not Detected	13	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected

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Client Sample ID: SG-VW25A-02

Lab ID#: 2107282-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072526**	**Date of Collection:**	**7/13/21 12:50:00 PM**
Dil. Factor:	**2.45**	**Date of Analysis:**	**7/26/21 08:26 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
Cumene	1.2	Not Detected	6.0	Not Detected
Cyclohexane	1.2	Not Detected	4.2	Not Detected
Dibromochloromethane	1.2	Not Detected	10	Not Detected
Dibromomethane	4.9	Not Detected	35	Not Detected
Ethanol	12	Not Detected	23	Not Detected
Ethyl Acetate	4.9	Not Detected	18	Not Detected
Ethyl Benzene	1.2	3.5	5.3	15
Ethyl-tert-butyl ether	4.9	Not Detected	20	Not Detected
Freon 11	1.2	Not Detected	6.9	Not Detected
Freon 12	1.2	1.8	6.0	8.8
Freon 113	1.2	Not Detected	9.4	Not Detected
Freon 114	1.2	Not Detected	8.6	Not Detected
Freon 134a	4.9	Not Detected	20	Not Detected
Heptane	1.2	Not Detected	5.0	Not Detected
Hexachlorobutadiene	4.9	Not Detected	52	Not Detected
Hexachloroethane	4.9	Not Detected	47	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
Iodomethane	12	Not Detected	71	Not Detected
Isopropyl ether	4.9	Not Detected	20	Not Detected
m,p-Xylene	1.2	13	5.3	56
Methyl tert-butyl ether	4.9	Not Detected	18	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Naphthalene	2.4	Not Detected	13	Not Detected
o-Xylene	1.2	4.4	5.3	19
Propylbenzene	1.2	Not Detected	6.0	Not Detected
Propylene	4.9	Not Detected	8.4	Not Detected
Styrene	1.2	Not Detected	5.2	Not Detected
tert-Amyl methyl ether	4.9	Not Detected	20	Not Detected
tert-Butyl alcohol	4.9	Not Detected	15	Not Detected
Tetrachloroethene	1.2	19	8.3	130
Tetrahydrofuran	1.2	Not Detected	3.6	Not Detected
Toluene	1.2	13	4.6	49
TPH ref. to Gasoline (MW=100)	120	Not Detected	500	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
Vinyl Acetate	4.9	Not Detected	17	Not Detected
Vinyl Bromide	4.9	Not Detected	21	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW25A-02

Lab ID#: 2107282-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072526**	**Date of Collection:**	**7/13/21 12:50:00 PM**
Dil. Factor:	**2.45**	**Date of Analysis:**	**7/26/21 08:26 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072526.d
Lab Smp Id: 2107282-11A
Inj Date : 26-JUL-2021 08:26
Operator : kk Inst ID: msdp.i
Smp Info : 200ml N2654
Misc Info : 9.4 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 8
Dil Factor: 2.45000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	148704	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	115863				48.23- 108.23	77.92
5.785	5.778 (1.000)	49	311406				150.57- 210.57	209.41
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	534197	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	80109				0.00- 45.71	15.00
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	548471	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	286986				23.78- 83.78	52.32
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	208318	25.3843	25.384		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	103912				27.21- 87.21	49.88
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	598199	25.7878	25.788		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	60704				0.00- 40.44	10.15

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	394935			34.95- 94.95	66.02
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	343275	24.3732	24.373	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	418066			95.92- 155.92	121.79
10.921	10.921 (1.154)	176	330662			66.89- 126.89	96.33
8 Freon 12					CAS #: 75-71-8		
1.731	1.716 (0.299)	85	9690	0.72654	1.780	80.00- 120.00	100.00
1.731	1.716 (0.299)	87	2571			2.37- 62.37	26.53
47 Acetone					CAS #: 67-64-1		
3.730	3.715 (0.645)	58	22639	5.80720	14.228	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	89167			302.95- 362.95	393.86
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	129304	5.31653	13.026	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	75832			28.38- 88.38	58.65
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	96264	7.70106	18.868	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	74964			47.84- 107.84	77.87
8.471	8.464 (0.895)	131	70756			45.29- 105.29	73.50
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	16263	1.42805	3.499	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	48523			273.74- 333.74	298.36
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	75488	5.29255	12.967	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	144789			163.73- 223.73	191.80
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	24635	1.80269	4.417	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	50781			177.45- 237.45	206.13
183 4-Ethyltoluene					CAS #: 622-96-8		
11.258	11.286 (1.190)	120	21137	1.52696	3.741	80.00- 120.00	100.00
11.258	11.286 (1.190)	105	63240			284.55- 344.55	299.18
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	43040	1.19646	2.931	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	20975			19.05- 79.05	48.73

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072526.d
Lab Smp Id: 2107282-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 9.4 Hg->10 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	148704	-3.81
108 1,4-Difluorobenze	573421	344053	802789	534197	-6.84
153 Chlorobenzene-d5	566079	339647	792511	548471	-3.11

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:11

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-11A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 9.4 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.384	101.54	70-130
$ 134 Toluene-d8	25.000	25.788	103.15	70-130
$ 170 4-Bromofluorobenz	25.000	24.373	97.49	70-130

Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

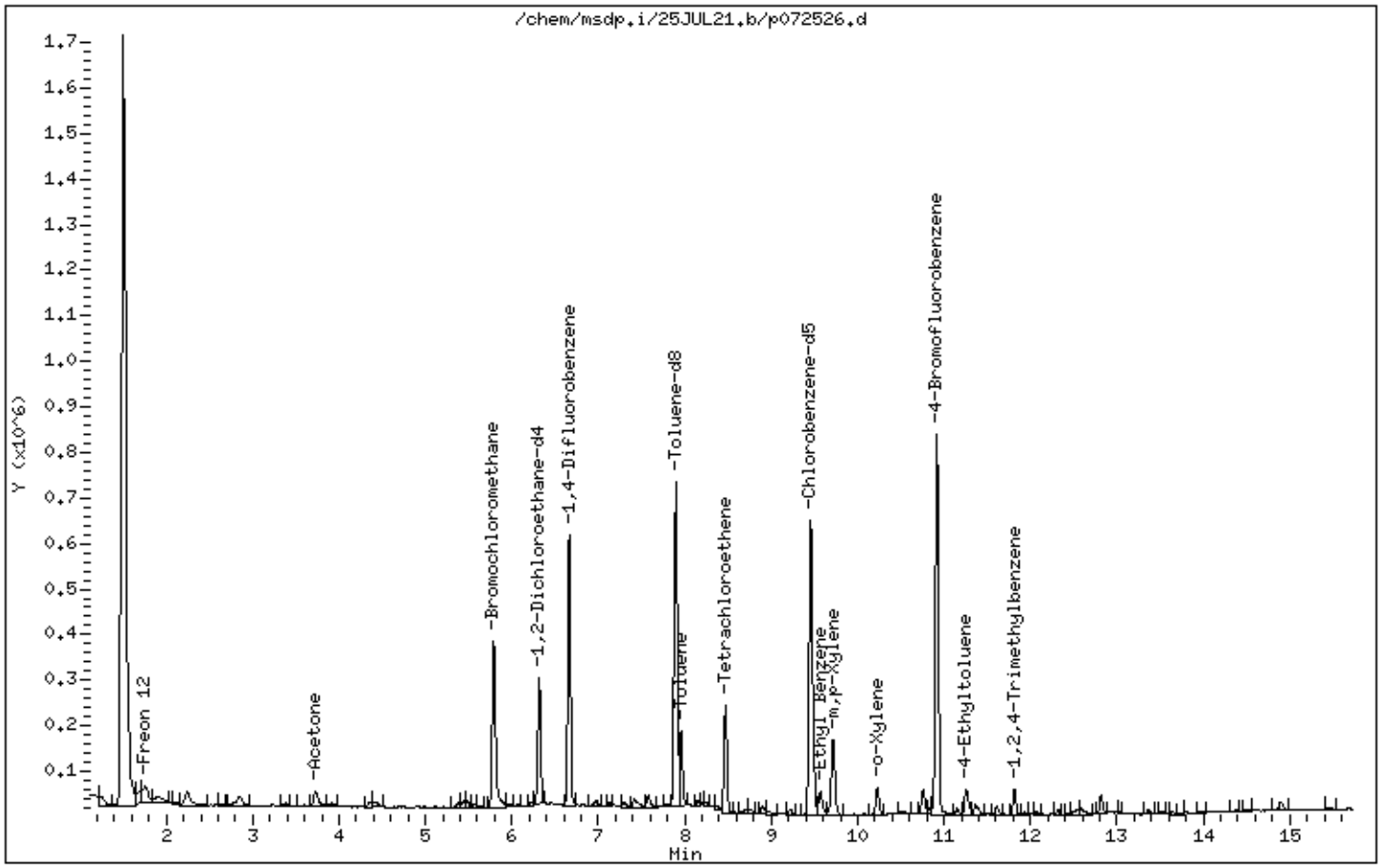
Instrument: msdp.i

Sample Info: 200ml N2654

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

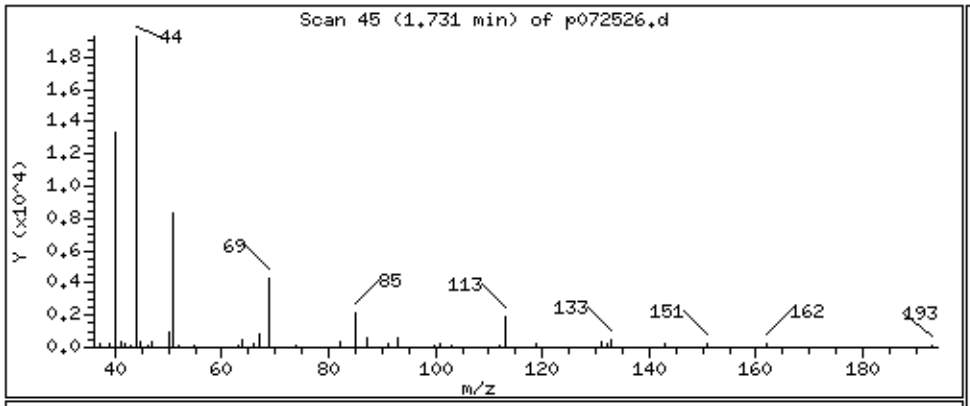
Operator: kk

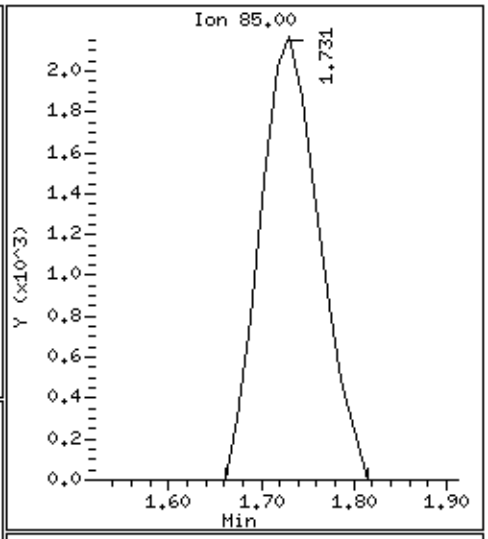
Column phase: RTX-624

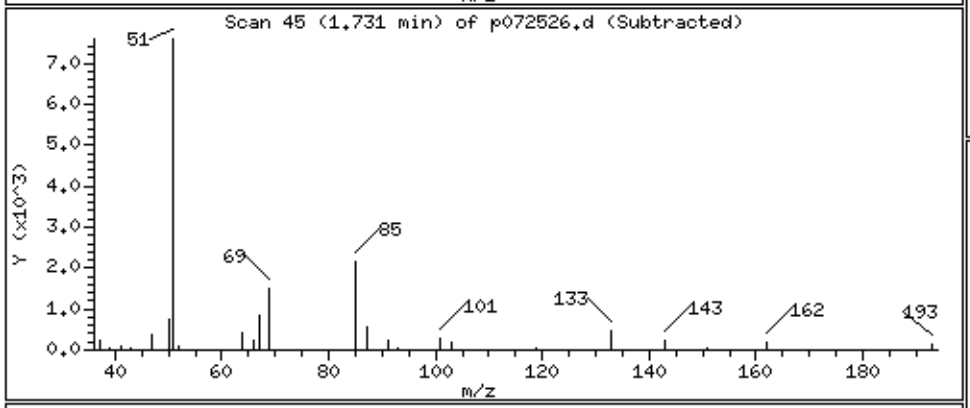
Column diameter: 0.25

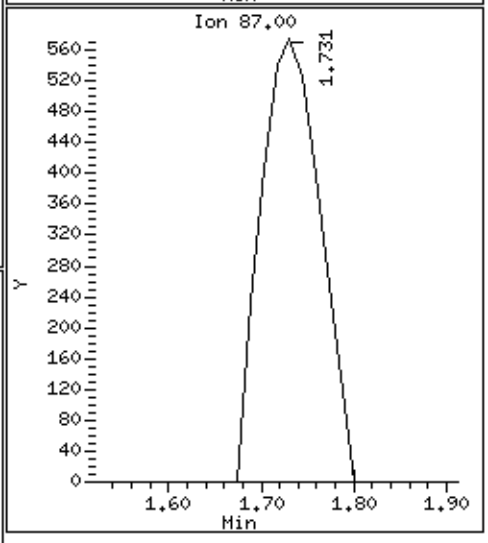
8 Freon 12

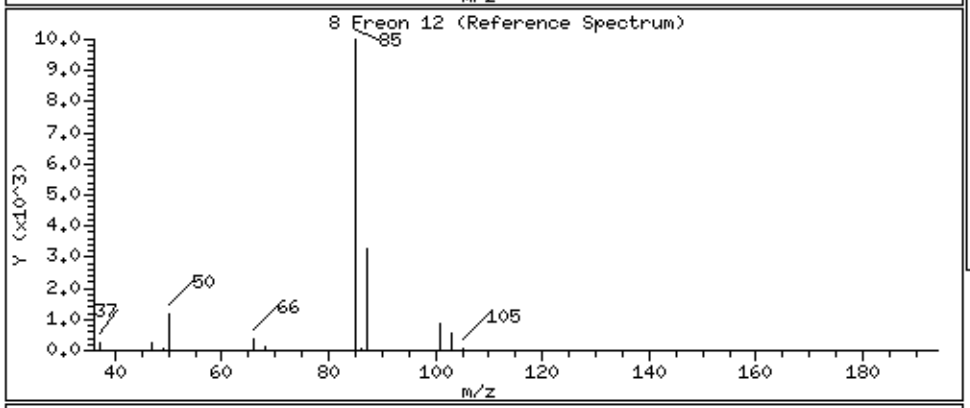
Concentration: 1.780 PPBV

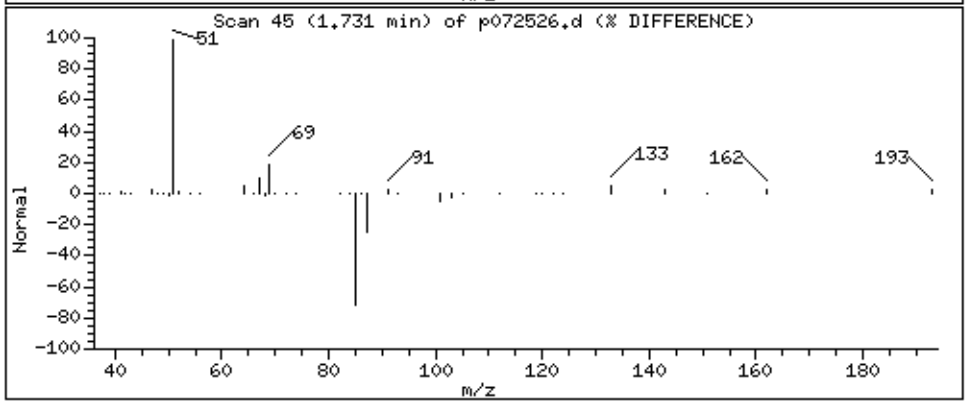












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

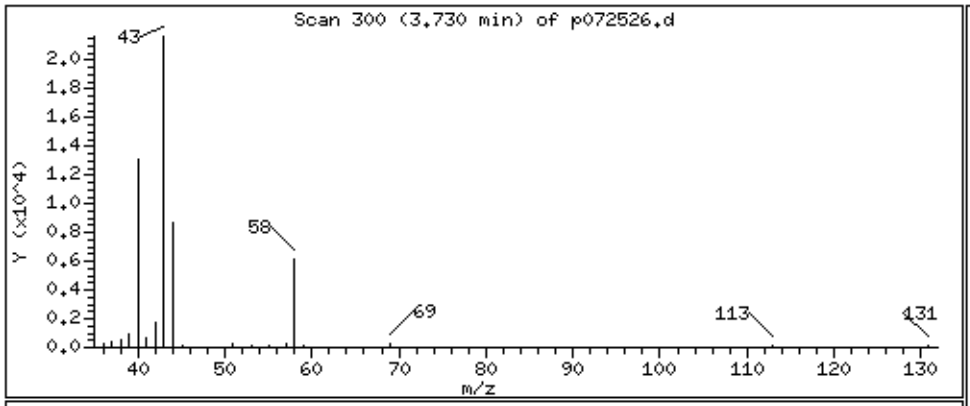
Operator: kk

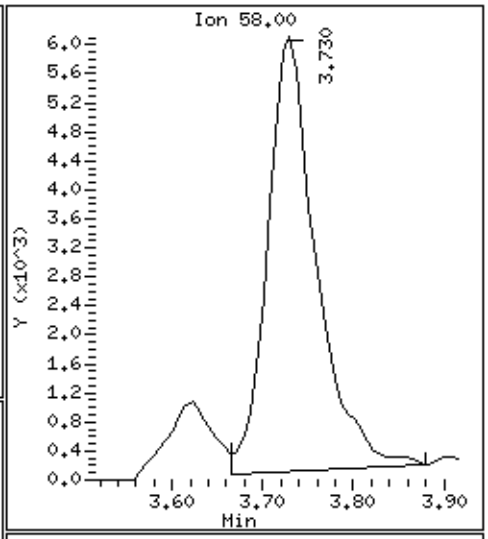
Column phase: RTX-624

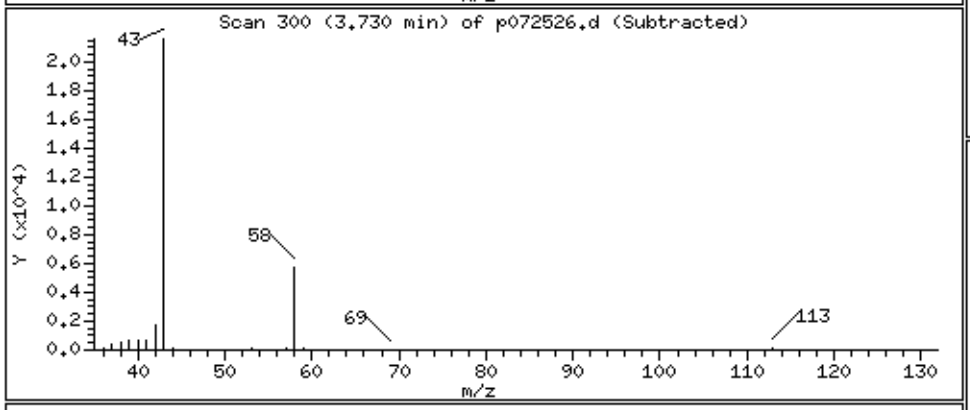
Column diameter: 0.25

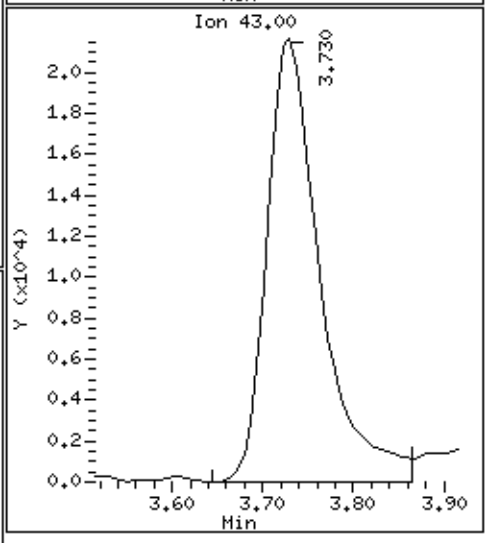
47 Acetone

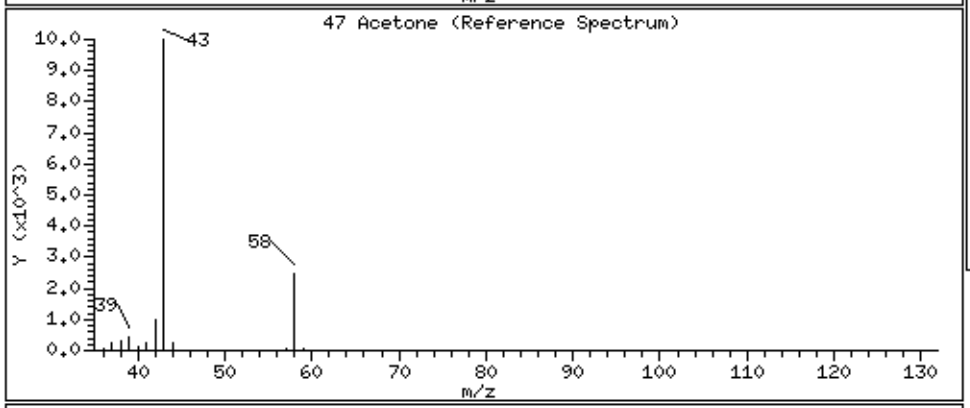
Concentration: 14.228 PPBV

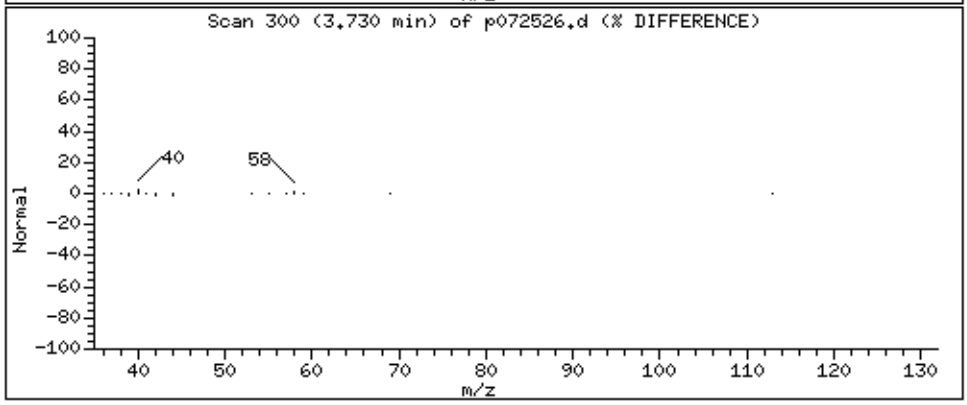












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

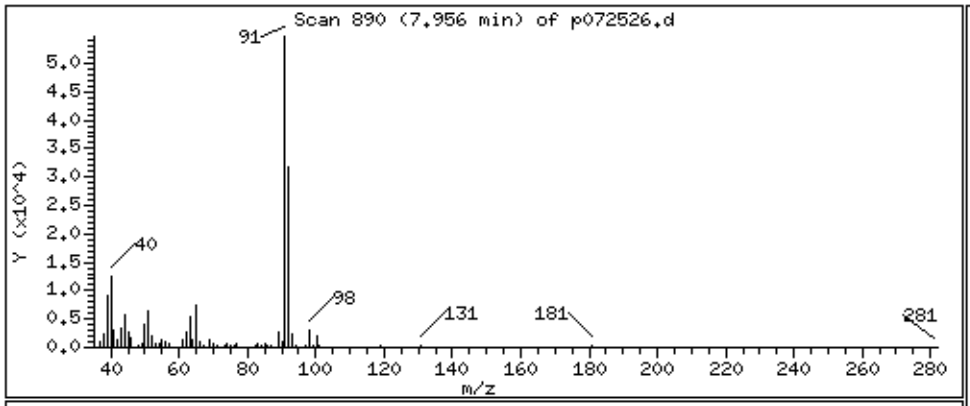
Operator: kk

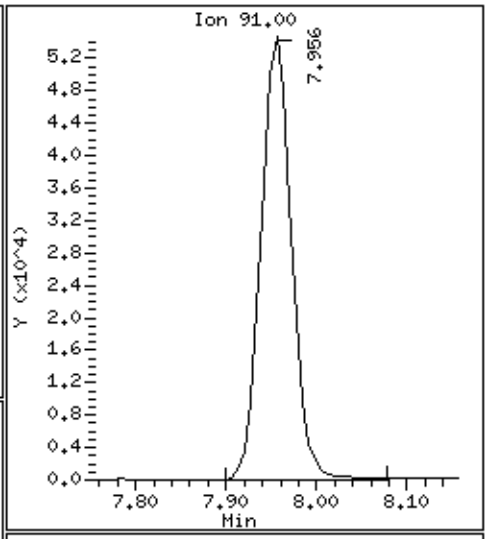
Column phase: RTX-624

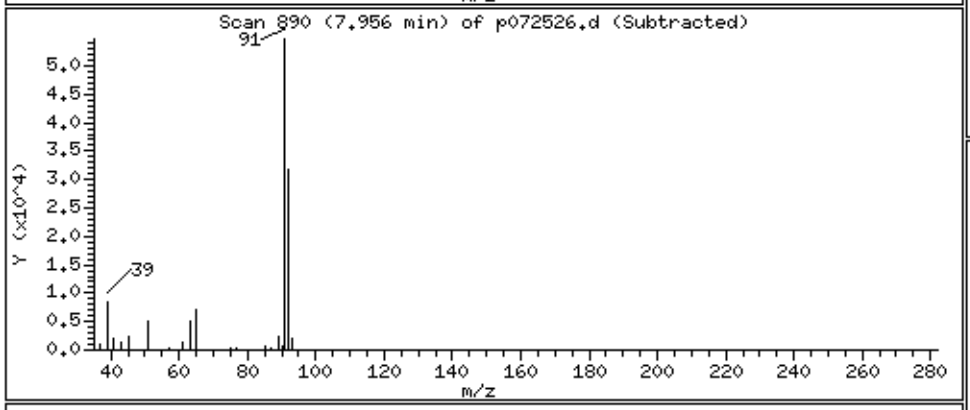
Column diameter: 0.25

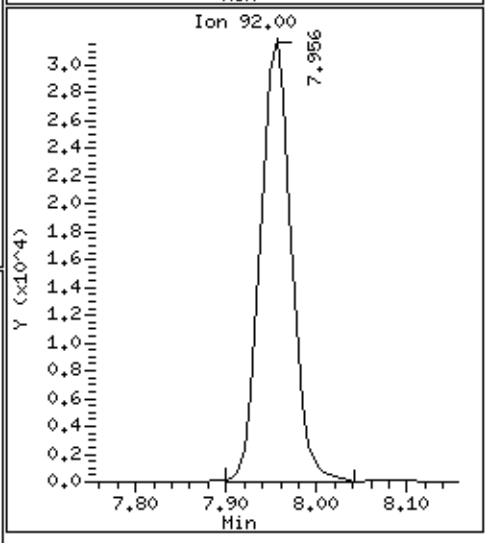
137 Toluene

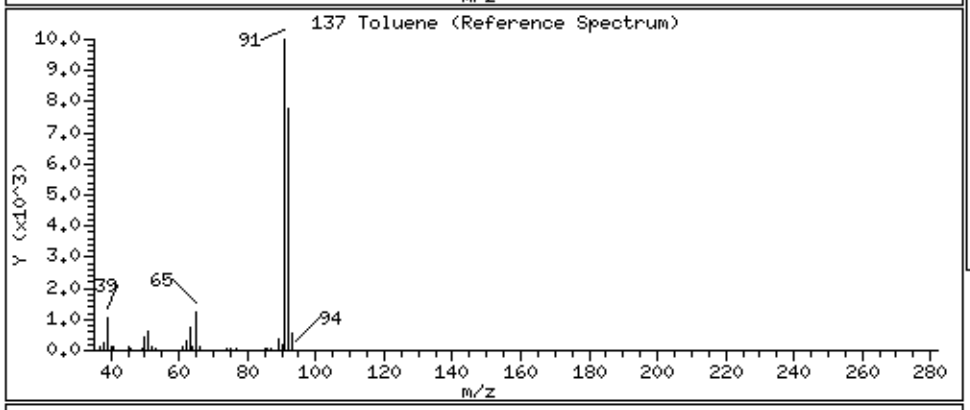
Concentration: 13.026 PPBV

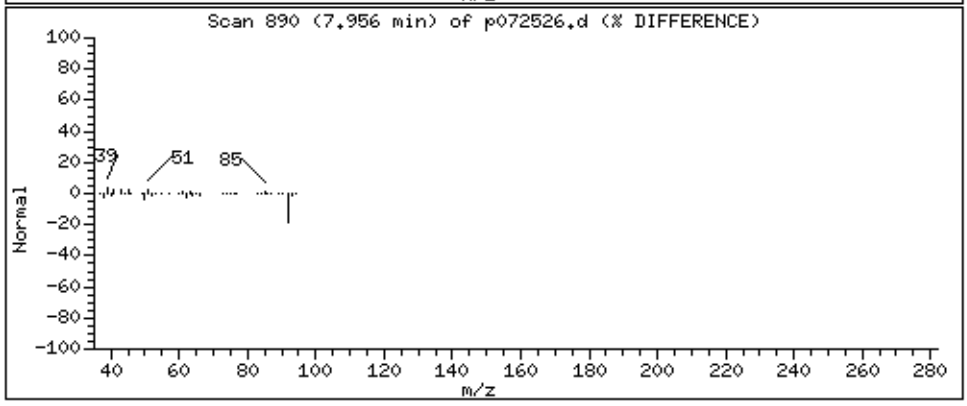












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Page 5

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

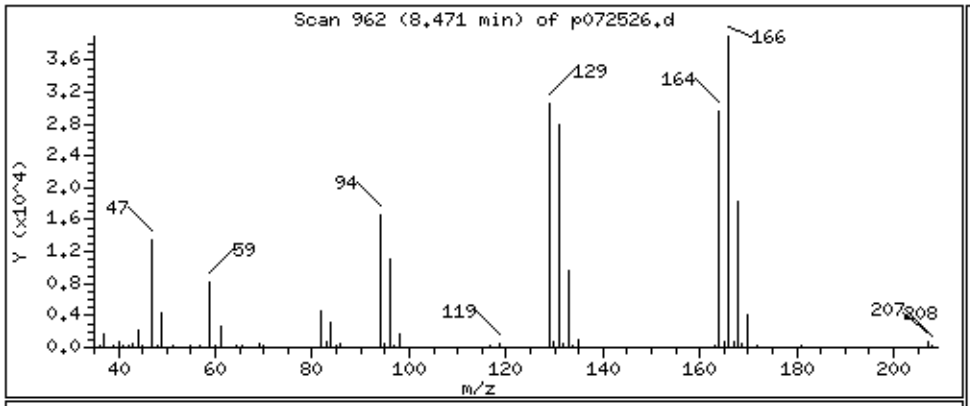
Operator: kk

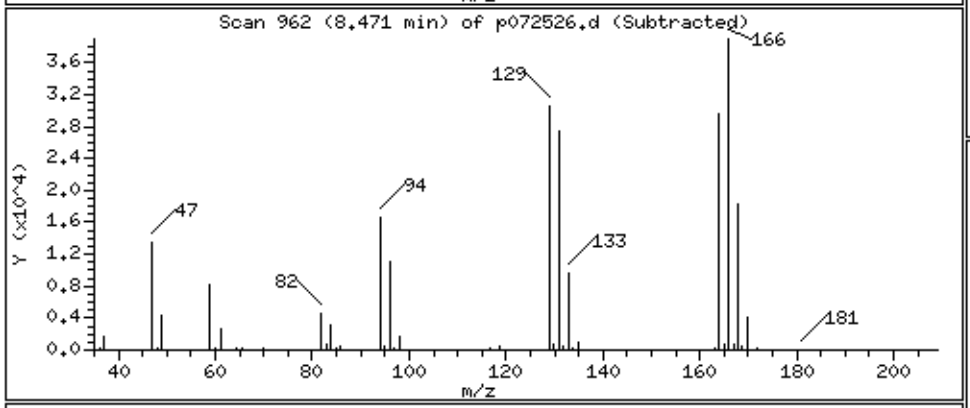
Column phase: RTX-624

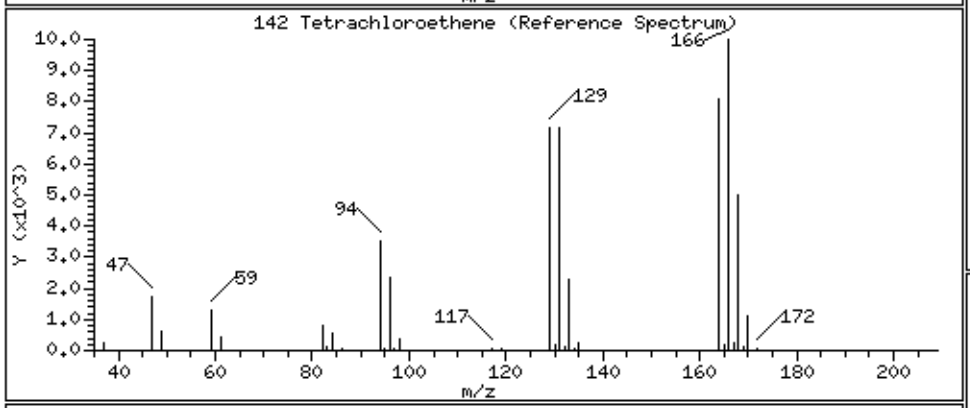
Column diameter: 0.25

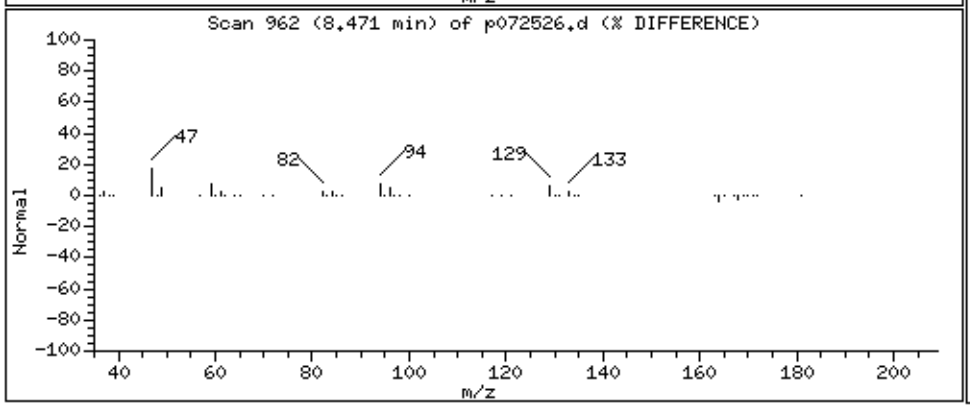
142 Tetrachloroethene

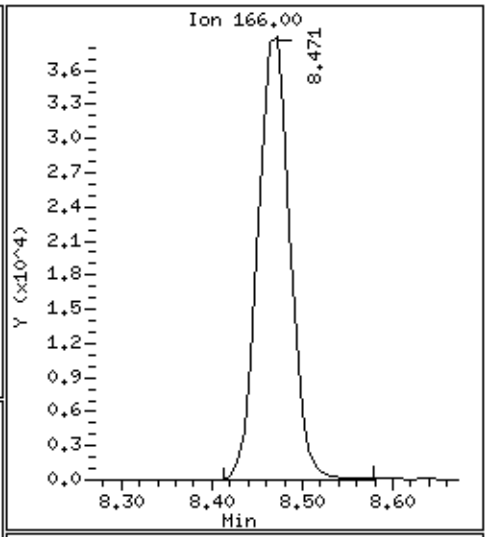
Concentration: 18.868 PPBV

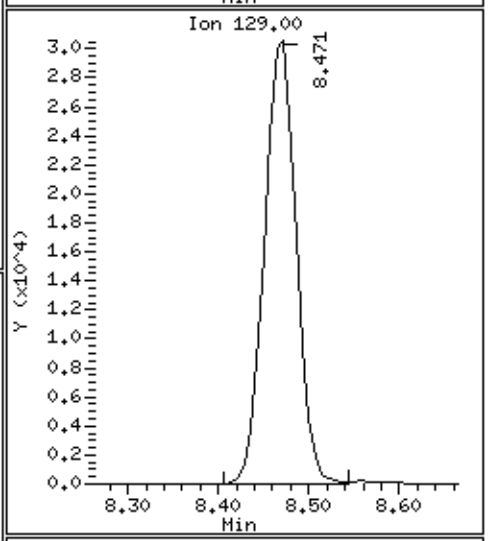


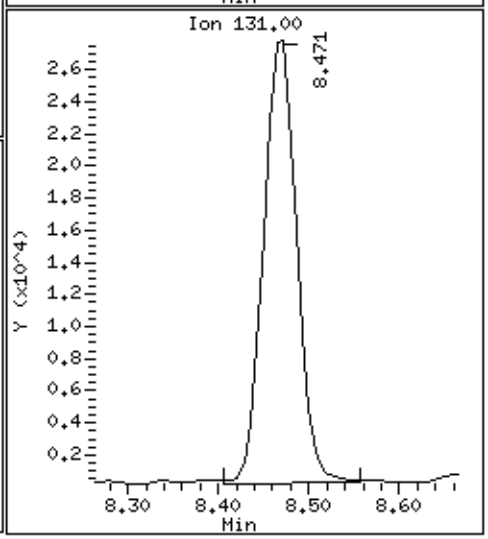












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

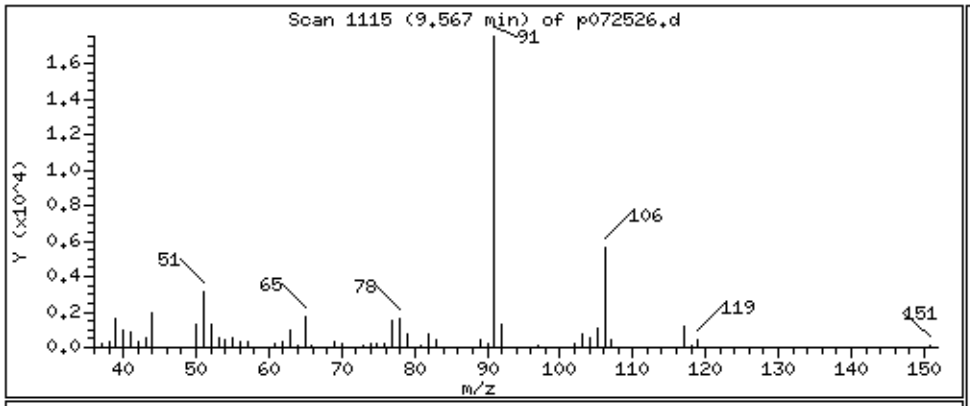
Operator: kk

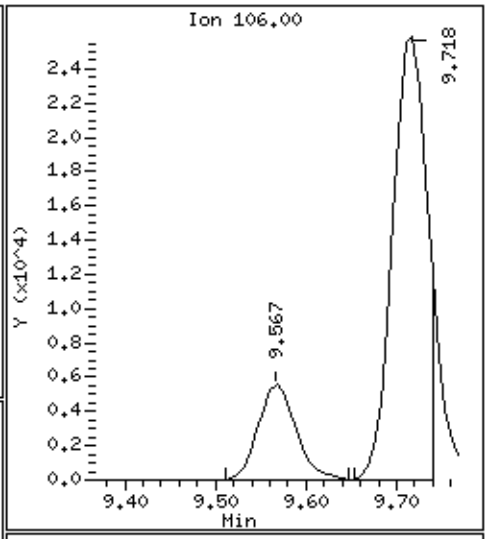
Column phase: RTX-624

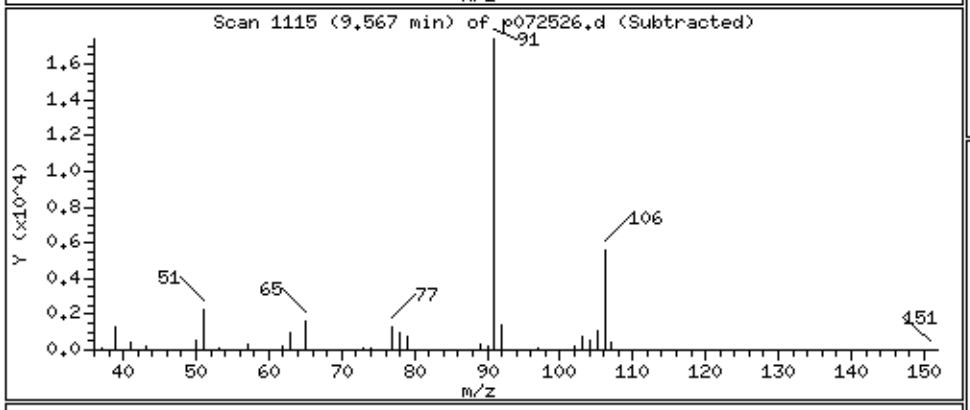
Column diameter: 0.25

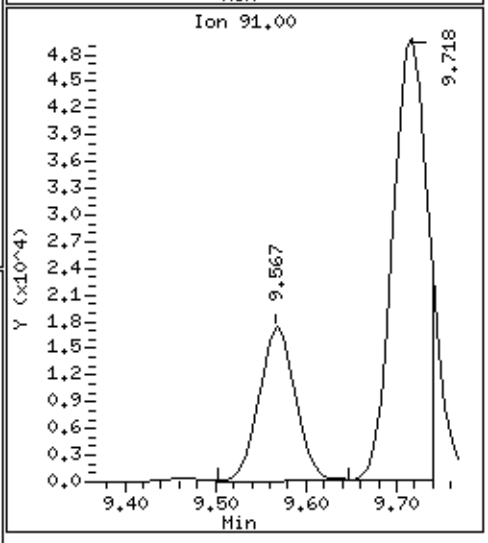
155 Ethyl Benzene

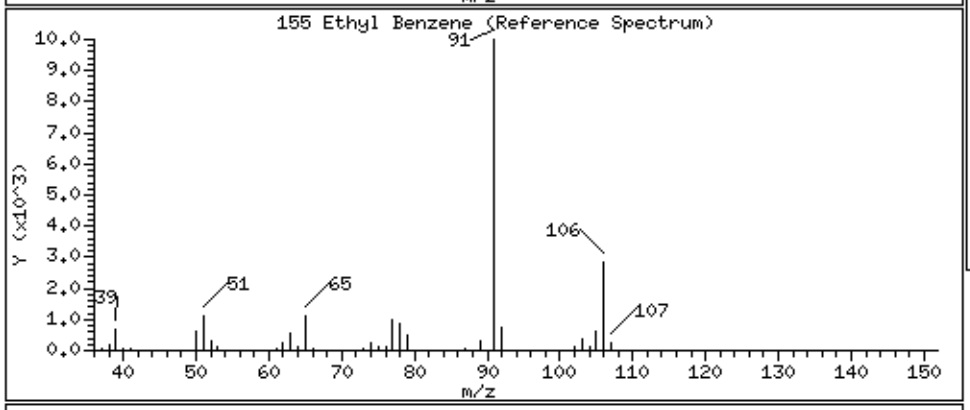
Concentration: 3.499 PPBV

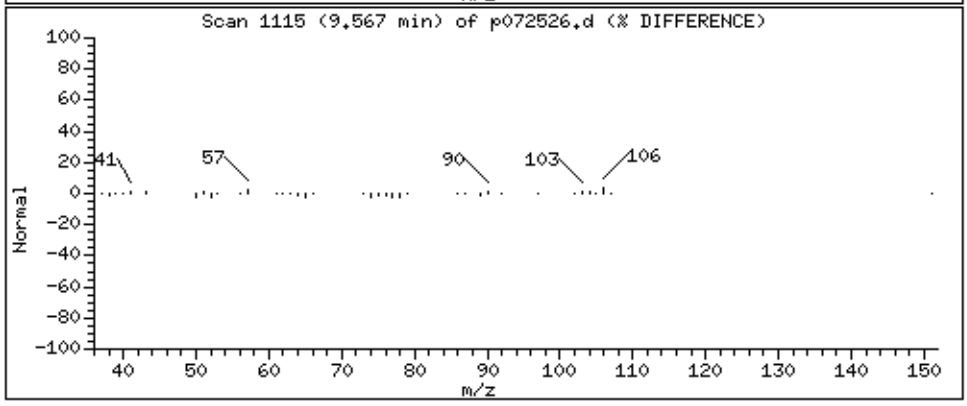












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

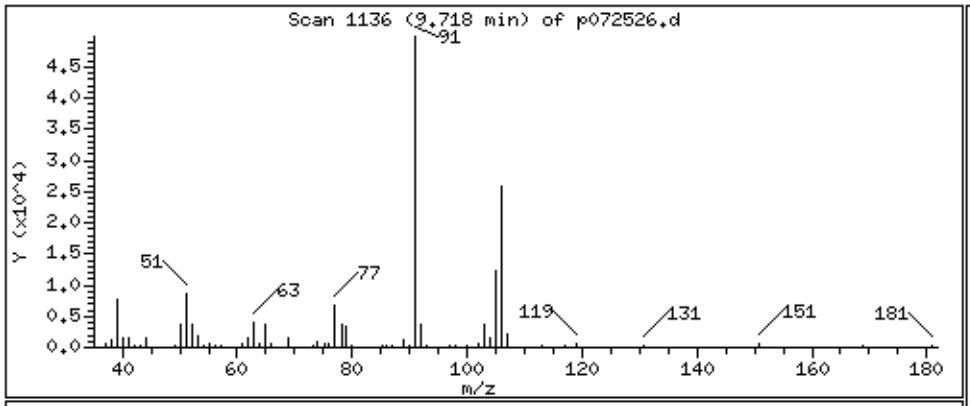
Operator: kk

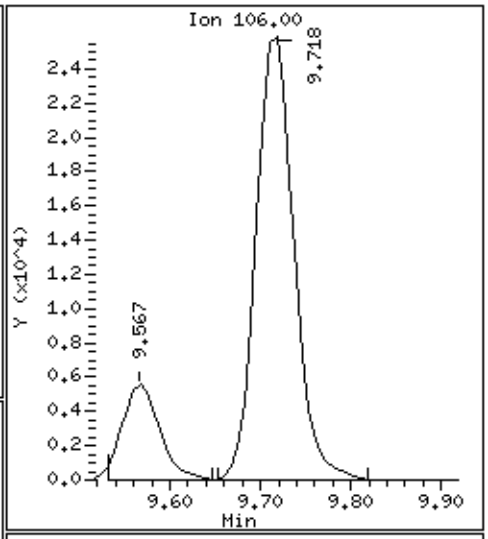
Column phase: RTX-624

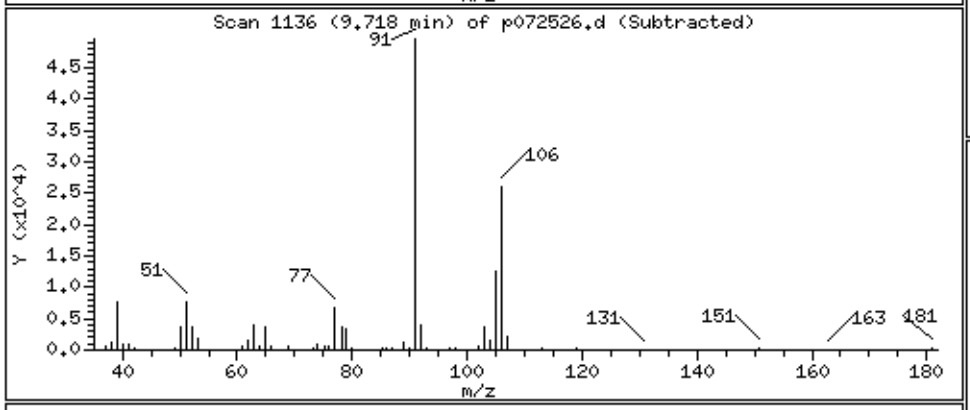
Column diameter: 0.25

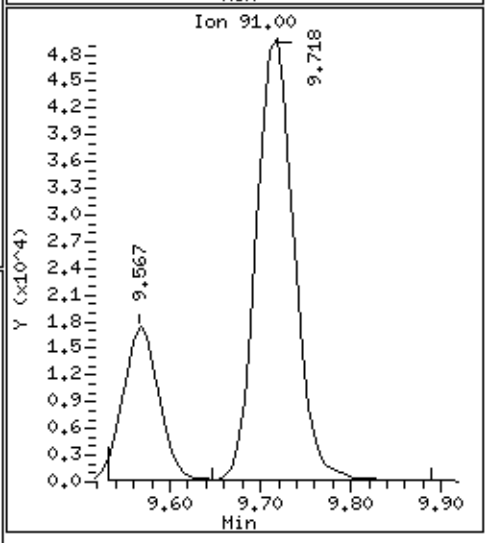
158 m,p-Xylene

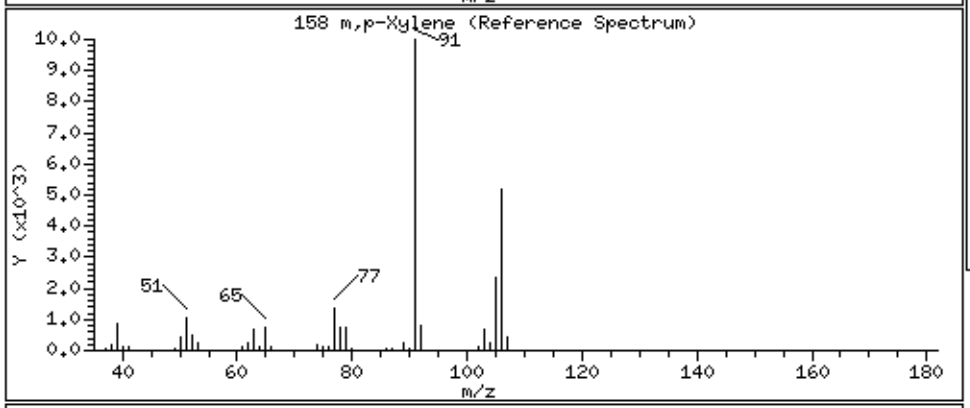
Concentration: 12.967 PPBV

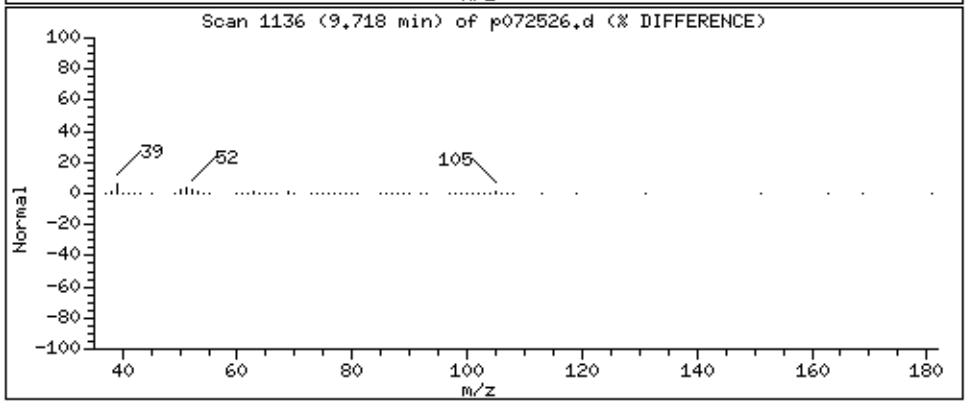












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

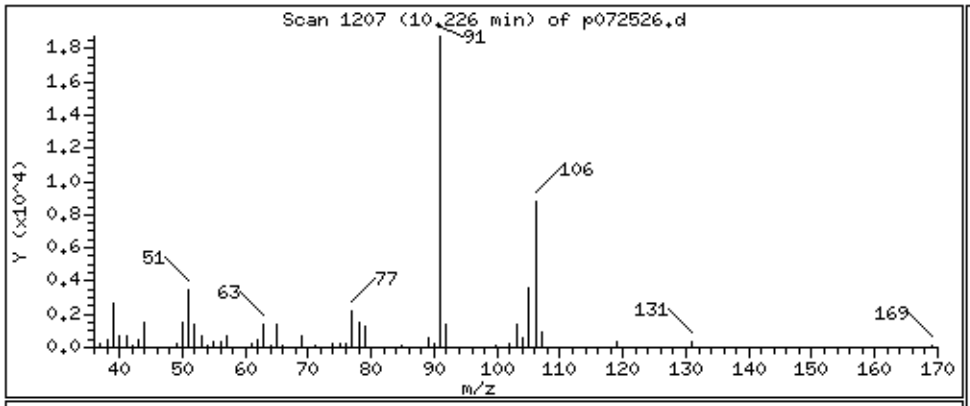
Operator: kk

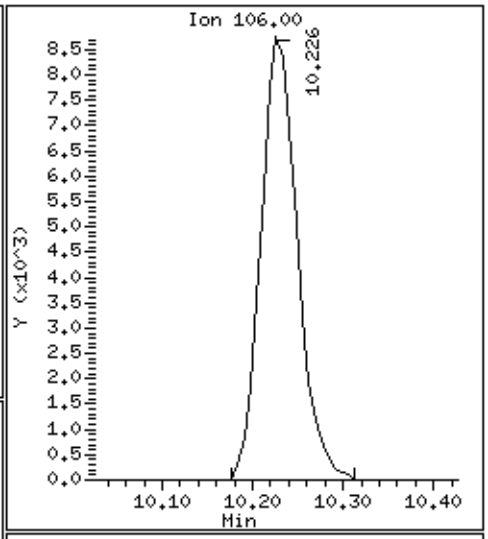
Column phase: RTX-624

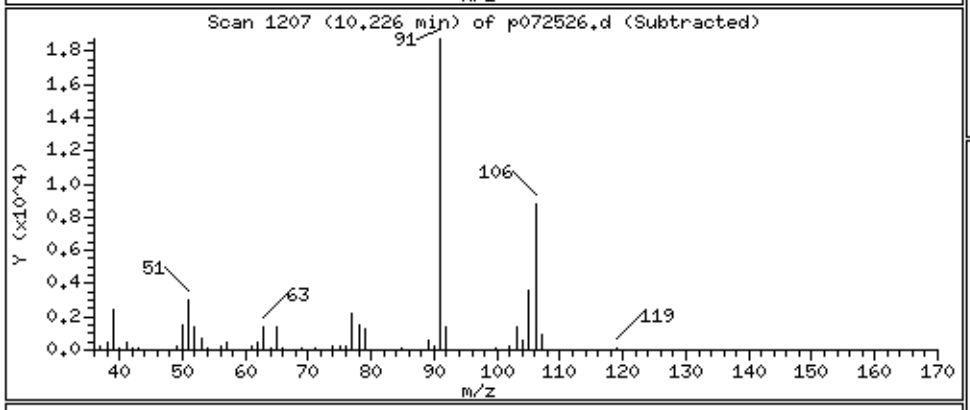
Column diameter: 0.25

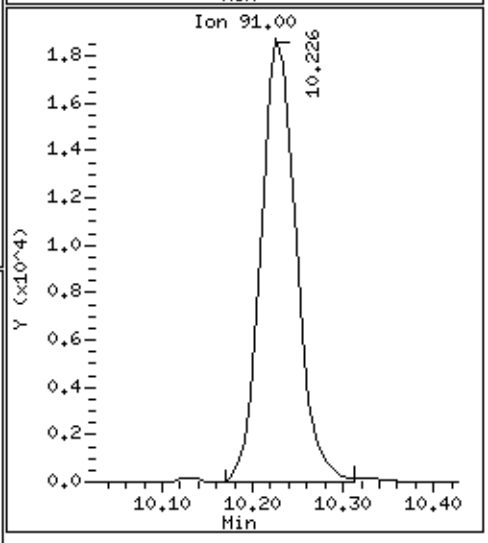
164 o-Xylene

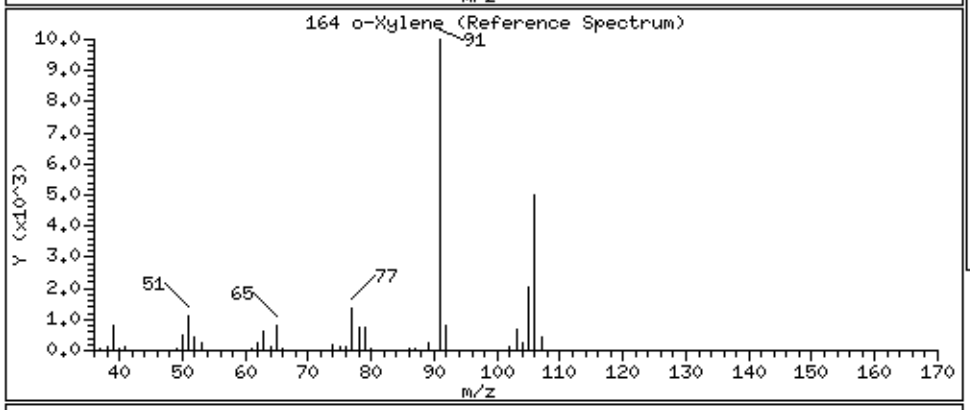
Concentration: 4.417 PPBV

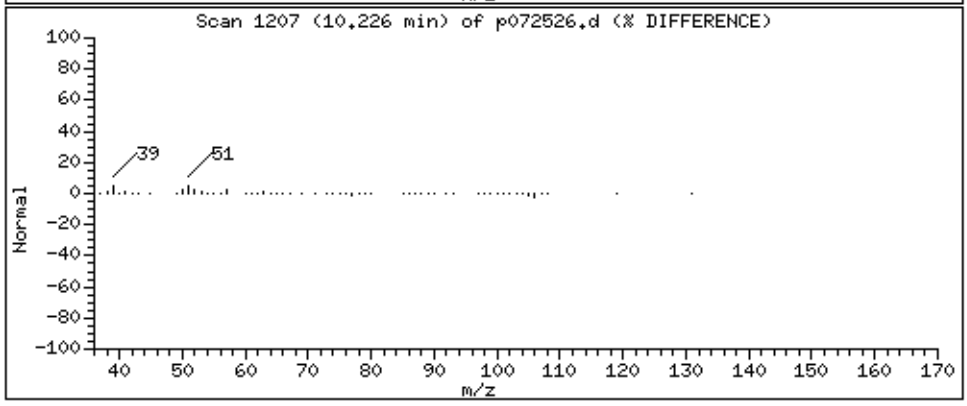












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

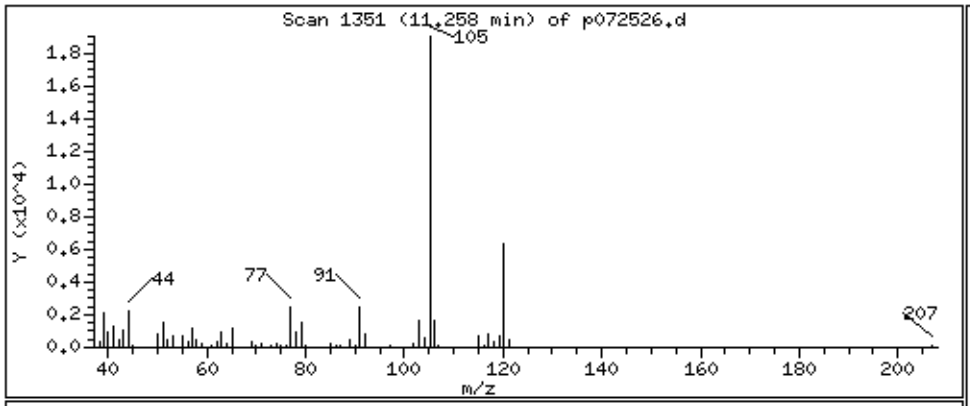
Operator: kk

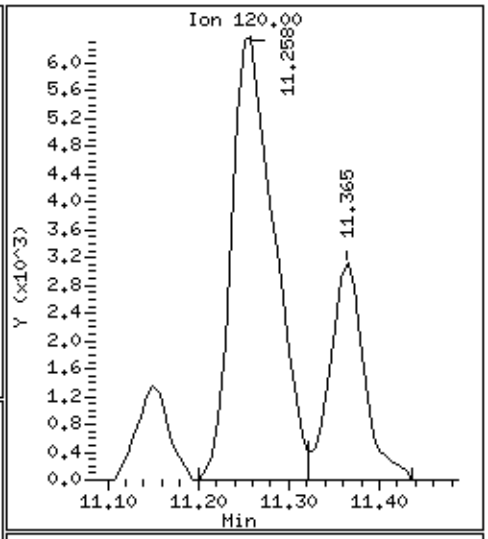
Column phase: RTX-624

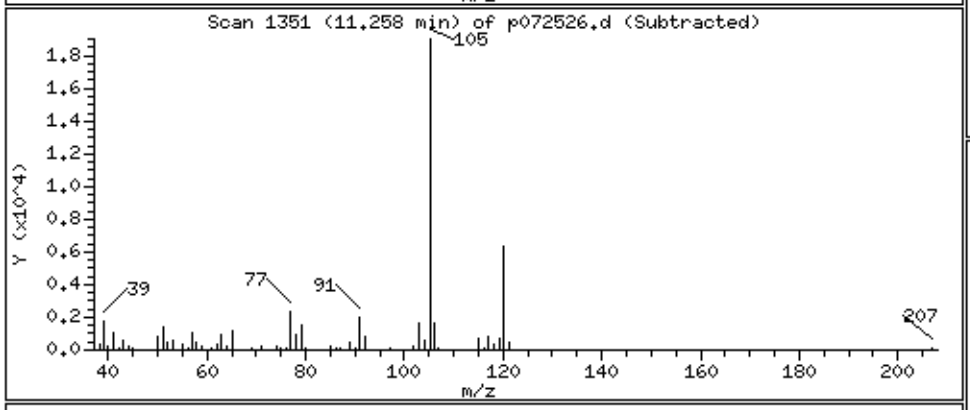
Column diameter: 0.25

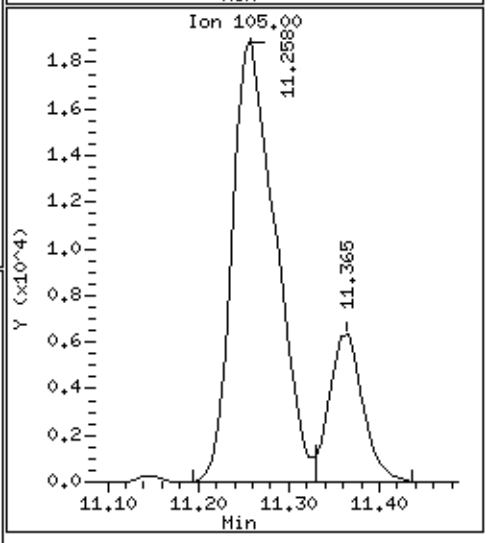
183 4-Ethyltoluene

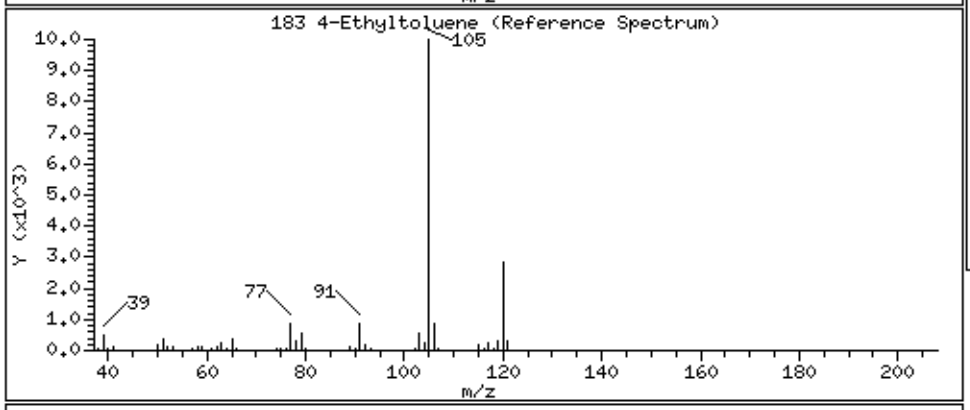
Concentration: 3.741 PPBV

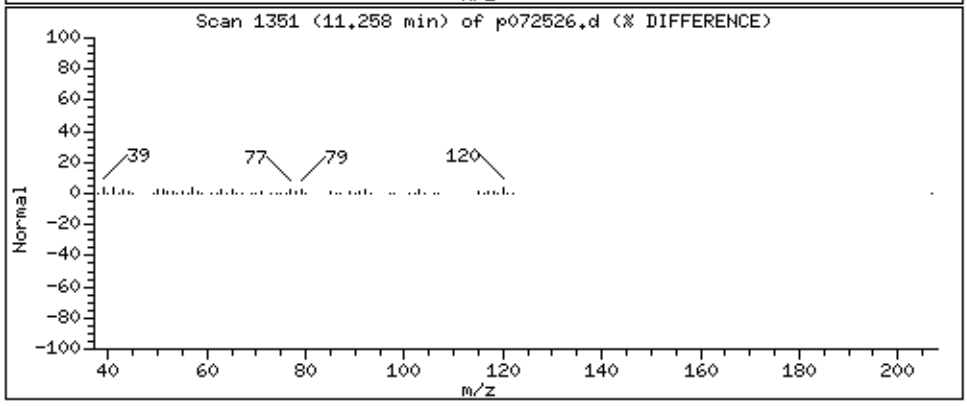












Data File: /chem/msdp.i/25JUL21.b/p072526.d

Date : 26-JUL-2021 08:26

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2654

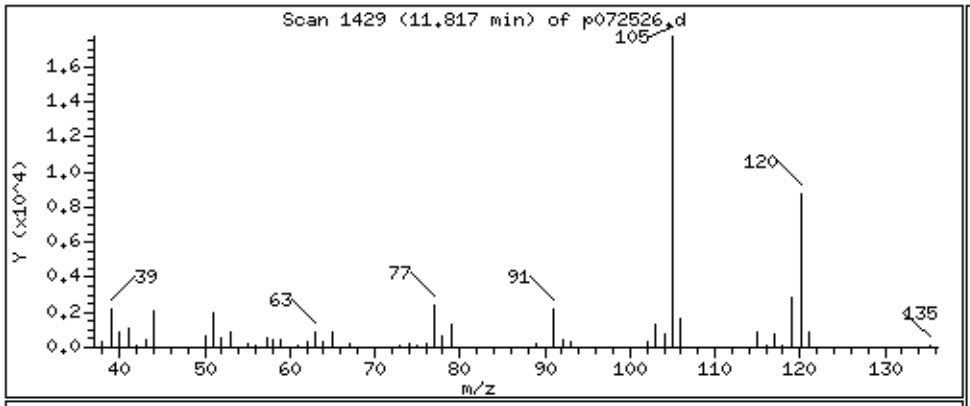
Operator: kk

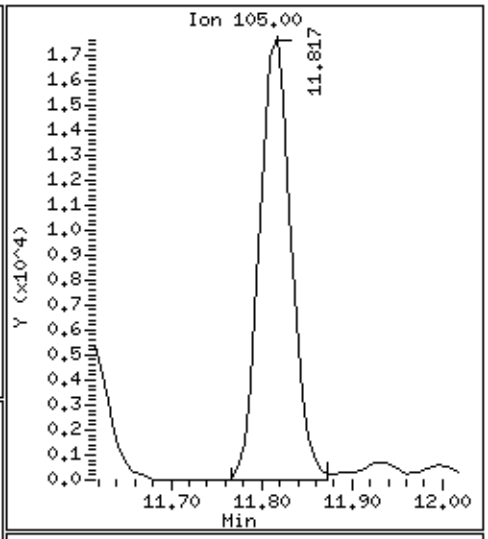
Column phase: RTX-624

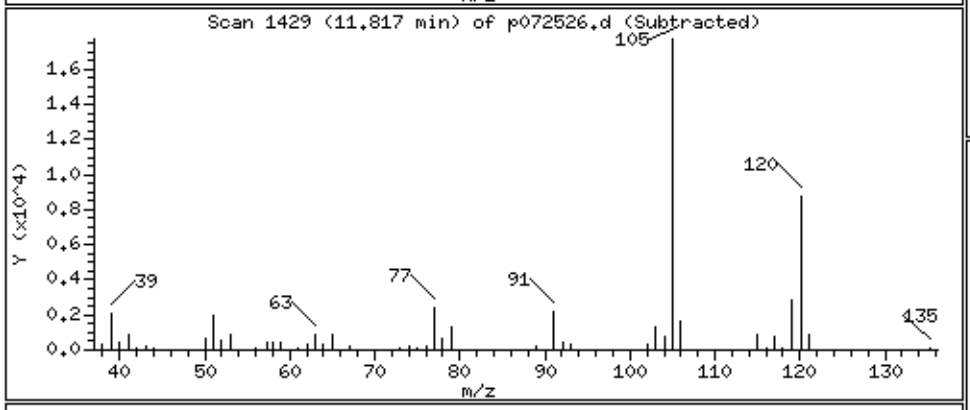
Column diameter: 0.25

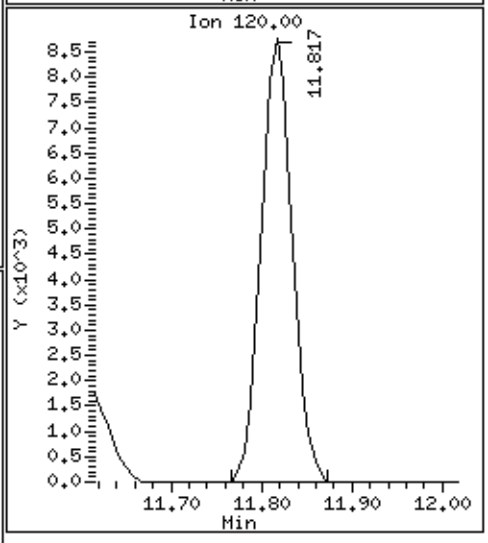
190 1,2,4-Trimethylbenzene

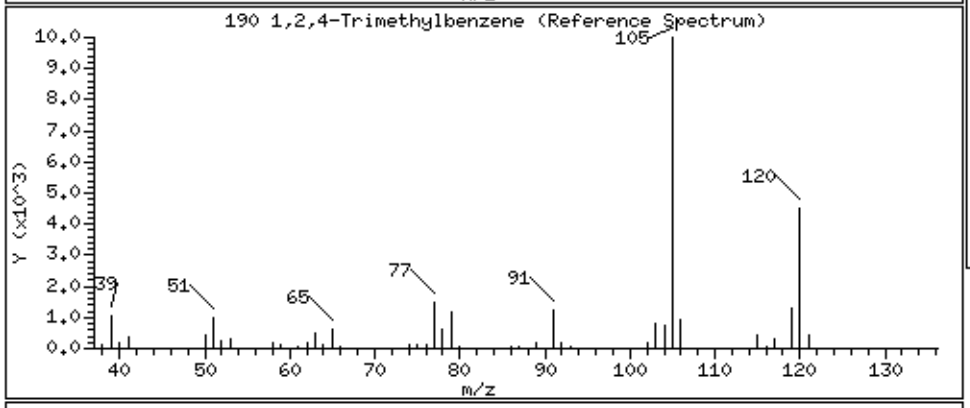
Concentration: 2.931 PPBV

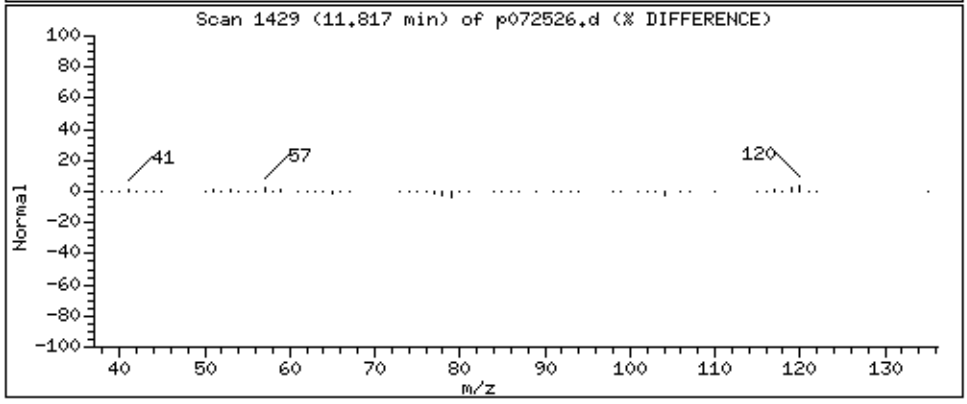












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Client Sample ID: SG-VW25B-02

Lab ID#: 2107282-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072527**	**Date of Collection:**	**7/13/21 1:18:00 PM**
Dil. Factor:	**2.39**	**Date of Analysis:**	**7/26/21 08:55 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.8	Not Detected	33	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.5	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.2	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.8	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
1,1-Difluoroethane	4.8	Not Detected	13	Not Detected
1,2,3-Trichloropropane	4.8	Not Detected	29	Not Detected
1,2,4-Trichlorobenzene	4.8	Not Detected	35	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,2-Dibromo-3-chloropropane	4.8	Not Detected	46	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.2	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.5	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
2-Hexanone	4.8	Not Detected	20	Not Detected
2-Propanol	4.8	Not Detected	12	Not Detected
3-Chloropropene	4.8	Not Detected	15	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.9	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.9	Not Detected
Acetone	12	Not Detected	28	Not Detected
Acrolein	4.8	Not Detected	11	Not Detected
Acrylonitrile	4.8	Not Detected	10	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.2	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
Bromodichloromethane	1.2	Not Detected	8.0	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Bromomethane	12	Not Detected	46	Not Detected
Carbon Disulfide	4.8	Not Detected	15	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.5	Not Detected
Chlorobenzene	1.2	Not Detected	5.5	Not Detected
Chloroethane	4.8	Not Detected	13	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected

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Client Sample ID: SG-VW25B-02

Lab ID#: 2107282-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072527**	**Date of Collection:**	**7/13/21 1:18:00 PM**
Dil. Factor:	**2.39**	**Date of Analysis:**	**7/26/21 08:55 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected
Cumene	1.2	Not Detected	5.9	Not Detected
Cyclohexane	1.2	Not Detected	4.1	Not Detected
Dibromochloromethane	1.2	Not Detected	10	Not Detected
Dibromomethane	4.8	Not Detected	34	Not Detected
Ethanol	12	Not Detected	22	Not Detected
Ethyl Acetate	4.8	Not Detected	17	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
Ethyl-tert-butyl ether	4.8	Not Detected	20	Not Detected
Freon 11	1.2	Not Detected	6.7	Not Detected
Freon 12	1.2	4.1	5.9	20
Freon 113	1.2	Not Detected	9.2	Not Detected
Freon 114	1.2	Not Detected	8.4	Not Detected
Freon 134a	4.8	Not Detected	20	Not Detected
Heptane	1.2	Not Detected	4.9	Not Detected
Hexachlorobutadiene	4.8	Not Detected	51	Not Detected
Hexachloroethane	4.8	Not Detected	46	Not Detected
Hexane	1.2	Not Detected	4.2	Not Detected
Iodomethane	12	Not Detected	69	Not Detected
Isopropyl ether	4.8	Not Detected	20	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
Methyl tert-butyl ether	4.8	Not Detected	17	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Naphthalene	2.4	Not Detected	12	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
Propylbenzene	1.2	Not Detected	5.9	Not Detected
Propylene	4.8	Not Detected	8.2	Not Detected
Styrene	1.2	Not Detected	5.1	Not Detected
tert-Amyl methyl ether	4.8	Not Detected	20	Not Detected
tert-Butyl alcohol	4.8	Not Detected	14	Not Detected
Tetrachloroethene	1.2	24	8.1	160
Tetrahydrofuran	1.2	Not Detected	3.5	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	490	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
Vinyl Acetate	4.8	Not Detected	17	Not Detected
Vinyl Bromide	4.8	Not Detected	21	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW25B-02

Lab ID#: 2107282-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072527**	**Date of Collection: 7/13/21 1:18:00 PM**	
Dil. Factor:	**2.39**	**Date of Analysis: 7/26/21 08:55 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072527.d
Lab Smp Id: 2107282-12A
Inj Date : 26-JUL-2021 08:55
Operator : kk Inst ID: msdp.i
Smp Info : 200ml O0751
Misc Info : 9 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 10
Dil Factor: 2.39000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	148930	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	113189				48.23- 108.23	76.00
5.785	5.778 (1.000)	49	317237				150.57- 210.57	213.01
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	537015	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	80408				0.00- 45.71	14.97
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	536213	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	278894				23.78- 83.78	52.01
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	213491	25.9752	25.975		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	102801				27.21- 87.21	48.15
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	591867	25.3810	25.381		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	64284				0.00- 40.44	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	393335			34.95- 94.95	66.46
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	339580	24.6620	24.662	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	419746			95.92- 155.92	123.61
10.921	10.921 (1.154)	176	324960			66.89- 126.89	95.69
8 Freon 12					CAS #: 75-71-8		
1.730	1.716 (0.299)	85	22843	1.71014	4.087	80.00- 120.00	100.00
1.730	1.716 (0.299)	87	7828			2.37- 62.37	34.27
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	124730	10.2064	24.393	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	98201			47.84- 107.84	78.73
8.471	8.464 (0.895)	131	96363			45.29- 105.29	77.26

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072527.d
Lab Smp Id: 2107282-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 9 Hg->9.9 psi

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	148930	-3.67
108 1,4-Difluorobenze	573421	344053	802789	537015	-6.35
153 Chlorobenzene-d5	566079	339647	792511	536213	-5.28

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 27-Jul-2021 10:54

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107282-12A
Level: LOW Operator: kk
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 9 Hg->9.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.975	103.90	70-130
$ 134 Toluene-d8	25.000	25.381	101.52	70-130
$ 170 4-Bromofluorobenz	25.000	24.662	98.65	70-130

Data File: /chem/msdp.i/25JUL21.b/p072527.d

Date : 26-JUL-2021 08:55

Client ID:

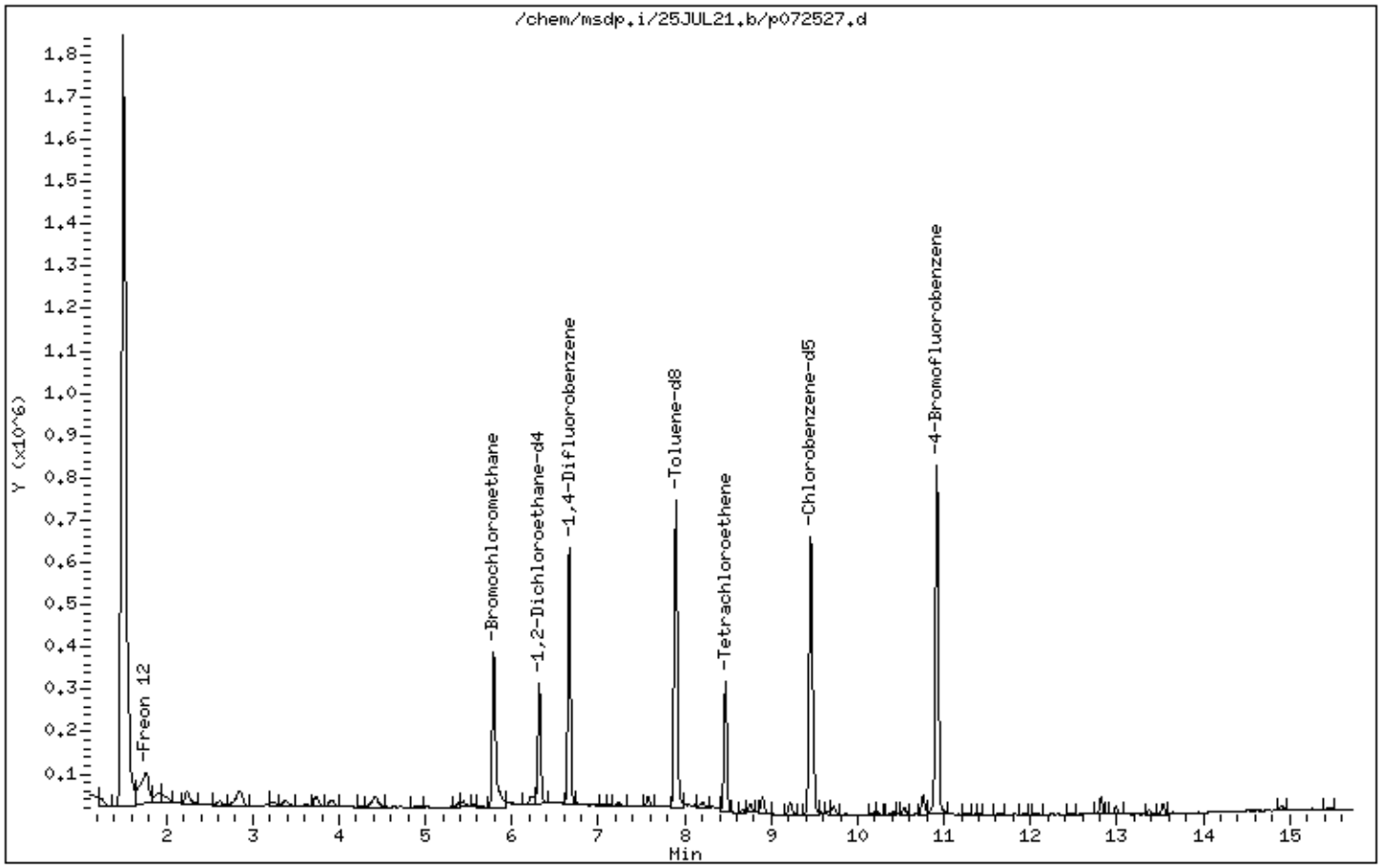
Instrument: msdp.i

Sample Info: 200ml 00751

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/25JUL21.b/p072527.d

Date : 26-JUL-2021 08:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00751

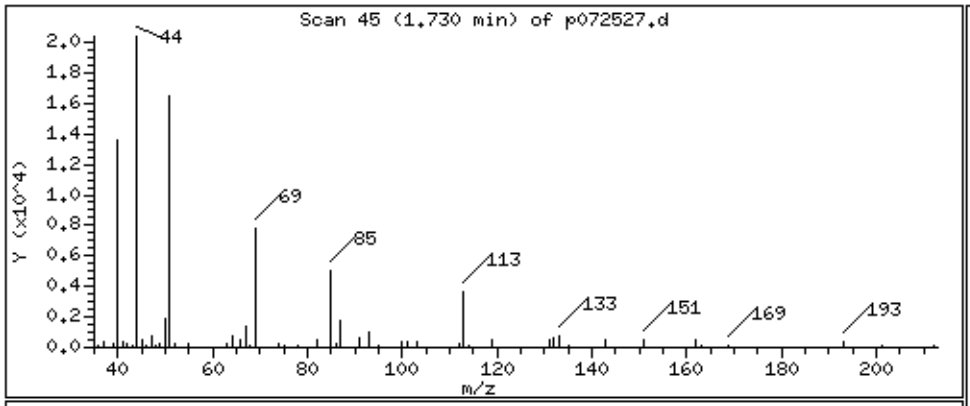
Operator: kk

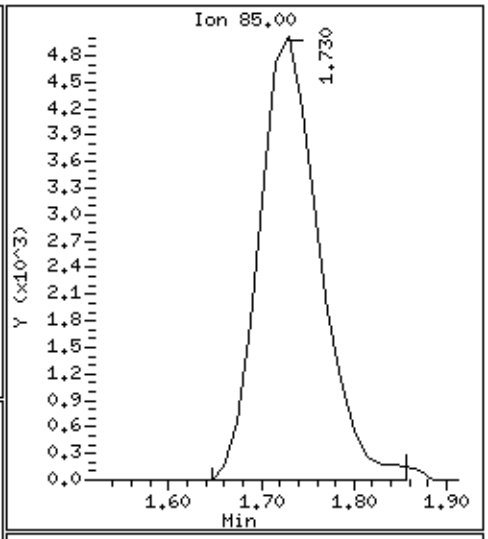
Column phase: RTX-624

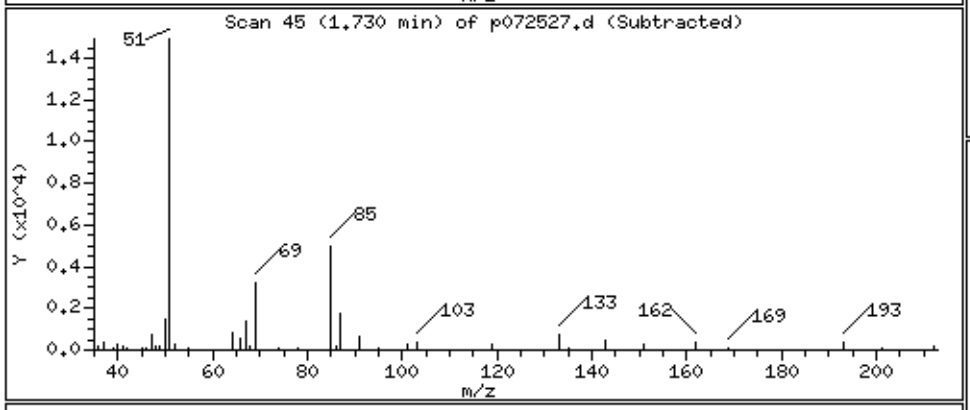
Column diameter: 0.25

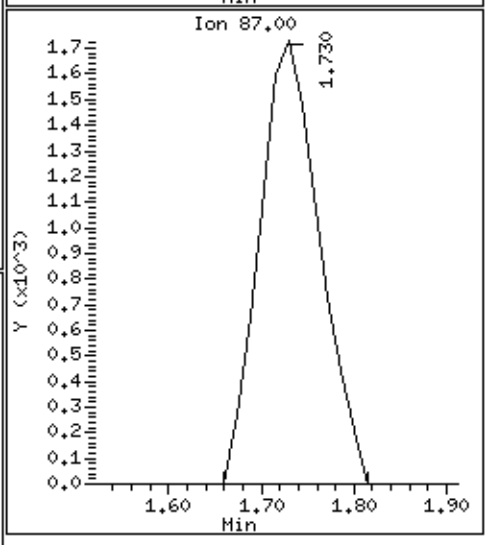
8 Freon 12

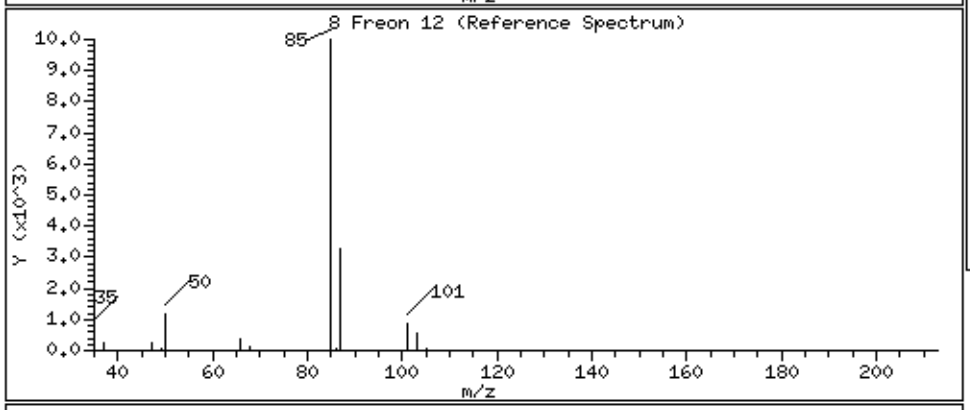
Concentration: 4.087 PPBV

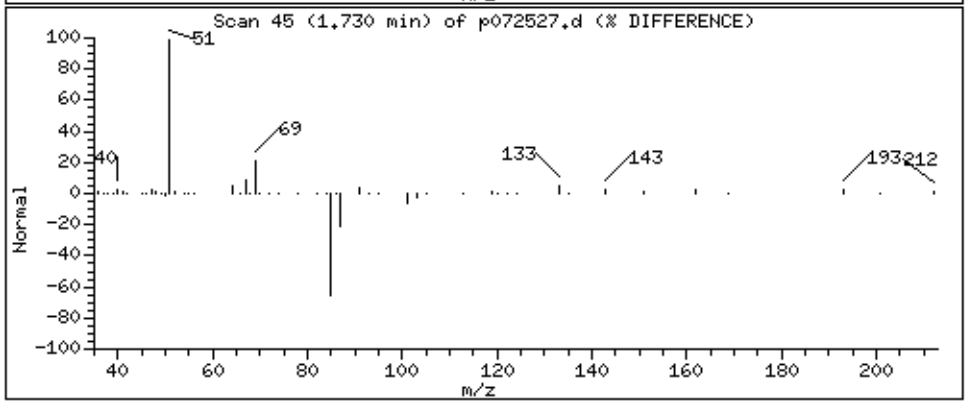












Data File: /chem/msdp.i/25JUL21.b/p072527.d

Date : 26-JUL-2021 08:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00751

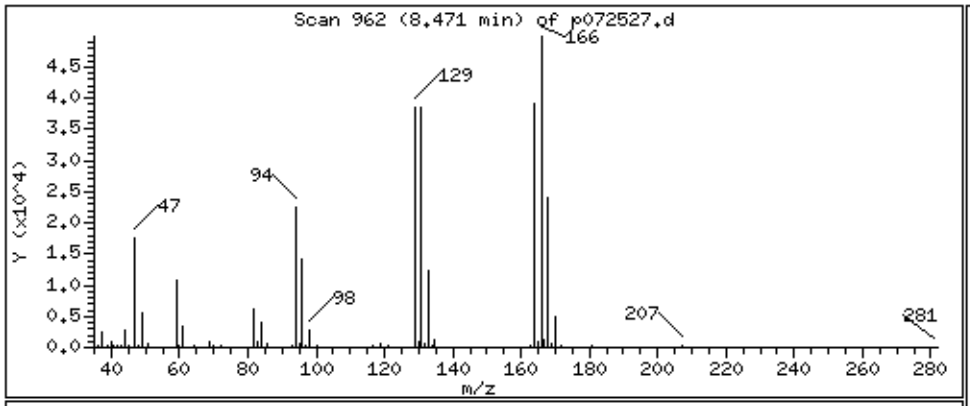
Operator: kk

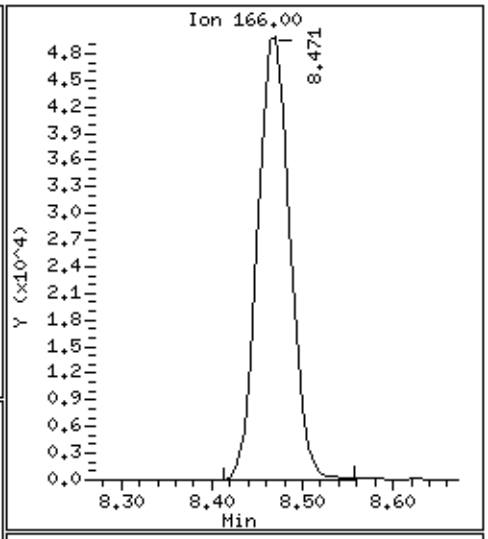
Column phase: RTX-624

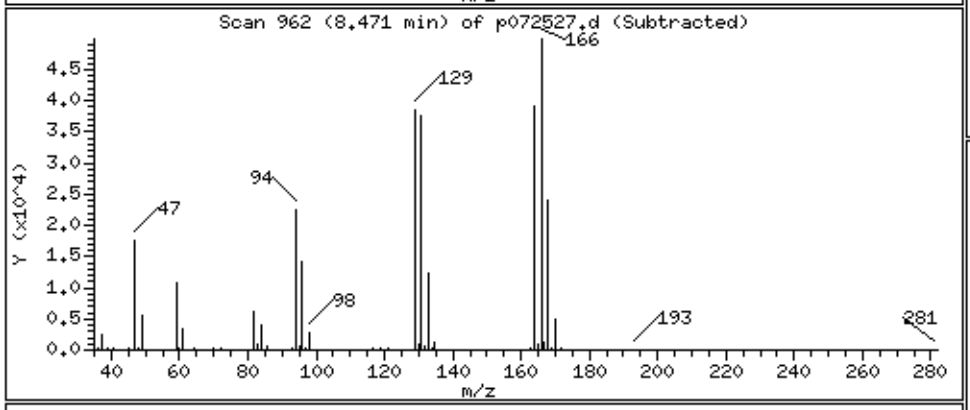
Column diameter: 0.25

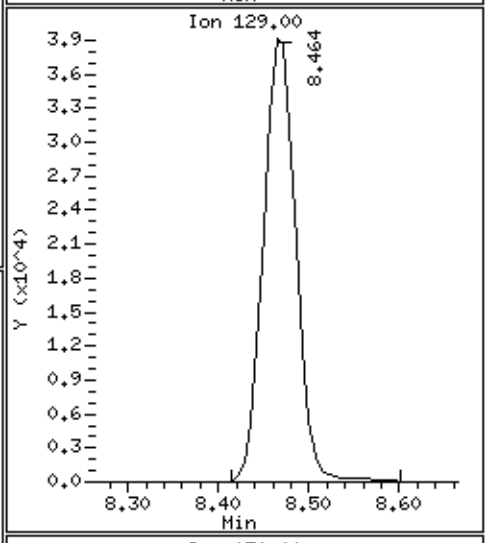
142 Tetrachloroethene

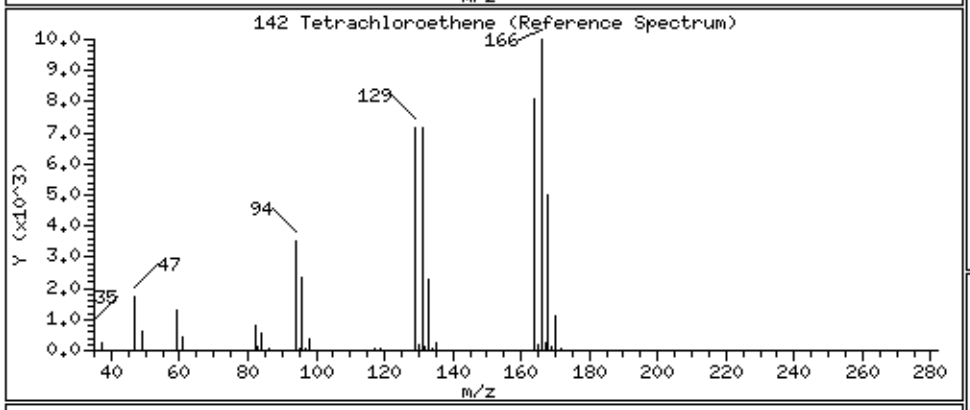
Concentration: 24.393 PPBV

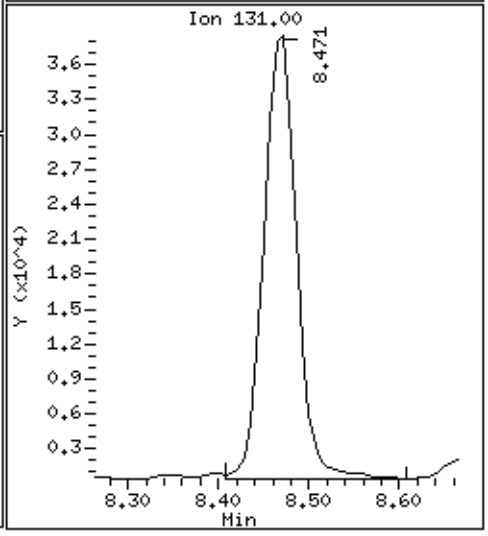


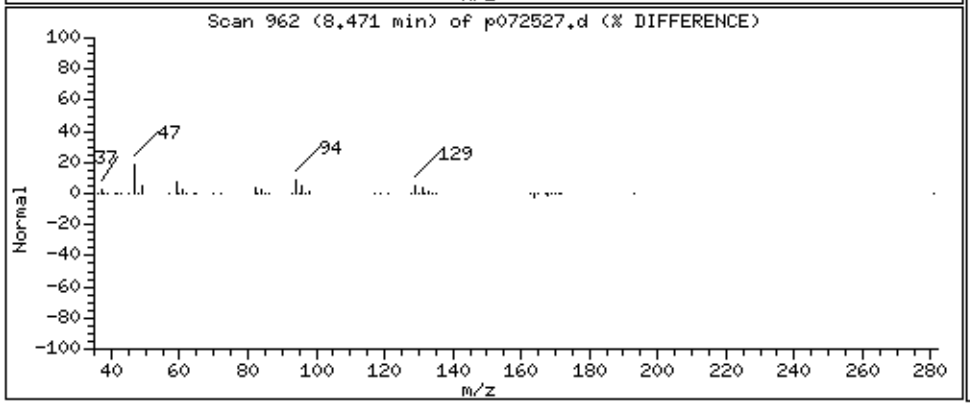












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 2107282-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 02:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	2.0	Not Detected	14	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Difluoroethane	2.0	Not Detected	5.4	Not Detected
1,2,3-Trichloropropane	2.0	Not Detected	12	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2-Dibromo-3-chloropropane	2.0	Not Detected	19	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Acrolein	2.0	Not Detected	4.6	Not Detected
Acrylonitrile	2.0	Not Detected	4.3	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2107282-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 02:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
Dibromomethane	2.0	Not Detected	14	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Ethyl Acetate	2.0	Not Detected	7.2	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Freon 134a	2.0	Not Detected	8.3	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Hexachloroethane	2.0	Not Detected	19	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
Iodomethane	5.0	Not Detected	29	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
Propylene	2.0	Not Detected	3.4	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Vinyl Acetate	2.0	Not Detected	7.0	Not Detected
Vinyl Bromide	2.0	Not Detected	8.7	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 2107282-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072507a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 02:25 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072507a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 25-JUL-2021 14:25
Operator : LD Inst ID: msdp.i
Smp Info : 200ml 35157
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 12:48 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AEC25677.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	161074	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123311				48.23- 108.23	76.56
5.785	5.778 (1.000)	49	325870				150.57- 210.57	202.31
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.666 (1.000)	114	596246	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	88804				0.00- 45.71	14.89
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	596979	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	316530				23.78- 83.78	53.02
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.315 (1.092)	65	228084	25.6584	25.658		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110355				27.21- 87.21	48.38
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	649783	25.0965	25.096		80.00- 120.00	100.00
7.898	7.891 (1.185)	70	66259				0.00- 40.44	10.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.898	7.891 (1.185)	100	419945			34.95- 94.95	64.63
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	378795	24.7098	24.710	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	466199			95.92- 155.92	123.07
10.921	10.921 (1.154)	176	365773			66.89- 126.89	96.56

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072507a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: Humid

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	161074	4.19
108 1,4-Difluorobenze	573421	344053	802789	596246	3.98
153 Chlorobenzene-d5	566079	339647	792511	596979	5.46

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 25-Jul-2021 14:57

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: LD
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AEC25677.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.658	102.63	70-130
$ 134 Toluene-d8	25.000	25.096	100.39	70-130
$ 170 4-Bromofluorobenz	25.000	24.710	98.84	70-130

Data File: /chem/msdp.i/25JUL21.b/p072507a.d

Date : 25-JUL-2021 14:25

Client ID: Lab Blank

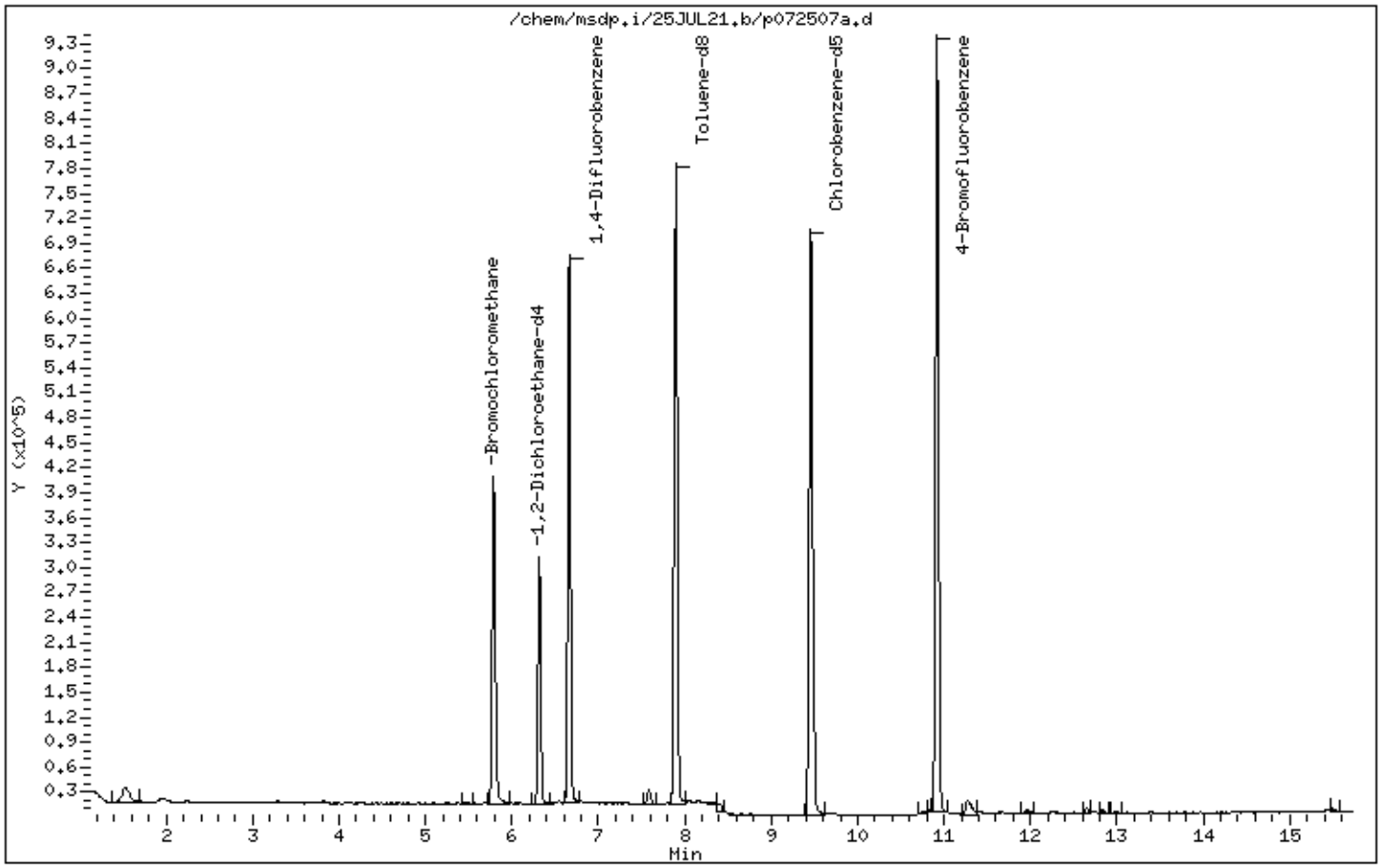
Instrument: msdp.i

Sample Info: 200ml 35157

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

SURROGATE RECOVERY FORM

Lab Name : Eurofins Air Toxics, LLC _____ SDG No. :2107282

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY						TOTAL
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#	OUT
1	SG-VW16B-02	108		101		98		
2	SG-VW17A-02	106		102		100		
3	SG-VW17B-03	104		102		95		
4	SG-VW18B-02	106		99		98		
5	SG-VW19A-02	103		102		98		
6	SG-VW19B-02	105		100		96		
7	SG-VW52A-02	102		100		98		
8	SG-VW52B-02	104		100		94		
9	SG-VW53A-03	102		100		96		
10	SG-VW53B-02	99		102		96		
11	SG-VW25A-02	102		103		97		
12	SG-VW25B-02	104		102		99		
13	Lab Blank	103		100		99		
14	CCV	105		99		101		
15	LCS	106		100		103		
16	LCSD	106		102		101		

Surrogate Recovery Limits

1,2-Dichloroethane-d4	70 - 130
Toluene-d8	70 - 130
4-Bromofluorobenzene	70 - 130

* Designates Values Outside of QC limits

LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name : Eurofins Air Toxics, LLC File ID: p072502.d Date : 2021-07-25 11:00:00 SDG No. : 2107282

		Bromochloromethane	RT	1,4-Difluorobenzene	RT	Chlorobenzene-d5	RT
	24-HOUR CCV	154602	5.78	573421	6.67	566079	9.46
	UPPER LIMIT	216442	6.11	802789	7.00	792510	9.79
	LOWER LIMIT	92761	5.45	344052	6.34	339647	9.13
	CLIENT SAMPLE NO.						
1	SG-VW16B-02	153307	5.79	581653	6.67	595939	9.46
2	SG-VW17A-02	150533	5.79	566048	6.67	580971	9.46
3	SG-VW17B-03	147252	5.79	545558	6.67	561368	9.46
4	SG-VW18B-02	147133	5.79	555998	6.67	568800	9.46
5	SG-VW19A-02	152695	5.79	548091	6.67	577422	9.46
6	SG-VW19B-02	145060	5.79	539475	6.67	526315	9.46
7	SG-VW52A-02	150576	5.79	561589	6.67	575270	9.46
8	SG-VW52B-02	142541	5.79	526413	6.66	523624	9.46
9	SG-VW53A-03	145671	5.79	542832	6.67	540794	9.46
10	SG-VW53B-02	152950	5.78	514584	6.67	502953	9.46
11	SG-VW25A-02	148704	5.79	534197	6.67	548471	9.46
12	SG-VW25B-02	148930	5.79	537015	6.67	536213	9.46
13	Lab Blank	161074	5.79	596246	6.67	596979	9.46
14	CCV	154602	5.78	573421	6.67	566079	9.46
15	LCS	155314	5.79	592829	6.67	584610	9.46
16	LCSD	160685	5.79	609536	6.67	603321	9.46

Area Upper Limit = +40% of intenral standard area

Area Lower Limit = -40% of intenral standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Designates Values Outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab File ID: p072503.d & p072504.d

Lab Sample ID: 15A & 15AA

CAS Number	Compound	Original Amount	Duplicate Amount	RPD	Result Less Than 5X RL
630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	0	
71-55-6	1,1,1-Trichloroethane	102	101	0.99	
79-34-5	1,1,2,2-Tetrachloroethane	104	103	0.97	
79-00-5	1,1,2-Trichloroethane	104	102	1.9	
75-34-3	1,1-Dichloroethane	106	105	0.95	
75-35-4	1,1-Dichloroethene	97	97	0	
75-37-6	1,1-Difluoroethane	ND	ND	0	
96-18-4	1,2,3-Trichloropropane	ND	ND	0	
120-82-1	1,2,4-Trichlorobenzene	118	121	2.5	
95-63-6	1,2,4-Trimethylbenzene	100	98	2.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	109	106	2.8	
95-50-1	1,2-Dichlorobenzene	102	100	2.0	
107-06-2	1,2-Dichloroethane	115	115	0	
78-87-5	1,2-Dichloropropane	105	104	0.96	
108-67-8	1,3,5-Trimethylbenzene	100	98	2.0	
106-99-0	1,3-Butadiene	119	114	4.3	
541-73-1	1,3-Dichlorobenzene	104	102	1.9	
106-46-7	1,4-Dichlorobenzene	104	102	1.9	
123-91-1	1,4-Dioxane	98	96	2.1	
540-84-1	2,2,4-Trimethylpentane	105	102	2.9	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	97	96	1.0	
591-78-6	2-Hexanone	102	100	2.0	
67-63-0	2-Propanol	113	110	2.7	
107-05-1	3-Chloropropene	93	91	2.2	
622-96-8	4-Ethyltoluene	99	98	1.0	
108-10-1	4-Methyl-2-pentanone	101	102	0.99	
67-64-1	Acetone	106	102	3.8	
107-02-8	Acrolein	ND	ND	0	
107-13-1	Acrylonitrile	ND	ND	0	
100-44-7	alpha-Chlorotoluene	98	98	0	
71-43-2	Benzene	103	102	0.98	
75-27-4	Bromodichloromethane	111	111	0	
75-25-2	Bromoform	107	106	0.94	
74-83-9	Bromomethane	92	91	1.1	
75-15-0	Carbon Disulfide	97	95	2.1	

56-23-5	Carbon Tetrachloride	112	110	1.8
108-90-7	Chlorobenzene	103	101	2.0
75-00-3	Chloroethane	96	95	1.0
67-66-3	Chloroform	108	105	2.8
74-87-3	Chloromethane	108	104	3.8
156-59-2	cis-1,2-Dichloroethene	103	103	0
10061-01-5	cis-1,3-Dichloropropene	104	104	0
98-82-8	Cumene	97	96	1.0
110-82-7	Cyclohexane	95	95	0
124-48-1	Dibromochloromethane	110	108	1.8
74-95-3	Dibromomethane	ND	ND	0
64-17-5	Ethanol	91	92	1.1
141-78-6	Ethyl Acetate	ND	ND	0
100-41-4	Ethyl Benzene	100	98	2.0
637-92-3	Ethyl-tert-butyl ether	ND	ND	0
75-69-4	Freon 11	108	107	0.93
76-13-1	Freon 113	100	99	1.0
76-14-2	Freon 114	107	101	5.8
75-71-8	Freon 12	109	106	2.8
811-97-2	Freon 134a	ND	ND	0
142-82-5	Heptane	99	99	0
87-68-3	Hexachlorobutadiene	125	124	0.80
110-54-3	Hexane	103	101	2.0
74-88-4	Iodomethane	ND	ND	0
108-20-3	Isopropyl ether	ND	ND	0
108-38-3	m,p-Xylene	100	99	1.0
1634-04-4	Methyl tert-butyl ether	93	91	2.2
75-09-2	Methylene Chloride	120	116	3.4
91-20-3	Naphthalene	104	108	3.8
95-47-6	o-Xylene	98	96	2.1
103-65-1	Propylbenzene	101	98	3.0
115-07-1	Propylene	110	110	0
100-42-5	Styrene	94	93	1.1
994-05-8	tert-Amyl methyl ether	ND	ND	0
75-65-0	tert-Butyl alcohol	ND	ND	0
127-18-4	Tetrachloroethene	105	104	0.96
109-99-9	Tetrahydrofuran	117	115	1.7
108-88-3	Toluene	101	100	1.00
156-60-5	trans-1,2-Dichloroethene	97	96	1.0
10061-02-6	trans-1,3-Dichloropropene	107	105	1.9
79-01-6	Trichloroethene	107	107	0
108-05-4	Vinyl Acetate	100	96	4.1

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	96	96	0

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdp.i/19MAY21.b/p051914.d
Level 3: /chem/msdp.i/19MAY21.b/p051915.d
Level 4: /chem/msdp.i/19MAY21.b/p051916.d
Level 5: /chem/msdp.i/19MAY21.b/p051917.d
Level 6: /chem/msdp.i/19MAY21.b/p051918.d
Level 7: /chem/msdp.i/19MAY21.b/p051919.d
Level 8: /chem/msdp.i/19MAY21.b/p051920.d
Level 9: /chem/msdp.i/19MAY21.b/p051921.d
Level 10: /chem/msdp.i/19MAY21.b/p051924.d

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Freon 143a	+++++	0.64347	0.55833	0.28699	0.48663	0.54132		
	0.53859	0.32618	+++++				0.48307	26.850
4 Freon 134a	+++++	0.77011	0.84089	0.78129	0.71828	0.77669		
	0.83041	0.82114	+++++				0.79126	5.405
5 Propylene	+++++	+++++	1.30044	1.16437	0.97808	1.08818		
	1.14258	1.19048	+++++				1.14402	9.390

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
6 Propane	0.35885	0.70755	0.41224	0.45766	0.35651	0.39030		
	0.42780	0.42956	+++++				0.44256	25.464
7 1,1-Difluoroethane	+++++	+++++	0.71318	0.51293	0.51356	0.55570		
	0.58422	0.52044	+++++				0.56667	13.609
8 Freon 12	+++++	1.89452	2.25684	2.41287	1.98305	2.23908		
	2.37709	2.51953	2.25486				2.24223	9.426
9 Chlorodifluoromethane	+++++	0.19040	0.21703	0.22854	0.20953	0.22781		
	0.23846	0.23864	+++++				0.22149	7.823
10 Freon 114	+++++	2.19697	2.35022	2.42550	1.98865	2.15848		
	2.32315	2.38505	1.78003				2.20100	10.095
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
12 Isobutane	+++++	+++++	2.94068	2.70679	2.13532	2.31544		
	2.47976	2.61851	+++++				2.53275	11.334
13 Freon 142b	2.88379	2.72504	2.51717	2.51995	1.92155	2.20295		
	2.38394	2.38895	+++++				2.44292	12.194
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
15 Chloromethane	+++++	+++++	1.62633	1.12803	1.35456	1.40983		
	1.30365	0.98253	+++++				1.30082	17.255
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
18 Butane	+++++	+++++	0.36632	0.35071	0.20777	0.23711		
	0.29558	0.35050	+++++				0.30133	22.008
19 Vinyl Chloride	+++++	1.63750	1.79369	1.70399	1.29644	1.43002		
	1.50248	1.58819	1.56702				1.56492	10.007
20 1,3-Butadiene	+++++	1.15962	1.11125	1.12135	1.33604	1.33164		
	1.39178	1.46398	1.15352				1.25865	10.936
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
24 Bromomethane	+++++	+++++	1.20010	1.20656	0.84526	0.89756		
	0.93585	0.95210	+++++				1.00624	15.607
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
30 Chloroethane	+++++	+++++	0.55246	0.65854	0.47089	0.52675		
	0.57230	0.59544	+++++				0.56273	11.288
31 Isopentane	+++++	+++++	1.67935	1.76478	1.70699	1.64818		
	1.70298	1.77148	+++++				1.71230	2.809
32 Vinyl Bromide	+++++	0.89521	1.00012	0.99635	0.80298	0.86636		
	0.95282	0.99672	+++++				0.93008	8.292

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
33 Freon 11	+++++	2.37298	2.30540	2.51055	2.23314	2.30111		
	2.43347	2.54911	2.35618				2.38274	4.554
34 Dichlorofluoromethane	+++++	2.10328	2.06570	2.13311	1.73001	1.97932		
	2.12384	2.24043	+++++				2.05367	7.927
35 Pentane	+++++	2.89800	2.83104	2.84872	2.63186	2.68332		
	2.75389	2.83565	+++++				2.78321	3.479
36 1-Pentene	2.06121	1.59213	1.56421	1.63474	1.37543	1.48214		
	1.53709	1.54332	+++++				1.59878	12.659
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
38 Ethyl Ether	+++++	0.41543	0.47730	0.50593	0.42858	0.46228		
	0.48772	0.50964	+++++				0.46955	7.767
39 Ethanol	+++++	+++++	0.27474	0.25602	0.21630	0.23850		
	0.24473	0.25725	+++++				0.24792	8.009
40 Freon 123a	1.67643	1.70260	1.56653	1.71267	1.35347	1.42708		
	1.48357	1.59067	+++++				1.56413	8.516
41 Freon 123	2.23549	2.28998	2.32261	2.22470	2.10291	2.12379		
	2.22936	2.25042	+++++				2.22241	3.385

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
42 Acrolein	+++++	+++++	0.43742	0.46343	0.37582	0.40776		
	0.43668	0.46010	+++++				0.43020	7.747
43 Freon 113	+++++	1.66116	1.75764	1.84846	1.81076	1.72301		
	1.78692	1.85367	1.72082				1.77031	3.803
44 1,1-Dichloroethene	+++++	1.13047	0.98158	1.08462	0.90481	0.98246		
	1.04403	1.08444	1.24812				1.05757	9.982
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
47 Acetone	+++++	+++++	0.71912	0.66713	0.55646	0.62462		
	0.66710	0.69799	+++++				0.65540	8.867
48 Carbon Disulfide	+++++	+++++	2.82595	2.99407	2.45111	2.66619		
	2.81912	2.96077	+++++				2.78620	7.233
49 Iodomethane	+++++	+++++	1.13057	1.12578	1.89275	2.20331		
	2.35282	2.40768	+++++				1.85215	31.782 <-
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
52 2-Propanol	+++++	+++++	2.69785	2.66069	2.37669	2.59218	2.71904	2.80241	+++++	2.64148	5.564
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
54 3-Chloropropene	+++++	0.46426	0.51422	0.48997	0.39775	0.44877	0.47843	0.46484	+++++	0.46546	7.851
55 Cyclopentene	2.17715	2.47822	2.46632	2.56699	2.14041	2.34707	2.46346	2.49030	+++++	2.39124	6.514
56 Methyl Acetate	2.75833	2.64156	2.95164	2.98908	2.39164	2.73802	2.95740	2.94353	+++++	2.79640	7.421
57 Acetonitrile	+++++	+++++	1.17773	1.29138	1.02662	1.19401	1.30642	1.39067	+++++	1.23114	10.326
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
59 Methylene Chloride	+++++	+++++	1.66058	1.84335	1.45839	1.64567	1.75730	1.84887	+++++	1.70236	8.667

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
61 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	3.20065	3.30496	2.90583	2.89744		
	3.04086	3.13252	+++++				3.08038	5.297
63 Methyl tert-butyl ether	+++++	3.20233	3.03539	3.11282	3.04059	2.95544		
	3.02504	3.11966	+++++				3.07018	2.627
64 trans-1,2-Dichloroethene	+++++	0.70368	0.71795	0.72086	0.61472	0.66913		
	0.70892	0.74337	0.77451				0.70664	6.798
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
66 Acrylonitrile	+++++	1.08486	1.02749	1.03009	0.83743	0.92318		
	0.97672	1.03119	0.95852				0.98368	7.902
67 Hexane	+++++	2.36995	2.44383	2.55815	2.23183	2.38896		
	2.51048	2.60764	2.59146				2.46279	5.242
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
71 1,1-Dichloroethane	+++++	2.12050	2.15298	2.31268	1.88443	2.09213		
	2.23176	2.32442	1.81878				2.11721	8.735
72 Isopropyl ether	+++++	+++++	5.59896	5.72998	5.66571	5.66877		
	5.76012	5.94316	+++++				5.72778	2.086
73 Vinyl Acetate	+++++	+++++	0.27670	0.27644	0.22773	0.26524		
	0.28486	0.30161	+++++				0.27210	9.135
74 Chloroprene	2.14359	2.03061	2.29463	2.44863	1.90092	2.21243		
	2.40069	2.43763	+++++				2.23364	8.953
75 1-Propanol	0.34779	0.37288	0.37461	0.33474	0.25627	0.30465		
	0.32597	0.32511	+++++				0.33025	11.608
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	4.83620	5.05574	4.88798	4.89187		
	4.97055	5.10638	+++++				4.95812	2.131
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
84 2,2-Dichloropropane	+++++	1.77964	1.81997	1.87272	1.91022	1.85607		
	1.92796	1.99401	+++++				1.88008	3.793
85 cis-1,2-Dichloroethene	+++++	0.63006	0.72053	0.77116	0.61241	0.72577		
	0.77548	0.80235	0.82883				0.73332	10.638
86 2-Butanone	+++++	+++++	0.58624	0.61354	0.46455	0.53642		
	0.58432	0.60531	+++++				0.56506	9.921

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
87 Ethyl Acetate	+++++	+++++	0.57084	0.59355	0.47870	0.54564		
	0.57818	0.60540	+++++				0.56205	8.124
88 Methyl Acrylate	3.17133	2.76269	2.95610	3.12287	2.41468	2.81782		
	3.08995	3.13777	+++++				2.93415	8.839
89 Tetrahydrofuran	+++++	1.93446	1.95308	2.03673	1.59091	1.83806		
	1.94537	2.03649	1.69916				1.87928	8.525
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
92 Chloroform	+++++	2.04196	2.15806	2.35426	1.86695	2.17101		
	2.31664	2.42886	2.06383				2.17519	8.546
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
94 Cyclohexane	+++++	1.43367	1.50722	1.58410	1.57245	1.53317		
	1.54570	1.61103	1.79345				1.57260	6.636
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
96 1,1,1-Trichloroethane	+++++	2.46156	2.42553	2.48444	2.36393	2.36921		
	2.42958	2.51331	2.61099				2.45732	3.291

US32TAR1

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
97 Carbon Tetrachloride	+++++	2.25147	2.24440	2.22561	2.35635	2.31498		
	2.45306	2.54156	2.05010				2.30469	6.528
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
99 1,1-Dichloropropene	+++++	0.17378	0.17794	0.17658	0.15112	0.16544		
	0.17360	0.17276	+++++				0.17017	5.462
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
101 2,2,4-Trimethylpentane	+++++	8.25963	8.27890	8.75173	8.57253	8.58971		
	8.69563	8.91957	8.41247				8.56002	2.709
102 Benzene	+++++	0.78550	0.87685	0.84553	0.74484	0.82677		
	0.84553	0.84637	0.82851				0.82499	5.017
103 Isobutanol	0.54457	0.28827	0.32257	0.35375	0.28589	0.33052		
	0.36043	0.34600	+++++				0.35400	23.128
105 tert-Amyl methyl ether	+++++	+++++	0.24796	0.22661	0.23645	0.23382		
	0.22848	0.22244	+++++				0.23262	3.884
106 1,2-Dichloroethane	+++++	0.41345	0.44525	0.47019	0.38312	0.44057		
	0.45058	0.44750	0.38354				0.42928	7.531

US32TAR1

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Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
107 Heptane	+++++	0.30034	0.32485	0.33244	0.32365	0.33156		
	0.32821	0.32372	0.34983				0.32683	4.186
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
110 n-Butanol	+++++	+++++	0.28572	0.30596	0.28104	0.30551		
	0.31292	0.30849	+++++				0.29994	4.393
111 Trichloroethene	+++++	0.38664	0.41237	0.41315	0.35498	0.40036		
	0.41626	0.41270	0.40610				0.40032	5.166
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
113 Ethyl acrylate	0.05846	0.06007	0.06293	0.05929	0.05058	0.05740		
	0.05605	0.05682	+++++				0.05770	6.225
114 1,2-Dichloropropane	+++++	0.43979	0.42737	0.42567	0.39065	0.41185		
	0.42060	0.42118	0.44647				0.42295	4.035
115 2-Pentanone	1.21904	1.27106	1.31222	1.33128	1.17591	1.27524		
	1.28236	1.28701	+++++				1.26926	3.934
116 Methyl Methacrylate	+++++	0.35343	0.34137	0.34552	0.32431	0.34108		
	0.34921	0.34961	+++++				0.34351	2.790

US32TAR1

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Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
117 1,4-Dioxane	+++++	0.22595	0.23899	0.23631	0.21158	0.22036		
	0.22028	0.21996	+++++				0.22478	4.349
118 Dibromomethane	+++++	0.34506	0.39714	0.39205	0.34241	0.37852		
	0.39319	0.38886	0.33065				0.37098	7.285
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
122 Bromodichloromethane	+++++	0.58233	0.63649	0.64840	0.58270	0.62912		
	0.65408	0.65615	0.57631				0.62070	5.563
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
126 cis-1,3-Dichloropropene	+++++	0.50516	0.52561	0.54285	0.48751	0.51912		
	0.54679	0.54891	0.51913				0.52438	4.097
127 Methylcyclohexane	+++++	0.61465	0.55349	0.55932	0.59377	0.58677		
	0.57314	0.56161	0.59163				0.57930	3.623
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
131 4-Methyl-2-pentanone	+++++	0.44567	0.41535	0.42739	0.42024	0.41445		
	0.41323	0.40846	0.49125				0.42950	6.406
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
136 Octane	+++++	0.49928	0.45400	0.47320	0.49988	0.47864		
	0.47697	0.47146	0.52912				0.48532	4.775

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
137 Toluene	+++++	1.17435	1.15077	1.15598	1.08690	1.13273		
	1.13471	1.13158	1.13864				1.13821	2.227
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
139 trans-1,3-Dichloropropene	+++++	0.47393	0.50610	0.49304	0.46856	0.50673		
	0.51882	0.51939	0.44922				0.49197	5.206
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
141 1,1,2-Trichloroethane	+++++	0.39429	0.40170	0.39839	0.38144	0.40439		
	0.41066	0.41457	0.44769				0.40664	4.784
142 Tetrachloroethene	+++++	0.60799	0.58444	0.57342	0.55590	0.57612		
	0.57841	0.58067	0.50122				0.56977	5.476
143 2-Hexanone	+++++	+++++	0.57709	0.59101	0.58032	0.57999		
	0.57982	0.57760	+++++				0.58097	0.877
144 1,3-Dichloropropane	+++++	0.50031	0.56980	0.56359	0.52057	0.55649		
	0.56248	0.55833	0.49258				0.54052	5.748
145 Butyl Acetate	0.62964	0.65442	0.64029	0.63612	0.60754	0.62559		
	0.62661	0.61750	+++++				0.62971	2.270

US32TAR1

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Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
146 Dibromochloromethane	+++++	0.78306	0.76265	0.73963	0.72881	0.77388	0.79214	0.79892	0.69915	0.75978	4.551
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB)	+++++	0.66728	0.66954	0.65728	0.60433	0.66080	0.67392	0.67207	0.61234	0.65220	4.249
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	0.78697	0.80160	0.70538	0.77001	0.79910	0.79313	+++++	0.77603	4.691
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Chlorobenzene	+++++	0.98039	1.00297	1.00615	0.95318	0.98786	1.00429	1.00931	0.99753	0.99271	1.887
155 Ethyl Benzene	+++++	0.54541	0.51726	0.50090	0.51483	0.52055	0.51499	0.51317	0.52561	0.51909	2.460

US32TAR1

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Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
156 Nonane	+++++	1.38941	1.32633	1.28604	1.42437	1.31837		
	1.30797	1.29642	+++++				1.33556	3.856
157 1,1,1,2-Tetrachloroethane	0.61281	0.53381	0.51050	0.53112	0.56741	0.57195		
	0.55638	0.56243	+++++				0.55580	5.622
158 m,p-Xylene	+++++	0.67481	0.63902	0.63767	0.64445	0.64388		
	0.63345	0.63344	0.69432				0.65013	3.424
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
160 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
163 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
164 o-Xylene	+++++	0.62320	0.64348	0.61211	0.64029	0.61923		
	0.61359	0.61455	0.61674				0.62290	1.967

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
165 Styrene	+++++	1.11525	1.07016	1.03759	1.05319	1.04745		
	1.04414	1.04408	1.11034				1.06528	2.899
166 2-Heptanone	3.67167	3.65906	3.63687	3.79847	3.47203	3.63504		
	3.74717	3.74578	+++++				3.67076	2.721
167 Bromoform	+++++	0.73776	0.73139	0.72964	0.73975	0.76576		
	0.77834	0.78519	0.72346				0.74891	3.192
168 Cumene	+++++	2.00688	1.92184	1.93874	2.01036	1.95640		
	1.93477	1.91851	1.96634				1.95673	1.829
169 Cyclohexanone	+++++	0.76224	0.72554	0.66914	0.71016	0.68589		
	0.67623	0.66926	+++++				0.69978	4.981
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
172 D-Limonene	0.41095	0.35482	0.36589	0.34451	0.78397	0.78575		
	0.74309	0.72747	+++++				0.56456	37.333 <-
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
174 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
175 1,1,2,2-Tetrachloroethane	+++++	0.98352	0.94583	0.93628	0.96719	0.95406		
	0.94385	0.94078	0.96890				0.95505	1.733
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
177 Bromobenzene	+++++	0.57508	0.60639	0.58293	0.59010	0.60294		
	0.60418	0.60421	+++++				0.59512	2.090
178 Propylbenzene	+++++	0.60804	0.57139	0.56757	0.59410	0.57645		
	0.57084	0.56325	0.58989				0.58019	2.677
179 1,2,3-Trichloropropane	+++++	0.31533	0.32131	0.28626	0.30096	0.29557		
	0.29066	0.28564	0.33945				0.30440	6.324
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
181 trans-1,4-Dichloro-2-butene	+++++	0.19277	0.21017	0.19835	0.19195	0.20110		
	0.20192	0.20059	+++++				0.19955	3.082
182 Decane	+++++	1.79609	1.57143	1.44505	1.61070	1.49654		
	1.37373	1.36070	+++++				1.52203	10.036
183 4-Ethyltoluene	+++++	0.65033	0.64054	0.60196	0.63791	0.61418		
	0.60505	0.58832	0.70940				0.63096	6.073

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
184 2-Chlorotoluene	+++++	0.49984	0.49658	0.48311	0.50814	0.48663		
	0.47710	0.47426	0.52646				0.49401	3.541
185 1,3,5-Trimethylbenzene	+++++	0.88840	0.83919	0.85191	0.89900	0.86876		
	0.85974	0.86328	0.87938				0.86871	2.254
186 4-Chlorotoluene	0.50588	0.49708	0.52780	0.52855	0.50077	0.52139		
	0.50962	0.50476	+++++				0.51198	2.399
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
188 alpha Methyl Styrene	+++++	0.86535	0.87923	0.83462	0.89343	0.87794		
	0.86963	0.86867	0.81509				0.86300	2.969
189 tert-Butylbenzene	+++++	1.62733	1.62633	1.57945	1.65095	1.62250		
	1.63890	1.62816	+++++				1.62480	1.368
190 1,2,4-Trimethylbenzene	+++++	1.70877	1.62174	1.59089	1.69054	1.63659		
	1.62056	1.60514	1.64323				1.63968	2.487
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
192 sec-Butylbenzene	+++++	0.49560	0.50610	0.49423	0.52391	0.50675		
	0.50351	0.50154	0.50833				0.50500	1.821

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Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
193 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
194 p-Cymene	+++++	2.30462	2.16921	2.12863	2.30933	2.22972		
	2.20755	2.18683	2.32036				2.23203	3.228
195 1,3-Dichlorobenzene	+++++	1.15658	1.15643	1.11720	1.11291	1.12849		
	1.10749	1.10683	1.09255				1.12231	2.086
196 1,4-Dichlorobenzene	+++++	1.16982	1.13485	1.12938	1.10992	1.14109		
	1.13566	1.13005	1.12236				1.13414	1.523
197 1,2,3-Trimethylbenzene	0.74930	0.74831	0.73294	0.73383	0.76340	0.76689		
	0.73531	0.73354	+++++				0.74544	1.857
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
199 alpha-Chlorotoluene	+++++	1.51181	1.54888	1.53627	1.57168	1.58619		
	1.58130	1.57052	1.55269				1.55742	1.609
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
201 Undecane	+++++	1.88866	1.82307	1.77843	1.79835	1.77435		
	1.69116	1.55266	+++++				1.75810	6.155

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
202 Butylbenzene	+++++	0.58573	0.58249	0.55423	0.58167	0.56357		
	0.53997	0.53683	0.59066				0.56690	3.760
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
204 1,2-Dichlorobenzene	+++++	1.10407	1.12539	1.09831	1.11450	1.09041		
	1.07307	1.07027	1.12778				1.10047	1.987
205 Hexachloroethane	0.25905	0.24933	0.20237	0.17807	0.37549	0.37170		
	0.35119	0.35730	+++++				0.29306	27.359
206 1,2-Dibromo-3-chloropropane	+++++	+++++	0.65994	0.64226	0.67551	0.68086		
	0.67149	0.66910	+++++				0.66653	2.068
207 Dodecane	+++++	1.08884	1.29307	1.39322	1.32012	1.47555		
	1.50880	1.50906	1.55944				1.39351	11.157
208 1,3,5-Trichlorobenzene	1.03535	1.05171	1.06253	1.06764	0.99487	1.06875		
	1.05551	1.04770	+++++				1.04801	2.304
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
210 alpha-Pinene	0.88866	0.92999	0.95994	0.95225	1.08022	1.15606		
	1.13931	1.16647	+++++				1.03411	10.952

US32TAR1

INITIAL CALIBRATION DATA

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Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD	
	100.000 Level 8	200.000 Level 9	0.50000 Level 10						
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
213 1,2,4-Trichlorobenzene	+++++	0.73365	0.82349	0.83826	0.78299	0.83257			
	0.83665	0.84391	+++++				0.81307	4.981	
214 beta-Pinene	0.45942	0.49034	0.48541	0.49081	0.86434	0.92317			
	0.87191	0.83101	+++++				0.67705	31.130	<-
215 Hexachlorobutadiene	+++++	0.49305	0.57072	0.57784	0.56417	0.59160			
	0.59973	0.60841	+++++				0.57222	6.696	
216 Naphthalene	+++++	2.17464	2.22406	2.02701	1.91757	2.04984			
	2.05935	2.09326	+++++				2.07796	4.828	
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	0.63662	0.72700	0.71965	0.68156	0.74340		
	0.75801	0.76517	+++++				0.71877	6.351
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
225 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
228 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 234 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
238 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
247 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

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Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
259 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
260 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
261 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
262 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
264 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
266 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
267 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 104 1,2-Dichloroethane-d4	+++++	1.29421	1.33794	1.42747	1.32413	1.34572		
	1.44423	1.55619	1.30758				1.37968	6.488
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 134 Toluene-d8	+++++	1.07349	1.09274	1.09966	1.07597	1.08471		
	1.09026	1.08938	1.07858				1.08560	0.834
$ 170 4-Bromofluorobenzene	+++++	0.64219	0.64090	0.63876	0.63357	0.63698		
	0.64598	0.65756	0.63983				0.64197	1.133

US32TAR1

INITIAL CALIBRATION DATA

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Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Average %RSD Results.
Calculated Average %RSD = 7.06874
Maximun Average %RSD = 30.00000
* Passed Average %RSD Test.

Report Date: 20-May-2021 11:06

Calibration History

Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Start Cal Date: 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.40000		
19-MAY-2021 19:17	AT20spICAL	/chem/msdp.i/19MAY21.b/p051914.d
Cal Level: 3 , Cal Amount: 0.80000		
19-MAY-2021 19:45	AT20spICAL	/chem/msdp.i/19MAY21.b/p051915.d
19-MAY-2021 14:02	AT20_Level3	/chem/msdp.i/19MAY21.b/p051904.d
Cal Level: 4 , Cal Amount: 2.00000		
19-MAY-2021 20:13	AT20spICAL	/chem/msdp.i/19MAY21.b/p051916.d
19-MAY-2021 14:30	AT20ICAL	/chem/msdp.i/19MAY21.b/p051905.d
Cal Level: 5 , Cal Amount: 5.00000		
19-MAY-2021 20:43	AT20spICAL	/chem/msdp.i/19MAY21.b/p051917.d
19-MAY-2021 15:00	AT20ICAL	/chem/msdp.i/19MAY21.b/p051906.d
Cal Level: 6 , Cal Amount: 20.00000		
19-MAY-2021 21:10	AT20spICAL	/chem/msdp.i/19MAY21.b/p051918.d
19-MAY-2021 15:27	AT20ICAL	/chem/msdp.i/19MAY21.b/p051907.d
Cal Level: 7 , Cal Amount: 50.00000		
19-MAY-2021 21:38	AT20spICAL	/chem/msdp.i/19MAY21.b/p051919.d
19-MAY-2021 15:55	AT20ICAL	/chem/msdp.i/19MAY21.b/p051908.d
Cal Level: 8 , Cal Amount: 100.00000		
19-MAY-2021 22:07	AT20spICAL	/chem/msdp.i/19MAY21.b/p051920.d
19-MAY-2021 16:24	AT20ICAL	/chem/msdp.i/19MAY21.b/p051909.d

Cal Level: 9 , Cal Amount: 200.00000		
19-MAY-2021 22:39	AT20spICAL	/chem/msdp.i/19MAY21.b/p051921.d
19-MAY-2021 16:53	AT20ICAL	/chem/msdp.i/19MAY21.b/p051910.d

Cal Level: 10, Cal Amount: 0.50000		
20-MAY-2021 00:05	AT20_Level2	/chem/msdp.i/19MAY21.b/p051924.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 7

Ccal Level: 7 , Ccal Amount: 50.000		
19-MAY-2021 15:55	AT20ICAL	/chem/msdp.i/19MAY21.b/p051908.d
Ccal Level: 7 , Ccal Amount: 50.000		
19-MAY-2021 21:38	AT20spICAL	/chem/msdp.i/19MAY21.b/p051919.d

Initial Calibration Narrative (Extended)
P21Q0519a.m

A multi-point TO-15 initial calibration was analyzed on MSD-P on 05/19/21 and 05/20/21.

ICAL: 3 out. Iodomethane @ 32%, D-Limonene @ 37%, and beta-Pinene @ 31%
Naph RSD @ 4.8%

ICV: 3 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153%, and 1,2,3-Trichlorobenzene @ 133%
File: P051925. Naph recovery: 117%
DODQSM: 3 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153%, and 1,2,3-Trichlorobenzene @ 133% File: P051925a
DOD4.2: 0 (zero) out; File: P051925c
RCP: 0 (zero) RCP compounds out. 5 **Non-RCP** compounds outside 80-120%. File P051925d
DODsp: (PID 23339): 2 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153% and 1,2,3-Trichlorobenzene @ 133 File: P051925e

The concentrations for Ethanol, Acrolein, 1,2,4-Trichlorobenzene, Naphthalene, 1,2,3-Trichlorobenzene, and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

An 8-point ICAL for AT20 supplemental compounds was analyzed on MSDP on 05/19/21-05/20/21.

An ICV was analyzed for the following AT20 supplemental compounds: 1,1,1,2-Tetrachloroethane.
ICV: 0 out; File: P051925
RCP Compounds: 0 RCP compounds out. File P051925d

ICAL Levels 1 and 2 were not included due to poor peak quality.

*****Bottom of the curve is 0.5ppbv; no TA RLs.*****

The RL for Isobutane was raised from 0.8ppbv to 2.0ppbv.

The concentrations for Dodecane, 1,2,4-TCB, Hexachlorobutadiene, 1,2,3-TCB, and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.
-Dodecane was curved at 0.618ppbv→ 247ppbv.
-1,2,4-TCB was curved at 1.01ppbv→252ppbv
-Hexachlorobutadiene was curved at 1.03ppbv→257ppbv
-1,2,3-TCB was curved at 1.06ppbv→266ppbv
-Naphthalene was curved at 0.10ppbv →25.4ppbv

BFB tune file:
1. P051901

The TO-15MDL study expires on 10/29/21.
Select specials MDL study expires 10/29/21.

Initial Calibration Narrative (TO-15)
P21Q0519a.m

A multi-point TO-15 initial calibration was analyzed on MSD-P on 05/19/21 and 05/20/21.

ICAL: 0 out
Naph RSD @ 4.8%

ICV: 0 (zero) out. File: P051925
Naph recovery: 117%.
DODQSM: 0 (zero) out. File: P051925a
DOD4.2: 0 (zero) out; P051925c
RCP: 0 (zero) RCP compounds out. 2 **Non-RCP** compounds outside 80-120%. File P051925d
DODsp: (PID 23339): 2 out; Trans-1, 4-dichloro-2-butene @ 146%, Dodecane @ 153% and 1,2,3-Trichlorobenzene @ 133 File: P051925e

The concentrations for Ethanol, 1,2,4-Trichlorobenzene, Naphthalene and Hexachlorobutadiene were adjusted in the ICV due to the certified concentration exceeding more than 15% of the nominal concentration.

ICAL Levels 1 and 2 were not included due to poor peak quality.

*****Bottom of the curve is 0.5ppbv; no TA RLs.*****

The RL for Isobutane was raised from 0.8ppbv to 2.0ppbv.

The concentrations for 1,2,4-TCB, Hexachlorobutadiene and Naphthalene were adjusted in the calibration due to the certified concentration exceeding more than 15% of the nominal concentration.

-1,2,4-TCB was curved at 1.01ppbv→252ppbv
-Hexachlorobutadiene was curved at 1.03ppbv→257ppbv
-Naphthalene was curved at 0.10ppbv →25.4ppbv

BFB tune file:
1. P051901

The TO-15MDL study expires on 10/29/21.

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
Quant Method : ISTD
Origin : Disabled
Target Version : 3.60
Integrator : HP RTE
Method file : /chem/msdp.i/19MAY21.b/p21q0519a.m
Cal Date : 20-May-2021 11:07 lk8g
Curve Type : Average

Please see Calibration History page(s) for all the calibration files.

UD 5/20/21

GH 5/20/21

Calibration File Names:
Level 2: /chem/msdp.i/19MAY21.b/p051914.d
Level 3: /chem/msdp.i/19MAY21.b/p051915.d
Level 4: /chem/msdp.i/19MAY21.b/p051916.d
Level 5: /chem/msdp.i/19MAY21.b/p051917.d
Level 6: /chem/msdp.i/19MAY21.b/p051918.d
Level 7: /chem/msdp.i/19MAY21.b/p051919.d
Level 8: /chem/msdp.i/19MAY21.b/p051920.d
Level 9: /chem/msdp.i/19MAY21.b/p051921.d
Level 10: /chem/msdp.i/19MAY21.b/p051924.d

Compound	0.40000 Level 2	0.80000 Level 3	2.000 Level 4	5.000 Level 5	20.000 Level 6	50.000 Level 7	___ RRF	% RSD
	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 1,1-Dichloro-1-Fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Freon 143a	+++++	0.64347	0.55833	0.28699	0.48663	0.54132		
	0.53859	0.32618	+++++				0.48307	26.850
4 Freon 134a	+++++	0.77011	0.84089	0.78129	0.71828	0.77669		
	0.83041	0.82114	+++++				0.79126	5.405
5 Propylene	+++++	+++++	1.30044	1.16437	0.97808	1.08818		
	1.14258	1.19048	+++++				1.14402	9.390

MSDP

									Method TO-15/TO-14					
	BFB Verification of 176/174 ratio: (142592/146432)*100=97.37%								SOP# 6					
		3234-10	Exp. Date:		8/17/21				Vacuum:	NA				
	BCM	158,810							Please check all standards					
	1,4-DFB	597,103						Surr.# 3234-10	Exp. Date:	8/17/21	Surrogate# NA	Exp. Date:	NA	
	CB-d5	587,747						CCV #3018-2034	Exp. Date:	8/17/21	LCS: #3018-2016	Exp. Date:	8/5/21	
								CCV sp1# 3018-2045	Exp. Date:	8/17/21	LCS sp1 #	Exp. Date:		
								CCV sp2# 3018-1928	Exp. Date:	6/1/21	LCS sp2 #	Exp. Date:		
	Verified CCV vs ICAL mid-point(-40%): LD							CCV sp3# 3018-2013	Exp. Date:	8/4/21	LCS sp3 #	Exp. Date:		
	Method: p21q0519a.m													

	File #	Enter/Scan Sample ID#	Constant#	Cart Pos.	Pressure	mL	DF	Verify Lead	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P051901	BFB Tune Check	3234-10	4	36ng	200mL	1.00	LD	LD	5/19/2021	1139	LD	Exp. 8/17/21
X	P051902	ICAL Level 1	3018-2045	1	0.3ppbv (5.0ppbv)	12mL	1.00	LD	LD	5/19/2021	1224	LD	Exp. 8/17/21. Poor peak quality.
X	P051903	ICAL Level 2	3018-2045	1	0.4ppbv (5.0ppbv)	16mL	1.00	LD	LD	5/19/2021	1252	LD	Poor peak quality.
√	P051904	ICAL Level 3	3018-2045	1	0.8ppbv (5.0ppbv)	32mL	1.00	gh	LD	5/19/2021	1402	LD	
√	P051905	ICAL Level 4	3018-2045	1	2.0ppbv (5.0ppbv)	80mL	1.00	gh	LD	5/19/2021	1430	LD	
√	P051906	ICAL Level 5	3018-2045	1	5.0ppbv (5.0ppbv)	200mL	1.00	gh	LD	5/19/2021	1500	LD	
√	P051907	ICAL Level 6	3018-2034	13	20ppbv (200ppbv)	20mL	1.00	gh	LD	5/19/2021	1527	LD	Exp. 8/17/21.
√	P051908	ICAL Level 7	3018-2034	13	50ppbv (200ppbv)	50mL	1.00	gh	LD	5/19/2021	1555	LD	
√	P051909	ICAL Level 8	3018-2034	13	100ppbv (200ppbv)	100mL	1.00	gh	LD	5/19/2021	1624	LD	
√	P051910	ICAL Level 9	3018-2034	13	200ppbv (200ppbv)	200mL	1.00	gh	LD	5/19/2021	1653	LD	
√	P051911	System Blank	35157	4	Humid	200mL	1.00	gh	LD	5/19/2021	1723	LD	
√	P051912	System Blank	35157	4	Humid	200mL	1.00	gh	gh	5/19/2021	1809	LD	
X	P051913	ICAL Level 2	3018-2045	1	0.4ppbv (5.0ppbv)	16mL	1.00	gh	gh	5/19/2021	1849	LD	Exp. 8/17/21. Poor peak quality.
√	P051914	ICAL Level 2	3018-1928	2	0.4ppbv (5.0ppbv)	16mL	1.00	gh	gh	5/19/2021	1917	LD	Exp. 6/1/21.
√	P051915	ICAL Level 3	3018-1928	2	0.8ppbv (5.0ppbv)	32mL	1.00	gh	gh	5/19/2021	1945	LD	
√	P051916	ICAL Level 4	3018-1928	2	2.0ppbv (5.0ppbv)	80mL	1.00	gh	gh	5/19/2021	2013	LD	
√	P051917	ICAL Level 5	3018-1928	2	5.0ppbv (5.0ppbv)	200mL	1.00	gh	gh	5/19/2021	2043	LD	
√	P051918	ICAL Level 6	3018-2013	3	20ppbv (200ppbv)	20mL	1.00	gh	gh	5/19/2021	2110	LD	Exp. 8/4/21.
√	P051919	ICAL Level 7	3018-2013	3	50ppbv (200ppbv)	50mL	1.00	gh	gh	5/19/2021	2138	LD	
√	P051920	ICAL Level 8	3018-2013	3	100ppbv (200ppbv)	100mL	1.00	gh	gh	5/19/2021	2207	LD	
√	P051921	ICAL Level 9	3018-2013	3	200ppbv (200ppbv)	200mL	1.00	LD	gh	5/19/2021	2239	LD	
√	P051922	System Blank	35157	4	Humid	200mL	1.00	LD	gh	5/19/2021	2308	LD	
√	P051923	System Blank	35157	4	Humid	200mL	1.00	LD	gh	5/19/2021	2338	LD	
√	P051924	ICAL Level 10	3018-2045	1	0.5ppbv (5.0ppbv)	20mL	1.00	LD	gh	5/20/2021	0005	LD	Exp. 8/17/21.
√	P051925	ICV	3018-2016	14	50ppbv (200ppbv)	50mL	1.00	LD	gh	5/20/2021	0033	LD	Exp. 8/5/21.

MB 5/20/21

IS and Associated Target Compounds and Surr.
Instruction #: I1.20

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane*
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

*Note: If Bromochloromethane (BCM) is required as a target compound, the internal standard mix is blended without BCM. Compounds and surrogates assigned to BCM are re-assigned to 1,4-Difluorobenzene for calibration and subsequent quantitation.

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051914.d
Lab Smp Id: ICAL Level 2
Inj Date : 19-MAY-2021 19:17
Operator : gh Inst ID: msdp.i
Smp Info : 16mL 3018-1928
Misc Info : 0.4ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:17 Cal File: p051914.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	163890	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127715			48.23- 108.23	77.93
5.771	5.778 (1.000)	49	296851			150.57- 210.57	181.13
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	600935	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93335			0.00- 45.71	15.53
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	587965	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	324501			23.78- 83.78	55.19
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	941	0.40000	0.3085	80.00- 120.00	100.00(a)
1.675	1.674 (0.290)	39	1309			34.98- 94.98	139.11
1.689	1.674 (0.292)	41	861			25.22- 85.22	91.50
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	7562	0.40000	0.4489	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
13 Freon 142b (continued)							
1.898	1.884 (0.329)	45	2247			0.00- 59.77	29.71
36 1-Pentene					CAS #: 109-67-1		
2.891	2.906 (0.500)	55	5405	0.40000	0.4946	80.00- 120.00	100.00(a)
2.899	2.906 (0.502)	42	6051			105.17- 165.17	111.95
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	4396	0.40000	0.4147	80.00- 120.00	100.00(a)
3.378	3.378 (0.585)	67	4936			104.69- 164.69	112.28
41 Freon 123					CAS #: 306-83-2		
3.464	3.479 (0.600)	83	5862	0.40000	0.3993	80.00- 120.00	100.00(a)
3.486	3.479 (0.603)	133	1216			0.00- 50.87	20.74
3.472	3.479 (0.601)	85	3801			36.08- 96.08	64.84
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	5709	0.40000	0.3618	80.00- 120.00	100.00(a)
4.066	4.073 (0.704)	68	2522			6.76- 66.76	44.18
4.066	4.073 (0.704)	53	1675			0.00- 57.54	29.34
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.073 (0.706)	43	7233	0.40000	0.3918	80.00- 120.00	100.00(a)
4.080	4.073 (0.706)	74	768			0.00- 44.13	10.62
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	5621	0.40000	0.3852	80.00- 120.00	100.00(a)
5.019	5.019 (0.869)	88	2057			9.21- 69.21	36.59
5.012	5.019 (0.867)	50	1789			0.00- 54.25	31.83
75 1-Propanol					CAS #: 71-23-8		
5.098	5.083 (0.882)	59	912	0.40000	0.4010	80.00- 120.00	100.00(a)
5.098	5.083 (0.882)	42	931			63.23- 123.23	102.08
5.105	5.083 (0.883)	41	494			24.74- 84.74	54.17
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.974)	55	8316	0.40000	0.4277	80.00- 120.00	100.00(a)
5.621	5.620 (0.973)	85	1426			0.00- 41.28	17.15
5.628	5.620 (0.974)	58	1499			0.00- 38.22	18.03
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	1428	0.40000	0.5920	80.00- 120.00	100.00(a)
6.244	6.244 (1.081)	43	3902			448.18- 508.18	273.25
6.244	6.244 (1.081)	41	2603			299.99- 359.99	182.28
113 Ethyl acrylate					CAS #: 140-88-5		
6.939	6.938 (0.733)	99	550	0.40000	0.3922	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
113 Ethyl acrylate (continued)							
6.939	6.938 (0.733)	45	1161			149.95- 209.95	211.09
6.939	6.938 (0.733)	55	9624			1849.07-1909.07	1749.82
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	11468	0.40000	0.3804	80.00- 120.00	100.00(a)
7.039	7.031 (0.744)	58	1303			0.00- 37.44	11.36
7.032	7.031 (0.743)	86	1613			0.00- 42.78	14.07
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	6054	0.40000	0.3952	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	2892			0.00- 59.10	47.77
8.665	8.657 (1.301)	43	14727			215.30- 275.30	243.26
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	5765	0.40000	0.4440	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	587965			57.42- 117.42	10198.87
9.596	9.596 (1.014)	95	2522			5.70- 65.70	43.75
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	9628	0.40000	0.3991	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	17002			136.03- 196.03	176.59
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	3866	0.40000	0.3634	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	2278			39.41- 99.41	58.92
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	4759	0.40000	0.3920	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	14696			295.02- 355.02	308.80
11.437	11.444 (1.209)	63	2158			11.82- 71.82	45.35
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	7049	0.40000	0.4016	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	15461			192.40- 252.40	219.34
12.318	12.318 (1.302)	77	2242			0.00- 54.69	31.81
205 Hexachloroethane					CAS #: 67-72-1		
12.963	12.970 (1.370)	201	2437	0.40000	0.4110	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	3360			102.99- 162.99	137.87
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	9740	0.40000	0.3917	80.00- 120.00	100.00(a)
13.758	13.758 (1.454)	182	8432			65.24- 125.24	86.57
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	8360	0.40000	0.3637	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
210 alpha-Pinene (continued)							
10.599	10.599 (1.120)	77	2517			0.00- 58.21	30.11
214 beta-Pinene					CAS #: 127-91-3		
11.415	11.422 (1.207)	93	4322	0.40000	0.3225	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	14696			153.57- 213.57	340.03

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051914.d
Lab Smp Id: ICAL Level 2
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.4ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	163890	3.20
108 1,4-Difluorobenze	597103	358262	835944	600935	0.64
153 Chlorobenzene-d5	587747	352648	822846	587965	0.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051914.d

Date : 19-MAY-2021 19:17

Client ID:

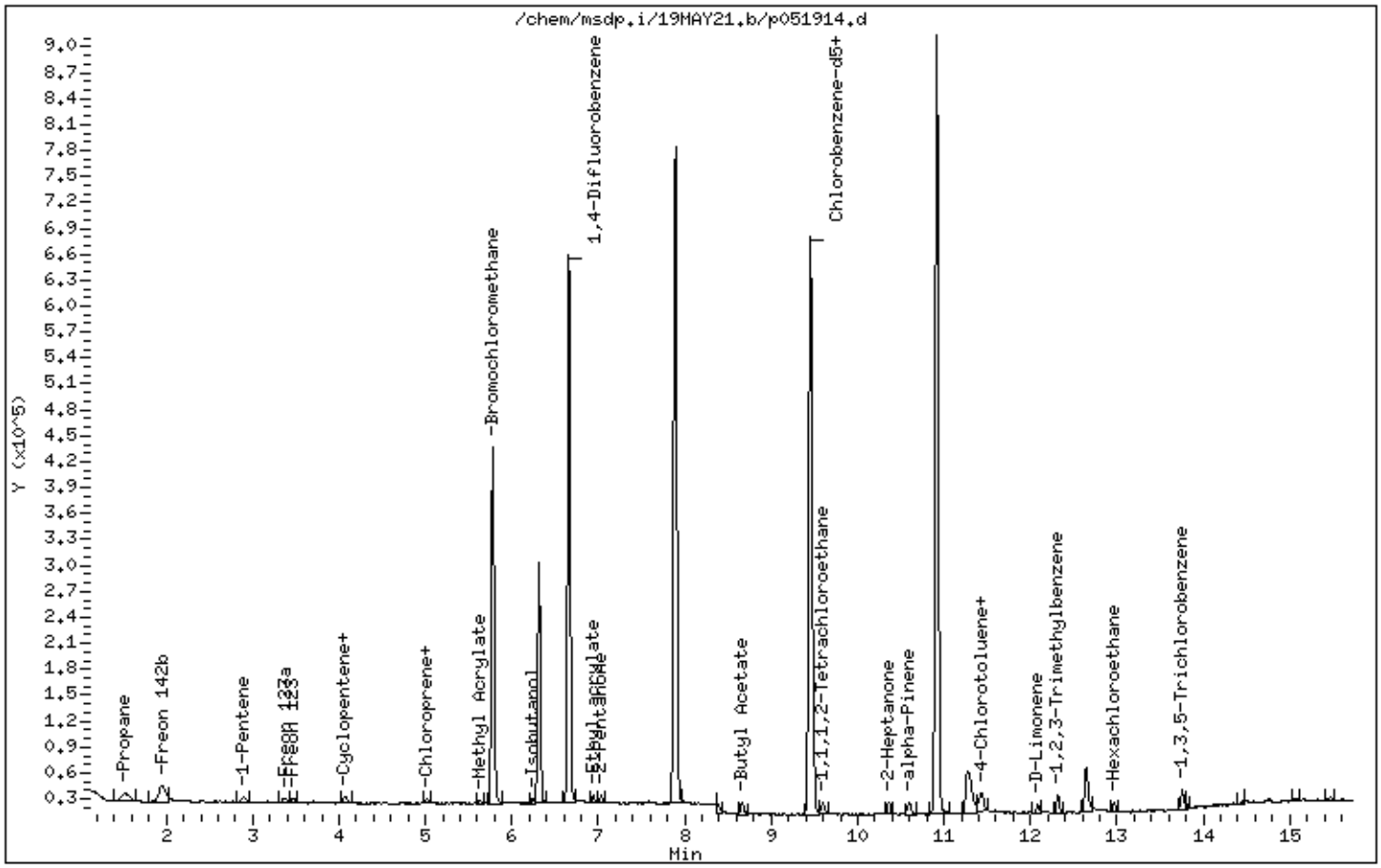
Instrument: msdp.i

Sample Info: 16mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051904.d
Lab Smp Id: ICAL Level 3
Inj Date : 19-MAY-2021 14:02
Operator : LD Inst ID: msdp.i
Smp Info : 32mL 3018-2045
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 11:07 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level3.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	4069	0.80000	0.7786	80.00- 120.00	100.00(a)
1.633	1.633 (0.283)	69	3525			59.44- 119.44	86.63
1.744	1.745 (0.302)	51	16724			419.06- 479.06	411.01
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	10010	0.80000	0.6759	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	3731			2.37- 62.37	37.27
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	1006	0.80000	0.6877	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	16724			1501.01-1561.01	1662.43
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	11608	0.80000	0.7985	80.00- 120.00	100.00
1.842	1.856 (0.319)	137	3024			2.30- 62.30	26.05
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	8652	0.80000	0.8371	80.00- 120.00	100.00
2.060	2.068 (0.357)	64	2015			0.00- 59.69	23.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	6127	0.80000	0.7370	80.00- 120.00	100.00
2.082	2.089 (0.360)	39	6271			52.37- 112.37	102.35
32 Vinyl Bromide					CAS #: 593-60-2		
2.834	2.841 (0.490)	106	4730	0.80000	0.7700	80.00- 120.00	100.00
2.834	2.841 (0.490)	108	4577			69.27- 129.27	96.77
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	12538	0.80000	0.7967	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	8055			34.72- 94.72	64.24
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.891	2.899 (0.500)	67	11113	0.80000	0.8193	80.00- 120.00	100.00(a)
2.891	2.899 (0.500)	69	4116			0.84- 60.84	37.04
35 Pentane					CAS #: 109-66-0		
2.963	2.970 (0.513)	43	15312	0.80000	0.8330	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	3948			0.00- 44.98	25.78
2.970	2.970 (0.514)	72	1224			0.00- 37.39	7.99
38 Ethyl Ether					CAS #: 60-29-7		
3.300	3.285 (0.571)	74	2195	0.80000	0.7078	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	5814			163.46- 223.46	264.87
3.278	3.285 (0.567)	45	7546			250.40- 310.40	343.78
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	8777	0.80000	0.7507	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	5991			33.56- 93.56	68.26
3.550	3.550 (0.614)	101	10762			89.21- 149.21	122.62
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.572	3.579 (0.618)	96	5973	0.80000	0.8551	80.00- 120.00	100.00
3.572	3.579 (0.618)	98	4228			34.02- 94.02	70.79
3.572	3.579 (0.618)	61	10403			168.77- 228.77	174.17
54 3-Chloropropene					CAS #: 107-05-1		
4.037	4.052 (0.699)	76	2453	0.80000	0.7979	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	9150			396.19- 456.19	373.01
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	16920	0.80000	0.8344	80.00- 120.00	100.00
4.453	4.446 (0.771)	57	5536			3.10- 63.10	32.72
4.446	4.446 (0.769)	41	6146			1.28- 61.28	36.32
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	3718	0.80000	0.7966	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
64 trans-1,2-Dichloroethene (continued)							
4.474	4.482 (0.774)	61	9389			255.84- 315.84	252.53
4.474	4.482 (0.774)	96	5939			127.59- 187.59	159.74
66 Acrylonitrile					CAS #: 107-13-1		
4.553	4.560 (0.788)	52	5732	0.80000	0.8823	80.00- 120.00	100.00
4.553	4.560 (0.788)	53	5440			88.05- 148.05	94.91
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	12522	0.80000	0.7698	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	8321			37.52- 97.52	66.45
4.696	4.697 (0.813)	86	1347			0.00- 41.48	10.76
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	11204	0.80000	0.8012	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	3451			0.00- 59.70	30.80
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	9403	0.80000	0.7573	80.00- 120.00	100.00(a)
5.506	5.506 (0.953)	79	3306			2.28- 62.28	35.16
5.506	5.506 (0.953)	97	2804			0.00- 53.93	29.82
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.542	5.549 (0.959)	98	3329	0.80000	0.6873	80.00- 120.00	100.00
5.542	5.549 (0.959)	96	6335			125.75- 185.75	190.30
5.542	5.549 (0.959)	61	13408			332.40- 392.40	402.76
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	10221	0.80000	0.8235	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	1918			0.00- 55.82	18.77
5.778	5.771 (1.000)	72	2670			0.00- 57.59	26.12
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	165114	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	125643			48.23- 108.23	76.09
5.771	5.778 (1.000)	49	294417			150.57- 210.57	178.31
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	10789	0.80000	0.7510	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	7171			34.70- 94.70	66.47
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	7575	0.80000	0.7293	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	14971			142.57- 202.57	197.64
5.957	5.957 (1.031)	41	7502			62.09- 122.09	99.04

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
96 1,1,1-Trichloroethane						CAS #: 71-55-6	
5.964	5.972 (1.032)	97	13006	0.80000	0.8014	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	7613			34.02- 94.02	58.53
97 Carbon Tetrachloride						CAS #: 56-23-5	
6.086	6.086 (1.053)	119	11896	0.80000	0.7815	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	10211			70.64- 130.64	85.84
99 1,1-Dichloropropene						CAS #: 563-58-6	
6.115	6.115 (0.918)	110	3371	0.80000	0.8170	80.00- 120.00	100.00(a)
6.115	6.115 (0.918)	75	7643			226.85- 286.85	226.73
101 2,2,4-Trimethylpentane						CAS #: 540-84-1	
6.280	6.280 (1.087)	57	43641	0.80000	0.7719	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	13299			2.24- 62.24	30.47
6.280	6.280 (1.087)	41	11333			0.00- 54.39	25.97
102 Benzene						CAS #: 71-43-2	
6.294	6.301 (0.945)	78	15237	0.80000	0.7617	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	4544			0.00- 52.90	29.82
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.308	6.308 (1.092)	65	213692	25.0000	23.451	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	105735			27.21- 87.21	49.48
106 1,2-Dichloroethane						CAS #: 107-06-2	
6.380	6.380 (0.958)	62	8020	0.80000	0.7705	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	2408			0.79- 60.79	30.02
107 Heptane						CAS #: 142-82-5	
6.444	6.444 (0.968)	71	5826	0.80000	0.7352	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	17276			226.53- 286.53	296.53
6.444	6.444 (0.968)	57	8717			100.85- 160.85	149.62
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	606184	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94479			0.00- 45.71	15.59
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	7500	0.80000	0.7727	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	8249			76.29- 136.29	109.99
6.867	6.867 (1.031)	97	5319			33.63- 93.63	70.92
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.089	7.089 (1.065)	63	8531	0.80000	0.8318	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	5060			41.07- 101.07	59.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
114 1,2-Dichloropropane (continued)							
7.089	7.089 (1.065)	41	4367			22.53- 82.53	51.19
116 Methyl Methacrylate					CAS #: 80-62-6		
7.132	7.132 (0.754)	69	6670	0.80000	0.8231	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	13396			179.84- 239.84	200.84
7.139	7.139 (0.755)	100	2488			9.59- 69.59	37.30
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.175 (1.079)	88	4383	0.80000	0.8042	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	4085			68.28- 128.28	93.20
7.182	7.175 (1.079)	57	1304			2.68- 62.68	29.75
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	6512	0.80000	0.7441	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	7271			60.09- 120.09	111.66
7.204	7.204 (0.761)	95	5822			48.38- 108.38	89.40
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	11296	0.80000	0.7506	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	7568			35.24- 95.24	67.00
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	9799	0.80000	0.7707	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	3081			2.42- 62.42	31.44
7.691	7.691 (1.155)	39	6857			37.16- 97.16	69.98
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	11923	0.80000	0.8488	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	4960			15.78- 75.78	41.60
6.974	6.974 (1.047)	55	14478			84.64- 144.64	121.43
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.791 (1.171)	58	8645	0.80000	0.8301	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	23117			242.35- 302.35	267.40
7.798	7.791 (1.171)	85	3561			3.24- 63.24	41.19
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	650730	25.0000	24.721	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	72936			0.00- 40.44	11.21
7.891	7.891 (1.185)	100	428196			34.95- 94.95	65.80
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	22780	0.80000	0.8254	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	12614			28.38- 88.38	55.37

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	9685	0.80000	0.8230	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	8103			56.00- 116.00	83.67
7.941	7.949 (1.193)	43	24475			228.66- 288.66	252.71
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	8944	0.80000	0.7706	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	3413			1.24- 61.24	38.16
8.214	8.214 (0.868)	39	5828			34.11- 94.11	65.16
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	7441	0.80000	0.7757	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	4988			31.96- 91.96	67.03
8.400	8.400 (0.888)	83	6109			52.93- 112.93	82.10
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	11474	0.80000	0.8537	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	9050			47.84- 107.84	78.87
8.464	8.464 (0.895)	131	8617			45.29- 105.29	75.10
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	9705	0.80000	0.7405	80.00- 120.00	100.00(a)
8.579	8.579 (1.288)	41	15102			94.99- 154.99	155.61
8.579	8.579 (1.288)	78	4420			2.05- 62.05	45.54
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	14778	0.80000	0.8245	80.00- 120.00	100.00
8.794	8.801 (0.930)	127	11344			47.45- 107.45	76.76
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	12593	0.80000	0.8185	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	11731			64.21- 124.21	93.15
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	589752	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	320479			23.78- 83.78	54.34
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	18502	0.80000	0.7901	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	5822			1.74- 61.74	31.47
9.496	9.496 (1.004)	77	16247			25.04- 85.04	87.81
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	10293	0.80000	0.8406	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	30246			273.74- 333.74	293.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	26221	0.80000	0.8322	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	21624			54.16- 114.16	82.47
9.603	9.603 (1.015)	85	6333			0.00- 53.90	24.15
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	12735	0.80000	0.8304	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	24959			163.73- 223.73	195.99
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	11761	0.80000	0.8004	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	25094			177.45- 237.45	213.37
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	21047	0.80000	0.8375	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	10991			17.88- 77.88	52.22
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	13923	0.80000	0.7881	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	7225			21.25- 81.25	51.89
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	37874	0.80000	0.8205	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	10437			0.00- 58.52	27.56
10.649	10.649 (1.126)	51	4962			0.00- 43.00	13.10
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	14385	0.80000	0.8714	80.00- 120.00	100.00(a)
10.878	10.871 (1.150)	98	5447			1.94- 61.94	37.87
10.871	10.871 (1.149)	42	10807			37.89- 97.89	75.13
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	378732	25.0000	25.008	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	481990			95.92- 155.92	127.26
10.921	10.921 (1.154)	176	365332			66.89- 126.89	96.46
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	18561	0.80000	0.8238	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	11307			35.20- 95.20	60.92
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	10853	0.80000	0.7731	80.00- 120.00	100.00(a)
11.107	11.107 (1.174)	158	10789			67.21- 127.21	99.41
11.179	11.179 (1.182)	77	6933			29.02- 89.02	63.88
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	11475	0.80000	0.8384	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
178 Propylbenzene (continued)							
11.150	11.150 (1.179)	91	43112			366.49- 426.49	375.70
11.143	11.150 (1.178)	105	2100			0.00- 44.85	18.30
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	5951	0.80000	0.8287	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	18371			280.55- 340.55	308.70
11.100	11.100 (1.173)	61	3117			15.49- 75.49	52.38
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	3638	0.80000	0.7728	80.00- 120.00	100.00(a)
11.179	11.179 (1.182)	89	2918			49.11- 109.11	80.21
11.179	11.179 (1.182)	75	18371			426.44- 486.44	504.98
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	33896	0.80000	0.9440	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	9535			0.00- 57.66	28.13
11.258	11.258 (1.190)	142	1347			0.00- 34.09	3.97
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	12273	0.80000	0.8246	80.00- 120.00	100.00
11.286	11.287 (1.193)	105	37727			284.55- 344.55	307.40
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	9433	0.80000	0.8094	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	32992			315.17- 375.17	349.75
11.308	11.301 (1.195)	65	4962			21.55- 81.55	52.60
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	16766	0.80000	0.8181	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	32345			164.93- 224.93	192.92
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	16331	0.80000	0.8022	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	9432			25.30- 85.30	57.76
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	30711	0.80000	0.8012	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	7000			0.00- 54.25	22.79
11.738	11.738 (1.241)	91	18642			31.27- 91.27	60.70
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	32248	0.80000	0.8337	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	16498			19.05- 79.05	51.16
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	9353	0.80000	0.7851	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
192 sec-Butylbenzene (continued)							
11.996	11.996 (1.268)	105	44701			437.55- 497.55	477.93
11.996	11.996 (1.268)	91	7110			40.76- 100.76	76.02
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	43493	0.80000	0.8260	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	10779			0.00- 55.54	24.78
12.153	12.153 (1.285)	91	9590			0.00- 51.48	22.05
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	21827	0.80000	0.8244	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	13524			33.21- 93.21	61.96
12.196	12.196 (1.289)	111	9335			11.31- 71.31	42.77
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	22077	0.80000	0.8252	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	13735			33.90- 93.90	62.21
12.311	12.311 (1.301)	111	9361			9.45- 69.45	42.40
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	28531	0.80000	0.7766	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	7255			0.00- 53.26	25.43
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	35643	0.80000	0.8594	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	32820			58.12- 118.12	92.08
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	11054	0.80000	0.8266	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	36768			314.79- 374.79	332.62
12.626	12.626 (1.335)	92	18539			154.29- 214.29	167.71
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	20836	0.80000	0.8026	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	14179			33.84- 93.84	68.05
12.733	12.741 (1.346)	111	9568			12.73- 72.73	45.92
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	25429	0.99000	0.7736	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	20311			52.87- 112.87	79.87
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	17480	1.01000	0.9113	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	17289			65.33- 125.33	98.91
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	11980	1.03000	0.8875	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
215 Hexachlorobutadiene (continued)							
14.581	14.582 (1.541)	223	7605			33.17- 93.17	63.48
216 Naphthalene					CAS #: 91-20-3		
14.761	14.768 (1.560)	128	5130	0.10000	0.1046	80.00- 120.00	100.00(a)
14.761	14.768 (1.560)	127	1046			0.00- 42.88	20.39
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	15919	1.06000	0.9388	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	15376			65.75- 125.75	96.59
15.069	15.069 (1.593)	145	5239			5.23- 65.23	32.91

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051904.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	165114	3.97
108 1,4-Difluorobenze	597103	358262	835944	606184	1.52
153 Chlorobenzene-d5	587747	352648	822846	589752	0.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051904.d

Date : 19-MAY-2021 14:02

Client ID:

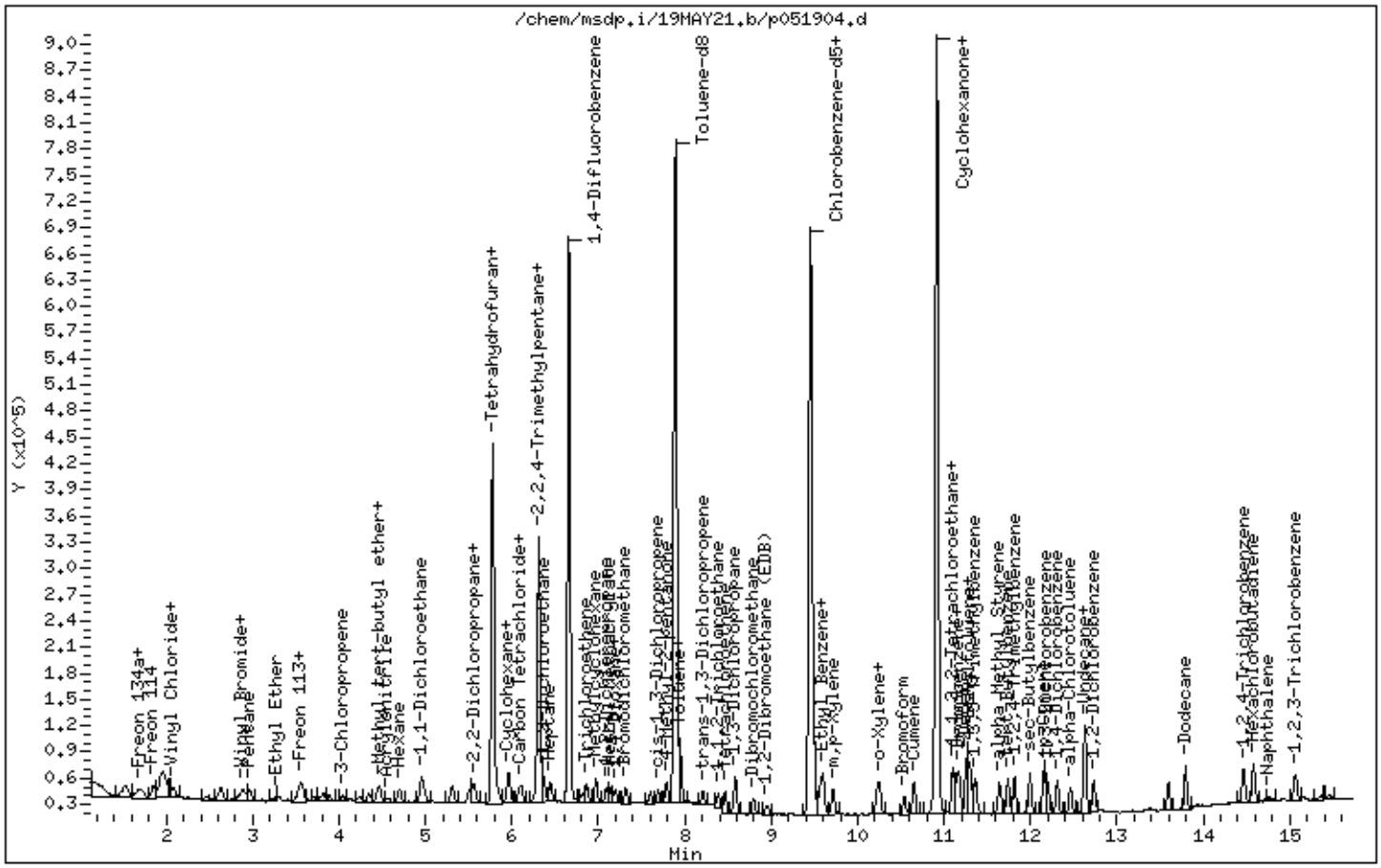
Instrument: msdp.i

Sample Info: 32mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051915.d
Lab Smp Id: ICAL Level 3
Inj Date : 19-MAY-2021 19:45
Operator : gh Inst ID: msdp.i
Smp Info : 32mL 3018-1928
Misc Info : 0.8ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	164344	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	125886			48.23- 108.23	76.60
5.778	5.778 (1.000)	49	290825			150.57- 210.57	176.96
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	606504	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95686			0.00- 45.71	15.78
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	593084	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	324813			23.78- 83.78	54.77
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	3384	0.80000	1.014	80.00- 120.00	100.00(a)
1.591	1.590 (0.275)	69	8253			243.50- 303.50	243.88
1.591	1.590 (0.275)	64	1419			0.00- 54.06	41.93
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	3721	0.80000	1.216	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	2558			34.98- 94.98	68.74
1.688	1.674 (0.292)	41	1187			25.22- 85.22	31.90
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	14331	0.80000	0.8483	80.00- 120.00	100.00(a)
1.884	1.884 (0.326)	45	4817			0.00- 59.77	33.61
36 1-Pentene					CAS #: 109-67-1		
2.898	2.906 (0.502)	55	8373	0.80000	0.7641	80.00- 120.00	100.00(a)
2.898	2.906 (0.502)	42	10665			105.17- 165.17	127.37
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	8954	0.80000	0.8423	80.00- 120.00	100.00(a)
3.378	3.378 (0.585)	67	10000			104.69- 164.69	111.68
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	12043	0.80000	0.8181	80.00- 120.00	100.00(a)
3.486	3.479 (0.603)	133	2878			0.00- 50.87	23.90
3.472	3.479 (0.601)	85	7657			36.08- 96.08	63.58
55 Cyclopentene					CAS #: 142-29-0		
4.066	4.073 (0.704)	67	13033	0.80000	0.8236	80.00- 120.00	100.00(a)
4.073	4.073 (0.705)	68	5570			6.76- 66.76	42.74
4.073	4.073 (0.705)	53	4098			0.00- 57.54	31.44
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.073 (0.706)	43	13892	0.80000	0.7505	80.00- 120.00	100.00(a)
4.073	4.073 (0.705)	74	2356			0.00- 44.13	16.96
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	10679	0.80000	0.7298	80.00- 120.00	100.00(a)
5.019	5.019 (0.869)	88	4129			9.21- 69.21	38.66
5.019	5.019 (0.869)	50	3511			0.00- 54.25	32.88
75 1-Propanol					CAS #: 71-23-8		
5.090	5.083 (0.881)	59	1961	0.80000	0.8598	80.00- 120.00	100.00(a)
5.090	5.083 (0.881)	42	1356			63.23- 123.23	69.15
5.090	5.083 (0.881)	41	964			24.74- 84.74	49.16
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.974)	55	14529	0.80000	0.7451	80.00- 120.00	100.00(a)
5.620	5.620 (0.973)	85	2658			0.00- 41.28	18.29
5.620	5.620 (0.973)	58	1084			0.00- 38.22	7.46
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	1516	0.80000	0.6268	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	6586			448.18- 508.18	434.43
6.244	6.244 (1.081)	41	6296			299.99- 359.99	415.30
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	1140	0.80000	0.8059	80.00- 120.00	100.00(a)
6.938	6.938 (0.733)	45	2310			149.95- 209.95	202.63
6.938	6.938 (0.733)	55	19701			1849.07-1909.07	1728.16
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	24123	0.80000	0.7933	80.00- 120.00	100.00(a)
7.032	7.031 (0.743)	58	1837			0.00- 37.44	7.62
7.032	7.031 (0.743)	86	3321			0.00- 42.78	13.77
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	12701	0.80000	0.8216	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	3929			0.00- 59.10	30.93
8.665	8.657 (1.301)	43	29172			215.30- 275.30	229.68
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	10131	0.80000	0.7736	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	593084			57.42- 117.42	5854.15
9.596	9.596 (1.014)	95	4021			5.70- 65.70	39.69
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	19243	0.80000	0.7954	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	30387			136.03- 196.03	157.91
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	6734	0.80000	0.6275	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	4720			39.41- 99.41	70.09
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	9434	0.80000	0.7705	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	29750			295.02- 355.02	315.35
11.437	11.444 (1.209)	63	4126			11.82- 71.82	43.74
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	14202	0.80000	0.8022	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	30046			192.40- 252.40	211.56
12.318	12.318 (1.302)	77	4952			0.00- 54.69	34.87
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	4732	0.80000	0.7912	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	7064			102.99- 162.99	149.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	19960	0.80000	0.7958	80.00- 120.00	100.00(a)
13.758	13.758 (1.454)	182	18425			65.24- 125.24	92.31
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	17650	0.80000	0.7612	80.00- 120.00	100.00(a)
10.599	10.599 (1.120)	77	6081			0.00- 58.21	34.45
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	9306	0.80000	0.6884	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	29750			153.57- 213.57	319.69

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051915.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.8ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	164344	3.48
108 1,4-Difluorobenze	597103	358262	835944	606504	1.57
153 Chlorobenzene-d5	587747	352648	822846	593084	0.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051915.d

Date : 19-MAY-2021 19:45

Client ID:

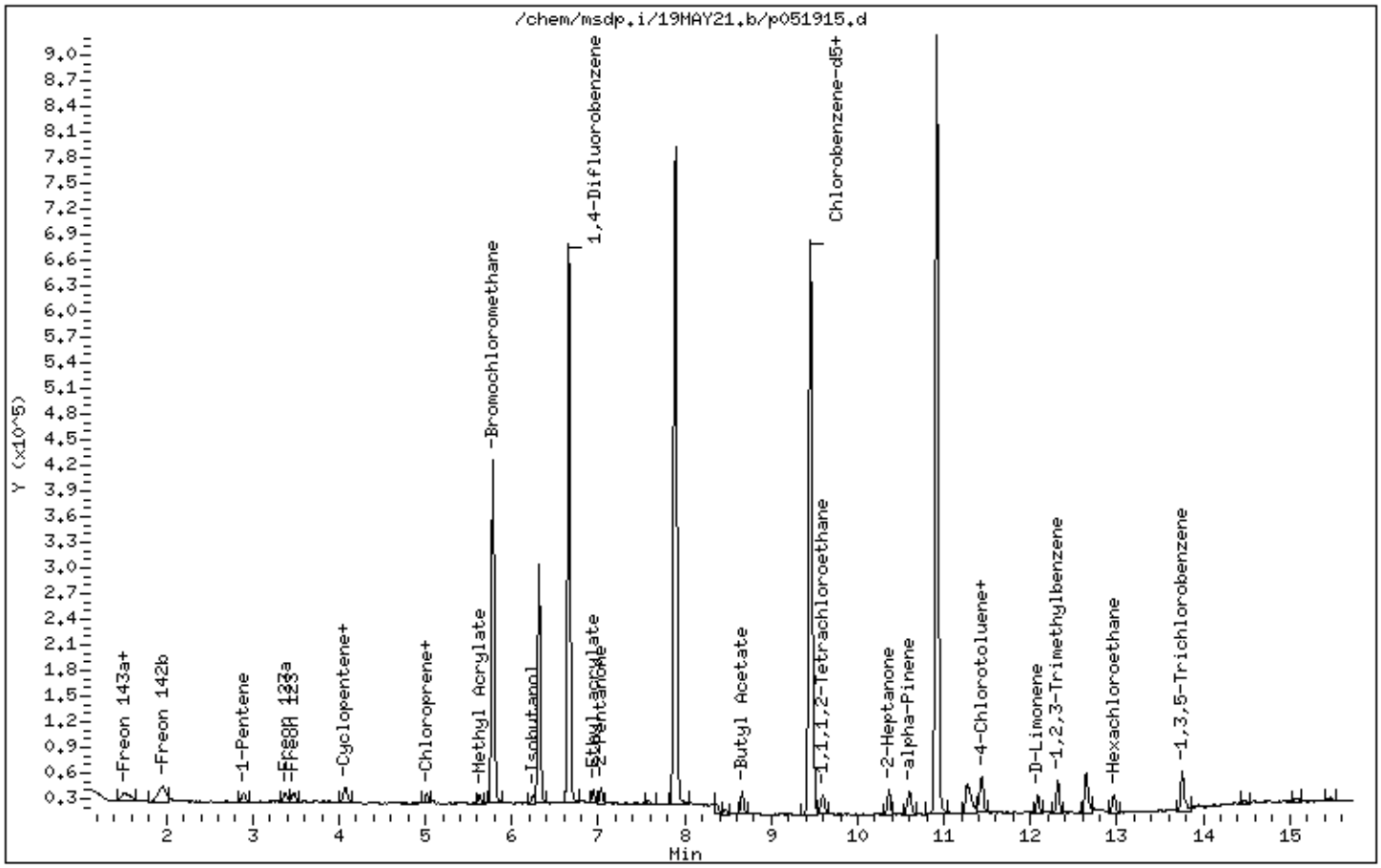
Instrument: msdp.i

Sample Info: 32mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051905.d
Lab Smp Id: ICAL Level 4
Inj Date : 19-MAY-2021 14:30
Operator : LD Inst ID: msdp.i
Smp Info : 80mL 3018-2045
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:13 Cal File: p051916.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.646	1.633 (0.285)	83	10752	2.00000	2.113	80.00- 120.00	100.00
1.646	1.633 (0.285)	69	9430			59.44- 119.44	87.70
1.744	1.745 (0.302)	51	44872			419.06- 479.06	417.34
5 Propylene					CAS #: 115-07-1		
1.674	1.675 (0.290)	41	16628	2.00000	2.178	80.00- 120.00	100.00
1.674	1.675 (0.290)	42	9737			35.28- 95.28	58.56
1.674	1.675 (0.290)	39	9475			38.35- 98.35	56.98
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.703 (0.295)	65	9119	2.00000	2.248	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	44872			597.63- 657.63	492.07
1.702	1.703 (0.295)	47	4376			33.72- 93.72	47.99
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	28857	2.00000	2.119	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	9809			2.37- 62.37	33.99
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	2775	2.00000	2.050	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	44872			1501.01-1561.01	1617.01
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	30051	2.00000	2.103	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	10561			2.30- 62.30	35.14
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	37601	2.00000	2.238	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	10224			2.44- 62.44	27.19
1.870	1.856 (0.324)	58	1126			0.00- 33.36	2.99
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	20795	2.00000	2.143	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	6777			0.00- 56.26	32.59
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	4684	2.00000	2.428	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	30160			823.29- 883.29	643.89
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	22935	2.00000	2.214	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	4016			0.00- 59.69	17.51
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	14209	2.00000	1.851	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	14860			52.37- 112.37	104.58
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	15345	2.00000	2.288	80.00- 120.00	100.00
2.476	2.483 (0.428)	96	14452			64.07- 124.07	94.18
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	7064	2.00000	2.048	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	2424			0.04- 60.04	34.31
2.619	2.612 (0.453)	49	2630			4.54- 64.54	37.23
31 Isopentane					CAS #: 78-78-4		
2.633	2.634 (0.456)	43	21473	2.00000	2.019	80.00- 120.00	100.00
2.633	2.634 (0.456)	57	14410			34.12- 94.12	67.11
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	12788	2.00000	2.173	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	11825			69.27- 129.27	92.47
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	29478	2.00000	1.982	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	21023			34.72- 94.72	71.32
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.899 (0.502)	67	26413	2.00000	2.016	80.00- 120.00	100.00
2.891	2.899 (0.500)	69	8532			0.84- 60.84	32.30
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	36199	2.00000	2.019	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	5481			0.00- 44.98	15.14
2.970	2.970 (0.514)	72	2569			0.00- 37.39	7.10
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.570)	74	6103	2.00000	2.113	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	11984			163.46- 223.46	196.36
3.285	3.285 (0.569)	45	17007			250.40- 310.40	278.67
39 Ethanol					CAS #: 64-17-5		
3.249	3.242 (0.562)	46	3513	2.00000	2.141	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	17032			511.19- 571.19	484.83
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	5593	2.00000	2.070	80.00- 120.00	100.00
3.529	3.529 (0.611)	56	9027			111.10- 171.10	161.40
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	22474	2.00000	2.051	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	14485			33.56- 93.56	64.45
3.550	3.550 (0.614)	101	27010			89.21- 149.21	120.18
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	12551	2.00000	1.903	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	8404			34.02- 94.02	66.96
3.579	3.579 (0.619)	61	26438			168.77- 228.77	210.64
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	9195	2.00000	2.141	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	30176			302.95- 362.95	328.18
48 Carbon Disulfide					CAS #: 75-15-0		
3.822	3.823 (0.662)	76	36134	2.00000	2.058	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	14456	2.00000	1.356	80.00- 120.00	100.00(a)
3.794	3.794 (0.657)	127	6010			12.22- 72.22	41.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.674)	45	34496	2.00000	2.040	80.00- 120.00	100.00
3.894	3.887 (0.674)	43	6922			0.00- 47.19	20.07
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	6575	2.00000	2.162	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	25612			396.19- 456.19	389.54
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.715)	41	15059	2.00000	1.986	80.00- 120.00	100.00
4.131	4.123 (0.715)	40	9224			20.95- 80.95	61.25
4.131	4.123 (0.715)	38	2726			0.00- 41.17	18.10
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.238 (0.732)	49	21233	2.00000	2.009	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	11130			22.03- 82.03	52.42
4.238	4.238 (0.733)	51	6579			0.18- 60.18	30.98
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.752)	59	40925	2.00000	2.099	80.00- 120.00	100.00
4.345	4.338 (0.752)	41	8206			0.00- 51.11	20.05
4.338	4.338 (0.751)	57	4155			0.00- 40.49	10.15
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.453	4.446 (0.771)	73	38812	2.00000	1.981	80.00- 120.00	100.00
4.453	4.446 (0.771)	57	12311			3.10- 63.10	31.72
4.453	4.446 (0.771)	41	12889			1.28- 61.28	33.21
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	9180	2.00000	2.060	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	24720			255.84- 315.84	269.28
4.474	4.482 (0.774)	96	14713			127.59- 187.59	160.27
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	13138	2.00000	2.031	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	14824			88.05- 148.05	112.83
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	31248	2.00000	2.036	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	21924			37.52- 97.52	70.16
4.696	4.697 (0.813)	86	3562			0.00- 41.48	11.40
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	27529	2.00000	2.029	80.00- 120.00	100.00
4.961	4.962 (0.859)	65	8205			0.00- 59.70	29.80

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.954	4.954 (0.857)	45	71591	2.00000	1.988	80.00- 120.00	100.00(a)
4.954	4.954 (0.857)	87	13182			0.00- 48.18	18.41
4.954	4.954 (0.857)	59	8012			0.00- 40.15	11.19
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.865)	86	3538	2.00000	2.042	80.00- 120.00	100.00
4.997	4.997 (0.865)	43	83098			2432.48-2492.48	2348.73
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.312	5.305 (0.919)	59	61838	2.00000	1.988	80.00- 120.00	100.00(a)
5.312	5.305 (0.919)	87	18730			1.00- 61.00	30.29
5.312	5.305 (0.919)	41	11608			0.00- 48.73	18.77
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.506	5.506 (0.953)	77	23271	2.00000	2.002	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	7682			2.28- 62.28	33.01
5.506	5.506 (0.953)	97	5978			0.00- 53.93	25.69
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.960)	98	9213	2.00000	2.082	80.00- 120.00	100.00
5.542	5.549 (0.959)	96	15160			125.75- 185.75	164.55
5.542	5.549 (0.959)	61	33574			332.40- 392.40	364.42
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.962)	72	7496	2.00000	2.089	80.00- 120.00	100.00
5.570	5.556 (0.964)	43	90870			1214.50-1274.50	1212.25
5.556	5.556 (0.962)	57	3054			14.68- 74.68	40.74
87 Ethyl Acetate						CAS #: 141-78-6	
5.577	5.570 (0.965)	45	7299	2.00000	2.045	80.00- 120.00	100.00
5.542	5.549 (0.959)	61	33574			452.04- 512.04	459.98
5.570	5.570 (0.964)	70	4007			22.77- 82.77	54.90
89 Tetrahydrofuran						CAS #: 109-99-9	
5.778	5.771 (1.000)	42	24973	2.00000	2.047	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	6164			0.00- 55.82	24.68
5.778	5.771 (1.000)	72	6913			0.00- 57.59	27.68
* 90 Bromochloromethane						CAS #: 74-97-5	
5.778	5.778 (1.000)	130	159831	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126227			48.23- 108.23	78.98
5.778	5.778 (1.000)	49	292527			150.57- 210.57	183.02
92 Chloroform						CAS #: 67-66-3	
5.835	5.835 (1.010)	83	27594	2.00000	2.032	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	18631			34.70- 94.70	67.52
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	19272	2.00000	2.021	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	34982			142.57- 202.57	181.52
5.957	5.957 (1.031)	41	20285			62.09- 122.09	105.26
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	31014	2.00000	2.006	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	19587			34.02- 94.02	63.16
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	28698	2.00000	1.977	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	27861			70.64- 130.64	97.08
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	8669	2.00000	2.064	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	21304			226.85- 286.85	245.75
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.280 (1.088)	57	105858	2.00000	1.977	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	34121			2.24- 62.24	32.23
6.287	6.280 (1.088)	41	25646			0.00- 54.39	24.23
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	42719	2.00000	2.114	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	9426			0.00- 52.90	22.07
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213845	25.0000	25.226	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	109056			27.21- 87.21	51.00
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	12080	2.00000	2.059	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	45185			372.79- 432.79	374.05
6.358	6.358 (0.955)	55	15451			112.09- 172.09	127.91
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	21692	2.00000	2.056	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	7191			0.79- 60.79	33.15
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	15826	2.00000	2.037	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	42456			226.53- 286.53	268.27
6.444	6.444 (0.968)	57	22790			100.85- 160.85	144.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	608981	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	97098			0.00- 45.71	15.94
110 n-Butanol						CAS #: 71-36-3	
6.817	6.810 (1.024)	56	13920	2.00000	1.933	80.00- 120.00	100.00
6.817	6.810 (1.024)	41	11206			40.99- 100.99	80.50
6.817	6.810 (1.024)	43	8308			27.38- 87.38	59.68
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	20090	2.00000	2.063	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	21639			76.29- 136.29	107.71
6.867	6.867 (1.031)	97	12122			33.63- 93.63	60.34
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.096	7.089 (1.066)	63	20821	2.00000	2.005	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	14576			41.07- 101.07	70.01
7.096	7.089 (1.066)	41	10584			22.53- 82.53	50.83
116 Methyl Methacrylate						CAS #: 80-62-6	
7.139	7.132 (0.755)	69	16454	2.00000	1.977	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	33345			179.84- 239.84	202.66
7.139	7.139 (0.755)	100	6482			9.59- 69.59	39.39
117 1,4-Dioxane						CAS #: 123-91-1	
7.182	7.175 (1.079)	88	11643	2.00000	2.092	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	11397			68.28- 128.28	97.89
7.175	7.175 (1.077)	57	4191			2.68- 62.68	36.00
118 Dibromomethane						CAS #: 74-95-3	
7.203	7.204 (0.761)	174	19142	2.00000	2.126	80.00- 120.00	100.00
7.203	7.204 (0.761)	93	16978			60.09- 120.09	88.70
7.203	7.204 (0.761)	95	14808			48.38- 108.38	77.36
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	31009	2.00000	2.066	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	19794			35.24- 95.24	63.83
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.691	7.691 (1.155)	75	25607	2.00000	2.035	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	8122			2.42- 62.42	31.72
7.691	7.691 (1.155)	39	17386			37.16- 97.16	67.90
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	26965	2.00000	1.892	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	13600			15.78- 75.78	50.44

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	34696			84.64- 144.64	128.67
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.791 (1.171)	58	20235	2.00000	1.954	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	55273			242.35- 302.35	273.16
7.798	7.791 (1.171)	85	7479			3.24- 63.24	36.96
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	665455	25.0000	25.210	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	77094			0.00- 40.44	11.59
7.891	7.891 (1.185)	100	431576			34.95- 94.95	64.85
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	56064	2.00000	1.997	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	34906			28.38- 88.38	62.26
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	22118	2.00000	1.902	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	18563			56.00- 116.00	83.93
7.941	7.949 (1.193)	43	60251			228.66- 288.66	272.41
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	24394	2.00000	2.042	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	8513			1.24- 61.24	34.90
8.213	8.214 (0.868)	39	16646			34.11- 94.11	68.24
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	19362	2.00000	2.008	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	12564			31.96- 91.96	64.89
8.400	8.400 (0.888)	83	17346			52.93- 112.93	89.59
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	28170	2.00000	1.983	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	21640			47.84- 107.84	76.82
8.464	8.464 (0.895)	131	20810			45.29- 105.29	73.87
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	27816	2.00000	1.995	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	55470			162.87- 222.87	199.42
8.586	8.586 (0.908)	100	4450			0.00- 45.94	16.00
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	27760	2.00000	2.102	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	35478			94.99- 154.99	127.80
8.579	8.579 (1.288)	78	9229			2.05- 62.05	33.25

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1		
8.801	8.801 (0.930)	129	36760	2.00000		1.973	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	28370				47.45- 107.45	77.18
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4		
8.951	8.951 (0.946)	107	32272	2.00000		2.011	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	30370				64.21- 124.21	94.11
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0		
7.605	7.605 (1.142)	63	38340	2.00000		2.022	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	11961				0.00- 59.64	31.20
7.605	7.605 (1.142)	144	3836				0.00- 39.63	10.01
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	602501	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	328882				23.78- 83.78	54.59
154 Chlorobenzene						CAS #: 108-90-7		
9.496	9.496 (1.004)	112	48343	2.00000		2.025	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	15057				1.74- 61.74	31.15
9.496	9.496 (1.004)	77	32004				25.04- 85.04	66.20
155 Ethyl Benzene						CAS #: 100-41-4		
9.567	9.567 (1.011)	106	24932	2.00000		1.960	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	76105				273.74- 333.74	305.25
156 Nonane						CAS #: 111-84-2		
9.596	9.596 (1.014)	43	63929	2.00000		1.973	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	51732				54.16- 114.16	80.92
9.596	9.603 (1.014)	85	15047				0.00- 53.90	23.54
158 m,p-Xylene						CAS #: 108-38-3		
9.718	9.718 (1.027)	106	30801	2.00000		1.958	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	61907				163.73- 223.73	200.99
164 o-Xylene						CAS #: 95-47-6		
10.226	10.226 (1.081)	106	31016	2.00000		2.047	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	61477				177.45- 237.45	198.21
165 Styrene						CAS #: 100-42-5		
10.255	10.255 (1.084)	104	51582	2.00000		1.986	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	24588				17.88- 77.88	47.67
167 Bromoform						CAS #: 75-25-2		
10.541	10.542 (1.114)	173	35253	2.00000		1.964	80.00- 120.00	100.00
10.549	10.542 (1.115)	171	18187				21.25- 81.25	51.59

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene						CAS #: 98-82-8		
10.649	10.649 (1.126)	105	92633	2.00000	1.959	80.00- 120.00	100.00	
10.649	10.649 (1.126)	120	25468			0.00- 58.52	27.49	
10.649	10.649 (1.126)	51	12337			0.00- 43.00	13.32	
169 Cyclohexanone						CAS #: 108-94-1		
10.871	10.871 (1.149)	55	34971	2.00000	2.003	80.00- 120.00	100.00(a)	
10.878	10.871 (1.150)	98	11080			1.94- 61.94	31.68	
10.871	10.871 (1.149)	42	22417			37.89- 97.89	64.10	
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	386143	25.0000	25.034	80.00- 120.00	100.00	
10.914	10.921 (1.154)	95	491927			95.92- 155.92	127.40	
10.921	10.921 (1.154)	176	373529			66.89- 126.89	96.73	
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
11.100	11.100 (1.173)	83	45589	2.00000	1.968	80.00- 120.00	100.00	
11.107	11.100 (1.174)	85	30225			35.20- 95.20	66.30	
177 Bromobenzene						CAS #: 108-86-1		
11.107	11.107 (1.174)	156	29228	2.00000	2.039	80.00- 120.00	100.00	
11.107	11.107 (1.174)	158	27871			67.21- 127.21	95.36	
11.179	11.179 (1.182)	77	16535			29.02- 89.02	56.57	
178 Propylbenzene						CAS #: 103-65-1		
11.150	11.150 (1.179)	120	27541	2.00000	1.952	80.00- 120.00	100.00	
11.150	11.150 (1.179)	91	110564			366.49- 426.49	401.45	
11.150	11.150 (1.179)	105	4410			0.00- 44.85	16.01	
179 1,2,3-Trichloropropane						CAS #: 96-18-4		
11.179	11.179 (1.182)	110	15487	2.00000	2.068	80.00- 120.00	100.00	
11.179	11.179 (1.182)	75	44040			280.55- 340.55	284.37	
11.100	11.100 (1.173)	61	6929			15.49- 75.49	44.74	
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6		
11.179	11.179 (1.182)	53	10130	2.00000	2.088	80.00- 120.00	100.00	
11.179	11.179 (1.182)	89	7740			49.11- 109.11	76.41	
11.179	11.179 (1.182)	75	44040			426.44- 486.44	434.75	
182 Decane						CAS #: 124-18-5		
11.251	11.251 (1.189)	57	75743	2.00000	1.938	80.00- 120.00	100.00	
11.251	11.251 (1.189)	71	21477			0.00- 57.66	28.36	
11.258	11.258 (1.190)	142	2780			0.00- 34.09	3.67	
183 4-Ethyltoluene						CAS #: 622-96-8		
11.286	11.287 (1.193)	120	30874	2.00000	2.017	80.00- 120.00	100.00	

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	94572			284.55- 344.55	306.32
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	23935	2.00000	2.009	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	81565			315.17- 375.17	340.78
11.301	11.301 (1.195)	65	12898			21.55- 81.55	53.89
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	40449	2.00000	1.939	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	83373			164.93- 224.93	206.12
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	42379	2.00000	2.012	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	23377			25.30- 85.30	55.16
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	78389	2.00000	2.001	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	18724			0.00- 54.25	23.89
11.738	11.738 (1.241)	91	46791			31.27- 91.27	59.69
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	78168	2.00000	1.959	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	40414			19.05- 79.05	51.70
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	24394	2.00000	2.013	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	113600			437.55- 497.55	465.69
11.996	11.996 (1.268)	91	17621			40.76- 100.76	72.23
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	104556	2.00000	1.942	80.00- 120.00	100.00
12.153	12.160 (1.285)	134	27205			0.00- 55.54	26.02
12.153	12.153 (1.285)	91	22499			0.00- 51.48	21.52
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	55740	2.00000	2.016	80.00- 120.00	100.00
12.196	12.196 (1.289)	148	34699			33.21- 93.21	62.25
12.196	12.196 (1.289)	111	22480			11.31- 71.31	40.33
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	54700	2.00000	1.976	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	35545			33.90- 93.90	64.98
12.311	12.311 (1.301)	111	21710			9.45- 69.45	39.69
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	74656	2.00000	2.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	17192			0.00- 53.26	23.03
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	87872	2.00000	1.994	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	80279			58.12- 118.12	91.36
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	28076	2.00000	2.018	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	92470			314.79- 374.79	329.36
12.626	12.626 (1.335)	92	50010			154.29- 214.29	178.12
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	54244	2.00000	2.034	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	33671			33.84- 93.84	62.07
12.733	12.741 (1.346)	111	23692			12.73- 72.73	43.68
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	31809	2.00000	1.969	80.00- 120.00	100.00(a)
13.600	13.600 (1.438)	75	26948			52.48- 112.48	84.72
13.600	13.600 (1.438)	155	24389			47.41- 107.41	76.67
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	76973	2.47000	2.484	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	66209			52.87- 112.87	86.02
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.460	14.467 (1.529)	180	50012	2.52000	2.605	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	47092			65.33- 125.33	94.16
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	35349	2.57000	2.658	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	22934			33.17- 93.17	64.88
216 Naphthalene					CAS #: 91-20-3		
14.760	14.768 (1.560)	128	13400	0.25000	0.2587	80.00- 120.00	100.00(a)
14.768	14.768 (1.561)	127	2043			0.00- 42.88	15.25
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	46605	2.66000	2.753	80.00- 120.00	100.00
15.068	15.069 (1.593)	182	42985			65.75- 125.75	92.23
15.061	15.069 (1.592)	145	15683			5.23- 65.23	33.65

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051905.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	159831	0.64
108 1,4-Difluorobenze	597103	358262	835944	608981	1.99
153 Chlorobenzene-d5	587747	352648	822846	602501	2.51

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051905.d

Date : 19-MAY-2021 14:30

Client ID:

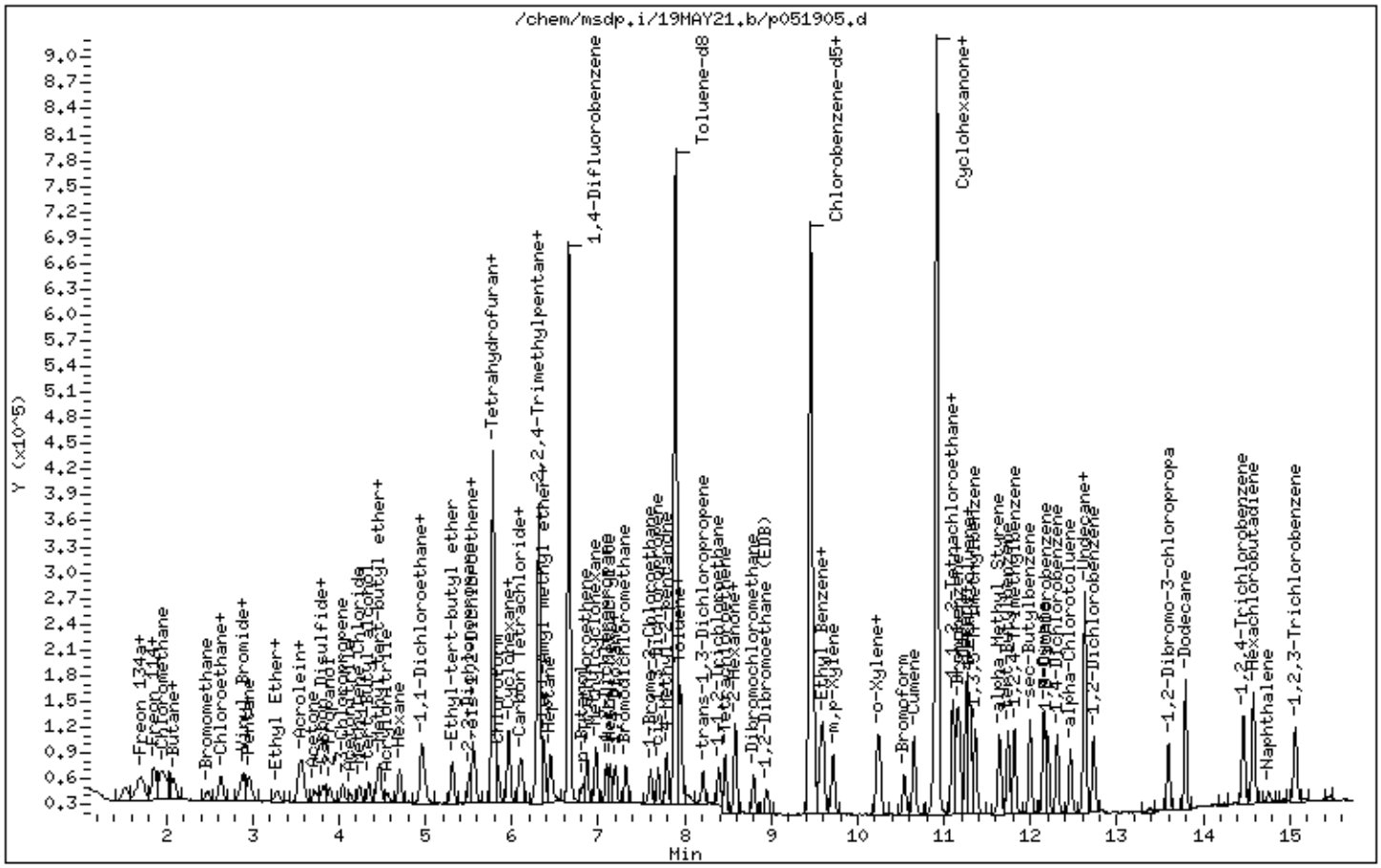
Instrument: msdp.i

Sample Info: 80mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051916.d
Lab Smp Id: ICAL Level 4
Inj Date : 19-MAY-2021 20:13
Operator : gh Inst ID: msdp.i
Smp Info : 80mL 3018-1928
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:13 Cal File: p051916.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	156828	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	122219			48.23- 108.23	77.93
5.778	5.778 (1.000)	49	287649			150.57- 210.57	183.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	605078	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	96791			0.00- 45.71	16.00
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	594880	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	325179			23.78- 83.78	54.66
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	7005	2.00000	2.200	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	17061			243.50- 303.50	243.55
1.591	1.590 (0.275)	64	2455			0.00- 54.06	35.05
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	5172	2.00000	1.772	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.675	1.674 (0.290)	39	4252			34.98- 94.98	82.21
1.675	1.674 (0.290)	41	3543			25.22- 85.22	68.50
13 Freon 142b						CAS #: 75-68-3	
1.898	1.884 (0.329)	65	31581	2.00000	1.959	80.00- 120.00	100.00(a)
1.884	1.884 (0.326)	45	11066			0.00- 59.77	35.04
36 1-Pentene						CAS #: 109-67-1	
2.906	2.906 (0.503)	55	19625	2.00000	1.877	80.00- 120.00	100.00(a)
2.906	2.906 (0.503)	42	27964			105.17- 165.17	142.49
40 Freon 123a						CAS #: 354-23-4	
3.378	3.385 (0.585)	117	19654	2.00000	1.937	80.00- 120.00	100.00(a)
3.386	3.378 (0.586)	67	26135			104.69- 164.69	132.98
41 Freon 123						CAS #: 306-83-2	
3.479	3.479 (0.602)	83	29140	2.00000	2.074	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	6343			0.00- 50.87	21.77
3.479	3.479 (0.602)	85	20407			36.08- 96.08	70.03
55 Cyclopentene						CAS #: 142-29-0	
4.073	4.073 (0.705)	67	30943	2.00000	2.049	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	11219			6.76- 66.76	36.26
4.073	4.073 (0.705)	53	8640			0.00- 57.54	27.92
56 Methyl Acetate						CAS #: 79-20-9	
4.080	4.073 (0.706)	43	37032	2.00000	2.096	80.00- 120.00	100.00(a)
4.080	4.073 (0.706)	74	5940			0.00- 44.13	16.04
74 Chloroprene						CAS #: 126-99-8	
5.019	5.019 (0.869)	53	28789	2.00000	2.062	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	11054			9.21- 69.21	38.40
5.019	5.019 (0.869)	50	7722			0.00- 54.25	26.82
75 1-Propanol						CAS #: 71-23-8	
5.090	5.083 (0.881)	59	4700	2.00000	2.160	80.00- 120.00	100.00
5.090	5.083 (0.881)	42	3899			63.23- 123.23	82.96
5.090	5.083 (0.881)	41	2821			24.74- 84.74	60.02
88 Methyl Acrylate						CAS #: 96-33-3	
5.628	5.620 (0.974)	55	37088	2.00000	1.993	80.00- 120.00	100.00(a)
5.628	5.620 (0.974)	85	5500			0.00- 41.28	14.83
5.628	5.620 (0.974)	58	3509			0.00- 38.22	9.46
103 Isobutanol						CAS #: 78-83-1	
6.244	6.244 (1.081)	39	4047	2.00000	1.753	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	20761			448.18- 508.18	513.00
6.244	6.244 (1.081)	41	13172			299.99- 359.99	325.48
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.938 (0.734)	99	2995	2.00000	2.111	80.00- 120.00	100.00
6.946	6.938 (0.734)	45	5574			149.95- 209.95	186.11
6.939	6.938 (0.733)	55	50476			1849.07-1909.07	1685.34
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	62449	2.00000	2.048	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	4500			0.00- 37.44	7.21
7.032	7.031 (0.743)	86	7757			0.00- 42.78	12.42
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	30994	2.00000	2.010	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	9804			0.00- 59.10	31.63
8.665	8.657 (1.301)	43	73858			215.30- 275.30	238.30
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	24295	2.00000	1.850	80.00- 120.00	100.00(a)
9.460	9.460 (1.000)	117	594880			57.42- 117.42	2448.57
9.603	9.596 (1.015)	95	9068			5.70- 65.70	37.32
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	45629	2.00000	1.976	80.00- 120.00	100.00(a)
10.362	10.362 (1.793)	43	77430			136.03- 196.03	169.69
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	17413	2.00000	1.618	80.00- 120.00	100.00(a)
12.089	12.089 (1.278)	93	11534			39.41- 99.41	66.24
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	25118	2.00000	2.045	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	72648			295.02- 355.02	289.23
11.444	11.444 (1.210)	63	9860			11.82- 71.82	39.25
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	34881	2.00000	1.964	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	77447			192.40- 252.40	222.03
12.311	12.318 (1.301)	77	8888			0.00- 54.69	25.48
205 Hexachloroethane					CAS #: 67-72-1		
12.963	12.970 (1.370)	201	9631	2.00000	1.605	80.00- 120.00	100.00(a)
12.963	12.970 (1.370)	117	13291			102.99- 162.99	138.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	50566	2.00000	2.010	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	47208			65.24- 125.24	93.36
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	45684	2.00000	1.964	80.00- 120.00	100.00(a)
10.599	10.599 (1.120)	77	14355			0.00- 58.21	31.42
214 beta-Pinene					CAS #: 127-91-3		
11.415	11.422 (1.207)	93	23101	2.00000	1.704	80.00- 120.00	100.00(a)
11.444	11.444 (1.210)	91	72648			153.57- 213.57	314.48

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051916.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	156828	-1.25
108 1,4-Difluorobenze	597103	358262	835944	605078	1.34
153 Chlorobenzene-d5	587747	352648	822846	594880	1.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051916.d

Date : 19-MAY-2021 20:13

Client ID:

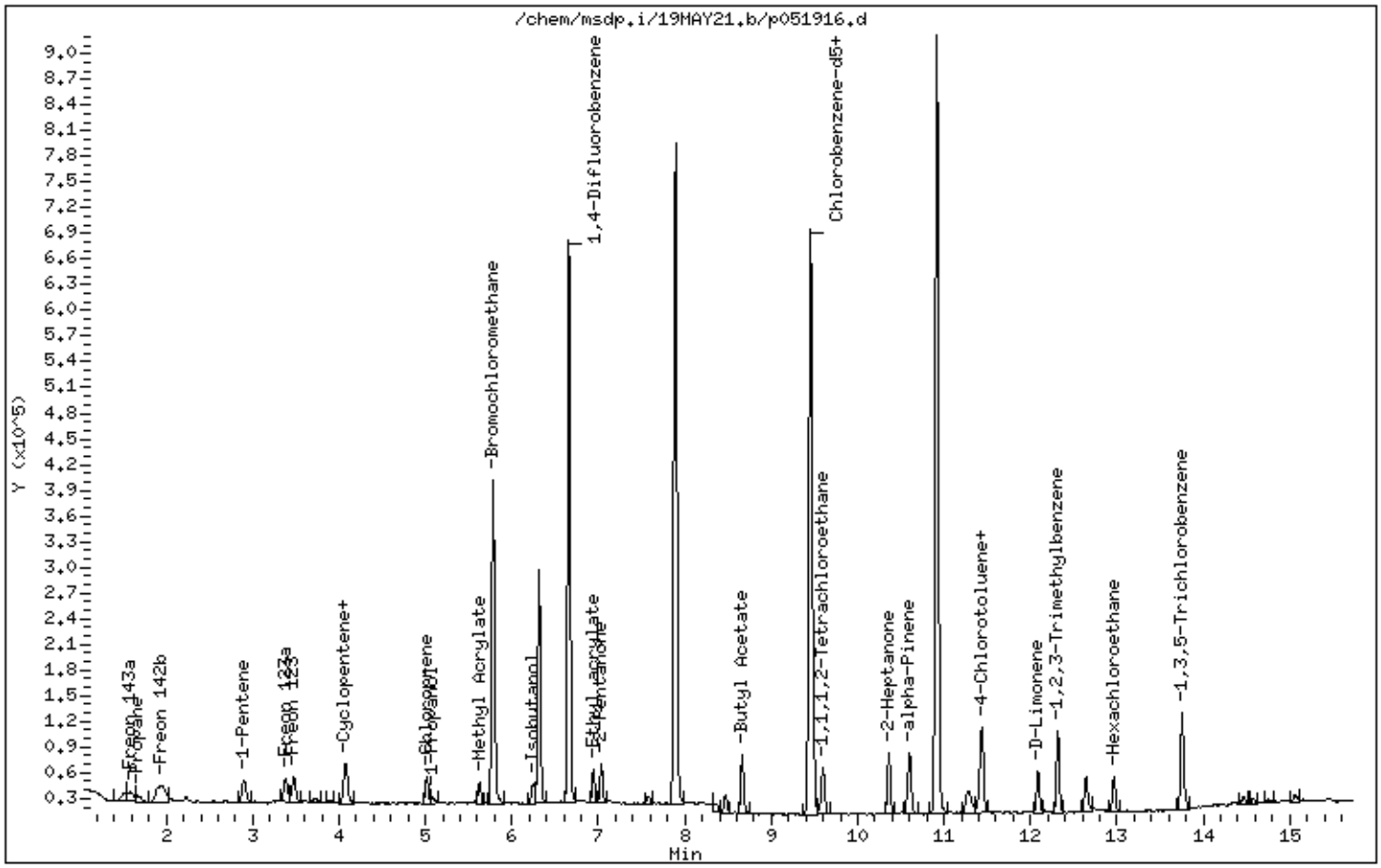
Instrument: msdp.i

Sample Info: 80mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051906.d
Lab Smp Id: ICAL Level 5
Inj Date : 19-MAY-2021 15:00
Operator : LD Inst ID: msdp.i
Smp Info : 200mL 3018-2045
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:43 Cal File: p051917.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.661	1.633 (0.287)	83	23995	5.00000	4.931	80.00- 120.00	100.00
1.661	1.633 (0.287)	69	22578			59.44- 119.44	94.09
1.759	1.745 (0.304)	51	102230			419.06- 479.06	426.05
5 Propylene					CAS #: 115-07-1		
1.689	1.675 (0.292)	41	35760	5.00000	4.916	80.00- 120.00	100.00
1.689	1.675 (0.292)	42	24631			35.28- 95.28	68.88
1.689	1.675 (0.292)	39	23528			38.35- 98.35	65.79
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	15753	5.00000	4.318	80.00- 120.00	100.00
1.759	1.745 (0.304)	51	102230			597.63- 657.63	648.96
1.717	1.703 (0.297)	47	10143			33.72- 93.72	64.39
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	74104	5.00000	5.482	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	24165			2.37- 62.37	32.61
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.745 (0.304)	67	7019	5.00000	5.292	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.759	1.745 (0.304)	51	102230			1501.01-1561.01	1456.48
10 Freon 114					CAS #: 76-14-2		
1.857	1.856 (0.321)	135	74492	5.00000	5.312	80.00- 120.00	100.00
1.857	1.856 (0.321)	137	23699			2.30- 62.30	31.81
12 Isobutane					CAS #: 75-28-5		
1.871	1.870 (0.323)	43	83131	5.00000	5.099	80.00- 120.00	100.00
1.871	1.870 (0.323)	42	28746			2.44- 62.44	34.58
1.871	1.856 (0.323)	58	3128			0.00- 33.36	3.76
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	34644	5.00000	4.063	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	9203			0.00- 56.26	26.56
18 Butane					CAS #: 106-97-8		
2.032	2.025 (0.351)	58	10771	5.00000	5.513	80.00- 120.00	100.00
2.039	2.025 (0.352)	43	81676			823.29- 883.29	758.30
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	52333	5.00000	5.191	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	16408			0.00- 59.69	31.35
20 1,3-Butadiene					CAS #: 106-99-0		
2.104	2.089 (0.364)	54	34439	5.00000	4.748	80.00- 120.00	100.00
2.096	2.089 (0.362)	39	40510			52.37- 112.37	117.63
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.429)	94	37056	5.00000	5.477	80.00- 120.00	100.00
2.483	2.483 (0.429)	96	35000			64.07- 124.07	94.45
30 Chloroethane					CAS #: 75-00-3		
2.619	2.612 (0.453)	64	20225	5.00000	5.684	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	5966			0.04- 60.04	29.50
2.612	2.612 (0.452)	49	6111			4.54- 64.54	30.22
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	54200	5.00000	5.198	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	34951			34.12- 94.12	64.49
32 Vinyl Bromide					CAS #: 593-60-2		
2.849	2.841 (0.492)	106	30600	5.00000	5.302	80.00- 120.00	100.00
2.849	2.841 (0.492)	108	29476			69.27- 129.27	96.33
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	77104	5.00000	5.291	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.891	2.884 (0.500)	103	50811			34.72- 94.72	65.90
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.899 (0.502)	67	65512	5.00000	5.152	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	21322			0.84- 60.84	32.55
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	87490	5.00000	5.059	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	12542			0.00- 44.98	14.34
2.970	2.970 (0.513)	72	6373			0.00- 37.39	7.28
38 Ethyl Ether					CAS #: 60-29-7		
3.293	3.285 (0.569)	74	15538	5.00000	5.437	80.00- 120.00	100.00
3.293	3.285 (0.569)	59	30441			163.46- 223.46	195.91
3.285	3.285 (0.568)	45	42142			250.40- 310.40	271.22
39 Ethanol					CAS #: 64-17-5		
3.250	3.242 (0.562)	46	7863	5.00000	4.992	80.00- 120.00	100.00
3.285	3.242 (0.568)	45	41557			511.19- 571.19	528.51
42 Acrolein					CAS #: 107-02-8		
3.543	3.529 (0.612)	55	14233	5.00000	5.312	80.00- 120.00	100.00
3.543	3.529 (0.612)	56	18296			111.10- 171.10	128.55
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	56770	5.00000	5.289	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	35706			33.56- 93.56	62.90
3.550	3.550 (0.614)	101	68951			89.21- 149.21	121.46
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	33311	5.00000	5.191	80.00- 120.00	100.00
3.586	3.579 (0.620)	98	21526			34.02- 94.02	64.62
3.586	3.579 (0.620)	61	66191			168.77- 228.77	198.71
47 Acetone					CAS #: 67-64-1		
3.722	3.708 (0.643)	58	20489	5.00000	4.976	80.00- 120.00	100.00
3.722	3.708 (0.643)	43	68525			302.95- 362.95	334.45
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	91954	5.00000	5.292	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.801	3.794 (0.657)	142	34575	5.00000	3.786	80.00- 120.00	100.00
3.801	3.794 (0.657)	127	14689			12.22- 72.22	42.48

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.673)	45	81715	5.00000	5.020	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	14133			0.00- 47.19	17.30
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	15048	5.00000	5.111	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	60762			396.19- 456.19	403.79
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	39661	5.00000	5.288	80.00- 120.00	100.00
4.138	4.123 (0.715)	40	25399			20.95- 80.95	64.04
4.138	4.123 (0.715)	38	4002			0.00- 41.17	10.09
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	56613	5.00000	5.369	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	29850			22.03- 82.03	52.73
4.238	4.238 (0.733)	51	17301			0.18- 60.18	30.56
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.346	4.338 (0.751)	59	101502	5.00000	5.272	80.00- 120.00	100.00
4.346	4.338 (0.751)	41	20240			0.00- 51.11	19.94
4.346	4.338 (0.751)	57	10646			0.00- 40.49	10.49
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.453	4.446 (0.770)	73	95601	5.00000	5.059	80.00- 120.00	100.00
4.453	4.446 (0.770)	57	32712			3.10- 63.10	34.22
4.446	4.446 (0.768)	41	29468			1.28- 61.28	30.82
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	22139	5.00000	5.128	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	65349			255.84- 315.84	295.18
4.482	4.482 (0.775)	96	35688			127.59- 187.59	161.20
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.790)	52	31636	5.00000	5.067	80.00- 120.00	100.00
4.568	4.560 (0.790)	53	37230			88.05- 148.05	117.68
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.812)	57	78566	5.00000	5.242	80.00- 120.00	100.00
4.697	4.697 (0.812)	43	52548			37.52- 97.52	66.88
4.697	4.697 (0.812)	86	8762			0.00- 41.48	11.15
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	71027	5.00000	5.330	80.00- 120.00	100.00
4.969	4.962 (0.859)	65	20959			0.00- 59.70	29.51

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether						CAS #: 108-20-3	
	4.954	4.954 (0.856)	45	175979	5.00000	5.056	80.00- 120.00	100.00
	4.954	4.954 (0.856)	87	32174			0.00- 48.18	18.28
	4.954	4.954 (0.856)	59	19101			0.00- 40.15	10.85
	73 Vinyl Acetate						CAS #: 108-05-4	
	4.997	4.997 (0.864)	86	8490	5.00000	5.067	80.00- 120.00	100.00
	4.997	4.997 (0.864)	43	210809			2432.48-2492.48	2483.03
	79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
	5.305	5.305 (0.917)	59	155272	5.00000	5.130	80.00- 120.00	100.00
	5.313	5.305 (0.918)	87	47844			1.00- 61.00	30.81
	5.305	5.305 (0.917)	41	29096			0.00- 48.73	18.74
	84 2,2-Dichloropropane						CAS #: 594-20-7	
	5.506	5.506 (0.952)	77	57515	5.00000	5.111	80.00- 120.00	100.00
	5.506	5.506 (0.952)	79	19126			2.28- 62.28	33.25
	5.513	5.506 (0.953)	97	14288			0.00- 53.93	24.84
	85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
	5.549	5.549 (0.959)	98	23684	5.00000	5.416	80.00- 120.00	100.00
	5.549	5.549 (0.959)	96	37228			125.75- 185.75	157.19
	5.549	5.549 (0.959)	61	88318			332.40- 392.40	372.90
	86 2-Butanone						CAS #: 78-93-3	
	5.563	5.556 (0.962)	72	18843	5.00000	5.301	80.00- 120.00	100.00
	5.570	5.556 (0.963)	43	231029			1214.50-1274.50	1226.07
	5.556	5.556 (0.960)	57	9599			14.68- 74.68	50.94
	87 Ethyl Acetate						CAS #: 141-78-6	
	5.578	5.570 (0.964)	45	18229	5.00000	5.206	80.00- 120.00	100.00
	5.549	5.549 (0.959)	61	88318			452.04- 512.04	484.49
	5.578	5.570 (0.964)	70	9745			22.77- 82.77	53.46
	89 Tetrahydrofuran						CAS #: 109-99-9	
	5.778	5.771 (0.999)	42	62552	5.00000	5.248	80.00- 120.00	100.00
	5.778	5.771 (0.999)	71	16889			0.00- 55.82	27.00
	5.778	5.771 (0.999)	72	17687			0.00- 57.59	28.28
*	90 Bromochloromethane						CAS #: 74-97-5	
	5.785	5.778 (1.000)	130	153560	25.0000		80.00- 120.00	100.00
	5.785	5.778 (1.000)	128	120740			48.23- 108.23	78.63
	5.785	5.778 (1.000)	49	285150			150.57- 210.57	185.69
	92 Chloroform						CAS #: 67-66-3	
	5.843	5.835 (1.010)	83	72304	5.00000	5.396	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.009)	85	48644			34.70- 94.70	67.28
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	48651	5.00000	5.230	80.00- 120.00	100.00
5.957	5.957 (1.030)	56	84034			142.57- 202.57	172.73
5.957	5.957 (1.030)	41	47136			62.09- 122.09	96.89
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.032)	97	76302	5.00000	5.101	80.00- 120.00	100.00
5.972	5.972 (1.032)	99	48638			34.02- 94.02	63.74
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.052)	119	68353	5.00000	4.926	80.00- 120.00	100.00
6.086	6.086 (1.052)	117	69130			70.64- 130.64	101.14
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.918)	110	21692	5.00000	5.091	80.00- 120.00	100.00
6.115	6.115 (0.917)	75	54412			226.85- 286.85	250.84
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.085)	57	268783	5.00000	5.166	80.00- 120.00	100.00
6.280	6.280 (1.085)	56	86771			2.24- 62.24	32.28
6.280	6.280 (1.085)	41	65018			0.00- 54.39	24.19
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	103868	5.00000	5.071	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	24431			0.00- 52.90	23.52
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	219202	25.0000	26.408	80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110588			27.21- 87.21	50.45
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	27837	5.00000	4.798	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	110361			372.79- 432.79	396.45
6.358	6.358 (0.954)	55	40445			112.09- 172.09	145.29
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	57760	5.00000	5.314	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	18494			0.79- 60.79	32.02
107 Heptane					CAS #: 142-82-5		
6.452	6.444 (0.968)	71	40838	5.00000	5.157	80.00- 120.00	100.00
6.452	6.444 (0.968)	43	109706			226.53- 286.53	268.64
6.452	6.444 (0.968)	57	53636			100.85- 160.85	131.34

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.666	6.659 (1.000)	114	614215	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	99192			0.00- 45.71	16.15
110 n-Butanol						CAS #: 71-36-3	
6.817	6.810 (1.023)	56	37585	5.00000	5.115	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	25791			40.99- 100.99	68.62
6.817	6.810 (1.023)	43	19657			27.38- 87.38	52.30
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.030)	95	50753	5.00000	5.124	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	55306			76.29- 136.29	108.97
6.867	6.867 (1.030)	97	33227			33.63- 93.63	65.47
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.096	7.089 (1.064)	63	52290	5.00000	4.994	80.00- 120.00	100.00
7.096	7.089 (1.064)	62	37275			41.07- 101.07	71.29
7.096	7.089 (1.064)	41	32092			22.53- 82.53	61.37
116 Methyl Methacrylate						CAS #: 80-62-6	
7.139	7.132 (0.755)	69	42786	5.00000	5.002	80.00- 120.00	100.00
7.139	7.132 (0.755)	41	84724			179.84- 239.84	198.02
7.139	7.139 (0.755)	100	16675			9.59- 69.59	38.97
117 1,4-Dioxane						CAS #: 123-91-1	
7.182	7.175 (1.077)	88	29029	5.00000	5.128	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	30676			68.28- 128.28	105.67
7.175	7.175 (1.076)	57	10403			2.68- 62.68	35.84
118 Dibromomethane						CAS #: 74-95-3	
7.204	7.204 (0.761)	174	48548	5.00000	5.183	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	44155			60.09- 120.09	90.95
7.204	7.204 (0.761)	95	37033			48.38- 108.38	76.28
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.098)	83	79651	5.00000	5.195	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	50267			35.24- 95.24	63.11
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.698	7.691 (1.155)	75	66685	5.00000	5.188	80.00- 120.00	100.00
7.691	7.691 (1.154)	77	20474			2.42- 62.42	30.70
7.698	7.691 (1.155)	39	45208			37.16- 97.16	67.79
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.046)	83	68708	5.00000	4.834	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	32707			15.78- 75.78	47.60

					AMOUNTS			
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)								
6.974	6.974 (1.046)	55	78753				84.64- 144.64	114.62
131 4-Methyl-2-pentanone						CAS #: 108-10-1		
7.798	7.791 (1.170)	58	52502	5.00000		5.020	80.00- 120.00	100.00
7.798	7.791 (1.170)	43	142064				242.35- 302.35	270.59
7.798	7.791 (1.170)	85	17584				3.24- 63.24	33.49
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	675430	25.0000		25.276	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	73047				0.00- 40.44	10.81
7.891	7.891 (1.184)	100	435947				34.95- 94.95	64.54
137 Toluene						CAS #: 108-88-3		
7.956	7.949 (1.193)	91	142004	5.00000		5.011	80.00- 120.00	100.00
7.956	7.949 (1.193)	92	83371				28.38- 88.38	58.71
136 Octane						CAS #: 111-65-9		
7.949	7.949 (1.192)	57	58129	5.00000		4.968	80.00- 120.00	100.00
7.949	7.949 (1.192)	85	50245				56.00- 116.00	86.44
7.949	7.949 (1.192)	43	157708				228.66- 288.66	271.31
139 trans-1,3-Dichloropropene						CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	61054	5.00000		4.981	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	20798				1.24- 61.24	34.06
8.214	8.214 (0.868)	39	41024				34.11- 94.11	67.19
141 1,1,2-Trichloroethane						CAS #: 79-00-5		
8.400	8.400 (0.888)	97	49333	5.00000		4.984	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	30960				31.96- 91.96	62.76
8.400	8.400 (0.888)	83	42360				52.93- 112.93	85.87
142 Tetrachloroethene						CAS #: 127-18-4		
8.464	8.464 (0.895)	166	71008	5.00000		4.897	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	56371				47.84- 107.84	79.39
8.464	8.464 (0.895)	131	53822				45.29- 105.29	75.80
143 2-Hexanone						CAS #: 591-78-6		
8.586	8.586 (0.908)	58	73185	5.00000		5.071	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	139375				162.87- 222.87	190.44
8.586	8.586 (0.908)	100	11054				0.00- 45.94	15.10
144 1,3-Dichloropropane						CAS #: 142-28-9		
8.579	8.579 (1.287)	76	69233	5.00000		5.146	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	91020				94.99- 154.99	131.47
8.579	8.579 (1.287)	78	23803				2.05- 62.05	34.38

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
146 Dibromochloromethane						CAS #: 124-48-1		
8.801	8.801 (0.930)	129	91590	5.00000		4.835	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	70825				47.45- 107.45	77.33
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4		
8.951	8.951 (0.946)	107	81392	5.00000		4.951	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	77262				64.21- 124.21	94.93
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0		
7.605	7.605 (1.141)	63	98471	5.00000		5.098	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	28839				0.00- 59.64	29.29
7.612	7.605 (1.142)	144	9784				0.00- 39.63	9.94
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	619157	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	334026				23.78- 83.78	53.95
154 Chlorobenzene						CAS #: 108-90-7		
9.496	9.496 (1.004)	112	124593	5.00000		5.059	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	38052				1.74- 61.74	30.54
9.496	9.496 (1.004)	77	71532				25.04- 85.04	57.41
155 Ethyl Benzene						CAS #: 100-41-4		
9.567	9.567 (1.011)	106	62027	5.00000		4.807	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	188972				273.74- 333.74	304.66
156 Nonane						CAS #: 111-84-2		
9.603	9.596 (1.015)	43	159252	5.00000		4.835	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	134249				54.16- 114.16	84.30
9.603	9.603 (1.015)	85	35745				0.00- 53.90	22.45
158 m,p-Xylene						CAS #: 108-38-3		
9.718	9.718 (1.027)	106	78963	5.00000		4.914	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	153333				163.73- 223.73	194.18
164 o-Xylene						CAS #: 95-47-6		
10.226	10.226 (1.081)	106	75798	5.00000		4.901	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	152985				177.45- 237.45	201.83
165 Styrene						CAS #: 100-42-5		
10.255	10.255 (1.084)	104	128486	5.00000		4.859	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	63172				17.88- 77.88	49.17
167 Bromoform						CAS #: 75-25-2		
10.549	10.542 (1.115)	173	90352	5.00000		4.922	80.00- 120.00	100.00
10.549	10.542 (1.115)	171	45856				21.25- 81.25	50.75

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
168 Cumene						CAS #: 98-82-8		
10.649	10.649 (1.126)	105	240077	5.00000	4.956	80.00- 120.00		100.00
10.656	10.649 (1.126)	120	66515			0.00- 58.52		27.71
10.649	10.649 (1.126)	51	32083			0.00- 43.00		13.36
169 Cyclohexanone						CAS #: 108-94-1		
10.871	10.871 (1.149)	55	82861	5.00000	4.708	80.00- 120.00		100.00(a)
10.871	10.871 (1.149)	98	26897			1.94- 61.94		32.46
10.871	10.871 (1.149)	42	53882			37.89- 97.89		65.03
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	395495	25.0000	24.963	80.00- 120.00		100.00
10.921	10.921 (1.154)	95	504864			95.92- 155.92		127.65
10.921	10.921 (1.154)	176	377124			66.89- 126.89		95.35
175 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
11.107	11.100 (1.174)	83	115941	5.00000	4.902	80.00- 120.00		100.00
11.107	11.100 (1.174)	85	75106			35.20- 95.20		64.78
177 Bromobenzene						CAS #: 108-86-1		
11.107	11.107 (1.174)	156	72185	5.00000	4.925	80.00- 120.00		100.00
11.107	11.107 (1.174)	158	70501			67.21- 127.21		97.67
11.179	11.179 (1.182)	77	42638			29.02- 89.02		59.07
178 Propylbenzene						CAS #: 103-65-1		
11.150	11.150 (1.179)	120	70283	5.00000	4.886	80.00- 120.00		100.00
11.150	11.150 (1.179)	91	273213			366.49- 426.49		388.73
11.150	11.150 (1.179)	105	11389			0.00- 44.85		16.20
179 1,2,3-Trichloropropane						CAS #: 96-18-4		
11.179	11.179 (1.182)	110	35448	5.00000	4.699	80.00- 120.00		100.00
11.179	11.179 (1.182)	75	108981			280.55- 340.55		307.44
11.100	11.100 (1.173)	61	16930			15.49- 75.49		47.76
181 trans-1,4-Dichloro-2-butene						CAS #: 110-57-6		
11.179	11.179 (1.182)	53	24562	5.00000	4.944	80.00- 120.00		100.00
11.179	11.179 (1.182)	89	19278			49.11- 109.11		78.49
11.179	11.179 (1.182)	75	108981			426.44- 486.44		443.70
182 Decane						CAS #: 124-18-5		
11.251	11.251 (1.189)	57	178943	5.00000	4.581	80.00- 120.00		100.00
11.251	11.251 (1.189)	71	50239			0.00- 57.66		28.08
11.258	11.258 (1.190)	142	7536			0.00- 34.09		4.21
183 4-Ethyltoluene						CAS #: 622-96-8		
11.287	11.287 (1.193)	120	74542	5.00000	4.802	80.00- 120.00		100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
183 4-Ethyltoluene (continued)							
11.287	11.287 (1.193)	105	236331			284.55- 344.55	317.04
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	59824	5.00000	4.914	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	202772			315.17- 375.17	338.95
11.301	11.301 (1.195)	65	31085			21.55- 81.55	51.96
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	105493	5.00000	4.941	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	204343			164.93- 224.93	193.70
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	103352	5.00000	4.828	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	55037			25.30- 85.30	53.25
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	195585	5.00000	4.893	80.00- 120.00	100.00
11.745	11.738 (1.242)	134	47923			0.00- 54.25	24.50
11.738	11.738 (1.241)	91	122078			31.27- 91.27	62.42
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	197002	5.00000	4.852	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	100446			19.05- 79.05	50.99
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	61201	5.00000	4.936	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	289294			437.55- 497.55	472.69
11.996	11.996 (1.268)	91	43669			40.76- 100.76	71.35
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	263591	5.00000	4.820	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	69874			0.00- 55.54	26.51
12.160	12.153 (1.285)	91	57763			0.00- 51.48	21.91
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	138345	5.00000	4.901	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	88212			33.21- 93.21	63.76
12.196	12.196 (1.289)	111	57941			11.31- 71.31	41.88
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	139853	5.00000	4.937	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	90352			33.90- 93.90	64.60
12.311	12.311 (1.301)	111	54179			9.45- 69.45	38.74
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	190239	5.00000	4.969	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	42809			0.00- 53.26	22.50
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	220225	5.00000	4.896	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	195864			58.12- 118.12	88.94
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	68631	5.00000	4.849	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	231841			314.79- 374.79	337.81
12.626	12.626 (1.335)	92	123591			154.29- 214.29	180.08
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	136005	5.00000	4.972	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	85924			33.84- 93.84	63.18
12.733	12.741 (1.346)	111	58979			12.73- 72.73	43.37
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	79532	5.00000	4.858	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	66463			52.48- 112.48	83.57
13.600	13.600 (1.438)	155	62161			47.41- 107.41	78.16
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	213240	6.18000	6.559	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	173340			52.87- 112.87	81.29
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	130791	6.30000	6.544	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	126487			65.33- 125.33	96.71
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	92162	6.44000	6.665	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	58371			33.17- 93.17	63.34
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	32129	0.64000	0.6122	80.00- 120.00	100.00
14.761	14.768 (1.560)	127	4372			0.00- 42.88	13.61
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	118701	6.66000	6.782	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	113556			65.75- 125.75	95.67
15.069	15.069 (1.593)	145	41550			5.23- 65.23	35.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051906.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153560	-3.31
108 1,4-Difluorobenze	597103	358262	835944	614215	2.87
153 Chlorobenzene-d5	587747	352648	822846	619157	5.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.66	6.33	6.99	6.67	0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051906.d

Date : 19-MAY-2021 15:00

Client ID:

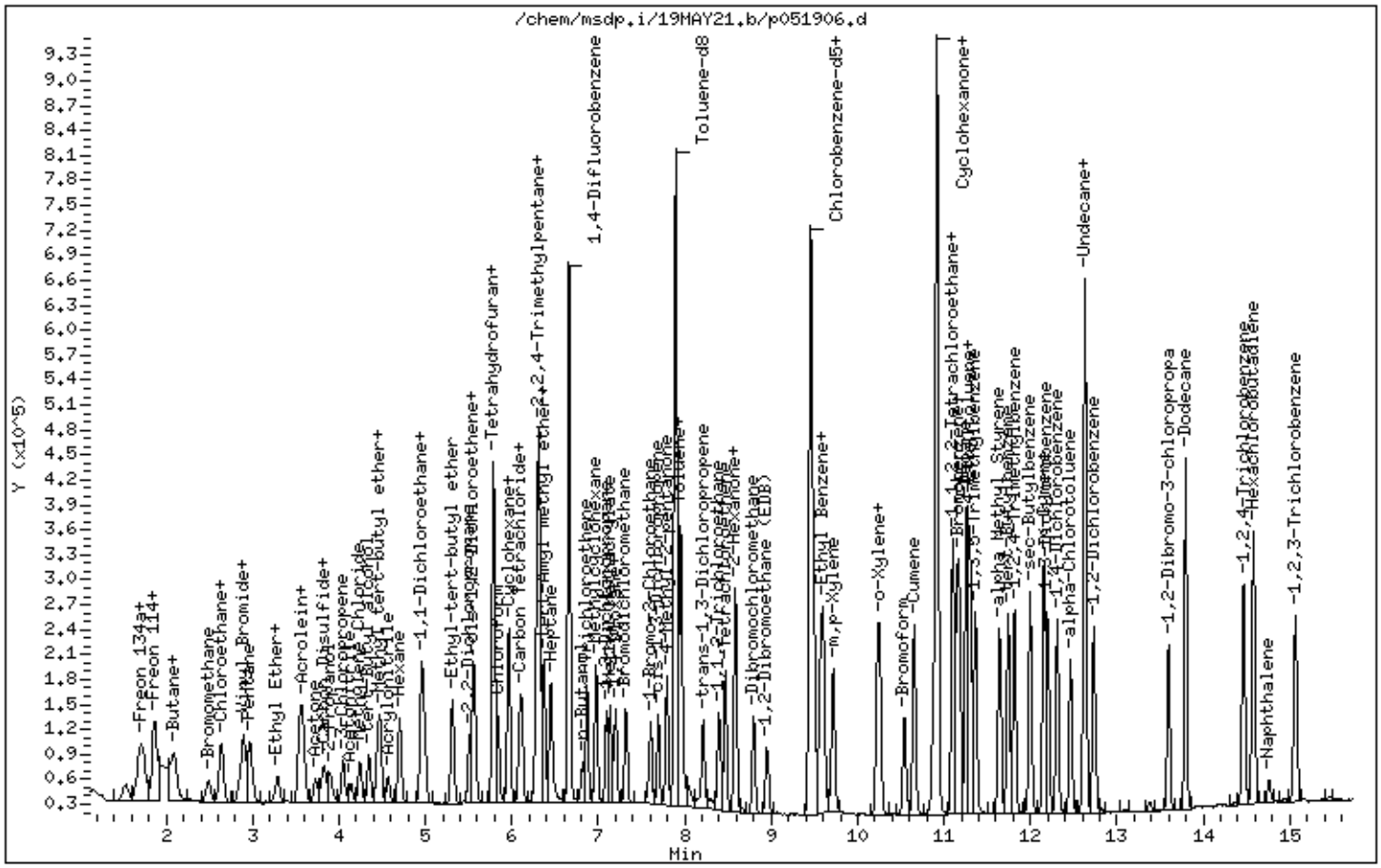
Instrument: msdp.i

Sample Info: 200mL 3018-2045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051917.d
Lab Smp Id: ICAL Level 5
Inj Date : 19-MAY-2021 20:43
Operator : gh Inst ID: msdp.i
Smp Info : 200mL 3018-1928
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 20:43 Cal File: p051917.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.785	5.778 (1.000)	130	153596	25.0000		80.00- 120.00	100.00
5.785	5.778 (1.000)	128	120099			48.23- 108.23	78.19
5.785	5.778 (1.000)	49	277119			150.57- 210.57	180.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	607535	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95316			0.00- 45.71	15.69
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	599728	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	327307			23.78- 83.78	54.58
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	8816	5.00000	2.827	80.00- 120.00	100.00
1.605	1.590 (0.277)	69	21877			243.50- 303.50	248.15
1.605	1.590 (0.277)	64	2504			0.00- 54.06	28.40
6 Propane					CAS #: 74-98-6		
1.688	1.674 (0.292)	43	14059	5.00000	4.918	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.688	1.674 (0.292)	39	9149			34.98- 94.98	65.08
1.688	1.674 (0.292)	41	8274			25.22- 85.22	58.85
13 Freon 142b					CAS #: 75-68-3		
1.898	1.884 (0.328)	65	77411	5.00000	4.903	80.00- 120.00	100.00
1.898	1.884 (0.328)	45	23408			0.00- 59.77	30.24
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.502)	55	50218	5.00000	4.904	80.00- 120.00	100.00(a)
2.906	2.906 (0.502)	42	65836			105.17- 165.17	131.10
40 Freon 123a					CAS #: 354-23-4		
3.393	3.385 (0.586)	117	52612	5.00000	5.296	80.00- 120.00	100.00(a)
3.386	3.378 (0.585)	67	63816			104.69- 164.69	121.30
41 Freon 123					CAS #: 306-83-2		
3.486	3.479 (0.603)	83	68341	5.00000	4.967	80.00- 120.00	100.00
3.486	3.479 (0.603)	133	15880			0.00- 50.87	23.24
3.486	3.479 (0.603)	85	48933			36.08- 96.08	71.60
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.704)	67	78856	5.00000	5.332	80.00- 120.00	100.00
4.073	4.073 (0.704)	68	30336			6.76- 66.76	38.47
4.073	4.073 (0.704)	53	22763			0.00- 57.54	28.87
56 Methyl Acetate					CAS #: 79-20-9		
4.088	4.073 (0.707)	43	91822	5.00000	5.308	80.00- 120.00	100.00
4.088	4.073 (0.707)	74	13069			0.00- 44.13	14.23
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.868)	53	75220	5.00000	5.500	80.00- 120.00	100.00
5.019	5.019 (0.868)	88	29151			9.21- 69.21	38.75
5.019	5.019 (0.868)	50	18461			0.00- 54.25	24.54
75 1-Propanol					CAS #: 71-23-8		
5.090	5.083 (0.880)	59	10283	5.00000	4.824	80.00- 120.00	100.00
5.090	5.083 (0.880)	42	8877			63.23- 123.23	86.33
5.090	5.083 (0.880)	41	5590			24.74- 84.74	54.36
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.620 (0.973)	55	95932	5.00000	5.264	80.00- 120.00	100.00
5.628	5.620 (0.973)	85	11014			0.00- 41.28	11.48
5.628	5.620 (0.973)	58	7843			0.00- 38.22	8.18
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.079)	39	10867	5.00000	4.807	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.079)	43	49327			448.18- 508.18	453.92
6.244	6.244 (1.079)	41	33984			299.99- 359.99	312.73
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.938 (0.734)	99	7111	5.00000	4.971	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	13011			149.95- 209.95	182.97
6.938	6.938 (0.733)	55	133152			1849.07-1909.07	1872.48
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	159681	5.00000	5.193	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	12244			0.00- 37.44	7.67
7.032	7.031 (0.743)	86	19990			0.00- 42.78	12.52
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	77293	5.00000	4.991	80.00- 120.00	100.00(a)
8.665	8.665 (1.301)	73	23632			0.00- 59.10	30.57
8.665	8.657 (1.301)	43	188441			215.30- 275.30	243.80
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	63705	5.00000	4.810	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	599728			57.42- 117.42	941.41
9.596	9.596 (1.014)	95	23461			5.70- 65.70	36.83
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.791)	58	116686	5.00000	5.161	80.00- 120.00	100.00
10.362	10.362 (1.791)	43	191827			136.03- 196.03	164.40
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	41323	5.00000	3.808	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	28530			39.41- 99.41	69.04
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	63397	5.00000	5.120	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	187470			295.02- 355.02	295.71
11.444	11.444 (1.210)	63	25896			11.82- 71.82	40.85
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	88020	5.00000	4.917	80.00- 120.00	100.00(a)
12.318	12.318 (1.302)	105	198476			192.40- 252.40	225.49
12.318	12.318 (1.302)	77	22835			0.00- 54.69	25.94
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	21359	5.00000	3.532	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	28923			102.99- 162.99	135.41

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	128059	5.00000	5.049	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	121863			65.24- 125.24	95.16
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	114218	5.00000	4.871	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	34098			0.00- 58.21	29.85
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	58870	5.00000	4.306	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	187470			153.57- 213.57	318.45

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051917.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153596	-3.28
108 1,4-Difluorobenze	597103	358262	835944	607535	1.75
153 Chlorobenzene-d5	587747	352648	822846	599728	2.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051917.d

Date : 19-MAY-2021 20:43

Client ID:

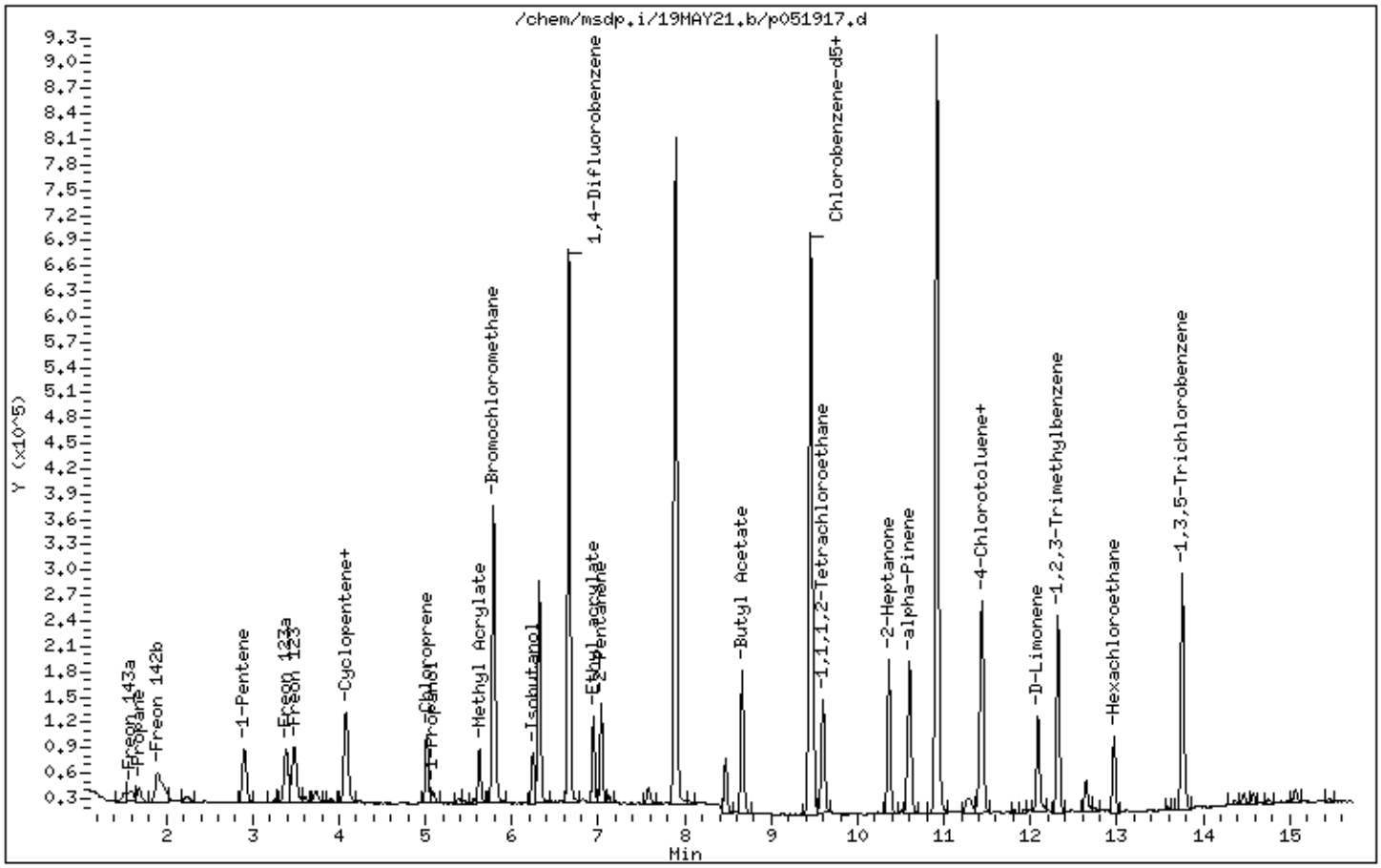
Instrument: msdp.i

Sample Info: 200mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051907.d
Lab Smp Id: ICAL Level 6
Inj Date : 19-MAY-2021 15:27
Operator : LD Inst ID: msdp.i
Smp Info : 20mL 3018-2034
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 15:27 Cal File: p051907.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	93022	20.0000	18.478	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	85552			59.44- 119.44	91.97
1.744	1.745 (0.302)	51	410469			419.06- 479.06	441.26
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	126668	20.0000	17.269	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	83011			35.28- 95.28	65.53
1.675	1.675 (0.290)	39	87777			38.35- 98.35	69.30
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.688	1.703 (0.292)	65	66510	20.0000	17.899	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	410469			597.63- 657.63	617.15
1.688	1.703 (0.292)	47	42224			33.72- 93.72	63.49
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	256819	20.0000	18.385	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	83094			2.37- 62.37	32.36
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.745 (0.302)	67	27136	20.0000	19.522	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	410469			1501.01-1561.01	1512.64
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	257544	20.0000	17.884	80.00- 120.00	100.00
1.842	1.856 (0.319)	137	84530			2.30- 62.30	32.82
12 Isobutane					CAS #: 75-28-5		
1.856	1.870 (0.321)	43	276539	20.0000	16.916	80.00- 120.00	100.00
1.856	1.870 (0.321)	42	89198			2.44- 62.44	32.26
1.856	1.856 (0.321)	58	9258			0.00- 33.36	3.35
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	175425	20.0000	19.636	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	48487			0.00- 56.26	27.64
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	26908	20.0000	14.306	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	210189			823.29- 883.29	781.14
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	167898	20.0000	16.491	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	51574			0.00- 59.69	30.72
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	173027	20.0000	22.047	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	131220			52.37- 112.37	75.84
24 Bromomethane					CAS #: 74-83-9		
2.476	2.483 (0.428)	94	109467	20.0000	16.296	80.00- 120.00	100.00
2.476	2.483 (0.428)	96	101049			64.07- 124.07	92.31
30 Chloroethane					CAS #: 75-00-3		
2.605	2.612 (0.451)	64	60984	20.0000	17.056	80.00- 120.00	100.00
2.605	2.612 (0.451)	66	18278			0.04- 60.04	29.97
2.605	2.612 (0.451)	49	19753			4.54- 64.54	32.39
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	221068	20.0000	20.084	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	143195			34.12- 94.12	64.77
32 Vinyl Bromide					CAS #: 593-60-2		
2.834	2.841 (0.490)	106	103992	20.0000	17.605	80.00- 120.00	100.00
2.834	2.841 (0.490)	108	100338			69.27- 129.27	96.49
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	289208	20.0000	19.049	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	188691			34.72- 94.72	65.24
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	224049	20.0000	17.280	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	67915			0.84- 60.84	30.31
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	340845	20.0000	18.944	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	51294			0.00- 44.98	15.05
2.970	2.970 (0.514)	72	24256			0.00- 37.39	7.12
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	55504	20.0000	18.719	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	102072			163.46- 223.46	183.90
3.278	3.285 (0.567)	45	151025			250.40- 310.40	272.10
39 Ethanol					CAS #: 64-17-5		
3.235	3.242 (0.560)	46	28012	20.0000	17.557	80.00- 120.00	100.00
3.278	3.242 (0.567)	45	150850			511.19- 571.19	538.52
42 Acrolein					CAS #: 107-02-8		
3.522	3.529 (0.609)	55	48671	20.0000	17.849	80.00- 120.00	100.00
3.522	3.529 (0.609)	56	67406			111.10- 171.10	138.49
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	234506	20.0000	20.574	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	150010			33.56- 93.56	63.97
3.550	3.550 (0.614)	101	277635			89.21- 149.21	118.39
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	117179	20.0000	17.797	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	73665			34.02- 94.02	62.87
3.579	3.579 (0.619)	61	234280			168.77- 228.77	199.93
47 Acetone					CAS #: 67-64-1		
3.708	3.708 (0.642)	58	72065	20.0000	17.340	80.00- 120.00	100.00
3.708	3.708 (0.642)	43	241838			302.95- 362.95	335.58
48 Carbon Disulfide					CAS #: 75-15-0		
3.815	3.823 (0.660)	76	317436	20.0000	17.928	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.787	3.794 (0.655)	142	245125	20.0000	23.837	80.00- 120.00	100.00
3.787	3.794 (0.655)	127	102171			12.22- 72.22	41.68

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.880	3.887 (0.671)	45	307798	20.0000	18.411	80.00- 120.00	100.00
3.880	3.887 (0.671)	43	51379			0.00- 47.19	16.69
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	51511	20.0000	17.182	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	225722			396.19- 456.19	438.20
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	132955	20.0000	17.513	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	69875			20.95- 80.95	52.56
4.123	4.123 (0.714)	38	15334			0.00- 41.17	11.53
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.238 (0.732)	49	188872	20.0000	17.656	80.00- 120.00	100.00
4.231	4.238 (0.732)	84	97783			22.03- 82.03	51.77
4.231	4.238 (0.732)	51	56590			0.18- 60.18	29.96
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	376326	20.0000	18.886	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	79824			0.00- 51.11	21.21
4.338	4.338 (0.751)	57	39827			0.00- 40.49	10.58
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	393778	20.0000	19.813	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	131571			3.10- 63.10	33.41
4.446	4.446 (0.769)	41	127804			1.28- 61.28	32.46
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	79611	20.0000	17.941	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	222503			255.84- 315.84	279.49
4.474	4.482 (0.774)	96	121969			127.59- 187.59	153.21
66 Acrylonitrile					CAS #: 107-13-1		
4.553	4.560 (0.788)	52	108453	20.0000	17.080	80.00- 120.00	100.00
4.553	4.560 (0.788)	53	125300			88.05- 148.05	115.53
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	289038	20.0000	18.610	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	192159			37.52- 97.52	66.48
4.696	4.697 (0.813)	86	34504			0.00- 41.48	11.94
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	244047	20.0000	17.840	80.00- 120.00	100.00
4.961	4.962 (0.859)	65	72133			0.00- 59.70	29.56

					AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
72 Isopropyl ether						CAS #: 108-20-3		
4.947	4.954 (0.856)	45	733750	20.0000	19.999	80.00- 120.00	100.00	
4.954	4.954 (0.857)	87	130937			0.00- 48.18	17.84	
4.947	4.954 (0.856)	59	74206			0.00- 40.15	10.11	
73 Vinyl Acetate						CAS #: 108-05-4		
4.997	4.997 (0.865)	86	29493	20.0000	17.415	80.00- 120.00	100.00	
4.990	4.997 (0.864)	43	540307			2432.48-2492.48	1831.98	
79 Ethyl-tert-butyl ether						CAS #: 637-92-3		
5.305	5.305 (0.918)	59	633028	20.0000	19.878	80.00- 120.00	100.00	
5.305	5.305 (0.918)	87	196731			1.00- 61.00	31.08	
5.305	5.305 (0.918)	41	121691			0.00- 48.73	19.22	
84 2,2-Dichloropropane						CAS #: 594-20-7		
5.506	5.506 (0.953)	77	247387	20.0000	20.676	80.00- 120.00	100.00	
5.506	5.506 (0.953)	79	79013			2.28- 62.28	31.94	
5.506	5.506 (0.953)	97	59214			0.00- 53.93	23.94	
85 cis-1,2-Dichloroethene						CAS #: 156-59-2		
5.542	5.549 (0.959)	98	79311	20.0000	17.700	80.00- 120.00	100.00	
5.542	5.549 (0.959)	96	126353			125.75- 185.75	159.31	
5.542	5.549 (0.959)	61	301739			332.40- 392.40	380.45	
86 2-Butanone						CAS #: 78-93-3		
5.556	5.556 (0.962)	72	60163	20.0000	16.887	80.00- 120.00	100.00	
5.563	5.556 (0.963)	43	755298			1214.50-1274.50	1255.42	
5.556	5.556 (0.962)	57	27140			14.68- 74.68	45.11	
87 Ethyl Acetate						CAS #: 141-78-6		
5.570	5.570 (0.964)	45	61995	20.0000	17.497	80.00- 120.00	100.00	
5.542	5.549 (0.959)	61	301739			452.04- 512.04	486.72	
5.570	5.570 (0.964)	70	32560			22.77- 82.77	52.52	
89 Tetrahydrofuran						CAS #: 109-99-9		
5.771	5.771 (0.999)	42	206034	20.0000	17.009	80.00- 120.00	100.00	
5.771	5.771 (0.999)	71	54220			0.00- 55.82	26.32	
5.771	5.771 (0.999)	72	59914			0.00- 57.59	29.08	
* 90 Bromochloromethane						CAS #: 74-97-5		
5.778	5.778 (1.000)	130	161884	25.0000		80.00- 120.00	100.00	
5.778	5.778 (1.000)	128	125674			48.23- 108.23	77.63	
5.771	5.778 (1.000)	49	290833			150.57- 210.57	179.66	
92 Chloroform						CAS #: 67-66-3		
5.835	5.835 (1.010)	83	241783	20.0000	17.626	80.00- 120.00	100.00	

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	158829			34.70- 94.70	65.69
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	203644	20.0000	20.607	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	346268			142.57- 202.57	170.04
5.957	5.957 (1.031)	41	187080			62.09- 122.09	91.87
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	306146	20.0000	19.529	80.00- 120.00	100.00
5.964	5.972 (1.032)	99	199684			34.02- 94.02	65.23
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	305164	20.0000	20.683	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	305319			70.64- 130.64	100.05
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	71487	20.0000	17.887	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	180986			226.85- 286.85	253.17
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	1110205	20.0000	20.193	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	359061			2.24- 62.24	32.34
6.279	6.280 (1.087)	41	278205			0.00- 54.39	25.06
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	352350	20.0000	18.258	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	82919			0.00- 52.90	23.53
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	214356	25.0000	24.596	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	113737			27.21- 87.21	53.06
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	111853	20.0000	20.020	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	458075			372.79- 432.79	409.53
6.358	6.358 (0.955)	55	161464			112.09- 172.09	144.35
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	181236	20.0000	17.798	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	57046			0.79- 60.79	31.48
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	153106	20.0000	20.067	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	404624			226.53- 286.53	264.28
6.444	6.444 (0.968)	57	205765			100.85- 160.85	134.39

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	591321	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94057			0.00- 45.71	15.91
110 n-Butanol					CAS #: 71-36-3		
6.810	6.810 (1.023)	56	132950	20.0000	19.082	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	94545			40.99- 100.99	71.11
6.810	6.810 (1.023)	43	78634			27.38- 87.38	59.15
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	167926	20.0000	18.042	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	180875			76.29- 136.29	107.71
6.867	6.867 (1.031)	97	109619			33.63- 93.63	65.28
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	184802	20.0000	18.644	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	133840			41.07- 101.07	72.42
7.089	7.089 (1.065)	41	101498			22.53- 82.53	54.92
116 Methyl Methacrylate					CAS #: 80-62-6		
7.132	7.132 (0.754)	69	150281	20.0000	19.013	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	320687			179.84- 239.84	213.39
7.132	7.139 (0.754)	100	60103			9.59- 69.59	39.99
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	100090	20.0000	18.671	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	98658			68.28- 128.28	98.57
7.175	7.175 (1.077)	57	32744			2.68- 62.68	32.71
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	158665	20.0000	18.457	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	142936			60.09- 120.09	90.09
7.204	7.204 (0.761)	95	122464			48.38- 108.38	77.18
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	275648	20.0000	18.925	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	177537			35.24- 95.24	64.41
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	230619	20.0000	18.894	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	72627			2.42- 62.42	31.49
7.691	7.691 (1.155)	39	154077			37.16- 97.16	66.81
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	280885	20.0000	20.418	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	132474			15.78- 75.78	47.16

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	326597			84.64- 144.64	116.27
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	198797	20.0000	19.794	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	542659			242.35- 302.35	272.97
7.791	7.791 (1.170)	85	66078			3.24- 63.24	33.24
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	636242	25.0000	24.785	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	65527			0.00- 40.44	10.30
7.891	7.891 (1.185)	100	416442			34.95- 94.95	65.45
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	514167	20.0000	19.066	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	307832			28.38- 88.38	59.87
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	236470	20.0000	20.785	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	199342			56.00- 116.00	84.30
7.941	7.949 (1.193)	43	614834			228.66- 288.66	260.01
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	217123	20.0000	19.138	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	68252			1.24- 61.24	31.43
8.214	8.214 (0.868)	39	141891			34.11- 94.11	65.35
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	176754	20.0000	19.263	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	111333			31.96- 91.96	62.99
8.400	8.400 (0.888)	83	150175			52.93- 112.93	84.96
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	257592	20.0000	19.183	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	201058			47.84- 107.84	78.05
8.464	8.464 (0.895)	131	191367			45.29- 105.29	74.29
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	268908	20.0000	19.939	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	517945			162.87- 222.87	192.61
8.586	8.586 (0.908)	100	41484			0.00- 45.94	15.43
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	246257	20.0000	19.204	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	314850			94.99- 154.99	127.85
8.579	8.579 (1.288)	78	78397			2.05- 62.05	31.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
146 Dibromochloromethane						CAS #: 124-48-1	
8.801	8.801 (0.930)	129	337715	20.0000	19.240	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	263594			47.45- 107.45	78.05
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.951	8.951 (0.946)	107	280035	20.0000	18.542	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	267724			64.21- 124.21	95.60
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.605	7.605 (1.142)	63	333684	20.0000	18.417	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	97824			0.00- 59.64	29.32
7.605	7.605 (1.142)	144	32120			0.00- 39.63	9.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	579226	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	311215			23.78- 83.78	53.73
154 Chlorobenzene						CAS #: 108-90-7	
9.496	9.496 (1.004)	112	441684	20.0000	19.332	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	142490			1.74- 61.74	32.26
9.496	9.496 (1.004)	77	248503			25.04- 85.04	56.26
155 Ethyl Benzene						CAS #: 100-41-4	
9.567	9.567 (1.011)	106	238564	20.0000	19.809	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	733130			273.74- 333.74	307.31
156 Nonane						CAS #: 111-84-2	
9.596	9.596 (1.014)	43	660026	20.0000	21.119	80.00- 120.00	100.00
9.596	9.603 (1.014)	57	552781			54.16- 114.16	83.75
9.596	9.603 (1.014)	85	158629			0.00- 53.90	24.03
158 m,p-Xylene						CAS #: 108-38-3	
9.718	9.718 (1.027)	106	298628	20.0000	19.892	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	589189			163.73- 223.73	197.30
164 o-Xylene						CAS #: 95-47-6	
10.226	10.226 (1.081)	106	296697	20.0000	20.402	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	604874			177.45- 237.45	203.87
165 Styrene						CAS #: 100-42-5	
10.255	10.255 (1.084)	104	488029	20.0000	19.783	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	228738			17.88- 77.88	46.87
167 Bromoform						CAS #: 75-25-2	
10.541	10.542 (1.114)	173	342784	20.0000	19.970	80.00- 120.00	100.00
10.541	10.542 (1.114)	171	175679			21.25- 81.25	51.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	931561	20.0000	20.442	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	266395			0.00- 58.52	28.60
10.649	10.649 (1.126)	51	122943			0.00- 43.00	13.20
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	329076	20.0000	19.988	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	105887			1.94- 61.94	32.18
10.871	10.871 (1.149)	42	225892			37.89- 97.89	68.64
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	366979	25.0000	24.808	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	468117			95.92- 155.92	127.56
10.921	10.921 (1.154)	176	351685			66.89- 126.89	95.83
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	448177	20.0000	20.205	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	290309			35.20- 95.20	64.78
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	273442	20.0000	19.953	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	268738			67.21- 127.21	98.28
11.179	11.179 (1.182)	77	168602			29.02- 89.02	61.66
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	275295	20.0000	20.363	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	1090818			366.49- 426.49	396.24
11.150	11.150 (1.179)	105	41933			0.00- 44.85	15.23
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	139458	20.0000	19.807	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	427261			280.55- 340.55	306.37
11.100	11.100 (1.173)	61	62807			15.49- 75.49	45.04
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	88946	20.0000	19.304	80.00- 120.00	100.00
11.172	11.179 (1.181)	89	71489			49.11- 109.11	80.37
11.179	11.179 (1.182)	75	427261			426.44- 486.44	480.36
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	746366	20.0000	20.338	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	204118			0.00- 57.66	27.35
11.258	11.258 (1.190)	142	29608			0.00- 34.09	3.97
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	295596	20.0000	20.284	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	929331			284.55- 344.55	314.39
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	235462	20.0000	20.537	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	804535			315.17- 375.17	341.68
11.301	11.301 (1.195)	65	116734			21.55- 81.55	49.58
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	416581	20.0000	20.680	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	804831			164.93- 224.93	193.20
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	413999	20.0000	20.536	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	229936			25.30- 85.30	55.54
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	765020	20.0000	20.366	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	183021			0.00- 54.25	23.92
11.738	11.738 (1.241)	91	463050			31.27- 91.27	60.53
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	783363	20.0000	20.495	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	381421			19.05- 79.05	48.69
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	242771	20.0000	20.736	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	1145624			437.55- 497.55	471.89
11.996	11.996 (1.268)	91	174745			40.76- 100.76	71.98
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	1070099	20.0000	20.727	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	276177			0.00- 55.54	25.81
12.153	12.153 (1.285)	91	231505			0.00- 51.48	21.63
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	515702	20.0000	19.622	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	331017			33.21- 93.21	64.19
12.196	12.196 (1.289)	111	214395			11.31- 71.31	41.57
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	514316	20.0000	19.523	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	333938			33.90- 93.90	64.93
12.311	12.311 (1.301)	111	204966			9.45- 69.45	39.85
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	728285	20.0000	20.267	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	167108			0.00- 53.26	22.95
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	833319	20.0000	19.843	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	748015			58.12- 118.12	89.76
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	269536	20.0000	20.284	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	921873			314.79- 374.79	342.02
12.626	12.626 (1.335)	92	496131			154.29- 214.29	184.07
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	516436	20.0000	20.144	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	324827			33.84- 93.84	62.90
12.733	12.741 (1.346)	111	222511			12.73- 72.73	43.09
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	313020	20.0000	20.327	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	265111			52.48- 112.48	84.69
13.600	13.600 (1.438)	155	243659			47.41- 107.41	77.84
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	755474	24.7000	24.812	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	627549			52.87- 112.87	83.07
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	457157	25.2000	24.597	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	438717			65.33- 125.33	95.97
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	335930	25.7000	25.915	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	210653			33.17- 93.17	62.71
216 Naphthalene					CAS #: 91-20-3		
14.761	14.768 (1.560)	128	112848	2.54000	2.343	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	14592			0.00- 42.88	12.93
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	420041	26.6000	25.838	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	398636			65.75- 125.75	94.90
15.069	15.069 (1.593)	145	147343			5.23- 65.23	35.08

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051907.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	161884	1.94
108 1,4-Difluorobenze	597103	358262	835944	591321	-0.97
153 Chlorobenzene-d5	587747	352648	822846	579226	-1.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051907.d

Page 1

Date : 19-MAY-2021 15:27

Client ID:

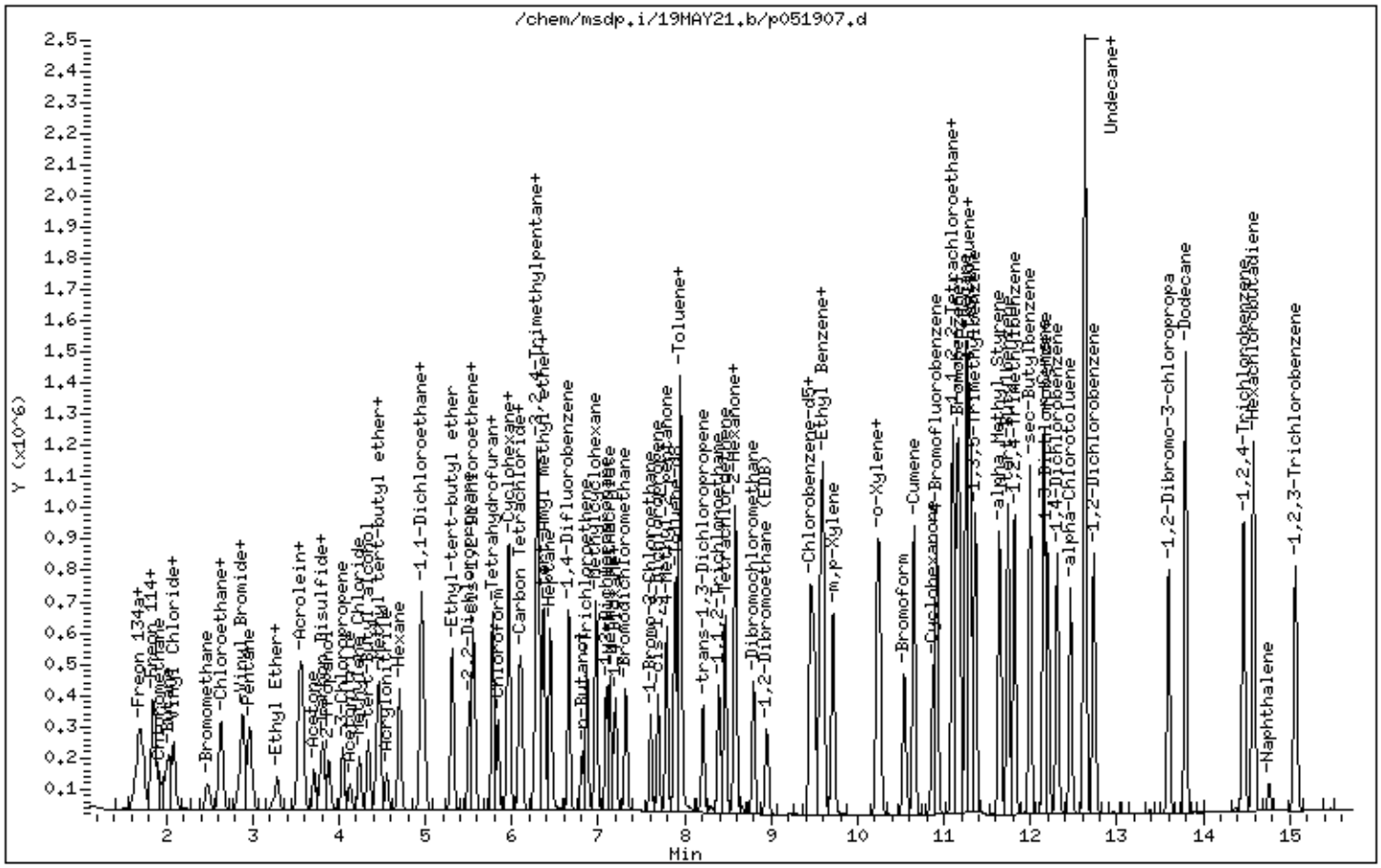
Instrument: msdp.i

Sample Info: 20mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051918.d
Lab Smp Id: ICAL Level 6
Inj Date : 19-MAY-2021 21:10
Operator : gh Inst ID: msdp.i
Smp Info : 20mL 3018-2013
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:10 Cal File: p051918.d
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	164276	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126583			48.23- 108.23	77.06
5.771	5.778 (1.000)	49	292813			150.57- 210.57	178.24
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	594883	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94502			0.00- 45.71	15.89
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	584012	25.0000		80.00- 120.00	100.00
9.453	9.460 (1.000)	82	316968			23.78- 83.78	54.27
3 Freon 143a					CAS #: 420-46-2		
1.577	1.590 (0.273)	65	63953	20.0000	19.336	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	170661			243.50- 303.50	266.85
1.591	1.590 (0.275)	64	16338			0.00- 54.06	25.55
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	46853	20.0000	15.945	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	29481			34.98- 94.98	62.92
1.674	1.674 (0.290)	41	25457			25.22- 85.22	54.33
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	252531	20.0000	15.611	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	76512			0.00- 59.77	30.30
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	180760	20.0000	16.998	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	247205			105.17- 165.17	136.76
40 Freon 123a					CAS #: 354-23-4		
3.378	3.385 (0.585)	117	177874	20.0000	17.207	80.00- 120.00	100.00
3.378	3.378 (0.585)	67	248317			104.69- 164.69	139.60
41 Freon 123					CAS #: 306-83-2		
3.472	3.479 (0.601)	83	276366	20.0000	18.974	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	56290			0.00- 50.87	20.37
3.472	3.479 (0.601)	85	179827			36.08- 96.08	65.07
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	281294	20.0000	18.118	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	105999			6.76- 66.76	37.68
4.066	4.073 (0.704)	53	78449			0.00- 57.54	27.89
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	314311	20.0000	17.425	80.00- 120.00	100.00
4.073	4.073 (0.705)	74	43403			0.00- 44.13	13.81
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	249821	20.0000	17.505	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	97837			9.21- 69.21	39.16
5.019	5.019 (0.869)	50	60899			0.00- 54.25	24.38
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	33679	20.0000	15.446	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	32228			63.23- 123.23	95.69
5.083	5.083 (0.880)	41	20019			24.74- 84.74	59.44
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	317339	20.0000	16.802	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	34842			0.00- 41.28	10.98
5.620	5.620 (0.973)	58	27405			0.00- 38.22	8.64
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	37572	20.0000	16.140	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	188703			448.18- 508.18	502.24
6.244	6.244 (1.081)	41	131184			299.99- 359.99	349.15
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	23633	20.0000	17.406	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	44798			149.95- 209.95	189.56
6.938	6.938 (0.733)	55	458959			1849.07-1909.07	1942.03
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	549397	20.0000	18.604	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	42813			0.00- 37.44	7.79
7.032	7.031 (0.743)	86	69391			0.00- 42.78	12.63
145 Butyl Acetate					CAS #: 123-86-4		
8.658	8.665 (1.300)	56	289132	20.0000	19.218	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	85224			0.00- 59.10	29.48
8.658	8.657 (1.300)	43	710835			215.30- 275.30	245.85
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	265099	20.0000	20.462	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	584012			57.42- 117.42	220.30
9.596	9.596 (1.014)	95	96156			5.70- 65.70	36.27
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	456297	20.0000	19.048	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	750475			136.03- 196.03	164.47
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	366276	20.0000	30.886	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	252611			39.41- 99.41	68.97
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	233965	20.0000	19.501	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	762751			295.02- 355.02	326.01
11.444	11.444 (1.210)	63	101096			11.82- 71.82	43.21
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	356670	20.0000	20.382	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	795713			192.40- 252.40	223.10
12.318	12.318 (1.302)	77	89457			0.00- 54.69	25.08
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	175433	20.0000	27.542	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	236009			102.99- 162.99	134.53

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	464814	20.0000	19.008	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	442074			65.24- 125.24	95.11
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	504688	20.0000	21.723	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	146698			0.00- 58.21	29.07
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	403829	20.0000	27.931	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	762751			153.57- 213.57	188.88

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051918.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	164276	3.44
108 1,4-Difluorobenze	597103	358262	835944	594883	-0.37
153 Chlorobenzene-d5	587747	352648	822846	584012	-0.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051918.d

Date : 19-MAY-2021 21:10

Client ID:

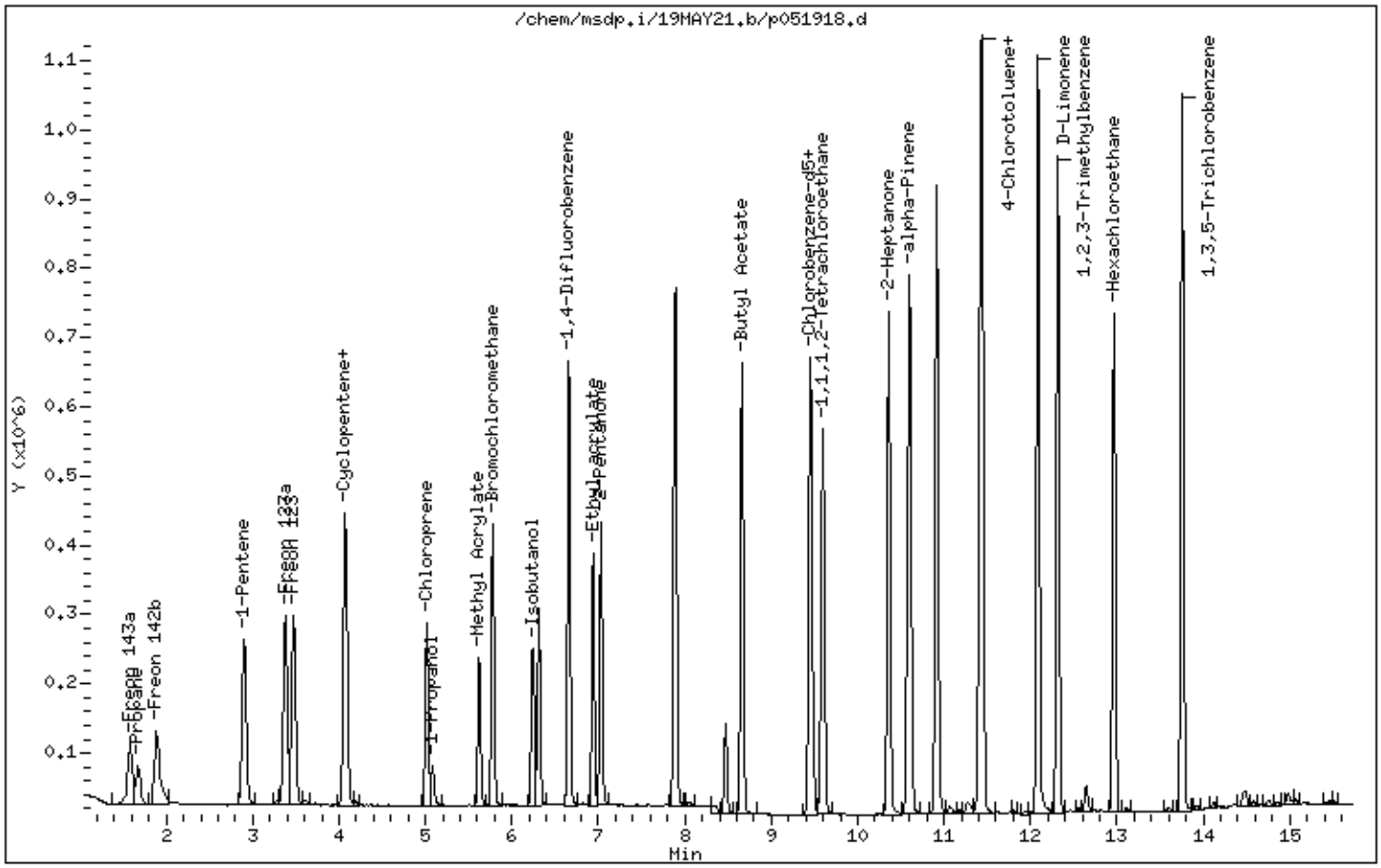
Instrument: msdp.i

Sample Info: 20mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051908.d
Lab Smp Id: ICAL Level 7
Inj Date : 19-MAY-2021 15:55
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2034
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:49 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:38 Cal File: p051919.d
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	246691	50.0000	50.000	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	220643			59.44- 119.44	89.44
1.745	1.745 (0.302)	51	1107781			419.06- 479.06	449.06
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	345627	50.0000	50.000	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	225623			35.28- 95.28	65.28
1.675	1.675 (0.290)	39	236222			38.35- 98.35	68.35
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	176502	50.0000	50.000	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1107781			597.63- 657.63	627.63
1.703	1.703 (0.295)	47	112469			33.72- 93.72	63.72
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	711177	50.0000	50.000	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	230217			2.37- 62.37	32.37
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.745	1.745 (0.302)	67	72356	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.745	1.745 (0.302)	51	1107781			1501.01-1561.01	1531.01
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	685577	50.0000	50.000	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	221438			2.30- 62.30	32.30
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	735430	50.0000	50.000	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	238581			2.44- 62.44	32.44
1.856	1.856 (0.321)	58	24710			0.00- 33.36	3.36
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	447790	50.0000	50.000	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	117587			0.00- 56.26	26.26
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	75310	50.0000	50.000	80.00- 120.00	100.00
2.025	2.025 (0.350)	43	642610			823.29- 883.29	853.29
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	454203	50.0000	50.000	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	134867			0.00- 59.69	29.69
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	422955	50.0000	50.000	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	348369			52.37- 112.37	82.37
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	285084	50.0000	50.000	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	268184			64.07- 124.07	94.07
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	167305	50.0000	50.000	80.00- 120.00	100.00
2.605	2.605 (0.451)	66	50256			0.04- 60.04	30.04
2.612	2.612 (0.452)	49	57784			4.54- 64.54	34.54
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	523495	50.0000	50.000	80.00- 120.00	100.00
2.641	2.641 (0.457)	57	335680			34.12- 94.12	64.12
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	275173	50.0000	50.000	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	273159			69.27- 129.27	99.27
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	730878	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.884	2.884 (0.499)	103	472992			34.72- 94.72	64.72
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	628672	50.0000	50.000	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	193895			0.84- 60.84	30.84
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	852276	50.0000	50.000	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	127691			0.00- 44.98	14.98
2.970	2.970 (0.514)	72	63019			0.00- 37.39	7.39
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	146830	50.0000	50.000	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	284064			163.46- 223.46	193.46
3.285	3.285 (0.569)	45	411715			250.40- 310.40	280.40
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	75752	50.0000	50.000	80.00- 120.00	100.00
3.285	3.285 (0.569)	45	409963			511.19- 571.19	541.19
42 Acrolein					CAS #: 107-02-8		
3.529	3.529 (0.611)	55	129512	50.0000	50.000	80.00- 120.00	100.00
3.529	3.529 (0.611)	56	182747			111.10- 171.10	141.10
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	547261	50.0000	50.000	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	347836			33.56- 93.56	63.56
3.550	3.550 (0.614)	101	652410			89.21- 149.21	119.21
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	312049	50.0000	50.000	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	199778			34.02- 94.02	64.02
3.579	3.579 (0.619)	61	620248			168.77- 228.77	198.77
47 Acetone					CAS #: 67-64-1		
3.708	3.708 (0.642)	58	198391	50.0000	50.000	80.00- 120.00	100.00
3.708	3.708 (0.642)	43	660552			302.95- 362.95	332.95
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	846836	50.0000	50.000	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	699816	50.0000	50.000	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	295430			12.22- 72.22	42.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	823329	50.0000	50.000	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	141505			0.00- 47.19	17.19
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	142539	50.0000	50.000	80.00- 120.00	100.00
4.045	4.045 (0.700)	41	607488			396.19- 456.19	426.19
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	379243	50.0000	50.000	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	193207			20.95- 80.95	50.95
4.123	4.123 (0.714)	38	42379			0.00- 41.17	11.17
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	522699	50.0000	50.000	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	271957			22.03- 82.03	52.03
4.238	4.238 (0.733)	51	157735			0.18- 60.18	30.18
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	920285	50.0000	50.000	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	194304			0.00- 51.11	21.11
4.338	4.338 (0.751)	57	96551			0.00- 40.49	10.49
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	938706	50.0000	50.000	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	310725			3.10- 63.10	33.10
4.446	4.446 (0.769)	41	293659			1.28- 61.28	31.28
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.776)	98	212528	50.0000	50.000	80.00- 120.00	100.00
4.474	4.474 (0.774)	61	607494			255.84- 315.84	285.84
4.482	4.482 (0.776)	96	334925			127.59- 187.59	157.59
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	293221	50.0000	50.000	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	346138			88.05- 148.05	118.05
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.813)	57	758783	50.0000	50.000	80.00- 120.00	100.00
4.697	4.697 (0.813)	43	512299			37.52- 97.52	67.52
4.697	4.697 (0.813)	86	87084			0.00- 41.48	11.48
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	664501	50.0000	50.000	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	197374			0.00- 59.70	29.70

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
72 Isopropyl ether						CAS #: 108-20-3	
4.954	4.954 (0.857)	45	1800515	50.0000	50.000	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	327418			0.00- 48.18	18.18
4.954	4.954 (0.857)	59	182720			0.00- 40.15	10.15
73 Vinyl Acetate						CAS #: 108-05-4	
4.997	4.997 (0.865)	86	84247	50.0000	50.000	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2074564			2432.48-2492.48	2462.48
79 Ethyl-tert-butyl ether						CAS #: 637-92-3	
5.305	5.305 (0.918)	59	1553756	50.0000	50.000	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	481611			1.00- 61.00	31.00
5.305	5.305 (0.918)	41	291010			0.00- 48.73	18.73
84 2,2-Dichloropropane						CAS #: 594-20-7	
5.506	5.506 (0.953)	77	589524	50.0000	50.000	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	190269			2.28- 62.28	32.28
5.506	5.506 (0.953)	97	141063			0.00- 53.93	23.93
85 cis-1,2-Dichloroethene						CAS #: 156-59-2	
5.549	5.549 (0.960)	98	230520	50.0000	50.000	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	359034			125.75- 185.75	155.75
5.549	5.549 (0.960)	61	835407			332.40- 392.40	362.40
86 2-Butanone						CAS #: 78-93-3	
5.556	5.556 (0.962)	72	170377	50.0000	50.000	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2120337			1214.50-1274.50	1244.50
5.556	5.556 (0.962)	57	76128			14.68- 74.68	44.68
87 Ethyl Acetate						CAS #: 141-78-6	
5.570	5.570 (0.964)	45	173307	50.0000	50.000	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	835407			452.04- 512.04	482.04
5.570	5.570 (0.964)	70	91460			22.77- 82.77	52.77
89 Tetrahydrofuran						CAS #: 109-99-9	
5.771	5.771 (0.999)	42	583804	50.0000	50.000	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	150745			0.00- 55.82	25.82
5.771	5.771 (0.999)	72	161049			0.00- 57.59	27.59
* 90 Bromochloromethane						CAS #: 74-97-5	
5.778	5.778 (1.000)	130	158810	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	124237			48.23- 108.23	78.23
5.778	5.778 (1.000)	49	286765			150.57- 210.57	180.57
92 Chloroform						CAS #: 67-66-3	
5.835	5.835 (1.010)	83	689555	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	446160			34.70- 94.70	64.70
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	486964	50.0000	50.000	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	840372			142.57- 202.57	172.57
5.957	5.957 (1.031)	41	448455			62.09- 122.09	92.09
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.033)	97	752510	50.0000	50.000	80.00- 120.00	100.00
5.972	5.972 (1.033)	99	481725			34.02- 94.02	64.02
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	735285	50.0000	50.000	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	739982			70.64- 130.64	100.64
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	197564	50.0000	50.000	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	507450			226.85- 286.85	256.85
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	2728265	50.0000	50.000	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	879725			2.24- 62.24	32.24
6.280	6.280 (1.087)	41	665520			0.00- 54.39	24.39
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	987337	50.0000	50.000	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	226078			0.00- 52.90	22.90
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	213713	25.0000	25.000	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	122256			27.21- 87.21	57.21
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	279227	50.0000	50.000	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1124694			372.79- 432.79	402.79
6.358	6.358 (0.955)	55	396758			112.09- 172.09	142.09
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	526134	50.0000	50.000	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	162017			0.79- 60.79	30.79
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	395953	50.0000	50.000	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1015753			226.53- 286.53	256.53
6.444	6.444 (0.968)	57	518123			100.85- 160.85	130.85

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	597103	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93822			0.00- 45.71	15.71
110 n-Butanol						CAS #: 71-36-3	
6.810	6.810 (1.023)	56	364840	50.0000	50.000	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	258986			40.99- 100.99	70.99
6.810	6.810 (1.023)	43	209354			27.38- 87.38	57.38
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	478111	50.0000	50.000	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	508207			76.29- 136.29	106.29
6.867	6.867 (1.031)	97	304245			33.63- 93.63	63.63
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.089	7.089 (1.065)	63	491834	50.0000	50.000	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	349523			41.07- 101.07	71.07
7.096	7.096 (1.066)	41	258375			22.53- 82.53	52.53
116 Methyl Methacrylate						CAS #: 80-62-6	
7.132	7.132 (0.754)	69	400937	50.0000	50.000	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	841331			179.84- 239.84	209.84
7.139	7.139 (0.755)	100	158742			9.59- 69.59	39.59
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	263150	50.0000	50.000	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	258613			68.28- 128.28	98.28
7.175	7.175 (1.077)	57	86007			2.68- 62.68	32.68
118 Dibromomethane						CAS #: 74-95-3	
7.204	7.204 (0.761)	174	444945	50.0000	50.000	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	400838			60.09- 120.09	90.09
7.204	7.204 (0.761)	95	348769			48.38- 108.38	78.38
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	751298	50.0000	50.000	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	490118			35.24- 95.24	65.24
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.691	7.691 (1.155)	75	619937	50.0000	50.000	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	200964			2.42- 62.42	32.42
7.691	7.691 (1.155)	39	416341			37.16- 97.16	67.16
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	700725	50.0000	50.000	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	320784			15.78- 75.78	45.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	803336			84.64- 144.64	114.64
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	494934	50.0000	50.000	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1347937			242.35- 302.35	272.35
7.791	7.791 (1.170)	85	164527			3.24- 63.24	33.24
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	647681	25.0000	25.000	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	67618			0.00- 40.44	10.44
7.891	7.891 (1.185)	100	420696			34.95- 94.95	64.95
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	1352715	50.0000	50.000	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	789761			28.38- 88.38	58.38
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.194)	57	571594	50.0000	50.000	80.00- 120.00	100.00
7.949	7.949 (1.194)	85	491595			56.00- 116.00	86.00
7.949	7.949 (1.194)	43	1478464			228.66- 288.66	258.66
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	595661	50.0000	50.000	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	186109			1.24- 61.24	31.24
8.214	8.214 (0.868)	39	381886			34.11- 94.11	64.11
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	475355	50.0000	50.000	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	294547			31.96- 91.96	61.96
8.400	8.400 (0.888)	83	394203			52.93- 112.93	82.93
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	677222	50.0000	50.000	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	527121			47.84- 107.84	77.84
8.464	8.464 (0.895)	131	509856			45.29- 105.29	75.29
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	681778	50.0000	50.000	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1314958			162.87- 222.87	192.87
8.586	8.586 (0.908)	100	108687			0.00- 45.94	15.94
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	664559	50.0000	50.000	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	830619			94.99- 154.99	124.99
8.579	8.579 (1.288)	78	212995			2.05- 62.05	32.05

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1	
8.801	8.801 (0.930)	129	909694	50.0000	50.000	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	704539			47.45- 107.45	77.45
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.951	8.951 (0.946)	107	776769	50.0000	50.000	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	731780			64.21- 124.21	94.21
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
7.605	7.605 (1.142)	63	919549	50.0000	50.000	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	272524			0.00- 59.64	29.64
7.605	7.605 (1.142)	144	88579			0.00- 39.63	9.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	587747	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	316106			23.78- 83.78	53.78
154 Chlorobenzene						CAS #: 108-90-7	
9.496	9.496 (1.004)	112	1161228	50.0000	50.000	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	368543			1.74- 61.74	31.74
9.496	9.496 (1.004)	77	639171			25.04- 85.04	55.04
155 Ethyl Benzene						CAS #: 100-41-4	
9.567	9.567 (1.011)	106	611900	50.0000	50.000	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1858590			273.74- 333.74	303.74
156 Nonane						CAS #: 111-84-2	
9.596	9.596 (1.014)	43	1549739	50.0000	50.000	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1304255			54.16- 114.16	84.16
9.603	9.603 (1.015)	85	370362			0.00- 53.90	23.90
158 m,p-Xylene						CAS #: 108-38-3	
9.718	9.718 (1.027)	106	756872	50.0000	50.000	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1466255			163.73- 223.73	193.73
164 o-Xylene						CAS #: 95-47-6	
10.226	10.226 (1.081)	106	727897	50.0000	50.000	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1509987			177.45- 237.45	207.45
165 Styrene						CAS #: 100-42-5	
10.255	10.255 (1.084)	104	1231272	50.0000	50.000	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	589570			17.88- 77.88	47.88
167 Bromoform						CAS #: 75-25-2	
10.542	10.542 (1.114)	173	900150	50.0000	50.000	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	461304			21.25- 81.25	51.25

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2299741	50.0000	50.000	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	655786			0.00- 58.52	28.52
10.649	10.649 (1.126)	51	299021			0.00- 43.00	13.00
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	806258	50.0000	50.000	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	257503			1.94- 61.94	31.94
10.871	10.871 (1.149)	42	547332			37.89- 97.89	67.89
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	374384	25.0000	25.000	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	471423			95.92- 155.92	125.92
10.921	10.921 (1.154)	176	362754			66.89- 126.89	96.89
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.100 (1.173)	83	1121488	50.0000	50.000	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	731261			35.20- 95.20	65.20
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	708749	50.0000	50.000	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	689001			67.21- 127.21	97.21
11.179	11.179 (1.182)	77	418295			29.02- 89.02	59.02
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	677615	50.0000	50.000	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2686688			366.49- 426.49	396.49
11.150	11.150 (1.179)	105	100610			0.00- 44.85	14.85
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	347438	50.0000	50.000	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1078964			280.55- 340.55	310.55
11.100	11.100 (1.173)	61	158059			15.49- 75.49	45.49
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	236389	50.0000	50.000	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	187005			49.11- 109.11	79.11
11.179	11.179 (1.182)	75	1078964			426.44- 486.44	456.44
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1759170	50.0000	50.000	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	486507			0.00- 57.66	27.66
11.258	11.258 (1.190)	142	71926			0.00- 34.09	4.09
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	721963	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
11.287	11.287 (1.193)	105	2270938			284.55- 344.55	314.55
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	572035	50.0000	50.000	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1974474			315.17- 375.17	345.17
11.301	11.301 (1.195)	65	294904			21.55- 81.55	51.55
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1021220	50.0000	50.000	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1990658			164.93- 224.93	194.93
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	1032008	50.0000	50.000	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	570738			25.30- 85.30	55.30
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	1907239	50.0000	50.000	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	462558			0.00- 54.25	24.25
11.738	11.738 (1.241)	91	1168575			31.27- 91.27	61.27
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1923799	50.0000	50.000	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	943605			19.05- 79.05	49.05
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	595687	50.0000	50.000	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2785108			437.55- 497.55	467.55
11.996	11.996 (1.268)	91	421521			40.76- 100.76	70.76
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2621026	50.0000	50.000	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	669378			0.00- 55.54	25.54
12.153	12.153 (1.285)	91	562900			0.00- 51.48	21.48
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.196 (1.289)	146	1326539	50.0000	50.000	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	838543			33.21- 93.21	63.21
12.196	12.196 (1.289)	111	547931			11.31- 71.31	41.31
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1341343	50.0000	50.000	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	857150			33.90- 93.90	63.90
12.311	12.311 (1.301)	111	529140			9.45- 69.45	39.45
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1864560	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	433710			0.00- 53.26	23.26
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2085733	50.0000	50.000	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	1838043			58.12- 118.12	88.12
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	662478	50.0000	50.000	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2284179			314.79- 374.79	344.79
12.626	12.626 (1.335)	92	1220868			154.29- 214.29	184.29
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1281765	50.0000	50.000	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	818290			33.84- 93.84	63.84
12.733	12.733 (1.346)	111	547687			12.73- 72.73	42.73
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	800345	50.0000	50.000	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	660103			52.48- 112.48	82.48
13.600	13.600 (1.438)	155	619570			47.41- 107.41	77.41
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2143839	61.8000	61.800	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1776648			52.87- 112.87	82.87
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1233138	63.0000	63.000	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1175567			65.33- 125.33	95.33
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.582 (1.541)	225	895709	64.4000	64.400	80.00- 120.00	100.00
14.582	14.582 (1.541)	223	565855			33.17- 93.17	63.17
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	306016	6.35000	6.350	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	39402			0.00- 42.88	12.88
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1163980	66.6000	66.600	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	1114530			65.75- 125.75	95.75
15.069	15.069 (1.593)	145	410098			5.23- 65.23	35.23

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051908.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	158810	0.00
108 1,4-Difluorobenze	597103	358262	835944	597103	0.00
153 Chlorobenzene-d5	587747	352648	822846	587747	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051908.d

Page 1

Date : 19-MAY-2021 15:55

Client ID:

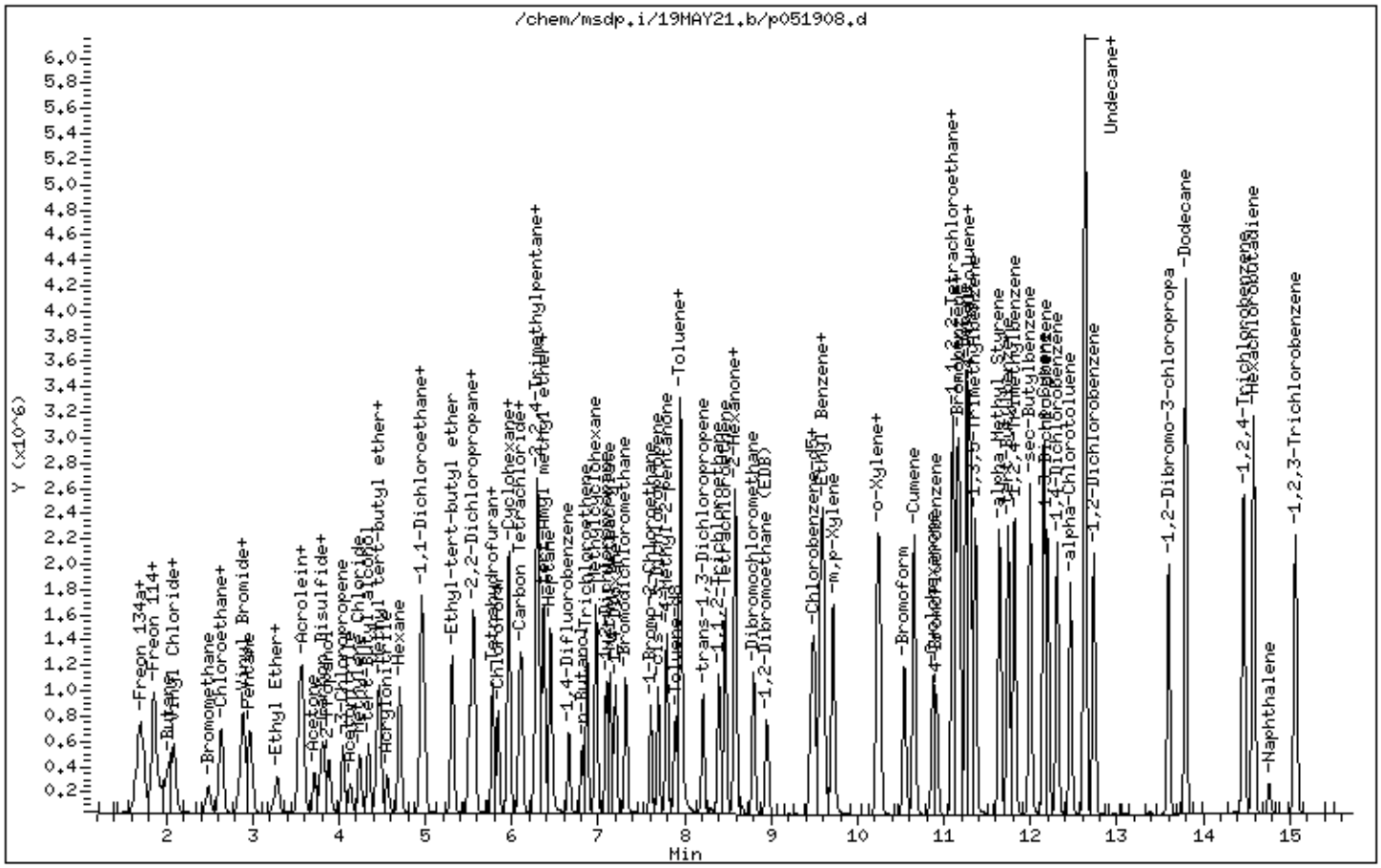
Instrument: msdp.i

Sample Info: 50mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051919.d
Lab Smp Id: ICAL Level 7
Inj Date : 19-MAY-2021 21:38
Operator : gh Inst ID: msdp.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:48 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 21:38 Cal File: p051919.d
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	161689	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	124860			47.22- 107.22	77.22
5.778	5.778 (1.000)	49	289657			149.14- 209.14	179.14
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	604813	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94059			0.00- 45.55	15.55
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	587682	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	320961			24.61- 84.61	54.61
3 Freon 143a					CAS #: 420-46-2		
1.590	1.590 (0.275)	65	175050	50.0000	50.000	80.00- 120.00	100.00
1.590	1.590 (0.275)	69	478765			243.50- 303.50	273.50
1.590	1.590 (0.275)	64	42119			0.00- 54.06	24.06
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	126213	50.0000	50.000	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	82019			34.98- 94.98	64.98
1.674	1.674 (0.290)	41	69691			25.22- 85.22	55.22
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	712387	50.0000	50.000	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	212071			0.00- 59.77	29.77
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	479291	50.0000	50.000	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	647860			105.17- 165.17	135.17
40 Freon 123a					CAS #: 354-23-4		
3.385	3.385 (0.586)	117	461487	50.0000	50.000	80.00- 120.00	100.00
3.378	3.378 (0.585)	67	621572			104.69- 164.69	134.69
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	686787	50.0000	50.000	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	143333			0.00- 50.87	20.87
3.479	3.479 (0.602)	85	453806			36.08- 96.08	66.08
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	758990	50.0000	50.000	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	279019			6.76- 66.76	36.76
4.073	4.073 (0.705)	53	209054			0.00- 57.54	27.54
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	885414	50.0000	50.000	80.00- 120.00	100.00
4.073	4.073 (0.705)	74	125122			0.00- 44.13	14.13
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	715451	50.0000	50.000	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	280509			9.21- 69.21	39.21
5.019	5.019 (0.869)	50	173487			0.00- 54.25	24.25
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	98517	50.0000	50.000	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	91848			63.23- 123.23	93.23
5.083	5.083 (0.880)	41	53925			24.74- 84.74	54.74
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	911220	50.0000	50.000	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	102793			0.00- 41.28	11.28
5.620	5.620 (0.973)	58	74910			0.00- 38.22	8.22
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	106882	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	511089			448.18- 508.18	478.18
6.244	6.244 (1.081)	41	352703			299.99- 359.99	329.99
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	67461	50.0000	50.000	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	121394			149.95- 209.95	179.95
6.938	6.938 (0.733)	55	1267640			1849.07-1909.07	1879.07
115 2-Pentanone					CAS #: 107-87-9		
7.031	7.031 (0.743)	43	1498872	50.0000	50.000	80.00- 120.00	100.00
7.031	7.031 (0.743)	58	111516			0.00- 37.44	7.44
7.031	7.031 (0.743)	86	191499			0.00- 42.78	12.78
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	756724	50.0000	50.000	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	220224			0.00- 59.10	29.10
8.657	8.657 (1.300)	43	1856227			215.30- 275.30	245.30
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	672251	50.0000	50.000	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	587682			57.42- 117.42	87.42
9.596	9.596 (1.014)	95	240014			5.70- 65.70	35.70
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	1175492	50.0000	50.000	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	1951662			136.03- 196.03	166.03
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	923546	50.0000	50.000	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	641066			39.41- 99.41	69.41
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	612826	50.0000	50.000	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1991813			295.02- 355.02	325.02
11.444	11.444 (1.210)	63	256306			11.82- 71.82	41.82
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	901378	50.0000	50.000	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	2004624			192.40- 252.40	222.40
12.318	12.318 (1.302)	77	222560			0.00- 54.69	24.69
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	436881	50.0000	50.000	80.00- 120.00	100.00
12.970	12.970 (1.371)	117	581027			102.99- 162.99	132.99

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	1256168	50.0000	50.000	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	1196432			65.24- 125.24	95.24
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	1358794	50.0000	50.000	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	383320			0.00- 58.21	28.21
214 beta-Pinene					CAS #: 127-91-3		
11.422	11.422 (1.207)	93	1085058	50.0000	50.000	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1991813			153.57- 213.57	183.57

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051919.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 21:38
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	161689	97013	226365	161689	0.00
108 1,4-Difluorobenze	604813	362888	846738	604813	0.00
153 Chlorobenzene-d5	587682	352609	822755	587682	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051919.d

Date : 19-MAY-2021 21:38

Client ID:

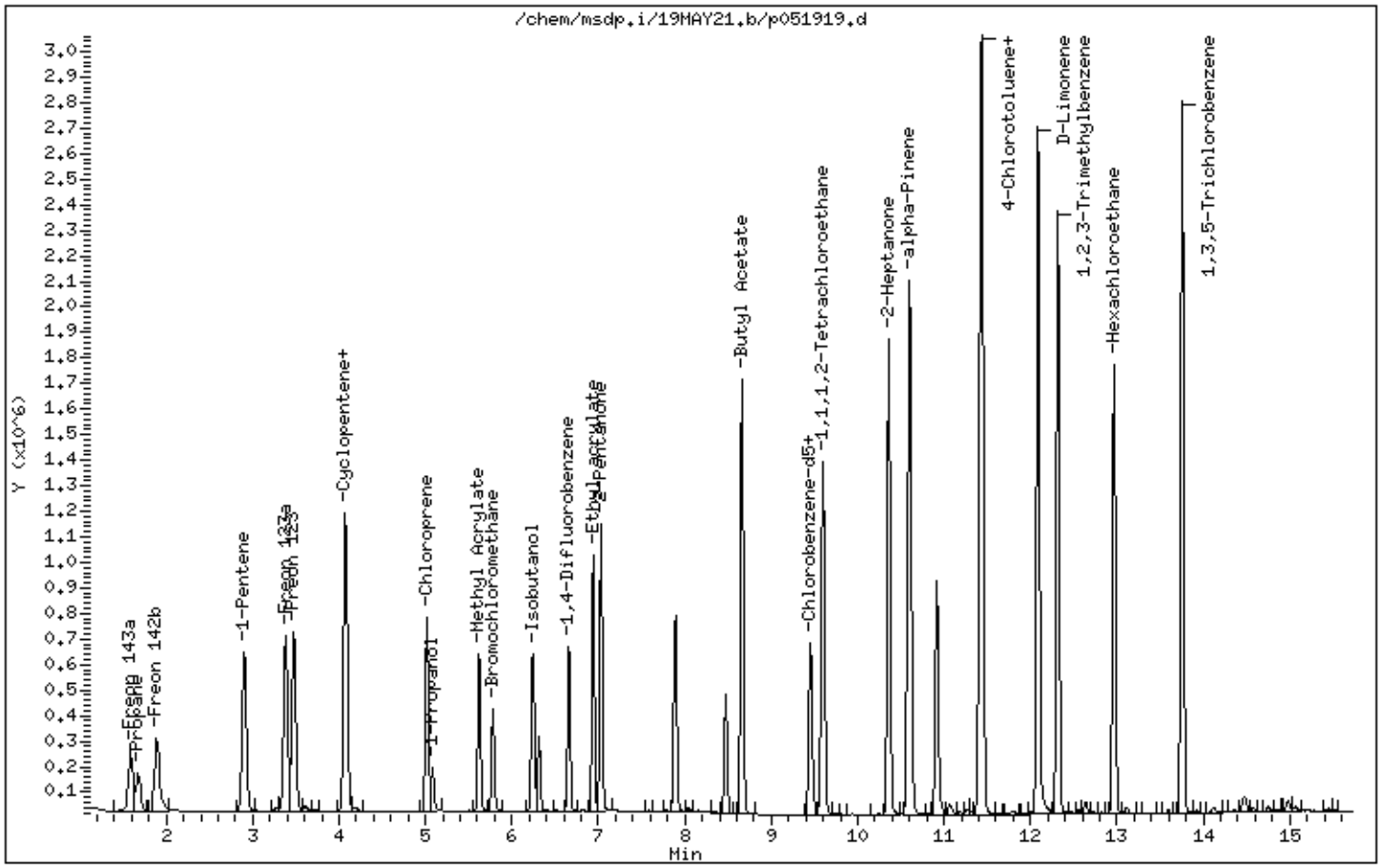
Instrument: msdp.i

Sample Info: 50mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051909.d
Lab Smp Id: ICAL Level 8
Inj Date : 19-MAY-2021 16:24
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2034
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 16:24 Cal File: p051909.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.646	1.633 (0.285)	83	507565	100.000	105.61	80.00- 120.00	100.00
1.646	1.633 (0.285)	69	455041			59.44- 119.44	89.65
1.744	1.745 (0.302)	51	2268262			419.06- 479.06	446.89
5 Propylene					CAS #: 115-07-1		
1.674	1.675 (0.290)	41	698368	100.000	100.69	80.00- 120.00	100.00
1.674	1.675 (0.290)	42	460529			35.28- 95.28	65.94
1.674	1.675 (0.290)	39	475977			38.35- 98.35	68.16
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.703 (0.295)	65	357088	100.000	101.44	80.00- 120.00	100.00
1.744	1.745 (0.302)	51	2268262			597.63- 657.63	635.21
1.702	1.703 (0.295)	47	231703			33.72- 93.72	64.89
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	1452922	100.000	108.35	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	469974			2.37- 62.37	32.35
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.745 (0.304)	67	145754	100.000	109.07	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.744	1.745 (0.302)	51	2268262			1501.01-1561.01	1556.23
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	1419953	100.000	103.69	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	456158			2.30- 62.30	32.12
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	1515676	100.000	98.575	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	485596			2.44- 62.44	32.04
1.870	1.856 (0.324)	58	50044			0.00- 33.36	3.30
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	796816	100.000	95.542	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	204373			0.00- 56.26	25.65
18 Butane					CAS #: 106-97-8		
2.039	2.025 (0.353)	58	180663	100.000	101.40	80.00- 120.00	100.00
2.039	2.025 (0.353)	43	1466054			823.29- 883.29	811.49
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	918346	100.000	96.270	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	270816			0.00- 59.69	29.49
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.089 (0.363)	54	850684	100.000	112.06	80.00- 120.00	100.00
2.096	2.089 (0.363)	39	739010			52.37- 112.37	86.87
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	572011	100.000	92.015	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	535822			64.07- 124.07	93.67
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	349804	100.000	102.90	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	100650			0.04- 60.04	28.77
2.612	2.612 (0.452)	49	117019			4.54- 64.54	33.45
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.457)	43	1040896	100.000	100.15	80.00- 120.00	100.00
2.641	2.634 (0.457)	57	666459			34.12- 94.12	64.03
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	582384	100.000	103.68	80.00- 120.00	100.00
2.848	2.841 (0.493)	108	563942			69.27- 129.27	96.83
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	1487386	100.000	103.14	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.891	2.884 (0.500)	103	967038			34.72- 94.72	65.02
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.899 (0.502)	67	1298135	100.000	105.01	80.00- 120.00	100.00
2.898	2.899 (0.502)	69	401988			0.84- 60.84	30.97
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	1683232	100.000	99.258	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	245789			0.00- 44.98	14.60
2.970	2.970 (0.514)	72	121307			0.00- 37.39	7.21
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	298105	100.000	105.37	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	576501			163.46- 223.46	193.39
3.285	3.285 (0.569)	45	836034			250.40- 310.40	280.45
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	149584	100.000	99.460	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	832557			511.19- 571.19	556.58
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	266909	100.000	102.94	80.00- 120.00	100.00
3.536	3.529 (0.612)	56	376803			111.10- 171.10	141.17
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	1092200	100.000	101.26	80.00- 120.00	100.00
3.557	3.550 (0.616)	153	689565			33.56- 93.56	63.14
3.550	3.550 (0.614)	101	1295372			89.21- 149.21	118.60
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.621)	96	638130	100.000	102.22	80.00- 120.00	100.00
3.586	3.579 (0.621)	98	399466			34.02- 94.02	62.60
3.586	3.579 (0.621)	61	1261088			168.77- 228.77	197.62
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	407743	100.000	103.12	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	1336506			302.95- 362.95	327.78
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.663)	76	1723104	100.000	102.46	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	1438092	100.000	135.14	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	601035			12.22- 72.22	41.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	1661934	100.000	104.21	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	292411			0.00- 47.19	17.59
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	292429	100.000	102.76	80.00- 120.00	100.00
4.052	4.052 (0.701)	41	1196303			396.19- 456.19	409.09
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	798509	100.000	108.94	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	401874			20.95- 80.95	50.33
4.123	4.123 (0.714)	38	88300			0.00- 41.17	11.06
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	1074098	100.000	105.04	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	556924			22.03- 82.03	51.85
4.238	4.238 (0.733)	51	323217			0.18- 60.18	30.09
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	1858636	100.000	99.052	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	385487			0.00- 51.11	20.74
4.338	4.338 (0.751)	57	191013			0.00- 40.49	10.28
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	1848968	100.000	98.795	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	604553			3.10- 63.10	32.70
4.446	4.446 (0.769)	41	579143			1.28- 61.28	31.32
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.481	4.482 (0.776)	98	433306	100.000	102.86	80.00- 120.00	100.00
4.481	4.482 (0.776)	61	1236426			255.84- 315.84	285.35
4.481	4.482 (0.776)	96	693293			127.59- 187.59	160.00
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	596989	100.000	99.669	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	715968			88.05- 148.05	119.93
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.813)	57	1534457	100.000	103.86	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	1029510			37.52- 97.52	67.09
4.696	4.697 (0.813)	86	176385			0.00- 41.48	11.49
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.860)	63	1364098	100.000	104.66	80.00- 120.00	100.00
4.969	4.962 (0.860)	65	405911			0.00- 59.70	29.76

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	==	====== ========	====	========	=======	=======	==========	=====
	72 Isopropyl ether					CAS #: 108-20-3		
	4.947	4.954 (0.856)	45	3520699	100.000	101.33	80.00- 120.00	100.00
	4.947	4.954 (0.856)	87	644730			0.00- 48.18	18.31
	4.947	4.954 (0.856)	59	358329			0.00- 40.15	10.18
	73 Vinyl Acetate					CAS #: 108-05-4		
	4.997	4.997 (0.865)	86	174113	100.000	107.01	80.00- 120.00	100.00
	4.990	4.997 (0.864)	43	3073069			2432.48-2492.48	1764.99
	79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
	5.305	5.305 (0.918)	59	3038101	100.000	100.85	80.00- 120.00	100.00
	5.305	5.305 (0.918)	87	938894			1.00- 61.00	30.90
	5.305	5.305 (0.918)	41	568486			0.00- 48.73	18.71
	84 2,2-Dichloropropane					CAS #: 594-20-7		
	5.506	5.506 (0.953)	77	1178409	100.000	103.59	80.00- 120.00	100.00
	5.506	5.506 (0.953)	79	375834			2.28- 62.28	31.89
	5.513	5.506 (0.954)	97	287766			0.00- 53.93	24.42
	85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
	5.549	5.549 (0.960)	98	473987	100.000	109.86	80.00- 120.00	100.00
	5.549	5.549 (0.960)	96	736483			125.75- 185.75	155.38
	5.549	5.549 (0.960)	61	1694585			332.40- 392.40	357.52
	86 2-Butanone					CAS #: 78-93-3		
	5.556	5.556 (0.962)	72	357150	100.000	104.90	80.00- 120.00	100.00
	5.563	5.556 (0.963)	43	4378918			1214.50-1274.50	1226.07
	5.556	5.556 (0.962)	57	154664			14.68- 74.68	43.31
	87 Ethyl Acetate					CAS #: 141-78-6		
	5.570	5.570 (0.964)	45	353395	100.000	104.48	80.00- 120.00	100.00
	5.549	5.549 (0.960)	61	1695217			452.04- 512.04	479.69
	5.570	5.570 (0.964)	70	189420			22.77- 82.77	53.60
	89 Tetrahydrofuran					CAS #: 109-99-9		
	5.771	5.771 (0.999)	42	1189052	100.000	103.31	80.00- 120.00	100.00
	5.771	5.771 (0.999)	71	309814			0.00- 55.82	26.06
	5.771	5.771 (0.999)	72	335384			0.00- 57.59	28.21
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.778	5.778 (1.000)	130	152805	25.0000		80.00- 120.00	100.00
	5.778	5.778 (1.000)	128	121664			48.23- 108.23	79.62
	5.778	5.778 (1.000)	49	281698			150.57- 210.57	184.35
	92 Chloroform					CAS #: 67-66-3		
	5.835	5.835 (1.010)	83	1415975	100.000	107.68	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.835	5.835 (1.010)	85	915346			34.70- 94.70	64.64
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	944762	100.000	101.07	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	1666010			142.57- 202.57	176.34
5.957	5.957 (1.031)	41	886450			62.09- 122.09	93.83
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.972 (1.033)	97	1485005	100.000	100.30	80.00- 120.00	100.00
5.971	5.972 (1.033)	99	948874			34.02- 94.02	63.90
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	1499358	100.000	106.30	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	1503563			70.64- 130.64	100.28
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	416114	100.000	102.27	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	1049030			226.85- 286.85	252.10
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	5314941	100.000	102.00	80.00- 120.00	100.00
6.279	6.280 (1.087)	56	1735895			2.24- 62.24	32.66
6.279	6.280 (1.087)	41	1349070			0.00- 54.39	25.38
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	2026776	100.000	103.01	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	474028			0.00- 52.90	23.39
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	220685	25.0000	26.504	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	141968			27.21- 87.21	64.33
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	547673	100.000	97.366	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	2227568			372.79- 432.79	406.73
6.358	6.358 (0.955)	55	768756			112.09- 172.09	140.37
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	1080056	100.000	103.85	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	332034			0.79- 60.79	30.74
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	786728	100.000	101.45	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	2022288			226.53- 286.53	257.05
6.444	6.444 (0.968)	57	1020722			100.85- 160.85	129.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	599259	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	96032			0.00- 45.71	16.03
110 n-Butanol					CAS #: 71-36-3		
6.809	6.810 (1.023)	56	750083	100.000	104.92	80.00- 120.00	100.00
6.809	6.810 (1.023)	41	530236			40.99- 100.99	70.69
6.809	6.810 (1.023)	43	429051			27.38- 87.38	57.20
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	997780	100.000	104.77	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	1060416			76.29- 136.29	106.28
6.867	6.867 (1.031)	97	630792			33.63- 93.63	63.22
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	1008198	100.000	100.30	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	717137			41.07- 101.07	71.13
7.096	7.089 (1.066)	41	522377			22.53- 82.53	51.81
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	824440	100.000	101.96	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	1710649			179.84- 239.84	207.49
7.139	7.139 (0.755)	100	331918			9.59- 69.59	40.26
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	528029	100.000	97.653	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	524400			68.28- 128.28	99.31
7.175	7.175 (1.077)	57	177216			2.68- 62.68	33.56
118 Dibromomethane					CAS #: 74-95-3		
7.203	7.204 (0.761)	174	928250	100.000	104.93	80.00- 120.00	100.00
7.203	7.204 (0.761)	93	831541			60.09- 120.09	89.58
7.203	7.204 (0.761)	95	722804			48.38- 108.38	77.87
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	1567843	100.000	105.12	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	1011256			35.24- 95.24	64.50
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.690	7.691 (1.155)	75	1310676	100.000	104.92	80.00- 120.00	100.00
7.690	7.691 (1.155)	77	416599			2.42- 62.42	31.79
7.690	7.691 (1.155)	39	879596			37.16- 97.16	67.11
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	1373843	100.000	98.785	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	639936			15.78- 75.78	46.58

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	1577222			84.64- 144.64	114.80
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	990523	100.000	97.755	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	2685952			242.35- 302.35	271.17
7.798	7.791 (1.171)	85	326227			3.24- 63.24	32.93
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	653351	25.0000	25.095	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	69659			0.00- 40.44	10.66
7.891	7.891 (1.185)	100	427970			34.95- 94.95	65.50
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	2719947	100.000	99.602	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	1593607			28.38- 88.38	58.59
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	1143310	100.000	99.301	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	970463			56.00- 116.00	84.88
7.948	7.949 (1.194)	43	2966309			228.66- 288.66	259.45
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	1224849	100.000	104.91	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	387990			1.24- 61.24	31.68
8.213	8.214 (0.868)	39	804536			34.11- 94.11	65.68
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	969495	100.000	103.06	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	600278			31.96- 91.96	61.92
8.400	8.400 (0.888)	83	805643			52.93- 112.93	83.10
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	1365527	100.000	99.832	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	1069381			47.84- 107.84	78.31
8.464	8.464 (0.895)	131	1033508			45.29- 105.29	75.69
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	1368856	100.000	99.686	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	2631318			162.87- 222.87	192.23
8.586	8.586 (0.908)	100	212248			0.00- 45.94	15.51
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	1348288	100.000	103.10	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	1683093			94.99- 154.99	124.83
8.579	8.579 (1.288)	78	436936			2.05- 62.05	32.41

				AMOUNTS				
					CAL-AMT	ON-COL		
	RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
	146 Dibromochloromethane						CAS #: 124-48-1	
	8.801	8.801 (0.930)	129	1870111	100.000	103.77	80.00- 120.00	100.00
	8.801	8.801 (0.930)	127	1452482			47.45- 107.45	77.67
	148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
	8.951	8.951 (0.946)	107	1591018	100.000	102.80	80.00- 120.00	100.00
	8.951	8.951 (0.946)	109	1499795			64.21- 124.21	94.27
	151 1-Bromo-2-Chloroethane						CAS #: 107-04-0	
	7.605	7.605 (1.142)	63	1915471	100.000	103.43	80.00- 120.00	100.00
	7.605	7.605 (1.142)	65	566303			0.00- 59.64	29.56
	7.605	7.605 (1.142)	144	182840			0.00- 39.63	9.55
*	153 Chlorobenzene-d5						CAS #: 3114-55-4	
	9.460	9.460 (1.000)	117	590210	25.0000		80.00- 120.00	100.00
	9.460	9.460 (1.000)	82	323727			23.78- 83.78	54.85
	154 Chlorobenzene						CAS #: 108-90-7	
	9.496	9.496 (1.004)	112	2370958	100.000	101.53	80.00- 120.00	100.00
	9.496	9.496 (1.004)	114	756993			1.74- 61.74	31.93
	9.496	9.496 (1.004)	77	1286889			25.04- 85.04	54.28
	155 Ethyl Benzene						CAS #: 100-41-4	
	9.567	9.567 (1.011)	106	1215808	100.000	99.229	80.00- 120.00	100.00
	9.567	9.567 (1.011)	91	3709578			273.74- 333.74	305.11
	156 Nonane						CAS #: 111-84-2	
	9.603	9.596 (1.015)	43	3087905	100.000	97.458	80.00- 120.00	100.00
	9.603	9.603 (1.015)	57	2613991			54.16- 114.16	84.65
	9.603	9.603 (1.015)	85	738081			0.00- 53.90	23.90
	158 m,p-Xylene						CAS #: 108-38-3	
	9.718	9.718 (1.027)	106	1495472	100.000	98.126	80.00- 120.00	100.00
	9.718	9.718 (1.027)	91	2934052			163.73- 223.73	196.20
	164 o-Xylene						CAS #: 95-47-6	
	10.226	10.226 (1.081)	106	1448581	100.000	98.124	80.00- 120.00	100.00
	10.226	10.226 (1.081)	91	2977601			177.45- 237.45	205.55
	165 Styrene						CAS #: 100-42-5	
	10.255	10.255 (1.084)	104	2465052	100.000	98.384	80.00- 120.00	100.00
	10.255	10.255 (1.084)	78	1179971			17.88- 77.88	47.87
	167 Bromoform						CAS #: 75-25-2	
	10.549	10.542 (1.115)	173	1837525	100.000	104.18	80.00- 120.00	100.00
	10.541	10.542 (1.114)	171	942585			21.25- 81.25	51.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	4567679	100.000	98.637	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	1306308			0.00- 58.52	28.60
10.649	10.649 (1.126)	51	589542			0.00- 43.00	12.91
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	1596477	100.000	95.938	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	513572			1.94- 61.94	32.17
10.871	10.871 (1.149)	42	1073939			37.89- 97.89	67.27
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	381266	25.0000	25.244	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	486727			95.92- 155.92	127.66
10.921	10.921 (1.154)	176	367158			66.89- 126.89	96.30
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	2228280	100.000	98.820	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	1439832			35.20- 95.20	64.62
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	1426381	100.000	101.78	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	1394001			67.21- 127.21	97.73
11.179	11.179 (1.182)	77	841614			29.02- 89.02	59.00
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	1347671	100.000	98.184	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	5312611			366.49- 426.49	394.21
11.150	11.150 (1.179)	105	203289			0.00- 44.85	15.08
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	686203	100.000	96.347	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	2133287			280.55- 340.55	310.88
11.100	11.100 (1.173)	61	307567			15.49- 75.49	44.82
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	476707	100.000	101.28	80.00- 120.00	100.00
11.179	11.179 (1.182)	89	367391			49.11- 109.11	77.07
11.179	11.179 (1.182)	75	2133287			426.44- 486.44	447.50
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	3243150	100.000	88.689	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	905505			0.00- 57.66	27.92
11.258	11.258 (1.190)	142	133433			0.00- 34.09	4.11
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	1428430	100.000	96.809	80.00- 120.00	100.00

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
183 4-Ethyltoluene (continued)								
11.286	11.287 (1.193)	105	4478546			284.55- 344.55		313.53
184 2-Chlorotoluene					CAS #: 95-49-8			
11.315	11.308 (1.196)	126	1126349	100.000	96.991	80.00- 120.00		100.00
11.308	11.308 (1.195)	91	3926471			315.17- 375.17		348.60
11.301	11.301 (1.195)	65	571555			21.55- 81.55		50.74
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
11.365	11.365 (1.201)	120	2029709	100.000	99.067	80.00- 120.00		100.00
11.365	11.365 (1.201)	105	3958269			164.93- 224.93		195.02
188 alpha Methyl Styrene					CAS #: 98-83-9			
11.644	11.645 (1.231)	118	2053068	100.000	99.954	80.00- 120.00		100.00
11.644	11.645 (1.231)	103	1126967			25.30- 85.30		54.89
189 tert-Butylbenzene					CAS #: 98-06-6			
11.738	11.738 (1.241)	119	3869191	100.000	100.90	80.00- 120.00		100.00
11.745	11.738 (1.242)	134	937426			0.00- 54.25		24.23
11.738	11.738 (1.241)	91	2366627			31.27- 91.27		61.17
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
11.816	11.817 (1.249)	105	3825889	100.000	98.524	80.00- 120.00		100.00
11.816	11.817 (1.249)	120	1877483			19.05- 79.05		49.07
192 sec-Butylbenzene					CAS #: 135-98-8			
11.995	11.996 (1.268)	134	1188712	100.000	99.702	80.00- 120.00		100.00
11.995	11.996 (1.268)	105	5589774			437.55- 497.55		470.24
11.995	11.996 (1.268)	91	846180			40.76- 100.76		71.18
194 p-Cymene					CAS #: 99-87-6			
12.160	12.160 (1.285)	119	5211679	100.000	99.223	80.00- 120.00		100.00
12.160	12.160 (1.285)	134	1335569			0.00- 55.54		25.63
12.160	12.153 (1.285)	91	1113414			0.00- 51.48		21.36
195 1,3-Dichlorobenzene					CAS #: 541-73-1			
12.203	12.196 (1.290)	146	2614617	100.000	98.021	80.00- 120.00		100.00
12.203	12.196 (1.290)	148	1681191			33.21- 93.21		64.30
12.196	12.196 (1.289)	111	1089961			11.31- 71.31		41.69
196 1,4-Dichlorobenzene					CAS #: 106-46-7			
12.311	12.311 (1.301)	146	2681111	100.000	99.901	80.00- 120.00		100.00
12.311	12.311 (1.301)	148	1693939			33.90- 93.90		63.18
12.311	12.311 (1.301)	111	1052991			9.45- 69.45		39.27
199 alpha-Chlorotoluene					CAS #: 100-44-7			
12.461	12.461 (1.317)	91	3733206	100.000	101.62	80.00- 120.00		100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	855205			0.00- 53.26	22.91
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	3992563	100.000	94.355	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	3525819			58.12- 118.12	88.31
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	1274791	100.000	95.075	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	4476615			314.79- 374.79	351.16
12.626	12.626 (1.335)	92	2399035			154.29- 214.29	188.19
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	2533352	100.000	97.467	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	1616747			33.84- 93.84	63.82
12.733	12.741 (1.346)	111	1075764			12.73- 72.73	42.46
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	1585272	100.000	100.82	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	1323143			52.48- 112.48	83.46
13.600	13.600 (1.438)	155	1237839			47.41- 107.41	78.08
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	4416932	124.000	138.94	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	3610956			52.87- 112.87	81.75
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	2488736	126.000	130.48	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	2388833			65.33- 125.33	95.99
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	1826473	129.000	136.64	80.00- 120.00	100.00
14.581	14.582 (1.541)	223	1154987			33.17- 93.17	63.24
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	617447	12.7000	12.602	80.00- 120.00	100.00
14.760	14.768 (1.560)	127	78355			0.00- 42.88	12.69
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	2380079	133.000	141.78	80.00- 120.00	100.00
15.068	15.069 (1.593)	182	2269705			65.75- 125.75	95.36
15.061	15.069 (1.592)	145	846452			5.23- 65.23	35.56

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051909.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	152805	-3.78
108 1,4-Difluorobenze	597103	358262	835944	599259	0.36
153 Chlorobenzene-d5	587747	352648	822846	590210	0.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051909.d

Date : 19-MAY-2021 16:24

Client ID:

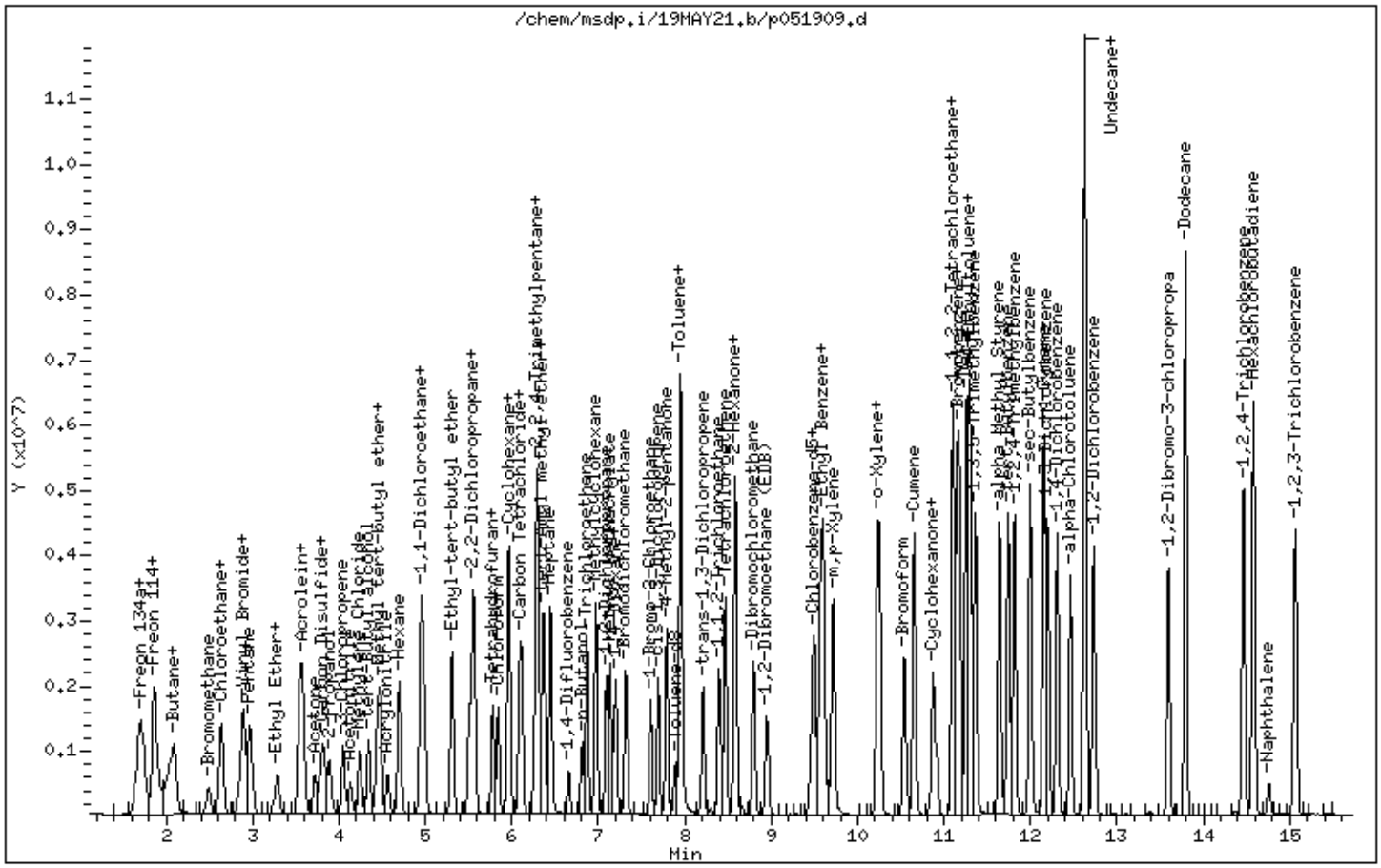
Instrument: msdp.i

Sample Info: 100mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051920.d
Lab Smp Id: ICAL Level 8
Inj Date : 19-MAY-2021 22:07
Operator : gh Inst ID: msdp.i
Smp Info : 100mL 3018-2013
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 22:07 Cal File: p051920.d
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	157260	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127325			48.23- 108.23	80.96
5.778	5.778 (1.000)	49	290406			150.57- 210.57	184.67
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	611896	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	94534			0.00- 45.71	15.45
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	605655	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	331071			23.78- 83.78	54.66
3 Freon 143a					CAS #: 420-46-2		
1.590	1.590 (0.275)	65	338792	100.000	105.77	80.00- 120.00	100.00
1.590	1.590 (0.275)	69	923313			243.50- 303.50	272.53
1.590	1.590 (0.275)	64	80203			0.00- 54.06	23.67
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	269102	100.000	96.261	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.674	1.674 (0.290)	39	170552			34.98- 94.98	63.38
1.674	1.674 (0.290)	41	145053			25.22- 85.22	53.90
13 Freon 142b					CAS #: 75-68-3		
1.884	1.884 (0.326)	65	1499593	100.000	97.279	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	444419			0.00- 59.77	29.64
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	966890	100.000	95.667	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	1331259			105.17- 165.17	137.68
40 Freon 123a					CAS #: 354-23-4		
3.386	3.385 (0.586)	117	933222	100.000	95.080	80.00- 120.00	100.00
3.386	3.378 (0.586)	67	1253615			104.69- 164.69	134.33
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	1402358	100.000	100.49	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	293086			0.00- 50.87	20.90
3.479	3.479 (0.602)	85	954375			36.08- 96.08	68.06
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	1549614	100.000	103.63	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	574894			6.76- 66.76	37.10
4.073	4.073 (0.705)	53	430697			0.00- 57.54	27.79
56 Methyl Acetate					CAS #: 79-20-9		
4.073	4.073 (0.705)	43	1860322	100.000	106.56	80.00- 120.00	100.00
4.080	4.073 (0.706)	74	265330			0.00- 44.13	14.26
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	1510132	100.000	108.90	80.00- 120.00	100.00
5.019	5.019 (0.869)	88	592673			9.21- 69.21	39.25
5.019	5.019 (0.869)	50	359244			0.00- 54.25	23.79
75 1-Propanol					CAS #: 71-23-8		
5.083	5.083 (0.880)	59	205049	100.000	98.484	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	189310			63.23- 123.23	92.32
5.083	5.083 (0.880)	41	113051			24.74- 84.74	55.13
88 Methyl Acrylate					CAS #: 96-33-3		
5.620	5.620 (0.973)	55	1943701	100.000	106.36	80.00- 120.00	100.00
5.620	5.620 (0.973)	85	217090			0.00- 41.28	11.17
5.620	5.620 (0.973)	58	162912			0.00- 38.22	8.38
103 Isobutanol					CAS #: 78-83-1		
6.236	6.244 (1.079)	39	226725	100.000	101.49	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.244	6.244 (1.081)	43	1059873			448.18- 508.18	467.47
6.244	6.244 (1.081)	41	745566			299.99- 359.99	328.84
113 Ethyl acrylate					CAS #: 140-88-5		
6.938	6.938 (0.733)	99	135799	100.000	96.936	80.00- 120.00	100.00
6.938	6.938 (0.733)	45	252316			149.95- 209.95	185.80
6.938	6.938 (0.733)	55	2635755			1849.07-1909.07	1940.92
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	3106672	100.000	101.23	80.00- 120.00	100.00
7.032	7.031 (0.743)	58	227526			0.00- 37.44	7.32
7.032	7.031 (0.743)	86	400164			0.00- 42.78	12.88
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	1533686	100.000	99.232	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	450207			0.00- 59.10	29.35
8.658	8.657 (1.300)	43	3763757			215.30- 275.30	245.41
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	1347909	100.000	100.28	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	605655			57.42- 117.42	44.93
9.596	9.596 (1.014)	95	485333			5.70- 65.70	36.01
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	2357119	100.000	102.38	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	3890207			136.03- 196.03	165.04
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	1800213	100.000	137.28	80.00- 120.00	100.00
12.089	12.089 (1.278)	93	1238262			39.41- 99.41	68.78
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	1234609	100.000	99.338	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	3962866			295.02- 355.02	320.98
11.444	11.444 (1.210)	63	506526			11.82- 71.82	41.03
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	1781367	100.000	98.416	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	3973322			192.40- 252.40	223.05
12.318	12.318 (1.302)	77	442101			0.00- 54.69	24.82
205 Hexachloroethane					CAS #: 67-72-1		
12.977	12.970 (1.372)	201	850803	100.000	123.71	80.00- 120.00	100.00
12.977	12.970 (1.372)	117	1124452			102.99- 162.99	132.16

					AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
208 1,3,5-Trichlorobenzene						CAS #: 108-70-3		
13.779	13.758 (1.457)	180	2557091	100.000	100.71	80.00- 120.00		100.00
13.779	13.758 (1.457)	182	2439083			65.24- 125.24		95.39
210 alpha-Pinene						CAS #: 80-56-8		
10.599	10.599 (1.120)	93	2760113	100.000	112.22	80.00- 120.00		100.00
10.599	10.599 (1.120)	77	796024			0.00- 58.21		28.84
214 beta-Pinene						CAS #: 127-91-3		
11.422	11.422 (1.207)	93	2112301	100.000	133.10	80.00- 120.00		100.00
11.444	11.444 (1.210)	91	3962866			153.57- 213.57		187.61

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051920.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	157260	-0.98
108 1,4-Difluorobenze	597103	358262	835944	611896	2.48
153 Chlorobenzene-d5	587747	352648	822846	605655	3.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051920.d

Date : 19-MAY-2021 22:07

Client ID:

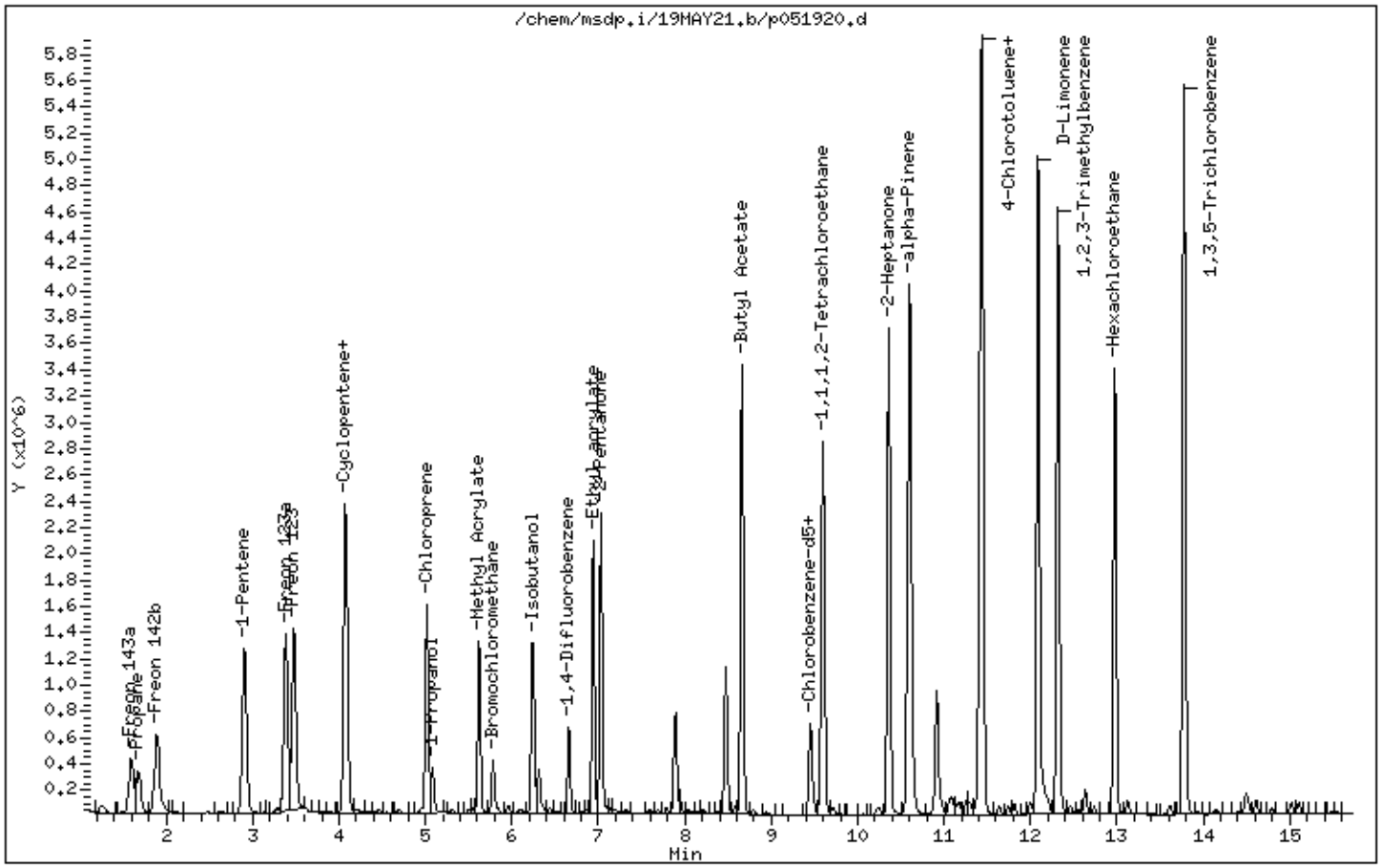
Instrument: msdp.i

Sample Info: 100mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051910.d
Lab Smp Id: ICAL Level 9
Inj Date : 19-MAY-2021 16:53
Operator : LD Inst ID: msdp.i
Smp Info : 200mL 3018-2034
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 16:53 Cal File: p051910.d
Als bottle: 13 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20ICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
4 Freon 134a					CAS #: 811-97-2		
1.660	1.633 (0.287)	83	963392	200.000	207.55	80.00- 120.00	100.00(A)
1.646	1.633 (0.285)	69	867624			59.44- 119.44	90.06
1.758	1.745 (0.304)	51	4138681			419.06- 479.06	429.59
5 Propylene					CAS #: 115-07-1		
1.688	1.675 (0.292)	41	1396714	200.000	208.12	80.00- 120.00	100.00(A)
1.688	1.675 (0.292)	42	925437			35.28- 95.28	66.26
1.688	1.675 (0.292)	39	960683			38.35- 98.35	68.78
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	610604	200.000	183.68	80.00- 120.00	100.00
1.758	1.745 (0.304)	51	4138681			597.63- 657.63	677.80
1.716	1.703 (0.297)	47	402984			33.72- 93.72	66.00
8 Freon 12					CAS #: 75-71-8		
1.730	1.717 (0.299)	85	2956019	200.000	224.92	80.00- 120.00	100.00(A)
1.730	1.717 (0.299)	87	956315			2.37- 62.37	32.35
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.745 (0.304)	67	279979	200.000	215.49	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
9 Chlorodifluoromethane (continued)							
1.758	1.745 (0.304)	51	4138681			1501.01-1561.01	1478.21
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	2798238	200.000	210.96	80.00- 120.00	100.00(A)
1.856	1.856 (0.321)	137	896202			2.30- 62.30	32.03
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	3072142	200.000	206.77	80.00- 120.00	100.00(A)
1.870	1.870 (0.323)	42	980915			2.44- 62.44	31.93
1.870	1.856 (0.323)	58	99396			0.00- 33.36	3.24
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	1152746	200.000	151.06	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	283410			0.00- 56.26	24.59
18 Butane					CAS #: 106-97-8		
2.053	2.025 (0.355)	58	411216	200.000	232.63	80.00- 120.00	100.00(A)
2.053	2.025 (0.355)	43	3342638			823.29- 883.29	812.87
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	1863332	200.000	203.01	80.00- 120.00	100.00(A)
2.075	2.068 (0.359)	64	541008			0.00- 59.69	29.03
20 1,3-Butadiene					CAS #: 106-99-0		
2.111	2.089 (0.365)	54	1717595	200.000	229.88	80.00- 120.00	100.00(A)
2.111	2.089 (0.365)	39	2054933			52.37- 112.37	119.64
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	1117043	200.000	189.24	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	1045104			64.07- 124.07	93.56
30 Chloroethane					CAS #: 75-00-3		
2.619	2.612 (0.453)	64	698592	200.000	211.62	80.00- 120.00	100.00(A)
2.619	2.612 (0.453)	66	205685			0.04- 60.04	29.44
2.619	2.612 (0.453)	49	231191			4.54- 64.54	33.09
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	2078373	200.000	206.91	80.00- 120.00	100.00(A)
2.641	2.634 (0.456)	57	1341657			34.12- 94.12	64.55
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.492)	106	1169390	200.000	214.33	80.00- 120.00	100.00(A)
2.848	2.841 (0.492)	108	1149051			69.27- 129.27	98.26
33 Freon 11					CAS #: 75-69-4		
2.898	2.884 (0.501)	101	2990714	200.000	213.62	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
33 Freon 11 (continued)							
2.898	2.884 (0.501)	103	1954067			34.72- 94.72	65.34
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.899 (0.502)	67	2628562	200.000	218.19	80.00- 120.00	100.00(A)
2.906	2.899 (0.502)	69	808198			0.84- 60.84	30.75
35 Pentane					CAS #: 109-66-0		
2.977	2.970 (0.515)	43	3326896	200.000	203.77	80.00- 120.00	100.00(A)
2.977	2.970 (0.515)	57	497125			0.00- 44.98	14.94
2.977	2.970 (0.515)	72	250044			0.00- 37.39	7.52
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	597925	200.000	217.07	80.00- 120.00	100.00(A)
3.292	3.285 (0.569)	59	1144802			163.46- 223.46	191.46
3.285	3.285 (0.568)	45	1667751			250.40- 310.40	278.92
39 Ethanol					CAS #: 64-17-5		
3.249	3.242 (0.562)	46	301814	200.000	207.52	80.00- 120.00	100.00(A)
3.285	3.242 (0.568)	45	1657457			511.19- 571.19	549.17
42 Acrolein					CAS #: 107-02-8		
3.543	3.529 (0.612)	55	539808	200.000	213.90	80.00- 120.00	100.00(A)
3.543	3.529 (0.612)	56	750593			111.10- 171.10	139.05
43 Freon 113					CAS #: 76-13-1		
3.557	3.550 (0.615)	151	2174805	200.000	208.58	80.00- 120.00	100.00(A)
3.557	3.550 (0.615)	153	1392066			33.56- 93.56	64.01
3.557	3.550 (0.615)	101	2603153			89.21- 149.21	119.70
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.593	3.579 (0.621)	96	1272304	200.000	210.50	80.00- 120.00	100.00(A)
3.593	3.579 (0.621)	98	804446			34.02- 94.02	63.23
3.593	3.579 (0.621)	61	2540756			168.77- 228.77	199.70
47 Acetone					CAS #: 67-64-1		
3.722	3.708 (0.643)	58	818913	200.000	213.00	80.00- 120.00	100.00(A)
3.722	3.708 (0.643)	43	2670673			302.95- 362.95	326.12
48 Carbon Disulfide					CAS #: 75-15-0		
3.837	3.823 (0.663)	76	3473690	200.000	212.53	80.00- 120.00	100.00(A)
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	2824784	200.000	259.99	80.00- 120.00	100.00(A)
3.794	3.794 (0.656)	127	1185970			12.22- 72.22	41.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	3287894	200.000	212.18	80.00- 120.00	100.00(A)
3.901	3.887 (0.674)	43	565170			0.00- 47.19	17.19
54 3-Chloropropene					CAS #: 107-05-1		
4.059	4.052 (0.702)	76	545365	200.000	199.73	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	2224570			396.19- 456.19	407.90
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	1631593	200.000	225.92	80.00- 120.00	100.00(A)
4.131	4.123 (0.714)	40	829052			20.95- 80.95	50.81
4.131	4.123 (0.714)	38	182363			0.00- 41.17	11.18
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	2169168	200.000	217.21	80.00- 120.00	100.00(A)
4.238	4.238 (0.733)	84	1125402			22.03- 82.03	51.88
4.238	4.238 (0.733)	51	657885			0.18- 60.18	30.33
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	3675194	200.000	203.38	80.00- 120.00	100.00(A)
4.345	4.338 (0.751)	41	762931			0.00- 51.11	20.76
4.345	4.338 (0.751)	57	374274			0.00- 40.49	10.18
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	3660106	200.000	203.22	80.00- 120.00	100.00(A)
4.446	4.446 (0.768)	57	1205080			3.10- 63.10	32.92
4.446	4.446 (0.768)	41	1137977			1.28- 61.28	31.09
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	872146	200.000	213.32	80.00- 120.00	100.00(A)
4.482	4.482 (0.775)	61	2471299			255.84- 315.84	283.36
4.482	4.482 (0.775)	96	1368568			127.59- 187.59	156.92
66 Acrylonitrile					CAS #: 107-13-1		
4.567	4.560 (0.789)	52	1209839	200.000	208.90	80.00- 120.00	100.00(A)
4.567	4.560 (0.789)	53	1441756			88.05- 148.05	119.17
67 Hexane					CAS #: 110-54-3		
4.696	4.697 (0.812)	57	3059384	200.000	213.36	80.00- 120.00	100.00(A)
4.696	4.697 (0.812)	43	2035499			37.52- 97.52	66.53
4.696	4.697 (0.812)	86	348023			0.00- 41.48	11.38
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	2727099	200.000	215.24	80.00- 120.00	100.00(A)
4.969	4.962 (0.859)	65	807144			0.00- 59.70	29.60

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
	72 Isopropyl ether					CAS #: 108-20-3		
	4.947	4.954 (0.855)	45	6972756	200.000	207.52	80.00- 120.00	100.00(A)
	4.947	4.954 (0.855)	87	1261426			0.00- 48.18	18.09
	4.947	4.954 (0.855)	59	707319			0.00- 40.15	10.14
	73 Vinyl Acetate					CAS #: 108-05-4		
	4.997	4.997 (0.864)	86	353856	200.000	221.69	80.00- 120.00	100.00(A)
	4.997	4.997 (0.864)	43	6152688			2432.48-2492.48	1738.75
	79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
	5.305	5.305 (0.917)	59	5991015	200.000	205.98	80.00- 120.00	100.00(A)
	5.305	5.305 (0.917)	87	1852036			1.00- 61.00	30.91
	5.305	5.305 (0.917)	41	1108520			0.00- 48.73	18.50
	84 2,2-Dichloropropane					CAS #: 594-20-7		
	5.513	5.506 (0.953)	77	2339456	200.000	212.12	80.00- 120.00	100.00(A)
	5.513	5.506 (0.953)	79	759579			2.28- 62.28	32.47
	5.513	5.506 (0.953)	97	577290			0.00- 53.93	24.68
	85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
	5.549	5.549 (0.959)	98	941351	200.000	222.97	80.00- 120.00	100.00(A)
	5.549	5.549 (0.959)	96	1475590			125.75- 185.75	156.75
	5.549	5.549 (0.959)	61	3406307			332.40- 392.40	361.85
	86 2-Butanone					CAS #: 78-93-3		
	5.556	5.556 (0.960)	72	710177	200.000	214.24	80.00- 120.00	100.00(A)
	5.563	5.556 (0.962)	43	8748765			1214.50-1274.50	1231.91
	5.556	5.556 (0.960)	57	313614			14.68- 74.68	44.16
	87 Ethyl Acetate					CAS #: 141-78-6		
	5.570	5.570 (0.963)	45	710278	200.000	215.42	80.00- 120.00	100.00(A)
	5.549	5.549 (0.959)	61	3406439			452.04- 512.04	479.59
	5.570	5.570 (0.963)	70	376648			22.77- 82.77	53.03
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.785	5.778 (1.000)	130	146655	25.0000		80.00- 120.00	100.00
	5.785	5.778 (1.000)	128	114483			48.23- 108.23	78.06
	5.785	5.778 (1.000)	49	264310			150.57- 210.57	180.23
	92 Chloroform					CAS #: 67-66-3		
	5.842	5.835 (1.010)	83	2849633	200.000	221.70	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.842	5.835 (1.010)	85	1839274			34.70- 94.70	64.54
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	1890120	200.000	209.08	80.00- 120.00	100.00(A)
5.957	5.957 (1.030)	56	3281786			142.57- 202.57	173.63
5.957	5.957 (1.030)	41	1740496			62.09- 122.09	92.08
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.972 (1.032)	97	2948715	200.000	206.40	80.00- 120.00	100.00(A)
5.971	5.972 (1.032)	99	1896974			34.02- 94.02	64.33
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.053)	119	2981854	200.000	217.13	80.00- 120.00	100.00(A)
6.093	6.086 (1.053)	117	3007163			70.64- 130.64	100.85
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.919)	110	839217	200.000	203.04	80.00- 120.00	100.00(A)
6.115	6.115 (0.918)	75	2124877			226.85- 286.85	253.20
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.085)	57	10464793	200.000	207.89	80.00- 120.00	100.00(A)
6.279	6.280 (1.085)	56	3399889			2.24- 62.24	32.49
6.279	6.280 (1.085)	41	2587604			0.00- 54.39	24.73
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	4111436	200.000	205.31	80.00- 120.00	100.00(A)
6.301	6.301 (0.946)	77	947596			0.00- 52.90	23.05
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	228223	25.0000	27.989	80.00- 120.00	100.00
6.308	6.308 (1.090)	67	169168			27.21- 87.21	74.12
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	1080564	200.000	191.25	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	4364452			372.79- 432.79	403.90
6.358	6.358 (0.955)	55	1482176			112.09- 172.09	137.17
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	2173814	200.000	205.36	80.00- 120.00	100.00(A)
6.380	6.380 (0.958)	64	662081			0.79- 60.79	30.46
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	1572559	200.000	200.11	80.00- 120.00	100.00(A)
6.444	6.444 (0.968)	43	4039565			226.53- 286.53	256.88
6.444	6.444 (0.968)	57	2057612			100.85- 160.85	130.84

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	607214	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93970			0.00- 45.71	15.48
110 n-Butanol						CAS #: 71-36-3	
6.809	6.810 (1.023)	56	1498541	200.000	205.70	80.00- 120.00	100.00(A)
6.809	6.810 (1.023)	41	1046025			40.99- 100.99	69.80
6.809	6.810 (1.023)	43	852168			27.38- 87.38	56.87
111 Trichloroethene						CAS #: 79-01-6	
6.867	6.867 (1.031)	95	2004771	200.000	206.61	80.00- 120.00	100.00(A)
6.867	6.867 (1.031)	130	2152958			76.29- 136.29	107.39
6.867	6.867 (1.031)	97	1282796			33.63- 93.63	63.99
114 1,2-Dichloropropane						CAS #: 78-87-5	
7.096	7.089 (1.066)	63	2045978	200.000	200.76	80.00- 120.00	100.00(A)
7.096	7.089 (1.066)	62	1452463			41.07- 101.07	70.99
7.096	7.089 (1.066)	41	1025055			22.53- 82.53	50.10
116 Methyl Methacrylate						CAS #: 80-62-6	
7.139	7.132 (0.755)	69	1664410	200.000	203.56	80.00- 120.00	100.00(A)
7.139	7.132 (0.755)	41	3490137			179.84- 239.84	209.69
7.139	7.139 (0.755)	100	669735			9.59- 69.59	40.24
117 1,4-Dioxane						CAS #: 123-91-1	
7.175	7.175 (1.077)	88	1068493	200.000	195.71	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	1054342			68.28- 128.28	98.68
7.175	7.175 (1.077)	57	357622			2.68- 62.68	33.47
118 Dibromomethane						CAS #: 74-95-3	
7.211	7.204 (0.762)	174	1851234	200.000	206.43	80.00- 120.00	100.00(A)
7.203	7.204 (0.761)	93	1651072			60.09- 120.09	89.19
7.203	7.204 (0.761)	95	1434152			48.38- 108.38	77.47
122 Bromodichloromethane						CAS #: 75-27-4	
7.318	7.318 (1.099)	83	3187397	200.000	209.29	80.00- 120.00	100.00(A)
7.318	7.318 (1.099)	85	2050718			35.24- 95.24	64.34
126 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.698	7.691 (1.156)	75	2666430	200.000	209.05	80.00- 120.00	100.00(A)
7.698	7.691 (1.156)	77	846283			2.42- 62.42	31.74
7.691	7.691 (1.155)	39	1760038			37.16- 97.16	66.01
127 Methylcyclohexane						CAS #: 108-87-2	
6.974	6.974 (1.047)	83	2728123	200.000	194.48	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	1272958			15.78- 75.78	46.66

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.047)	55	3109761			84.64- 144.64	113.99
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	1984175	200.000	194.19	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	5363252			242.35- 302.35	270.30
7.798	7.791 (1.171)	85	653050			3.24- 63.24	32.91
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	661488	25.0000	25.064	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62867			0.00- 40.44	9.50
7.891	7.891 (1.185)	100	430214			34.95- 94.95	65.04
137 Toluene					CAS #: 108-88-3		
7.956	7.949 (1.195)	91	5496866	200.000	198.84	80.00- 120.00	100.00
7.956	7.949 (1.195)	92	3223093			28.38- 88.38	58.64
136 Octane					CAS #: 111-65-9		
7.948	7.949 (1.194)	57	2290202	200.000	196.83	80.00- 120.00	100.00
7.948	7.949 (1.194)	85	1946174			56.00- 116.00	84.98
7.948	7.949 (1.194)	43	5895371			228.66- 288.66	257.42
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	2472659	200.000	208.56	80.00- 120.00	100.00(A)
8.213	8.214 (0.868)	77	780505			1.24- 61.24	31.57
8.213	8.214 (0.868)	39	1616909			34.11- 94.11	65.39
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	1973653	200.000	206.88	80.00- 120.00	100.00(A)
8.400	8.400 (0.888)	99	1227648			31.96- 91.96	62.20
8.400	8.400 (0.888)	83	1639096			52.93- 112.93	83.05
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	2764412	200.000	200.38	80.00- 120.00	100.00(A)
8.464	8.464 (0.895)	129	2156828			47.84- 107.84	78.02
8.464	8.464 (0.895)	131	2092898			45.29- 105.29	75.71
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	2749799	200.000	198.84	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	5238084			162.87- 222.87	190.49
8.586	8.586 (0.908)	100	433880			0.00- 45.94	15.78
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	2712190	200.000	204.00	80.00- 120.00	100.00(A)
8.579	8.579 (1.288)	41	3365614			94.99- 154.99	124.09
8.579	8.579 (1.288)	78	882760			2.05- 62.05	32.55

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
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146 Dibromochloromethane						CAS #: 124-48-1		
8.801	8.801 (0.930)	129	3803420	200.000	207.93	80.00- 120.00	100.00(A)	
8.801	8.801 (0.930)	127	2948441			47.45- 107.45	77.52	
148 1,2-Dibromoethane (EDB)						CAS #: 106-93-4		
8.951	8.951 (0.946)	107	3199545	200.000	204.31	80.00- 120.00	100.00(A)	
8.951	8.951 (0.946)	109	3015665			64.21- 124.21	94.25	
151 1-Bromo-2-Chloroethane						CAS #: 107-04-0		
7.605	7.605 (1.142)	63	3852793	200.000	204.41	80.00- 120.00	100.00(A)	
7.605	7.605 (1.142)	65	1142924			0.00- 59.64	29.66	
7.605	7.605 (1.142)	144	374076			0.00- 39.63	9.71	
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	595090	25.0000		80.00- 120.00	100.00	
9.460	9.460 (1.000)	82	322638			23.78- 83.78	54.22	
154 Chlorobenzene						CAS #: 108-90-7		
9.496	9.496 (1.004)	112	4805022	200.000	203.48	80.00- 120.00	100.00(A)	
9.496	9.496 (1.004)	114	1542900			1.74- 61.74	32.11	
9.496	9.496 (1.004)	77	2584699			25.04- 85.04	53.79	
155 Ethyl Benzene						CAS #: 100-41-4		
9.567	9.567 (1.011)	106	2443043	200.000	198.07	80.00- 120.00	100.00	
9.567	9.567 (1.011)	91	7445132			273.74- 333.74	304.75	
156 Nonane						CAS #: 111-84-2		
9.603	9.596 (1.015)	43	6171885	200.000	194.14	80.00- 120.00	100.00	
9.603	9.603 (1.015)	57	5253139			54.16- 114.16	85.11	
9.603	9.603 (1.015)	85	1482943			0.00- 53.90	24.03	
158 m,p-Xylene						CAS #: 108-38-3		
9.718	9.718 (1.027)	106	3015614	200.000	196.78	80.00- 120.00	100.00	
9.718	9.718 (1.027)	91	5869082			163.73- 223.73	194.62	
164 o-Xylene						CAS #: 95-47-6		
10.226	10.226 (1.081)	106	2925715	200.000	197.04	80.00- 120.00	100.00	
10.226	10.226 (1.081)	91	5968076			177.45- 237.45	203.99	
165 Styrene						CAS #: 100-42-5		
10.255	10.255 (1.084)	104	4970586	200.000	197.21	80.00- 120.00	100.00	
10.255	10.255 (1.084)	78	2372058			17.88- 77.88	47.72	
167 Bromoform						CAS #: 75-25-2		
10.549	10.542 (1.115)	173	3738056	200.000	208.68	80.00- 120.00	100.00(A)	
10.549	10.542 (1.115)	171	1919438			21.25- 81.25	51.35	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
168 Cumene					CAS #: 98-82-8		
10.656	10.649 (1.126)	105	9133490	200.000	196.23	80.00- 120.00	100.00
10.656	10.649 (1.126)	120	2612516			0.00- 58.52	28.60
10.649	10.649 (1.126)	51	1174655			0.00- 43.00	12.86
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	3186182	200.000	191.28	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	1023262			1.94- 61.94	32.12
10.871	10.871 (1.149)	42	2155068			37.89- 97.89	67.64
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	391305	25.0000	25.595	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	492677			95.92- 155.92	125.91
10.921	10.921 (1.154)	176	379433			66.89- 126.89	96.97
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	4478778	200.000	197.42	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	2889301			35.20- 95.20	64.51
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	2876488	200.000	203.06	80.00- 120.00	100.00(A)
11.107	11.107 (1.174)	158	2796126			67.21- 127.21	97.21
11.179	11.179 (1.182)	77	1690886			29.02- 89.02	58.78
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	2681478	200.000	194.62	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	10576237			366.49- 426.49	394.42
11.150	11.150 (1.179)	105	403848			0.00- 44.85	15.06
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	1359844	200.000	190.81	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	4281561			280.55- 340.55	314.86
11.107	11.100 (1.174)	61	607928			15.49- 75.49	44.71
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	954975	200.000	201.05	80.00- 120.00	100.00(A)
11.179	11.179 (1.182)	89	738088			49.11- 109.11	77.29
11.179	11.179 (1.182)	75	4281561			426.44- 486.44	448.34
182 Decane					CAS #: 124-18-5		
11.258	11.251 (1.190)	57	6477918	200.000	178.80	80.00- 120.00	100.00
11.258	11.251 (1.190)	71	1764517			0.00- 57.66	27.24
11.258	11.258 (1.190)	142	263248			0.00- 34.09	4.06
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	2800806	200.000	189.85	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
11.286	11.287 (1.193)	105	9001865			284.55- 344.55	321.40
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.308 (1.196)	126	2257842	200.000	193.82	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	7834055			315.17- 375.17	346.97
11.301	11.301 (1.195)	65	1128270			21.55- 81.55	49.97
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	4109840	200.000	199.10	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	7853670			164.93- 224.93	191.09
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	4135477	200.000	199.73	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	2280562			25.30- 85.30	55.15
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.738 (1.242)	119	7751216	200.000	200.41	80.00- 120.00	100.00(A)
11.745	11.738 (1.242)	134	1872880			0.00- 54.25	24.16
11.738	11.738 (1.241)	91	4741993			31.27- 91.27	61.18
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	7641602	200.000	195.85	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	3760947			19.05- 79.05	49.22
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	11.996 (1.269)	134	2387678	200.000	198.82	80.00- 120.00	100.00
12.003	11.996 (1.269)	105	11138250			437.55- 497.55	466.49
11.996	11.996 (1.268)	91	1685037			40.76- 100.76	70.57
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	10410880	200.000	197.06	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	2680251			0.00- 55.54	25.74
12.160	12.153 (1.285)	91	2223506			0.00- 51.48	21.36
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	5269323	200.000	196.50	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	3364893			33.21- 93.21	63.86
12.196	12.196 (1.289)	111	2179310			11.31- 71.31	41.36
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	5379837	200.000	198.98	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	3443156			33.90- 93.90	64.00
12.311	12.311 (1.301)	111	2132840			9.45- 69.45	39.65
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	7476818	200.000	201.60	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene (continued)							
12.461	12.461 (1.317)	126	1723549			0.00- 53.26	23.05
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	7391785	200.000	176.63	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	6481442			58.12- 118.12	87.68
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	2555712	200.000	190.54	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	8833770			314.79- 374.79	345.65
12.626	12.626 (1.335)	92	4753356			154.29- 214.29	185.99
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	5095250	200.000	195.20	80.00- 120.00	100.00
12.733	12.741 (1.346)	148	3245004			33.84- 93.84	63.69
12.733	12.741 (1.346)	111	2166463			12.73- 72.73	42.52
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	3185412	200.000	200.77	80.00- 120.00	100.00(A)
13.600	13.600 (1.438)	75	2632735			52.48- 112.48	82.65
13.600	13.600 (1.438)	155	2459698			47.41- 107.41	77.22
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	8872524	247.000	272.11	80.00- 120.00	100.00(A)
13.801	13.801 (1.459)	43	7239358			52.87- 112.87	81.59
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	5062178	252.000	261.56	80.00- 120.00	100.00(A)
14.467	14.467 (1.529)	182	4827276			65.33- 125.33	95.36
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.582 (1.541)	225	3721949	257.000	273.25	80.00- 120.00	100.00(A)
14.581	14.582 (1.541)	223	2342743			33.17- 93.17	62.94
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	1265607	25.4000	25.587	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	157387			0.00- 42.88	12.44
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.069 (1.593)	180	4844896	266.000	283.17	80.00- 120.00	100.00(A)
15.068	15.069 (1.593)	182	4630533			65.75- 125.75	95.58
15.068	15.069 (1.593)	145	1724268			5.23- 65.23	35.59

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051910.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	146655	-7.65
108 1,4-Difluorobenze	597103	358262	835944	607214	1.69
153 Chlorobenzene-d5	587747	352648	822846	595090	1.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051910.d

Date : 19-MAY-2021 16:53

Client ID:

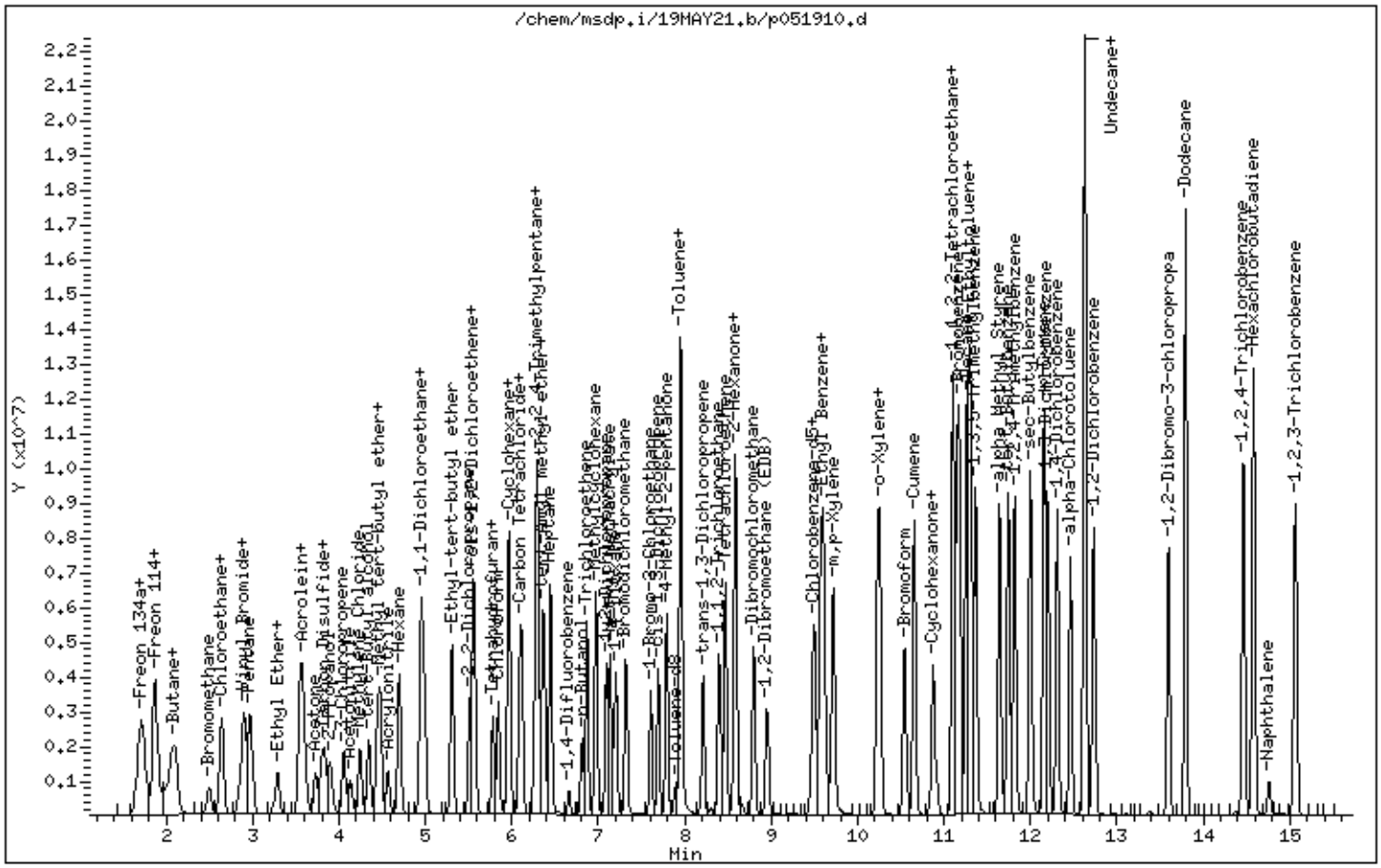
Instrument: msdp.i

Sample Info: 200mL 3018-2034

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051921.d
Lab Smp Id: ICAL Level 9
Inj Date : 19-MAY-2021 22:39
Operator : gh Inst ID: msdp.i
Smp Info : 200mL 3018-2013
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 22:39 Cal File: p051921.d
Als bottle: 3 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spICAL.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	153421	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	119993			48.23- 108.23	78.21
5.778	5.778 (1.000)	49	281111			150.57- 210.57	183.23
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	611809	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95212			0.00- 45.71	15.56
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	591968	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	325404			23.78- 83.78	54.97
3 Freon 143a					CAS #: 420-46-2		
1.591	1.590 (0.275)	65	400344	200.000	135.04	80.00- 120.00	100.00
1.591	1.590 (0.275)	69	1105090			243.50- 303.50	276.04
1.591	1.590 (0.275)	64	95760			0.00- 54.06	23.92
6 Propane					CAS #: 74-98-6		
1.675	1.674 (0.290)	43	527234	200.000	194.13	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.675	1.674 (0.290)	39	330737			34.98- 94.98	62.73
1.675	1.674 (0.290)	41	280905			25.22- 85.22	53.28
13 Freon 142b						CAS #: 75-68-3	
1.884	1.884 (0.326)	65	2932126	200.000	195.58	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	866027			0.00- 59.77	29.54
36 1-Pentene						CAS #: 109-67-1	
2.906	2.906 (0.503)	55	1894226	200.000	193.06	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	2580451			105.17- 165.17	136.23
40 Freon 123a						CAS #: 354-23-4	
3.386	3.385 (0.586)	117	1952332	200.000	203.39	80.00- 120.00	100.00(A)
3.378	3.378 (0.585)	67	2434248			104.69- 164.69	124.68
41 Freon 123						CAS #: 306-83-2	
3.479	3.479 (0.602)	83	2762089	200.000	202.52	80.00- 120.00	100.00(A)
3.479	3.479 (0.602)	133	571513			0.00- 50.87	20.69
3.479	3.479 (0.602)	85	1881243			36.08- 96.08	68.11
55 Cyclopentene						CAS #: 142-29-0	
4.073	4.073 (0.705)	67	3056516	200.000	208.28	80.00- 120.00	100.00(A)
4.073	4.073 (0.705)	68	1136453			6.76- 66.76	37.18
4.066	4.073 (0.704)	53	851928			0.00- 57.54	27.87
56 Methyl Acetate						CAS #: 79-20-9	
4.073	4.073 (0.705)	43	3612790	200.000	210.52	80.00- 120.00	100.00(A)
4.073	4.073 (0.705)	74	515897			0.00- 44.13	14.28
74 Chloroprene						CAS #: 126-99-8	
5.012	5.019 (0.867)	53	2991875	200.000	218.26	80.00- 120.00	100.00(A)
5.019	5.019 (0.869)	88	1176445			9.21- 69.21	39.32
5.012	5.019 (0.867)	50	709040			0.00- 54.25	23.70
75 1-Propanol						CAS #: 71-23-8	
5.083	5.083 (0.880)	59	399024	200.000	196.88	80.00- 120.00	100.00
5.083	5.083 (0.880)	42	379166			63.23- 123.23	95.02
5.083	5.083 (0.880)	41	223562			24.74- 84.74	56.03
88 Methyl Acrylate						CAS #: 96-33-3	
5.621	5.620 (0.973)	55	3851199	200.000	213.88	80.00- 120.00	100.00(A)
5.621	5.620 (0.973)	85	434023			0.00- 41.28	11.27
5.621	5.620 (0.973)	58	316363			0.00- 38.22	8.21
103 Isobutanol						CAS #: 78-83-1	
6.237	6.244 (1.079)	39	424672	200.000	195.48	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
6.237	6.244 (1.079)	43	2091776			448.18- 508.18	492.56
6.237	6.244 (1.079)	41	1430737			299.99- 359.99	336.90
113 Ethyl acrylate					CAS #: 140-88-5		
6.939	6.938 (0.733)	99	269080	200.000	196.94	80.00- 120.00	100.00
6.939	6.938 (0.733)	45	496156			149.95- 209.95	184.39
6.939	6.938 (0.733)	55	5189842			1849.07-1909.07	1928.74
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.031 (0.743)	43	6094951	200.000	202.80	80.00- 120.00	100.00(A)
7.032	7.031 (0.743)	58	460764			0.00- 37.44	7.56
7.032	7.031 (0.743)	86	784528			0.00- 42.78	12.87
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.301)	56	3022342	200.000	196.12	80.00- 120.00	100.00
8.665	8.665 (1.301)	73	883323			0.00- 59.10	29.23
8.665	8.657 (1.301)	43	7358553			215.30- 275.30	243.47
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	2663540	200.000	202.39	80.00- 120.00	100.00(A)
9.460	9.460 (1.000)	117	591968			57.42- 117.42	22.22
9.596	9.596 (1.014)	95	938731			5.70- 65.70	35.24
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	4597454	200.000	204.09	80.00- 120.00	100.00(A)
10.362	10.362 (1.793)	43	7586394			136.03- 196.03	165.01
172 D-Limonene					CAS #: 5989-27-5		
12.089	12.089 (1.278)	68	3445097	200.000	257.71	80.00- 120.00	100.00(A)
12.089	12.089 (1.278)	93	2389612			39.41- 99.41	69.36
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	2390402	200.000	197.18	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	7653013			295.02- 355.02	320.16
11.444	11.444 (1.210)	63	988176			11.82- 71.82	41.34
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	3473836	200.000	196.80	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	7726951			192.40- 252.40	222.43
12.318	12.318 (1.302)	77	848060			0.00- 54.69	24.41
205 Hexachloroethane					CAS #: 67-72-1		
12.970	12.970 (1.371)	201	1692084	200.000	243.84	80.00- 120.00	100.00(A)
12.963	12.970 (1.370)	117	2255610			102.99- 162.99	133.30

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.758	13.758 (1.454)	180	4961639	200.000	199.94	80.00- 120.00	100.00
13.758	13.758 (1.454)	182	4745365			65.24- 125.24	95.64
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	5524082	200.000	225.60	80.00- 120.00	100.00(A)
10.599	10.599 (1.120)	77	1558779			0.00- 58.21	28.22
214 beta-Pinene					CAS #: 127-91-3		
11.423	11.422 (1.207)	93	3935444	200.000	245.48	80.00- 120.00	100.00(A)
11.444	11.444 (1.210)	91	7653013			153.57- 213.57	194.46

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051921.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	153421	-3.39
108 1,4-Difluorobenze	597103	358262	835944	611809	2.46
153 Chlorobenzene-d5	587747	352648	822846	591968	0.72

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051921.d

Date : 19-MAY-2021 22:39

Client ID:

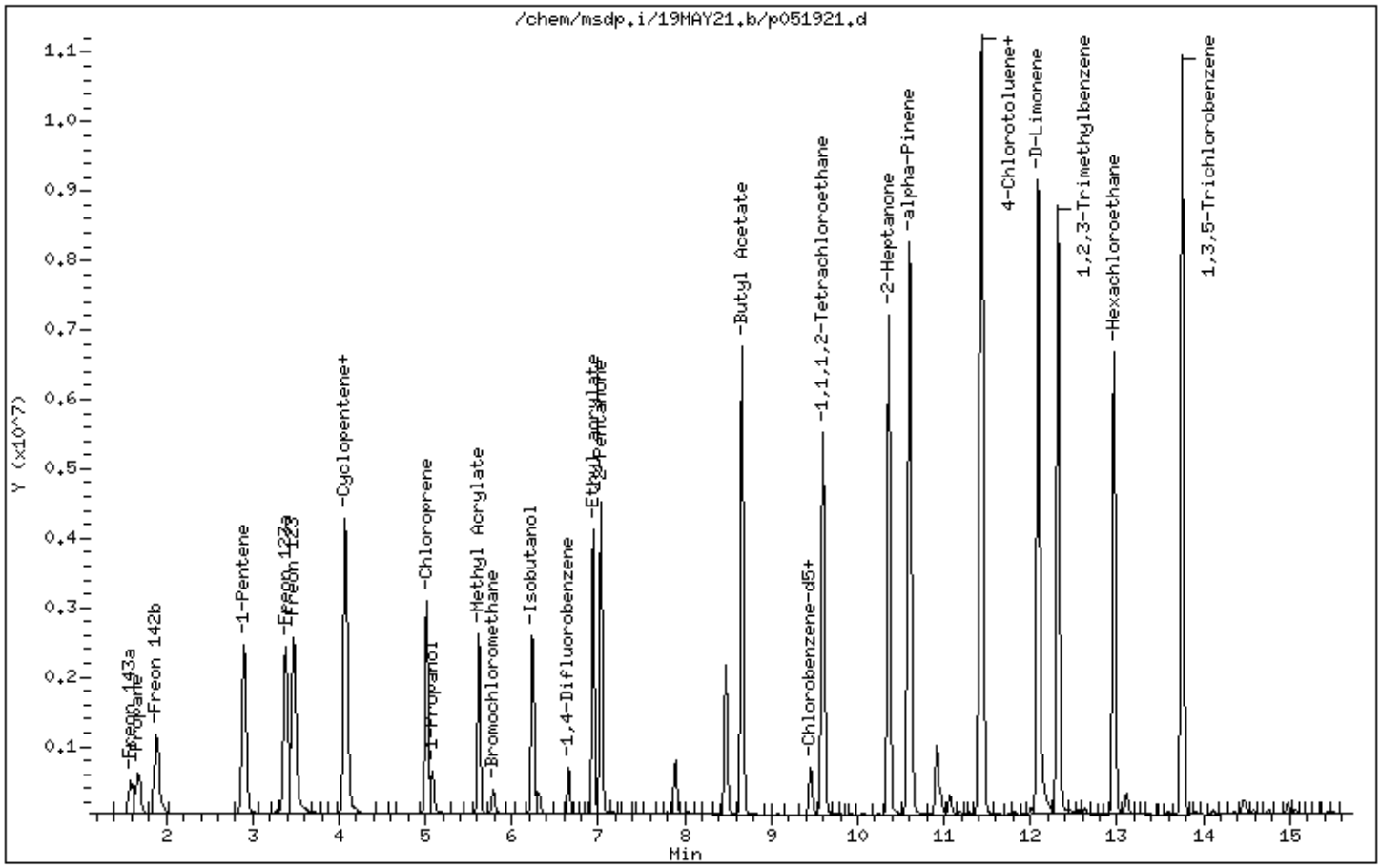
Instrument: msdp.i

Sample Info: 200mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051924.d
Lab Smp Id: ICAL Level 10
Inj Date : 20-MAY-2021 00:05
Operator : gh Inst ID: msdp.i
Smp Info : 20mL 3018-2045
Misc Info : 0.5ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 09:50 lk8g Quant Type: ISTD
Cal Date : 20-MAY-2021 00:05 Cal File: p051924.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_Level2.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	163846	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	127369			48.23- 108.23	77.74
5.771	5.778 (1.000)	49	298690			150.57- 210.57	182.30
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	600718	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	95422			0.00- 45.71	15.88
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	590361	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	322116			23.78- 83.78	54.56
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	214241	25.0000	23.693	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	108928			27.21- 87.21	50.84
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	647924	25.0000	24.838	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	71814			0.00- 40.44	11.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	419509			34.95- 94.95	64.75
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	377731	25.0000	24.917	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	484972			95.92- 155.92	128.39
10.921	10.921 (1.154)	176	368139			66.89- 126.89	97.46
8 Freon 12					CAS #: 75-71-8		
1.716	1.717 (0.297)	85	7389	0.50000	0.5028	80.00- 120.00	100.00
1.716	1.717 (0.297)	87	2098			2.37- 62.37	28.39
10 Freon 114					CAS #: 76-14-2		
1.842	1.856 (0.319)	135	5833	0.50000	0.4044	80.00- 120.00	100.00(a)
1.842	1.856 (0.319)	137	1678			2.30- 62.30	28.77
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	5135	0.50000	0.5007	80.00- 120.00	100.00
2.053	2.068 (0.355)	64	2485			0.00- 59.69	48.39
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	3780	0.50000	0.4582	80.00- 120.00	100.00(a)
2.082	2.089 (0.360)	39	3849			52.37- 112.37	101.83
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	7721	0.50000	0.4944	80.00- 120.00	100.00(a)
2.877	2.884 (0.498)	103	5435			34.72- 94.72	70.39
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	5639	0.50000	0.4860	80.00- 120.00	100.00(a)
3.550	3.550 (0.614)	153	3997			33.56- 93.56	70.88
3.543	3.550 (0.613)	101	6873			89.21- 149.21	121.88
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	4090	0.50000	0.5901	80.00- 120.00	100.00
3.572	3.579 (0.618)	98	2595			34.02- 94.02	63.45
3.579	3.579 (0.619)	61	6008			168.77- 228.77	146.89
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	2538	0.50000	0.5480	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	5211			255.84- 315.84	205.32
4.474	4.482 (0.774)	96	4298			127.59- 187.59	169.35
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	3141	0.50000	0.4872	80.00- 120.00	100.00(a)
4.553	4.560 (0.788)	53	3388			88.05- 148.05	107.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
67 Hexane					CAS #: 110-54-3		
4.689	4.697 (0.812)	57	8492	0.50000	0.5261	80.00- 120.00	100.00
4.696	4.697 (0.813)	43	5530			37.52- 97.52	65.12
4.696	4.697 (0.813)	86	877			0.00- 41.48	10.33
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.962 (0.859)	63	5960	0.50000	0.4295	80.00- 120.00	100.00(a)
4.961	4.962 (0.859)	65	2369			0.00- 59.70	39.75
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.542	5.549 (0.959)	98	2716	0.50000	0.5651	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	3855			125.75- 185.75	141.94
5.542	5.549 (0.959)	61	7686			332.40- 392.40	282.99
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	5568	0.50000	0.4521	80.00- 120.00	100.00(a)
5.778	5.771 (1.000)	71	1335			0.00- 55.82	23.98
5.778	5.771 (1.000)	72	1481			0.00- 57.59	26.60
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	6763	0.50000	0.4744	80.00- 120.00	100.00(a)
5.835	5.835 (1.010)	85	4617			34.70- 94.70	68.27
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	5877	0.50000	0.5702	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	9323			142.57- 202.57	158.64
5.957	5.957 (1.031)	41	5136			62.09- 122.09	87.39
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.972 (1.032)	97	8556	0.50000	0.5313	80.00- 120.00	100.00
5.964	5.972 (1.032)	99	5329			34.02- 94.02	62.28
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	6718	0.50000	0.4448	80.00- 120.00	100.00(a)
6.086	6.086 (1.053)	117	6855			70.64- 130.64	102.04
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.087)	57	27567	0.50000	0.4914	80.00- 120.00	100.00(a)
6.279	6.280 (1.087)	56	8468			2.24- 62.24	30.72
6.279	6.280 (1.087)	41	9487			0.00- 54.39	34.41
102 Benzene					CAS #: 71-43-2		
6.294	6.301 (0.945)	78	9954	0.50000	0.5021	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	2384			0.00- 52.90	23.95
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	4608	0.50000	0.4467	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
106 1,2-Dichloroethane (continued)							
6.380	6.380 (0.958)	64	1942			0.79- 60.79	42.14
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	4203	0.50000	0.5352	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	9247			226.53- 286.53	220.01
6.444	6.444 (0.968)	57	5163			100.85- 160.85	122.84
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	4879	0.50000	0.5072	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	4525			76.29- 136.29	92.74
6.867	6.867 (1.031)	97	2893			33.63- 93.63	59.29
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	5364	0.50000	0.5278	80.00- 120.00	100.00
7.096	7.089 (1.066)	62	3356			41.07- 101.07	62.57
7.096	7.089 (1.066)	41	2982			22.53- 82.53	55.59
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.204 (0.762)	174	3904	0.50000	0.4456	80.00- 120.00	100.00(a)
7.204	7.204 (0.761)	93	4176			60.09- 120.09	106.97
7.204	7.204 (0.761)	95	4289			48.38- 108.38	109.86
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	6924	0.50000	0.4642	80.00- 120.00	100.00(a)
7.318	7.318 (1.099)	85	4799			35.24- 95.24	69.31
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	6237	0.50000	0.4950	80.00- 120.00	100.00(a)
7.691	7.691 (1.155)	77	2224			2.42- 62.42	35.66
7.698	7.691 (1.156)	39	4083			37.16- 97.16	65.46
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	7108	0.50000	0.5106	80.00- 120.00	100.00(a)
6.974	6.974 (1.047)	98	3734			15.78- 75.78	52.53
6.967	6.974 (1.046)	55	8514			84.64- 144.64	119.78
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	5902	0.50000	0.5719	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	15074			242.35- 302.35	255.40
7.798	7.791 (1.171)	85	2388			3.24- 63.24	40.46
137 Toluene					CAS #: 108-88-3		
7.948	7.949 (1.194)	91	13680	0.50000	0.5002	80.00- 120.00	100.00
7.948	7.949 (1.194)	92	7825			28.38- 88.38	57.20

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
136 Octane					CAS #: 111-65-9		
7.941	7.949 (1.193)	57	6357	0.50000	0.5451	80.00- 120.00	100.00
7.941	7.949 (1.193)	85	5775			56.00- 116.00	90.84
7.941	7.949 (1.193)	43	15538			228.66- 288.66	244.42
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	5304	0.50000	0.4565	80.00- 120.00	100.00(a)
8.213	8.214 (0.868)	77	3481			1.24- 61.24	65.63
8.213	8.214 (0.868)	39	3904			34.11- 94.11	73.60
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.393	8.400 (0.887)	97	5286	0.50000	0.5505	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	2785			31.96- 91.96	52.69
8.400	8.400 (0.888)	83	4153			52.93- 112.93	78.57
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	5918	0.50000	0.4398	80.00- 120.00	100.00(a)
8.464	8.464 (0.895)	129	5123			47.84- 107.84	86.57
8.464	8.464 (0.895)	131	4693			45.29- 105.29	79.30
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	5918	0.50000	0.4556	80.00- 120.00	100.00(a)
8.579	8.579 (1.288)	41	8417			94.99- 154.99	142.23
8.579	8.579 (1.288)	78	2554			2.05- 62.05	43.16
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	8255	0.50000	0.4601	80.00- 120.00	100.00(a)
8.794	8.801 (0.930)	127	6763			47.45- 107.45	81.93
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	7230	0.50000	0.4694	80.00- 120.00	100.00(a)
8.951	8.951 (0.946)	109	7175			64.21- 124.21	99.24
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	11778	0.50000	0.5024	80.00- 120.00	100.00
9.489	9.496 (1.003)	114	3810			1.74- 61.74	32.35
9.489	9.496 (1.003)	77	11483			25.04- 85.04	97.50
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	6206	0.50000	0.5063	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	18714			273.74- 333.74	301.55
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	8198	0.50000	0.5340	80.00- 120.00	100.00
9.711	9.718 (1.026)	91	15993			163.73- 223.73	195.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	7282	0.50000	0.4950	80.00- 120.00	100.00(a)
10.226	10.226 (1.081)	91	15872			177.45- 237.45	217.96
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	13110	0.50000	0.5212	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	6253			17.88- 77.88	47.70
167 Bromoform					CAS #: 75-25-2		
10.549	10.542 (1.115)	173	8542	0.50000	0.4830	80.00- 120.00	100.00(a)
10.549	10.542 (1.115)	171	4517			21.25- 81.25	52.88
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	23217	0.50000	0.5024	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	6594			0.00- 58.52	28.40
10.649	10.649 (1.126)	51	3671			0.00- 43.00	15.81
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	11440	0.50000	0.5072	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	7316			35.20- 95.20	63.95
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	6965	0.50000	0.5084	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	26590			366.49- 426.49	381.77
11.150	11.150 (1.179)	105	910			0.00- 44.85	13.07
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	4008	0.50000	0.5576	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	11313			280.55- 340.55	282.26
11.100	11.100 (1.173)	61	1733			15.49- 75.49	43.24
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.287 (1.193)	120	8376	0.50000	0.5622	80.00- 120.00	100.00
11.286	11.287 (1.193)	105	23951			284.55- 344.55	285.95
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	6216	0.50000	0.5328	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	20231			315.17- 375.17	325.47
11.294	11.301 (1.194)	65	3746			21.55- 81.55	60.26
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.358	11.365 (1.201)	120	10383	0.50000	0.5061	80.00- 120.00	100.00
11.358	11.365 (1.201)	105	18974			164.93- 224.93	182.74
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	9624	0.50000	0.4722	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
188 alpha Methyl Styrene (continued)							
11.645	11.645 (1.231)	103	5344			25.30- 85.30	55.53
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	19402	0.50000	0.5011	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	9573			19.05- 79.05	49.34
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	6002	0.50000	0.5033	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	29055			437.55- 497.55	484.09
11.996	11.996 (1.268)	91	4721			40.76- 100.76	78.66
194 p-Cymene					CAS #: 99-87-6		
12.153	12.160 (1.285)	119	27397	0.50000	0.5198	80.00- 120.00	100.00(a)
12.160	12.160 (1.285)	134	6978			0.00- 55.54	25.47
12.153	12.153 (1.285)	91	6676			0.00- 51.48	24.37
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	12900	0.50000	0.4867	80.00- 120.00	100.00(a)
12.203	12.196 (1.290)	148	8737			33.21- 93.21	67.73
12.203	12.196 (1.290)	111	5935			11.31- 71.31	46.01
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	13252	0.50000	0.4948	80.00- 120.00	100.00(a)
12.311	12.311 (1.301)	148	8912			33.90- 93.90	67.25
12.311	12.311 (1.301)	111	5613			9.45- 69.45	42.36
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	18333	0.50000	0.4985	80.00- 120.00	100.00(a)
12.461	12.461 (1.317)	126	4052			0.00- 53.26	22.10
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	6974	0.50000	0.5210	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	24024			314.79- 374.79	344.48
12.626	12.626 (1.335)	92	13531			154.29- 214.29	194.02
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.741 (1.346)	146	13316	0.50000	0.5124	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	8543			33.84- 93.84	64.16
12.733	12.741 (1.346)	111	6040			12.73- 72.73	45.36
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	22758	0.61800	0.6916	80.00- 120.00	100.00(a)
13.801	13.801 (1.459)	43	20608			52.87- 112.87	90.55

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051924.d
Lab Smp Id: ICAL Level 10
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	163846	3.17
108 1,4-Difluorobenze	597103	358262	835944	600718	0.61
153 Chlorobenzene-d5	587747	352648	822846	590361	0.44

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/19MAY21.b/p051924.d

Date : 20-MAY-2021 00:05

Client ID:

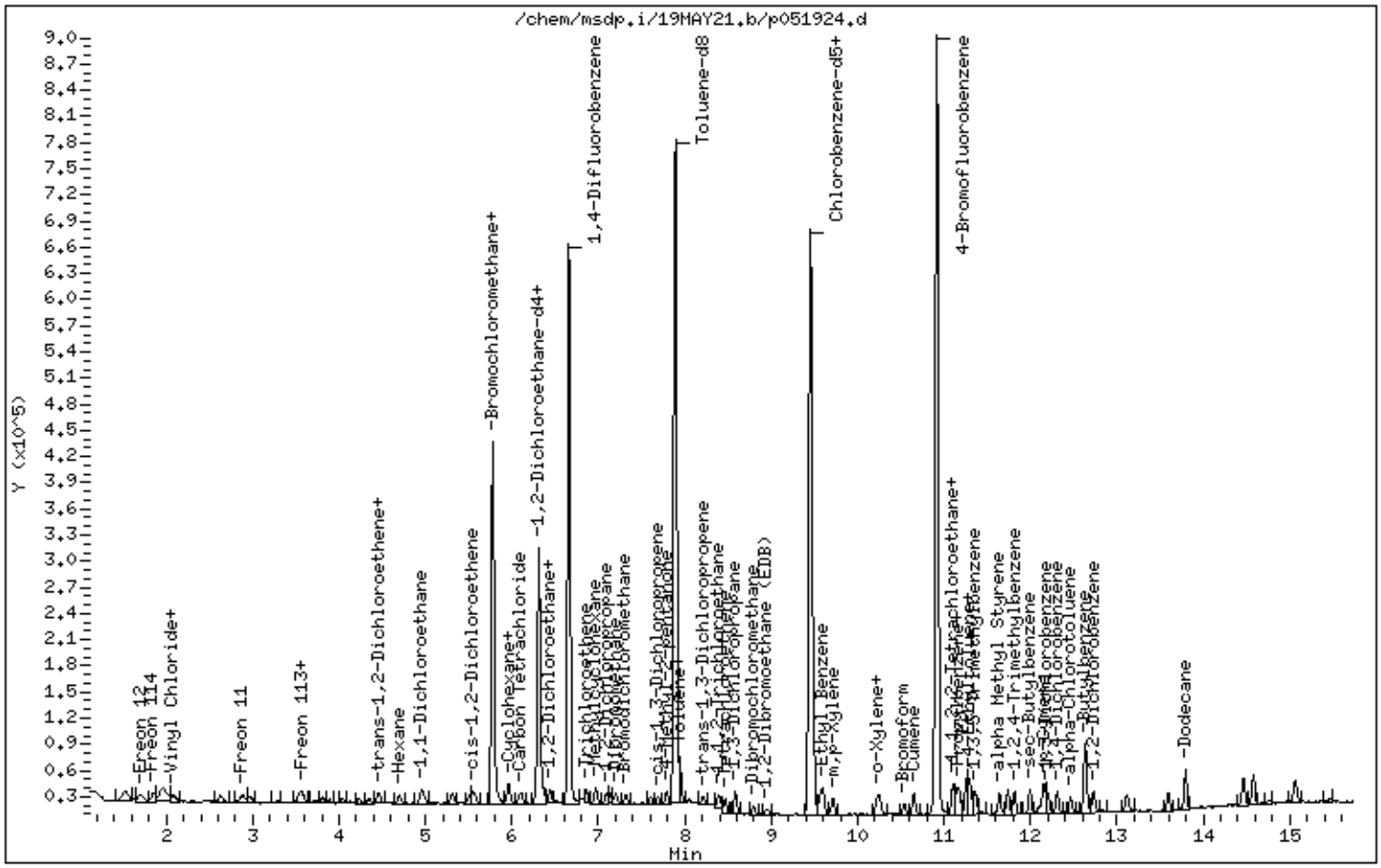
Instrument: msdp.i

Sample Info: 20mL 3018-2045

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/19MAY21.b/p051925.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 20-MAY-2021 00:33
Operator : gh Inst ID: msdp.i
Smp Info : 50mL 3018-2016
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/19MAY21.b/p21q0519a.m
Meth Date : 20-May-2021 11:31 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.778	5.778 (1.000)	130	159261	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	123314				48.23- 108.23	77.43
5.778	5.778 (1.000)	49	287112				150.57- 210.57	180.28
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.659 (1.000)	114	599327	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93610				0.00- 45.71	15.62
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	583008	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	317926				23.78- 83.78	54.53
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.308	6.308 (1.092)	65	217297	24.7232	24.723		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	123853				27.21- 87.21	57.00
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	648333	24.9118	24.912		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	65745				0.00- 40.44	10.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	421967			34.95- 94.95	65.08
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	376160	25.1259	25.126	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	479143			95.92- 155.92	127.38
10.921	10.921 (1.154)	176	367133			66.89- 126.89	97.60
4 Freon 134a					CAS #: 811-97-2		
1.633	1.633 (0.283)	83	269381	53.4416	53.442	80.00- 120.00	100.00
1.633	1.633 (0.283)	69	238008			59.44- 119.44	88.35
1.745	1.745 (0.302)	51	1146080			419.06- 479.06	425.45
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	351150	48.1826	48.182	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	231660			35.28- 95.28	65.97
1.675	1.675 (0.290)	39	239136			38.35- 98.35	68.10
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	184945	51.2320	51.232	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1146080			597.63- 657.63	619.69
1.703	1.703 (0.295)	47	118519			33.72- 93.72	64.08
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	729033	51.0385	51.038	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	236858			2.37- 62.37	32.49
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.745	1.745 (0.302)	67	72194	51.1662	51.166	80.00- 120.00	100.00
1.745	1.745 (0.302)	51	1146080			1501.01-1561.01	1587.50
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	701038	49.9978	49.998	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	225650			2.30- 62.30	32.19
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	765128	47.4212	47.421	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	246889			2.44- 62.44	32.27
1.856	1.856 (0.321)	58	25257			0.00- 33.36	3.30
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	437995	52.8545	52.854	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	114348			0.00- 56.26	26.11
18 Butane					CAS #: 106-97-8		
2.025	2.025 (0.350)	58	80145	41.7506	41.751	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.025	2.025 (0.350)	43	645591			823.29- 883.29	805.53
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	464010	46.5443	46.544	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	139745			0.00- 59.69	30.12
20 1,3-Butadiene					CAS #: 106-99-0		
2.089	2.089 (0.362)	54	446648	55.7047	55.705	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	360563			52.37- 112.37	80.73
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	297578	46.4227	46.423	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	278799			64.07- 124.07	93.69
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	171538	47.8510	47.851	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	50751			0.04- 60.04	29.59
2.612	2.612 (0.452)	49	59140			4.54- 64.54	34.48
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	529089	48.5043	48.504	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	338228			34.12- 94.12	63.93
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	279438	47.1623	47.162	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	273101			69.27- 129.27	97.73
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	742373	48.9075	48.908	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	483442			34.72- 94.72	65.12
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.899	2.899 (0.502)	67	646344	49.4042	49.404	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	195128			0.84- 60.84	30.19
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	832217	46.9376	46.938	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	122475			0.00- 44.98	14.72
2.970	2.970 (0.514)	72	59490			0.00- 37.39	7.15
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	152084	50.8427	50.843	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	294053			163.46- 223.46	193.35
3.285	3.285 (0.569)	45	421334			250.40- 310.40	277.04

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	73066	46.2624	46.262	80.00- 120.00	100.00
3.285	3.242 (0.569)	45	419314			511.19- 571.19	573.88
42 Acrolein					CAS #: 107-02-8		
3.536	3.529 (0.612)	55	138287	50.4592	50.459	80.00- 120.00	100.00
3.536	3.529 (0.612)	56	194444			111.10- 171.10	140.61
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	550653	48.8270	48.827	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	354592			33.56- 93.56	64.39
3.550	3.550 (0.614)	101	666533			89.21- 149.21	121.04
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	337843	50.1462	50.146	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	214195			34.02- 94.02	63.40
3.579	3.579 (0.619)	61	675008			168.77- 228.77	199.80
47 Acetone					CAS #: 67-64-1		
3.715	3.708 (0.643)	58	199513	47.7852	47.785	80.00- 120.00	100.00
3.715	3.708 (0.643)	43	667100			302.95- 362.95	334.36
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	862293	48.5817	48.582	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	700808	59.3954	59.395	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	293044			12.22- 72.22	41.82
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	849259	50.4689	50.469	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	140946			0.00- 47.19	16.60
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.052 (0.700)	76	145308	49.0044	49.004	80.00- 120.00	100.00
4.045	4.052 (0.700)	41	618664			396.19- 456.19	425.76
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	381456	48.6371	48.637	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	193635			20.95- 80.95	50.76
4.123	4.123 (0.714)	38	41374			0.00- 41.17	10.85
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	531632	49.0219	49.022	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	271047			22.03- 82.03	50.98
4.238	4.238 (0.733)	51	161032			0.18- 60.18	30.29

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	909661	46.3560	46.356	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	192086			0.00- 51.11	21.12
4.338	4.338 (0.751)	57	96676			0.00- 40.49	10.63
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	942632	48.1957	48.196	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	317705			3.10- 63.10	33.70
4.446	4.446 (0.769)	41	299560			1.28- 61.28	31.78
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.482 (0.774)	98	218803	48.6055	48.605	80.00- 120.00	100.00
4.474	4.482 (0.774)	61	620102			255.84- 315.84	283.41
4.474	4.482 (0.774)	96	343318			127.59- 187.59	156.91
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	303698	48.4637	48.464	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	359381			88.05- 148.05	118.33
67 Hexane					CAS #: 110-54-3		
4.697	4.697 (0.813)	57	776348	49.4834	49.483	80.00- 120.00	100.00
4.697	4.697 (0.813)	43	525013			37.52- 97.52	67.63
4.697	4.697 (0.813)	86	88068			0.00- 41.48	11.34
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	682714	50.6181	50.618	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	199004			0.00- 59.70	29.15
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.954 (0.856)	45	1790476	49.0696	49.070	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	321907			0.00- 48.18	17.98
4.954	4.954 (0.857)	59	180794			0.00- 40.15	10.10
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.865)	86	88227	50.8989	50.899	80.00- 120.00	100.00
4.990	4.997 (0.864)	43	2127436			2432.48-2492.48	2411.32
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1542046	48.8215	48.821	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	471804			1.00- 61.00	30.60
5.305	5.305 (0.918)	41	285817			0.00- 48.73	18.53
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	590380	49.2930	49.293	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	190828			2.28- 62.28	32.32
5.513	5.506 (0.954)	97	143176			0.00- 53.93	24.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.960)	98	233240	49.9273	49.927	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	363999			125.75- 185.75	156.06
5.549	5.549 (0.960)	61	845213			332.40- 392.40	362.38
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	172909	48.0341	48.034	80.00- 120.00	100.00
5.563	5.556 (0.963)	43	2166913			1214.50-1274.50	1253.21
5.556	5.556 (0.962)	57	75659			14.68- 74.68	43.76
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	177582	49.5968	49.597	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	845213			452.04- 512.04	475.96
5.570	5.570 (0.964)	70	92639			22.77- 82.77	52.17
89 Tetrahydrofuran					CAS #: 109-99-9		
5.771	5.771 (0.999)	42	596496	49.8249	49.825	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	151172			0.00- 55.82	25.34
5.771	5.771 (0.999)	72	164276			0.00- 57.59	27.54
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	698985	50.4429	50.443	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	450734			34.70- 94.70	64.48
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	484683	48.3805	48.380	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	852306			142.57- 202.57	175.85
5.957	5.957 (1.031)	41	457785			62.09- 122.09	94.45
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.972 (1.033)	97	760233	48.5642	48.564	80.00- 120.00	100.00
5.972	5.972 (1.033)	99	490526			34.02- 94.02	64.52
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	745174	50.7546	50.755	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	752839			70.64- 130.64	101.03
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	203160	49.7993	49.799	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	511996			226.85- 286.85	252.02
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	2687519	49.2841	49.284	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	862052			2.24- 62.24	32.08
6.280	6.280 (1.087)	41	651161			0.00- 54.39	24.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.946)	78	1008062	50.9701	50.970	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	234415			0.00- 52.90	23.25
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	277129	49.6938	49.694	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1123129			372.79- 432.79	405.27
6.358	6.358 (0.955)	55	386701			112.09- 172.09	139.54
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	539745	52.4480	52.448	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	168125			0.79- 60.79	31.15
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	404133	51.5803	51.580	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1034181			226.53- 286.53	255.90
6.444	6.444 (0.968)	57	534196			100.85- 160.85	132.18
110 n-Butanol					CAS #: 71-36-3		
6.810	6.810 (1.023)	56	349325	48.5815	48.581	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	250704			40.99- 100.99	71.77
6.810	6.810 (1.023)	43	202468			27.38- 87.38	57.96
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	487275	50.7743	50.774	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	525030			76.29- 136.29	107.75
6.867	6.867 (1.031)	97	316440			33.63- 93.63	64.94
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	501779	49.4882	49.488	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	357412			41.07- 101.07	71.23
7.096	7.089 (1.066)	41	260924			22.53- 82.53	52.00
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.132 (0.755)	69	396710	49.5227	49.523	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	847515			179.84- 239.84	213.64
7.139	7.139 (0.755)	100	159570			9.59- 69.59	40.22
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	259955	48.2421	48.242	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	255954			68.28- 128.28	98.46
7.175	7.175 (1.077)	57	86664			2.68- 62.68	33.34
118 Dibromomethane					CAS #: 74-95-3		
7.204	7.204 (0.761)	174	458044	52.9443	52.944	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	407519			60.09- 120.09	88.97

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.204	7.204 (0.761)	95	354189			48.38- 108.38	77.33
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	770056	51.7510	51.751	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	492807			35.24- 95.24	64.00
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	636121	50.6019	50.602	80.00- 120.00	100.00
7.691	7.691 (1.155)	77	200691			2.42- 62.42	31.55
7.691	7.691 (1.155)	39	434030			37.16- 97.16	68.23
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	691986	49.8280	49.828	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	322440			15.78- 75.78	46.60
6.974	6.974 (1.047)	55	795373			84.64- 144.64	114.94
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.791	7.791 (1.170)	58	480926	46.7077	46.708	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1325477			242.35- 302.35	275.61
7.798	7.791 (1.171)	85	161202			3.24- 63.24	33.52
137 Toluene					CAS #: 108-88-3		
7.949	7.949 (1.194)	91	1343637	49.2421	49.242	80.00- 120.00	100.00
7.949	7.949 (1.194)	92	787609			28.38- 88.38	58.62
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.194)	57	566390	48.6818	48.682	80.00- 120.00	100.00
7.949	7.949 (1.194)	85	479927			56.00- 116.00	84.73
7.949	7.949 (1.194)	43	1456775			228.66- 288.66	257.20
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	600175	52.3121	52.312	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	190922			1.24- 61.24	31.81
8.214	8.214 (0.868)	39	389221			34.11- 94.11	64.85
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	476355	50.2326	50.232	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	296859			31.96- 91.96	62.32
8.400	8.400 (0.888)	83	396895			52.93- 112.93	83.32
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	682961	51.3998	51.400	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	535513			47.84- 107.84	78.41
8.464	8.464 (0.895)	131	516602			45.29- 105.29	75.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	657966	48.5640	48.564	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1278689			162.87- 222.87	194.34
8.586	8.586 (0.908)	100	102219			0.00- 45.94	15.54
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	649887	50.1538	50.154	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	820466			94.99- 154.99	126.25
8.579	8.579 (1.288)	78	211986			2.05- 62.05	32.62
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	922140	52.0444	52.044	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	712882			47.45- 107.45	77.31
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	783569	51.5187	51.519	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	740572			64.21- 124.21	94.51
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	920567	49.4826	49.482	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	271612			0.00- 59.64	29.50
7.605	7.605 (1.142)	144	89030			0.00- 39.63	9.67
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1170183	50.5473	50.547	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	376526			1.74- 61.74	32.18
9.496	9.496 (1.004)	77	640652			25.04- 85.04	54.75
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	610182	50.4060	50.406	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1864363			273.74- 333.74	305.54
156 Nonane					CAS #: 111-84-2		
9.603	9.596 (1.015)	43	1509244	48.4576	48.458	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1271714			54.16- 114.16	84.26
9.603	9.603 (1.015)	85	358055			0.00- 53.90	23.72
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	532758	41.1032	41.103	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	583008			57.42- 117.42	109.43
9.596	9.596 (1.014)	95	192120			5.70- 65.70	36.06
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	760695	50.1737	50.174	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1493758			163.73- 223.73	196.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	723870	49.8321	49.832	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1494892			177.45- 237.45	206.51
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1208123	48.6312	48.631	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	579213			17.88- 77.88	47.94
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	906568	51.9083	51.908	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	460931			21.25- 81.25	50.84
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2265548	49.6487	49.649	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	647806			0.00- 58.52	28.59
10.649	10.649 (1.126)	51	293698			0.00- 43.00	12.96
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	751578	46.0550	46.055	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	241627			1.94- 61.94	32.15
10.871	10.871 (1.149)	42	519433			37.89- 97.89	69.11
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.100 (1.174)	83	1111439	49.9028	49.903	80.00- 120.00	100.00
11.107	11.100 (1.174)	85	714222			35.20- 95.20	64.26
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	712211	51.3180	51.318	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	694838			67.21- 127.21	97.56
11.179	11.179 (1.182)	77	448248			29.02- 89.02	62.94
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	673698	49.7919	49.792	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2670473			366.49- 426.49	396.39
11.150	11.150 (1.179)	105	100975			0.00- 44.85	14.99
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	347282	48.9223	48.922	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1167359			280.55- 340.55	336.14
11.100	11.100 (1.173)	61	156927			15.49- 75.49	45.19
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	340414	73.1510	73.151	80.00- 120.00	100.00(R)
11.179	11.179 (1.182)	89	238240			49.11- 109.11	69.99
11.179	11.179 (1.182)	75	1167359			426.44- 486.44	342.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1694913	47.7517	47.752	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	465002			0.00- 57.66	27.44
11.258	11.258 (1.190)	142	69403			0.00- 34.09	4.09
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.287 (1.193)	120	721474	49.0325	49.032	80.00- 120.00	100.00
11.287	11.287 (1.193)	105	2282704			284.55- 344.55	316.39
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	570341	49.5063	49.506	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1973274			315.17- 375.17	345.98
11.301	11.301 (1.195)	65	288198			21.55- 81.55	50.53
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1019008	50.3002	50.300	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1992138			164.93- 224.93	195.50
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	1011075	50.2389	50.239	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	559661			25.30- 85.30	55.35
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.738 (1.241)	119	1828423	48.2549	48.255	80.00- 120.00	100.00
11.738	11.738 (1.241)	134	453008			0.00- 54.25	24.78
11.738	11.738 (1.241)	91	1113434			31.27- 91.27	60.90
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1940625	50.7513	50.751	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	961894			19.05- 79.05	49.57
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.996 (1.268)	134	587147	49.8567	49.857	80.00- 120.00	100.00
11.996	11.996 (1.268)	105	2755895			437.55- 497.55	469.37
11.996	11.996 (1.268)	91	411332			40.76- 100.76	70.06
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2592253	49.8015	49.802	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	667083			0.00- 55.54	25.73
12.160	12.153 (1.285)	91	550118			0.00- 51.48	21.22
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.196 (1.290)	146	1321489	50.4912	50.491	80.00- 120.00	100.00
12.203	12.196 (1.290)	148	844750			33.21- 93.21	63.92
12.196	12.196 (1.289)	111	544933			11.31- 71.31	41.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1351414	51.0959	51.096	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	860632			33.90- 93.90	63.68
12.311	12.311 (1.301)	111	545078			9.45- 69.45	40.33
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1867138	51.4087	51.409	80.00- 120.00	100.00
12.468	12.461 (1.318)	126	432223			0.00- 53.26	23.15
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2141161	52.2242	52.224	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	1903384			58.12- 118.12	88.89
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	659133	49.8581	49.858	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2279398			314.79- 374.79	345.82
12.626	12.626 (1.335)	92	1217501			154.29- 214.29	184.71
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1280596	49.8997	49.900	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	810645			33.84- 93.84	63.30
12.741	12.741 (1.347)	111	542670			12.73- 72.73	42.38
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.614	13.600 (1.439)	157	808811	52.0350	52.035	80.00- 120.00	100.00
13.614	13.600 (1.439)	75	667140			52.48- 112.48	82.48
13.614	13.600 (1.439)	155	627024			47.41- 107.41	77.52
207 Dodecane					CAS #: 112-40-3		
13.822	13.801 (1.461)	57	2491393	76.6649	76.665	80.00- 120.00	100.00(R)
13.822	13.801 (1.461)	43	2053107			52.87- 112.87	82.41
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.496	14.467 (1.532)	180	1351062	71.2544	71.254	80.00- 120.00	100.00
14.496	14.467 (1.532)	182	1288755			65.33- 125.33	95.39
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.617	14.582 (1.545)	225	961978	72.0891	72.089	80.00- 120.00	100.00
14.617	14.582 (1.545)	223	615317			33.17- 93.17	63.96
216 Naphthalene					CAS #: 91-20-3		
14.796	14.768 (1.564)	128	329062	6.79056	6.790	80.00- 120.00	100.00
14.804	14.768 (1.565)	127	41782			0.00- 42.88	12.70
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.104	15.069 (1.597)	180	1290198	76.9717	76.972	80.00- 120.00	100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.104	15.069 (1.597)	182	1235122			65.75- 125.75	95.73
15.104	15.069 (1.597)	145	454864			5.23- 65.23	35.26

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p051925.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 19-MAY-2021
Calibration Time: 15:55
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	158810	95286	222334	159261	0.28
108 1,4-Difluorobenze	597103	358262	835944	599327	0.37
153 Chlorobenzene-d5	587747	352648	822846	583008	-0.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.66	6.33	6.99	6.66	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 19MAY21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: gh
Data Type: MS DATA SampleType: ICV
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/19MAY21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	53.442	106.88	70-130
5 Propylene	50.000	48.182	96.37	70-130
7 1,1-Difluoroethan	50.000	51.232	102.46	70-130
8 Freon 12	50.000	51.038	102.08	70-130
9 Chlorodifluoromet	50.000	51.166	102.33	70-130
10 Freon 114	50.000	49.998	100.00	70-130
12 Isobutane	50.000	47.421	94.84	70-130
15 Chloromethane	50.000	52.854	105.71	70-130
18 Butane	50.000	41.751	83.50	70-130
19 Vinyl Chloride	50.000	46.544	93.09	70-130
20 1,3-Butadiene	50.000	55.705	111.41	70-130
24 Bromomethane	50.000	46.423	92.85	70-130
30 Chloroethane	50.000	47.851	95.70	70-130
31 Isopentane	50.000	48.504	97.01	70-130
32 Vinyl Bromide	50.000	47.162	94.32	70-130
33 Freon 11	50.000	48.908	97.82	70-130
34 Dichlorofluoromet	50.000	49.404	98.81	70-130
35 Pentane	50.000	46.938	93.88	70-130
38 Ethyl Ether	50.000	50.843	101.69	70-130
39 Ethanol	58.000	46.262	79.76	70-130
42 Acrolein	58.000	50.459	87.00	70-130
43 Freon 113	50.000	48.827	97.65	70-130
44 1,1-Dichloroethen	50.000	50.146	100.29	70-130
47 Acetone	50.000	47.785	95.57	70-130
48 Carbon Disulfide	50.000	48.582	97.16	70-130
49 Iodomethane	50.000	59.395	118.79	70-130
52 2-Propanol	50.000	50.469	100.94	70-130
54 3-Chloropropene	50.000	49.004	98.01	70-130
57 Acetonitrile	50.000	48.637	97.27	70-130
59 Methylene Chlorid	50.000	49.022	98.04	70-130
62 tert-Butyl alcoho	50.000	46.356	92.71	70-130
63 Methyl tert-butyl	50.000	48.196	96.39	70-130
64 trans-1,2-Dichlor	50.000	48.605	97.21	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	48.464	96.93	70-130
67	Hexane	50.000	49.483	98.97	70-130
71	1,1-Dichloroethan	50.000	50.618	101.24	70-130
72	Isopropyl ether	50.000	49.070	98.14	70-130
73	Vinyl Acetate	50.000	50.899	101.80	70-130
79	Ethyl-tert-butyl	50.000	48.821	97.64	70-130
84	2,2-Dichloropropa	50.000	49.293	98.59	70-130
85	cis-1,2-Dichloroe	50.000	49.927	99.85	70-130
86	2-Butanone	50.000	48.034	96.07	70-130
87	Ethyl Acetate	50.000	49.597	99.19	70-130
89	Tetrahydrofuran	50.000	49.825	99.65	70-130
92	Chloroform	50.000	50.443	100.89	70-130
94	Cyclohexane	50.000	48.380	96.76	70-130
96	1,1,1-Trichloroet	50.000	48.564	97.13	70-130
99	1,1-Dichloroprope	50.000	49.799	99.60	70-130
97	Carbon Tetrachlor	50.000	50.755	101.51	70-130
101	2,2,4-Trimethylpe	50.000	49.284	98.57	70-130
102	Benzene	50.000	50.970	101.94	70-130
105	tert-Amyl methyl	50.000	49.694	99.39	70-130
106	1,2-Dichloroethan	50.000	52.448	104.90	70-130
107	Heptane	50.000	51.580	103.16	70-130
110	n-Butanol	50.000	48.581	97.16	70-130
111	Trichloroethene	50.000	50.774	101.55	70-130
118	Dibromomethane	50.000	52.944	105.89	70-130
127	Methylcyclohexane	50.000	49.828	99.66	70-130
114	1,2-Dichloropropa	50.000	49.488	98.98	70-130
116	Methyl Methacryla	50.000	49.523	99.05	70-130
117	1,4-Dioxane	50.000	48.242	96.48	70-130
122	Bromodichlorometh	50.000	51.751	103.50	70-130
126	cis-1,3-Dichlorop	50.000	50.602	101.20	70-130
131	4-Methyl-2-pentan	50.000	46.708	93.42	70-130
136	Octane	50.000	48.682	97.36	70-130
137	Toluene	50.000	49.242	98.48	70-130
139	trans-1,3-Dichlor	50.000	52.312	104.62	70-130
141	1,1,2-Trichloroet	50.000	50.232	100.47	70-130
142	Tetrachloroethene	50.000	51.400	102.80	70-130
143	2-Hexanone	50.000	48.564	97.13	70-130
144	1,3-Dichloropropa	50.000	50.154	100.31	70-130
146	Dibromochlorometh	50.000	52.044	104.09	70-130
148	1,2-Dibromoethane	50.000	51.519	103.04	70-130
151	1-Bromo-2-Chloroe	50.000	49.482	98.97	70-130
154	Chlorobenzene	50.000	50.547	101.09	70-130
155	Ethyl Benzene	50.000	50.406	100.81	70-130
156	Nonane	50.000	48.458	96.92	70-130
157	1,1,1,2-Tetrachlo	50.000	41.103	82.21	70-130
158	m,p-Xylene	50.000	50.174	100.35	70-130
164	o-Xylene	50.000	49.832	99.66	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	48.631	97.26	70-130
167 Bromoform	50.000	51.908	103.82	70-130
168 Cumene	50.000	49.649	99.30	70-130
169 Cyclohexanone	50.000	46.055	92.11	70-130
175 1,1,2,2-Tetrachlo	50.000	49.903	99.81	70-130
177 Bromobenzene	50.000	51.318	102.64	70-130
178 Propylbenzene	50.000	49.792	99.58	70-130
179 1,2,3-Trichloropr	50.000	48.922	97.84	70-130
181 trans-1,4-Dichlor	50.000	73.151	146.30*	70-130
182 Decane	50.000	47.752	95.50	70-130
183 4-Ethyltoluene	50.000	49.032	98.07	70-130
184 2-Chlorotoluene	50.000	49.506	99.01	70-130
185 1,3,5-Trimethylbe	50.000	50.300	100.60	70-130
188 alpha Methyl Styr	50.000	50.239	100.48	70-130
189 tert-Butylbenzene	50.000	48.255	96.51	70-130
190 1,2,4-Trimethylbe	50.000	50.751	101.50	70-130
192 sec-Butylbenzene	50.000	49.857	99.71	70-130
194 p-Cymene	50.000	49.802	99.60	70-130
195 1,3-Dichlorobenze	50.000	50.491	100.98	70-130
196 1,4-Dichlorobenze	50.000	51.096	102.19	70-130
199 alpha-Chlorotolue	50.000	51.409	102.82	70-130
201 Undecane	50.000	52.224	104.45	70-130
202 Butylbenzene	50.000	49.858	99.72	70-130
204 1,2-Dichlorobenze	50.000	49.900	99.80	70-130
206 1,2-Dibromo-3-chl	50.000	52.035	104.07	70-130
207 Dodecane	50.000	76.665	153.33*	70-130
213 1,2,4-Trichlorobe	58.000	71.254	122.85	70-130
215 Hexachlorobutadie	58.000	72.089	124.29	70-130
216 Naphthalene	5.800	6.790	117.08	60-140
222 1,2,3-Trichlorobe	58.000	76.972	132.71*	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.723	98.89	70-130
$ 134 Toluene-d8	25.000	24.912	99.65	70-130
$ 170 4-Bromofluorobenz	25.000	25.126	100.50	70-130

Data File: /chem/msdp.i/19MAY21.b/p051925.d

Page 1

Date : 20-MAY-2021 00:33

Client ID: ICV

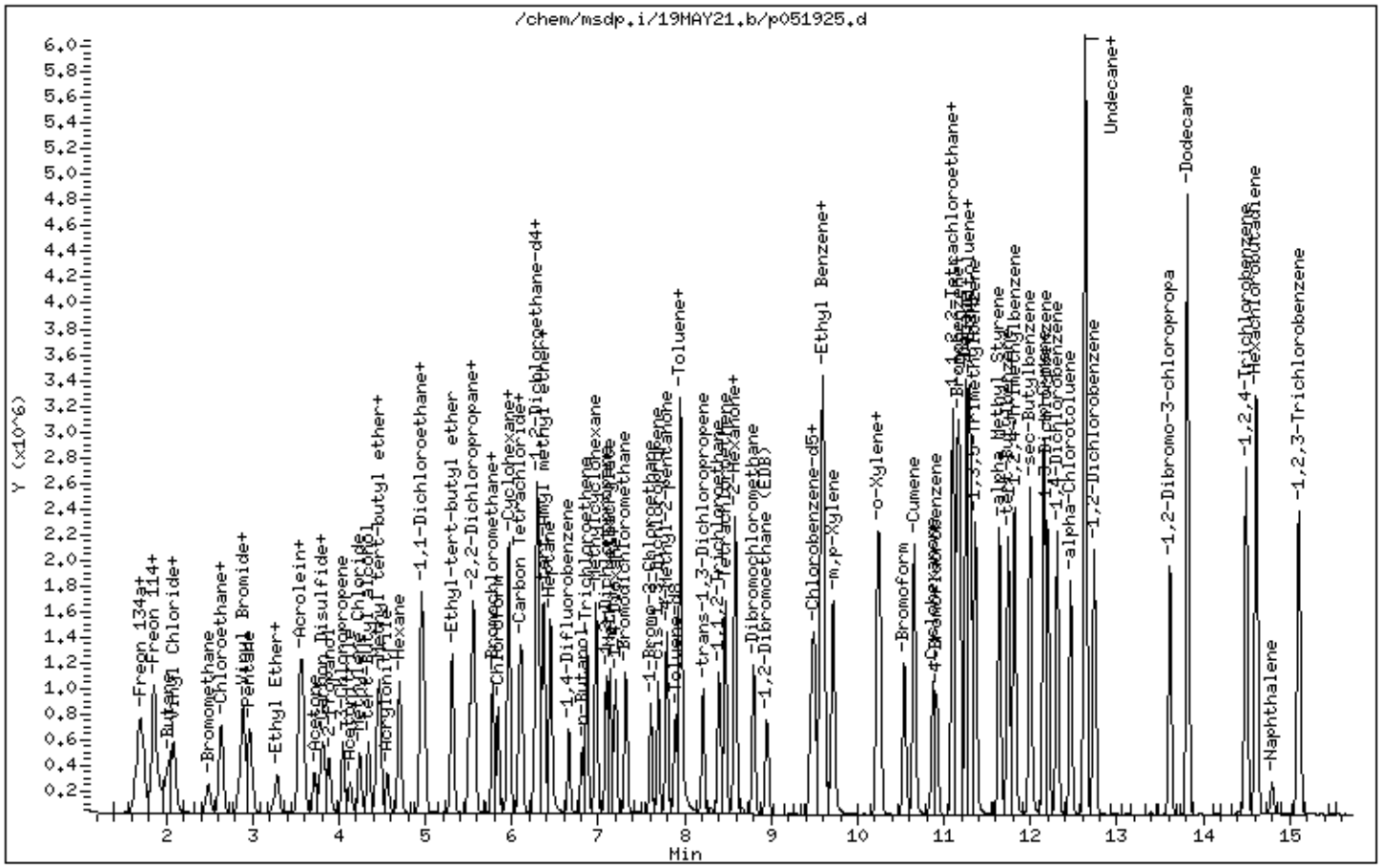
Instrument: msdp.i

Sample Info: 50mL 3018-2016

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



MSD-P MDL Case Narrative

A Method Detection Limit study for TO-15 method was performed on 10/19/20-10/23/20,10/26/20-10/29/20 & 11/02/20,11/05/20,11/06/20.

The MDL was performed at:

- 0.3 ppbv (5.0ppbv->0.3ppbv) for the 0.3ppbv RL compounds; 12mL of #3018-1674
- 0.4 ppbv (5.0ppbv->0.4ppbv) for the 0.4ppbv RL compounds; 16mL of #3018-1674
- 0.8 ppbv (5.0ppbv->0.8ppbv) for 0.8ppbv RL compounds; 32ml of #3018-1674
- 1.0ppbv (5.0ppbv->1.0ppbv) for chloroethane & ethanol;40ml of 3018-1674 & 40ml of 3018-1682

A Method Detection Limit study for select TA TO-15 specials was performed on 11/27/20-11/29/20.

The MDL was performed at:

- 0.4ppbv(5.0ppbv->0.4ppbv) for 1,1,1,2-tetrachloroethane;16ml of #3018-1644

MDL verifications were analyzed on 11/03/20 & 11/10/20:

- P110313: (0.3ppbv & 0.4ppbv RL compounds). 5.0ppbv->0.25ppv; 10ml of #3018-1682.
- P110314: (0.8ppbv RL compounds). 5.0ppbv->0.6ppbv. 24ml of #3018-1682.
- P110315: (0.5 for naph only). 5.0->5.0ppbv; 200ml of #3018-1682.
- P110312: (for 1,1,1,2-PCA only). 5.0ppbv->0.25ppbv. 10ml of #3018-1644
- P111017: (for chloroethane, ethanol & vinyl acetate). 5.0ppbv->0.75ppbv. 30ml of 3018-1682.

Notes:

1. **The MDL values for the following compounds were taken from the MDL blank:**
    a. Dibromomethane (0.07607ppbv)
    b. Acetone (0.48647ppbv)
    c. Iodomethane (0.06508ppbv)
    d. Carbon disulfide (0.1958ppbv)
    e. Decane (0.57314ppbv)
    f. Undecane(0.1836ppbv)
    g. Dodecane (0.71923ppbv)
    h. Naphthalene (0.38524ppbv)

2. The ratio of the mean recovered concentration and the MDL value for naphthalene and dodecane recovered outside of 1-20.
3. The MDL verification for chloroethane and ethanol is less than 2X the mean MDL.

MDL Expires 10/29/21

0.3 mdl.rp

TO15 Quad MDL MSD-P
Standard 3018-1674 (5.0ppbv)
12mL load volume
Spike concentration: 0.3ppbv

Report Date : 28-Oct-2020 16:45

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p101908	p101909	p101910	p102008	p102009	p102010	p102107	p102108	p102109
INJ.DATE:	19-OCT-2020	19-OCT-2020	19-OCT-2020	20-OCT-2020	20-OCT-2020	20-OCT-2020	21-OCT-2020	21-OCT-2020	21-OCT-2020
INJ.TIME:	14:06	14:34	15:01	16:26	16:54	17:21	15:23	15:51	16:19

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

$\bar{x} = 70.54$
$2\bar{x} = 141.07$
$3\bar{x} = 211.62$
$4\bar{x} = 282.16$

Ratio of the mean recovered concentration and the MDL value is between 1 & 20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

PPTV RL(PPTV) Sp RL(PPTV) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 1,1-Dichloroethane	217.02	219.07	292.15	253.35	258.29	195.74	292.58	280.15	220.83	247.69	36.00	104.26
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

no spike in 500 — 300 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv	RL (ppbv)	SP RL (ppbv)	Blank
87	Ethyl Acetate	201.00	285.05	246.94	220.66	323.49	229.31	299.26	256.43	286.92	261.01	40.42	117.05		2000	300	—
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
89	Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				—
92	Chloroform	242.52	244.52	264.08	247.68	239.93	283.26	261.71	270.85	264.59	257.68	14.79	42.84		500	300	
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
94	Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
96	1,1,1-Trichloroethane	292.64	289.12	314.87	273.07	292.46	311.97	284.37	293.95	306.68	295.46	13.50	39.11		500	300	—
97	Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
101	2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
102	Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
$ 104	1,2-Dichloroethane-d4	23662.67	23877.71	24079.59	23563.77	24206.96	24182.62	23963.20	24552.71	24218.03	24034.14	305.26	884.02				
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
106	1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
107	Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00				
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	248.45	319.45	282.47	291.32	274.66	272.30	278.78	242.30	239.06	272.09	25.76	74.60	500	300	—
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24585.67	24787.41	24622.65	24917.45	24550.68	25002.95	24999.39	25581.69	24685.96	24859.31	321.49	931.02			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	274.66	274.06	286.73	307.61	281.73	317.24	284.89	304.85	280.24	290.22	15.66	45.36
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500 300 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	24680.65	24394.98	24458.85	24972.60	24217.99	24821.47	24904.35	25061.39	25327.68	24760.00	354.77	1027.42
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
	230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/19OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/19OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

0.4mdl.rp

TO15 Quad MDL - MSD-P
Standard 3018-1674 (5.0ppbv)
16ml load volume
spike concentration: 0.4ppbv

Report Date : 28-Oct-2020 18:51

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102207	p102208	p102209	p102307	p102308	p102309	p102606	p102607	p102608
INJ.DATE:	22-OCT-2020	22-OCT-2020	22-OCT-2020	23-OCT-2020	23-OCT-2020	23-OCT-2020	26-OCT-2020	26-OCT-2020	26-OCT-2020
INJ.TIME:	16:40	17:08	17:35	14:33	15:01	15:28	11:55	12:23	12:51

pptv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(pptv)	SpRL(pptv)	Blank
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
4 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
5 Propylene	436.27	459.07	358.71	365.97	442.84	407.04	328.83	315.33	395.64	389.97	51.11	148.02	2,000	400	—
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
7 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
8 Freon 12	368.05	362.51	350.90	422.39	382.44	336.13	389.94	336.87	366.98	368.47	27.28	79.01	500	400	—
9 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
10 Freon 114	402.19	319.34	374.64	343.74	334.54	363.82	297.84	361.33	350.45	349.77	30.80	89.20	500	400	—
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
12 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
15 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

$\bar{x} = 93.579$
$2\bar{x} = 187.16$
$3\bar{x} = 280.74$
$4\bar{x} = 374.32$

The ratio of the mean recovered concentration & the MDL value is b/w 1 & 20.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SP RL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
18 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
19 Vinyl Chloride	238.72	286.52	271.11	333.74	362.20	338.00	255.39	295.79	250.02	292.39	43.60	126.26	500	400	—
20 1,3-Butadiene	312.68	378.59	382.05	250.04	280.91	275.23	257.72	279.89	265.49	298.07	49.87	144.41	500	400	—
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
33 Freon 11	457.24	407.10	435.95	369.75	393.31	349.16	378.67	348.37	383.63	391.46	36.91	106.88	500	400	—
34 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
35 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
38 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
39 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
42 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
43 Freon 113	426.15	433.79	441.55	364.87	456.53	443.18	409.02	415.07	401.94	421.35	27.52	79.69	500	400	—
44 1,1-Dichloroethene	411.86	277.89	289.34	245.03	323.41	408.62	342.89	361.09	322.12	331.36	56.67	164.11	500	800	—
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
47 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
48 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
49 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
52 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
54 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
57 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
59 Methylene Chloride	372.76	312.97	335.71	286.43	401.04	334.94	335.25	305.15	310.05	332.70	35.53	102.89	5000	400	60.72
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
62 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	pptv RL(pptv)	spRL(pptv)	Blank
64 trans-1,2-Dichloroethe	313.59	405.50	314.93	359.93	369.92	296.05	382.07	269.64	318.20	336.65	44.63	129.25	500	400	—
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
66 Acrylonitrile	340.64	301.35	399.89	330.73	361.11	300.84	267.26	315.86	273.74	321.27	42.21	122.24	2000	800	—
67 Hexane	284.59	274.85	274.18	282.13	331.11	344.69	341.12	289.67	342.62	307.22	31.56	91.39	500	800	—
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
72 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
73 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
79 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
84 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
85 cis-1,2-Dichloroethene	364.42	423.15	261.26	309.14	261.64	232.81	264.66	260.96	254.08	292.46	62.51	181.02	500	400	—
86 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	
87	Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88	Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89	Tetrahydrofuran	300.42	300.83	294.38	309.82	323.07	338.59	237.00	237.36	280.14	291.29	34.92	101.13	500 800 —
* 90	Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
91	trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
92	Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93	cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	—
94	Cyclohexane	333.63	372.37	338.12	334.85	386.70	337.43	317.34	337.97	288.47	338.54	28.42	82.29	500 400 —
95	Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96	1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97	Carbon Tetrachloride	351.08	365.90	423.66	373.13	342.96	305.44	373.84	266.92	317.12	346.67	45.69	132.32	500 800 —
98	sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
99	1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
100	2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
101	2,2,4-Trimethylpentane	355.69	333.15	292.38	297.05	306.33	311.83	333.39	309.71	308.79	316.48	20.28	58.72	500 400 —
102	Benzene	398.55	338.76	371.15	328.61	335.51	376.93	394.84	330.43	306.37	353.46	32.62	94.47	500 400 —
103	Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 104	1,2-Dichloroethane-d4	25538.41	25119.18	24972.96	25310.46	26037.22	25493.94	22898.21	23988.75	24315.92	24852.78	963.98	2791.69	
105	tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106	1,2-Dichloroethane	368.16	305.97	383.28	351.01	378.61	339.20	327.18	311.28	361.64	347.37	28.30	81.94	500 800 10.4
107	Heptane	377.00	338.49	321.63	237.39	335.69	324.80	348.25	362.21	369.78	335.03	41.40	119.90	500 500 —
* 108	1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
109	Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110	n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv RL(ppbv)	Sp RL(ppbv)	Blank
111 Trichloroethene	359.98	366.80	369.81	358.75	381.97	420.18	406.91	394.92	420.70	386.67	24.88	72.05	500	400	—
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	367.27	387.51	438.23	349.97	414.12	402.30	315.92	374.28	442.15	387.97	41.24	119.42	500	400	—
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
117 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
118 Dibromomethane	363.07	396.21	400.70	375.65	381.51	404.00	384.97	366.62	423.18	388.43	19.37	56.11	2000	400	76.07
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	280.09	346.41	399.61	350.41	326.89	332.36	325.16	374.56	344.71	342.24	33.38	96.67	500	400	—
127 Methylcyclohexane	421.60	402.15	396.00	283.94	356.13	415.49	365.32	368.56	344.41	372.62	42.80	123.96	~000	400	—
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	349.17	342.85	324.09	329.39	448.82	363.24	372.47	304.65	357.29	354.66	41.09	118.99	500	400	—
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24608.41	24757.16	24060.47	24358.97	24799.49	24544.21	24420.57	24318.45	25304.67	24574.71	356.92	1033.64			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Octane	391.51	314.58	349.24	392.86	398.27	317.52	435.75	346.46	343.20	365.49	41.01	118.76
137 Toluene	393.31	369.84	335.47	374.46	391.89	378.56	364.69	361.01	383.40	372.52	17.82	51.60
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 trans-1,3-Dichloroprop	332.51	308.98	399.68	312.19	350.76	343.89	326.55	353.48	301.43	336.61	30.06	87.07
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1,1,2-Trichloroethane	359.42	310.37	399.03	326.09	345.12	374.12	325.48	333.64	335.86	345.46	27.67	80.13
142 Tetrachloroethene	368.16	376.49	362.62	383.34	406.92	446.83	425.80	406.87	406.85	398.21	27.87	80.71
143 2-Hexanone	337.34	364.76	359.28	356.16	308.83	350.55	345.40	353.88	353.41	347.73	16.58	48.02
144 1,3-Dichloropropane	379.58	319.29	400.88	326.89	349.89	313.18	370.24	372.04	373.71	356.19	30.43	88.14
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Dibromochloromethane	399.15	402.43	371.98	328.44	351.93	404.39	388.88	370.10	331.22	372.06	29.51	85.45
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 1,2-Dibromoethane (EDB	337.27	380.78	399.90	344.59	425.77	356.23	338.97	345.95	323.51	361.44	33.67	97.51
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Ethyl Benzene	350.04	307.75	414.55	382.37	341.21	376.01	421.98	290.14	387.24	363.48	45.10	130.60
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 m,p-Xylene	381.11	385.02	373.70	279.50	328.49	371.80	390.58	345.71	301.63	350.84	39.78	115.22

ppbv RL(ppbv) SpRL(ppbv) Blank

2000 400 —
500 400 —
500 400 —
— — —
500 400 7.09
500 400 —
2000 400 —
2000 400 —
500 400 —
— — —
500 800 —
— — —
— — —
— — —
— — —
500 400 —
— — 19.29
500 800 ~~46.24~~ GH 11/11/20

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
164 o-Xylene	360.35	388.65	360.30	402.22	263.00	381.05	393.85	328.05	343.58	357.89	43.09	124.79
165 Styrene	363.22	358.96	355.97	332.09	332.19	352.82	322.68	355.25	294.72	340.88	22.41	64.90
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Bromoform	384.81	405.27	406.78	365.38	370.81	375.07	374.03	369.63	351.46	378.14	18.12	52.48
168 Cumene	358.73	319.23	373.24	314.45	325.75	332.23	371.15	349.17	341.49	342.83	21.76	63.02
169 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 170 4-Bromofluorobenzene	25111.07	24795.31	25807.35	25214.38	25273.17	25304.26	25170.01	25431.80	25249.38	25261.86	269.17	779.51
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 1,1,2,2-Tetrachloroeth	394.75	382.23	361.14	364.24	388.23	395.06	358.67	355.71	362.71	373.64	16.20	46.93
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 Propylbenzene	358.34	343.23	365.47	348.41	315.89	358.02	401.15	335.02	403.17	358.74	28.65	82.96
179 1,2,3-Trichloropropane	396.36	433.62	361.53	369.60	353.73	433.59	394.94	293.12	372.73	378.80	43.25	125.25
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

PPTV RL(PPTV) SP RL(PPTV) BLANK

164 o-Xylene: 124.79 | 500 | 400 | 8.96
165 Styrene: 64.90 | 500 | 400 | —
166 2-Heptanone: +++++ | | | —
167 Bromoform: 52.48 | 500 | 400 | —
168 Cumene: 63.02 | 500 | 800 | —
175 1,1,2,2-Tetrachloroeth: 46.93 | 500 | 400 | —
178 Propylbenzene: 82.96 | 500 | 400 | —
179 1,2,3-Trichloropropane: 125.25 | 2000 | 400 | —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv	RL(ppbv)	SPRL(ppbv)	Blank
183 4-Ethyltoluene	328.35	323.51	409.88	350.59	394.94	309.53	348.09	311.33	343.67	346.65	35.09	101.62	500		400	—
184 2-Chlorotoluene	367.12	437.45	399.61	324.10	337.68	379.55	388.66	368.97	399.59	378.08	34.12	98.81	2000		400	—
185 1,3,5-Trimethylbenzene	361.70	382.59	305.37	322.46	290.91	333.22	399.63	316.81	339.41	339.12	35.94	104.09	500		400	11.91
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
188 alpha Methyl Styrene	340.84	346.95	357.65	316.13	311.83	307.88	324.63	323.57	342.20	330.19	17.32	50.16	1000		400	—
189 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
190 1,2,4-Trimethylbenzene	351.77	366.19	384.29	326.05	339.25	336.74	376.07	351.72	372.74	356.09	19.91	57.67	500		800	40.41
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
192 sec-Butylbenzene	326.70	387.27	334.38	303.10	357.00	376.71	377.82	357.98	334.64	350.62	27.86	80.67	2000		400	—
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
194 p-Cymene	329.01	291.99	322.26	303.61	342.86	308.30	363.77	346.10	361.19	329.90	25.52	73.91	2000		800	491
195 1,3-Dichlorobenzene	396.73	395.68	406.80	347.34	383.69	416.48	403.45	401.34	390.46	393.55	19.74	57.16	500		400	6.61
196 1,4-Dichlorobenzene	397.02	396.80	373.82	336.65	380.96	372.10	379.74	387.84	407.73	381.41	20.51	59.40	500		400	10.61
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
199 alpha-Chlorotoluene	355.07	348.38	383.67	358.47	379.84	352.56	372.19	361.56	392.68	367.16	15.53	44.97	500		800	—
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
201 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
202 Butylbenzene	358.91	342.67	328.13	333.54	305.09	329.53	365.04	339.04	387.15	343.23	24.06	69.69	1000		400	45.09
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				
204 1,2-Dichlorobenzene	405.81	403.04	358.55	356.29	398.25	390.07	392.01	401.55	406.90	390.27	19.48	56.41	500		400	26.05
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
206 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/22OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/22OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

0.8mdl.rp

TO1S Quad MDL MSD-P
standard 3018-16674 (5.0ppbv)
32mL load volume
Spike concentration: 0.8 ppbv
Naph @ 0.08ppbv

Report Date : 30-Oct-2020 15:35

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102713	p102714	p102715	p102812	p102813	p102814	p102913	p102914	p102915
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	16:13	16:41	17:09	16:20	16:48	17:16	16:09	16:37	17:05

ppbv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(pptv)	SPRL(pptv)	Blank
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
2 1,1-Dichloro-1-Fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
3 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
4 Freon 134a	782.35	724.88	886.81	836.87	782.13	915.12	890.85	977.30	953.51	861.09	85.21	246.77	2000	800	-
5 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
6 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
7 1,1-Difluoroethane	828.20	1034.35	526.55	766.58	681.54	895.20	701.39	694.22	904.48	781.39	151.42	438.51	2000	800	-
8 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
9 Chlorodifluoromethane	854.60	805.17	642.55	827.65	687.63	812.52	1041.61	928.38	684.55	809.41	126.85	367.37	2000	800	-
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
11 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
12 Isobutane	719.04	711.25	707.49	729.52	689.89	671.33	801.41	778.78	804.87	734.84	48.61	140.77	2000	800	—
13 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
14 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
15 Chloromethane	882.85	931.18	918.86	751.25	728.44	745.41	1061.42	972.38	1001.77	888.17	121.18	350.93	5000	800	—
16 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
17 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

Reviewer 1 _____ Date: 10/30/20
Reviewer 2 _____ Date: 11/11/20

rm 11/03/20

$\bar{X}$ = ~~253.78~~ ~~254.04~~ 243.95
$2\bar{x}$ = 507.56 508.08 487.90
$3\bar{x}$ = 761.34 762.12 731.85
$4\bar{x}$ = ~~1,015.12~~ ~~1,016.16~~ 975.80

The ratio of the mean recovered concentration to the MDL value is b/w 1-20 for all compounds except dodecane and Naphthalene.

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	PPTV RL(PPTV)	SP RL(PPTV)	Blank
18 Butane	898.47	689.60	606.50	714.19	994.52	733.80	751.23	938.98	1233.61	840.10	194.99	564.68	2000	800	—
19 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
20 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
21 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
22 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
23 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
24 Bromomethane	834.50	796.28	852.48	898.11	761.37	815.39	846.32	919.26	1012.42	859.57	74.89	216.88	5000	800	—
25 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
26 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
27 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
28 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
29 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
31 Isopentane	655.87	662.86	650.61	734.81	705.95	701.65	727.87	655.13	699.75	688.28	32.73	94.78	2000	2000	—
32 Vinyl Bromide	737.71	813.81	758.98	757.93	700.24	661.88	709.79	675.94	746.89	729.24	47.22	136.75	2000	800	—
33 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
34 Dichlorofluoromethane	778.66	732.59	744.21	814.55	761.68	702.11	748.89	790.16	735.31	756.46	33.93	98.25	2000	800	—
35 Pentane	639.53	701.46	729.10	649.67	678.40	698.89	670.06	598.35	821.94	687.49	63.44	183.72	2000	800	—
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
37 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
38 Ethyl Ether	564.60	615.24	558.00	800.06	654.88	660.41	744.34	741.00	309.41	627.55	145.03	420.00	2000	800	—
* ~~39 Ethanol~~	~~569.54~~	~~328.32~~	~~497.33~~	~~641.05~~	~~1160.40~~	~~721.07~~	~~599.91~~	~~403.71~~	~~443.84~~	~~596.13~~	~~244.55~~	~~708.23~~	~~2000~~	~~1000~~ 500	— MS 11/10/20

* Ethanol MDL included in 10ppbv spike

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
40 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Acrolein	699.46	712.62	502.97	856.57	794.32	807.25	756.02	655.40	696.07	720.08	103.32	299.22
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Acetone	848.22	800.39	727.29	836.77	676.13	837.53	907.31	713.75	735.23	786.96	76.92	222.76
48 Carbon Disulfide	808.80	840.34	749.99	777.80	747.78	684.04	761.31	799.80	776.40	771.81	44.40	128.59
49 Iodomethane	457.35	451.01	440.43	437.13	459.33	452.25	478.66	430.79	399.77	445.19	22.11	64.02
50 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 2-Propanol	666.68	704.84	695.32	785.79	731.69	795.25	734.79	809.37	796.47	746.69	51.78	149.96
53 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 3-Chloropropene	852.23	979.94	823.74	485.40	620.09	771.94	735.72	607.16	820.37	744.06	150.57	436.06
55 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Acetonitrile	731.86	716.27	660.84	656.65	700.17	610.38	801.87	579.31	812.61	696.66	79.25	229.52
58 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 tert-Butyl alcohol	740.42	784.24	698.11	749.56	863.98	769.73	738.29	787.50	724.28	761.79	47.82	138.48
63 Methyl tert-butyl ethe	732.79	675.63	767.02	757.40	730.51	793.25	764.89	693.44	732.19	738.57	37.05	107.30

ppbv RL(ppbv) SpRL(ppbv) Blank

42 2000 2000 —
47 5000 500 497.4
48 1000 800 195.8
49 2000 800 45 45 ms 11/03/20
52 2000 800 137.2
54 2000 800 —
57 2000 800 —
62 2000 800 —
63 2000 800 —

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
64 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
65 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
66 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
67 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
68 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
69 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
70 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
71 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
72 Isopropyl ether	682.23	642.03	666.75	695.31	656.63	696.37	661.77	656.86	696.19	672.68	20.37	58.98	2000	800	—
73 Vinyl Acetate	379.16	510.38	679.89	456.28	594.69	817.23	865.96	319.67	628.92	583.57	186.68	540.62	2000	800	—
74 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
75 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
76 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
77 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
78 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
79 Ethyl-tert-butyl ether	732.15	735.05	698.72	703.42	678.14	735.97	721.12	633.77	751.04	709.93	36.40	105.41	2000	800	—
80 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
81 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
82 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
83 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
84 2,2-Dichloropropane	856.50	766.31	748.03	737.62	810.23	833.08	893.06	935.10	891.13	830.12	69.98	202.65	2000	800	—
85 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
86 2-Butanone	494.27	680.84	630.20	636.77	695.03	636.19	496.57	833.87	704.79	645.39	104.97	303.98	2000	800	—

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SpRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
87 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
88 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
89 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 90 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
91 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
92 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
93 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
94 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
95 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
96 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
97 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
98 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
99 1,1-Dichloropropene	691.47	788.20	695.94	788.42	758.83	619.78	822.02	955.67	776.77	766.35	94.95	274.96	2000	800	—
100 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
101 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
102 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
103 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 104 1,2-Dichloroethane-d4	26542.98	25336.38	25035.81	26773.65	27060.55	27089.31	28110.69	28004.75	27657.60	26845.75	1081.60	3132.31			
105 tert-Amyl methyl ether	672.84	754.03	800.25	749.08	911.69	801.21	750.86	870.59	838.98	794.39	72.44	209.80	2000	2000	—
106 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
107 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 108 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
109 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
110 n-Butanol	818.67	808.84	787.27	836.16	856.92	901.90	852.85	807.79	844.38	834.98	34.16	98.92	2000	800	68.07

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SP RL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
111 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
112 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
113 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
114 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
115 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
116 Methyl Methacrylate	757.87	628.93	710.27	777.16	558.68	667.00	648.50	874.39	750.66	708.16	93.91	271.96	2000	800	—
117 1,4-Dioxane	765.97	849.41	952.34	642.09	797.15	771.61	800.61	642.99	673.24	766.16	101.84	294.93	2000	800	—
118 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
119 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
120 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
121 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
122 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
123 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
124 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
125 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
126 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
128 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
129 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
130 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
131 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
132 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 133 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
$ 134 Toluene-d8	24078.61	24335.63	24036.51	23516.55	23802.94	23773.37	23590.02	23613.19	24343.15	23898.89	313.75	908.62			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
135 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
136 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
137 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
138 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
139 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
140 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
141 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
142 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
143 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
144 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
145 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
146 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
147 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
148 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
149 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
150 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
151 1-Bromo-2-Chloroethane	657.71	773.71	721.48	656.34	733.70	677.29	720.22	717.61	692.34	705.60	38.30	110.92	2000	800	—
152 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
* 153 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00			
154 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
155 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
156 Nonane	649.99	615.89	662.19	649.94	671.72	581.89	713.24	665.35	674.53	653.86	37.29	108.00	2000	800	46.24
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
158 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

ppbv RL(ppbv) SPRL(ppbv) Blank

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL			
159 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
160 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
161 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
162 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
163 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
164 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
165 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
166 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
167 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
168 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
169 Cyclohexanone	848.24	767.43	798.03	808.84	844.16	792.72	752.74	812.64	890.64	812.83	42.72	123.73	2000	800	—
$ 170 4-Bromofluorobenzene	26008.20	26019.99	26097.96	26091.99	26069.47	25566.33	25848.37	26700.26	25817.70	26024.47	306.72	888.26			
171 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
172 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
173 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
174 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
175 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
176 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
177 Bromobenzene	806.33	851.30	818.09	815.14	762.80	818.62	765.09	884.18	735.55	806.35	46.17	133.72	2000	800	—
178 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
179 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
180 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
181 trans-1,4-Dichloro-2-b	696.47	780.58	811.00	821.84	756.32	754.81	776.59	738.59	930.39	785.18	66.13	191.51	2000	800	
182 Decane	665.03	678.56	590.12	632.67	602.85	585.50	637.99	632.02	612.73	626.39	31.92	92.43	2000	800	573.14

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	RL(ppbv)	SPRL(ppbv)	Blank
183 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
184 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
185 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
186 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
187 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
188 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
189 tert-Butylbenzene	777.35	746.78	784.01	732.15	775.27	697.75	724.53	721.59	728.65	743.12	29.77	86.20	2000	300	32.20
190 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
191 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
192 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
193 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
194 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
195 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
196 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
197 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
198 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
199 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
200 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
201 Undecane	543.26	526.15	549.31	522.63	565.63	525.07	573.32	541.49	521.46	540.92	19.10	55.32	2000	800	183.60
202 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
203 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
204 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
205 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	ppbv RL(ppbv)	Sp RL(ppbv)	Blank
206 1,2-Dibromo-3-chloropr	776.96	766.33	816.70	748.77	742.97	795.65	764.63	775.37	776.17	773.73	22.51	65.19	2000	800	—
207 Dodecane	669.70	747.33	708.32	688.30	749.03	735.59	633.57	674.71	655.94	695.83	41.64	120.59	2000	800	719.23
208 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
209 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
210 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
211 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
212 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
213 1,2,4-Trichlorobenzene	1024.36	1024.97	1115.91	982.45	1070.32	954.95	934.25	1004.44	1088.59	1022.25	60.90	176.36	2000	2000	65.11
214 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
215 Hexachlorobutadiene	1087.27	1049.68	989.99	1016.98	1194.77	1118.77	1104.49	1141.26	1112.79	1090.67	63.37	183.51	2000	2000	38.6
216 Naphthalene	96.82	117.03	115.70	96.98	95.10	96.49	94.23	93.62	93.19	99.91	9.44	27.33	1000	800	385.
217 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
218 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
219 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
220 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
221 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
222 1,2,3-Trichlorobenzene	1001.11	1201.96	1141.79	1103.14	1149.53	1158.53	1177.05	1141.75	1245.42	1146.70	68.02	196.98	2000	800	129.49
223 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
224 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
225 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
226 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
227 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
228 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
229 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
230 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 234 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 235 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 236 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
238 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
239 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
240 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/27OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/27OCT20.b
Inst ID: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL
254 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

1.0mdl.rp

Chloroethane & Ethanol only

TO15 Quad MDL MSD-P
Standards: 3018-1674 & 3018-1682
40mL load volume
Spike concentration: 1.0ppbv (5.0ppbv)

Report Date : 12-NOV-2020 16:23 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/06NOV20.b/p20q1012a.m
Batch File: /chem/msdp.i/06NOV20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

Spiked ID(s) Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p110206	p110207	p110208	p110513	p110514	p110515	p110609	p110610	p110611
INJ.DATE:	02-NOV-2020	02-NOV-2020	02-NOV-2020	05-NOV-2020	05-NOV-2020	05-NOV-2020	06-NOV-2020	06-NOV-2020	06-NOV-2020
INJ.TIME:	14:13	14:41	15:09	20:32	21:00	21:28	14:11	14:39	15:06

ppbv PL Blar

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1 Chloroethane	949.12	1022.70	806.30	825.92	1224.10	964.54	1180.50	905.28	1303.10	1020.17	177.54	0.000000	2.00	1.98	514.16
2 Ethanol	794.28	1176.80	541.34	587.68	928.34	802.22	478.16	696.21	766.27	752.37	213.76	0.000000	2.00	1.22	619.05
* 3 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 4 1,2-Dichloroethane-d4	27635.00	26462.00	27301.00	26650.00	26719.00	27118.00	27404.00	26779.00	27199.00	27029.67	394.08	0.000000	0.400	23.68	1141.26
* 5 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 6 Toluene-d8	24478.00	23898.00	24046.00	24964.00	25032.00	24902.00	24547.00	25074.00	25358.00	24699.89	492.08	0.000000	0.400	17.33	1425.08
* 7 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000
$ 8 4-Bromofluorobenzene	26376.00	26376.00	25359.00	23859.00	24195.00	23898.00	24336.00	24526.00	24254.00	24797.67	995.84	0.000000	0.400	8.60	2883.95

Reviewer 1 _____ Date: 11/12/20
Reviewer 2 _____ Date: 11/12/20

The ratio of the mean recovered concentration & the MDL is b/w 1-20.

$\bar{x} = 566.60$

$2\bar{x} = 1133.21$

1112pca_mdl.rp

TO15 Quad MDL MSD-P
Standard 3018-1644 (5.0ppbv)

1,1,1,2-Tetrachloroethane only

16mL load volume
Spike Concentration 0.4ppbv

Report Date : 10-NOV-2020 15:36 Page 1

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

Spiked ID(s) _____ Spiked Vol(s) _____

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102710	p102711	p102712	p102809	p102810	p102811	p102910	p102911	p102912
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	14:49	15:17	15:45	14:57	15:25	15:53	14:46	15:14	15:42

RTV RL Blank

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
*	1 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$	2 1,2-Dichloroethane-d4	24573.00	24807.00	24616.00	25011.00	26208.00	26456.00	27161.00	26313.00	27385.00	25836.67	1102.74	0.000000	2.00	8.09	3193.55
*	3 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
$	4 Toluene-d8	24075.00	24304.00	24661.00	24305.00	23479.00	23880.00	24032.00	24417.00	23597.00	24083.33	385.46	0.000000	2.00	21.57	1116.30
*	5 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	2.00	1.00	0.000000
	6 1,1,1,2-Tetrachloroethane	379.06	447.57	427.78	423.52	384.11	446.89	435.94	349.79	387.48	409.13	34.82	0.000000	2.00	4.06	100.83
$	7 4-Bromofluorobenzene	25482.00	25724.00	25783.00	26216.00	25959.00	25799.00	26068.00	25824.00	25833.00	25854.22	209.93	0.000000	2.00	42.53	607.95

80

Reviewer 1 _____ Date: 11/10/20
Reviewer 2 _____ Date: 11/12/20

The ratio of the mean recovered concentration & the MDL is b/w 1-20.

$\bar{x} = 100.83$

$2\bar{x} = 201.66$

$3\bar{x} = 302.49$

$4\bar{x} = 403.32$

blank_mdl.rp

MSD-P Blank MDL
can #s 33665 & 497

Report Date : 03-NOV-2020 17:44 Page 1

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SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i
Student T 2.896 for 9 Replicates with 99% Confidence

	Spiked ID(s)	Spiked Vol(s)

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09
FILENAME:	p102707EPALB	p102708EPALB	p102709EPALB	p102806EPALB	p102807EPALB	p102808EPALB	p102907EPALB	p102908EPALB	p102909EPALB
INJ.DATE:	27-OCT-2020	27-OCT-2020	27-OCT-2020	28-OCT-2020	28-OCT-2020	28-OCT-2020	29-OCT-2020	29-OCT-2020	29-OCT-2020
INJ.TIME:	13:05	13:52	14:22	12:51	14:00	14:29	12:51	13:49	14:18

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL
1 Freon 134a	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
2 Propylene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
3 1,1-Difluoroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
4 Freon 12	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
5 Chlorodifluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
6 Freon 114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
7 Isobutane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
8 Chloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
9 Butane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
10 Vinyl Chloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
11 1,3-Butadiene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
12 Bromomethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
13 Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
14 Isopentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
15 Vinyl Bromide	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
16 Freon 11	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
17 Dichlorofluoromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000
18 Pentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
19 Ethanol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
20 Ethyl Ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000
21 Acrolein	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000

Reviewer 1 _____ Date: 11/03/20

Reviewer 2 _____ Date: 11/11/20

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m

Batch File: /chem/msdp.i/29OCT20.b

Instrument Names: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
22 Freon 113	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
23 1,1-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
24 Acetone 497.49	331.00	354.71	246.63	201.44	376.96	233.77	173.33	355.39	249.83	280.34	74.98	0.000000	0.400	1.29	217.15	
25 Iodomethane 65.08	65.08	27.98	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	10.34	22.52	0.000000	2.00	0.159	65.21	Ratio 1 t
26 Carbon Disulfide 195.78	151.31	148.10	133.40	158.96	153.20	166.49	113.13	146.20	117.68	143.16	18.17	0.000000	0.400	2.72	52.62	
27 2-Propanol 137.20	69.67	88.64	14.84	42.56	56.13	41.38	31.21	93.32	82.38	57.79	27.42	0.000000	0.400	0.728	79.41	Ratio 1 t
28 3-Chloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
29 Acetonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
30 Methylene Chloride 60.72	0.000000	0.000000	0.000000	60.72	0.000000	0.000000	0.000000	0.000000	0.000000	6.75	20.24	0.000000	0.400	0.115	58.61	Rat
31 tert-Butyl alcohol	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
32 Methyl tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
33 trans-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
34 Acrylonitrile	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
35 Hexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
36 Isopropyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
37 1,1-Dichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
38 Vinyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
39 Ethyl-tert-butyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
40 2,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
41 cis-1,2-Dichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
42 2-Butanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
43 Ethyl Acetate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 44 Bromochloromethane	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	
45 Tetrahydrofuran	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
46 Chloroform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
47 Cyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
48 1,1,1-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
49 Carbon Tetrachloride	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	

Reviewer 1 _____ Date:_____

Reviewer 2 _____ Date:_____

US32TAR1

SPIKED METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdp.i/29OCT20.b/p20q1012a.m
Batch File: /chem/msdp.i/29OCT20.b
Instrument Names: msdp.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	SPK AMT	RL	RATIO	MDL	
50 1,1-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
51 2,2,4-Trimethylpentane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
52 Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 53 1,2-Dichloroethane-d4	25449.00	26875.00	26033.00	28600.00	27056.00	27244.00	27238.00	27582.00	27588.00	27073.89	913.17	0.000000	0.400	10.24	2644.53	
54 tert-Amyl methyl ether	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
55 1,2-Dichloroethane 10.40	0.000000	0.000000	0.000000	0.000000	10.40	0.000000	0.000000	0.000000	0.000000	1.16	3.47	0.000000	0.400	0.115	10.04	Rati
56 Heptane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 57 1,4-Difluorobenzene	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	
58 n-Butanol 68.07	52.43	0.000000	39.24	68.07	0.000000	0.000000	38.26	54.00	0.000000	28.00	27.94	0.000000	0.400	0.346	80.92	Rati
59 Trichloroethene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
60 Methylcyclohexane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
61 1,2-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
62 Methyl Methacrylate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
63 1,4-Dioxane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
64 Dibromomethane 76.07	0.000000	0.000000	50.85	30.83	0.000000	0.000000	76.07	28.33	20.27	22.93	26.94	0.000000	0.400	0.294	78.01	Ratio 1 t
65 Bromodichloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
66 1-Bromo-2-Chloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
67 cis-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
68 4-Methyl-2-pentanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
$ 69 Toluene-d8	24332.00	24851.00	24110.00	24640.00	24909.00	24437.00	24430.00	24025.00	23792.00	24391.78	374.29	0.000000	0.400	22.50	1083.95	
70 Octane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
71 Toluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
72 trans-1,3-Dichloropropene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
73 1,1,2-Trichloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
74 Tetrachloroethene 7.09	7.09	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.788	2.36	0.000000	0.400	0.115	6.85	Ratio 1 t
75 1,3-Dichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000	
76 2-Hexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
77 Dibromochloromethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
78 1,2-Dibromoethane (EDB)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000	
* 79 Chlorobenzene-d5	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	0.000000	0.000000	0.400	1.00	0.000000	

80	Chlorobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
81	Ethyl Benzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
82	Nonane 46.24	0.000000	0.000000	0.000000	46.24	0.000000	0.000000	0.000000	0.000000	0.000000	5.14	15.41	0.000000	0.400	0.115	44.64	Ratio 1 t	
83	1,1,1,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
84	m,p-Xylene 19.29	0.000000	0.000000	0.000000	19.29	0.000000	0.000000	0.000000	0.000000	0.000000	2.14	6.43	0.000000	0.400	0.115	18.62	Ratio 1 t	
85	o-Xylene 8.96	0.000000	0.000000	0.000000	8.96	0.000000	0.000000	0.000000	0.000000	0.000000	0.996	2.99	0.000000	0.400	0.115	8.65	Ratio 1 t	
86	Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
87	Bromoform	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
88	Cumene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
89	Cyclohexanone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
$ 90	4-Bromofluorobenzene	26249.00	25487.00	25699.00	25494.00	25682.00	25924.00	26381.00	25900.00	26007.00	25869.22	312.25	0.000000	5.00	1.00	0.000000		
91	1,1,2,2-Tetrachloroethane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	28.61	904.27			
92	Bromobenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
93	Propylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000			
94	1,2,3-Trichloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
95	trans-1,4-Dichloro-2-butene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000			
96	4-Ethyltoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
97	Decane 573.14	491.02	405.05	339.69	573.14	403.12	0.000000	563.04	396.70	325.06	388.54	170.65	0.000000	0.400	0.786	494.19	Rati	
98	2-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
99	1,3,5-Trimethylbenzene 11.91	7.14	11.91	0.000000	0.000000	0.000000	0.000000	10.79	0.000000	0.000000	3.32	5.13	0.000000	0.400	0.223	14.85	Rati	
100	alpha Methyl Styrene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
101	tert-Butylbenzene 32.20	32.20	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.58	10.73	0.000000	0.400	0.115	31.09	Rati	
102	1,2,4-Trimethylbenzene 40.41	0.000000	11.59	3.17	40.41	0.000000	0.000000	0.000000	20.21	0.000000	8.38	13.94	0.000000	0.400	0.207	40.37	Ratio 1 t	
103	sec-Butylbenzene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
104	p-Cymene 4.91	4.91	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.545	1.64	0.000000	0.400	0.115	4.74	Ratio 1 t	
105	1,3-Dichlorobenzene 6.61	0.000000	6.61	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.735	2.20	0.000000	0.400	0.115	6.38	Ratio 1 t	
106	1,4-Dichlorobenzene 10.61	0.000000	0.000000	0.000000	10.61	0.000000	0.000000	0.000000	0.000000	0.000000	1.18	3.54	0.000000	0.400	0.115	10.25	Ratio 1 t	
107	alpha-Chlorotoluene	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400	1.00	0.000000			
108	Undecane 183.60	0.000000	0.000000	106.80	130.26	91.15	137.17	174.19	146.33	183.60	107.72	67.57	0.000000	0.400	0.551	195.68	Ratio 1 t	
109	Butylbenzene 45.09	26.38	12.90	0.000000	45.09	0.000000	0.000000	14.12	0.000000	0.000000	10.94	15.88	0.000000	0.400	0.238	45.98	Ratio 1 t	
110	1,2-Dichlorobenzene 20.05	26.05	0.000000	0.000000	13.71	0.000000	0.000000	0.000000	0.000000	0.000000	4.42	9.29	0.000000	0.400	0.164	26.91	Ratio 1 t	
111	1,2-Dibromo-3-chloropropane	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	2.00	1.00	0.000000			
112	Dodecane 719.23	0.000000	66.26	60.12	719.23	236.24	131.75	184.35	143.99	116.87	184.31	212.46	0.000000	0.400	0.300	615.27	Ratio 1 t	
113	1,2,4-Trichlorobenzene 65.18	65.18	48.80	15.77	46.15	24.18	0.000000	13.22	59.47	0.000000	30.31	25.09	0.000000	0.400	0.417	72.67	Ratio 1 t	
114	Hexachlorobutadiene 38.61	0.000000	0.000000	0.000000	38.61	0.000000	0.000000	0.000000	0.000000	0.000000	4.29	12.87	0.000000	0.400	0.115	37.27	Ratio 1 t	
115	Naphthalene 385.24	42.99	32.63	22.36	385.24	178.02	96.40	0.000000	0.000000	34.33	88.00	124.65	0.000000	0.400	0.244	360.98	Ratio 1 t	
116	1,2,3-Trichlorobenzene 129.49	129.49	0.000000	0.000000	74.71	47.26	0.000000	0.000000	0.000000	0.000000	27.94	46.85	0.000000	0.400	0.206	135.67	Ratio 1 t	

Reviewer 1 _____ Date: 11/03/20

Reviewer 2 _____ Date: _____

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 2107282-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072502**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:00 AM**

Compound	%Recovery
1,1,1,2-Tetrachloroethane	102
1,1,1-Trichloroethane	100
1,1,2,2-Tetrachloroethane	105
1,1,2-Trichloroethane	105
1,1-Dichloroethane	104
1,1-Dichloroethene	91
1,1-Difluoroethane	98
1,2,3-Trichloropropane	101
1,2,4-Trichlorobenzene	98
1,2,4-Trimethylbenzene	98
1,2-Dibromo-3-chloropropane	103
1,2-Dibromoethane (EDB)	108
1,2-Dichlorobenzene	102
1,2-Dichloroethane	117
1,2-Dichloropropane	105
1,3,5-Trimethylbenzene	102
1,3-Butadiene	115
1,3-Dichlorobenzene	104
1,4-Dichlorobenzene	103
1,4-Dioxane	102
2,2,4-Trimethylpentane	103
2-Butanone (Methyl Ethyl Ketone)	97
2-Hexanone	110
2-Propanol	109
3-Chloropropene	88
4-Ethyltoluene	99
4-Methyl-2-pentanone	106
Acetone	102
Acrolein	102
Acrylonitrile	108
alpha-Chlorotoluene	99
Benzene	104
Bromodichloromethane	112
Bromoform	105
Bromomethane	93
Carbon Disulfide	94
Carbon Tetrachloride	109
Chlorobenzene	103
Chloroethane	95
Chloroform	106
Chloromethane	114
cis-1,2-Dichloroethene	100

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Client Sample ID: CCV

Lab ID#: 2107282-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:00 AM**	

Compound	%Recovery
cis-1,3-Dichloropropene	106
Cumene	99
Cyclohexane	93
Dibromochloromethane	110
Dibromomethane	110
Ethanol	104
Ethyl Acetate	118
Ethyl Benzene	100
Ethyl-tert-butyl ether	97
Freon 11	104
Freon 12	106
Freon 113	97
Freon 114	103
Freon 134a	109
Heptane	100
Hexachlorobutadiene	102
Hexachloroethane	116
Hexane	99
Iodomethane	110
Isopropyl ether	111
m,p-Xylene	99
Methyl tert-butyl ether	90
Methylene Chloride	118
Naphthalene	88
o-Xylene	99
Propylbenzene	101
Propylene	109
Styrene	97
tert-Amyl methyl ether	96
tert-Butyl alcohol	94
Tetrachloroethene	104
Tetrahydrofuran	114
Toluene	102
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	97
trans-1,3-Dichloropropene	107
Trichloroethene	106
Vinyl Acetate	96
Vinyl Bromide	94
Vinyl Chloride	94

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107282-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:00 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072502.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2021 11:00
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2125
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 27-Jul-2021 08:18 ugdc Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	154602	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	121732			48.23- 108.23	78.74
5.778	5.778 (1.000)	49	329253			150.57- 210.57	212.97
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	573421	25.0000		80.00- 120.00	100.00
6.666	6.666 (1.000)	88	83321			0.00- 45.71	14.53
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	566079	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	293268			23.78- 83.78	51.81
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.315 (1.093)	65	224693	25.0000	26.335	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	127910			27.21- 87.21	56.93
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	617936	25.0000	24.816	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66298			0.00- 40.44	10.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	406085			34.95- 94.95	65.72
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	368342	25.0000	25.340	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	450442			95.92- 155.92	122.29
10.921	10.921 (1.154)	176	354586			66.89- 126.89	96.27
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	266508	50.0000	54.465	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	217594			59.44- 119.44	81.65
1.744	1.744 (0.302)	51	1318795			419.06- 479.06	494.84
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	386352	50.0000	54.610	80.00- 120.00	100.00
1.688	1.688 (0.292)	42	257658			35.28- 95.28	66.69
1.675	1.675 (0.290)	39	265816			38.35- 98.35	68.80
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	172514	50.0000	49.229	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1318795			597.63- 657.63	764.46
1.702	1.702 (0.295)	47	134301			33.72- 93.72	77.85
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	736520	50.0000	53.116	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	238865			2.37- 62.37	32.43
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.758 (0.304)	67	77385	50.0000	56.498	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1318795			1501.01-1561.01	1704.20
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	699589	50.0000	51.398	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	219234			2.30- 62.30	31.34
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	834338	50.0000	53.269	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	273435			2.44- 62.44	32.77
1.870	1.870 (0.324)	58	23961			0.00- 33.36	2.87
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	459362	50.0000	57.103	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	115216			0.00- 56.26	25.08
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.352)	58	87609	50.0000	47.014	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.352)	43	797320			823.29- 883.29	910.09
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	455805	50.0000	47.099	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	145666			0.00- 59.69	31.96
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	447236	50.0000	57.459	80.00- 120.00	100.00
2.096	2.096 (0.363)	39	399431			52.37- 112.37	89.31
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	289144	50.0000	46.466	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	271358			64.07- 124.07	93.85
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	165194	50.0000	47.470	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	46267			0.04- 60.04	28.01
2.612	2.612 (0.452)	49	68037			4.54- 64.54	41.19
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	574601	50.0000	54.264	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	328784			34.12- 94.12	57.22
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.493)	106	269606	50.0000	46.874	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	268341			69.27- 129.27	99.53
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	768951	50.0000	52.185	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	495527			34.72- 94.72	64.44
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.503)	67	618322	50.0000	48.686	80.00- 120.00	100.00
2.899	2.899 (0.502)	69	191224			0.84- 60.84	30.93
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	922742	50.0000	53.612	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	123395			0.00- 44.98	13.37
2.970	2.970 (0.514)	72	53645			0.00- 37.39	5.81
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	129202	50.0000	44.495	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	273810			163.46- 223.46	211.92
3.285	3.285 (0.569)	45	457051			250.40- 310.40	353.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.561)	46	79869	50.0000	52.094	80.00- 120.00	100.00
3.285	3.285 (0.569)	45	454452			511.19- 571.19	569.00
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	135133	50.0000	50.794	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	185582			111.10- 171.10	137.33
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	532164	50.0000	48.610	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	340278			33.56- 93.56	63.94
3.550	3.550 (0.614)	101	643492			89.21- 149.21	120.92
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	298111	50.0000	45.582	80.00- 120.00	100.00
3.586	3.586 (0.621)	98	186881			34.02- 94.02	62.69
3.579	3.579 (0.619)	61	635494			168.77- 228.77	213.17
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	206145	50.0000	50.862	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	765064			302.95- 362.95	371.13
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	808904	50.0000	46.947	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	631711	50.0000	55.153	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	293656			12.22- 72.22	46.49
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	887952	50.0000	54.358	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	166969			0.00- 47.19	18.80
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	126177	50.0000	43.835	80.00- 120.00	100.00
4.052	4.052 (0.701)	41	646829			396.19- 456.19	512.64
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	440895	50.0000	57.910	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	228421			20.95- 80.95	51.81
4.123	4.123 (0.714)	38	49146			0.00- 41.17	11.15
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	621464	50.0000	59.032	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	262639			22.03- 82.03	42.26
4.238	4.238 (0.733)	51	184283			0.18- 60.18	29.65

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.338	4.338 (0.751)	59	898493	50.0000	47.167	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	221769			0.00- 51.11	24.68
4.338	4.338 (0.751)	57	101387			0.00- 40.49	11.28
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	858658	50.0000	45.225	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	309240			3.10- 63.10	36.01
4.446	4.446 (0.769)	41	337445			1.28- 61.28	39.30
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.776)	98	211417	50.0000	48.380	80.00- 120.00	100.00
4.482	4.482 (0.776)	61	622080			255.84- 315.84	294.24
4.482	4.482 (0.776)	96	330474			127.59- 187.59	156.31
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	330293	50.0000	54.296	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	390024			88.05- 148.05	118.08
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.813)	57	755592	50.0000	49.612	80.00- 120.00	100.00
4.696	4.696 (0.813)	43	565926			37.52- 97.52	74.90
4.696	4.696 (0.813)	86	82339			0.00- 41.48	10.90
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.969 (0.860)	63	681670	50.0000	52.064	80.00- 120.00	100.00
4.969	4.969 (0.860)	65	197978			0.00- 59.70	29.04
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.857)	45	1963464	50.0000	55.432	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	296886			0.00- 48.18	15.12
4.954	4.954 (0.857)	59	179366			0.00- 40.15	9.14
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.865)	86	80510	50.0000	47.846	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2344966			2432.48-2492.48	2912.64
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1484002	50.0000	48.400	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	432130			1.00- 61.00	29.12
5.305	5.305 (0.918)	41	332630			0.00- 48.73	22.41
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.513 (0.954)	77	588269	50.0000	50.597	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	189634			2.28- 62.28	32.24
5.513	5.513 (0.954)	97	138603			0.00- 53.93	23.56

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.960)	98	227855	50.0000	50.244	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	353007			125.75- 185.75	154.93
5.549	5.549 (0.960)	61	857114			332.40- 392.40	376.17
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	169522	50.0000	48.512	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2548692			1214.50-1274.50	1503.46
5.556	5.556 (0.962)	57	80547			14.68- 74.68	47.51
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	205488	50.0000	59.120	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	857114			452.04- 512.04	417.11
5.578	5.578 (0.965)	70	83588			22.77- 82.77	40.68
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (1.000)	42	663706	50.0000	57.110	80.00- 120.00	100.00
5.778	5.778 (1.000)	71	142259			0.00- 55.82	21.43
5.778	5.778 (1.000)	72	156376			0.00- 57.59	23.56
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.011)	83	711213	50.0000	52.872	80.00- 120.00	100.00
5.843	5.843 (1.011)	85	462443			34.70- 94.70	65.02
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	451728	50.0000	46.450	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	856165			142.57- 202.57	189.53
5.957	5.957 (1.031)	41	508193			62.09- 122.09	112.50
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.971 (1.033)	97	762787	50.0000	50.196	80.00- 120.00	100.00
5.971	5.971 (1.033)	99	488372			34.02- 94.02	64.02
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.055)	119	777646	50.0000	54.562	80.00- 120.00	100.00
6.093	6.093 (1.055)	117	789136			70.64- 130.64	101.48
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	201782	50.0000	51.696	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	505775			226.85- 286.85	250.65
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.287 (1.088)	57	2736490	50.0000	51.694	80.00- 120.00	100.00
6.287	6.287 (1.088)	56	917606			2.24- 62.24	33.53
6.287	6.287 (1.088)	41	747538			0.00- 54.39	27.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	980218	50.0000	51.801	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	225612			0.00- 52.90	23.02
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	256253	50.0000	48.026	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1040741			372.79- 432.79	406.14
6.358	6.358 (0.954)	55	418207			112.09- 172.09	163.20
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	576080	50.0000	58.508	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	173523			0.79- 60.79	30.12
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	373474	50.0000	49.821	80.00- 120.00	100.00
6.451	6.451 (0.968)	43	1133008			226.53- 286.53	303.37
6.451	6.451 (0.968)	57	537207			100.85- 160.85	143.84
110 n-Butanol					CAS #: 71-36-3		
6.817	6.817 (1.023)	56	382355	50.0000	55.577	80.00- 120.00	100.00
6.810	6.810 (1.021)	41	293303			40.99- 100.99	76.71
6.810	6.810 (1.021)	43	240327			27.38- 87.38	62.85
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	486800	50.0000	53.016	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	524670			76.29- 136.29	107.78
6.867	6.867 (1.030)	97	314088			33.63- 93.63	64.52
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	508632	50.0000	52.430	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	369022			41.07- 101.07	72.55
7.096	7.096 (1.064)	41	347603			22.53- 82.53	68.34
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	393687	50.0000	50.615	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	906054			179.84- 239.84	230.15
7.139	7.139 (0.755)	100	147473			9.59- 69.59	37.46
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.182 (1.077)	88	264118	50.0000	51.229	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	278369			68.28- 128.28	105.40
7.175	7.175 (1.076)	57	95948			2.68- 62.68	36.33
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	461661	50.0000	54.958	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	433580			60.09- 120.09	93.92

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.204	7.204 (0.761)	95	380124			48.38- 108.38	82.34
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	800475	50.0000	56.226	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	519551			35.24- 95.24	64.91
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	637849	50.0000	53.032	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	197223			2.42- 62.42	30.92
7.698	7.698 (1.155)	39	478269			37.16- 97.16	74.98
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	651528	50.0000	49.034	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	311094			15.78- 75.78	47.75
6.974	6.974 (1.046)	55	810929			84.64- 144.64	124.47
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	519919	50.0000	52.776	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1578257			242.35- 302.35	303.56
7.798	7.798 (1.170)	85	153379			3.24- 63.24	29.50
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1331798	50.0000	51.013	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	780885			28.38- 88.38	58.63
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.192)	57	591252	50.0000	53.114	80.00- 120.00	100.00
7.948	7.948 (1.192)	85	456928			56.00- 116.00	77.28
7.948	7.948 (1.192)	43	1668037			228.66- 288.66	282.12
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	596893	50.0000	53.582	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	188064			1.24- 61.24	31.51
8.214	8.214 (0.868)	39	429564			34.11- 94.11	71.97
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	484302	50.0000	52.598	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	300140			31.96- 91.96	61.97
8.400	8.400 (0.888)	83	407013			52.93- 112.93	84.04
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	672864	50.0000	52.154	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	526740			47.84- 107.84	78.28
8.464	8.464 (0.895)	131	512101			45.29- 105.29	76.11

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	725636	50.0000	55.160	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1566548			162.87- 222.87	215.89
8.586	8.586 (0.908)	100	104282			0.00- 45.94	14.37
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	668285	50.0000	53.904	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	951887			94.99- 154.99	142.44
8.579	8.579 (1.287)	78	216128			2.05- 62.05	32.34
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	945893	50.0000	54.982	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	729974			47.45- 107.45	77.17
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	796353	50.0000	53.925	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	753266			64.21- 124.21	94.59
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	968593	50.0000	54.416	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	279700			0.00- 59.64	28.88
7.612	7.612 (1.142)	144	92596			0.00- 39.63	9.56
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1153523	50.0000	51.318	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	364485			1.74- 61.74	31.60
9.496	9.496 (1.004)	77	612090			25.04- 85.04	53.06
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	585900	50.0000	49.848	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1774247			273.74- 333.74	302.82
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1679593	50.0000	55.540	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1280813			54.16- 114.16	76.26
9.603	9.603 (1.015)	85	338373			0.00- 53.90	20.15
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	727649	50.0000	49.429	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1391095			163.73- 223.73	191.18
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	699722	50.0000	49.610	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1406488			177.45- 237.45	201.01
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1165539	50.0000	48.320	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
165 Styrene (continued)							
10.255	10.255 (1.084)	78	547927			17.88- 77.88	47.01
167 Bromoform					CAS #: 75-25-2		
10.549	10.549 (1.115)	173	893886	50.0000	52.713	80.00- 120.00	100.00
10.549	10.549 (1.115)	171	461861			21.25- 81.25	51.67
168 Cumene					CAS #: 98-82-8		
10.656	10.656 (1.126)	105	2193046	50.0000	49.497	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	639000			0.00- 58.52	29.14
10.649	10.649 (1.126)	51	338174			0.00- 43.00	15.42
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	899746	50.0000	56.783	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	251822			1.94- 61.94	27.99
10.871	10.871 (1.149)	42	625979			37.89- 97.89	69.57
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1139062	50.0000	52.672	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	735202			35.20- 95.20	64.54
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	708388	50.0000	52.569	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	685430			67.21- 127.21	96.76
11.179	11.179 (1.182)	77	404172			29.02- 89.02	57.06
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	665625	50.0000	50.666	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2616426			366.49- 426.49	393.08
11.150	11.150 (1.179)	105	97689			0.00- 44.85	14.68
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	348253	50.0000	50.526	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1004604			280.55- 340.55	288.47
11.107	11.107 (1.174)	61	168079			15.49- 75.49	48.26
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	189224	50.0000	41.878	80.00- 120.00	100.00
11.172	11.172 (1.181)	89	149242			49.11- 109.11	78.87
11.179	11.179 (1.182)	75	1004604			426.44- 486.44	530.91
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1625857	50.0000	47.176	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	419881			0.00- 57.66	25.83
11.258	11.258 (1.190)	142	60657			0.00- 34.09	3.73

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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183 4-Ethyltoluene						CAS #: 622-96-8	
11.286	11.286 (1.193)	120	709993	50.0000	49.695	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2245612			284.55- 344.55	316.29
184 2-Chlorotoluene						CAS #: 95-49-8	
11.315	11.315 (1.196)	126	576834	50.0000	51.567	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1928483			315.17- 375.17	334.32
11.301	11.301 (1.195)	65	290934			21.55- 81.55	50.44
185 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
11.365	11.365 (1.201)	120	1004358	50.0000	51.060	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1873056			164.93- 224.93	186.49
188 alpha Methyl Styrene						CAS #: 98-83-9	
11.645	11.645 (1.231)	118	957850	50.0000	49.018	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	525867			25.30- 85.30	54.90
189 tert-Butylbenzene						CAS #: 98-06-6	
11.745	11.745 (1.242)	119	1906342	50.0000	51.816	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	464103			0.00- 54.25	24.35
11.745	11.745 (1.242)	91	1121746			31.27- 91.27	58.84
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6	
11.817	11.817 (1.249)	105	1829613	50.0000	49.279	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	934425			19.05- 79.05	51.07
192 sec-Butylbenzene						CAS #: 135-98-8	
12.003	12.003 (1.269)	134	589896	50.0000	51.588	80.00- 120.00	100.00
12.003	12.003 (1.269)	105	2725406			437.55- 497.55	462.01
12.003	12.003 (1.269)	91	408985			40.76- 100.76	69.33
194 p-Cymene						CAS #: 99-87-6	
12.160	12.160 (1.285)	119	2513910	50.0000	49.741	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	657529			0.00- 55.54	26.16
12.160	12.160 (1.285)	91	531493			0.00- 51.48	21.14
195 1,3-Dichlorobenzene						CAS #: 541-73-1	
12.203	12.203 (1.290)	146	1321061	50.0000	51.984	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	842736			33.21- 93.21	63.79
12.203	12.203 (1.290)	111	524661			11.31- 71.31	39.72
196 1,4-Dichlorobenzene						CAS #: 106-46-7	
12.311	12.311 (1.301)	146	1322811	50.0000	51.510	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	841479			33.90- 93.90	63.61
12.311	12.311 (1.301)	111	507972			9.45- 69.45	38.40

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.468	12.468 (1.318)	91	1745352	50.0000	49.493	80.00- 120.00	100.00
12.468	12.468 (1.318)	126	411206			0.00- 53.26	23.56
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2064540	50.0000	51.861	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2006708			58.12- 118.12	97.20
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	640515	50.0000	49.899	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2205128			314.79- 374.79	344.27
12.626	12.626 (1.335)	92	1166403			154.29- 214.29	182.10
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1278073	50.0000	51.291	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	808390			33.84- 93.84	63.25
12.741	12.741 (1.347)	111	528172			12.73- 72.73	41.33
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	774525	50.0000	51.319	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	632737			52.48- 112.48	81.69
13.600	13.600 (1.438)	155	603634			47.41- 107.41	77.94
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2009246	61.8000	63.677	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1819645			52.87- 112.87	90.56
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1138087	63.0000	61.817	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1072834			65.33- 125.33	94.27
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	847162	64.4000	65.384	80.00- 120.00	100.00
14.581	14.581 (1.541)	223	533049			33.17- 93.17	62.92
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	264470	6.35000	5.621	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	32731			0.00- 42.88	12.38
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1053197	66.6000	64.712	80.00- 120.00	100.00
15.069	15.069 (1.593)	182	1011018			65.75- 125.75	96.00
15.069	15.069 (1.593)	145	355535			5.23- 65.23	33.76

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.45336	0.010	-5.34047	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.07763	0.010	0.73396	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.65069	0.010	-1.35810	30.00000	Averaged
4 Freon 134a	0.79126	0.86192	0.010	-8.92991	30.00000	Averaged
5 Propylene	1.14402	1.24951	0.010	-9.22069	30.00000	Averaged
7 1,1-Difluoroethane	0.56667	0.55793	0.010	1.54274	30.00000	Averaged
8 Freon 12	2.24223	2.38199	0.010	-6.23296	30.00000	Averaged
9 Chlorodifluoromethane	0.22149	0.25027	0.010	-12.99613	30.00000	Averaged
10 Freon 114	2.20100	2.26255	0.010	-2.79617	30.00000	Averaged
12 Isobutane	2.53275	2.69834	0.010	-6.53801	30.00000	Averaged
15 Chloromethane	1.30082	1.48563	0.010	-14.20696	30.00000	Averaged
18 Butane	0.30133	0.28334	0.010	5.97151	30.00000	Averaged
19 Vinyl Chloride	1.56492	1.47412	0.010	5.80182	30.00000	Averaged
20 1,3-Butadiene	1.25865	1.44641	0.010	-14.91787	30.00000	Averaged
24 Bromomethane	1.00624	0.93512	0.010	7.06742	30.00000	Averaged
30 Chloroethane	0.56273	0.53426	0.010	5.05995	30.00000	Averaged
31 Isopentane	1.71230	1.85832	0.010	-8.52821	30.00000	Averaged
32 Vinyl Bromide	0.93008	0.87194	0.010	6.25167	30.00000	Averaged
33 Freon 11	2.38274	2.48687	0.010	-4.37019	30.00000	Averaged
34 Dichlorofluoromethane	2.05367	1.99972	0.010	2.62693	30.00000	Averaged
35 Pentane	2.78321	2.98425	0.010	-7.22327	30.00000	Averaged
38 Ethyl Ether	0.46955	0.41785	0.010	11.01051	30.00000	Averaged
39 Ethanol	0.24792	0.25831	0.010	-4.18744	30.00000	Averaged
42 Acrolein	0.43020	0.43704	0.010	-1.58855	30.00000	Averaged
43 Freon 113	1.77031	1.72108	0.010	2.78075	30.00000	Averaged
44 1,1-Dichloroethene	1.05757	0.96412	0.010	8.83560	30.00000	Averaged
47 Acetone	0.65540	0.66670	0.010	-1.72310	30.00000	Averaged
48 Carbon Disulfide	2.78620	2.61609	0.010	6.10571	30.00000	Averaged
49 Iodomethane	1.85215	2.04302	0.010	-10.30536	30.00000	Averaged
52 2-Propanol	2.64148	2.87174	0.010	-8.71708	30.00000	Averaged
54 3-Chloropropene	0.46546	0.40807	0.010	12.33016	30.00000	Averaged
57 Acetonitrile	1.23114	1.42590	0.010	-15.81973	30.00000	Averaged
59 Methylene Chloride	1.70236	2.00988	0.010	-18.06443	30.00000	Averaged
62 tert-Butyl alcohol	3.08038	2.90583	0.010	5.66653	30.00000	Averaged
63 Methyl tert-butyl ether	3.07018	2.77700	0.010	9.54950	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.70664	0.68375	0.010	3.23996	30.00000	Averaged
66 Acrylonitrile	0.98368	1.06820	0.010	-8.59212	30.00000	Averaged
67 Hexane	2.46279	2.44367	0.010	0.77637	30.00000	Averaged
71 1,1-Dichloroethane	2.11721	2.20460	0.010	-4.12746	30.00000	Averaged
72 Isopropyl ether	5.72778	6.35006	0.010	-10.86420	30.00000	Averaged
73 Vinyl Acetate	0.27210	0.26038	0.010	4.30683	30.00000	Averaged
79 Ethyl-tert-butyl ether	4.95812	4.79943	0.010	3.20070	30.00000	Averaged
84 2,2-Dichloropropane	1.88008	1.90253	0.010	-1.19370	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.73332	0.73691	0.010	-0.48893	30.00000	Averaged
86 2-Butanone	0.56506	0.54825	0.010	2.97524	30.00000	Averaged
87 Ethyl Acetate	0.56205	0.66457	0.010	-18.24040	30.00000	Averaged
89 Tetrahydrofuran	1.87928	2.14650	0.010	-14.21913	30.00000	Averaged
92 Chloroform	2.17519	2.30014	0.010	-5.74418	30.00000	Averaged
94 Cyclohexane	1.57260	1.46094	0.010	7.10033	30.00000	Averaged
96 1,1,1-Trichloroethane	2.45732	2.46694	0.010	-0.39148	30.00000	Averaged
97 Carbon Tetrachloride	2.30469	2.51499	0.010	-9.12497	30.00000	Averaged
99 1,1-Dichloropropene	0.17017	0.17595	0.010	-3.39211	30.00000	Averaged
101 2,2,4-Trimethylpentane	8.56002	8.85011	0.010	-3.38889	30.00000	Averaged
102 Benzene	0.82499	0.85471	0.010	-3.60267	30.00000	Averaged
105 tert-Amyl methyl ether	0.23262	0.22344	0.010	3.94737	30.00000	Averaged
106 1,2-Dichloroethane	0.42928	0.50232	0.010	-17.01556	30.00000	Averaged
107 Heptane	0.32683	0.32565	0.010	0.35848	30.00000	Averaged
110 n-Butanol	0.29994	0.33340	0.010	-11.15471	30.00000	Averaged
111 Trichloroethene	0.40032	0.42447	0.010	-6.03287	30.00000	Averaged
114 1,2-Dichloropropane	0.42295	0.44351	0.010	-4.86080	30.00000	Averaged
116 Methyl Methacrylate	0.34351	0.34773	0.010	-1.23015	30.00000	Averaged
117 1,4-Dioxane	0.22478	0.23030	0.010	-2.45802	30.00000	Averaged
118 Dibromomethane	0.37098	0.40777	0.010	-9.91653	30.00000	Averaged
122 Bromodichloromethane	0.62070	0.69798	0.010	-12.45135	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.52438	0.55618	0.010	-6.06325	30.00000	Averaged
127 Methylcyclohexane	0.57930	0.56811	0.010	1.93161	30.00000	Averaged
131 4-Methyl-2-pentanone	0.42950	0.45335	0.010	-5.55194	30.00000	Averaged
137 Toluene	1.13821	1.16127	0.010	-2.02648	30.00000	Averaged
136 Octane	0.48532	0.51555	0.010	-6.22920	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.49197	0.52722	0.010	-7.16374	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.40664	0.42777	0.010	-5.19576	30.00000	Averaged
142 Tetrachloroethene	0.56977	0.59432	0.010	-4.30866	30.00000	Averaged
143 2-Hexanone	0.58097	0.64093	0.010	-10.32069	30.00000	Averaged
144 1,3-Dichloropropane	0.54052	0.58272	0.010	-7.80729	30.00000	Averaged
146 Dibromochloromethane	0.75978	0.83548	0.010	-9.96307	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.65220	0.70339	0.010	-7.85009	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.77603	0.84457	0.010	-8.83250	30.00000	Averaged
154 Chlorobenzene	0.99271	1.01887	0.010	-2.63552	30.00000	Averaged
155 Ethyl Benzene	0.51909	0.51751	0.010	0.30481	30.00000	Averaged
156 Nonane	1.33556	1.48353	0.010	-11.07962	30.00000	Averaged
158 m,p-Xylene	0.65013	0.64271	0.010	1.14122	30.00000	Averaged
164 o-Xylene	0.62290	0.61804	0.010	0.77944	30.00000	Averaged
165 Styrene	1.06528	1.02948	0.010	3.35980	30.00000	Averaged
167 Bromoform	0.74891	0.78954	0.010	-5.42562	30.00000	Averaged
168 Cumene	1.95673	1.93705	0.010	1.00582	30.00000	Averaged
169 Cyclohexanone	0.69978	0.79472	0.010	-13.56659	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.95505	1.00610	0.010	-5.34508	30.00000	Averaged
177 Bromobenzene	0.59512	0.62570	0.010	-5.13804	30.00000	Averaged
178 Propylbenzene	0.58019	0.58793	0.010	-1.33288	30.00000	Averaged
179 1,2,3-Trichloropropane	0.30440	0.30760	0.010	-1.05251	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.19955	0.16714	0.010	16.24387	30.00000	Averaged
182 Decane	1.52203	1.43607	0.010	5.64804	30.00000	Averaged
183 4-Ethyltoluene	0.63096	0.62711	0.010	0.60947	30.00000	Averaged
184 2-Chlorotoluene	0.49401	0.50950	0.010	-3.13454	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.86871	0.88712	0.010	-2.11931	30.00000	Averaged
188 alpha Methyl Styrene	0.86300	0.84604	0.010	1.96484	30.00000	Averaged
189 tert-Butylbenzene	1.62480	1.68381	0.010	-3.63186	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.63968	1.61604	0.010	1.44183	30.00000	Averaged
192 sec-Butylbenzene	0.50500	0.52104	0.010	-3.17619	30.00000	Averaged
194 p-Cymene	2.23203	2.22046	0.010	0.51850	30.00000	Averaged
195 1,3-Dichlorobenzene	1.12231	1.16685	0.010	-3.96859	30.00000	Averaged
196 1,4-Dichlorobenzene	1.13414	1.16840	0.010	-3.02038	30.00000	Averaged
199 alpha-Chlorotoluene	1.55742	1.54162	0.010	1.01475	30.00000	Averaged
201 Undecane	1.75810	1.82354	0.010	-3.72266	30.00000	Averaged
202 Butylbenzene	0.56690	0.56575	0.010	0.20252	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 11:00
Lab File ID: p072502.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
204 1,2-Dichlorobenzene	1.10047	1.12888	0.010	-2.58144	30.00000	Averaged
206 1,2-Dibromo-3-chloropropane	0.66653	0.68411	0.010	-2.63868	30.00000	Averaged
207 Dodecane	1.39351	1.43585	0.010	-3.03774	30.00000	Averaged
213 1,2,4-Trichlorobenzene	0.81307	0.79781	0.010	1.87750	30.00000	Averaged
215 Hexachlorobutadiene	0.57222	0.58096	0.010	-1.52727	30.00000	Averaged
216 Naphthalene	2.07796	1.83936	0.010	11.48273	30.00000	Averaged
222 1,2,3-Trichlorobenzene	0.71877	0.69839	0.010	2.83551	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072502.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 12:26
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	168789	101273	236305	154602	-8.41
108 1,4-Difluorobenze	601487	360892	842082	573421	-4.67
153 Chlorobenzene-d5	599612	359767	839457	566079	-5.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/25JUL21.b/p072502.d

Page 1

Date : 25-JUL-2021 11:00

Client ID: CCV

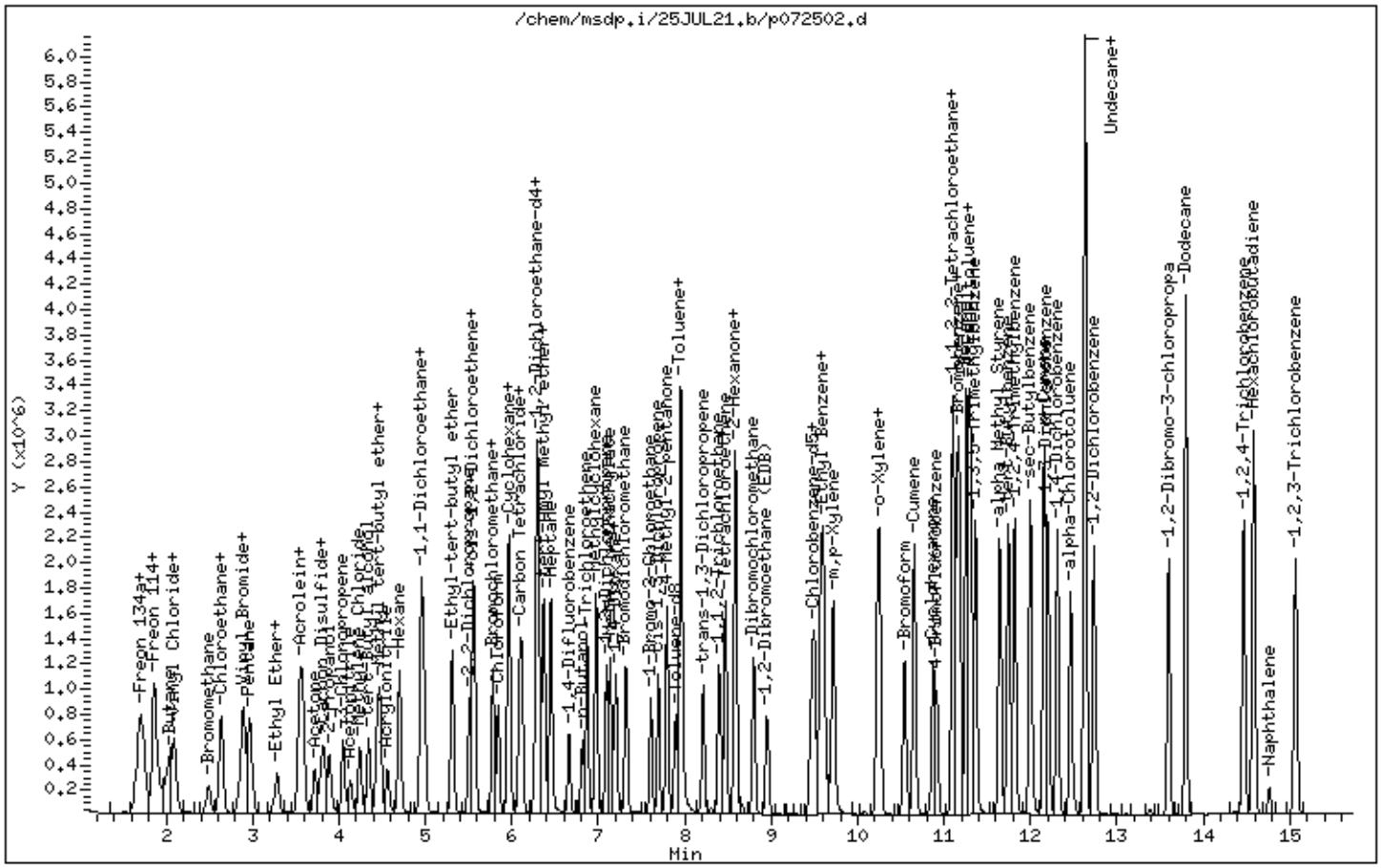
Instrument: msdp.i

Sample Info: 50mL 3018-2125

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107282-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:29 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	102	70-130
1,1,2,2-Tetrachloroethane	104	70-130
1,1,2-Trichloroethane	104	70-130
1,1-Dichloroethane	106	70-130
1,1-Dichloroethene	97	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	118	70-130
1,2,4-Trimethylbenzene	100	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	109	70-130
1,2-Dichlorobenzene	102	70-130
1,2-Dichloroethane	115	70-130
1,2-Dichloropropane	105	70-130
1,3,5-Trimethylbenzene	100	70-130
1,3-Butadiene	119	70-130
1,3-Dichlorobenzene	104	70-130
1,4-Dichlorobenzene	104	70-130
1,4-Dioxane	98	70-130
2,2,4-Trimethylpentane	105	70-130
2-Butanone (Methyl Ethyl Ketone)	97	70-130
2-Hexanone	102	70-130
2-Propanol	113	70-130
3-Chloropropene	93	70-130
4-Ethyltoluene	99	70-130
4-Methyl-2-pentanone	101	70-130
Acetone	106	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	98	70-130
Benzene	103	70-130
Bromodichloromethane	111	70-130
Bromoform	107	70-130
Bromomethane	92	70-130
Carbon Disulfide	97	70-130
Carbon Tetrachloride	112	70-130
Chlorobenzene	103	70-130
Chloroethane	96	70-130
Chloroform	108	70-130
Chloromethane	108	70-130
cis-1,2-Dichloroethene	103	70-130

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Client Sample ID: LCS

Lab ID#: 2107282-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:29 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	104	70-130
Cumene	97	70-130
Cyclohexane	95	70-130
Dibromochloromethane	110	70-130
Dibromomethane	Not Spiked	
Ethanol	91	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	100	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	108	70-130
Freon 12	109	70-130
Freon 113	100	70-130
Freon 114	107	70-130
Freon 134a	Not Spiked	
Heptane	99	70-130
Hexachlorobutadiene	125	70-130
Hexachloroethane	Not Spiked	
Hexane	103	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	100	70-130
Methyl tert-butyl ether	93	70-130
Methylene Chloride	120	70-130
Naphthalene	104	60-140
o-Xylene	98	70-130
Propylbenzene	101	70-130
Propylene	110	70-130
Styrene	94	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	105	70-130
Tetrahydrofuran	117	70-130
Toluene	101	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	97	70-130
trans-1,3-Dichloropropene	107	70-130
Trichloroethene	107	70-130
Vinyl Acetate	100	70-130
Vinyl Bromide	Not Spiked	
Vinyl Chloride	96	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2107282-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:29 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	103	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072503.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 25-JUL-2021 11:29
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 15:21 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	155314	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	124299				48.23- 108.23	80.03
5.778	5.778 (1.000)	49	330998				150.57- 210.57	213.11
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	592829	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	87093				0.00- 45.71	14.69
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	584610	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	307591				23.78- 83.78	52.61
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.315 (1.092)	65	227174	26.5037	26.504		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	128980				27.21- 87.21	56.78
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	645297	25.0670	25.067		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66810				0.00- 40.44	10.35

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	422140			34.95- 94.95	65.42
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	388358	25.8697	25.870	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	464888			95.92- 155.92	119.71
10.921	10.921 (1.154)	176	367529			66.89- 126.89	94.64
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	291161	59.2302	59.230	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	240518			59.44- 119.44	82.61
1.744	1.744 (0.302)	51	1322051			419.06- 479.06	454.06
5 Propylene					CAS #: 115-07-1		
1.688	1.675 (0.292)	41	392410	55.2122	55.212	80.00- 120.00	100.00
1.688	1.688 (0.292)	42	267899			35.28- 95.28	68.27
1.688	1.675 (0.292)	39	269227			38.35- 98.35	68.61
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.294)	65	181420	51.5328	51.533	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1322051			597.63- 657.63	728.72
1.702	1.702 (0.294)	47	140672			33.72- 93.72	77.54
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	757371	54.3696	54.370	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	246314			2.37- 62.37	32.52
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.758 (0.304)	67	77308	56.1834	56.183	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1322051			1501.01-1561.01	1710.09
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	734656	53.7268	53.727	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	226259			2.30- 62.30	30.80
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	870360	55.3139	55.314	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	290328			2.44- 62.44	33.36
1.870	1.870 (0.323)	58	25411			0.00- 33.36	2.92
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	435687	53.9119	53.912	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	107052			0.00- 56.26	24.57
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.352)	58	89662	47.8954	47.895	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.351)	43	857992			823.29- 883.29	956.91
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	467617	48.0980	48.098	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	134089			0.00- 59.69	28.67
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	466488	59.6574	59.657	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	412778			52.37- 112.37	88.49
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	288912	46.2161	46.216	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	276842			64.07- 124.07	95.82
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.451)	64	168656	48.2425	48.242	80.00- 120.00	100.00
2.619	2.612 (0.453)	66	49528			0.04- 60.04	29.37
2.612	2.612 (0.451)	49	68624			4.54- 64.54	40.69
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	582012	54.7118	54.712	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	344288			34.12- 94.12	59.15
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.492)	106	276006	47.7668	47.767	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	274102			69.27- 129.27	99.31
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	802322	54.2000	54.200	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	522661			34.72- 94.72	65.14
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	638494	50.0442	50.044	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	194948			0.84- 60.84	30.53
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	909251	52.5854	52.585	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	123985			0.00- 44.98	13.64
2.970	2.970 (0.513)	72	55373			0.00- 37.39	6.09
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	138493	47.4758	47.476	80.00- 120.00	100.00
3.292	3.285 (0.569)	59	286893			163.46- 223.46	207.15
3.285	3.285 (0.568)	45	472028			250.40- 310.40	340.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.242	3.242 (0.560)	46	81485	52.9043	52.904	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	471111			511.19- 571.19	578.15
42 Acrolein					CAS #: 107-02-8		
3.543	3.536 (0.612)	55	147344	55.1302	55.130	80.00- 120.00	100.00
3.543	3.536 (0.612)	56	202470			111.10- 171.10	137.41
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	553026	50.2835	50.284	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	354829			33.56- 93.56	64.16
3.558	3.550 (0.615)	101	670618			89.21- 149.21	121.26
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	318892	48.5361	48.536	80.00- 120.00	100.00
3.586	3.586 (0.620)	98	201435			34.02- 94.02	63.17
3.586	3.579 (0.620)	61	678258			168.77- 228.77	212.69
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	215196	52.8512	52.851	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	785751			302.95- 362.95	365.13
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	841176	48.5962	48.596	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	693007	60.2266	60.227	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	314391			12.22- 72.22	45.37
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	924582	56.3413	56.341	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	173840			0.00- 47.19	18.80
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	134707	46.5837	46.584	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	665274			396.19- 456.19	493.87
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	435113	56.8882	56.888	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	231741			20.95- 80.95	53.26
4.131	4.123 (0.714)	38	48092			0.00- 41.17	11.05
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	635355	60.0749	60.075	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	268215			22.03- 82.03	42.21
4.238	4.238 (0.733)	51	189351			0.18- 60.18	29.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.751)	59	913384	47.7285	47.728	80.00- 120.00	100.00
4.345	4.338 (0.751)	41	223964			0.00- 51.11	24.52
4.345	4.338 (0.751)	57	99210			0.00- 40.49	10.86
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	886363	46.4703	46.470	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	318491			3.10- 63.10	35.93
4.446	4.446 (0.768)	41	333865			1.28- 61.28	37.67
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	213515	48.6361	48.636	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	633005			255.84- 315.84	296.47
4.482	4.482 (0.775)	96	342204			127.59- 187.59	160.27
66 Acrylonitrile					CAS #: 107-13-1		
4.567	4.560 (0.789)	52	345041	56.4603	56.460	80.00- 120.00	100.00
4.567	4.560 (0.789)	53	404201			88.05- 148.05	117.15
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	786487	51.4034	51.403	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	586806			37.52- 97.52	74.61
4.696	4.696 (0.812)	86	85206			0.00- 41.48	10.83
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.969 (0.859)	63	698524	53.1062	53.106	80.00- 120.00	100.00
4.969	4.969 (0.859)	65	204114			0.00- 59.70	29.22
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.856)	45	1981885	55.6954	55.695	80.00- 120.00	100.00
4.954	4.954 (0.856)	87	299521			0.00- 48.18	15.11
4.954	4.954 (0.856)	59	183023			0.00- 40.15	9.23
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	84825	50.1797	50.180	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1793285			2432.48-2492.48	2114.10
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1508892	48.9856	48.986	80.00- 120.00	100.00
5.305	5.305 (0.917)	87	437731			1.00- 61.00	29.01
5.305	5.305 (0.917)	41	333949			0.00- 48.73	22.13
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.513 (0.953)	77	594961	50.9377	50.938	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	189080			2.28- 62.28	31.78
5.513	5.513 (0.953)	97	142069			0.00- 53.93	23.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	234866	51.5530	51.553	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	368259			125.75- 185.75	156.80
5.549	5.549 (0.959)	61	889212			332.40- 392.40	378.60
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	170069	48.4458	48.446	80.00- 120.00	100.00
5.570	5.563 (0.963)	43	2601203			1214.50-1274.50	1529.49
5.556	5.556 (0.960)	57	84209			14.68- 74.68	49.51
87 Ethyl Acetate					CAS #: 141-78-6		
5.577	5.570 (0.964)	45	208470	59.7030	59.703	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	889212			452.04- 512.04	426.54
5.577	5.578 (0.964)	70	85362			22.77- 82.77	40.95
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (0.999)	42	682176	58.4296	58.430	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	147411			0.00- 55.82	21.61
5.778	5.778 (0.999)	72	155324			0.00- 57.59	22.77
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	728186	53.8855	53.886	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	469219			34.70- 94.70	64.44
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	463508	47.4425	47.442	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	875141			142.57- 202.57	188.81
5.957	5.957 (1.030)	41	511755			62.09- 122.09	110.41
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.971 (1.032)	97	777166	50.9073	50.907	80.00- 120.00	100.00
5.971	5.971 (1.032)	99	500808			34.02- 94.02	64.44
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.053)	119	801511	55.9789	55.979	80.00- 120.00	100.00
6.093	6.093 (1.053)	117	802505			70.64- 130.64	100.12
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	198178	49.1107	49.111	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	524019			226.85- 286.85	264.42
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.287 (1.085)	57	2786365	52.3951	52.395	80.00- 120.00	100.00
6.279	6.287 (1.085)	56	894597			2.24- 62.24	32.11
6.279	6.287 (1.085)	41	746774			0.00- 54.39	26.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	1012030	51.7316	51.732	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	235921			0.00- 52.90	23.31
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	265871	48.1976	48.198	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1072764			372.79- 432.79	403.49
6.358	6.358 (0.954)	55	416565			112.09- 172.09	156.68
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	583501	57.3214	57.321	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	178403			0.79- 60.79	30.57
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	383802	49.5225	49.522	80.00- 120.00	100.00
6.444	6.451 (0.967)	43	1150826			226.53- 286.53	299.85
6.451	6.451 (0.968)	57	551817			100.85- 160.85	143.78
110 n-Butanol					CAS #: 71-36-3		
6.817	6.817 (1.023)	56	347418	48.8459	48.846	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	263315			40.99- 100.99	75.79
6.817	6.810 (1.023)	43	217927			27.38- 87.38	62.73
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	506344	53.3397	53.340	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	549841			76.29- 136.29	108.59
6.867	6.867 (1.030)	97	323551			33.63- 93.63	63.90
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	527806	52.6258	52.626	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	375837			41.07- 101.07	71.21
7.096	7.096 (1.064)	41	343408			22.53- 82.53	65.06
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	393850	49.0310	49.031	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	920715			179.84- 239.84	233.77
7.139	7.139 (0.755)	100	156493			9.59- 69.59	39.73
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.182 (1.077)	88	260230	48.8226	48.822	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	271550			68.28- 128.28	104.35
7.182	7.175 (1.077)	57	96825			2.68- 62.68	37.21
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	482940	55.6691	55.669	80.00- 120.00	100.00
7.211	7.204 (0.762)	93	448933			60.09- 120.09	92.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.211	7.204 (0.762)	95	391296			48.38- 108.38	81.02
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	820477	55.7440	55.744	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	530646			35.24- 95.24	64.68
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	649542	52.2359	52.236	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	201829			2.42- 62.42	31.07
7.698	7.698 (1.155)	39	485141			37.16- 97.16	74.69
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	667917	48.6220	48.622	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	309014			15.78- 75.78	46.27
6.974	6.974 (1.046)	55	827996			84.64- 144.64	123.97
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	515280	50.5928	50.593	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1549340			242.35- 302.35	300.68
7.798	7.798 (1.170)	85	152735			3.24- 63.24	29.64
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1358820	50.3444	50.344	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	792196			28.38- 88.38	58.30
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.192)	57	594016	51.6160	51.616	80.00- 120.00	100.00
7.948	7.948 (1.192)	85	465064			56.00- 116.00	78.29
7.948	7.948 (1.192)	43	1703359			228.66- 288.66	286.75
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.214 (0.868)	75	616397	53.5787	53.579	80.00- 120.00	100.00
8.213	8.214 (0.868)	77	188294			1.24- 61.24	30.55
8.213	8.214 (0.868)	39	440166			34.11- 94.11	71.41
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	497104	52.2769	52.277	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	312111			31.96- 91.96	62.79
8.400	8.400 (0.888)	83	415042			52.93- 112.93	83.49
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	701966	52.6854	52.685	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	545423			47.84- 107.84	77.70
8.471	8.464 (0.895)	131	524212			45.29- 105.29	74.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	690925	50.8568	50.857	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1468802			162.87- 222.87	212.58
8.593	8.586 (0.908)	100	99084			0.00- 45.94	14.34
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	672747	52.4871	52.487	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	932765			94.99- 154.99	138.65
8.579	8.579 (1.287)	78	216554			2.05- 62.05	32.19
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	974355	54.8406	54.841	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	765373			47.45- 107.45	78.55
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	828421	54.3184	54.318	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	775962			64.21- 124.21	93.67
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	982292	53.3792	53.379	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	284041			0.00- 59.64	28.92
7.612	7.612 (1.142)	144	94408			0.00- 39.63	9.61
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1200210	51.7022	51.702	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	381117			1.74- 61.74	31.75
9.496	9.496 (1.004)	77	628706			25.04- 85.04	52.38
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	610236	50.2723	50.272	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1821353			273.74- 333.74	298.47
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1800060	57.6365	57.636	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1364809			54.16- 114.16	75.82
9.603	9.603 (1.015)	85	363634			0.00- 53.90	20.20
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.603	9.603 (1.015)	131	582457	44.8143	44.814	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	584610			57.42- 117.42	100.37
9.596	9.596 (1.014)	95	211280			5.70- 65.70	36.27
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	763665	50.2316	50.232	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1461876			163.73- 223.73	191.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	713422	48.9782	48.978	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1423267			177.45- 237.45	199.50
165 Styrene					CAS #: 100-42-5		
10.262	10.255 (1.085)	104	1175326	47.1813	47.181	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	553716			17.88- 77.88	47.11
167 Bromoform					CAS #: 75-25-2		
10.549	10.549 (1.115)	173	939374	53.6393	53.639	80.00- 120.00	100.00
10.549	10.549 (1.115)	171	478934			21.25- 81.25	50.98
168 Cumene					CAS #: 98-82-8		
10.656	10.656 (1.126)	105	2221922	48.5591	48.559	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	640302			0.00- 58.52	28.82
10.649	10.649 (1.126)	51	339298			0.00- 43.00	15.27
169 Cyclohexanone					CAS #: 108-94-1		
10.878	10.871 (1.150)	55	722986	44.1815	44.182	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	205067			1.94- 61.94	28.36
10.878	10.871 (1.150)	42	493220			37.89- 97.89	68.22
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1161589	52.0115	52.012	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	752820			35.20- 95.20	64.81
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	732652	52.6462	52.646	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	712077			67.21- 127.21	97.19
11.179	11.179 (1.182)	77	448702			29.02- 89.02	61.24
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	686242	50.5800	50.580	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2680740			366.49- 426.49	390.64
11.150	11.150 (1.179)	105	101122			0.00- 44.85	14.74
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	360346	50.6236	50.624	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1152237			280.55- 340.55	319.76
11.107	11.107 (1.174)	61	179199			15.49- 75.49	49.73
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	336628	72.1391	72.139	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	223795			49.11- 109.11	66.48
11.179	11.179 (1.182)	75	1152237			426.44- 486.44	342.29

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1791914	50.3461	50.346	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	458761			0.00- 57.66	25.60
11.258	11.258 (1.190)	142	66842			0.00- 34.09	3.73
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.286 (1.193)	120	732412	49.6394	49.639	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2320251			284.55- 344.55	316.80
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.315 (1.196)	126	591110	51.1685	51.168	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1972681			315.17- 375.17	333.72
11.301	11.301 (1.195)	65	297161			21.55- 81.55	50.27
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1014772	49.9538	49.954	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1908196			164.93- 224.93	188.04
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	886458	43.9261	43.926	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	494874			25.30- 85.30	55.83
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1946961	51.2425	51.242	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	474065			0.00- 54.25	24.35
11.745	11.745 (1.242)	91	1144002			31.27- 91.27	58.76
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	1910291	49.8211	49.821	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	973859			19.05- 79.05	50.98
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	12.003 (1.269)	134	611030	51.7425	51.742	80.00- 120.00	100.00
12.003	12.003 (1.269)	105	2815269			437.55- 497.55	460.74
12.003	12.003 (1.269)	91	426353			40.76- 100.76	69.78
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2614151	50.0845	50.084	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	680829			0.00- 55.54	26.04
12.160	12.160 (1.285)	91	544245			0.00- 51.48	20.82
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1364763	52.0016	52.002	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	871009			33.21- 93.21	63.82
12.203	12.203 (1.290)	111	546753			11.31- 71.31	40.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1379552	52.0168	52.017	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	866628			33.90- 93.90	62.82
12.311	12.311 (1.301)	111	522963			9.45- 69.45	37.91
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.468 (1.317)	91	1789217	49.1282	49.128	80.00- 120.00	100.00
12.468	12.468 (1.318)	126	422542			0.00- 53.26	23.62
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2201410	53.5466	53.546	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2148519			58.12- 118.12	97.60
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	665311	50.1875	50.188	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2290623			314.79- 374.79	344.29
12.626	12.626 (1.335)	92	1198133			154.29- 214.29	180.09
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1308151	50.8336	50.834	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	839471			33.84- 93.84	64.17
12.741	12.741 (1.347)	111	543115			12.73- 72.73	41.52
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	805556	51.6835	51.683	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	658995			52.48- 112.48	81.81
13.600	13.600 (1.438)	155	632567			47.41- 107.41	78.53
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2325576	71.3662	71.366	80.00- 120.00	100.00(R)
13.801	13.801 (1.459)	43	2093990			52.87- 112.87	90.04
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1300717	68.4111	68.411	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1247330			65.33- 125.33	95.90
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	968994	72.4158	72.416	80.00- 120.00	100.00
14.581	14.581 (1.541)	223	605598			33.17- 93.17	62.50
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	291982	6.00887	6.009	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	36767			0.00- 42.88	12.59
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1238068	73.6592	73.659	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.069	15.069 (1.593)	182	1174739			65.75- 125.75	94.88
15.069	15.069 (1.593)	145	416823			5.23- 65.23	33.67

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072503.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	155314	0.46
108 1,4-Difluorobenze	573421	344053	802789	592829	3.38
153 Chlorobenzene-d5	566079	339647	792511	584610	3.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 25-Jul-2021 15:21

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCS
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	59.230	118.46	70-130
5 Propylene	50.000	55.212	110.42	70-130
7 1,1-Difluoroethan	50.000	51.533	103.07	70-130
8 Freon 12	50.000	54.370	108.74	70-130
9 Chlorodifluoromet	50.000	56.183	112.37	70-130
10 Freon 114	50.000	53.727	107.45	70-130
12 Isobutane	50.000	55.314	110.63	70-130
15 Chloromethane	50.000	53.912	107.82	70-130
18 Butane	50.000	47.895	95.79	70-130
19 Vinyl Chloride	50.000	48.098	96.20	70-130
20 1,3-Butadiene	50.000	59.657	119.31	70-130
24 Bromomethane	50.000	46.216	92.43	70-130
30 Chloroethane	50.000	48.242	96.48	70-130
31 Isopentane	50.000	54.712	109.42	70-130
32 Vinyl Bromide	50.000	47.767	95.53	70-130
33 Freon 11	50.000	54.200	108.40	70-130
34 Dichlorofluoromet	50.000	50.044	100.09	70-130
35 Pentane	50.000	52.585	105.17	70-130
38 Ethyl Ether	50.000	47.476	94.95	70-130
39 Ethanol	58.000	52.904	91.21	70-130
42 Acrolein	58.000	55.130	95.05	70-130
43 Freon 113	50.000	50.284	100.57	70-130
44 1,1-Dichloroethen	50.000	48.536	97.07	70-130
47 Acetone	50.000	52.851	105.70	70-130
48 Carbon Disulfide	50.000	48.596	97.19	70-130
49 Iodomethane	50.000	60.227	120.45	70-130
52 2-Propanol	50.000	56.341	112.68	70-130
54 3-Chloropropene	50.000	46.584	93.17	70-130
57 Acetonitrile	50.000	56.888	113.78	70-130
59 Methylene Chlorid	50.000	60.075	120.15	70-130
62 tert-Butyl alcoho	50.000	47.728	95.46	70-130
63 Methyl tert-butyl	50.000	46.470	92.94	70-130
64 trans-1,2-Dichlor	50.000	48.636	97.27	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	56.460	112.92	70-130
67	Hexane	50.000	51.403	102.81	70-130
71	1,1-Dichloroethan	50.000	53.106	106.21	70-130
72	Isopropyl ether	50.000	55.695	111.39	70-130
73	Vinyl Acetate	50.000	50.180	100.36	70-130
79	Ethyl-tert-butyl	50.000	48.986	97.97	70-130
84	2,2-Dichloropropa	50.000	50.938	101.88	70-130
85	cis-1,2-Dichloroe	50.000	51.553	103.11	70-130
86	2-Butanone	50.000	48.446	96.89	70-130
87	Ethyl Acetate	50.000	59.703	119.41	70-130
89	Tetrahydrofuran	50.000	58.430	116.86	70-130
92	Chloroform	50.000	53.886	107.77	70-130
94	Cyclohexane	50.000	47.442	94.88	70-130
96	1,1,1-Trichloroet	50.000	50.907	101.81	70-130
99	1,1-Dichloroprope	50.000	49.111	98.22	70-130
97	Carbon Tetrachlor	50.000	55.979	111.96	70-130
101	2,2,4-Trimethylpe	50.000	52.395	104.79	70-130
102	Benzene	50.000	51.732	103.46	70-130
105	tert-Amyl methyl	50.000	48.198	96.40	70-130
106	1,2-Dichloroethan	50.000	57.321	114.64	70-130
107	Heptane	50.000	49.522	99.04	70-130
110	n-Butanol	50.000	48.846	97.69	70-130
111	Trichloroethene	50.000	53.340	106.68	70-130
118	Dibromomethane	50.000	55.669	111.34	70-130
127	Methylcyclohexane	50.000	48.622	97.24	70-130
114	1,2-Dichloropropa	50.000	52.626	105.25	70-130
116	Methyl Methacryla	50.000	49.031	98.06	70-130
117	1,4-Dioxane	50.000	48.822	97.65	70-130
122	Bromodichlorometh	50.000	55.744	111.49	70-130
126	cis-1,3-Dichlorop	50.000	52.236	104.47	70-130
131	4-Methyl-2-pentan	50.000	50.593	101.19	70-130
136	Octane	50.000	51.616	103.23	70-130
137	Toluene	50.000	50.344	100.69	70-130
139	trans-1,3-Dichlor	50.000	53.579	107.16	70-130
141	1,1,2-Trichloroet	50.000	52.277	104.55	70-130
142	Tetrachloroethene	50.000	52.685	105.37	70-130
143	2-Hexanone	50.000	50.857	101.71	70-130
144	1,3-Dichloropropa	50.000	52.487	104.97	70-130
146	Dibromochlorometh	50.000	54.841	109.68	70-130
148	1,2-Dibromoethane	50.000	54.318	108.64	70-130
151	1-Bromo-2-Chloroe	50.000	53.379	106.76	70-130
154	Chlorobenzene	50.000	51.702	103.40	70-130
155	Ethyl Benzene	50.000	50.272	100.54	70-130
156	Nonane	50.000	57.636	115.27	70-130
157	1,1,1,2-Tetrachlo	50.000	44.814	89.63	70-130
158	m,p-Xylene	50.000	50.232	100.46	70-130
164	o-Xylene	50.000	48.978	97.96	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165	Styrene	50.000	47.181	94.36	70-130
167	Bromoform	50.000	53.639	107.28	70-130
168	Cumene	50.000	48.559	97.12	70-130
169	Cyclohexanone	50.000	44.182	88.36	70-130
175	1,1,2,2-Tetrachlo	50.000	52.012	104.02	70-130
177	Bromobenzene	50.000	52.646	105.29	70-130
178	Propylbenzene	50.000	50.580	101.16	70-130
179	1,2,3-Trichloropr	50.000	50.624	101.25	70-130
181	trans-1,4-Dichlor	50.000	72.139	144.28*	70-130
182	Decane	50.000	50.346	100.69	70-130
183	4-Ethyltoluene	50.000	49.639	99.28	70-130
184	2-Chlorotoluene	50.000	51.168	102.34	70-130
185	1,3,5-Trimethylbe	50.000	49.954	99.91	70-130
188	alpha Methyl Styr	50.000	43.926	87.85	70-130
189	tert-Butylbenzene	50.000	51.242	102.48	70-130
190	1,2,4-Trimethylbe	50.000	49.821	99.64	70-130
192	sec-Butylbenzene	50.000	51.742	103.48	70-130
194	p-Cymene	50.000	50.084	100.17	70-130
195	1,3-Dichlorobenze	50.000	52.002	104.00	70-130
196	1,4-Dichlorobenze	50.000	52.017	104.03	70-130
199	alpha-Chlorotolue	50.000	49.128	98.26	70-130
201	Undecane	50.000	53.546	107.09	70-130
202	Butylbenzene	50.000	50.188	100.38	70-130
204	1,2-Dichlorobenze	50.000	50.834	101.67	70-130
206	1,2-Dibromo-3-chl	50.000	51.683	103.37	70-130
207	Dodecane	50.000	71.366	142.73*	70-130
213	1,2,4-Trichlorobe	58.000	68.411	117.95	70-130
215	Hexachlorobutadie	58.000	72.416	124.85	70-130
216	Naphthalene	5.800	6.009	103.60	60-140
222	1,2,3-Trichlorobe	58.000	73.659	127.00	70-130

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104	1,2-Dichloroethan	25.000	26.504	106.01	70-130
$ 134	Toluene-d8	25.000	25.067	100.27	70-130
$ 170	4-Bromofluorobenz	25.000	25.870	103.48	70-130

Data File: /chem/msdp.i/25JUL21.b/p072503.d

Page 1

Date : 25-JUL-2021 11:29

Client ID: LCS

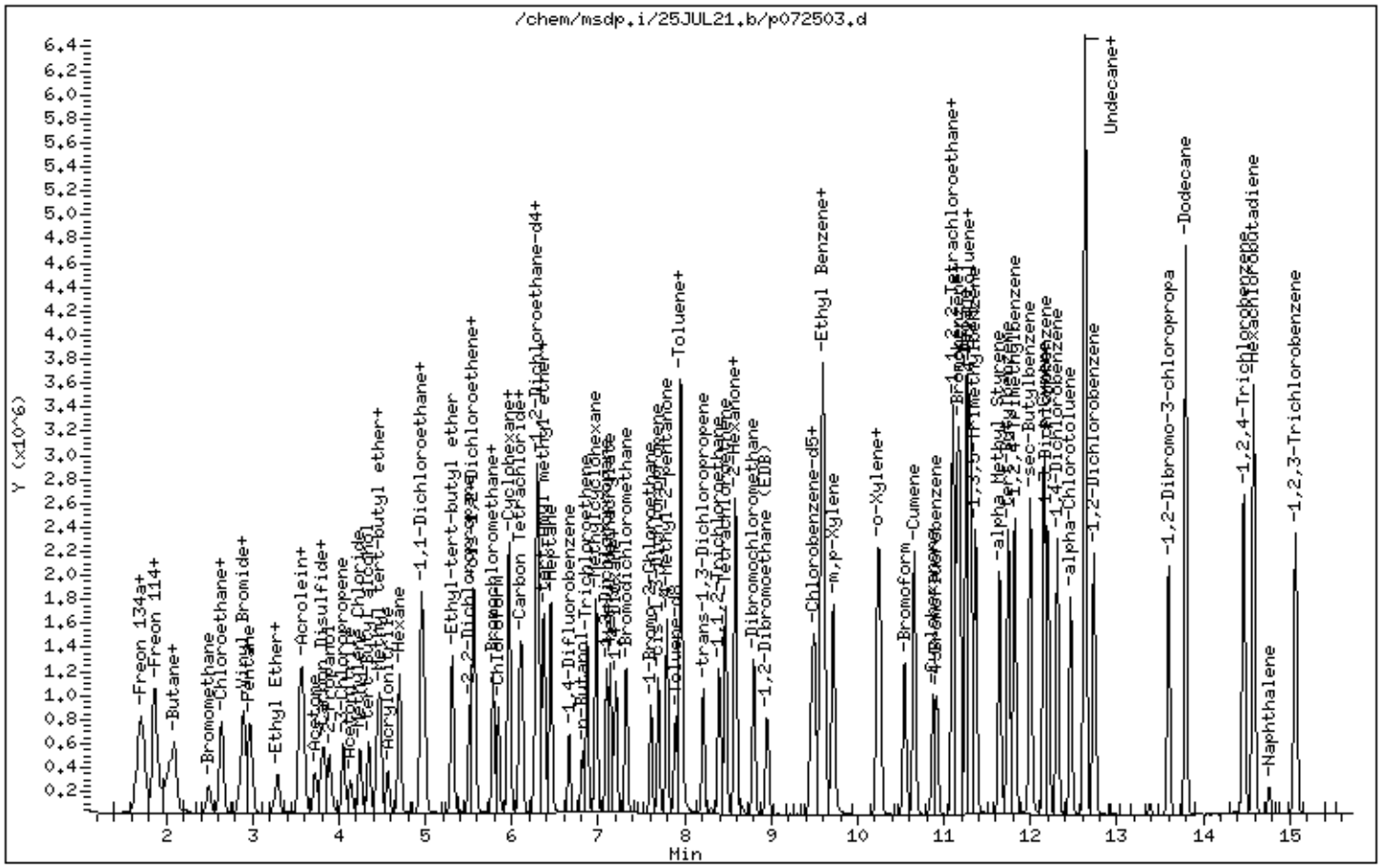
Instrument: msdp.i

Sample Info: 100mL 3018-2122A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCSD

Lab ID#: 2107282-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:58 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	101	70-130
1,1,2,2-Tetrachloroethane	103	70-130
1,1,2-Trichloroethane	102	70-130
1,1-Dichloroethane	105	70-130
1,1-Dichloroethene	97	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	121	70-130
1,2,4-Trimethylbenzene	98	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	106	70-130
1,2-Dichlorobenzene	100	70-130
1,2-Dichloroethane	115	70-130
1,2-Dichloropropane	104	70-130
1,3,5-Trimethylbenzene	98	70-130
1,3-Butadiene	114	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	102	70-130
1,4-Dioxane	96	70-130
2,2,4-Trimethylpentane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
2-Hexanone	100	70-130
2-Propanol	110	70-130
3-Chloropropene	91	70-130
4-Ethyltoluene	98	70-130
4-Methyl-2-pentanone	102	70-130
Acetone	102	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	98	70-130
Benzene	102	70-130
Bromodichloromethane	111	70-130
Bromoform	106	70-130
Bromomethane	91	70-130
Carbon Disulfide	95	70-130
Carbon Tetrachloride	110	70-130
Chlorobenzene	101	70-130
Chloroethane	95	70-130
Chloroform	105	70-130
Chloromethane	104	70-130
cis-1,2-Dichloroethene	103	70-130

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Client Sample ID: LCSD

Lab ID#: 2107282-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:58 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	104	70-130
Cumene	96	70-130
Cyclohexane	95	70-130
Dibromochloromethane	108	70-130
Dibromomethane	Not Spiked	
Ethanol	92	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	98	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	107	70-130
Freon 12	106	70-130
Freon 113	99	70-130
Freon 114	101	70-130
Freon 134a	Not Spiked	
Heptane	99	70-130
Hexachlorobutadiene	124	70-130
Hexachloroethane	Not Spiked	
Hexane	101	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	99	70-130
Methyl tert-butyl ether	91	70-130
Methylene Chloride	116	70-130
Naphthalene	108	60-140
o-Xylene	96	70-130
Propylbenzene	98	70-130
Propylene	110	70-130
Styrene	93	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	104	70-130
Tetrahydrofuran	115	70-130
Toluene	100	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	96	70-130
trans-1,3-Dichloropropene	105	70-130
Trichloroethene	107	70-130
Vinyl Acetate	96	70-130
Vinyl Bromide	Not Spiked	
Vinyl Chloride	96	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2107282-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/25/21 11:58 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072504.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 25-JUL-2021 11:58
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 15:21 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20LCS_new.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 90 Bromochloromethane							CAS #: 74-97-5	
5.785	5.778 (1.000)	130	160685	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	121494				48.23- 108.23	75.61
5.785	5.778 (1.000)	49	336957				150.57- 210.57	209.70
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.666 (1.000)	114	609536	25.0000			80.00- 120.00	100.00
6.666	6.666 (1.000)	88	91060				0.00- 45.71	14.94
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	603321	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	311083				23.78- 83.78	51.56
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.315 (1.092)	65	234887	26.4876	26.488		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	128979				27.21- 87.21	54.91
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	672229	25.3974	25.397		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68304				0.00- 40.44	10.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	433195			34.95- 94.95	64.44
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	390572	25.2103	25.210	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	485299			95.92- 155.92	124.25
10.921	10.921 (1.154)	176	380353			66.89- 126.89	97.38
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	292021	57.4195	57.420	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	238454			59.44- 119.44	81.66
1.745	1.744 (0.302)	51	1352263			419.06- 479.06	463.07
5 Propylene					CAS #: 115-07-1		
1.689	1.675 (0.292)	41	403709	54.9034	54.903	80.00- 120.00	100.00
1.689	1.688 (0.292)	42	269397			35.28- 95.28	66.73
1.689	1.675 (0.292)	39	276592			38.35- 98.35	68.51
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.702 (0.294)	65	184486	50.6519	50.652	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1352263			597.63- 657.63	732.99
1.703	1.702 (0.294)	47	139204			33.72- 93.72	75.46
8 Freon 12					CAS #: 75-71-8		
1.717	1.716 (0.297)	85	765029	53.0837	53.084	80.00- 120.00	100.00
1.717	1.716 (0.297)	87	245710			2.37- 62.37	32.12
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.758 (0.304)	67	80183	56.3247	56.325	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1352263			1501.01-1561.01	1686.47
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	714686	50.5194	50.519	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	225858			2.30- 62.30	31.60
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	871537	53.5374	53.537	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	286918			2.44- 62.44	32.92
1.870	1.870 (0.323)	58	25875			0.00- 33.36	2.97
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	437234	52.2951	52.295	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	111109			0.00- 56.26	25.41
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.352)	58	93000	48.0180	48.018	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Butane (continued)							
2.032	2.032 (0.351)	43	853458			823.29- 883.29	917.69
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	481198	47.8406	47.841	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	134939			0.00- 59.69	28.04
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	459991	56.8603	56.860	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	416060			52.37- 112.37	90.45
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	294214	45.4910	45.491	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	274527			64.07- 124.07	93.31
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	172189	47.6071	47.607	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	49845			0.04- 60.04	28.95
2.612	2.612 (0.452)	49	67044			4.54- 64.54	38.94
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	588252	53.4501	53.450	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	347045			34.12- 94.12	59.00
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.492)	106	281018	47.0086	47.009	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	281126			69.27- 129.27	100.04
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	817655	53.3896	53.390	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	531817			34.72- 94.72	65.04
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	646695	48.9928	48.993	80.00- 120.00	100.00
2.906	2.899 (0.502)	69	199813			0.84- 60.84	30.90
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	927929	51.8719	51.872	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	122539			0.00- 44.98	13.21
2.970	2.970 (0.513)	72	54038			0.00- 37.39	5.82
38 Ethyl Ether					CAS #: 60-29-7		
3.293	3.285 (0.569)	74	142128	47.0933	47.093	80.00- 120.00	100.00
3.285	3.285 (0.568)	59	298512			163.46- 223.46	210.03
3.285	3.285 (0.568)	45	481122			250.40- 310.40	338.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
39 Ethanol					CAS #: 64-17-5		
3.250	3.242 (0.562)	46	84958	53.3153	53.315	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	478445			511.19- 571.19	563.15
42 Acrolein					CAS #: 107-02-8		
3.543	3.536 (0.612)	55	150922	54.5816	54.582	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	207090			111.10- 171.10	137.22
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	562825	49.4640	49.464	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	364623			33.56- 93.56	64.78
3.550	3.550 (0.614)	101	684047			89.21- 149.21	121.54
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	329316	48.4473	48.447	80.00- 120.00	100.00
3.586	3.586 (0.620)	98	205080			34.02- 94.02	62.27
3.586	3.579 (0.620)	61	692670			168.77- 228.77	210.34
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	214332	50.8795	50.880	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	791854			302.95- 362.95	369.45
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	850565	47.4962	47.496	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	719038	60.4003	60.400	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	323856			12.22- 72.22	45.04
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	934728	55.0557	55.056	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	174172			0.00- 47.19	18.63
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	135690	45.3554	45.355	80.00- 120.00	100.00
4.052	4.052 (0.700)	41	682163			396.19- 456.19	502.73
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	428011	54.0894	54.089	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	233741			20.95- 80.95	54.61
4.131	4.123 (0.714)	38	48767			0.00- 41.17	11.39
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	637462	58.2594	58.259	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	273999			22.03- 82.03	42.98
4.238	4.238 (0.733)	51	188880			0.18- 60.18	29.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.346	4.338 (0.751)	59	935508	47.2506	47.251	80.00- 120.00	100.00
4.346	4.338 (0.751)	41	221169			0.00- 51.11	23.64
4.346	4.338 (0.751)	57	101390			0.00- 40.49	10.84
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	901443	45.6813	45.681	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	325953			3.10- 63.10	36.16
4.446	4.446 (0.768)	41	331361			1.28- 61.28	36.76
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	217678	47.9271	47.927	80.00- 120.00	100.00
4.482	4.482 (0.775)	61	641595			255.84- 315.84	294.74
4.482	4.482 (0.775)	96	349354			127.59- 187.59	160.49
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.789)	52	349424	55.2664	55.266	80.00- 120.00	100.00
4.568	4.560 (0.789)	53	408741			88.05- 148.05	116.98
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	800294	50.5576	50.558	80.00- 120.00	100.00
4.697	4.696 (0.812)	43	596878			37.52- 97.52	74.58
4.697	4.696 (0.812)	86	84211			0.00- 41.48	10.52
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.969 (0.859)	63	712173	52.3342	52.334	80.00- 120.00	100.00
4.969	4.969 (0.859)	65	206026			0.00- 59.70	28.93
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.954 (0.856)	45	2000687	54.3446	54.344	80.00- 120.00	100.00
4.954	4.954 (0.856)	87	305609			0.00- 48.18	15.28
4.954	4.954 (0.856)	59	187543			0.00- 40.15	9.37
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	83901	47.9742	47.974	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1838971			2432.48-2492.48	2191.83
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1541951	48.3857	48.386	80.00- 120.00	100.00
5.313	5.305 (0.918)	87	450535			1.00- 61.00	29.22
5.305	5.305 (0.917)	41	333773			0.00- 48.73	21.65
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.513 (0.953)	77	605028	50.0682	50.068	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	193984			2.28- 62.28	32.06
5.513	5.513 (0.953)	97	143559			0.00- 53.93	23.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	243408	51.6422	51.642	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	374175			125.75- 185.75	153.72
5.549	5.549 (0.959)	61	902509			332.40- 392.40	370.78
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	174780	48.1235	48.124	80.00- 120.00	100.00
5.570	5.563 (0.963)	43	2627246			1214.50-1274.50	1503.17
5.556	5.556 (0.960)	57	84487			14.68- 74.68	48.34
87 Ethyl Acetate					CAS #: 141-78-6		
5.578	5.570 (0.964)	45	210368	58.2330	58.233	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	902509			452.04- 512.04	429.01
5.578	5.578 (0.964)	70	88465			22.77- 82.77	42.05
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.778 (0.999)	42	694938	57.5331	57.533	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	151212			0.00- 55.82	21.76
5.778	5.778 (0.999)	72	157443			0.00- 57.59	22.66
92 Chloroform					CAS #: 67-66-3		
5.843	5.843 (1.010)	83	735664	52.6193	52.619	80.00- 120.00	100.00
5.843	5.843 (1.010)	85	484007			34.70- 94.70	65.79
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	479099	47.3992	47.399	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	895167			142.57- 202.57	186.84
5.957	5.957 (1.030)	41	516625			62.09- 122.09	107.83
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.971 (1.032)	97	795525	50.3682	50.368	80.00- 120.00	100.00
5.972	5.971 (1.032)	99	511468			34.02- 94.02	64.29
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.093 (1.053)	119	814837	55.0075	55.008	80.00- 120.00	100.00
6.093	6.093 (1.053)	117	816129			70.64- 130.64	100.16
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.122 (0.918)	110	208483	50.2482	50.248	80.00- 120.00	100.00
6.122	6.122 (0.918)	75	525840			226.85- 286.85	252.22
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.287 (1.087)	57	2817456	51.2090	51.209	80.00- 120.00	100.00
6.287	6.287 (1.087)	56	935013			2.24- 62.24	33.19
6.287	6.287 (1.087)	41	750062			0.00- 54.39	26.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	1031207	51.2670	51.267	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	241073			0.00- 52.90	23.38
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	266159	46.9274	46.927	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1074600			372.79- 432.79	403.74
6.358	6.358 (0.954)	55	423672			112.09- 172.09	159.18
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	601512	57.4711	57.471	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	180006			0.79- 60.79	29.93
107 Heptane					CAS #: 142-82-5		
6.451	6.451 (0.968)	71	393530	49.3858	49.386	80.00- 120.00	100.00
6.451	6.451 (0.968)	43	1182701			226.53- 286.53	300.54
6.451	6.451 (0.968)	57	561305			100.85- 160.85	142.63
110 n-Butanol					CAS #: 71-36-3		
6.817	6.817 (1.023)	56	355559	48.6203	48.620	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	262421			40.99- 100.99	73.81
6.817	6.810 (1.023)	43	219354			27.38- 87.38	61.69
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	521224	53.4021	53.402	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	558805			76.29- 136.29	107.21
6.867	6.867 (1.030)	97	335751			33.63- 93.63	64.42
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	538422	52.2127	52.213	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	389118			41.07- 101.07	72.27
7.096	7.096 (1.064)	41	345495			22.53- 82.53	64.17
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	401717	48.4594	48.459	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	932012			179.84- 239.84	232.01
7.139	7.139 (0.755)	100	157297			9.59- 69.59	39.16
117 1,4-Dioxane					CAS #: 123-91-1		
7.182	7.182 (1.077)	88	264407	48.2464	48.246	80.00- 120.00	100.00
7.182	7.175 (1.077)	58	277622			68.28- 128.28	105.00
7.182	7.175 (1.077)	57	99712			2.68- 62.68	37.71
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	491695	54.9205	54.920	80.00- 120.00	100.00
7.211	7.204 (0.762)	93	449227			60.09- 120.09	91.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.211	7.204 (0.762)	95	396281			48.38- 108.38	80.59
122 Bromodichloromethane					CAS #: 75-27-4		
7.325	7.318 (1.099)	83	840430	55.5344	55.534	80.00- 120.00	100.00
7.325	7.318 (1.099)	85	542733			35.24- 95.24	64.58
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	665629	52.0623	52.062	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	207655			2.42- 62.42	31.20
7.698	7.698 (1.155)	39	494122			37.16- 97.16	74.23
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	673617	47.6928	47.693	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	323033			15.78- 75.78	47.95
6.974	6.974 (1.046)	55	838513			84.64- 144.64	124.48
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	532789	50.8780	50.878	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1569982			242.35- 302.35	294.67
7.798	7.798 (1.170)	85	156107			3.24- 63.24	29.30
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1388456	50.0323	50.032	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	805579			28.38- 88.38	58.02
136 Octane					CAS #: 111-65-9		
7.949	7.948 (1.192)	57	604679	51.1023	51.102	80.00- 120.00	100.00
7.949	7.948 (1.192)	85	474299			56.00- 116.00	78.44
7.949	7.948 (1.192)	43	1714284			228.66- 288.66	283.50
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	625359	52.6719	52.672	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	191998			1.24- 61.24	30.70
8.214	8.214 (0.868)	39	446287			34.11- 94.11	71.36
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	501344	51.0877	51.088	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	309175			31.96- 91.96	61.67
8.400	8.400 (0.888)	83	425550			52.93- 112.93	84.88
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.471 (0.895)	166	717357	52.1707	52.171	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	548719			47.84- 107.84	76.49
8.471	8.464 (0.895)	131	534952			45.29- 105.29	74.57

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
143 2-Hexanone					CAS #: 591-78-6		
8.586	8.586 (0.908)	58	701341	50.0226	50.023	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1480670			162.87- 222.87	211.12
8.586	8.586 (0.908)	100	99772			0.00- 45.94	14.23
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	681256	51.6941	51.694	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	955023			94.99- 154.99	140.19
8.579	8.579 (1.287)	78	220198			2.05- 62.05	32.32
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	993279	54.1720	54.172	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	770568			47.45- 107.45	77.58
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	830510	52.7665	52.766	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	785456			64.21- 124.21	94.58
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	999028	52.8006	52.800	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	293337			0.00- 59.64	29.36
7.612	7.612 (1.142)	144	95972			0.00- 39.63	9.61
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1214154	50.6808	50.681	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	386471			1.74- 61.74	31.83
9.496	9.496 (1.004)	77	636740			25.04- 85.04	52.44
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	615288	49.1165	49.116	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1846364			273.74- 333.74	300.08
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1810732	56.1802	56.180	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1373141			54.16- 114.16	75.83
9.603	9.603 (1.015)	85	363823			0.00- 53.90	20.09
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.603	9.603 (1.015)	131	588843	43.9007	43.901	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	603321			57.42- 117.42	102.46
9.596	9.596 (1.014)	95	214536			5.70- 65.70	36.43
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	776780	49.5097	49.510	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1480718			163.73- 223.73	190.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	723848	48.1529	48.153	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1462783			177.45- 237.45	202.08
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1191593	46.3508	46.351	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	564026			17.88- 77.88	47.33
167 Bromoform					CAS #: 75-25-2		
10.549	10.549 (1.115)	173	957708	52.9902	52.990	80.00- 120.00	100.00
10.549	10.549 (1.115)	171	493550			21.25- 81.25	51.53
168 Cumene					CAS #: 98-82-8		
10.656	10.656 (1.126)	105	2256556	47.7866	47.787	80.00- 120.00	100.00
10.656	10.656 (1.126)	120	658610			0.00- 58.52	29.19
10.649	10.649 (1.126)	51	343372			0.00- 43.00	15.22
169 Cyclohexanone					CAS #: 108-94-1		
10.878	10.871 (1.150)	55	724750	42.9158	42.916	80.00- 120.00	100.00
10.878	10.878 (1.150)	98	209466			1.94- 61.94	28.90
10.871	10.871 (1.149)	42	494705			37.89- 97.89	68.26
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1188367	51.5604	51.560	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	765293			35.20- 95.20	64.40
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	737052	51.3199	51.320	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	725107			67.21- 127.21	98.38
11.179	11.179 (1.182)	77	459909			29.02- 89.02	62.40
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	690222	49.2956	49.296	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2726586			366.49- 426.49	395.03
11.150	11.150 (1.179)	105	101943			0.00- 44.85	14.77
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	368199	50.1226	50.123	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1173146			280.55- 340.55	318.62
11.107	11.107 (1.174)	61	174594			15.49- 75.49	47.42
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	349393	72.5526	72.553	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	227138			49.11- 109.11	65.01
11.179	11.179 (1.182)	75	1173146			426.44- 486.44	335.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1856457	50.5419	50.542	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	477753			0.00- 57.66	25.73
11.258	11.258 (1.190)	142	70909			0.00- 34.09	3.82
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.286 (1.193)	120	750431	49.2834	49.283	80.00- 120.00	100.00
11.287	11.286 (1.193)	105	2354621			284.55- 344.55	313.77
184 2-Chlorotoluene					CAS #: 95-49-8		
11.315	11.315 (1.196)	126	599052	50.2477	50.248	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2000391			315.17- 375.17	333.93
11.301	11.301 (1.195)	65	296158			21.55- 81.55	49.44
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1031205	49.1884	49.188	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1937934			164.93- 224.93	187.93
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	903839	43.3984	43.398	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	498515			25.30- 85.30	55.16
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1984033	50.5988	50.599	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	482516			0.00- 54.25	24.32
11.745	11.745 (1.242)	91	1164980			31.27- 91.27	58.72
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1945100	49.1557	49.156	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	984601			19.05- 79.05	50.62
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	12.003 (1.269)	134	619515	50.8340	50.834	80.00- 120.00	100.00
12.003	12.003 (1.269)	105	2871922			437.55- 497.55	463.58
11.996	12.003 (1.268)	91	435898			40.76- 100.76	70.36
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2657529	49.3366	49.336	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	696060			0.00- 55.54	26.19
12.160	12.160 (1.285)	91	557372			0.00- 51.48	20.97
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1387686	51.2353	51.235	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	893691			33.21- 93.21	64.40
12.203	12.203 (1.290)	111	557213			11.31- 71.31	40.15

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1401608	51.2095	51.209	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	896788			33.90- 93.90	63.98
12.311	12.311 (1.301)	111	533811			9.45- 69.45	38.09
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.468 (1.317)	91	1835877	48.8461	48.846	80.00- 120.00	100.00
12.468	12.468 (1.318)	126	429032			0.00- 53.26	23.37
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2267431	53.4420	53.442	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2199836			58.12- 118.12	97.02
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	669048	48.9042	48.904	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2321452			314.79- 374.79	346.98
12.626	12.626 (1.335)	92	1219376			154.29- 214.29	182.26
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1334574	50.2521	50.252	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	850192			33.84- 93.84	63.71
12.741	12.741 (1.347)	111	547798			12.73- 72.73	41.05
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	833260	51.8030	51.803	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	675768			52.48- 112.48	81.10
13.600	13.600 (1.438)	155	651512			47.41- 107.41	78.19
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2418611	71.9194	71.919	80.00- 120.00	100.00(R)
13.801	13.801 (1.459)	43	2188887			52.87- 112.87	90.50
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1376490	70.1512	70.151	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1309706			65.33- 125.33	95.15
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.581 (1.541)	225	996073	72.1310	72.131	80.00- 120.00	100.00
14.582	14.581 (1.541)	223	632514			33.17- 93.17	63.50
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	313825	6.25809	6.258	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	39470			0.00- 42.88	12.58
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1324140	76.3369	76.337	80.00- 120.00	100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
222 1,2,3-Trichlorobenzene (continued)							
15.069	15.069 (1.593)	182	1262336			65.75- 125.75	95.33
15.069	15.069 (1.593)	145	439542			5.23- 65.23	33.19

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072504.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	160685	3.93
108 1,4-Difluorobenze	573421	344053	802789	609536	6.30
153 Chlorobenzene-d5	566079	339647	792511	603321	6.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 25JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: LD
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT20_new.spk Quant Type: ISTD
Sublist File: AT20LCS_new.sub
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	57.420	114.84	70-130
5 Propylene	50.000	54.903	109.81	70-130
7 1,1-Difluoroethan	50.000	50.652	101.30	70-130
8 Freon 12	50.000	53.084	106.17	70-130
9 Chlorodifluoromet	50.000	56.325	112.65	70-130
10 Freon 114	50.000	50.519	101.04	70-130
12 Isobutane	50.000	53.537	107.07	70-130
15 Chloromethane	50.000	52.295	104.59	70-130
18 Butane	50.000	48.018	96.04	70-130
19 Vinyl Chloride	50.000	47.841	95.68	70-130
20 1,3-Butadiene	50.000	56.860	113.72	70-130
24 Bromomethane	50.000	45.491	90.98	70-130
30 Chloroethane	50.000	47.607	95.21	70-130
31 Isopentane	50.000	53.450	106.90	70-130
32 Vinyl Bromide	50.000	47.009	94.02	70-130
33 Freon 11	50.000	53.390	106.78	70-130
34 Dichlorofluoromet	50.000	48.993	97.99	70-130
35 Pentane	50.000	51.872	103.74	70-130
38 Ethyl Ether	50.000	47.093	94.19	70-130
39 Ethanol	58.000	53.315	91.92	70-130
42 Acrolein	58.000	54.582	94.11	70-130
43 Freon 113	50.000	49.464	98.93	70-130
44 1,1-Dichloroethen	50.000	48.447	96.89	70-130
47 Acetone	50.000	50.880	101.76	70-130
48 Carbon Disulfide	50.000	47.496	94.99	70-130
49 Iodomethane	50.000	60.400	120.80	70-130
52 2-Propanol	50.000	55.056	110.11	70-130
54 3-Chloropropene	50.000	45.355	90.71	70-130
57 Acetonitrile	50.000	54.089	108.18	70-130
59 Methylene Chlorid	50.000	58.259	116.52	70-130
62 tert-Butyl alcoho	50.000	47.251	94.50	70-130
63 Methyl tert-butyl	50.000	45.681	91.36	70-130
64 trans-1,2-Dichlor	50.000	47.927	95.85	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	55.266	110.53	70-130
67	Hexane	50.000	50.558	101.12	70-130
71	1,1-Dichloroethan	50.000	52.334	104.67	70-130
72	Isopropyl ether	50.000	54.344	108.69	70-130
73	Vinyl Acetate	50.000	47.974	95.95	70-130
79	Ethyl-tert-butyl	50.000	48.386	96.77	70-130
84	2,2-Dichloropropa	50.000	50.068	100.14	70-130
85	cis-1,2-Dichloroe	50.000	51.642	103.28	70-130
86	2-Butanone	50.000	48.124	96.25	70-130
87	Ethyl Acetate	50.000	58.233	116.47	70-130
89	Tetrahydrofuran	50.000	57.533	115.07	70-130
92	Chloroform	50.000	52.619	105.24	70-130
94	Cyclohexane	50.000	47.399	94.80	70-130
96	1,1,1-Trichloroet	50.000	50.368	100.74	70-130
99	1,1-Dichloroprope	50.000	50.248	100.50	70-130
97	Carbon Tetrachlor	50.000	55.008	110.02	70-130
101	2,2,4-Trimethylpe	50.000	51.209	102.42	70-130
102	Benzene	50.000	51.267	102.53	70-130
105	tert-Amyl methyl	50.000	46.927	93.85	70-130
106	1,2-Dichloroethan	50.000	57.471	114.94	70-130
107	Heptane	50.000	49.386	98.77	70-130
110	n-Butanol	50.000	48.620	97.24	70-130
111	Trichloroethene	50.000	53.402	106.80	70-130
118	Dibromomethane	50.000	54.920	109.84	70-130
127	Methylcyclohexane	50.000	47.693	95.39	70-130
114	1,2-Dichloropropa	50.000	52.213	104.43	70-130
116	Methyl Methacryla	50.000	48.459	96.92	70-130
117	1,4-Dioxane	50.000	48.246	96.49	70-130
122	Bromodichlorometh	50.000	55.534	111.07	70-130
126	cis-1,3-Dichlorop	50.000	52.062	104.12	70-130
131	4-Methyl-2-pentan	50.000	50.878	101.76	70-130
136	Octane	50.000	51.102	102.20	70-130
137	Toluene	50.000	50.032	100.06	70-130
139	trans-1,3-Dichlor	50.000	52.672	105.34	70-130
141	1,1,2-Trichloroet	50.000	51.088	102.18	70-130
142	Tetrachloroethene	50.000	52.171	104.34	70-130
143	2-Hexanone	50.000	50.023	100.05	70-130
144	1,3-Dichloropropa	50.000	51.694	103.39	70-130
146	Dibromochlorometh	50.000	54.172	108.34	70-130
148	1,2-Dibromoethane	50.000	52.766	105.53	70-130
151	1-Bromo-2-Chloroe	50.000	52.800	105.60	70-130
154	Chlorobenzene	50.000	50.681	101.36	70-130
155	Ethyl Benzene	50.000	49.116	98.23	70-130
156	Nonane	50.000	56.180	112.36	70-130
157	1,1,1,2-Tetrachlo	50.000	43.901	87.80	70-130
158	m,p-Xylene	50.000	49.510	99.02	70-130
164	o-Xylene	50.000	48.153	96.31	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	46.351	92.70	70-130
167 Bromoform	50.000	52.990	105.98	70-130
168 Cumene	50.000	47.787	95.57	70-130
169 Cyclohexanone	50.000	42.916	85.83	70-130
175 1,1,2,2-Tetrachlo	50.000	51.560	103.12	70-130
177 Bromobenzene	50.000	51.320	102.64	70-130
178 Propylbenzene	50.000	49.296	98.59	70-130
179 1,2,3-Trichloropr	50.000	50.123	100.25	70-130
181 trans-1,4-Dichlor	50.000	72.553	145.11*	70-130
182 Decane	50.000	50.542	101.08	70-130
183 4-Ethyltoluene	50.000	49.283	98.57	70-130
184 2-Chlorotoluene	50.000	50.248	100.50	70-130
185 1,3,5-Trimethylbe	50.000	49.188	98.38	70-130
188 alpha Methyl Styr	50.000	43.398	86.80	70-130
189 tert-Butylbenzene	50.000	50.599	101.20	70-130
190 1,2,4-Trimethylbe	50.000	49.156	98.31	70-130
192 sec-Butylbenzene	50.000	50.834	101.67	70-130
194 p-Cymene	50.000	49.336	98.67	70-130
195 1,3-Dichlorobenze	50.000	51.235	102.47	70-130
196 1,4-Dichlorobenze	50.000	51.209	102.42	70-130
199 alpha-Chlorotolue	50.000	48.846	97.69	70-130
201 Undecane	50.000	53.442	106.88	70-130
202 Butylbenzene	50.000	48.904	97.81	70-130
204 1,2-Dichlorobenze	50.000	50.252	100.50	70-130
206 1,2-Dibromo-3-chl	50.000	51.803	103.61	70-130
207 Dodecane	50.000	71.919	143.84*	70-130
213 1,2,4-Trichlorobe	58.000	70.151	120.95	70-130
215 Hexachlorobutadie	58.000	72.131	124.36	70-130
216 Naphthalene	5.800	6.258	107.90	60-140
222 1,2,3-Trichlorobe	58.000	76.337	131.62*	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.488	105.95	70-130
$ 134 Toluene-d8	25.000	25.397	101.59	70-130
$ 170 4-Bromofluorobenz	25.000	25.210	100.84	70-130

Data File: /chem/msdp.i/25JUL21.b/p072504.d

Date : 25-JUL-2021 11:58

Client ID: LCSD

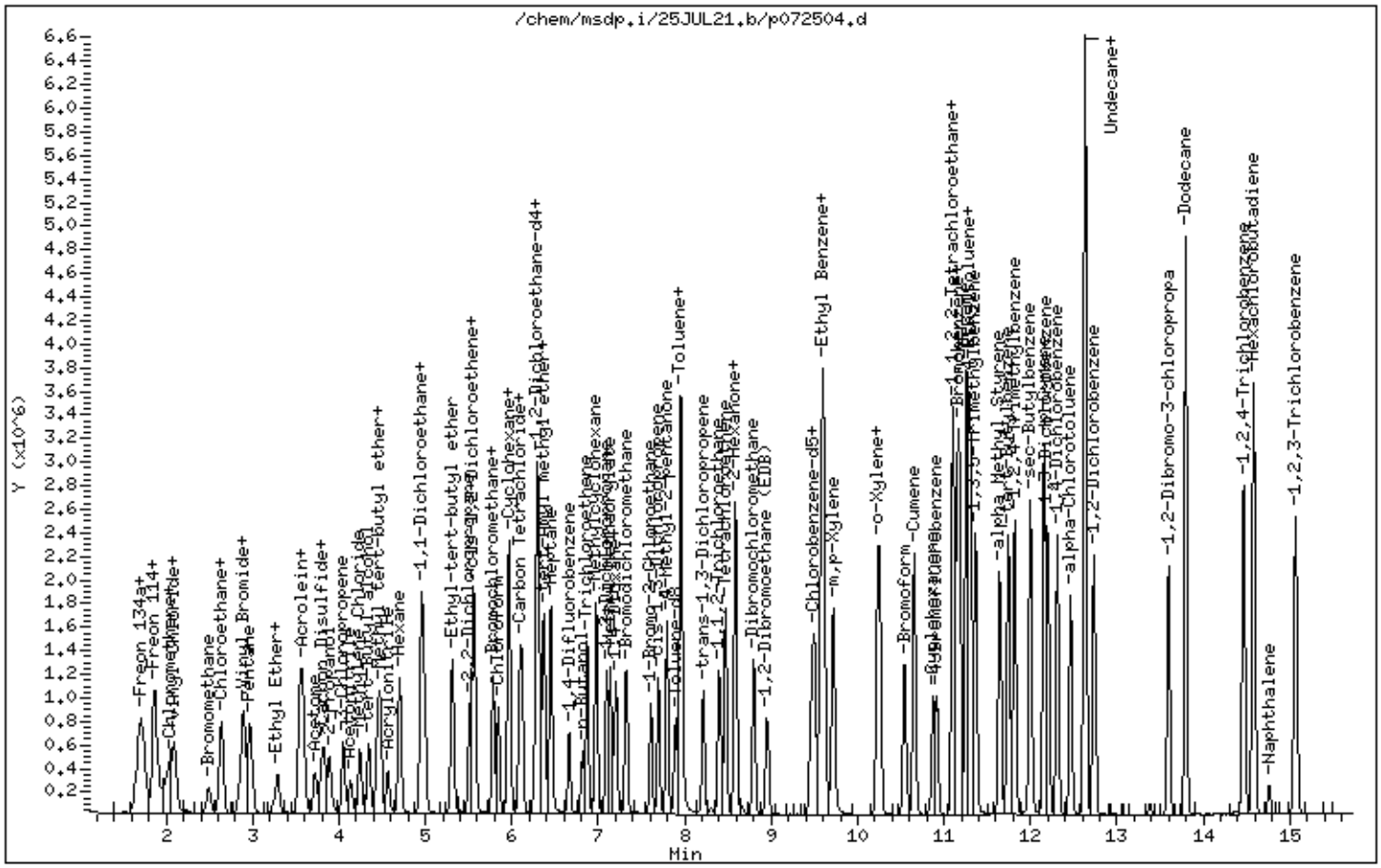
Instrument: msdp.i

Sample Info: 100mL 3018-2122A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



MSDP

								Method TO-15/TO-14					
	BFB Verification of 176/174 ratio: (122720/127040) * 100 = 96.60%							SOP# 6					
		3234-10	Exp. Date:		8/17/21			Vacuum:	NA				
	BCM	154,602				Please check all standards							
	1,4-DFB	573,421				Surr.# 3234-10		Exp. Date:	8/17/21	Surrogate# NA		Exp. Date:	NA
	CB-d5	566,079				CCV: 3018-2125		Exp. Date:	9/28/21	LCS: 3018-2122A		Exp. Date:	9/23/21
						CCV sp1#		Exp. Date:		LCS sp1 #		Exp. Date:	
						CCV sp2#		Exp. Date:		LCS sp2 #		Exp. Date:	
	Verified CCV vs ICAL mid-point(-40%): LD					CCV sp3#		Exp. Date:		LCS sp3 #		Exp. Date:	
	Method: p21q0519a.m												

	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	mL	DF	Verify Load	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P072501	BFB Tune Check	3234-10	12	36ng	50ml	1.00	LD	LD	7/25/2021	1013	LD	Exp. 8/17/21. leg validation
√	P072502	CCV	3018-2125	13	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/25/2021	1100	LD	Exp. 9/28/21; 0 out
√	P072503	LCS	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/25/2021	1129	LD	Exp. 9/23/21. 2 out AT-20
√	P072504	LCSD	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/25/2021	1158	LD	Exp. 9/23/21; RPD ok
√	P072505	CCVsp	3018-2127	11	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/25/2021	1226	LD	Exp. 9/26/21; 0 out
√	P072506	TPHg Calib	3234-26A	12	500ppbv (625ppbv)	160mL	1.00	LD	LD	7/25/2021	1328	LD	Exp. 9/3/21
√	P072507	Lab Blank	35157	12	Humid	200ml	1.00	LD	LD	7/25/2021	1425	LD	leg validation
√	P072508	2107282-01A	N5655	1	7.8 Hg->10 psi	200ml	2.27	kk	LD	7/25/2021	1527	kk	"E" chlorodifl (NTC) > 400ppbv
√	P072509	2107282-02A	N3465	2	6.3 Hg->9.9 psi	200ml	2.12	kk	LD	7/25/2021	1556	kk	"E" chlorodifl (NTC) <400ppbv
√	P072510	2107262-01A	N3454	3	5.5 Hg->10 psi	200ml	2.06	kk	LD	7/25/2021	1626	kk	
√	P072511	2107262-02A	N3829	4	7.0 Hg->10 psi	200ml	2.19	kk	LD	7/25/2021	1655	kk	
√	P072512	2107262-04A	40867	5	6.5 Hg->10.4 psi	200ml	2.18	kk	LD	7/25/2021	1724	kk	
√	P072513	2107262-05A	1L1614	6	6.5 Hg->10 psi	200ml	2.14	kk	LD	7/25/2021	1754	kk	
√	P072514	2107262-07A	1040	7	7.5 Hg->10 psi	200ml	2.24	kk	LD	7/25/2021	1823	kk	
√	P072515	2107262-03A	3033	8	5.5 Hg->10 psi	140ml	2.94	kk	LD	7/25/2021	1853	kk	dil ntc; "E" THF (NTC) < 400ppbv
√	P072516	2107262-06A	N2621	9	7.0 Hg->10 psi	200ml	2.19	kk	LD	7/25/2021	1922	kk	"E" THF (NTC) <400ppbv, matrix
√	P072517	System Blank	35157	1	Humid	200ml	1.00	kk	kk	7/25/2021	2008	kk	leg validation
√	P072518	System Blank	35157	11	Humid	200ml	1.00	LD	kk	7/25/2021	2224	LD	leg validation
√	P072519	2107260A-24A	1L1929	1	7.8 Hg->9.9 psi	200ml	2.26	LD	kk	7/25/2021	2253	LD	
√	P072520	2107282-03A	8019	2	7.1 Hg->10 psi	200ml	2.20	LD	kk	7/25/2021	2322	LD	
√	P072521	2107282-04A	N3422	3	7.1 Hg->9.8 psi	200ml	2.18	LD	kk	7/25/2021	2352	LD	
√	P072522	2107282-05A	N3419	4	5.1 Hg->9.9 psi	200ml	2.02	LD	kk	7/26/2021	0021	LD	
√	P072523	2107282-07A	N5535	5	7.1 Hg->9.7 psi	200ml	2.17	LD	kk	7/26/2021	0051	LD	
√	P072524	2107282-08A	1L1923	6	5.9 Hg->9.6 psi	200ml	2.06	LD	LD	7/26/2021	0727	LD	
√	P072525	2107282-09A	B2628	7	7.1 Hg->9.9 psi	200ml	2.19	LD	LD	7/26/2021	0756	LD	

Gd 7/27/21

	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	mL	DF	Verify Load	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P072526	2107282-11A	N2654	8	9.4 Hg->10 psi	200ml	2.45	LD	LD	7/26/2021	0826	LD	
√	P072527	2107282-12A	O0751	10	9 Hg->9.9 psi	200ml	2.39	LD	LD	7/26/2021	0855	LD	
√	P072528	2107282-06A	1L1555	12	7.8 Hg->10.1 psi	200ml	2.28	LD	LD	7/26/2021	0925	LD	
√	P072529	2107282-10A	O0889	11	5.9 Hg->10 psi	10ml	41.8	LD	LD	7/26/2021	1002	LD	dil TC

gd 7/27/21

US32TAR1

Data file : /chem/msdp.i/19MAY21.b/p051901.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 19-MAY-2021 11:39
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/19MAY21.b/bfb30.m
Meth Date : 18-Nov-2019 14:14 ushn Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 4 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.921	10.993	-0.072	95	186911			100.00- 100.00	100.00
10.921	10.993	-0.072	50	42709			8.00- 40.00	22.85
10.921	10.993	-0.072	75	81216			30.00- 66.00	43.45
10.921	10.993	-0.072	96	12084			5.00- 9.00	6.47
10.921	10.993	-0.072	173	1196			0.00- 1.99	0.82
10.921	10.993	-0.072	174	146453			50.01- 120.00	78.35
10.921	10.993	-0.072	175	10521			4.00- 9.00	7.18
10.921	10.993	-0.072	176	142592			93.00- 101.00	97.36
10.921	10.993	-0.072	177	9138			5.00- 9.00	6.41

Data File: /chem/msdp.i/19MAY21.b/p051901.d

Date : 19-MAY-2021 11:39

Client ID: BFB

Instrument: msdp.i

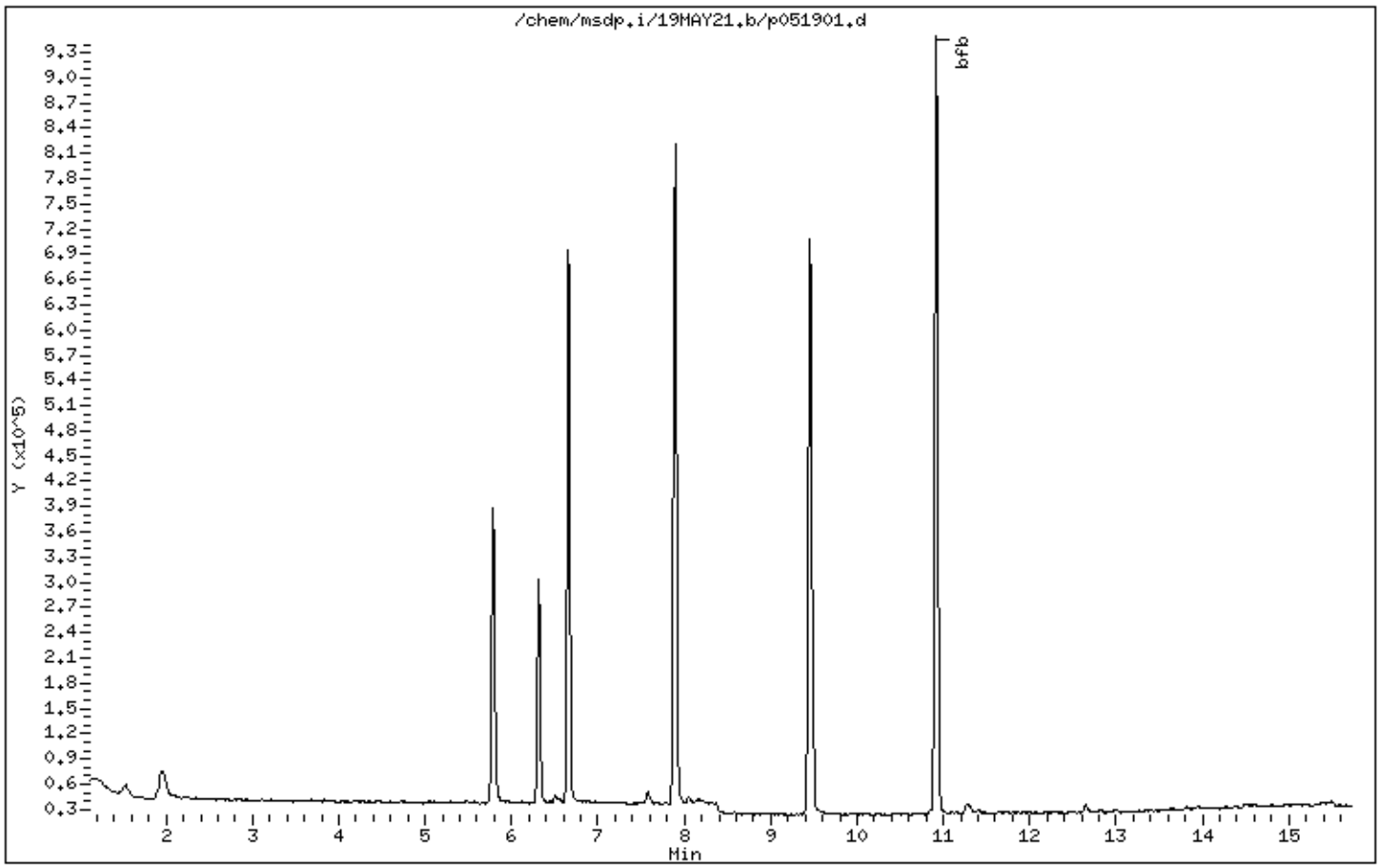
Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/19MAY21.b/p051901.d

Date : 19-MAY-2021 11:39

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

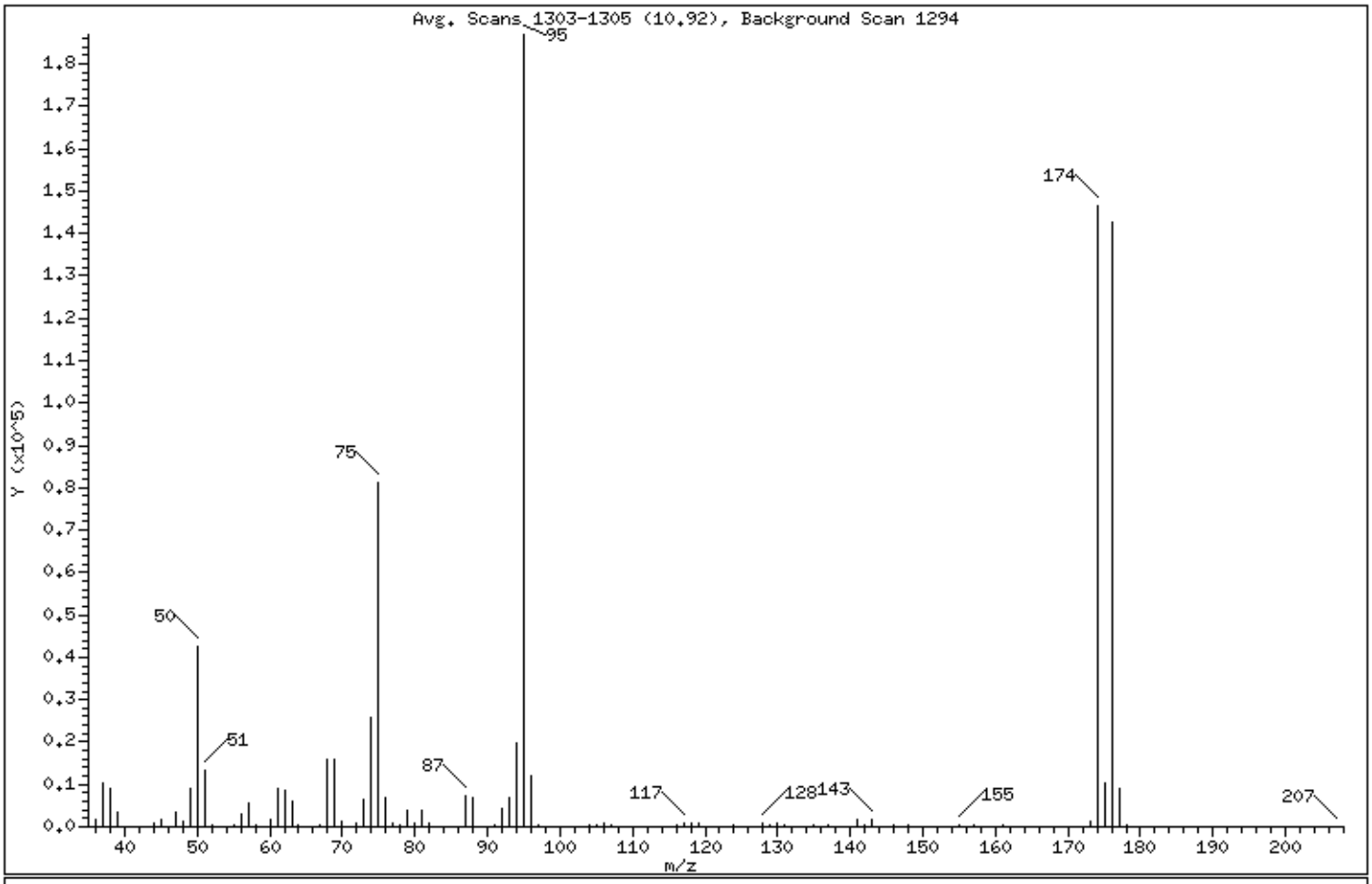
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.85
75	30.00 - 66.00% of mass 95	43.45
96	5.00 - 9.00% of mass 95	6.47
173	Less than 1.99% of mass 174	0.64 (0.82)
174	50.01 - 120.00% of mass 95	78.35
175	4.00 - 9.00% of mass 174	5.63 (7.18)
176	93.00 - 101.00% of mass 174	76.29 (97.36)
177	5.00 - 9.00% of mass 176	4.89 (6.41)

Date : 19-MAY-2021 11:39

Client ID: BFB Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: p051901.d
Spectrum: Avg. Scans 1303-1305 (10.92), Background Scan 1294
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1868	70.00	1283	104.00	572	144.00	34
37.00	10229	71.00	45	105.00	269	145.00	194
38.00	8812	72.00	868	106.00	645	146.00	291
39.00	3495	73.00	6642	107.00	260	147.00	74
40.00	164	74.00	25736	110.00	56	148.00	464
44.00	917	75.00	81216	111.00	52	149.00	159
45.00	1818	76.00	7007	112.00	153	150.00	194
46.00	106	77.00	923	113.00	102	152.00	130
47.00	3380	78.00	552	115.00	151	153.00	181
48.00	1430	79.00	3744	116.00	557	154.00	159
49.00	9200	80.00	918	117.00	965	155.00	433
50.00	42704	81.00	3849	118.00	686	157.00	324
51.00	13167	82.00	684	119.00	932	159.00	214
52.00	589	83.00	51	123.00	100	161.00	241
55.00	241	85.00	29	124.00	227	165.00	33
56.00	2844	86.00	166	126.00	88	172.00	143
57.00	5428	87.00	7358	127.00	87	173.00	1196
58.00	256	88.00	6801	128.00	774	174.00	146432
59.00	71	91.00	377	129.00	295	175.00	10521
60.00	1820	92.00	4204	130.00	668	176.00	142592
61.00	9042	93.00	6703	131.00	353	177.00	9138
62.00	8617	94.00	19944	135.00	237	178.00	285
63.00	5849	95.00	186880	137.00	246	207.00	79
64.00	483	96.00	12084	140.00	173		
67.00	360	97.00	281	141.00	1745		
68.00	16023	98.00	26	142.00	230		
69.00	15790	103.00	189	143.00	1755		

US32TAR1

Data file : /chem/msdp.i/25JUL21.b/p072501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JUL-2021 10:13
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/25JUL21.b/bfb30.m
Meth Date : 25-Jul-2021 13:15 lk8g Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Processing Host: us32tar1

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
10.921	10.993	-0.072	95	155392			100.00- 100.00	100.00
10.921	10.993	-0.072	50	43037			8.00- 40.00	27.70
10.921	10.993	-0.072	75	73781			30.00- 66.00	47.48
10.921	10.993	-0.072	96	9825			5.00- 9.00	6.32
10.921	10.993	-0.072	173	1141			0.00- 1.99	0.90
10.921	10.993	-0.072	174	127042			50.01- 120.00	81.76
10.921	10.993	-0.072	175	9487			4.00- 9.00	7.47
10.921	10.993	-0.072	176	122725			93.00- 101.00	96.60
10.921	10.993	-0.072	177	7992			5.00- 9.00	6.51

Data File: /chem/msdp.i/25JUL21.b/p072501.d

Date : 25-JUL-2021 10:13

Client ID: BFB

Instrument: msdp.i

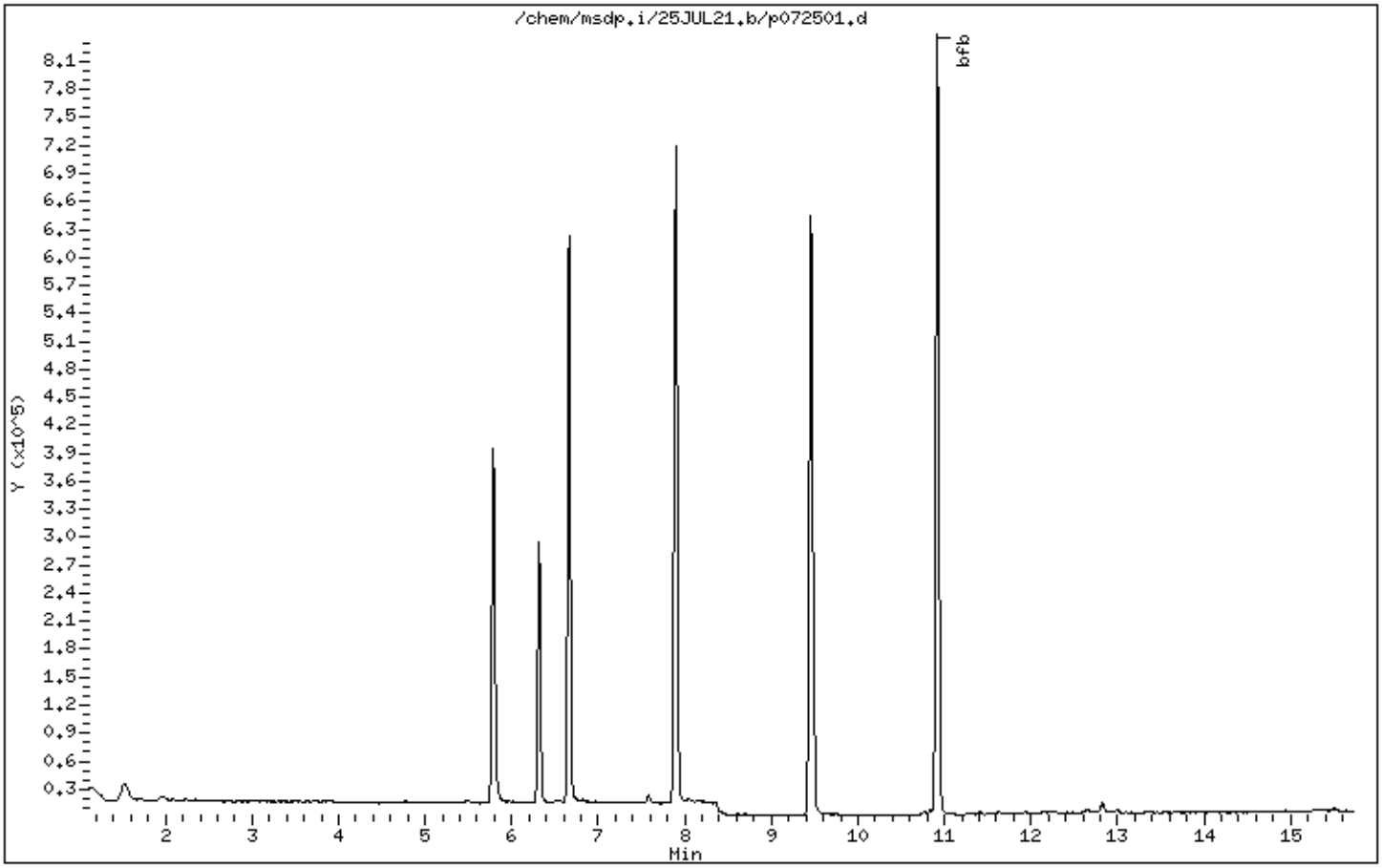
Sample Info: 200ml #3234-10

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/25JUL21.b/p072501.d

Date : 25-JUL-2021 10:13

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10

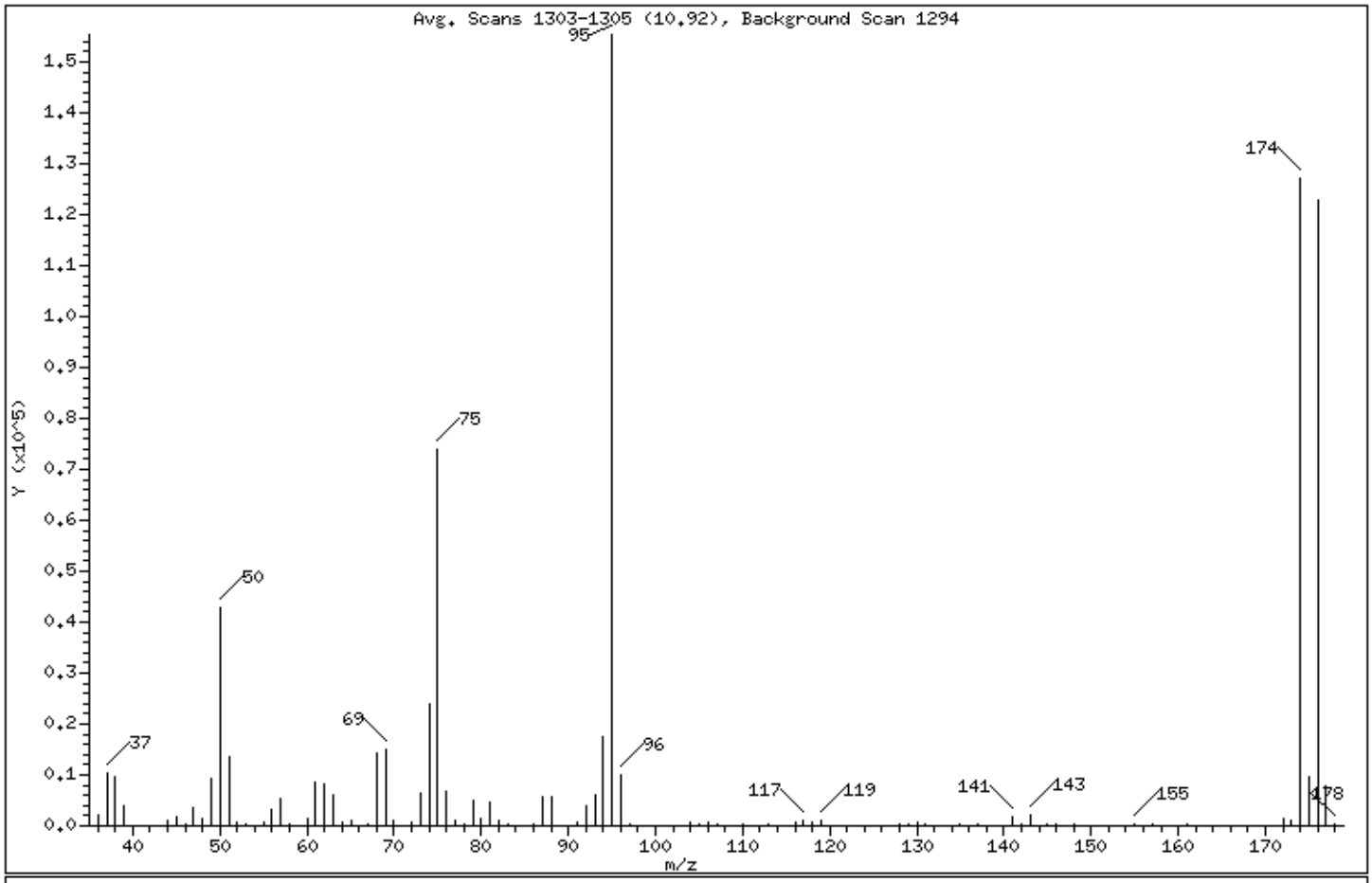
Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	27.70
75	30.00 - 66.00% of mass 95	47.48
96	5.00 - 9.00% of mass 95	6.32
173	Less than 1.99% of mass 174	0.73 (0.90)
174	50.01 - 120.00% of mass 95	81.76
175	4.00 - 9.00% of mass 174	6.11 (7.47)
176	93.00 - 101.00% of mass 174	78.98 (96.60)
177	5.00 - 9.00% of mass 176	5.14 (6.51)

Date : 25-JUL-2021 10:13

Client ID: BFB Instrument: msdp.i

Sample Info: 200ml #3234-10

Volume Injected (uL): 1.0 Operator: LD

Column phase: Column diameter: 2.00

Data File: p072501.d
Spectrum: Avg. Scans 1303-1305 (10.92), Background Scan 1294
Location of Maximum: 95.00
Number of points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1994	64.00	809	94.00	17392	141.00	1745
37.00	10387	65.00	1239	95.00	155392	142.00	200
38.00	9700	67.00	352	96.00	9825	143.00	2027
39.00	3973	68.00	14384	97.00	346	145.00	418
40.00	107	69.00	14979	104.00	696	146.00	236
41.00	58	70.00	1143	105.00	283	147.00	95
43.00	29	71.00	41	106.00	718	148.00	347
44.00	1060	72.00	873	107.00	185	150.00	171
45.00	1832	73.00	6328	110.00	197	153.00	125
46.00	272	74.00	23912	111.00	152	154.00	35
47.00	3484	75.00	73776	112.00	36	155.00	365
48.00	1346	76.00	6664	113.00	215	157.00	273
49.00	9372	77.00	895	115.00	146	159.00	81
50.00	43032	78.00	522	116.00	723	161.00	212
51.00	13540	79.00	5050	117.00	1049	171.00	146
52.00	642	80.00	1569	118.00	583	172.00	1473
53.00	246	81.00	4756	119.00	1127	173.00	1141
55.00	697	82.00	1197	124.00	87	174.00	127040
56.00	3062	83.00	182	128.00	526	175.00	9487
57.00	5375	86.00	203	129.00	286	176.00	122720
58.00	316	87.00	5762	130.00	571	177.00	7992
60.00	1540	88.00	5703	131.00	333	178.00	217
61.00	8524	91.00	703	135.00	267		
62.00	8122	92.00	4043	137.00	283		
63.00	6216	93.00	6059	140.00	142		

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/25JUL21.b/p072505.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2021 12:26
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2127
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/25JUL21.b/p21q0519a.m
Meth Date : 25-Jul-2021 15:23 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT20spCCV.sub
Sample Matrix: AIR
Processing Host: us32tar1

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 90 Bromochloromethane					CAS #: 74-97-5		
5.778	5.778 (1.000)	130	168789	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	131325			48.23- 108.23	77.80
5.778	5.778 (1.000)	49	343355			150.57- 210.57	203.42
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.666	6.666 (1.000)	114	601487	25.0000		80.00- 120.00	100.00
6.666	6.666 (1.000)	88	88600			0.00- 45.71	14.73
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	599612	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	314073			23.78- 83.78	52.38
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.315	6.315 (1.093)	65	231457	25.0000	24.848	80.00- 120.00	100.00
6.315	6.315 (1.093)	67	113143			27.21- 87.21	48.88
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	648773	25.0000	24.839	80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67552			0.00- 40.44	10.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.184)	100	421752			34.95- 94.95	65.01
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	383707	25.0000	24.920	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	474628			95.92- 155.92	123.70
10.921	10.921 (1.154)	176	367715			66.89- 126.89	95.83
3 Freon 143a					CAS #: 420-46-2		
1.590	1.590 (0.275)	65	194908	50.0000	59.760	80.00- 120.00	100.00
1.590	1.590 (0.275)	69	463783			243.50- 303.50	237.95
1.590	1.590 (0.275)	64	44796			0.00- 54.06	22.98
6 Propane					CAS #: 74-98-6		
1.674	1.674 (0.290)	43	147503	50.0000	49.366	80.00- 120.00	100.00
1.674	1.674 (0.290)	39	89342			34.98- 94.98	60.57
1.688	1.688 (0.292)	41	75262			25.22- 85.22	51.02
13 Freon 142b					CAS #: 75-68-3		
1.898	1.898 (0.329)	65	775968	50.0000	47.047	80.00- 120.00	100.00
1.884	1.884 (0.326)	45	240789			0.00- 59.77	31.03
36 1-Pentene					CAS #: 109-67-1		
2.906	2.906 (0.503)	55	480812	50.0000	44.543	80.00- 120.00	100.00
2.906	2.906 (0.503)	42	695999			105.17- 165.17	144.75
40 Freon 123a					CAS #: 354-23-4		
3.385	3.385 (0.586)	117	456007	50.0000	43.181	80.00- 120.00	100.00
3.385	3.385 (0.586)	67	600211			104.69- 164.69	131.62
41 Freon 123					CAS #: 306-83-2		
3.479	3.479 (0.602)	83	672554	50.0000	44.823	80.00- 120.00	100.00
3.479	3.479 (0.602)	133	151314			0.00- 50.87	22.50
3.479	3.479 (0.602)	85	450708			36.08- 96.08	67.01
55 Cyclopentene					CAS #: 142-29-0		
4.073	4.073 (0.705)	67	693825	50.0000	42.975	80.00- 120.00	100.00
4.073	4.073 (0.705)	68	252632			6.76- 66.76	36.41
4.073	4.073 (0.705)	53	221431			0.00- 57.54	31.91
56 Methyl Acetate					CAS #: 79-20-9		
4.080	4.080 (0.706)	43	1027746	50.0000	54.435	80.00- 120.00	100.00
4.080	4.080 (0.706)	74	119684			0.00- 44.13	11.65
74 Chloroprene					CAS #: 126-99-8		
5.019	5.019 (0.869)	53	760989	50.0000	50.461	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
74 Chloroprene (continued)							
5.019	5.019 (0.869)	88	264334			9.21- 69.21	34.74
5.019	5.019 (0.869)	50	189341			0.00- 54.25	24.88
75 1-Propanol					CAS #: 71-23-8		
5.090	5.090 (0.881)	59	94850	50.0000	42.539	80.00- 120.00	100.00
5.090	5.090 (0.881)	42	98098			63.23- 123.23	103.42
5.090	5.090 (0.881)	41	58743			24.74- 84.74	61.93
88 Methyl Acrylate					CAS #: 96-33-3		
5.628	5.628 (0.974)	55	1002447	50.0000	50.603	80.00- 120.00	100.00
5.628	5.628 (0.974)	85	101351			0.00- 41.28	10.11
5.628	5.628 (0.974)	58	76932			0.00- 38.22	7.67
103 Isobutanol					CAS #: 78-83-1		
6.244	6.244 (1.081)	39	116063	50.0000	48.561	80.00- 120.00	100.00
6.244	6.244 (1.081)	43	558696			448.18- 508.18	481.37
6.244	6.244 (1.081)	41	388564			299.99- 359.99	334.79
113 Ethyl acrylate					CAS #: 140-88-5		
6.946	6.946 (0.734)	99	64527	50.0000	46.627	80.00- 120.00	100.00
6.946	6.946 (0.734)	45	136134			149.95- 209.95	210.97
6.946	6.946 (0.734)	55	1364561			1849.07-1909.07	2114.69
115 2-Pentanone					CAS #: 107-87-9		
7.032	7.032 (0.743)	43	1723470	50.0000	56.614	80.00- 120.00	100.00
7.032	7.032 (0.743)	58	118450			0.00- 37.44	6.87
7.032	7.032 (0.743)	86	189246			0.00- 42.78	10.98
145 Butyl Acetate					CAS #: 123-86-4		
8.665	8.665 (1.300)	56	776671	50.0000	51.263	80.00- 120.00	100.00
8.665	8.665 (1.300)	73	210929			0.00- 59.10	27.16
8.665	8.665 (1.300)	43	2076827			215.30- 275.30	267.40
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.603	9.603 (1.015)	131	683545	50.0000	51.276	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	599612			57.42- 117.42	87.72
9.603	9.603 (1.015)	95	248218			5.70- 65.70	36.31
166 2-Heptanone					CAS #: 110-43-0		
10.362	10.362 (1.793)	58	1194340	50.0000	48.191	80.00- 120.00	100.00
10.362	10.362 (1.793)	43	2106999			136.03- 196.03	176.42
172 D-Limonene					CAS #: 5989-27-5		
12.096	12.096 (1.279)	68	836019	50.0000	61.742	80.00- 120.00	100.00
12.096	12.096 (1.279)	93	580896			39.41- 99.41	69.48

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
186 4-Chlorotoluene					CAS #: 106-43-4		
11.444	11.444 (1.210)	126	645655	50.0000	52.580	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1985988			295.02- 355.02	307.59
11.444	11.444 (1.210)	63	282458			11.82- 71.82	43.75
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.318	12.318 (1.302)	120	907524	50.0000	50.759	80.00- 120.00	100.00
12.318	12.318 (1.302)	105	1953593			192.40- 252.40	215.27
12.318	12.318 (1.302)	77	227746			0.00- 54.69	25.10
205 Hexachloroethane					CAS #: 67-72-1		
12.984	12.984 (1.373)	201	409699	50.0000	58.287	80.00- 120.00	100.00
12.977	12.977 (1.372)	117	563991			102.99- 162.99	137.66
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
13.786	13.786 (1.457)	180	1242566	50.0000	49.434	80.00- 120.00	100.00
13.786	13.786 (1.457)	182	1183140			65.24- 125.24	95.22
210 alpha-Pinene					CAS #: 80-56-8		
10.599	10.599 (1.120)	93	1290368	50.0000	52.025	80.00- 120.00	100.00
10.599	10.599 (1.120)	77	385104			0.00- 58.21	29.84
214 beta-Pinene					CAS #: 127-91-3		
11.422	11.422 (1.207)	93	1018960	50.0000	62.749	80.00- 120.00	100.00
11.444	11.444 (1.210)	91	1985988			153.57- 213.57	194.90

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 25-JUL-2021 12:26
Lab File ID: p072505.d Init. Cal. Date(s): 19-MAY-2021 20-MAY-2021
Analysis Type: AIR Init. Cal. Times: 14:02 00:05
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/25JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.37128	0.010	0.60906	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.07861	0.010	0.64329	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.63993	0.010	0.31874	30.00000	Averaged
3 Freon 143a	0.48307	0.57737	0.010	-19.52068	30.00000	Averaged
6 Propane	0.44256	0.43695	0.010	1.26828	30.00000	Averaged
13 Freon 142b	2.44292	2.29862	0.010	5.90664	30.00000	Averaged
36 1-Pentene	1.59878	1.42430	0.010	10.91387	30.00000	Averaged
40 Freon 123a	1.56413	1.35082	0.010	13.63768	30.00000	Averaged
41 Freon 123	2.22241	1.99228	0.010	10.35465	30.00000	Averaged
55 Cyclopentene	2.39124	2.05529	0.010	14.04902	30.00000	Averaged
56 Methyl Acetate	2.79640	3.04446	0.010	-8.87066	30.00000	Averaged
74 Chloroprene	2.23364	2.25425	0.010	-0.92263	30.00000	Averaged
75 1-Propanol	0.33025	0.28097	0.010	14.92188	30.00000	Averaged
88 Methyl Acrylate	2.93415	2.96952	0.010	-1.20525	30.00000	Averaged
103 Isobutanol	0.35400	0.34381	0.010	2.87840	30.00000	Averaged
113 Ethyl acrylate	0.05770	0.05381	0.010	6.74601	30.00000	Averaged
115 2-Pentanone	1.26926	1.43715	0.010	-13.22729	30.00000	Averaged
145 Butyl Acetate	0.62971	0.64563	0.010	-2.52684	30.00000	Averaged
157 1,1,1,2-Tetrachloroethane	0.55580	0.56999	0.010	-2.55244	30.00000	Averaged
166 2-Heptanone	3.67076	3.53795	0.010	3.61796	30.00000	Averaged
172 D-Limonene	0.56456	0.69713	0.010	-23.48345	30.00000	Averaged
186 4-Chlorotoluene	0.51198	0.53839	0.010	-5.15916	30.00000	Averaged
197 1,2,3-Trimethylbenzene	0.74544	0.75676	0.010	-1.51833	30.00000	Averaged
205 Hexachloroethane	0.29306	0.34164	0.010	-16.57434	30.00000	Averaged
208 1,3,5-Trichlorobenzene	1.04801	1.03614	0.010	1.13218	30.00000	Averaged
210 alpha-Pinene	1.03411	1.07600	0.010	-4.05086	30.00000	Averaged
214 beta-Pinene	0.67705	0.84968	0.010	-25.49753	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072505.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/25JUL21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-JUL-2021
Calibration Time: 11:00
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	154602	92761	216443	168789	9.18
108 1,4-Difluorobenze	573421	344053	802789	601487	4.89
153 Chlorobenzene-d5	566079	339647	792511	599612	5.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	-0.00
108 1,4-Difluorobenze	6.67	6.34	7.00	6.67	-0.00
153 Chlorobenzene-d5	9.46	9.13	9.79	9.46	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/25JUL21.b/p072505.d

Date : 25-JUL-2021 12:26

Client ID: CCV

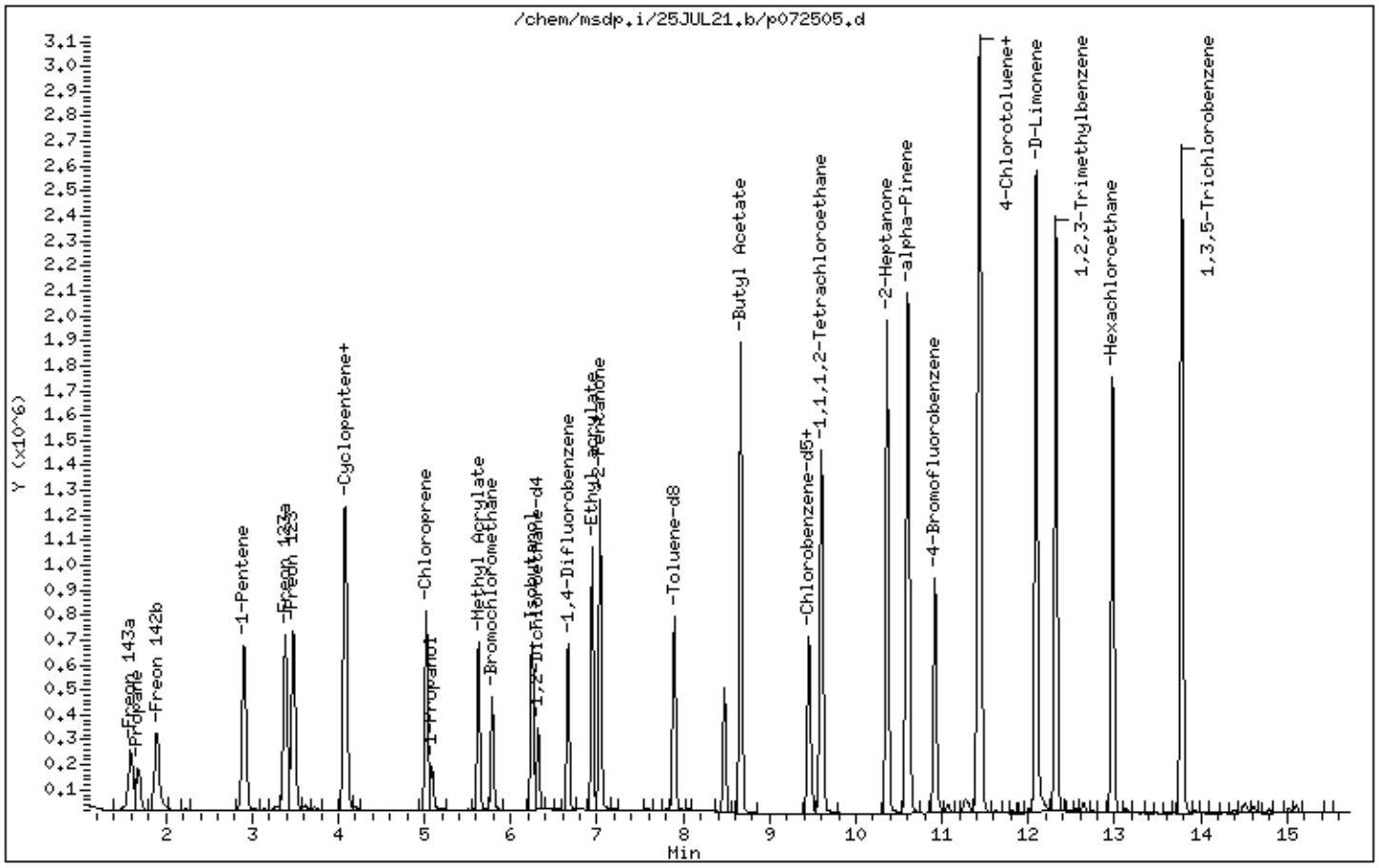
Instrument: msdp.i

Sample Info: 50mL 3018-2127

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Shipping/Receiving Documents

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Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Air Toxics, Ltd. at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: ~~2107282~~

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: AECOM
Project Name: SMUD 59th St.
Project Manager: Robert Kohlhardt Project # 60632793.6
Sampler: Tamrah Hendrick
Site Name:

Special Instructions/Notes: "Level IV Reporting"
Invoicing To:
SWPP Queen
Report Email To:
Robert.Kohlhardt@aecom.com

Turnaround Time (Rush surcharges may apply)
Standard X Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15			
01A	SG-VW16B-02	IL3390	25041	7/12/21	1305	7/12/21	1311	-27.5	-5			X			
02A	SG-VW17A-02	IL3107	25359	7/12/21	1402	7/12/21	1407	-26.5	-3.5			X			
03A	SG-VW17B-03	8019	22391	7/12/21	1432	7/12/21	1439	-28	-5			X			
04A	SG-VW18B-02	IL3162	25390	7/12/21	1527	7/12/21	1532	-28	-5			X			
05A	SG-VW19A-02	IL3178	22496	7/13/21	0717	7/13/21	0723	-27	-3.5			X			
06A	SG-VW19B-02	IL1555	25451	7/13/21	0806	7/13/21	0811	-26.5	-5			X			
07A	SG-VW52A-02	IL3249	20422	7/13/21	0858	7/13/21	0904	-27	-5			X			
08A	SG-VW52B-02	IL1923	100498	7/13/21	0925	7/13/21	0934	-27	-5			X			
09A	SG-VW53A-03	LC1056	22624	7/13/21	1047	7/13/21	1053	-27	-5			X			
10A	SG-VW53B-02	IL2497	25480	7/13/21	1124	7/13/21	1130	-28	-4.5			X			
11A	SG-VW25A-02	IL2921	25403	7/13/21	1243	7/13/21	1250	-27	-5			X			
12A	SG-VW25B-02	IL2372	25402	7/13/21	1312	7/13/21	1318	-27	-5			X			

Relinquished by: (Signature/Affiliation) AECOM	Date 7/13/21	Time 1446	Received by: (Signature/Affiliation)	Date 7-13-21	Time 1446
Relinquished by: (Signature/Affiliation)	Date 7-13-21	Time 1544	Received by: (Signature/Affiliation) FATE	Date 07/13/21	Time 1544
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: COURIER Custody Seals Intact? Yes No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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SAMPLE RECEIPT SUMMARY

WORKORDER 2107282

Client

Mr. Robert Kohlhardt
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

Phone

916-679-2000

Fax

916-679-2900

Sales Rep: DaV

Date Promised: 07/27/21
Date Completed:
Date Received: 7/13/21
PO#:
Project#: 60632793.6 SMUD 59th St.

Total $: $ 2,096.00
Logged By: JYW

Fraction	Sample #	Analysis	Collected	Amount$
01A	SG-VW16B-02	TO-15	7/12/2021	$150.00
02A	SG-VW17A-02	TO-15	7/12/2021	$150.00
03A	SG-VW17B-03	TO-15	7/12/2021	$150.00
04A	SG-VW18B-02	TO-15	7/12/2021	$150.00
05A	SG-VW19A-02	TO-15	7/13/2021	$150.00
06A	SG-VW19B-02	TO-15	7/13/2021	$150.00
07A	SG-VW52A-02	TO-15	7/13/2021	$150.00
08A	SG-VW52B-02	TO-15	7/13/2021	$150.00
09A	SG-VW53A-03	TO-15	7/13/2021	$150.00
10A	SG-VW53B-02	TO-15	7/13/2021	$150.00
11A	SG-VW25A-02	TO-15	7/13/2021	$150.00
12A	SG-VW25B-02	TO-15	7/13/2021	$150.00

Misc. Charges	1 Liter Summa Canister (13) @ $20.00 each., Shipment 140018	$260.00
	eCVP (12) @ $3.00 each.	$36.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: SMUD 59th Street Corporation Yard/25677

BILL TO: Mr. Jerry Montgomery
SWPPQueen
7202 Gloria Drive #25
Sacramento, CA 95831

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sp)-AECOM (SMUD 59th)

Other Records

Air Toxics Ltd.

Curve Response Factors
p072506.d

Compound	Ave. RF	% RSD
TPH	65533	0.00048

LD 7/25/24

Air Toxics Ltd.

File Response Factors

Data File: p072506.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	65532.6838202	10

Air Toxics Ltd.

List of Selected Compounds

Data File: p072506.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 1.5344	0.26	1.534	115565	
☑	Unknown Peak 1.8702	0.06	1.870	24868	
☑	Butane	0.68	2.046	307509	
☑	Unknown Peak 2.2465	0.07	2.247	32928	
☑	Isopentane	3.30	2.640	1487563	
☑	Unknown Peak 2.9699	1.11	2.970	502032	
☑	Unknown Peak 3.1705	0.17	3.171	74539	
☑	Ethanol	1.42	3.249	638253	
☑	Unknown Peak 3.3925	0.38	3.393	170160	
☑	Unknown Peak 3.5358	0.14	3.536	64122	
☑	Unknown Peak 4.0802	1.56	4.080	703755	
☑	Unknown Peak 4.1088	1.24	4.109	560030	
☑	Unknown Peak 4.1876	0.20	4.188	89055	
☑	Unknown Peak 4.4025	0.68	4.403	305450	
☑	Unknown Peak 4.6174	0.10	4.617	47104	
☑	Hexane	0.74	4.696	331942	
☑	Unknown Peak 4.8180	0.06	4.818	25588	
☑	Unknown Peak 4.8825	0.07	4.883	31871	
☑	Unknown Peak 4.9254	0.09	4.925	39114	
☑	Unknown Peak 5.0114	0.04	5.011	17665	
☑	Unknown Peak 5.0830	0.05	5.083	23540	
☑	Unknown Peak 5.2263	1.39	5.226	626843	
☑	Unknown Peak 5.3266	0.58	5.327	260955	
☑	Unknown Peak 5.3839	0.12	5.384	52364	
☑	Bromochloromethane	2.49	5.785	1122833	
☑	Tetrahydrofuran	0.67	5.892	301966	
☑	Cyclohexane	1.57	5.964	708657	
☑	Unknown Peak 6.0644	0.74	6.064	331369	
☐	2,2,4-Trimethylpentane	6.71	6.286	3025263	
☐	Benzene	0.08	6.301	36773	
☑	1,2-Dichloroethane-d4	16.55	6.315	7460326	
☑	Heptane	0.83	6.451	372152	
☑	Unknown Peak 6.5801	0.19	6.580	84127	
☑	1,4-Difluorobenzene	3.56	6.666	1604103	
☑	Unknown Peak 6.7807	0.24	6.781	106908	
☑	Unknown Peak 6.9382	1.31	6.938	589692	
☑	Methylcyclohexane	2.28	6.974	1025546	
☑	Unknown Peak 7.0529	0.93	7.053	421097	
☑	Unknown Peak 7.1245	0.21	7.125	93040	
☑	Unknown Peak 7.1746	0.14	7.175	64422	
☑	Unknown Peak 7.3036	4.68	7.304	2107273	
☑	Unknown Peak 7.4110	7.14	7.411	3218117	
☑	Unknown Peak 7.5758	0.94	7.576	424967	
☑	4-Methyl-2-pentanone	1.89	7.712	852334	
☑	Unknown Peak 7.7978	0.32	7.798	143094	
☑	Toluene-d8	4.44	7.891	1999980	
☑	Toluene	4.15	7.955	1870707	
☑	Unknown Peak 8.0342	0.24	8.034	106922	
☑	Unknown Peak 8.156	0.31	8.156	137705	
☑	Unknown Peak 8.2491	0.80	8.249	360604	
☑	Unknown Peak 8.5213	0.12	8.521	53644	
☑	Unknown Peak 8.7147	0.07	8.715	30380	

Air Toxics Ltd.

List of Selected Compounds

Data File: p072506.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 8.7791	0.03	8.779	15656	
☑	Unknown Peak 8.9009	0.04	8.901	15897	
☑	Unknown Peak 8.9797	0.14	8.980	63578	
☑	Unknown Peak 9.1230	0.07	9.123	31563	
☑	Unknown Peak 9.2376	0.06	9.238	26981	
☑	Unknown Peak 9.3737	0.09	9.374	39204	
☑	Chlorobenzene-d5	4.47	9.460	2013632	
☑	Ethyl Benzene	0.84	9.567	379996	
☑	m,p-Xylene	2.65	9.718	1196328	
☑	Unknown Peak 9.9539	0.05	9.954	20382	
☑	Unknown Peak 10.068	0.02	10.069	11164	
☑	o-Xylene	0.93	10.233	420804	
☑	Unknown Peak 10.498	0.04	10.498	20014	
☑	Cumene	0.25	10.656	114614	
☑	Unknown Peak 10.741	0.21	10.742	95613	
☑	4-Bromofluorobenzene	5.52	10.921	2489783	
☑	Propylbenzene	0.19	11.150	83975	
☑	4-Ethyltoluene	1.29	11.258	582218	
☑	1,3,5-Trimethylbenzene	0.42	11.365	187439	
☑	Unknown Peak 11.622	0.51	11.623	231057	
☑	1,2,4-Trimethylbenzene	1.01	11.816	453670	
☑	Unknown Peak 11.952	0.38	11.952	170981	
☑	Unknown Peak 12.124	0.16	12.124	73583	
☑	Unknown Peak 12.238	0.44	12.239	196355	
☑	Unknown Peak 12.317	0.23	12.318	104086	
☑	Unknown Peak 12.482	0.17	12.482	78557	
☑	Unknown Peak 12.554	0.21	12.554	96847	
☑	Unknown Peak 12.597	0.22	12.597	98622	
☑	Unknown Peak 12.647	0.15	12.647	66088	
☑	Unknown Peak 12.740	0.06	12.740	25817	
☑	Unknown Peak 12.826	0.14	12.826	61964	
☑	Unknown Peak 12.919	0.09	12.919	41693	
☑	Unknown Peak 12.955	0.11	12.955	49198	
☑	Unknown Peak 13.034	0.12	13.034	52848	
☑	Unknown Peak 13.134	0.04	13.134	17968	
☑	Unknown Peak 13.184	0.07	13.184	30325	
☑	Unknown Peak 13.377	0.05	13.378	24263	
☑	Unknown Peak 13.521	0.21	13.521	92676	
☑	Unknown Peak 13.836	0.06	13.836	28796	
☑	Unknown Peak 14.022	0.07	14.023	31825	
☑	Unknown Peak 14.366	0.02	14.366	10024	
☑	Unknown Peak 14.545	0.03	14.545	14993	
☑	Unknown Peak 14.803	0.04	14.803	17037	

Air Toxics Ltd.

File Results

Data File: File Information: p072508.d
Sample #: 2107282-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.27

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	47	(10597194.2848762 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072508.d
Sample #: 2107282-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.27

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2407	1.241	64443	
	Unknown Peak 1.5066	1.507	14993722	
	Unknown Peak 1.7724	1.772	7238976	
	Unknown Peak 1.8983	1.898	717737	
	Unknown Peak 2.2395	2.240	167868	
	Unknown Peak 2.8269	2.827	13859	
	Unknown Peak 2.8555	2.856	40507	
	Ethanol	3.257	123092	
✓	Unknown Peak 3.3641	3.364	15083	
✓	Unknown Peak 3.6148	3.615	10969	
	Acetone	3.729	138374	
	2-Propanol	3.909	51472	
✓	Unknown Peak 4.0876	4.088	14707	
✓	Unknown Peak 4.3454	4.345	19477	
	Unknown Peak 4.4099	4.410	24760	
	Unknown Peak 5.3841	5.384	53290	
	Unknown Peak 5.4342	5.434	58158	
	Unknown Peak 5.5703	5.570	43206	
	Unknown Peak 5.6276	5.628	22087	
✓	Bromochloromethane	5.785	1005828	
	Chloroform	5.843	581481	
	Unknown Peak 6.1648	6.165	10346	
✓	Unknown Peak 6.2436	6.244	23128	
✓	1,2-Dichloroethane-d4	6.315	695633	
	Unknown Peak 6.5087	6.509	14586	
✓	1,4-Difluorobenzene	6.666	1424510	
	Trichloroethene	6.867	45792	
✓	Unknown Peak 7.0387	7.039	12335	
✓	Unknown Peak 7.1247	7.125	42148	
✓	Unknown Peak 7.2393	7.239	32707	
✓	Unknown Peak 7.3253	7.325	12882	
✓	Unknown Peak 7.576	7.576	77775	
✓	Unknown Peak 7.7765	7.777	10705	
✓	Toluene-d8	7.898	1802002	
✓	Toluene	7.956	242963	
✓	Unknown Peak 8.0487	8.049	13261	
✓	Unknown Peak 8.2063	8.206	19310	
✓	Unknown Peak 8.3782	8.378	20096	
	Tetrachloroethene	8.471	351168	
✓	Unknown Peak 8.7006	8.701	68568	
✓	Unknown Peak 8.7579	8.758	50846	
✓	Unknown Peak 8.9083	8.908	84730	
✓	Unknown Peak 9.2235	9.223	51631	
✓	Chlorobenzene-d5	9.460	2010046	
✓	Unknown Peak 9.6747	9.675	22020	
✓	Unknown Peak 9.7249	9.725	13223	
✓	Unknown Peak 10.219	10.219	23267	
✓	Unknown Peak 10.541	10.541	73720	
✓	Unknown Peak 10.763	10.764	22390	
✓	4-Bromofluorobenzene	10.921	2350534	
✓	Unknown Peak 11.279	11.279	65165	
✓	Unknown Peak 11.401	11.401	37260	

List of Selected Compounds

Data File: File Information: p072508.d
Sample #: 2107282-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.27

	Compounds	RT	Peak Area	10
✓	Unknown Peak 11.644	11.645	17380	
✓	Unknown Peak 11.945	11.945	28259	
✓	Unknown Peak 12.067	12.067	17706	
✓	Unknown Peak 12.246	12.246	12334	
✓	Unknown Peak 12.468	12.468	14034	
✓	Unknown Peak 12.647	12.647	20979	
✓	Unknown Peak 12.819	12.819	31289	
✓	Unknown Peak 12.991	12.991	22131	
✓	Unknown Peak 13.363	13.364	22622	
✓	Unknown Peak 14.388	14.388	12255	
✓	Unknown Peak 14.516	14.517	10424	
✓	Unknown Peak 14.918	14.918	18863	

Air Toxics Ltd.

File Results

Data File: File Information: p072509.d
Sample #: 2107282-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	86	(11904859.9064063 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072509.d
Sample #: 2107282-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2409	1.241	84630	
	Unknown Peak 1.5067	1.507	10456037	
	1,1-Difluoroethane	1.717	4433784	
✓	Unknown Peak 1.8985	1.899	833237	
✓	Unknown Peak 2.2396	2.240	56326	
✓	Unknown Peak 2.6408	2.641	22377	
✓	Unknown Peak 3.2926	3.293	50590	
	Acetone	3.730	112407	
✓	Unknown Peak 3.9015	3.902	39617	
✓	Unknown Peak 4.3456	4.346	12270	
✓	Unknown Peak 4.4172	4.417	17039	
✓	Unknown Peak 4.7037	4.704	12328	
✓	Unknown Peak 5.6349	5.635	19027	
✓	Bromochloromethane	5.785	930460	
	Chloroform	5.843	974024	
✓	Unknown Peak 5.9572	5.957	33229	
✓	Unknown Peak 6.0862	6.086	12900	
✓	Unknown Peak 6.2294	6.229	25563	
✓	1,2-Dichloroethane-d4	6.315	675241	
✓	Unknown Peak 6.3799	6.380	31033	
✓	1,4-Difluorobenzene	6.666	1408884	
✓	Unknown Peak 6.9744	6.974	44427	
✓	Unknown Peak 7.1320	7.132	14326	
✓	Unknown Peak 7.2466	7.247	19534	
✓	Unknown Peak 7.2967	7.297	28865	
✓	Unknown Peak 7.5833	7.583	77591	
✓	Unknown Peak 7.8053	7.805	20566	
✓	Toluene-d8	7.898	1777288	
✓	Toluene	7.956	15113	
✓	Unknown Peak 8.0488	8.049	12777	
✓	Unknown Peak 8.1420	8.142	22284	
✓	Unknown Peak 8.2208	8.221	38785	
✓	Unknown Peak 8.3712	8.371	32876	
	Tetrachloroethene	8.472	949083	
✓	Unknown Peak 8.6720	8.672	74669	
✓	Unknown Peak 8.7652	8.765	130450	
	Unknown Peak 8.9084	8.908	148595	
	Unknown Peak 9.2236	9.224	178823	
✓	Chlorobenzene-d5	9.460	2005944	
✓	Unknown Peak 9.5674	9.567	28600	
✓	Unknown Peak 9.7250	9.725	104632	
✓	Unknown Peak 10.083	10.083	33257	
✓	Unknown Peak 10.226	10.226	44371	
✓	Unknown Peak 10.412	10.413	62808	
✓	Unknown Peak 10.548	10.549	97363	
✓	Unknown Peak 10.598	10.599	84210	
✓	Unknown Peak 10.770	10.771	10135	
✓	4-Bromofluorobenzene	10.921	2328257	
✓	Unknown Peak 11.014	11.014	49014	
✓	Unknown Peak 11.157	11.158	13455	
✓	Unknown Peak 11.265	11.265	80004	
✓	Unknown Peak 11.401	11.401	36398	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072509.d
Sample #: 2107282-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.12

	Compounds	RT	Peak Area	10
✓	Unknown Peak 11.623	11.623	29515	
✓	Unknown Peak 11.816	11.817	31425	
✓	Unknown Peak 11.938	11.938	20939	
✓	Unknown Peak 11.974	11.974	14827	
✓	Unknown Peak 12.081	12.082	24103	
✓	Unknown Peak 12.318	12.318	63784	
✓	Unknown Peak 12.461	12.461	11972	
✓	Unknown Peak 12.640	12.640	27963	
✓	Unknown Peak 12.819	12.819	20329	
✓	Unknown Peak 12.991	12.991	42101	
✓	Unknown Peak 13.363	13.364	36099	
✓	Unknown Peak 13.979	13.980	16185	
✓	Unknown Peak 14.123	14.123	20785	
✓	Unknown Peak 14.509	14.510	21985	
✓	Unknown Peak 14.903	14.904	30503	
✓	Unknown Peak 15.462	15.463	24227	

Air Toxics Ltd.

File Results

Data File: File Information: p072520.d
Sample #: 2107282-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	58	(10967732.37897 - 9236552.34008662 / 65533) *

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072520.d
Sample #: 2107282-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2407	1.241	74704	
	Unknown Peak 1.5065	1.507	11088508	
	1,1-Difluoroethane	1.716	6729951	
	Unknown Peak 1.8983	1.898	1499481	
✓	Unknown Peak 2.0818	2.082	56894	
✓	Unknown Peak 2.2394	2.239	205049	
✓	Unknown Peak 2.5403	2.540	14207	
✓	Unknown Peak 2.7695	2.770	10407	
✓	Unknown Peak 2.8913	2.891	12793	
	Unknown Peak 3.2924	3.292	120268	
✓	Unknown Peak 3.6004	3.600	14066	
	Acetone	3.729	136421	
✓	Unknown Peak 3.9084	3.908	48916	
✓	Unknown Peak 4.2451	4.245	15460	
✓	Unknown Peak 4.3597	4.360	14793	
✓	Unknown Peak 4.4098	4.410	31278	
✓	Unknown Peak 5.3840	5.384	46846	
	Unknown Peak 5.4341	5.434	85085	
✓	Unknown Peak 5.5631	5.563	35750	
✓	Unknown Peak 5.6275	5.628	21611	
✓	Bromochloromethane	5.792	860069	
	Chloroform	5.842	2373830	
✓	Unknown Peak 5.9714	5.971	87732	
✓	Carbon Tetrachloride	6.086	61676	
✓	Unknown Peak 6.1648	6.165	45327	
✓	Unknown Peak 6.2292	6.229	98669	
✓	1,2-Dichloroethane-d4	6.315	701790	
✓	1,4-Difluorobenzene	6.666	1407595	
✓	Unknown Peak 6.9312	6.931	11351	
✓	Unknown Peak 7.1246	7.125	23366	
✓	Unknown Peak 7.2464	7.246	64016	
✓	Unknown Peak 7.3252	7.325	19706	
✓	Unknown Peak 7.4398	7.440	15383	
✓	Unknown Peak 7.5759	7.576	77814	
✓	Toluene-d8	7.898	1801807	
✓	Unknown Peak 8.0343	8.034	14752	
✓	Unknown Peak 8.2062	8.206	62263	
	Tetrachloroethene	8.471	1113315	
✓	Unknown Peak 8.6718	8.672	128517	
	Unknown Peak 8.7578	8.758	233620	
✓	Unknown Peak 8.8294	8.829	55475	
	Unknown Peak 8.9082	8.908	267909	
	Unknown Peak 9.2234	9.223	336360	
✓	Unknown Peak 9.3022	9.302	12007	
✓	Chlorobenzene-d5	9.460	1955650	
✓	Unknown Peak 9.6603	9.660	22652	
✓	Unknown Peak 9.7248	**9.725**	**52108**	
✓	Unknown Peak 9.8752	9.875	10423	
✓	Unknown Peak 10.226	10.226	47684	
✓	Unknown Peak 10.419	10.420	42158	
	Unknown Peak 10.541	10.541	129587	
✓	4-Bromofluorobenzene	10.921	2204437	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072520.d
Sample #: 2107282-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.2

	Compounds	RT	Peak Area	10
☑	Unknown Peak 10.999	11.000	15314	
☑	Unknown Peak 11.257	11.258	13095	
☑	Unknown Peak 11.401	11.401	21578	
☑	Unknown Peak 11.623	11.623	45373	
☑	Unknown Peak 11.931	11.931	41553	
☑	Unknown Peak 12.067	12.067	31064	
☑	Unknown Peak 12.453	12.454	40595	
☑	Unknown Peak 12.640	12.640	35007	
☑	Unknown Peak 12.812	12.812	34896	
☑	Unknown Peak 12.991	12.991	28476	
☑	Unknown Peak 13.363	13.364	39517	
☑	Unknown Peak 13.521	13.521	23536	
☑	Unknown Peak 13.643	13.643	44881	
☑	Unknown Peak 13.800	13.801	33780	
☑	Unknown Peak 14.387	14.388	10031	
☑	Unknown Peak 14.516	14.517	30725	
☑	Unknown Peak 14.624	14.624	26540	
☑	Unknown Peak 14.910	14.911	39274	

Air Toxics Ltd.

File Results

Data File: File Information: p072521.d
Sample #: 2107282-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	42	(10509905.0963759 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072521.d
Sample #: 2107282-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2406	1.241	67456	
	Unknown Peak 1.5065	1.507	13170250	
	Freon 12	1.730	847368	
	Unknown Peak 1.8983	1.898	230533	
✓	Unknown Peak 2.2394	2.239	70834	
✓	Unknown Peak 2.5259	2.526	13883	
✓	Unknown Peak 2.8984	2.898	12306	
✓	Unknown Peak 3.3640	3.364	17187	
	Unknown Peak 3.7293	3.729	94598	
	2-Propanol	3.901	71794	
✓	Unknown Peak 4.417	4.417	69646	
✓	Unknown Peak 5.3840	5.384	41330	
✓	Unknown Peak 5.4341	5.434	41871	
✓	Unknown Peak 5.5702	5.570	16283	
✓	Unknown Peak 5.6347	5.635	21756	
✓	Bromochloromethane	5.792	988081	
	Chloroform	5.842	661271	
✓	Unknown Peak 6.2221	6.222	32543	
✓	1,2-Dichloroethane-d4	6.315	696340	
✓	Unknown Peak 6.5229	6.523	25931	
✓	1,4-Difluorobenzene	6.666	1407110	
✓	Unknown Peak 7.1246	7.125	13474	
✓	Unknown Peak 7.2464	7.246	47295	
✓	Unknown Peak 7.4469	7.447	14261	
✓	Unknown Peak 7.5830	7.583	83303	
✓	Toluene-d8	7.898	1784743	
✓	Unknown Peak 8.0415	8.041	18652	
✓	Unknown Peak 8.2062	8.206	76568	
	Tetrachloroethene	8.471	1919252	
✓	Unknown Peak 8.6718	8.672	108676	
	Unknown Peak 8.7578	8.758	224316	
✓	Unknown Peak 8.8294	8.829	56030	
	Unknown Peak 8.9082	8.908	242832	
	Unknown Peak 9.2234	9.223	297679	
✓	Chlorobenzene-d5	9.460	1983828	
✓	Unknown Peak 9.6675	9.668	35265	
✓	Unknown Peak 9.7319	9.732	52596	
✓	Unknown Peak 9.8752	9.875	12296	
✓	Unknown Peak 10.226	10.226	39631	
✓	Unknown Peak 10.419	10.420	33318	
✓	Unknown Peak 10.541	10.541	106935	
✓	Unknown Peak 10.684	10.685	14376	
✓	Unknown Peak 10.770	10.771	25893	
✓	4-Bromofluorobenzene	10.921	2254598	
✓	Unknown Peak 10.999	11.000	17453	
✓	Unknown Peak 11.085	11.086	16986	
✓	Unknown Peak 11.408	11.408	14813	
✓	Unknown Peak 11.637	11.637	35399	
✓	Unknown Peak 12.081	12.081	14869	
✓	Unknown Peak 12.461	12.461	28935	
✓	Unknown Peak 12.647	12.647	24831	
✓	Unknown Peak 12.819	12.819	40957	

List of Selected Compounds

Data File: File Information: p072521.d
Sample #: 2107282-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.18

	Compounds	RT	Peak Area	10
✓	Unknown Peak 12.991	12.991	18841	
✓	Unknown Peak 13.370	13.371	19920	
✓	Unknown Peak 13.499	13.500	10644	
✓	Unknown Peak 13.643	13.643	19244	
✓	Unknown Peak 14.624	14.624	16003	
✓	Unknown Peak 14.903	14.904	14173	

Air Toxics Ltd.

File Results

Data File: File Information: p072522.d
Sample #: 2107282-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	57	(11085813.6819909 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072522.d
Sample #: 2107282-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
	Unknown Peak 1.5066	1.507	13112267	
	Freon 12	1.730	1134675	
	Unknown Peak 1.8983	1.898	213151	
✓	Unknown Peak 2.0318	2.032	20156	
	Unknown Peak 2.2395	2.240	152525	
✓	Unknown Peak 2.6263	2.626	25222	
	Freon 11	2.891	127332	
✓	Unknown Peak 3.2352	3.235	23840	
✓	Unknown Peak 3.3713	3.371	36169	
✓	Unknown Peak 3.7294	3.729	87241	
✓	Unknown Peak 3.9156	3.916	32909	
✓	Unknown Peak 4.4099	4.410	89868	
✓	Unknown Peak 5.3268	5.327	10433	
✓	Unknown Peak 5.3841	5.384	23393	
✓	Unknown Peak 5.4772	5.477	22965	
✓	Unknown Peak 5.5631	5.563	17565	
✓	Bromochloromethane	5.785	1245237	
✓	Chloroform	5.843	37279	
✓	Unknown Peak 5.9714	5.971	51858	
✓	Unknown Peak 6.0574	6.057	21550	
✓	1,2-Dichloroethane-d4	6.315	763335	
✓	Unknown Peak 6.4514	6.451	12675	
✓	Unknown Peak 6.5158	6.516	36544	
✓	1,4-Difluorobenzene	6.666	1381790	
✓	Unknown Peak 6.9384	6.938	12621	
✓	Unknown Peak 6.9743	6.974	28190	
✓	Unknown Peak 7.1318	7.132	37086	
✓	Unknown Peak 7.3038	7.304	19594	
✓	Unknown Peak 7.4112	7.411	48658	
✓	Unknown Peak 7.576	7.576	74964	
✓	Toluene-d8	7.891	1777685	
✓	Unknown Peak 8.0487	8.049	86554	
	Unknown Peak 8.1562	8.156	644947	
	Tetrachloroethene	8.471	2322083	
✓	Unknown Peak 8.7006	8.701	66785	
✓	Unknown Peak 8.7579	8.758	26503	
✓	Unknown Peak 8.9011	8.901	38257	
✓	Unknown Peak 9.2235	9.223	28506	
✓	Chlorobenzene-d5	9.460	1931923	
✓	Unknown Peak 9.7249	9.725	26642	
✓	Unknown Peak 9.8681	9.868	11052	
✓	Unknown Peak 10.362	10.362	10445	
✓	Unknown Peak 10.505	10.506	30080	
✓	Unknown Peak 10.598	10.599	17075	
✓	Unknown Peak 10.849	10.850	106459	
✓	4-Bromofluorobenzene	10.921	2292570	
✓	Unknown Peak 11.157	11.158	14364	
✓	Unknown Peak 11.401	11.401	31782	
✓	Unknown Peak 11.615	11.616	16750	
✓	Unknown Peak 11.923	11.924	30948	
✓	Unknown Peak 11.981	11.981	15692	
✓	Unknown Peak 12.067	12.067	36764	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072522.d
Sample #: 2107282-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
✓	Unknown Peak 12.454	12.454	19059	
✓	Unknown Peak 12.640	12.640	31619	
✓	Unknown Peak 12.812	12.812	31714	
✓	Unknown Peak 12.984	12.984	36575	
✓	Unknown Peak 13.363	13.364	44378	
✓	Unknown Peak 13.535	13.536	25670	
✓	Unknown Peak 13.643	13.643	30181	
✓	Unknown Peak 13.786	13.786	23136	
✓	Unknown Peak 14.516	14.517	26481	
✓	Unknown Peak 14.903	14.904	47639	
✓	Unknown Peak 15.455	15.455	11379	

Air Toxics Ltd.

File Results

Data File: File Information: p072528.d
Sample #: 2107282-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	92	(11885854.8393519 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072528.d
Sample #: 2107282-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

Compounds	RT	Peak Area	10
Unknown Peak 1.2406	1.241	66637	
Unknown Peak 1.5064	1.506	10697657	
1,1-Difluoroethane	1.716	5694074	
Freon 12	1.730	77463	
Unknown Peak 1.8982	1.898	764016	
Unknown Peak 2.0889	2.089	125492	
Unknown Peak 2.2465	2.247	504179	
Unknown Peak 2.5402	2.540	29388	
Unknown Peak 2.6262	2.626	78744	
Freon 11	2.891	1069331	
Unknown Peak 3.0345	3.034	11565	
Unknown Peak 3.2207	3.221	75004	
Unknown Peak 3.3711	3.371	187335	
Unknown Peak 3.5932	3.593	47562	
Acetone	3.729	116229	
Unknown Peak 3.9083	3.908	77180	
Unknown Peak 4.0659	4.066	68017	
Unknown Peak 4.2450	4.245	28081	
Unknown Peak 4.4098	4.410	339180	
Unknown Peak 4.6963	4.696	15515	
Unknown Peak 4.9040	4.904	30990	
Unknown Peak 5.3839	5.384	58297	
Unknown Peak 5.4269	5.427	60356	
Unknown Peak 5.5630	5.563	21510	
Bromochloromethane	5.785	993618	
Chloroform	5.842	284496	
Unknown Peak 6.2292	6.229	104081	
1,2-Dichloroethane-d4	6.315	673707	
Unknown Peak 6.5085	6.509	116633	
1,4-Difluorobenzene	6.666	1363421	
Unknown Peak 6.8380	6.838	16801	
Unknown Peak 6.9240	6.924	11867	
Unknown Peak 7.1317	7.132	11574	
Unknown Peak 7.2392	7.239	13676	
Unknown Peak 7.5758	7.576	66991	
Toluene-d8	7.891	1692197	
Unknown Peak 8.0414	8.041	12743	
Unknown Peak 8.2062	8.206	28383	
Tetrachloroethene	8.471	1258675	
Unknown Peak 8.6646	8.665	19105	
Unknown Peak 8.7577	8.758	40676	
Unknown Peak 8.9010	8.901	88451	
Unknown Peak 9.2162	9.216	56072	
Chlorobenzene-d5	9.460	1806275	
Unknown Peak 9.6603	9.660	24789	
Unknown Peak 9.7247	9.725	20032	
Unknown Peak 10.412	10.412	12143	
Unknown Peak 10.512	10.513	15850	
Unknown Peak 10.541	10.541	21600	
Unknown Peak 10.763	10.763	27153	
4-Bromofluorobenzene	10.921	2019469	
Unknown Peak 11.931	11.931	12999	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072528.d
Sample #: 2107282-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.28

	Compounds	RT	Peak Area	10
☑	Unknown Peak 12.067	12.067	13592	☐
☑	Unknown Peak 12.826	12.826	73266	☐
☑	Unknown Peak 13.377	13.378	24217	☐
☑	Unknown Peak 13.549	13.550	21537	☐
☑	Unknown Peak 15.505	15.505	10522	☐

Air Toxics Ltd.

File Results

Data File: File Information: p072523.d
Sample #: 2107282-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	4.5	(9371962.17998075 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072523.d
Sample #: 2107282-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.17

	Compounds	RT	Peak Area	10
	Unknown Peak 1.1707	1.171	221317	
	Unknown Peak 1.5066	1.507	13485194	
	Freon 12	1.730	919750	
✓	Unknown Peak 2.2395	2.240	54532	
	Freon 11	2.899	21264	
	Acetone	3.729	237672	
✓	Unknown Peak 3.9085	3.909	36172	
✓	Unknown Peak 5.3840	5.384	15582	
✓	Unknown Peak 5.4414	5.441	19065	
✓	Bromochloromethane	5.785	1073788	
	Chloroform	5.843	22189	
✓	1,2-Dichloroethane-d4	6.315	643414	
✓	Unknown Peak 6.5158	6.516	17170	
✓	1,4-Difluorobenzene	6.666	1378304	
✓	Unknown Peak 7.1247	7.125	18616	
✓	Unknown Peak 7.5831	7.583	29395	
✓	Toluene-d8	7.898	1704769	
✓	Unknown Peak 8.0415	8.042	16989	
✓	Unknown Peak 8.1490	8.149	13731	
✓	Unknown Peak 8.3710	8.371	19345	
	Tetrachloroethene	8.471	1297647	
✓	Unknown Peak 8.7077	8.708	14922	
✓	Unknown Peak 9.0945	9.095	13509	
✓	Chlorobenzene-d5	9.460	1891357	
✓	Unknown Peak 9.6747	9.675	15213	
✓	4-Bromofluorobenzene	10.921	2245170	
✓	Unknown Peak 11.157	11.158	20257	
✓	Unknown Peak 11.401	11.401	15608	
✓	Unknown Peak 11.630	11.630	14560	
✓	Unknown Peak 12.067	12.067	12192	
✓	Unknown Peak 12.826	12.826	20749	
✓	Unknown Peak 13.385	13.385	25177	
✓	Unknown Peak 14.552	14.553	20578	
✓	Unknown Peak 15.505	15.505	21800	

Air Toxics Ltd.

File Results

Data File: File Information: p072524.d
Sample #: 2107282-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	3.5	(9347654.28209651 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072524.d
Sample #: 2107282-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2407	1.241	106485	
	Unknown Peak 1.5066	1.507	15531490	
	Freon 12	1.730	1230063	
✓	Unknown Peak 2.0246	2.025	94189	
✓	Unknown Peak 2.2323	2.232	73708	
	Freon 11	2.891	38096	
	Acetone	3.722	125698	
✓	Unknown Peak 3.9013	3.901	47988	
✓	Unknown Peak 4.3454	4.345	53049	
✓	Unknown Peak 4.9471	4.947	27253	
✓	Unknown Peak 5.1047	5.105	11220	
✓	Unknown Peak 5.3769	5.377	18304	
✓	Unknown Peak 5.4342	5.434	24837	
✓	Unknown Peak 5.5631	5.563	12325	
✓	Unknown Peak 5.6204	5.620	15460	
✓	Bromochloromethane	5.785	1085968	
✓	Chloroform	5.843	40275	
✓	1,2-Dichloroethane-d4	6.315	619492	
✓	Unknown Peak 6.5087	6.509	31490	
✓	1,4-Difluorobenzene	6.659	1294472	
✓	Unknown Peak 7.1247	7.125	22765	
✓	Unknown Peak 7.5831	7.583	30946	
✓	Toluene-d8	7.891	1609578	
✓	Unknown Peak 8.0487	8.049	19026	
✓	Unknown Peak 8.1562	8.156	49210	
	Tetrachloroethene	8.464	885684	
✓	Unknown Peak 8.7006	8.701	26153	
✓	Unknown Peak 9.0014	9.001	20222	
✓	Chlorobenzene-d5	9.460	1714619	
✓	Unknown Peak 10.598	10.599	35176	
✓	Unknown Peak 10.777	10.778	14198	
✓	4-Bromofluorobenzene	10.921	1976224	
✓	Unknown Peak 11.157	11.158	12732	
✓	Unknown Peak 11.401	11.401	26983	
✓	Unknown Peak 11.637	11.637	13809	
✓	Unknown Peak 11.938	11.938	12211	
✓	Unknown Peak 12.067	12.067	17084	
✓	Unknown Peak 12.461	12.461	15633	
✓	Unknown Peak 12.647	12.647	16288	
✓	Unknown Peak 12.819	12.819	23301	
✓	Unknown Peak 12.984	12.984	12905	
✓	Unknown Peak 13.363	13.364	20189	
✓	Unknown Peak 13.528	13.528	10777	
✓	Unknown Peak 13.643	13.643	35186	
✓	Unknown Peak 13.793	13.794	38622	
✓	Unknown Peak 14.509	14.510	19755	
✓	Unknown Peak 14.610	14.610	18458	
✓	Unknown Peak 14.910	14.911	66308	
✓	Unknown Peak 15.462	15.463	19266	

Air Toxics Ltd.

File Results

Data File: File Information: p072525.d
Sample #: 2107282-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	46	(10623627.8108227 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072525.d
Sample #: 2107282-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.5066	1.507	11891640	
☐	Freon 12	1.730	583207	
☑	Unknown Peak 2.0318	2.032	108656	
☐	Unknown Peak 2.2395	2.240	366987	
☑	Unknown Peak 2.4830	2.483	40041	
☑	Unknown Peak 2.9128	2.913	19180	
☑	Unknown Peak 3.2638	3.264	22726	
☑	Unknown Peak 3.6148	3.615	25373	
☐	Acetone	3.722	640640	
☑	Unknown Peak 3.9085	3.909	45529	
☑	Unknown Peak 4.1234	4.123	11669	
☑	Unknown Peak 4.2165	4.217	11695	
☐	tert-Butyl alcohol	4.345	144900	
☑	Unknown Peak 4.7179	4.718	22467	
☑	Unknown Peak 4.9400	4.940	17100	
☐	Unknown Peak 5.3769	5.377	163880	
☑	Unknown Peak 5.4342	5.434	93016	
☐	2-Butanone (Methyl Ethyl Ketone)	5.563	140644	
☑	Unknown Peak 5.6276	5.628	26094	
☑	Bromochloromethane	5.785	963315	
☑	Unknown Peak 5.9714	5.971	13894	
☑	Unknown Peak 6.1649	6.165	51409	
☑	Benzene	6.301	18965	
☑	1,2-Dichloroethane-d4	6.315	684469	
☑	Unknown Peak 6.4585	6.459	14987	
☑	Unknown Peak 6.5087	6.509	35052	
☑	Unknown Peak 6.5875	6.588	29161	
☑	1,4-Difluorobenzene	6.666	1338882	
☑	Unknown Peak 6.7522	6.752	20663	
☑	Unknown Peak 6.8167	6.817	33117	
☑	Unknown Peak 7.0316	7.032	43989	
☐	Unknown Peak 7.1247	7.125	124089	
☑	Unknown Peak 7.3109	7.311	79732	
☑	Unknown Peak 7.5760	7.576	46376	
☑	Unknown Peak 7.7049	7.705	15829	
☑	Unknown Peak 7.7980	7.798	27960	
☑	Toluene-d8	7.891	1668762	
☑	Unknown Peak 8.0487	8.049	17538	
☑	Unknown Peak 8.1418	8.142	16367	
☑	Unknown Peak 8.3066	8.307	13048	
☑	Unknown Peak 8.3782	8.378	19908	
☐	Tetrachloroethene	8.471	455267	
☑	Unknown Peak 8.5931	8.593	30908	
☑	Unknown Peak 8.7006	8.701	97506	
☑	Unknown Peak 8.7794	8.779	37518	
☑	Unknown Peak 8.9011	8.901	13060	
☑	Unknown Peak 9.2521	9.252	13006	
☑	Unknown Peak 9.3667	9.367	12680	
☑	Chlorobenzene-d5	9.460	1775975	
☑	Unknown Peak 9.5816	9.582	33250	
☑	Unknown Peak 9.7177	9.718	43855	
☑	Unknown Peak 10.226	10.226	24930	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072525.d
Sample #: 2107282-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

	Compounds	RT	Peak Area	10
✓	Unknown Peak 10.369	10.370	41693	
✓	Unknown Peak 10.505	10.506	60537	
✓	Unknown Peak 10.598	10.599	46635	
✓	Unknown Peak 10.763	10.764	48955	
✓	Unknown Peak 10.849	10.850	35474	
✓	4-Bromofluorobenzene	10.921	2063064	
✓	Unknown Peak 11.014	11.014	16990	
✓	Unknown Peak 11.150	11.150	21891	
✓	Unknown Peak 11.257	11.258	33181	
✓	Unknown Peak 11.401	11.401	47334	
✓	Unknown Peak 11.608	11.609	31991	
✓	Unknown Peak 11.809	11.809	24636	
✓	Unknown Peak 11.931	11.931	26847	
✓	Unknown Peak 12.067	12.067	39529	
✓	Unknown Peak 12.310	12.311	16944	
✓	Unknown Peak 12.461	12.461	39355	
✓	Unknown Peak 12.597	12.597	16937	
✓	Unknown Peak 12.812	12.812	64350	
✓	Unknown Peak 12.991	12.991	43665	
✓	Unknown Peak 13.363	13.364	24819	
✓	Unknown Peak 13.514	13.514	19043	
✓	Unknown Peak 13.643	13.643	47317	
✓	Unknown Peak 13.793	13.794	24577	
✓	Unknown Peak 14.380	14.381	14553	
✓	Unknown Peak 14.517	14.517	12026	
✓	Unknown Peak 14.617	14.617	16246	
✓	Unknown Peak 14.910	14.911	48391	
✓	Unknown Peak 15.476	15.477	16988	

Air Toxics Ltd.

File Results

Data File: File Information: p072529.d
Sample #: 2107282-10A
Client ID:
Spike Level: 0
Dilution Factor: 41.8

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(8160221.64383214 - 9236552.34008662 / 6553

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072529.d
Sample #: 2107282-10A
Client ID:
Spike Level: 0
Dilution Factor: 41.8

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.5066	1.507	10648341	☐
☐	1,1-Difluoroethane	1.689	3692116	☐
☑	Bromochloromethane	5.778	992766	☐
☑	1,2-Dichloroethane-d4	6.308	625197	☐
☑	1,4-Difluorobenzene	6.666	1283384	☐
☑	Toluene-d8	7.891	1578116	☐
☑	Unknown Peak 8.3209	8.321	62166	☐
☑	Unknown Peak 8.4642	8.464	24322	☐
☑	Chlorobenzene-d5	9.460	1672358	☐
☑	4-Bromofluorobenzene	10.921	1908592	☐
☑	Unknown Peak 15.512	15.513	13320	☐

Air Toxics Ltd.

File Results

Data File: File Information: p072526.d
Sample #: 2107282-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.45

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	110	(12140544.2524822 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072526.d
Sample #: 2107282-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.45

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2408	1.241	91626	
	Unknown Peak 1.5067	1.507	5973470	
✓	Unknown Peak 1.7025	1.703	122662	
	Freon 12	1.731	182887	
✓	Unknown Peak 1.9124	1.912	96876	
✓	Unknown Peak 2.0963	2.096	12195	
✓	Unknown Peak 2.2467	2.247	159129	
✓	Unknown Peak 2.6335	2.634	10907	
✓	Unknown Peak 2.8484	2.848	136262	
✓	Unknown Peak 3.3785	3.379	18876	
✓	Unknown Peak 3.6006	3.601	19254	
	Acetone	3.730	140547	
✓	Unknown Peak 3.9157	3.916	39993	
✓	Unknown Peak 4.3598	4.360	29231	
✓	Unknown Peak 4.4171	4.417	55730	
✓	Unknown Peak 5.3841	5.384	31666	
✓	Unknown Peak 5.4343	5.434	37609	
✓	Unknown Peak 5.4773	5.477	45489	
✓	Unknown Peak 5.5632	5.563	20877	
✓	Unknown Peak 5.6277	5.628	11883	
✓	Bromochloromethane	5.785	1039550	
✓	Unknown Peak 5.9572	5.957	25177	
✓	Unknown Peak 6.0646	6.065	11185	
✓	Unknown Peak 6.2222	6.222	13550	
✓	1,2-Dichloroethane-d4	6.315	643330	
✓	1,4-Difluorobenzene	6.666	1328363	
✓	Unknown Peak 6.9743	6.974	51008	
✓	Unknown Peak 7.1248	7.125	23978	
✓	Unknown Peak 7.3038	7.304	30522	
✓	Unknown Peak 7.4113	7.411	79407	
✓	Unknown Peak 7.5760	7.576	78465	
✓	Unknown Peak 7.7981	7.798	14809	
✓	Toluene-d8	7.891	1702776	
✓	Toluene	7.956	387158	
✓	Unknown Peak 8.1491	8.149	32878	
✓	Unknown Peak 8.2350	8.235	21406	
✓	Unknown Peak 8.3640	8.364	23464	
	Tetrachloroethene	8.471	595031	
✓	Unknown Peak 8.7006	8.701	29018	
✓	Unknown Peak 8.7508	8.751	33699	
✓	Unknown Peak 8.9012	8.901	51244	
✓	Unknown Peak 8.9728	8.973	22684	
✓	Unknown Peak 9.2164	9.216	33756	
✓	Chlorobenzene-d5	9.460	1823343	
✓	Ethyl Benzene	9.567	172970	
✓	m,p-Xylene	9.718	511135	
✓	o-Xylene	10.226	163308	
	Unknown Peak 10.541	10.542	26772	
	Unknown Peak 10.756	10.756	151281	
✓	Unknown Peak 10.842	10.842	40729	
✓	4-Bromofluorobenzene	10.921	2154128	
✓	Unknown Peak 11.150	11.150	29631	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072526.d
Sample #: 2107282-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.45

	Compounds	RT	Peak Area	10
✓	4-Ethyltoluene	11.258	181863	
✓	Unknown Peak 11.365	11.365	82274	
✓	Unknown Peak 11.616	11.616	51096	
✓	1,2,4-Trimethylbenzene	11.817	141751	
✓	Unknown Peak 11.924	11.924	13314	
✓	Unknown Peak 12.074	12.074	17214	
✓	Unknown Peak 12.318	12.318	24569	
✓	Unknown Peak 12.461	12.461	11607	
	Unknown Peak 12.540	12.540	43322	
✓	Unknown Peak 12.597	12.597	50517	
	Unknown Peak 12.812	12.812	111581	
✓	Unknown Peak 13.019	13.020	13110	
✓	Unknown Peak 13.363	13.364	27246	
✓	Unknown Peak 13.521	13.521	15247	
✓	Unknown Peak 13.643	13.643	14686	
✓	Unknown Peak 13.772	13.772	10746	
✓	Unknown Peak 13.987	13.987	18861	
✓	Unknown Peak 14.380	14.381	10201	
✓	Unknown Peak 14.517	14.517	13757	
	Unknown Peak 14.896	14.897	65636	
✓	Unknown Peak 15.462	15.463	21172	

Air Toxics Ltd.

File Results

Data File: File Information: p072527.d
Sample #: 2107282-12A
Client ID:
Spike Level: 0
Dilution Factor: 2.39

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	74	(11253504.8057198 - 9236552.34008662 / 65533

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072527.d
Sample #: 2107282-12A
Client ID:
Spike Level: 0
Dilution Factor: 2.39

Compounds	RT	Peak Area	10
Unknown Peak 1.2407	1.241	66747	
Unknown Peak 1.5065	1.507	6658854	
Freon 12	1.730	562311	
Unknown Peak 1.9123	1.912	127990	
Unknown Peak 1.9543	1.954	62624	
Unknown Peak 2.2395	2.240	135069	
Unknown Peak 2.6191	2.619	62938	
Unknown Peak 2.8483	2.848	219622	
Unknown Peak 3.2208	3.221	28641	
Unknown Peak 3.3784	3.378	72542	
Unknown Peak 3.7294	3.729	91072	
Unknown Peak 3.9084	3.908	65859	
Unknown Peak 4.2523	4.252	12953	
Unknown Peak 4.4242	4.424	146681	
Unknown Peak 4.8969	4.897	22113	
Unknown Peak 5.3840	5.384	28977	
Unknown Peak 5.4413	5.441	45560	
Unknown Peak 5.6276	5.628	17757	
Bromochloromethane	5.785	1119991	
Unknown Peak 6.2293	6.229	76325	
1,2-Dichloroethane-d4	6.315	674181	
1,4-Difluorobenzene	6.666	1333534	
Unknown Peak 7.0459	7.046	10554	
Unknown Peak 7.1247	7.125	11296	
Unknown Peak 7.2393	7.239	33471	
Unknown Peak 7.5759	7.576	65896	
Toluene-d8	7.891	1731056	
Unknown Peak 8.2063	8.206	51417	
Tetrachloroethene	8.471	772834	
Unknown Peak 8.6719	8.672	33191	
Unknown Peak 8.7578	8.758	45915	
Unknown Peak 8.9011	8.901	122257	
Unknown Peak 9.2163	9.216	92182	
Chlorobenzene-d5	9.460	1874888	
Unknown Peak 9.6675	9.668	20668	
Unknown Peak 9.7177	9.718	68440	
Unknown Peak 10.197	10.198	17593	
Unknown Peak 10.226	10.226	17361	
Unknown Peak 10.412	10.413	35801	
Unknown Peak 10.541	10.541	51707	
Unknown Peak 10.756	10.756	132088	
4-Bromofluorobenzene	10.921	2157610	
Unknown Peak 11.257	11.258	11823	
Unknown Peak 11.401	11.401	10946	
Unknown Peak 11.644	11.645	12710	
Unknown Peak 11.931	11.931	16491	
Unknown Peak 12.067	12.067	11641	
Unknown Peak 12.461	12.461	12060	
Unknown Peak 12.819	12.819	102189	
Unknown Peak 12.984	12.984	51056	
Unknown Peak 13.370	13.371	27659	
Unknown Peak 13.535	13.536	58373	

List of Selected Compounds

Data File: File Information: p072527.d
Sample #: 2107282-12A
Client ID:
Spike Level: 0
Dilution Factor: 2.39

Compounds	RT	Peak Area	10
Unknown Peak 14.910	14.911	30286	
Unknown Peak 15.455	15.455	14781	

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi –[Init. Pressure (“Hg))*(14.7psi/30”Hg)]}}$

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{\text{14.7psi + Final Pressure (psi)}}{\text{14.7psi +Initial Pressure (psi)}}$

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
0.0	**1.14**	1.34	**1.68**	2.02
0.2	**1.14**	1.35	**1.69**	2.03
0.4	**1.15**	1.36	**1.70**	2.05
0.5	**1.16**	1.36	**1.71**	2.05
0.6	**1.16**	1.37	**1.71**	2.06
0.8	**1.17**	1.38	**1.73**	2.08
1.0	**1.18**	1.39	**1.74**	2.09
1.2	**1.18**	1.40	**1.75**	2.10
1.4	**1.19**	1.40	**1.76**	2.12
1.5	**1.20**	1.41	**1.77**	2.13
1.6	**1.20**	1.42	**1.77**	2.13
1.8	**1.21**	1.42	**1.79**	2.15
2.0	**1.22**	1.44	**1.80**	2.16
2.2	**1.23**	1.45	**1.81**	2.18
2.4	**1.23**	1.46	**1.83**	2.20
2.5	**1.24**	1.46	**1.83**	2.20
2.6	**1.24**	1.47	**1.84**	2.21
2.8	**1.25**	1.48	**1.85**	2.23
3.0	**1.26**	1.49	**1.87**	2.24
3.2	**1.27**	1.50	**1.88**	2.26
3.4	**1.28**	1.51	**1.90**	2.28
3.5	**1.29**	1.52	**1.90**	2.29
3.6	**1.29**	1.52	**1.91**	2.30
3.8	**1.30**	1.53	**1.92**	2.31
4.0	**1.31**	1.55	**1.94**	2.33
4.2	**1.32**	1.56	**1.95**	2.35
4.4	**1.33**	1.57	**1.97**	2.37
4.5	**1.34**	1.58	**1.98**	2.38
4.6	**1.34**	1.58	**1.98**	2.39
4.8	**1.35**	1.60	**2.00**	2.40
5.0	**1.36**	1.61	**2.02**	2.42
5.2	**1.37**	1.62	**2.03**	2.44
5.4	**1.39**	1.63	**2.05**	2.46
5.5	**1.39**	1.64	**2.06**	2.47
5.6	**1.40**	1.65	**2.07**	2.48
5.8	**1.41**	1.66	**2.08**	2.50
6.0	**1.42**	1.68	**2.10**	2.52
6.2	**1.43**	1.69	**2.12**	2.55
6.4	**1.44**	1.70	**2.14**	2.57
6.5	**1.45**	1.71	**2.15**	2.58
6.6	**1.46**	1.72	**2.15**	2.59
6.8	**1.47**	1.73	**2.17**	2.61
7.0	**1.48**	1.75	**2.19**	2.64
7.2	**1.49**	1.76	**2.21**	2.66
7.4	**1.51**	1.78	**2.23**	2.68
7.5	**1.51**	1.79	**2.24**	2.69
7.6	**1.52**	1.79	**2.25**	2.70

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
7.7	**1.53**	1.80	**2.26**	2.72
7.8	**1.54**	1.81	**2.27**	2.73
8.0	**1.55**	1.83	**2.29**	2.76
8.2	**1.56**	1.84	**2.31**	2.78
8.4	**1.58**	1.86	**2.33**	2.81
8.5	**1.59**	1.87	**2.34**	2.82
8.6	**1.59**	1.88	**2.36**	2.83
8.8	**1.61**	1.90	**2.38**	2.86
9.0	**1.62**	1.91	**2.40**	2.89
9.2	**1.64**	1.93	**2.42**	2.91
9.4	**1.65**	1.95	**2.45**	2.94
9.5	**1.66**	1.96	**2.46**	2.96
9.6	**1.67**	1.97	**2.47**	2.97
9.8	**1.69**	1.99	**2.50**	3.00
10.0	**1.70**	2.01	**2.52**	3.03
10.2	**1.72**	2.03	**2.55**	3.06
10.4	**1.74**	2.05	**2.57**	3.09
10.5	**1.75**	2.06	**2.59**	3.11
10.6	**1.76**	2.07	**2.60**	3.12
10.8	**1.78**	2.09	**2.63**	3.16
11.0	**1.79**	2.12	**2.65**	3.19
11.2	**1.81**	2.14	**2.68**	3.22
11.4	**1.83**	2.16	**2.71**	3.26
11.5	**1.84**	2.17	**2.72**	3.28
11.6	**1.85**	2.18	**2.74**	3.29
11.8	**1.87**	2.21	**2.77**	3.33
12.0	**1.89**	2.23	**2.80**	3.37
12.2	**1.91**	2.26	**2.83**	3.40
12.4	**1.94**	2.28	**2.86**	3.44
12.5	**1.95**	2.30	**2.88**	3.46
12.6	**1.96**	2.31	**2.90**	3.48
12.8	**1.98**	2.34	**2.93**	3.52
13.0	**2.00**	2.36	**2.97**	3.56
13.2	**2.03**	2.39	**3.00**	3.61
13.4	**2.05**	2.42	**3.04**	3.65
13.5	**2.07**	2.44	**3.06**	3.67
13.6	**2.08**	2.45	**3.07**	3.70
13.8	**2.10**	2.48	**3.11**	3.74
14.0	**2.13**	2.51	**3.15**	3.79
14.2	**2.16**	2.54	**3.19**	3.84
14.4	**2.18**	2.58	**3.23**	3.88
14.5	**2.20**	2.59	**3.25**	3.91
14.6	**2.21**	2.61	**3.27**	3.94
14.8	**2.24**	2.64	**3.32**	3.99
15.0	**2.27**	2.68	**3.36**	4.04
15.2	**2.30**	2.72	**3.41**	4.10
15.4	**2.33**	2.75	**3.45**	4.15

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
15.5	**2.35**	2.77	**3.48**	4.18
15.6	**2.37**	2.79	**3.50**	4.21
15.8	**2.40**	2.83	**3.55**	4.27
16.0	**2.43**	2.87	**3.60**	4.33
16.2	**2.47**	2.91	**3.65**	4.39
16.4	**2.51**	2.96	**3.71**	4.46
16.5	**2.52**	2.98	**3.73**	4.49
16.6	**2.54**	3.00	**3.76**	4.52
16.8	**2.58**	3.05	**3.82**	4.59
17.0	**2.62**	3.09	**3.88**	4.66
17.2	**2.66**	3.14	**3.94**	4.74
17.4	**2.70**	3.19	**4.00**	4.81
17.5	**2.73**	3.22	**4.03**	4.85
17.6	**2.75**	3.24	**4.07**	4.89
17.8	**2.79**	3.30	**4.13**	4.97
18.0	**2.84**	3.35	**4.20**	5.05
18.2	**2.89**	3.41	**4.27**	5.14
18.4	**2.94**	3.47	**4.35**	5.22
18.5	**2.96**	3.50	**4.38**	5.27
18.6	**2.99**	3.53	**4.42**	5.32
18.8	**3.04**	3.59	**4.50**	5.41
19.0	**3.10**	3.65	**4.58**	5.51
19.2	**3.16**	3.72	**4.67**	5.61
19.4	**3.22**	3.79	**4.76**	5.72
19.5	**3.25**	3.83	**4.80**	5.77
19.6	**3.28**	3.87	**4.85**	5.83
19.8	**3.34**	3.94	**4.94**	5.94
20.0	**3.41**	4.02	**5.04**	6.06
20.2	**3.48**	4.10	**5.14**	6.18
20.4	**3.55**	4.19	**5.25**	6.31
20.5	**3.59**	4.23	**5.31**	6.38
20.6	**3.63**	4.28	**5.36**	6.45
20.8	**3.70**	4.37	**5.48**	6.59
21.0	**3.79**	4.47	**5.60**	6.73
21.2	**3.87**	4.57	**5.73**	6.89
21.4	**3.96**	4.67	**5.86**	7.05
21.5	**4.01**	4.73	**5.93**	7.13
21.6	**4.06**	4.79	**6.00**	7.22
21.8	**4.16**	4.90	**6.15**	7.39
22.0	**4.26**	5.03	**6.30**	7.58
22.4	**4.48**	5.29	**6.63**	7.98

Initial Vacuum (" of Hg)	2 psi	5 psi	10 psi	15 psi
22.5	**4.54**	5.36	**6.72**	8.08
22.6	**4.61**	5.43	**6.81**	8.19
22.8	**4.73**	5.58	**7.00**	8.42
23.0	**4.87**	5.74	**7.20**	8.66
23.2	**5.01**	5.91	**7.41**	8.91
23.4	**5.16**	6.09	**7.64**	9.18
23.5	**5.24**	6.19	**7.76**	9.32
23.6	**5.33**	6.28	**7.88**	9.47
23.8	**5.50**	6.48	**8.13**	9.78
24.0	**5.68**	6.70	**8.40**	10.10
24.2	**5.88**	6.93	**8.69**	10.45
24.4	**6.09**	7.18	**9.00**	10.82
24.5	**6.20**	7.31	**9.17**	11.02
24.6	**6.31**	7.45	**9.33**	11.22
24.8	**6.55**	7.73	**9.69**	11.66
25.0	**6.82**	8.04	**10.08**	12.12
25.2	**7.10**	8.38	**10.50**	12.63
25.4	**7.41**	8.74	**10.96**	13.18
25.5	**7.57**	8.93	**11.20**	13.47
25.6	**7.75**	9.14	**11.46**	13.78
25.8	**8.11**	9.57	**12.00**	14.43
26.0	**8.52**	10.05	**12.60**	15.15
26.2	**8.97**	10.58	**13.27**	15.95
26.4	**9.47**	11.17	**14.00**	16.84
26.5	**9.74**	11.49	**14.40**	17.32
26.6	**10.02**	11.82	**14.83**	17.83
26.8	**10.65**	12.56	**15.75**	18.94
27.0	**11.36**	13.40	**16.80**	20.20
27.2	**12.17**	14.36	**18.00**	21.65
27.4	**13.11**	15.46	**19.39**	23.31
27.5	**13.63**	16.08	**20.16**	24.24
27.6	**14.20**	16.75	**21.00**	25.26
27.8	**15.49**	18.27	**22.91**	27.55
28.0	**17.04**	20.10	**25.20**	30.31
28.2	**18.93**	22.34	**28.00**	33.67
28.4	**21.30**	25.13	**31.51**	37.88
28.5	**22.72**	26.80	**33.61**	40.41
28.6	**24.34**	28.72	**36.01**	43.29
28.8	**28.40**	33.50	**42.01**	50.51
29.0	**34.08**	40.20	**50.41**	60.61

eurofins | Air Toxics

Method:TO-15 (Sp)-AECOM (SMUD 59th alphanumeric)

CAS Number	Compound	Rpt. Limit(ppbv)
630-20-6	1,1,1,2-Tetrachloroethane	2.0
71-55-6	1,1,1-Trichloroethane	0.5
79-34-5	1,1,2,2-Tetrachloroethane	0.5
79-00-5	1,1,2-Trichloroethane	0.5
75-34-3	1,1-Dichloroethane	0.5
75-35-4	1,1-Dichloroethene	0.5
75-37-6	1,1-Difluoroethane	2.0
96-18-4	1,2,3-Trichloropropane	2.0
120-82-1	1,2,4-Trichlorobenzene	2.0
95-63-6	1,2,4-Trimethylbenzene	0.5
96-12-8	1,2-Dibromo-3-chloropropane	2.0
106-93-4	1,2-Dibromoethane (EDB)	0.5
95-50-1	1,2-Dichlorobenzene	0.5
107-06-2	1,2-Dichloroethane	0.5
78-87-5	1,2-Dichloropropane	0.5
108-67-8	1,3,5-Trimethylbenzene	0.5
106-99-0	1,3-Butadiene	0.5
541-73-1	1,3-Dichlorobenzene	0.5
106-46-7	1,4-Dichlorobenzene	0.5
123-91-1	1,4-Dioxane	2.0
540-84-1	2,2,4-Trimethylpentane	0.5
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2.0
591-78-6	2-Hexanone	2.0
67-63-0	2-Propanol	2.0
107-05-1	3-Chloropropene	2.0
622-96-8	4-Ethyltoluene	0.5
108-10-1	4-Methyl-2-pentanone	0.5
67-64-1	Acetone	5.0
107-02-8	Acrolein	2.0
107-13-1	Acrylonitrile	2.0
100-44-7	alpha-Chlorotoluene	0.5
71-43-2	Benzene	0.5

75-27-4	Bromodichloromethane	0.5
	Method:TO-15 (Sp)-AECOM (SMUD 59th alphanumeric)	

CAS Number	Compound	Rpt. Limit(ppbv)
75-25-2	Bromoform	0.5
74-83-9	Bromomethane	5.0
75-15-0	Carbon Disulfide	2.0
56-23-5	Carbon Tetrachloride	0.5
108-90-7	Chlorobenzene	0.5
75-00-3	Chloroethane	2.0
67-66-3	Chloroform	0.5
74-87-3	Chloromethane	5.0
156-59-2	cis-1,2-Dichloroethene	0.5
10061-01-5	cis-1,3-Dichloropropene	0.5
98-82-8	Cumene	0.5
110-82-7	Cyclohexane	0.5
124-48-1	Dibromochloromethane	0.5
74-95-3	Dibromomethane	2.0
64-17-5	Ethanol	5.0
141-78-6	Ethyl Acetate	2.0
100-41-4	Ethyl Benzene	0.5
637-92-3	Ethyl-tert-butyl ether	2.0
75-69-4	Freon 11	0.5
76-13-1	Freon 113	0.5
76-14-2	Freon 114	0.5
75-71-8	Freon 12	0.5
811-97-2	Freon 134a	2.0
142-82-5	Heptane	0.5
87-68-3	Hexachlorobutadiene	2.0
67-72-1	Hexachloroethane	2.0
110-54-3	Hexane	0.5
74-88-4	Iodomethane	5.0
108-20-3	Isopropyl ether	2.0
108-38-3	m,p-Xylene	0.5
1634-04-4	Methyl tert-butyl ether	2.0
75-09-2	Methylene Chloride	5.0
91-20-3	Naphthalene	1.0
95-47-6	o-Xylene	0.5
103-65-1	Propylbenzene	0.5

115-07-1	Propylene	2.0
100-42-5	Styrene	0.5
994-05-8	tert-Amyl methyl ether	2.0
75-65-0	tert-Butyl alcohol	2.0
127-18-4	Tetrachloroethene	0.5
109-99-9	Tetrahydrofuran	0.5
108-88-3	Toluene	0.5
9999-9999-038	TPH ref. to Gasoline (MW=100)	50.0
156-60-5	trans-1,2-Dichloroethene	0.5
10061-02-6	trans-1,3-Dichloropropene	0.5
79-01-6	Trichloroethene	0.5
108-05-4	Vinyl Acetate	2.0
593-60-2	Vinyl Bromide	2.0
75-01-4	Vinyl Chloride	0.5

	Surrogate	Method Limits
17060-07-0	1,2-Dichloroethane-d4	70-130
460-00-4	4-Bromofluorobenzene	70-130
2037-26-5	Toluene-d8	70-130

Eurofins Air Toxics	Data Review Checklist			Release Date: 10/22/19
Workorder # 2107282	Form F1.27	Revision #17	Revision Date: 10/22/19	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: MSDP 7/25/21 VD	S2:	S3:	S4:
✓				■	Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
✓				■	Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
NA				■	Manual Integrations included and approved				
✓				✓	Chain of Custody verified for special comments/notes and analyses requested (add comments below)				
✓				■	Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				
✓				■	Verified standard expiration dates				

Profile, analyses, reporting, special notes and unusual circumstances: S1 0x-0 out. 03-07a.

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: VD 7/25/21	A2: VD 7/26/21	A3:	A4:
✓	✓			✓	IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, Canister #s Verified and dilution ranges are met per SOP (ex. Over-ranged/overdiluted)				
NA	NA			NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
✓	NA			✓	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓	✓			■	12/24 Hr clock time & Hold Time met for all samples				
NA	NA			NA	Re-analysis of sample(s) has been evaluated for comparability and/or sample(s) has/have been checked for trends (Inf/Eff), field dups/trip blanks, samples following bad loads on auto samplers have been verified (system blks, confirmation runs)				
✓	✓			✓	All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes: A1: 01A, 02A full load. A2. 03A – 09A, 11A-12A-Full loads. MA-DI TC.

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No	T:		
						Initials/Instrument/ Date	D1: GL 7/27/21	D2:	D3:	D4:
NA					■	CAR # (if applicable)				
✓					■	Spectra Verified *(documentation of spectral defense included if applicable)*				
NA					■	TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓					■	Lab Narrative is correct				
NA					■	TPH/NMOC calculations complete and included in folder				

Special notes:

GL 7/27/21

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: GL 7/27/21	3rd Tier: *(needed only for DOD or per client request)*	
NA		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
	✓	Manually entered results are checked		
	✓	At least one result per sample is verified against Target quant sheets		
	✓	Appropriate data qualifier flags are applied		
	✓	Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable