Electronic Comprehensive Validation Package (eCVP)

Vera Belitsky Vera Belitsky 08-09-2021

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WORK ORDER #: 2107684

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:	07/30/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	08/06/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-SVM1A-01	TO-15	5.9 "Hg	10.1 psi
02A	SG-SVM1B-01	TO-15	6.5 "Hg	9.8 psi
03A	SG-SVM2A-01	TO-15	6.9 "Hg	10.1 psi
04A	SG-SVM2B-01	TO-15	4.9 "Hg	10.1 psi
05A	SG-SVM3A-01	TO-15	6.3 "Hg	9.7 psi
06A	SG-SVM3B-01	TO-15	7.1 "Hg	9.6 psi
07A	SG-VM65A-01	TO-15	6.5 "Hg	10.1 psi
08A	SG-VM65B-01	TO-15	5.5 "Hg	9.8 psi
09A	SG-VM66A-01	TO-15	6.3 "Hg	10 psi
10A	SG-VM66B-01	TO-15	7.1 "Hg	10.2 psi
11A	SG-VM66B-02	TO-15	6.9 "Hg	9.8 psi
12A	Lab Blank	TO-15	NA	NA
13A	CCV	TO-15	NA	NA
14A	LCS	TO-15	NA	NA
14AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 08/06/21

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

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LABORATORY NARRATIVE
EPA Method TO-15
AECOM
Workorder# 2107684

Eleven 1 Liter Summa Canister samples were received on July 30, 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.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

Dilution was performed on sample SG-SVM1A-01 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-SVM1A-01	2107684-01A	07/29/2021	07/30/2021	NA	4	08/02/2021	NA	GOOD
SG-SVM1B-01	2107684-02A	07/29/2021	07/30/2021	NA	5	08/03/2021	NA	GOOD
SG-SVM2A-01	2107684-03A	07/29/2021	07/30/2021	NA	4	08/02/2021	NA	GOOD
SG-SVM2B-01	2107684-04A	07/29/2021	07/30/2021	NA	4	08/02/2021	NA	GOOD
SG-SVM3A-01	2107684-05A	07/29/2021	07/30/2021	NA	4	08/02/2021	NA	GOOD
SG-SVM3B-01	2107684-06A	07/29/2021	07/30/2021	NA	4	08/02/2021	NA	GOOD
SG-VM65A-01	2107684-07A	07/30/2021	07/30/2021	NA	3	08/02/2021	NA	GOOD
SG-VM65B-01	2107684-08A	07/30/2021	07/30/2021	NA	3	08/02/2021	NA	GOOD
SG-VM66A-01	2107684-09A	07/30/2021	07/30/2021	NA	4	08/03/2021	NA	GOOD
SG-VM66B-01	2107684-10A	07/30/2021	07/30/2021	NA	4	08/03/2021	NA	GOOD
SG-VM66B-02	2107684-11A	07/30/2021	07/30/2021	NA	4	08/03/2021	NA	GOOD
Lab Blank	2107684-12A	NA	NA	NA	NA	08/02/2021	NA	GOOD
CCV	2107684-13A	NA	NA	NA	NA	08/02/2021	NA	GOOD
LCS	2107684-14A	NA	NA	NA	NA	08/02/2021	NA	GOOD
LCSD	2107684-14AA	NA	NA	NA	NA	08/02/2021	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-SVM1A-01

Lab ID#: 2107684-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloropropane	180	180	810	820
cis-1,2-Dichloroethene	180	13000	690	53000
Tetrachloroethene	180	48000	1200	330000
Trichloroethene	180	3400	940	18000

Client Sample ID: SG-SVM1B-01

Lab ID#: 2107684-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.3	14	10	34
Acetone	11	52	25	120
cis-1,2-Dichloroethene	1.1	16	4.2	63
Propylene	4.3	8.8	7.3	15
Tetrachloroethene	1.1	69	7.2	460
Trichloroethene	1.1	16	5.7	85

Client Sample ID: SG-SVM2A-01

Lab ID#: 2107684-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.4	12	11	29
Acetone	11	67	26	160
Propylene	4.4	23	7.5	40
Tetrachloroethene	1.1	14	7.4	96

Client Sample ID: SG-SVM2B-01

Lab ID#: 2107684-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2,4-Trimethylbenzene	1.0	2.7	5.0	13
2-Propanol	4.0	6.9	9.9	17
Acetone	10	14	24	33

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

Client Sample ID: SG-SVM2B-01

Lab ID#: 2107684-04A

Tetrachloroethene	1.0	11	6.8	77

Client Sample ID: SG-SVM3A-01

Lab ID#: 2107684-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.0	86	7.1	590

Client Sample ID: SG-SVM3B-01

Lab ID#: 2107684-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.1	20	7.3	140

Client Sample ID: SG-VM65A-01

Lab ID#: 2107684-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2,2,4-Trimethylpentane	1.1	22	5.0	100
2-Propanol	4.3	5.0	10	12
Acetone	11	23	26	54
Benzene	1.1	5.1	3.4	16
Carbon Disulfide	4.3	5.0	13	15
Cyclohexane	1.1	2.8	3.7	9.8
Ethyl Benzene	1.1	1.1	4.7	4.8
Heptane	1.1	4.6	4.4	19
Hexane	1.1	55	3.8	190
m,p-Xylene	1.1	2.3	4.7	10
o-Xylene	1.1	1.1	4.7	4.7
Propylene	4.3	8.8	7.4	15
Tetrachloroethene	1.1	14	7.3	96
Toluene	1.1	9.9	4.0	37
TPH ref. to Gasoline (MW=100)	110	480	440	2000

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

Client Sample ID: SG-VM65B-01

Lab ID#: 2107684-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	1.1	5.0	5.5
Hexane	1.0	4.1	3.6	14
Tetrachloroethene	1.0	6.4	6.9	43

Client Sample ID: SG-VM66A-01

Lab ID#: 2107684-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2,2,4-Trimethylpentane	1.1	9.1	5.0	42
Benzene	1.1	2.5	3.4	8.1
Carbon Disulfide	4.3	4.4	13	14
cis-1,2-Dichloroethene	1.1	1.3	4.2	5.0
Hexane	1.1	29	3.8	100
Tetrachloroethene	1.1	28	7.2	190
Tetrahydrofuran	1.1	1.1	3.1	3.4
Toluene	1.1	2.8	4.0	10
TPH ref. to Gasoline (MW=100)	110	150	440	610

Client Sample ID: SG-VM66B-01

Lab ID#: 2107684-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2,2,4-Trimethylpentane	1.1	17	5.2	79
Cyclohexane	1.1	1.1	3.8	3.8
Hexane	1.1	11	3.9	39
Tetrachloroethene	1.1	5.1	7.5	35

Client Sample ID: SG-VM66B-02

Lab ID#: 2107684-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2,2,4-Trimethylpentane	1.1	16	5.0	76

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

Client Sample ID: SG-VM66B-02

Lab ID#: 2107684-11A

Hexane	1.1	10	3.8	37
Tetrachloroethene	1.1	5.5	7.3	37

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Client Sample ID: SG-SVM1A-01

Lab ID#: 2107684-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080215**	**Date of Collection:**	**7/29/21 8:10:00 AM**
Dil. Factor:	**350**	**Date of Analysis:**	**8/2/21 06:15 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	700	Not Detected	4800	Not Detected
1,1,1-Trichloroethane	180	Not Detected	950	Not Detected
1,1,2,2-Tetrachloroethane	180	Not Detected	1200	Not Detected
1,1,2-Trichloroethane	180	Not Detected	950	Not Detected
1,1-Dichloroethane	180	Not Detected	710	Not Detected
1,1-Dichloroethene	180	Not Detected	690	Not Detected
1,1-Difluoroethane	700	Not Detected	1900	Not Detected
1,2,3-Trichloropropane	700	Not Detected	4200	Not Detected
1,2,4-Trichlorobenzene	700	Not Detected	5200	Not Detected
1,2,4-Trimethylbenzene	180	Not Detected	860	Not Detected
1,2-Dibromo-3-chloropropane	700	Not Detected	6800	Not Detected
1,2-Dibromoethane (EDB)	180	Not Detected	1300	Not Detected
1,2-Dichlorobenzene	180	Not Detected	1000	Not Detected
1,2-Dichloroethane	180	Not Detected	710	Not Detected
1,2-Dichloropropane	180	180	810	820
1,3,5-Trimethylbenzene	180	Not Detected	860	Not Detected
1,3-Butadiene	180	Not Detected	390	Not Detected
1,3-Dichlorobenzene	180	Not Detected	1000	Not Detected
1,4-Dichlorobenzene	180	Not Detected	1000	Not Detected
1,4-Dioxane	700	Not Detected	2500	Not Detected
2,2,4-Trimethylpentane	180	Not Detected	820	Not Detected
2-Butanone (Methyl Ethyl Ketone)	700	Not Detected	2100	Not Detected
2-Hexanone	700	Not Detected	2900	Not Detected
2-Propanol	700	Not Detected	1700	Not Detected
3-Chloropropene	700	Not Detected	2200	Not Detected
4-Ethyltoluene	180	Not Detected	860	Not Detected
4-Methyl-2-pentanone	180	Not Detected	720	Not Detected
Acetone	1800	Not Detected	4200	Not Detected
Acrolein	700	Not Detected	1600	Not Detected
Acrylonitrile	700	Not Detected	1500	Not Detected
alpha-Chlorotoluene	180	Not Detected	900	Not Detected
Benzene	180	Not Detected	560	Not Detected
Bromodichloromethane	180	Not Detected	1200	Not Detected
Bromoform	180	Not Detected	1800	Not Detected
Bromomethane	1800	Not Detected	6800	Not Detected
Carbon Disulfide	700	Not Detected	2200	Not Detected
Carbon Tetrachloride	180	Not Detected	1100	Not Detected
Chlorobenzene	180	Not Detected	800	Not Detected
Chloroethane	700	Not Detected	1800	Not Detected
Chloroform	180	Not Detected	850	Not Detected
Chloromethane	1800	Not Detected	3600	Not Detected
cis-1,2-Dichloroethene	180	13000	690	53000

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Client Sample ID: SG-SVM1A-01

Lab ID#: 2107684-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080215**	**Date of Collection:**	**7/29/21 8:10:00 AM**
Dil. Factor:	**350**	**Date of Analysis:**	**8/2/21 06:15 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	180	Not Detected	790	Not Detected
Cumene	180	Not Detected	860	Not Detected
Cyclohexane	180	Not Detected	600	Not Detected
Dibromochloromethane	180	Not Detected	1500	Not Detected
Dibromomethane	700	Not Detected	5000	Not Detected
Ethanol	1800	Not Detected	3300	Not Detected
Ethyl Acetate	700	Not Detected	2500	Not Detected
Ethyl Benzene	180	Not Detected	760	Not Detected
Ethyl-tert-butyl ether	700	Not Detected	2900	Not Detected
Freon 11	180	Not Detected	980	Not Detected
Freon 12	180	Not Detected	860	Not Detected
Freon 113	180	Not Detected	1300	Not Detected
Freon 114	180	Not Detected	1200	Not Detected
Freon 134a	700	Not Detected	2900	Not Detected
Heptane	180	Not Detected	720	Not Detected
Hexachlorobutadiene	700	Not Detected	7500	Not Detected
Hexachloroethane	700	Not Detected	6800	Not Detected
Hexane	180	Not Detected	620	Not Detected
Iodomethane	1800	Not Detected	10000	Not Detected
Isopropyl ether	700	Not Detected	2900	Not Detected
m,p-Xylene	180	Not Detected	760	Not Detected
Methyl tert-butyl ether	700	Not Detected	2500	Not Detected
Methylene Chloride	1800	Not Detected	6100	Not Detected
Naphthalene	350	Not Detected	1800	Not Detected
o-Xylene	180	Not Detected	760	Not Detected
Propylbenzene	180	Not Detected	860	Not Detected
Propylene	700	Not Detected	1200	Not Detected
Styrene	180	Not Detected	740	Not Detected
tert-Amyl methyl ether	700	Not Detected	2900	Not Detected
tert-Butyl alcohol	700	Not Detected	2100	Not Detected
Tetrachloroethene	180	48000	1200	330000
Tetrahydrofuran	180	Not Detected	520	Not Detected
Toluene	180	Not Detected	660	Not Detected
TPH ref. to Gasoline (MW=100)	18000	Not Detected	72000	Not Detected
trans-1,2-Dichloroethene	180	Not Detected	690	Not Detected
trans-1,3-Dichloropropene	180	Not Detected	790	Not Detected
Trichloroethene	180	3400	940	18000
Vinyl Acetate	700	Not Detected	2500	Not Detected
Vinyl Bromide	700	Not Detected	3100	Not Detected
Vinyl Chloride	180	Not Detected	450	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-SVM1A-01

Lab ID#: 2107684-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080215**	**Date of Collection:**	**7/29/21 8:10:00 AM**
Dil. Factor:	**350**	**Date of Analysis:**	**8/2/21 06:15 PM**

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080215.d
Lab Smp Id: 2107684-01A
Inj Date : 02-AUG-2021 18:15
Operator : LD Inst ID: msdp.i
Smp Info : 120mL S1407
Misc Info : 5.9 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 8
Dil Factor: 350.00000
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		
5.778	5.778 (1.000)	130	166076	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126955				48.23- 108.23	76.44
5.778	5.778 (1.000)	49	339913				150.57- 210.57	204.67
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	602162	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	90058				0.00- 45.71	14.96
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	607087	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	319017				23.78- 83.78	52.55
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	232516	25.3692	25.369		80.00- 120.00	100.00(a)
6.308	6.308 (1.092)	67	115738				27.21- 87.21	49.78
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	657734	25.1540	25.154		80.00- 120.00	100.00(a)
7.891	7.891 (1.185)	70	69611				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 (1.185)	100	427978			34.95- 94.95	65.07
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	381311	24.4598	24.460	80.00- 120.00	100.00(a)
10.914	10.921 (1.154)	95	462559			95.92- 155.92	121.31
10.921	10.921 (1.154)	176	365407			66.89- 126.89	95.83
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.542	5.549 (0.959)	98	186780	38.3414	13419	80.00- 120.00	100.00
5.542	5.549 (0.959)	96	285341			125.75- 185.75	152.77
5.542	5.549 (0.959)	61	482434			332.40- 392.40	258.29
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	92600	9.60354	3361.2	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	100552			76.29- 136.29	108.59
6.867	6.867 (1.031)	97	59136			33.63- 93.63	63.86
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	5198	0.51024	178.58	80.00- 120.00	100.00
7.096	7.089 (1.066)	62	3735			41.07- 101.07	71.85
7.089	7.089 (1.065)	41	3669			22.53- 82.53	70.58
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	1908708	137.952	48283	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	1474165			47.84- 107.84	77.23
8.464	8.464 (0.895)	131	1426485			45.29- 105.29	74.74

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: p080215.d
Lab Smp Id: 2107684-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 5.9 Hg->10.1 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	166076	11.24
108 1,4-Difluorobenze	558135	334881	781389	602162	7.89
153 Chlorobenzene-d5	542388	325433	759343	607087	11.93

		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: 06-Aug-2021 12:07

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-01A
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/02AUG21.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	25.369	101.48	70-130
$ 134 Toluene-d8	25.000	25.154	100.62	70-130
$ 170 4-Bromofluorobenz	25.000	24.460	97.84	70-130

Data File: /chem/msdp.i/02AUG21.b/p080215.d

Date : 02-AUG-2021 18:15

Client ID:

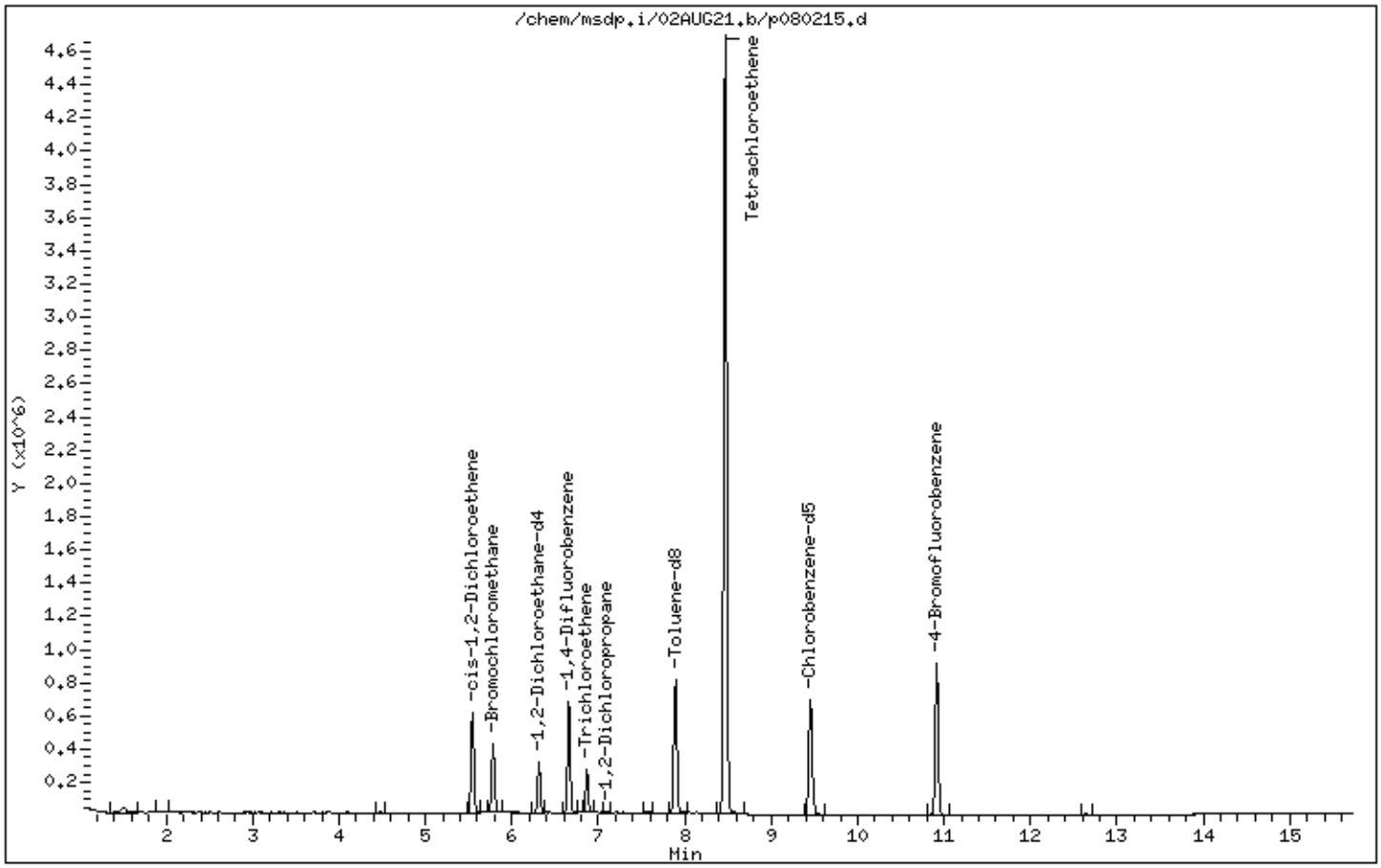
Instrument: msdp.i

Sample Info: 120mL S1407

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080215.d

Date : 02-AUG-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 120mL S1407

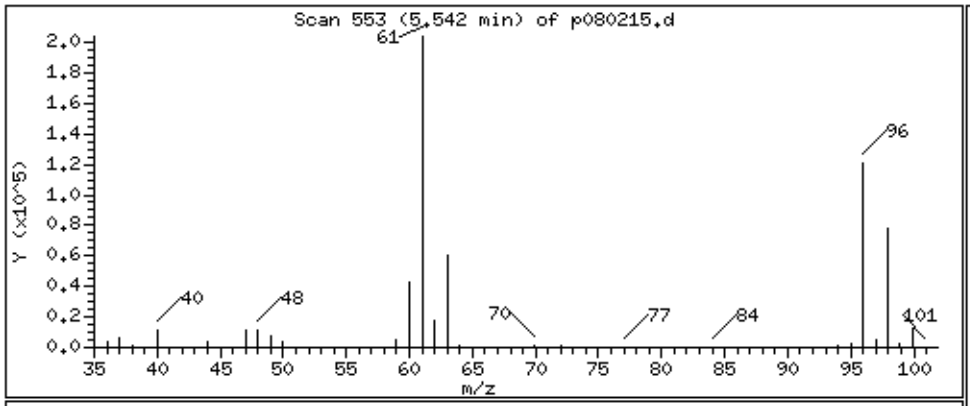
Operator: LD

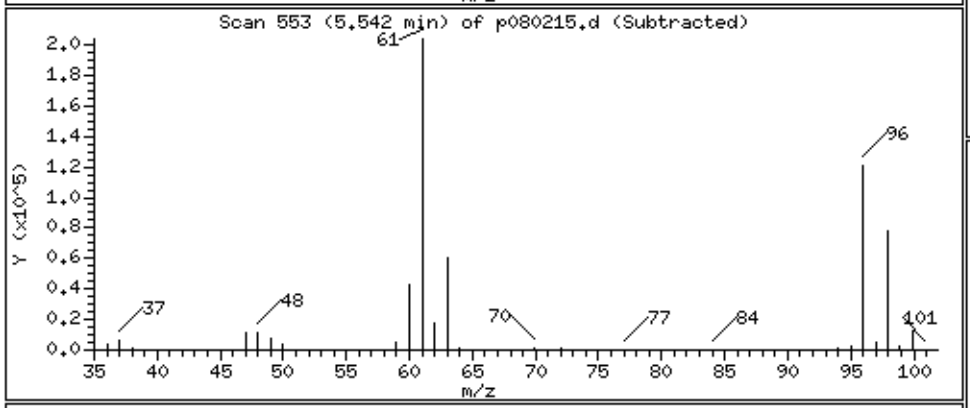
Column phase: RTX-624

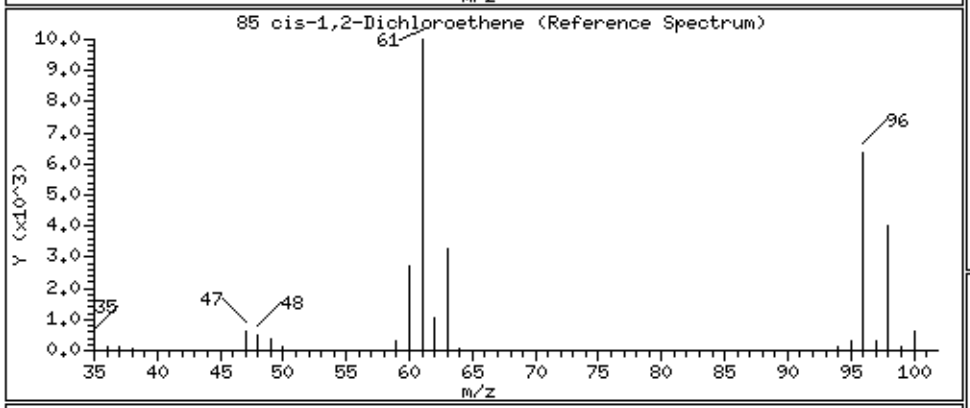
Column diameter: 0.25

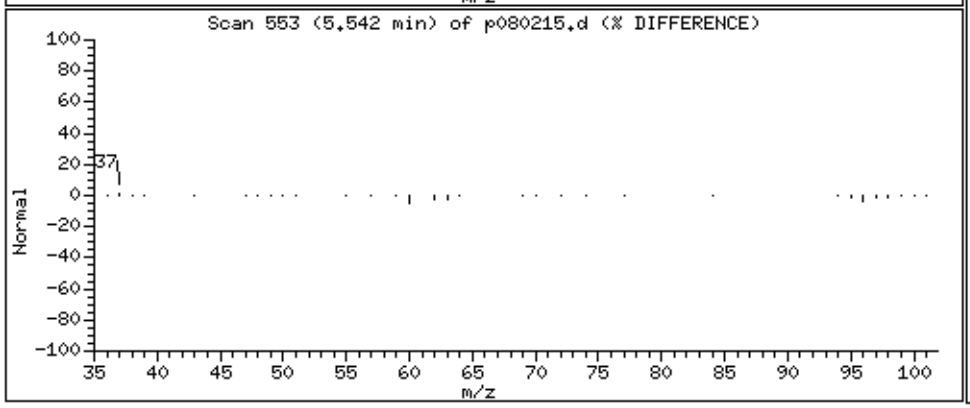
85 cis-1,2-Dichloroethene

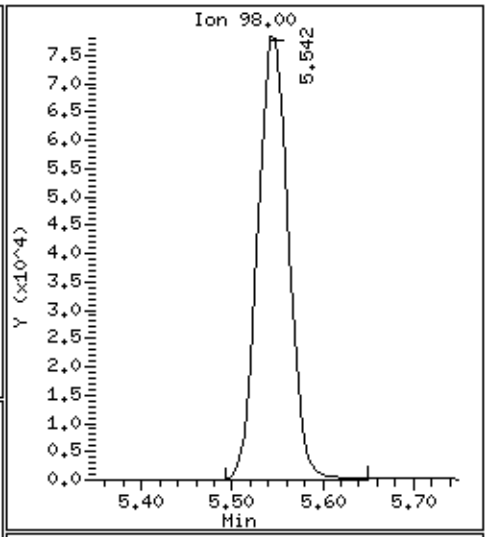
Concentration: 13419 PPBV

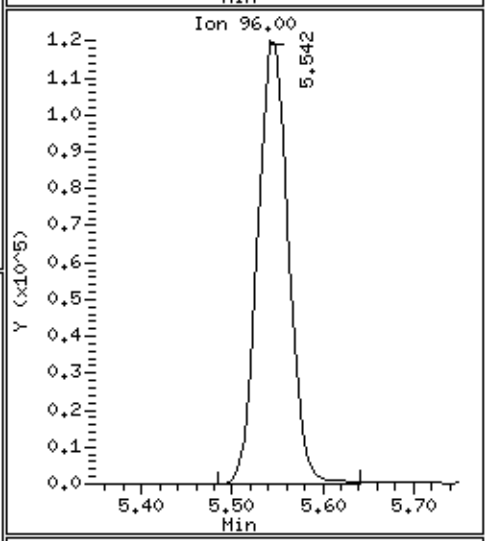


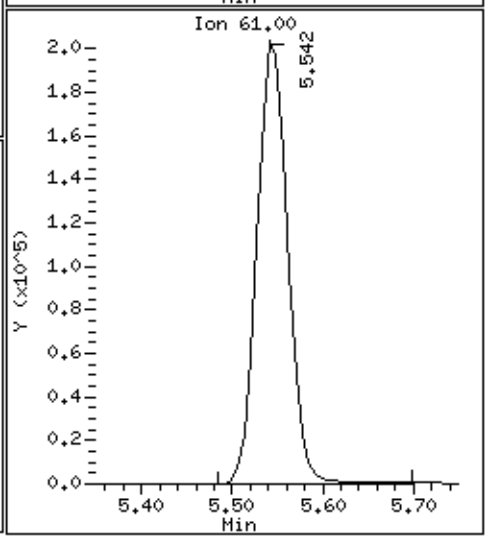












Data File: /chem/msdp.i/02AUG21.b/p080215.d

Date : 02-AUG-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 120mL S1407

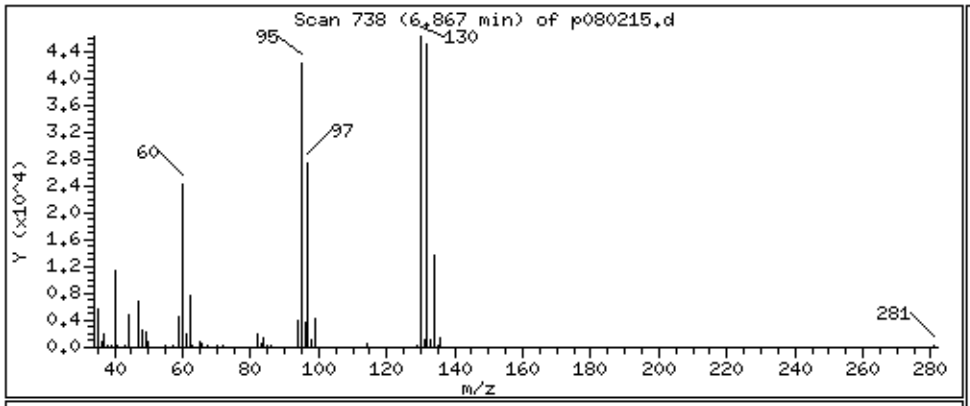
Operator: LD

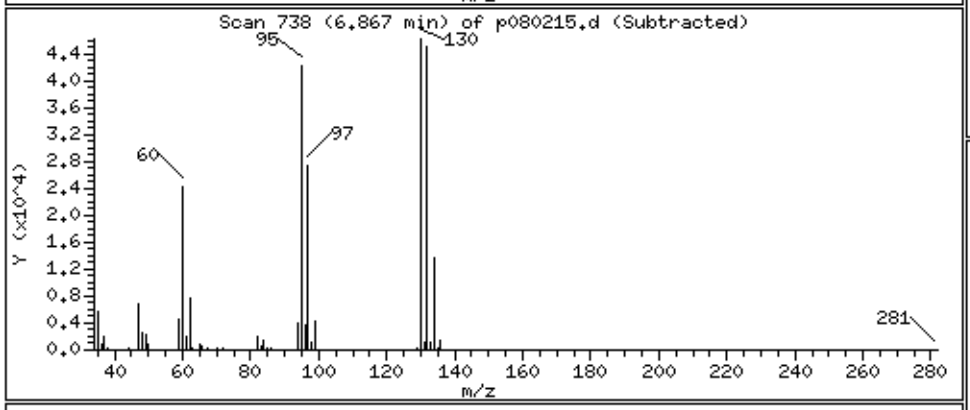
Column phase: RTX-624

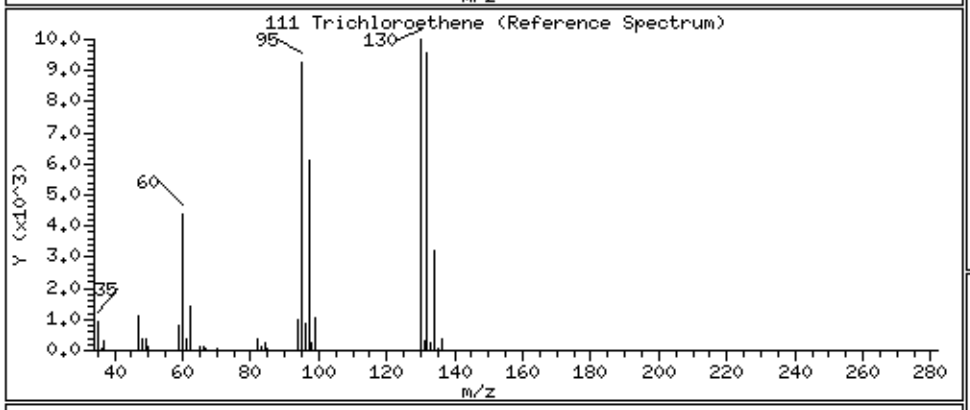
Column diameter: 0.25

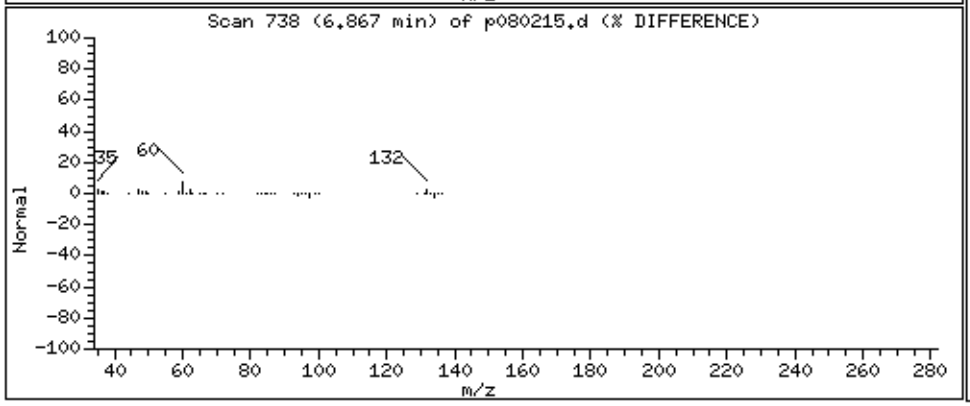
111 Trichloroethene

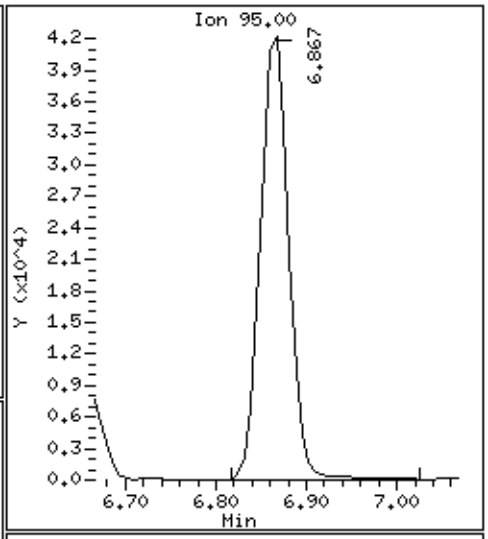
Concentration: 3361.2 PPBV

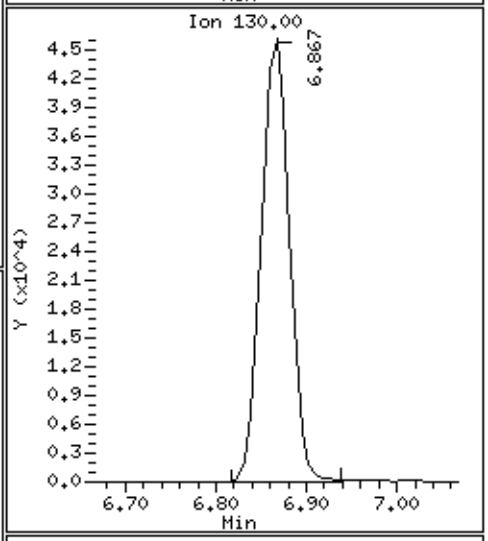


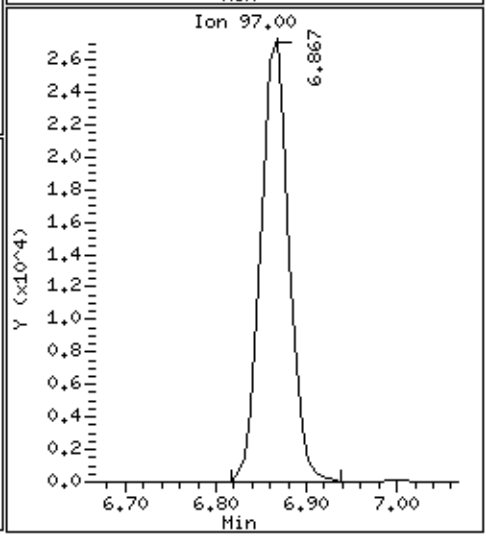












Data File: /chem/msdp.i/02AUG21.b/p080215.d

Date : 02-AUG-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 120mL S1407

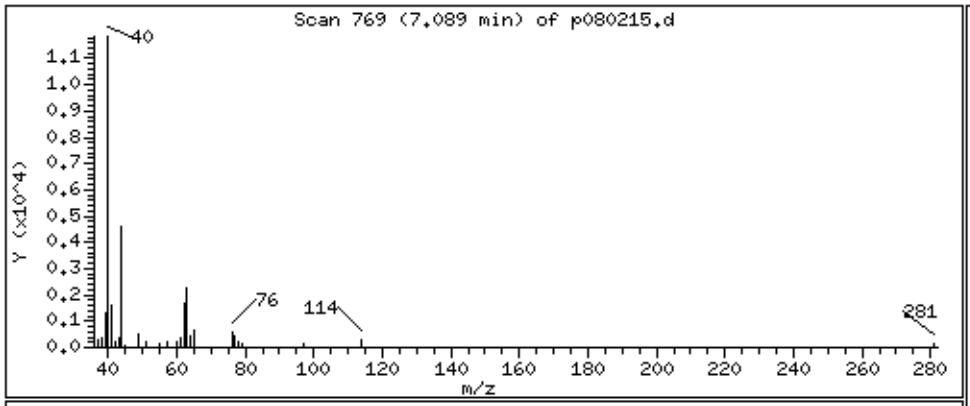
Operator: LD

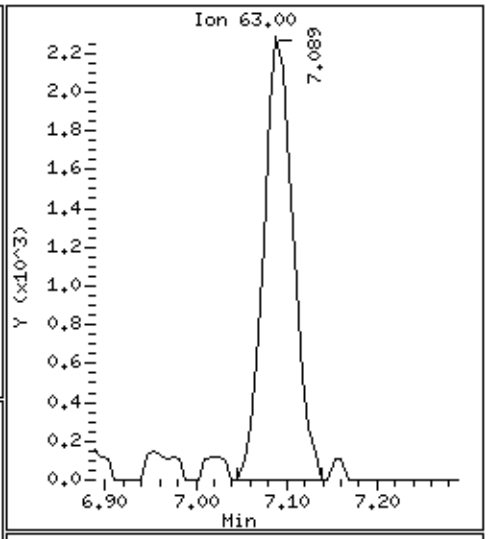
Column phase: RTX-624

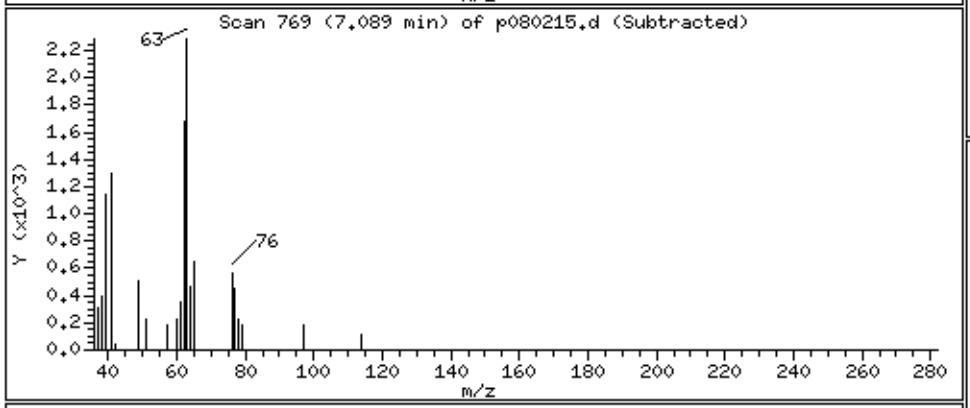
Column diameter: 0.25

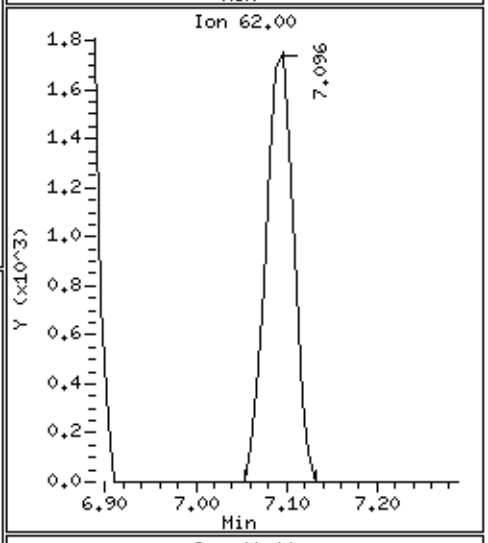
114 1,2-Dichloropropane

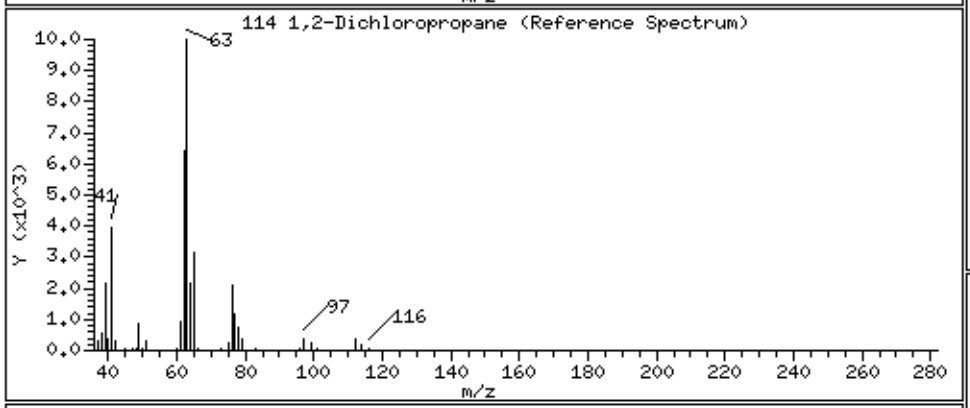
Concentration: 178.58 PPBV

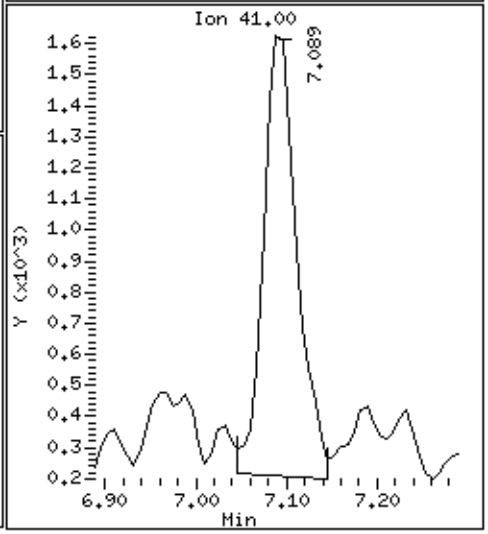


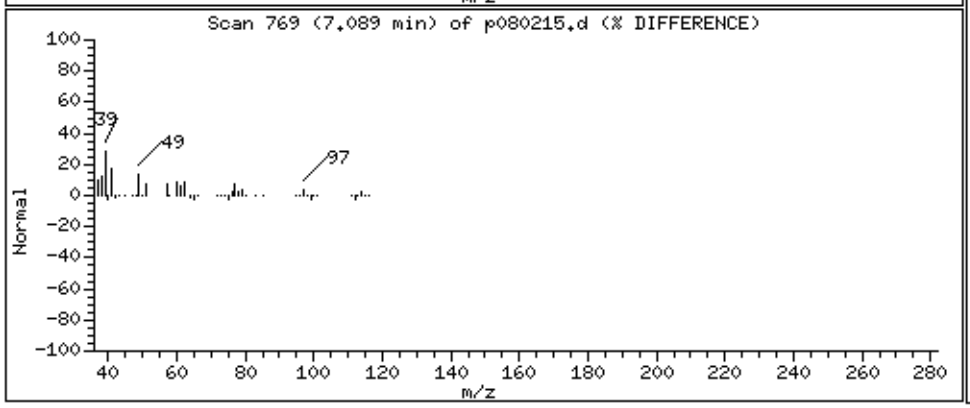












Data File: /chem/msdp.i/02AUG21.b/p080215.d

Date : 02-AUG-2021 18:15

Client ID:

Instrument: msdp.i

Sample Info: 120mL S1407

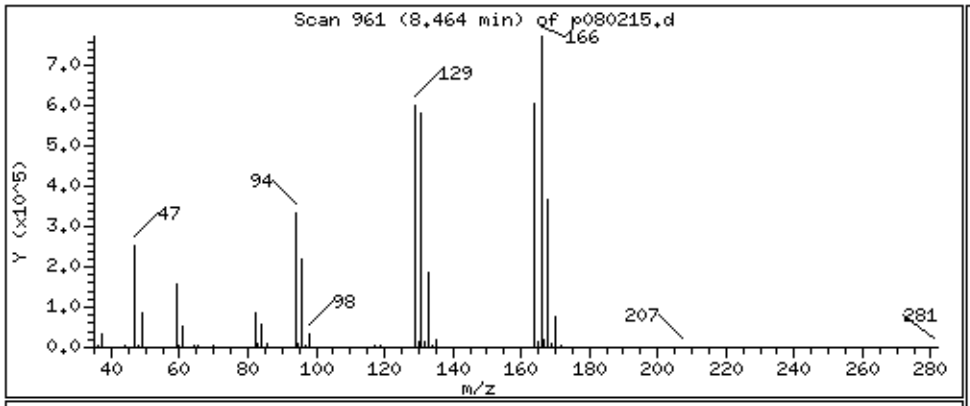
Operator: LD

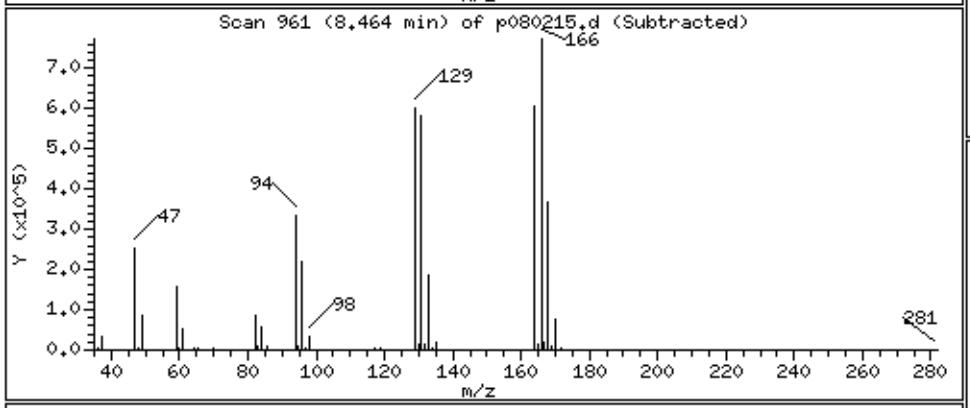
Column phase: RTX-624

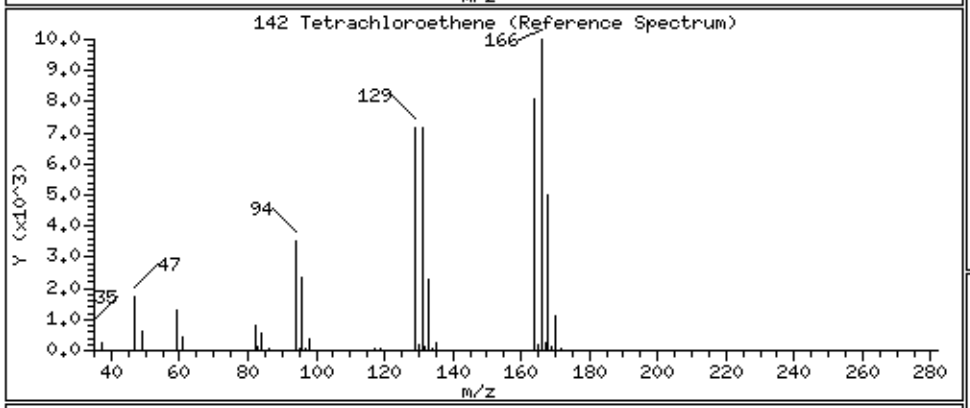
Column diameter: 0.25

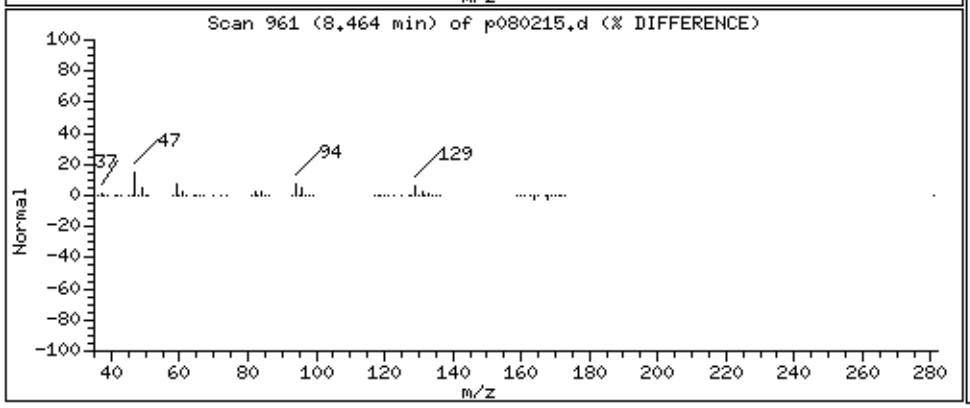
142 Tetrachloroethene

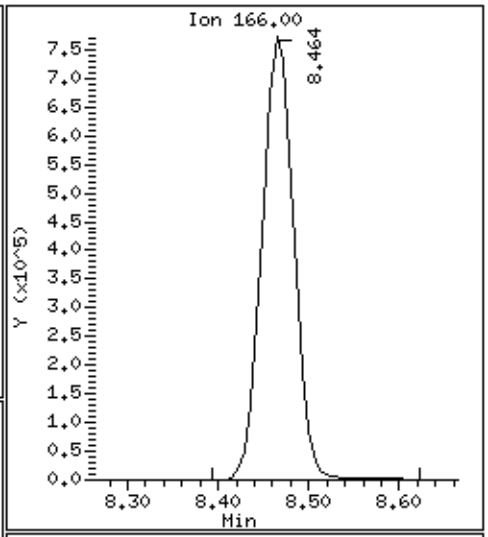
Concentration: 48283 PPBV

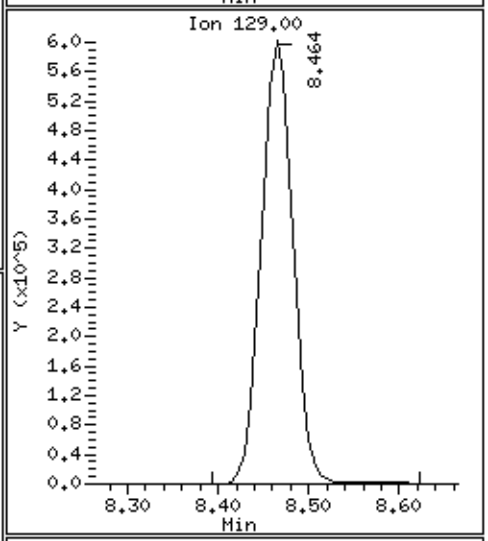


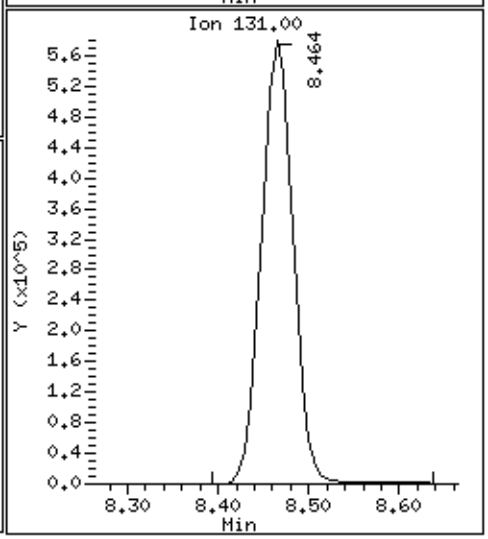












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Client Sample ID: SG-SVM1B-01

Lab ID#: 2107684-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080225**	**Date of Collection:**	**7/29/21 8:37:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**8/3/21 12:52 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	14	10	34
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	52	25	120
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	16	4.2	63

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Client Sample ID: SG-SVM1B-01

Lab ID#: 2107684-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080225**	**Date of Collection:**	**7/29/21 8:37:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**8/3/21 12:52 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	Not Detected	20	Not Detected
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	Not Detected	3.8	Not Detected
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	8.8	7.3	15
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	69	7.2	460
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	16	5.7	85
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-SVM1B-01

Lab ID#: 2107684-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080225**	**Date of Collection:**	**7/29/21 8:37:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**8/3/21 12:52 AM**

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080225.d
Lab Smp Id: 2107684-02A
Inj Date : 03-AUG-2021 00:52
Operator : mb Inst ID: msdp.i
Smp Info : 200ml O0762
Misc Info : 6.5 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 9
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

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
*	90 Bromochloromethane					CAS #: 74-97-5		
	5.785	5.778 (1.000)	130	157636	25.0000		80.00- 120.00	100.00
	5.785	5.778 (1.000)	128	120930			48.23- 108.23	76.71
	5.785	5.778 (1.000)	49	328961			150.57- 210.57	208.68
*	108 1,4-Difluorobenzene					CAS #: 540-36-3		
	6.666	6.659 (1.000)	114	587556	25.0000		80.00- 120.00	100.00
	6.666	6.659 (1.000)	88	85225			0.00- 45.71	14.51
*	153 Chlorobenzene-d5					CAS #: 3114-55-4		
	9.460	9.460 (1.000)	117	597552	25.0000		80.00- 120.00	100.00
	9.460	9.460 (1.000)	82	311938			23.78- 83.78	52.20
$	104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	6.315	6.308 (1.092)	65	223509	25.6921	25.692	80.00- 120.00	100.00
	6.315	6.308 (1.092)	67	110630			27.21- 87.21	49.50
$	134 Toluene-d8					CAS #: 2037-26-5		
	7.891	7.891 (1.184)	98	638789	25.0368	25.037	80.00- 120.00	100.00
	7.891	7.891 (1.184)	70	64433			0.00- 40.44	10.09

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	414545			34.95- 94.95	64.90
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	385068	25.0949	25.095	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	459137			95.92- 155.92	119.24
10.921	10.921 (1.154)	176	365157			66.89- 126.89	94.83
5 Propylene					CAS #: 115-07-1		
1.688	1.674 (0.292)	41	29788	4.12946	8.796	80.00- 120.00	100.00
1.688	1.674 (0.292)	42	21031			35.28- 95.28	70.60
1.688	1.674 (0.292)	39	21675			38.35- 98.35	72.77
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	100477	24.3133	51.787	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	382578			302.95- 362.95	380.76
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	108415	6.50920	13.864	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	33266			0.00- 47.19	30.68
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	34573	7.47698	15.926	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	54475			125.75- 185.75	157.56
5.549	5.549 (0.959)	61	86673			332.40- 392.40	250.69
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	69729	7.41136	15.786	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	75803			76.29- 136.29	108.71
6.867	6.867 (1.030)	97	45174			33.63- 93.63	64.79
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	438889	32.2269	68.643	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	339081			47.84- 107.84	77.26
8.471	8.464 (0.895)	131	325595			45.29- 105.29	74.19

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080225.d
Lab Smp Id: 2107684-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.5 Hg->9.8 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	157636	5.59
108 1,4-Difluorobenze	558135	334881	781389	587556	5.27
153 Chlorobenzene-d5	542388	325433	759343	597552	10.17

		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	6.67	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.

Report Date: 06-Aug-2021 12:18

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-02A
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/msdp.i/02AUG21.b/p21q0519a.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	25.692	102.77	70-130
$ 134 Toluene-d8	25.000	25.037	100.15	70-130
$ 170 4-Bromofluorobenz	25.000	25.095	100.38	70-130

Data File: /chem/msdp.i/02AUG21.b/p080225.d

Date : 03-AUG-2021 00:52

Client ID:

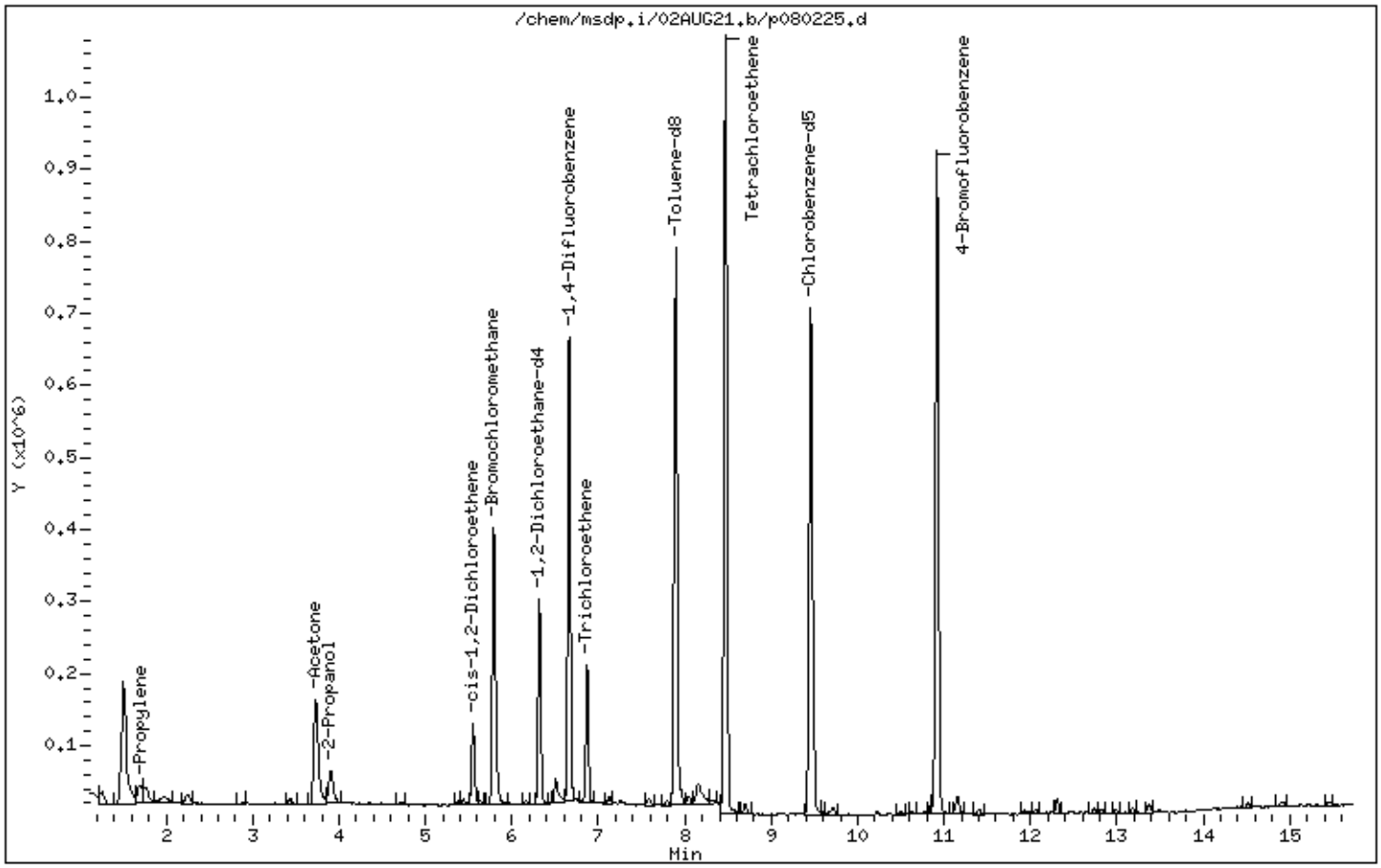
Instrument: msdp.i

Sample Info: 200ml 00762

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080225.d

Date : 03-AUG-2021 00:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00762

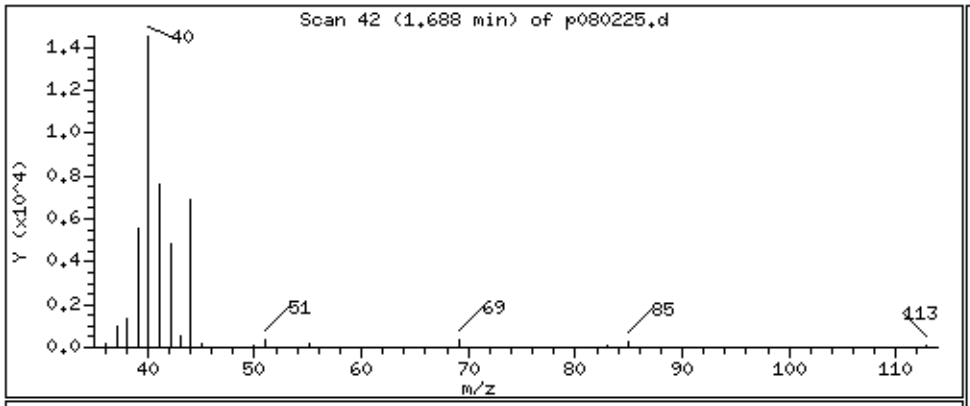
Operator: mb

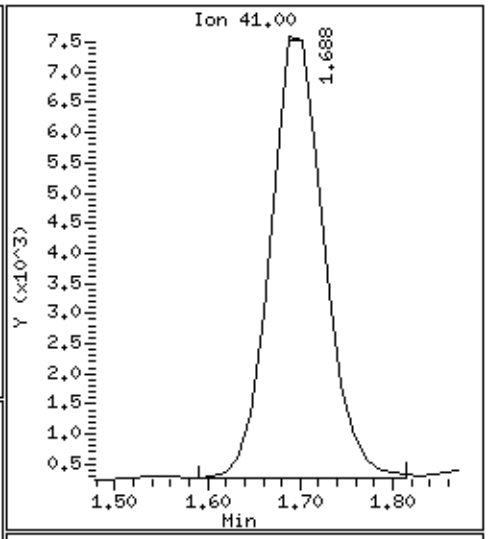
Column phase: RTX-624

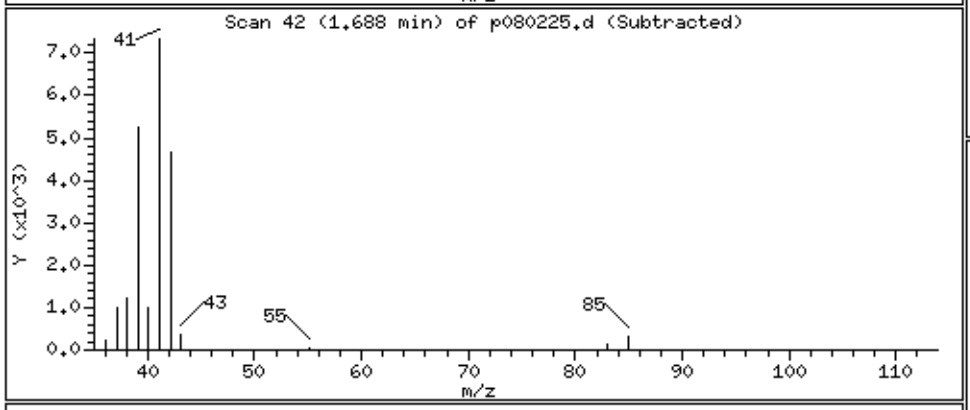
Column diameter: 0.25

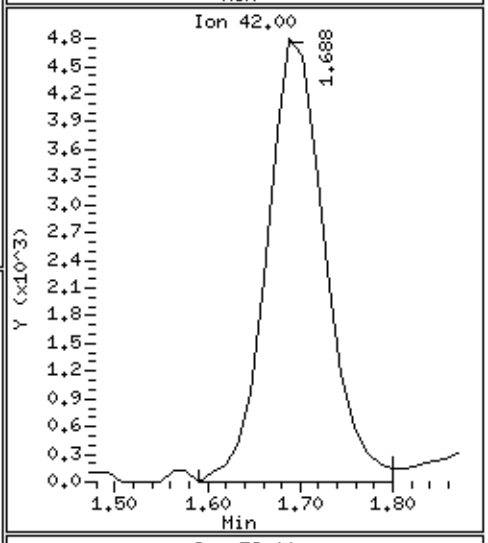
5 Propylene

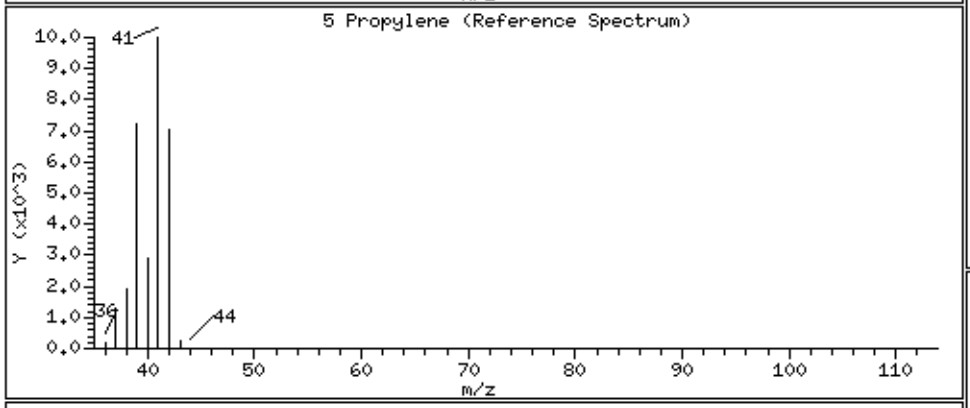
Concentration: 8.796 PPBV

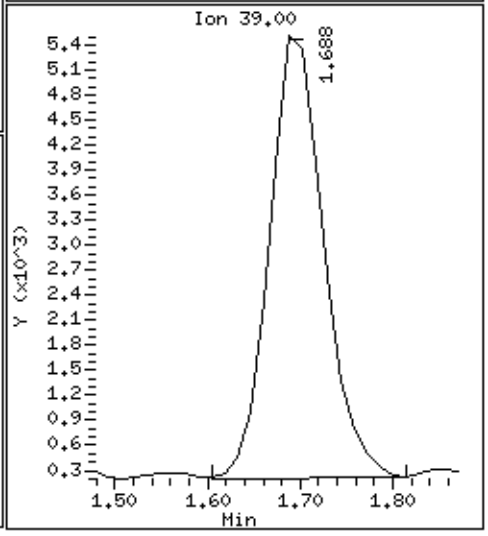


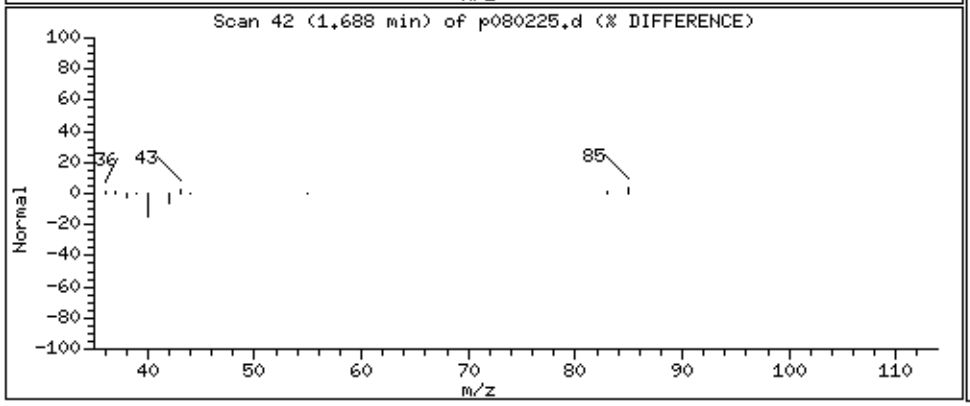












Data File: /chem/msdp.i/02AUG21.b/p080225.d

Date : 03-AUG-2021 00:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00762

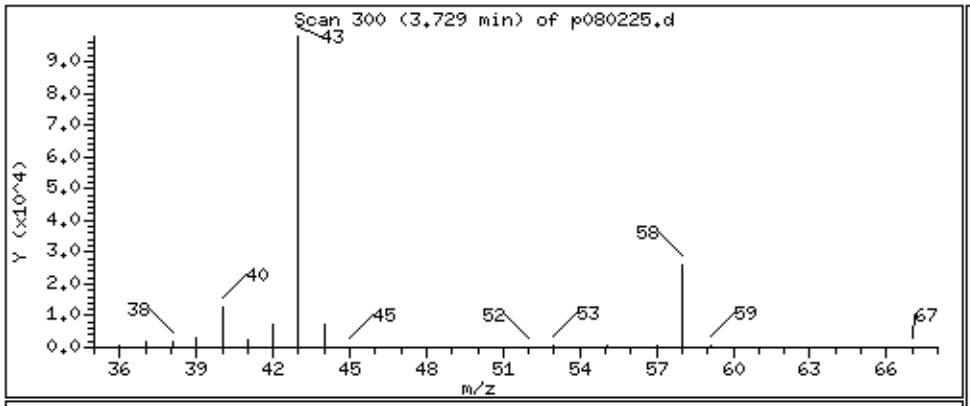
Operator: mb

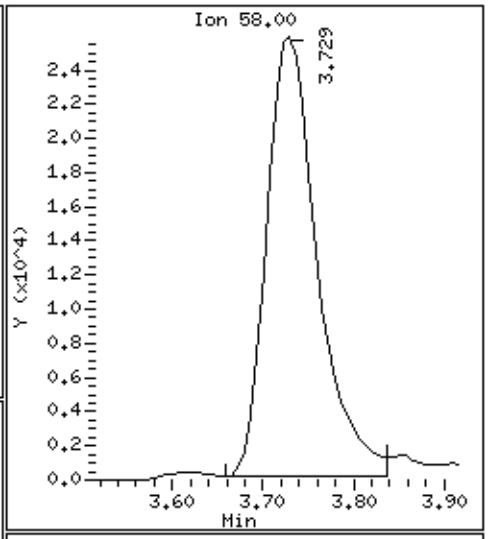
Column phase: RTX-624

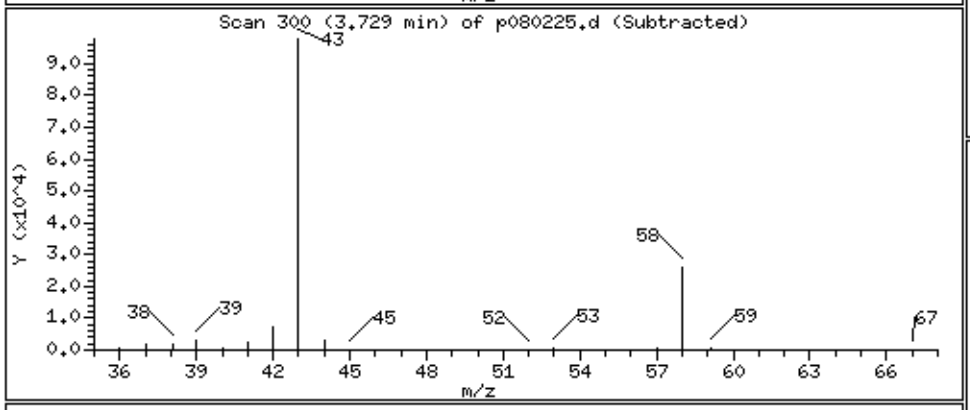
Column diameter: 0.25

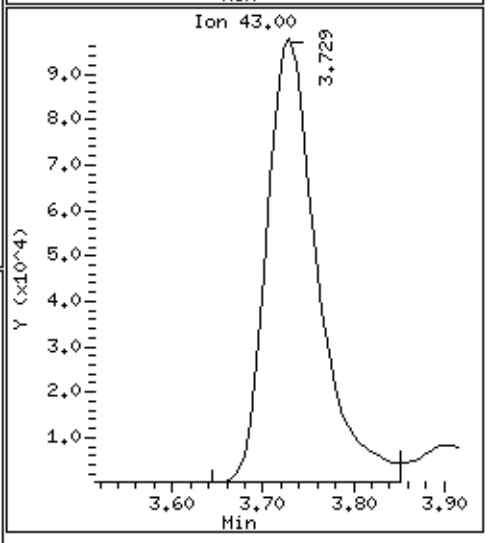
47 Acetone

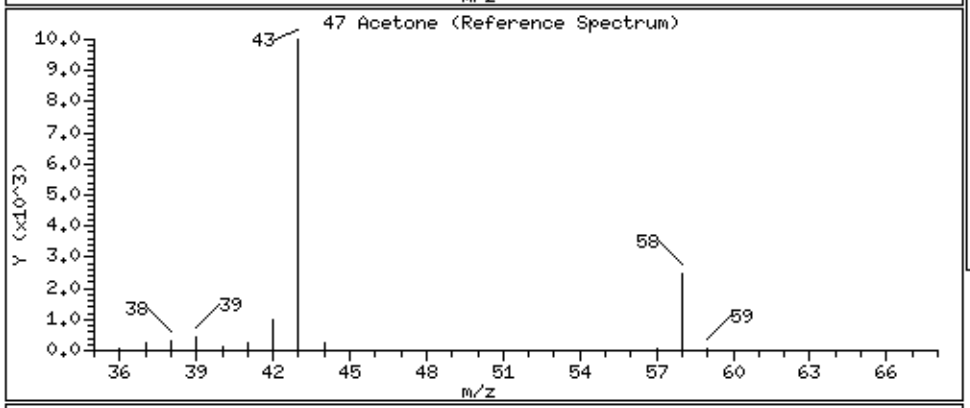
Concentration: 51.787 PPBV

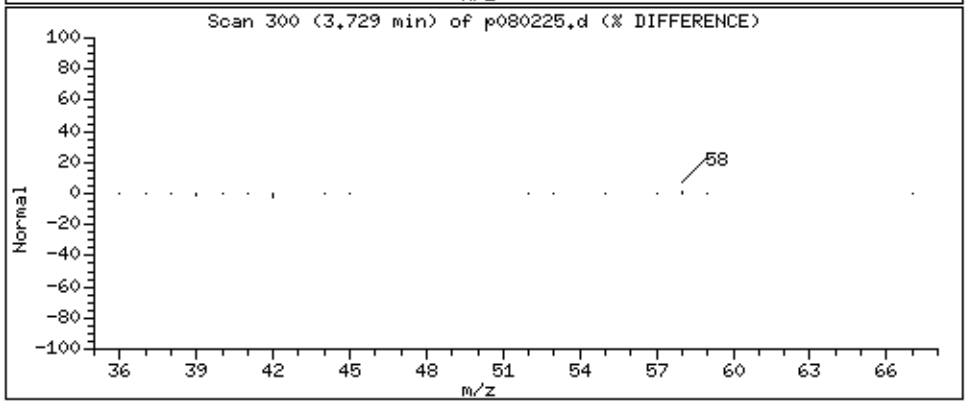












Data File: /chem/msdp.i/02AUG21.b/p080225.d

Date : 03-AUG-2021 00:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00762

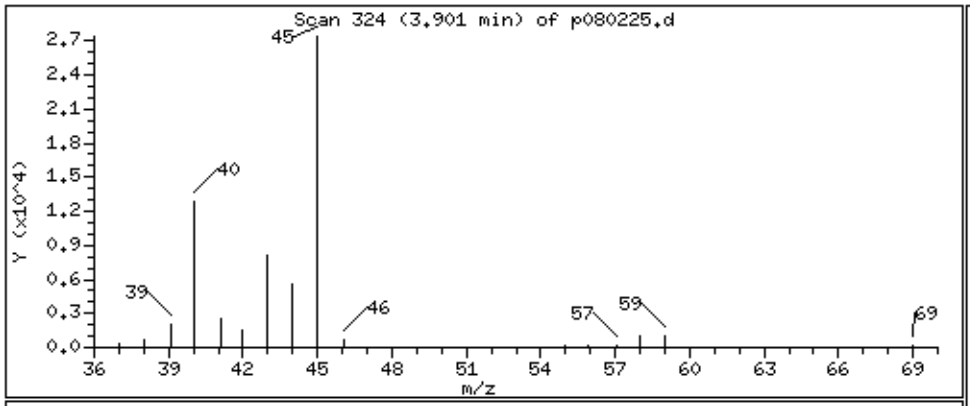
Operator: mb

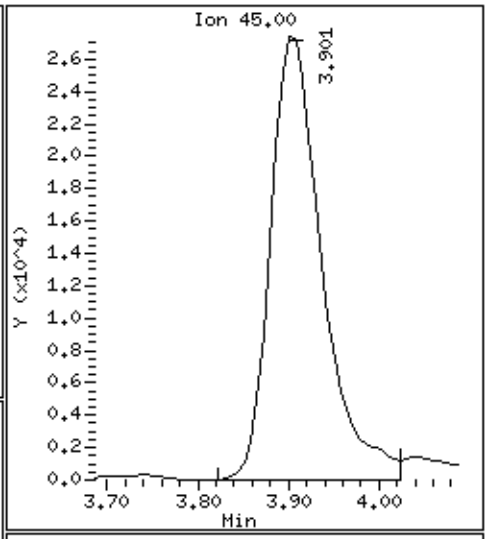
Column phase: RTX-624

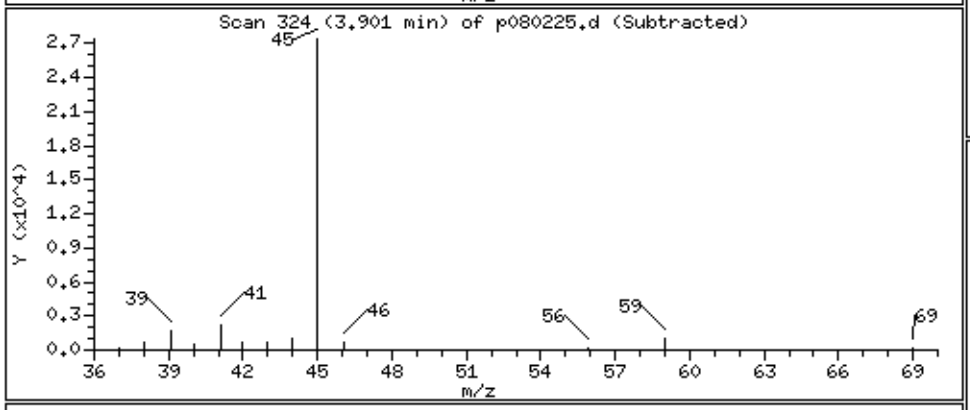
Column diameter: 0.25

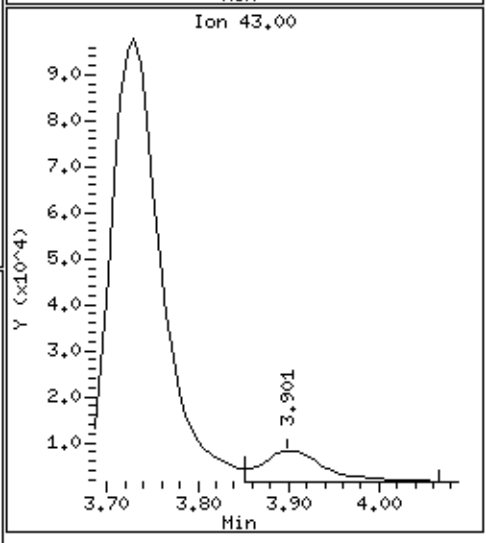
52 2-Propanol

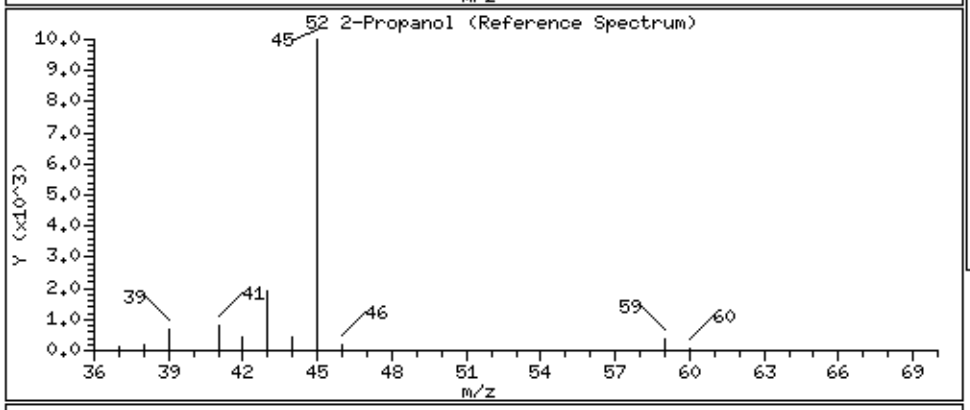
Concentration: 13.864 PPBV

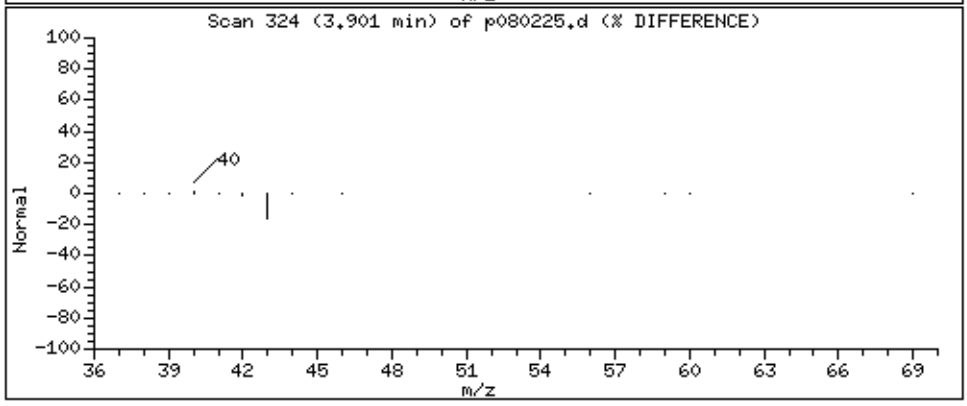












Data File: /chem/msdp.i/02AUG21.b/p080225.d

Date : 03-AUG-2021 00:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00762

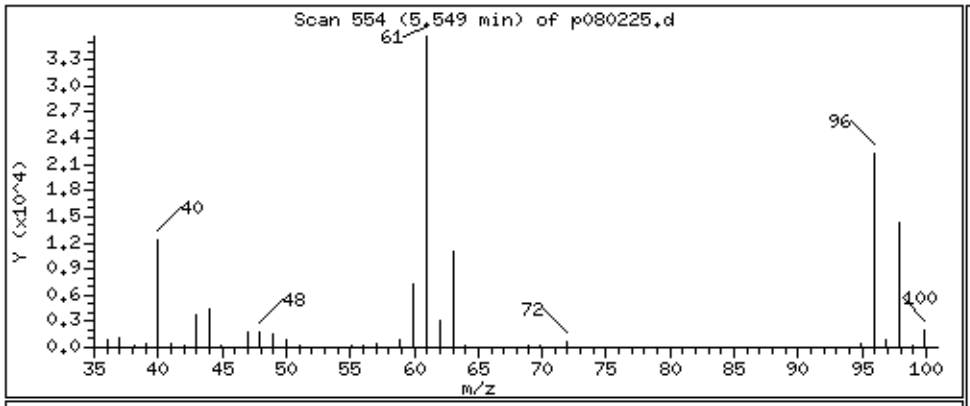
Operator: mb

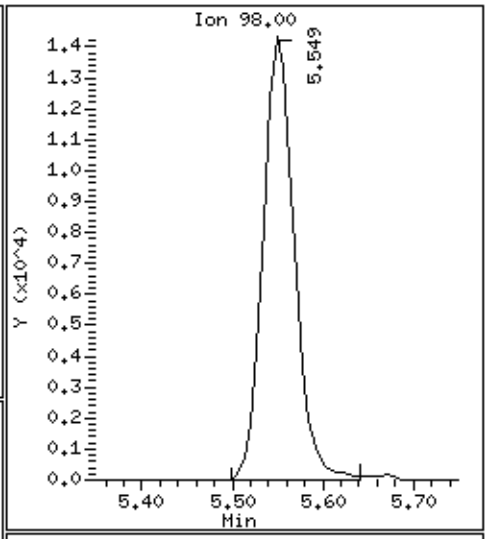
Column phase: RTX-624

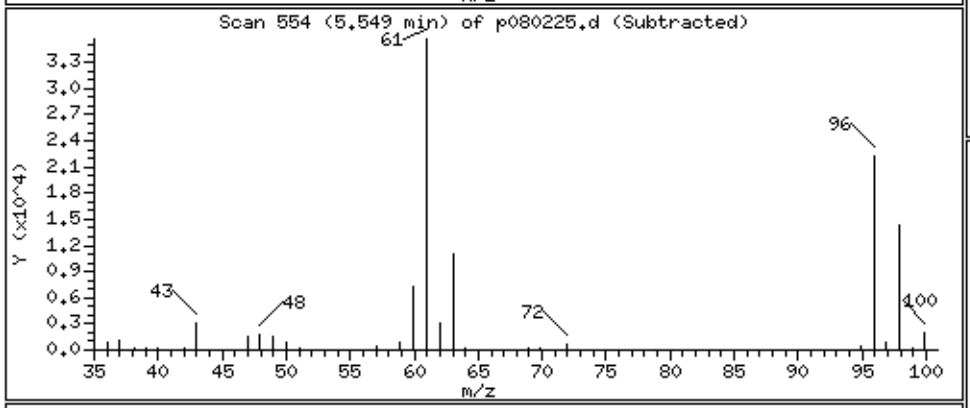
Column diameter: 0.25

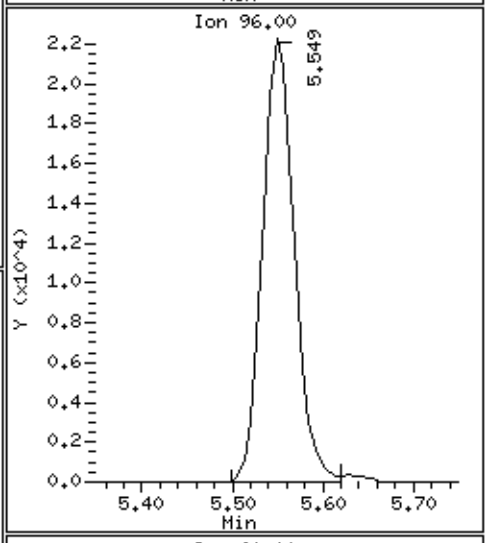
85 cis-1,2-Dichloroethene

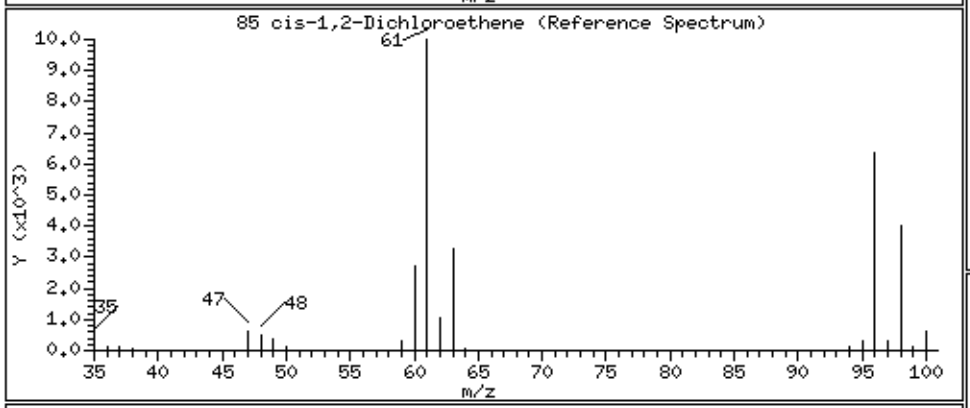
Concentration: 15.926 PPBV

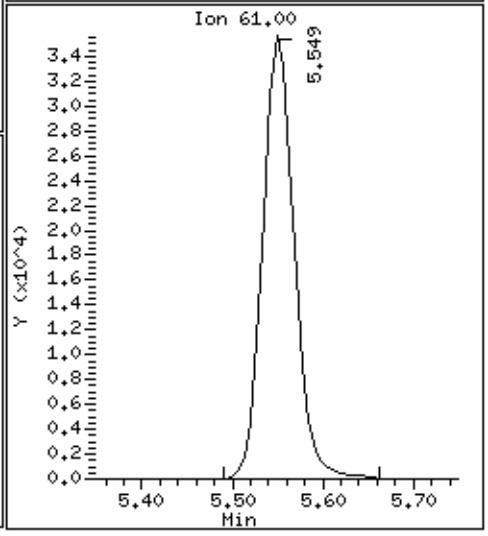


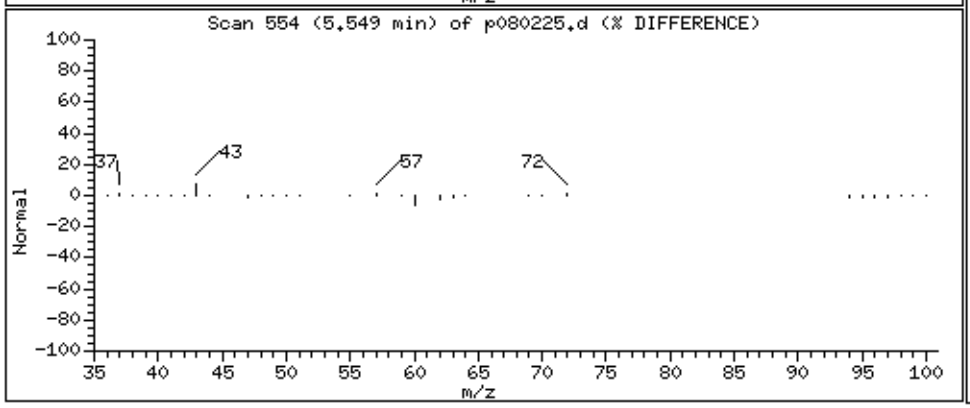












Data File: /chem/msdp.i/02AUG21.b/p080225.d

Date : 03-AUG-2021 00:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00762

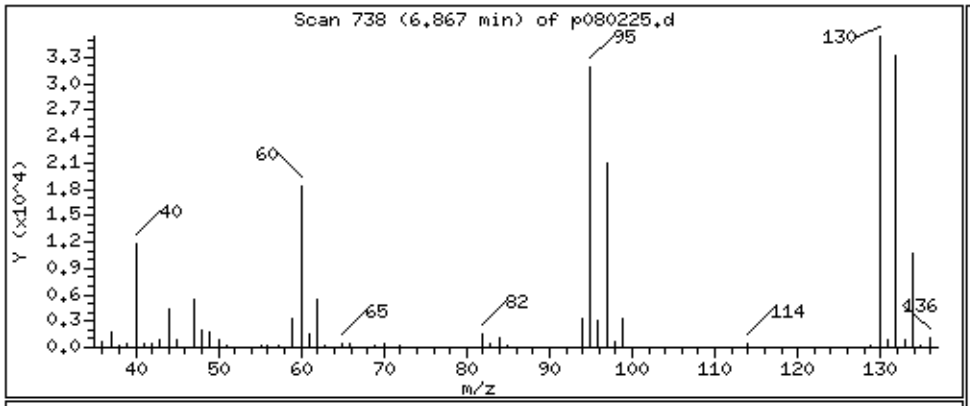
Operator: mb

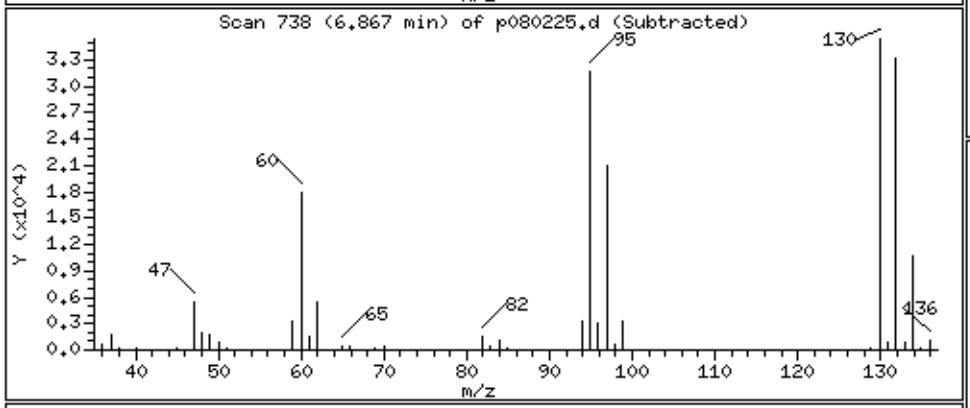
Column phase: RTX-624

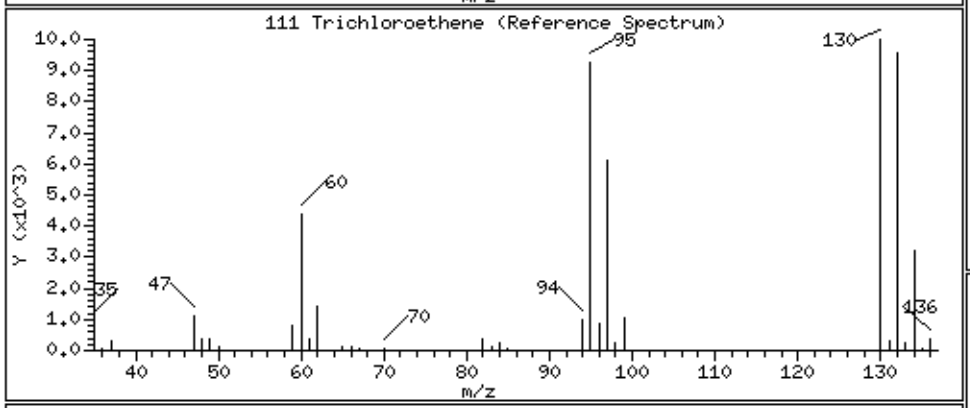
Column diameter: 0.25

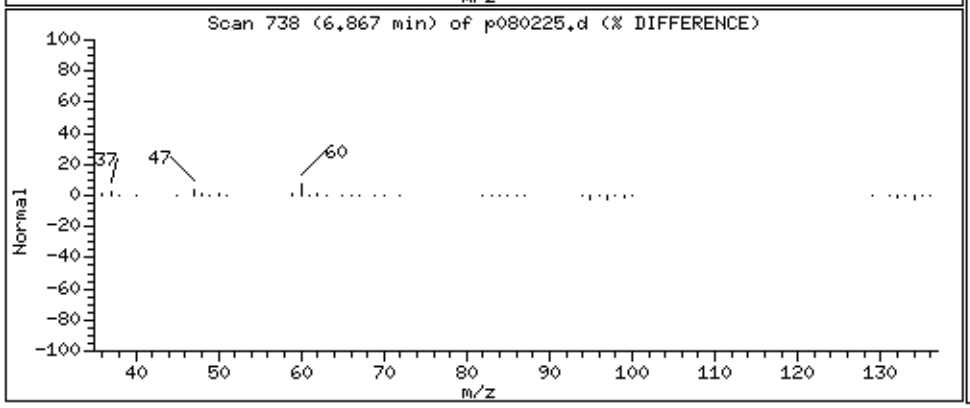
111 Trichloroethene

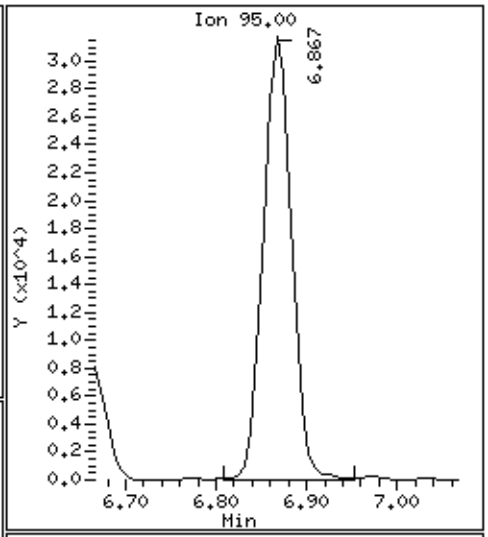
Concentration: 15.786 PPBV

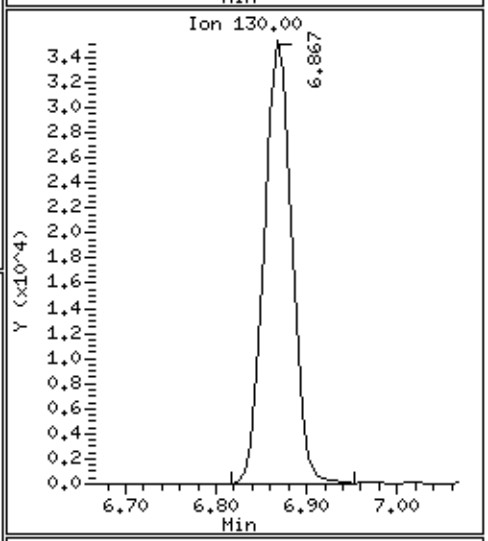


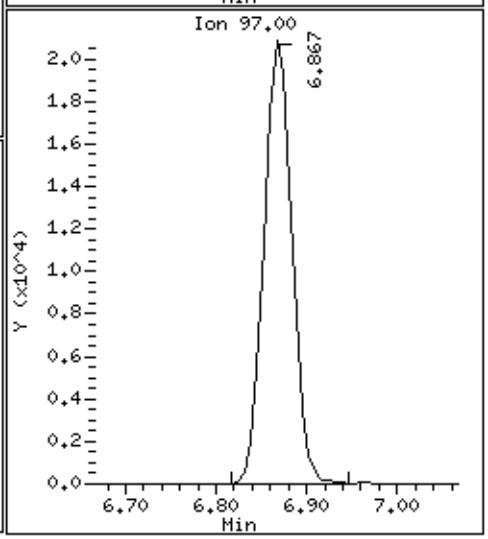












Data File: /chem/msdp.i/02AUG21.b/p080225.d

Date : 03-AUG-2021 00:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00762

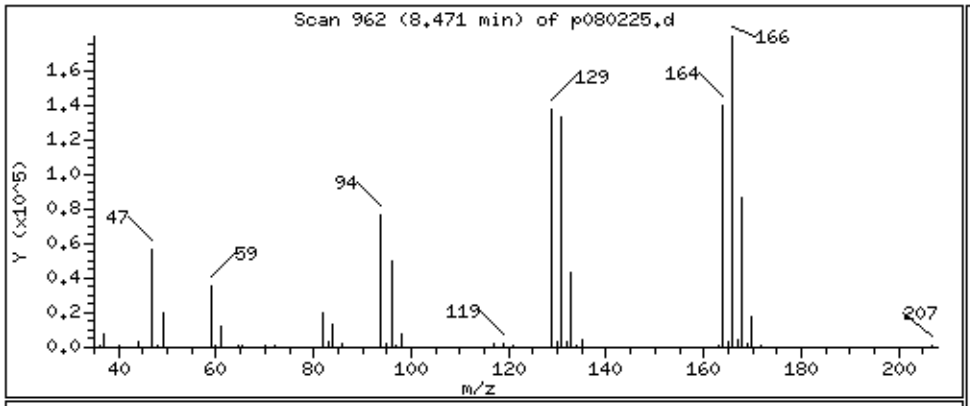
Operator: mb

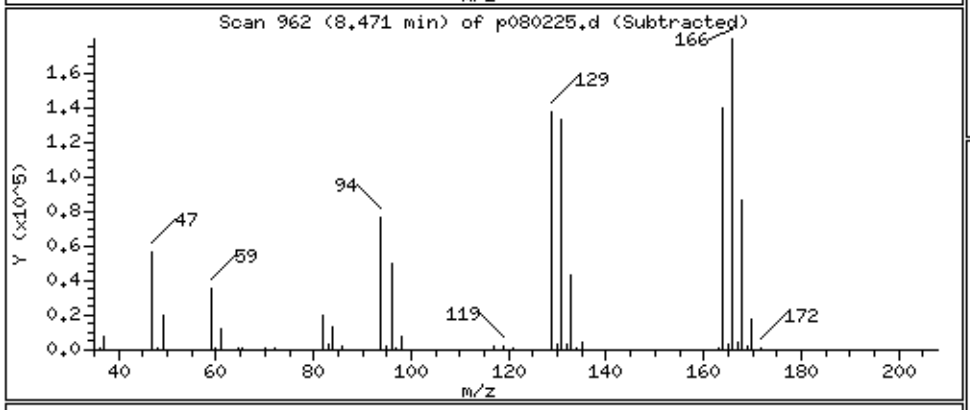
Column phase: RTX-624

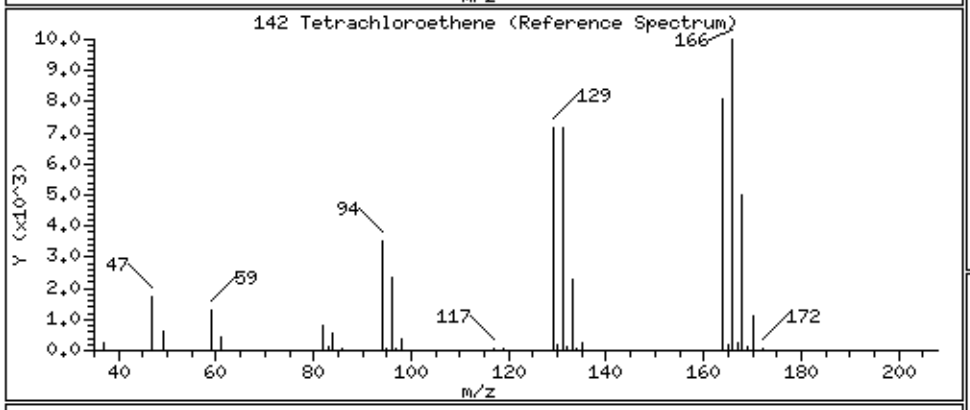
Column diameter: 0.25

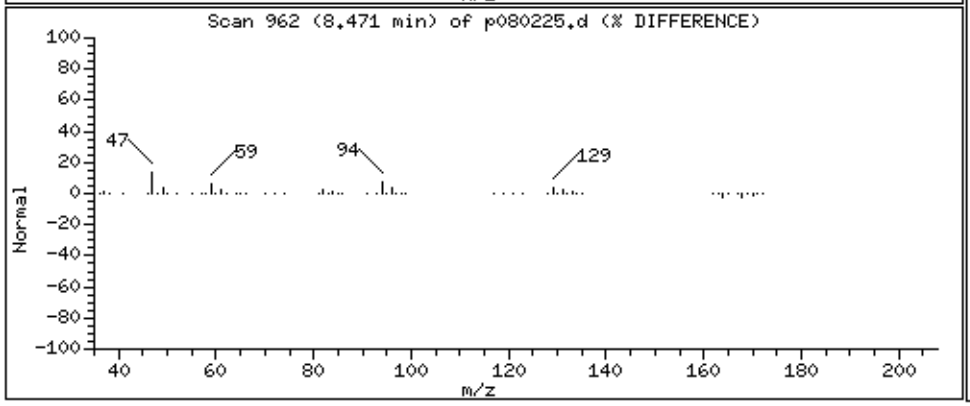
142 Tetrachloroethene

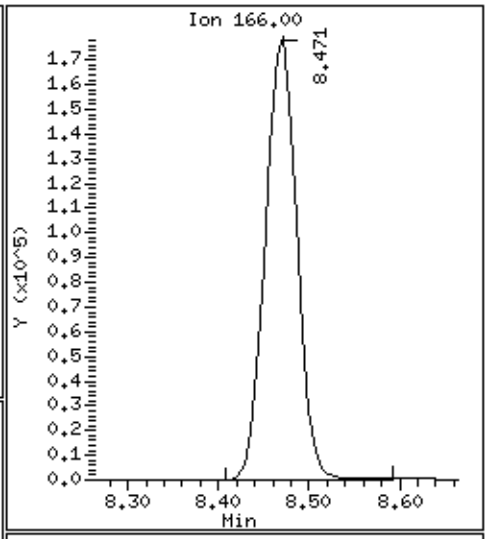
Concentration: 68.643 PPBV

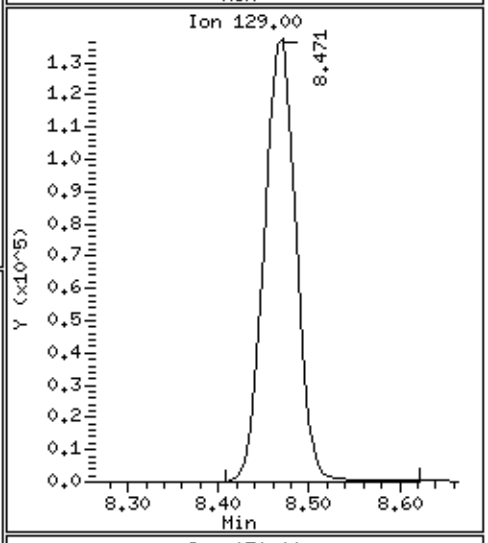


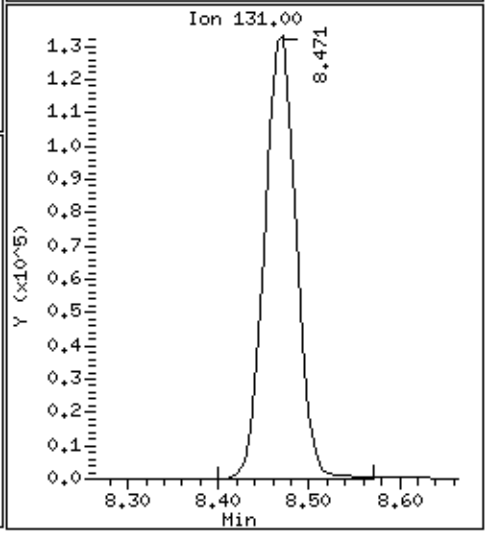












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Client Sample ID: SG-SVM2A-01

Lab ID#: 2107684-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080218**	**Date of Collection:**	**7/29/21 2:12:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**8/2/21 09:27 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	7.5	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	Not Detected	13	Not Detected
2-Hexanone	4.4	Not Detected	18	Not Detected
2-Propanol	4.4	12	11	29
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	67	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	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	6.9	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-SVM2A-01

Lab ID#: 2107684-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080218**	**Date of Collection:**	**7/29/21 2:12:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**8/2/21 09:27 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	9.3	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	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	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	23	7.5	40
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	14	7.4	96
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-SVM2A-01

Lab ID#: 2107684-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080218**	**Date of Collection:**	**7/29/21 2:12:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**8/2/21 09:27 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080218.d
Lab Smp Id: 2107684-03A
Inj Date : 02-AUG-2021 21:27
Operator : mb Inst ID: msdp.i
Smp Info : 200ml N3823
Misc Info : 6.9 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
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	151091	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	117771				48.23- 108.23	77.95
5.785	5.778 (1.000)	49	312066				150.57- 210.57	206.54
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	562528	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	81007				0.00- 45.71	14.40
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	561178	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	293606				23.78- 83.78	52.32
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	211476	25.3620	25.362		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	104702				27.21- 87.21	49.51
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	615220	25.1859	25.186		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65748				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	404050			34.95- 94.95	65.68
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	341238	23.6800	23.680	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	414512			95.92- 155.92	121.47
10.921	10.921 (1.154)	176	334691			66.89- 126.89	98.08
5 Propylene					CAS #: 115-07-1		
1.689	1.674 (0.292)	41	72464	10.4807	22.953	80.00- 120.00	100.00
1.689	1.674 (0.292)	42	51904			35.28- 95.28	71.63
1.689	1.674 (0.292)	39	51017			38.35- 98.35	70.40
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	121300	30.6235	67.065	80.00- 120.00	100.00
3.722	3.715 (0.643)	43	445275			302.95- 362.95	367.09
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	86145	5.39616	11.818	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	27473			0.00- 47.19	31.89
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	82902	6.48193	14.195	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	64681			47.84- 107.84	78.02
8.464	8.464 (0.895)	131	64055			45.29- 105.29	77.27

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080218.d
Lab Smp Id: 2107684-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.9 Hg->10.1 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	151091	1.21
108 1,4-Difluorobenze	558135	334881	781389	562528	0.79
153 Chlorobenzene-d5	542388	325433	759343	561178	3.46

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.66	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.

Report Date: 06-Aug-2021 12:08

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-03A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.9 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.362	101.45	70-130
$ 134 Toluene-d8	25.000	25.186	100.74	70-130
$ 170 4-Bromofluorobenz	25.000	23.680	94.72	70-130

Data File: /chem/msdp.i/02AUG21.b/p080218.d

Date : 02-AUG-2021 21:27

Client ID:

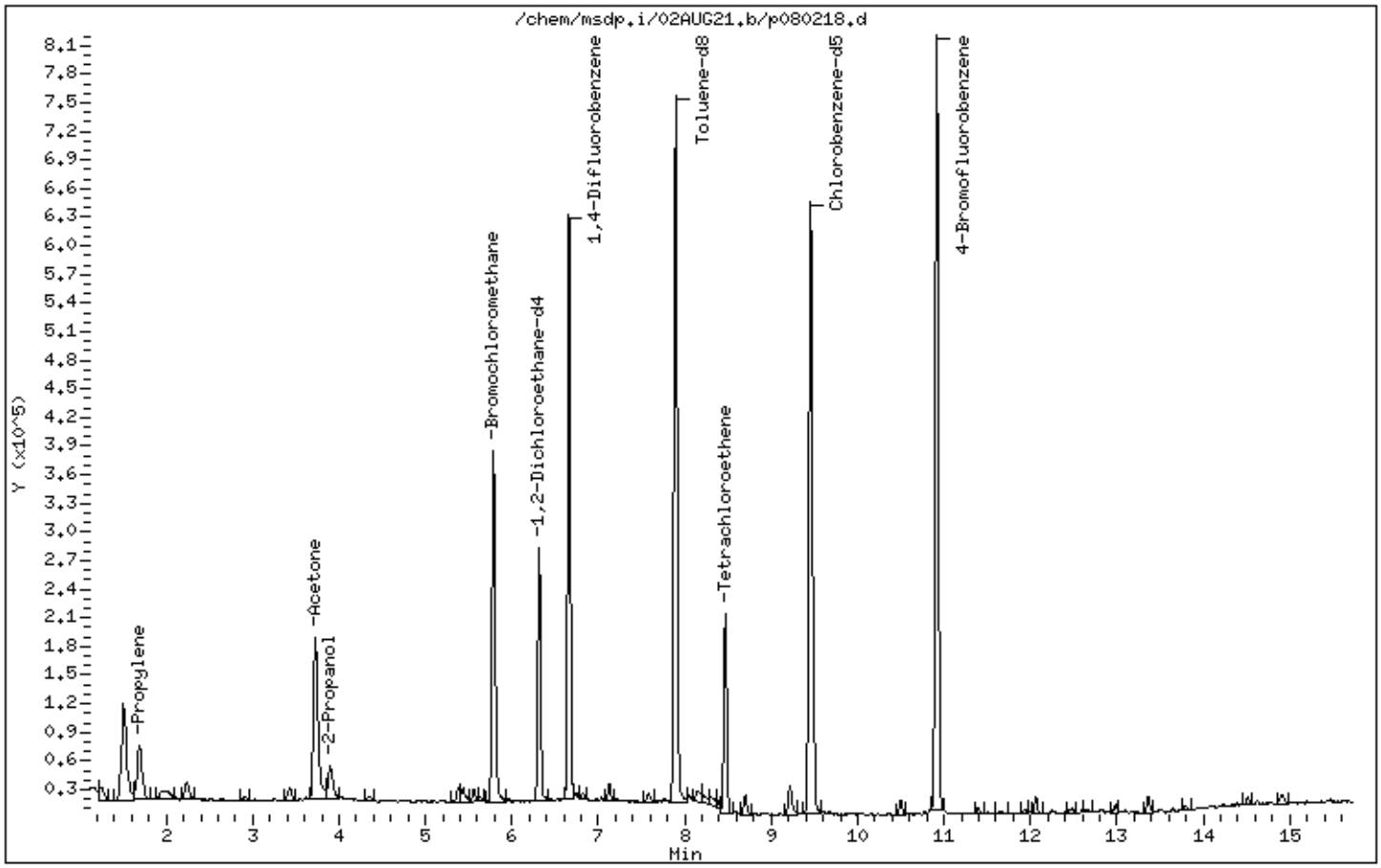
Instrument: msdp.i

Sample Info: 200ml N3823

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080218.d

Date : 02-AUG-2021 21:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3823

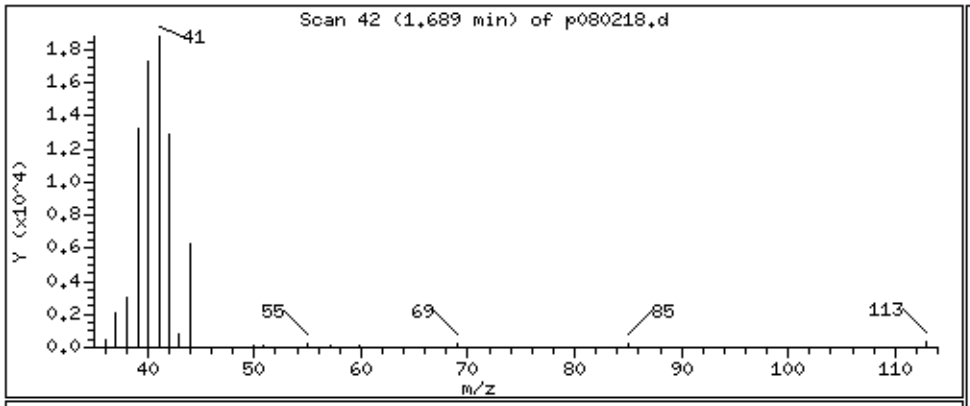
Operator: mb

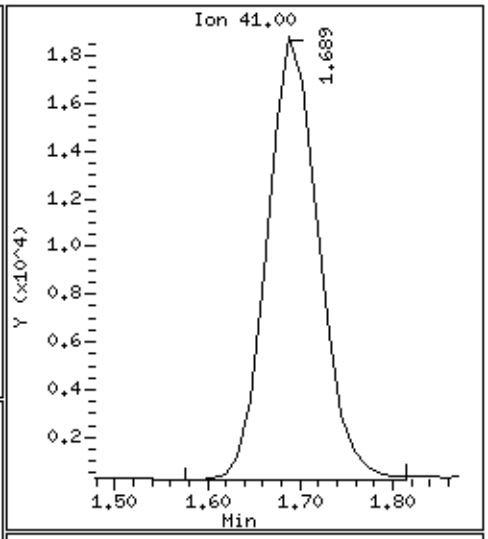
Column phase: RTX-624

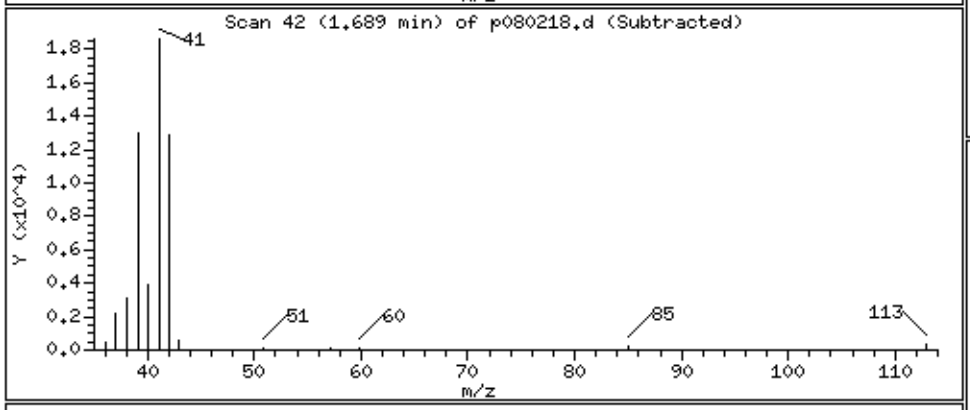
Column diameter: 0.25

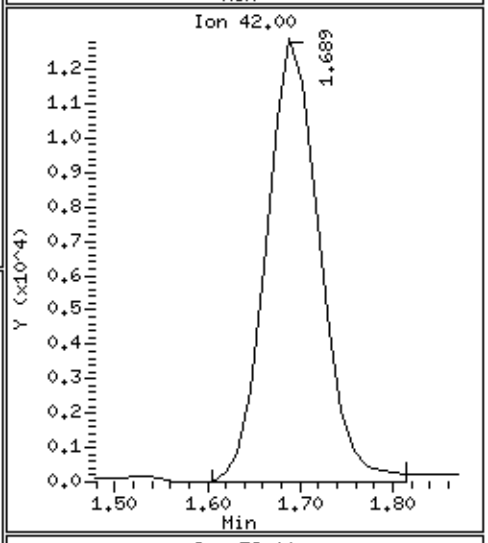
5 Propylene

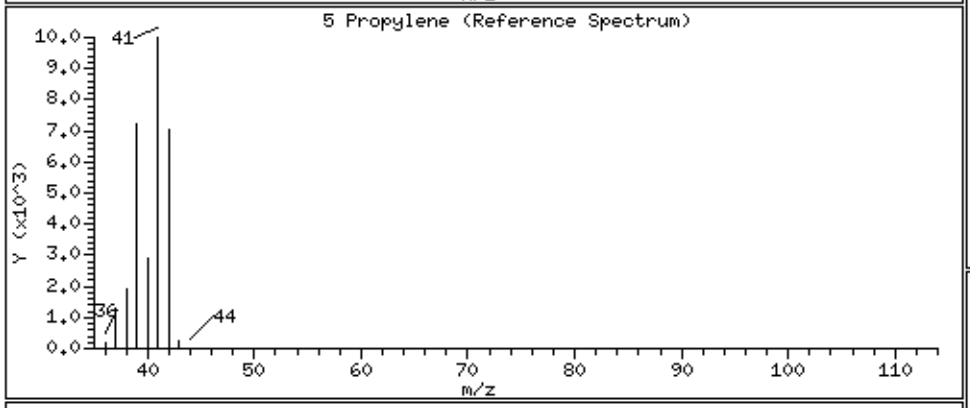
Concentration: 22.953 PPBV

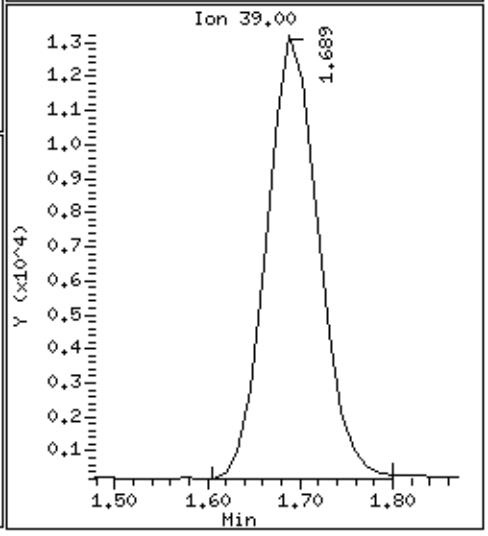


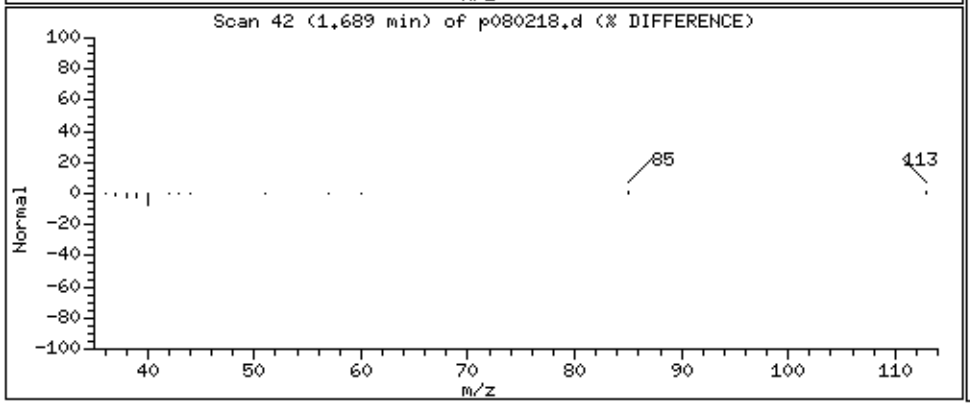












Data File: /chem/msdp.i/02AUG21.b/p080218.d

Date : 02-AUG-2021 21:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3823

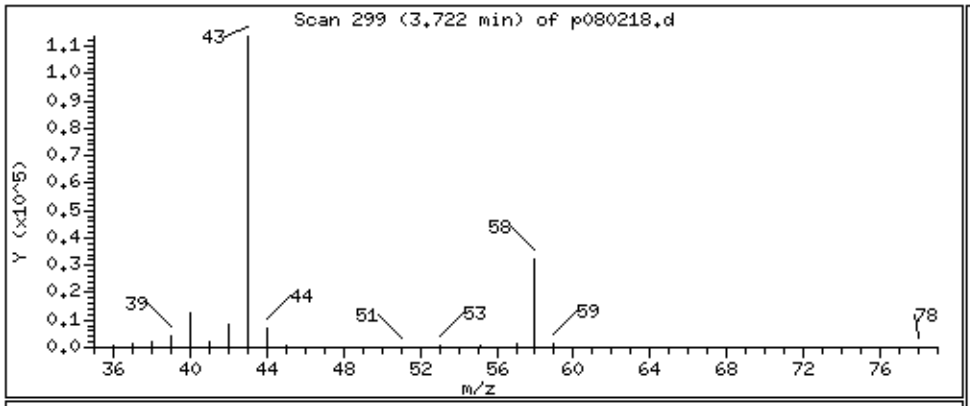
Operator: mb

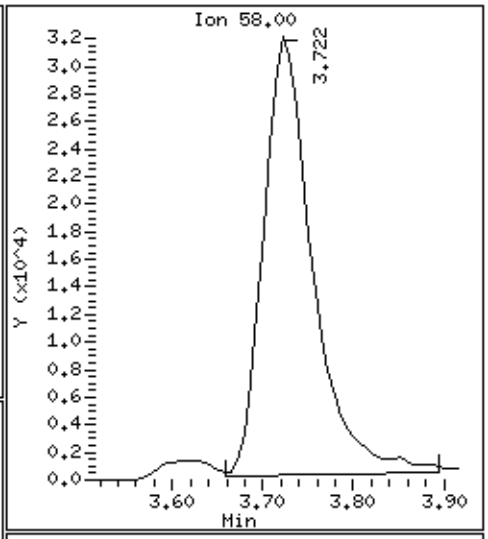
Column phase: RTX-624

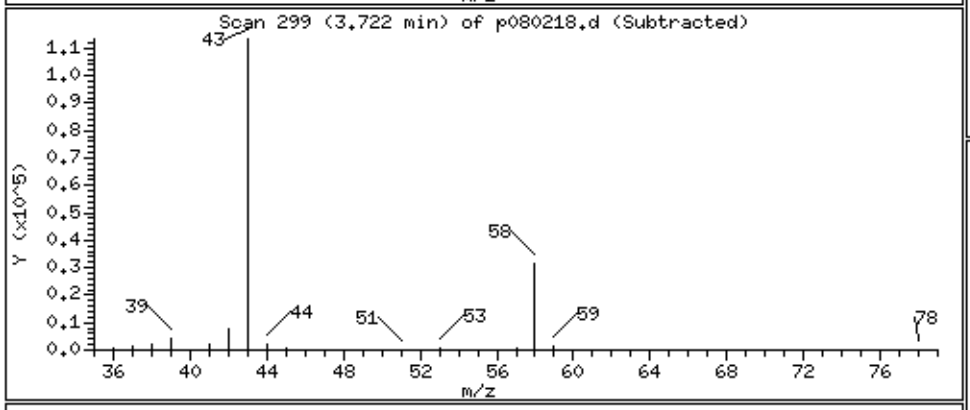
Column diameter: 0.25

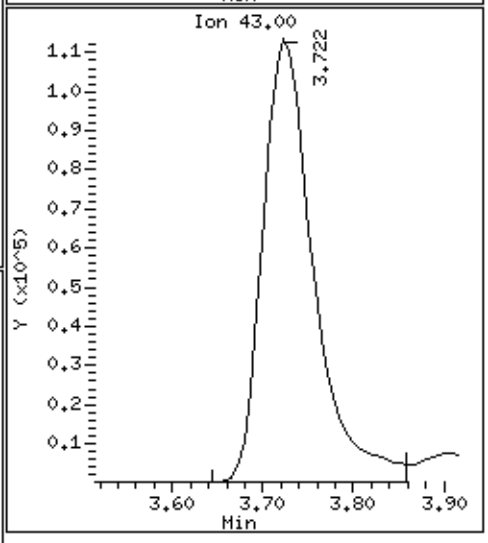
47 Acetone

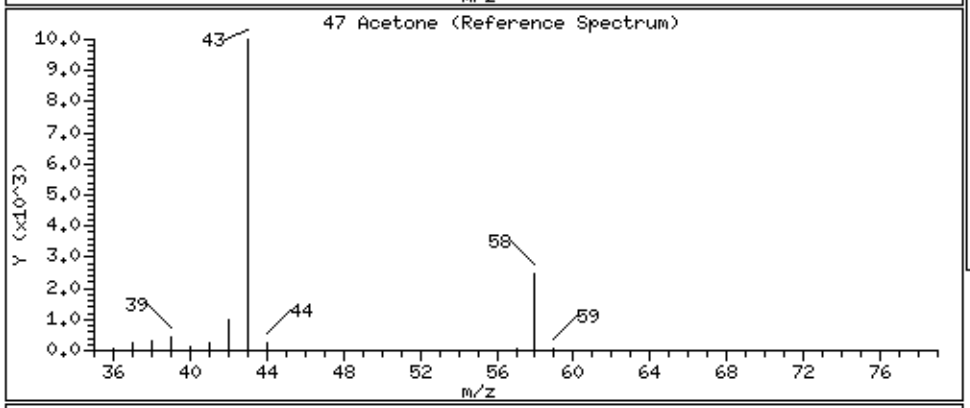
Concentration: 67.065 PPBV

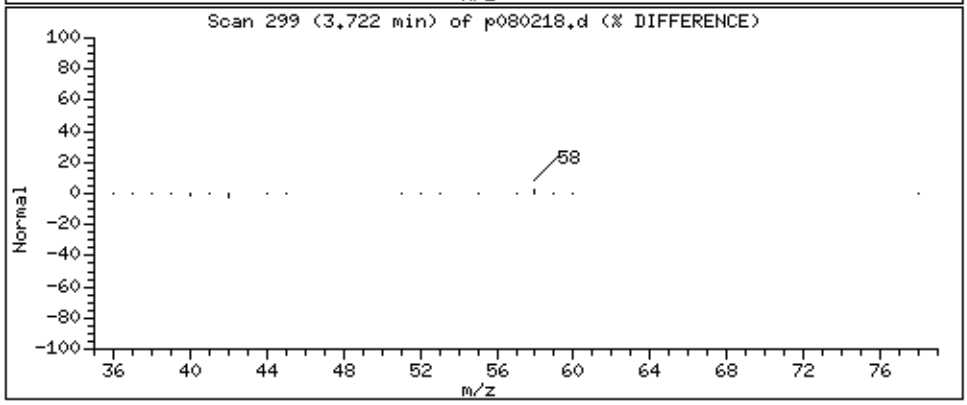












Data File: /chem/msdp.i/02AUG21.b/p080218.d

Date : 02-AUG-2021 21:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3823

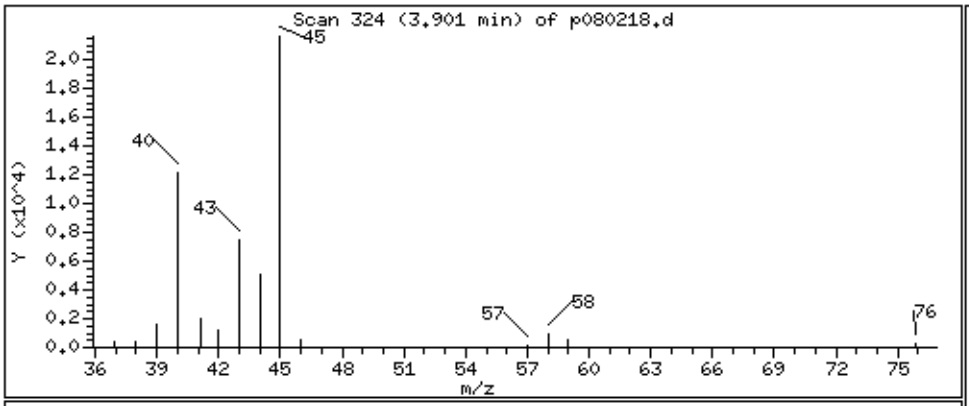
Operator: mb

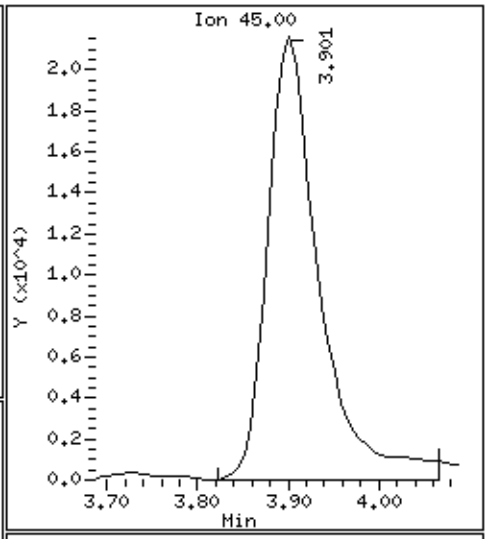
Column phase: RTX-624

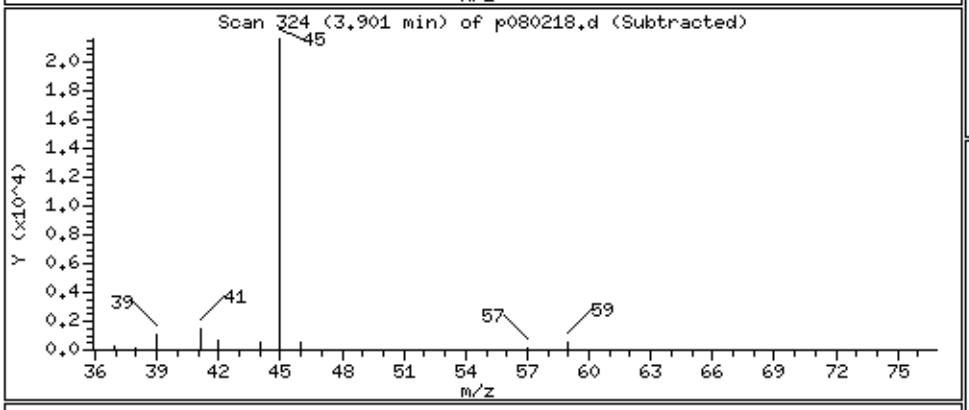
Column diameter: 0.25

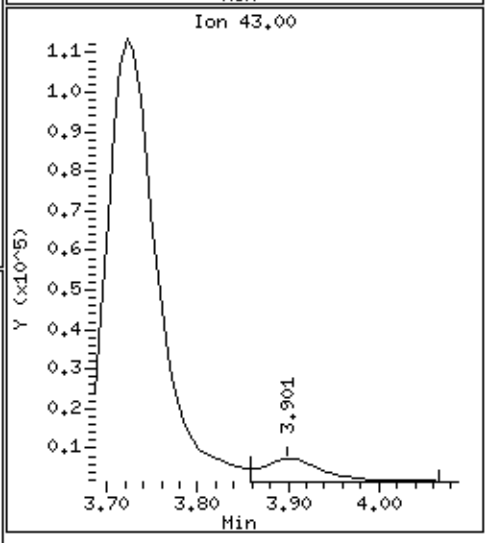
52 2-Propanol

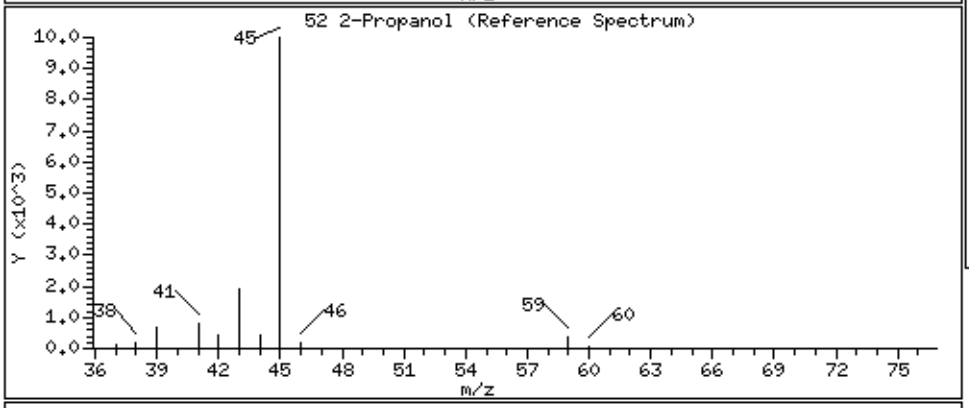
Concentration: 11.818 PPBV

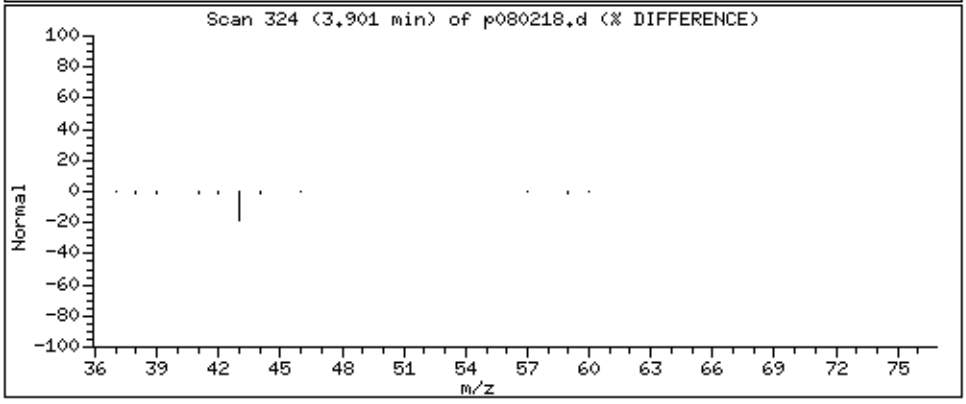












Data File: /chem/msdp.i/02AUG21.b/p080218.d

Date : 02-AUG-2021 21:27

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3823

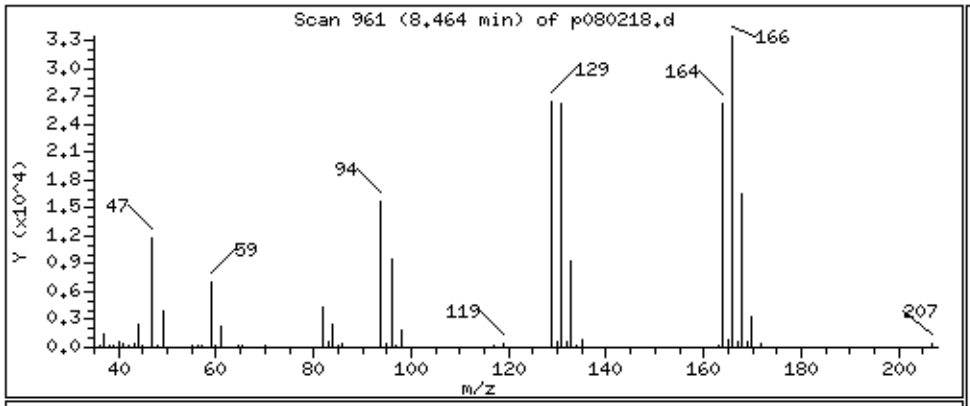
Operator: mb

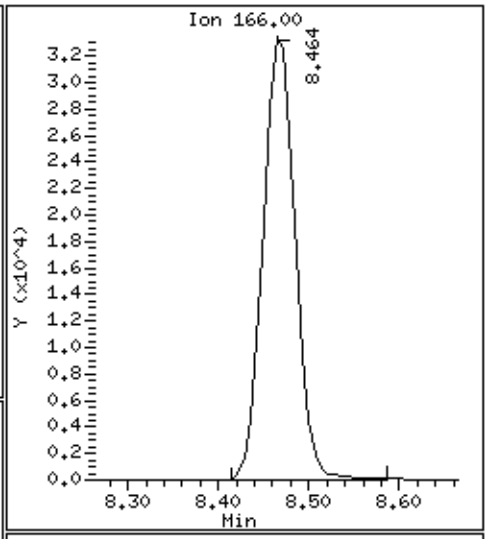
Column phase: RTX-624

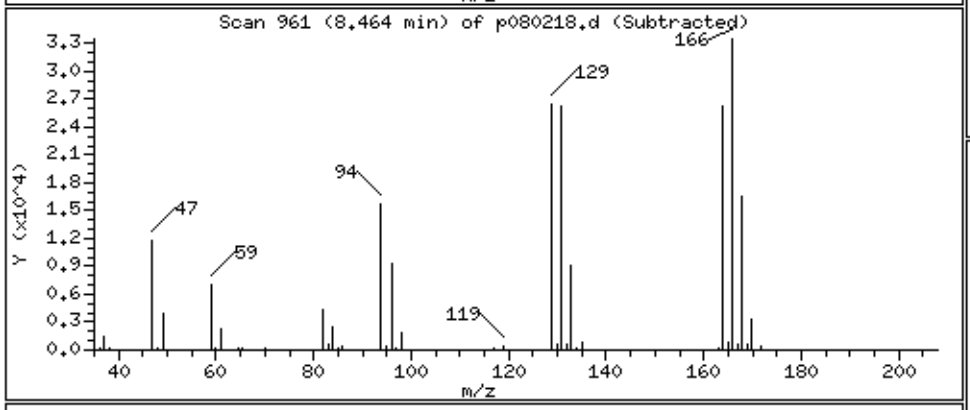
Column diameter: 0.25

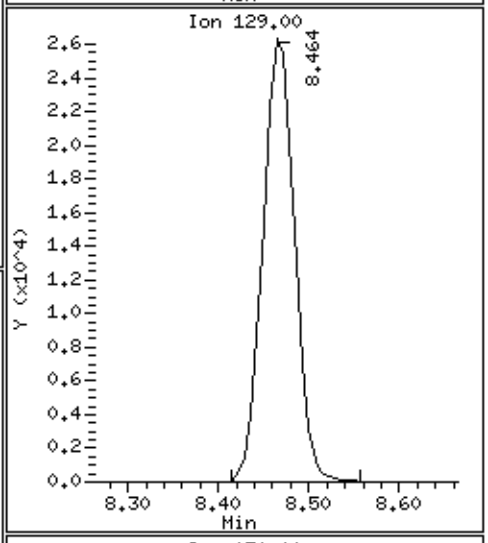
142 Tetrachloroethene

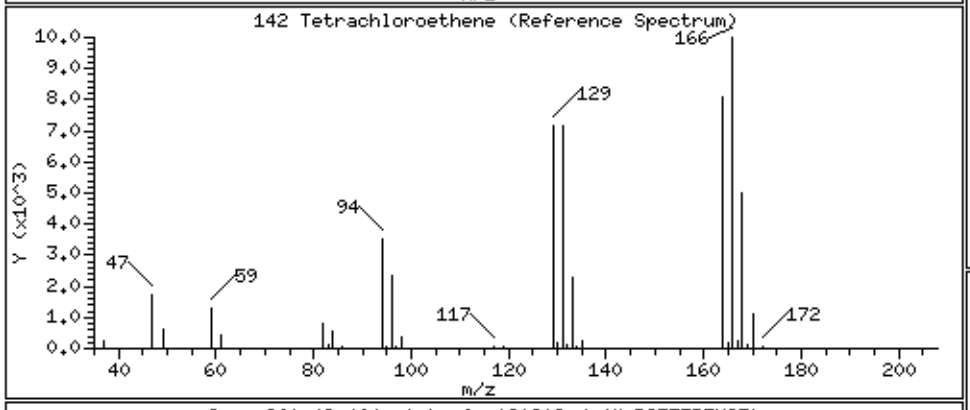
Concentration: 14.195 PPBV

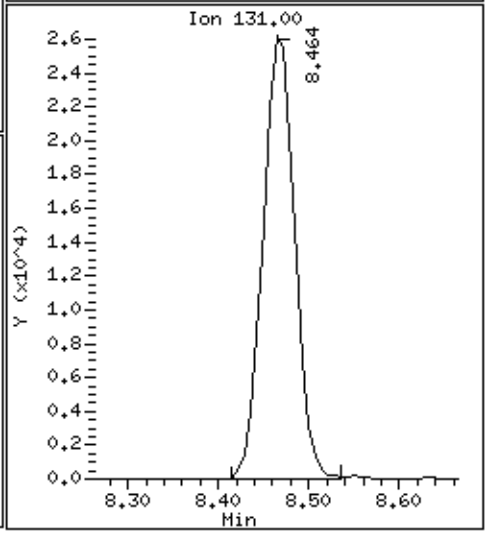


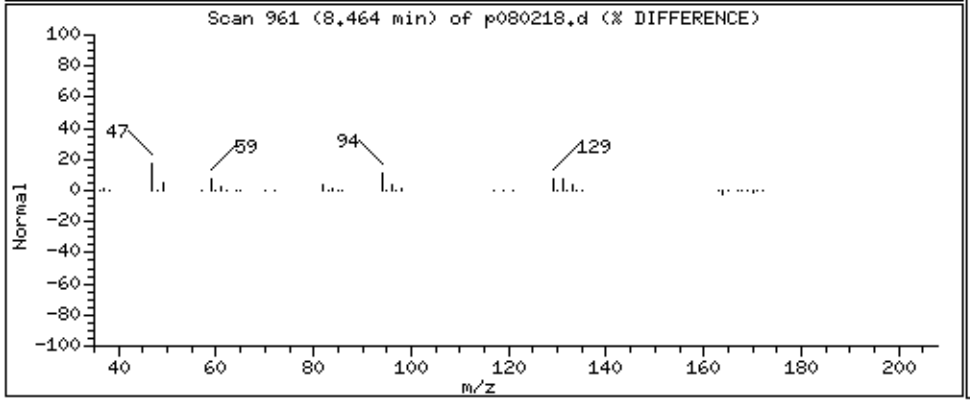












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Client Sample ID: SG-SVM2B-01

Lab ID#: 2107684-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080219**	**Date of Collection:**	**7/29/21 2:50:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 09:56 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	2.7	5.0	13
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	6.9	9.9	17
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	14	24	33
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-SVM2B-01

Lab ID#: 2107684-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080219**	**Date of Collection:**	**7/29/21 2:50:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 09:56 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	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	11	6.8	77
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-SVM2B-01

Lab ID#: 2107684-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080219**	**Date of Collection:**	**7/29/21 2:50:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 09:56 PM**

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080219.d
Lab Smp Id: 2107684-04A
Inj Date : 02-AUG-2021 21:56
Operator : mb Inst ID: msdp.i
Smp Info : 200ml LC684
Misc Info : 4.9 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 3
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	152829	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	117972				48.23- 108.23	77.19
5.785	5.778 (1.000)	49	315988				150.57- 210.57	206.76
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	567820	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	81442				0.00- 45.71	14.34
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	557695	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	289986				23.78- 83.78	52.00
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	213637	25.3298	25.330		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	105405				27.21- 87.21	49.34
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	622281	25.2375	25.238		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	64615				0.00- 40.44	10.38

					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	405225				34.95- 94.95	65.12
$ 170 4-Bromofluorobenzene						CAS #: 460-00-4		
10.921	10.921 (1.154)	174	351789	24.5646	24.565		80.00- 120.00	100.00
10.914	10.921 (1.154)	95	423464				95.92- 155.92	120.37
10.921	10.921 (1.154)	176	333900				66.89- 126.89	94.92
47 Acetone						CAS #: 67-64-1		
3.722	3.715 (0.643)	58	27571	6.88143	13.900		80.00- 120.00	100.00
3.729	3.715 (0.645)	43	99525				302.95- 362.95	360.98
52 2-Propanol						CAS #: 67-63-0		
3.901	3.887 (0.674)	45	55051	3.40920	6.886		80.00- 120.00	100.00
3.908	3.887 (0.676)	43	12800				0.00- 47.19	23.25
142 Tetrachloroethene						CAS #: 127-18-4		
8.464	8.464 (0.895)	166	71243	5.60513	11.322		80.00- 120.00	100.00
8.464	8.464 (0.895)	129	53394				47.84- 107.84	74.95
8.464	8.464 (0.895)	131	52983				45.29- 105.29	74.37
190 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
11.816	11.816 (1.249)	105	49521	1.35386	2.735		80.00- 120.00	100.00
11.809	11.816 (1.248)	120	23530				19.05- 79.05	47.52

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080219.d
Lab Smp Id: 2107684-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 4.9 Hg->10.1 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	152829	2.37
108 1,4-Difluorobenze	558135	334881	781389	567820	1.74
153 Chlorobenzene-d5	542388	325433	759343	557695	2.82

		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	6.67	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.

Report Date: 06-Aug-2021 12:09

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-04A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 4.9 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.330	101.32	70-130
$ 134 Toluene-d8	25.000	25.238	100.95	70-130
$ 170 4-Bromofluorobenz	25.000	24.565	98.26	70-130

Data File: /chem/msdp.i/02AUG21.b/p080219.d

Date : 02-AUG-2021 21:56

Client ID:

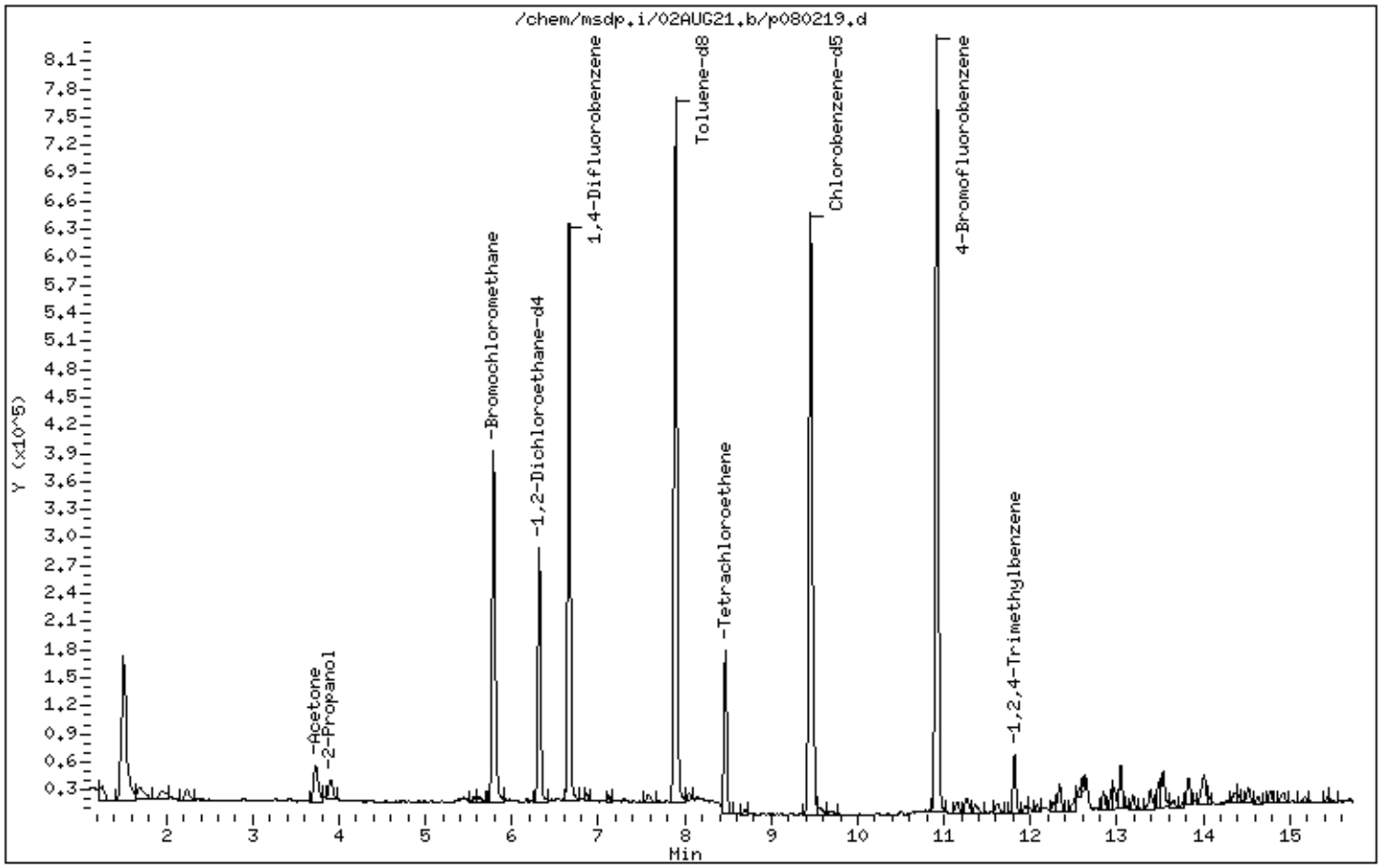
Instrument: msdp.i

Sample Info: 200ml LC684

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080219.d

Date : 02-AUG-2021 21:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml LC684

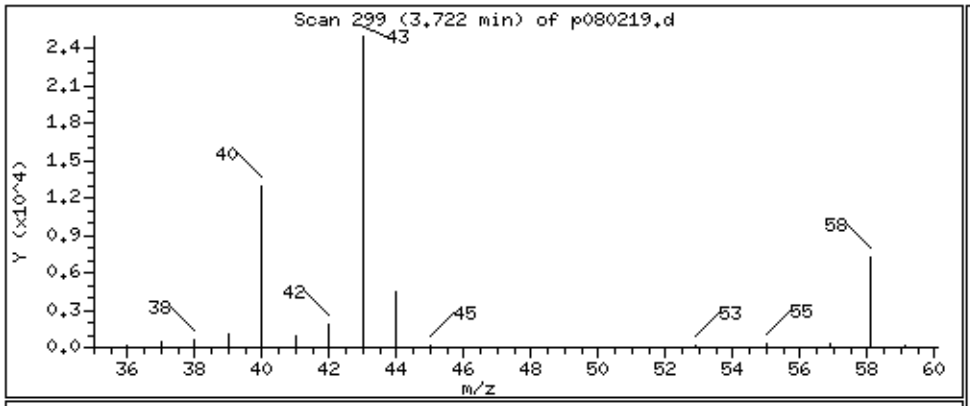
Operator: mb

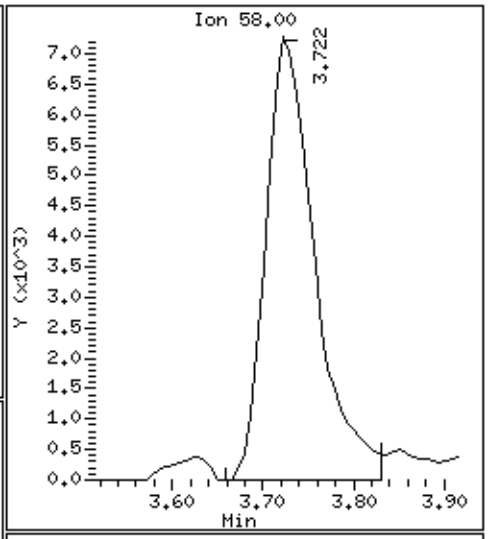
Column phase: RTX-624

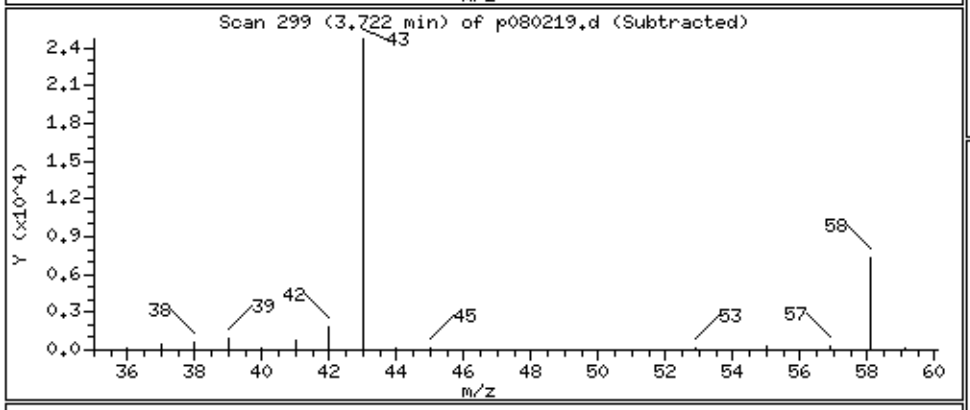
Column diameter: 0.25

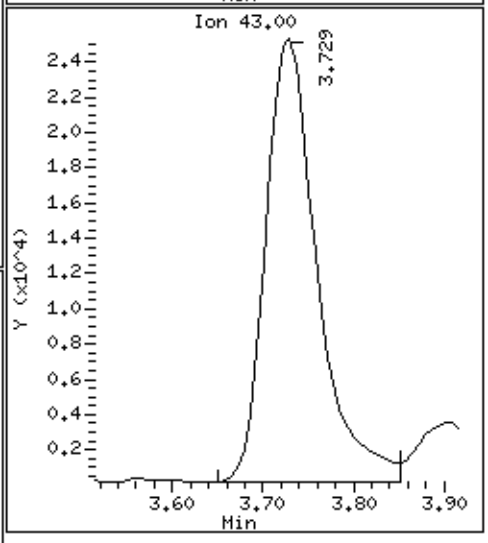
47 Acetone

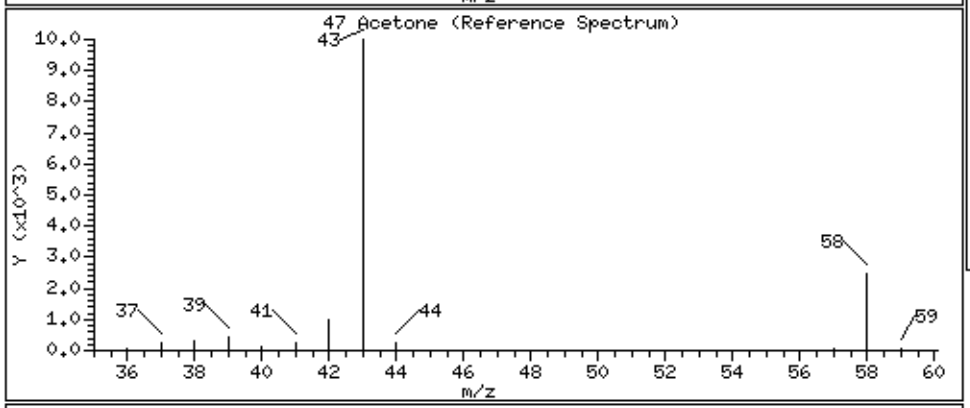
Concentration: 13.900 PPBV

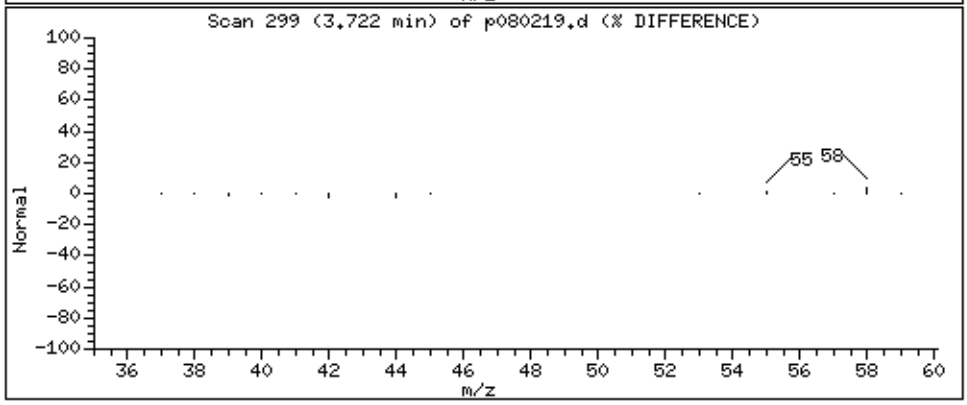












Data File: /chem/msdp.i/02AUG21.b/p080219.d

Date : 02-AUG-2021 21:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml LC684

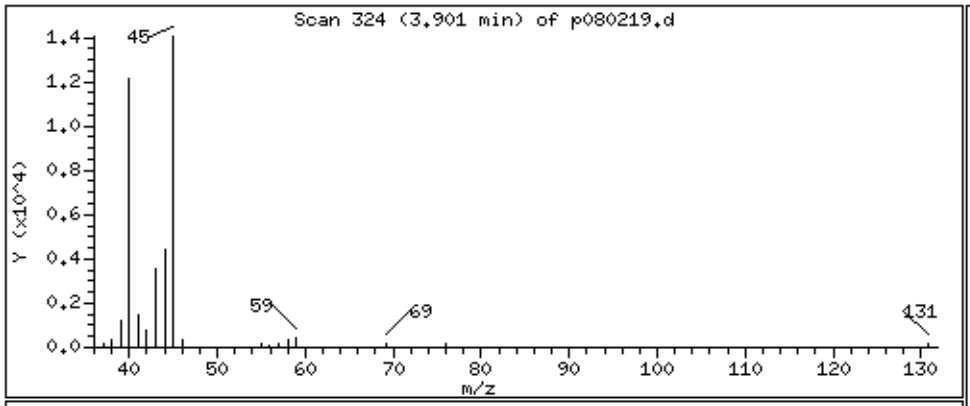
Operator: mb

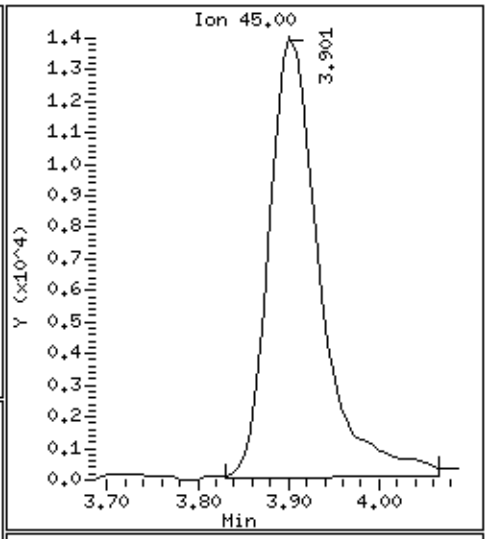
Column phase: RTX-624

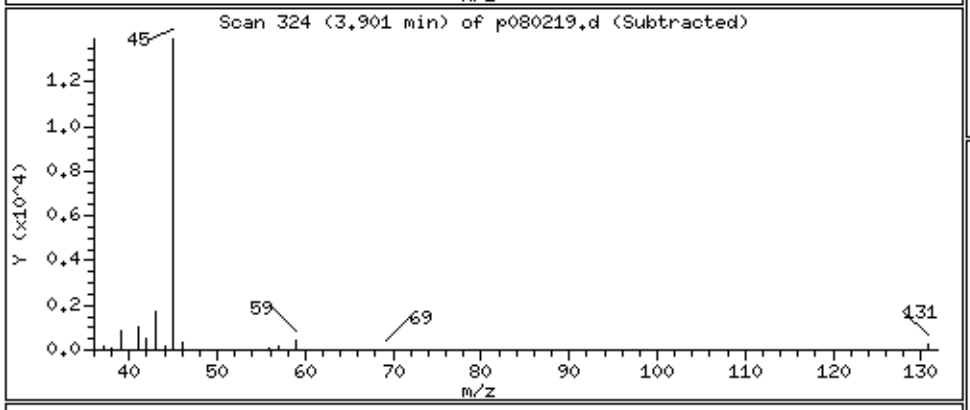
Column diameter: 0.25

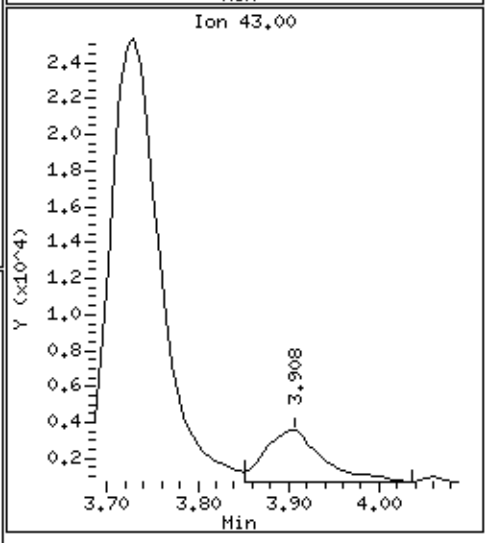
52 2-Propanol

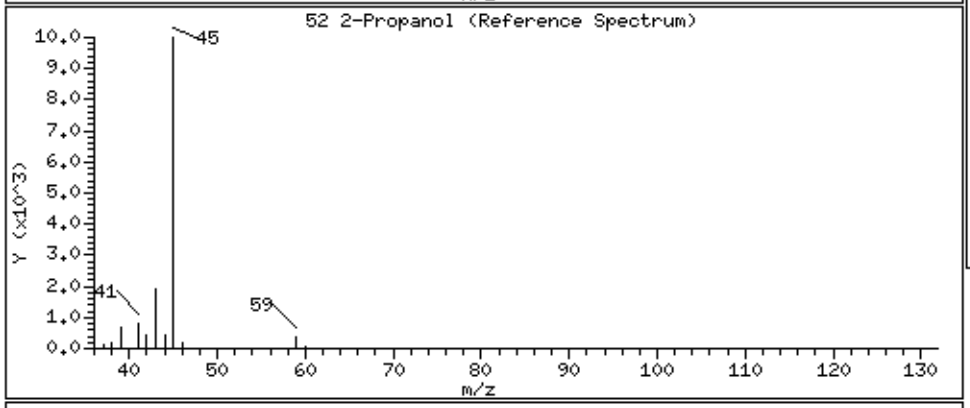
Concentration: 6.886 PPBV

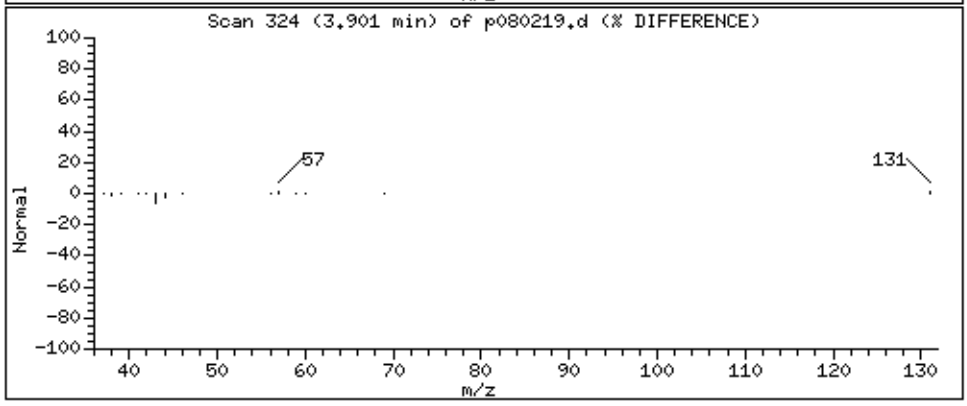












Data File: /chem/msdp.i/02AUG21.b/p080219.d

Date : 02-AUG-2021 21:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml LC684

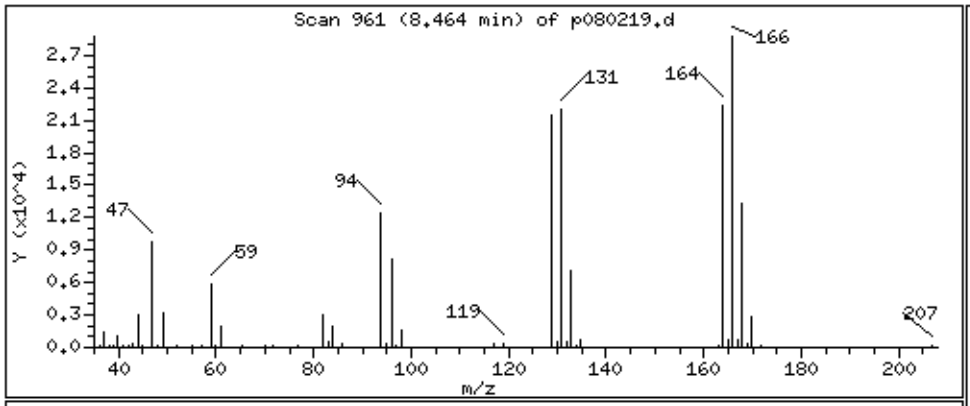
Operator: mb

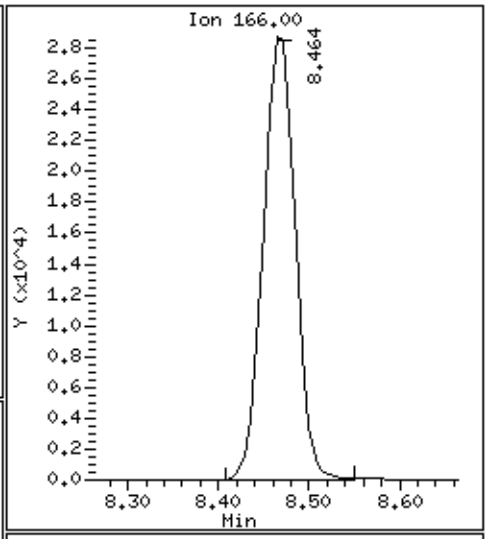
Column phase: RTX-624

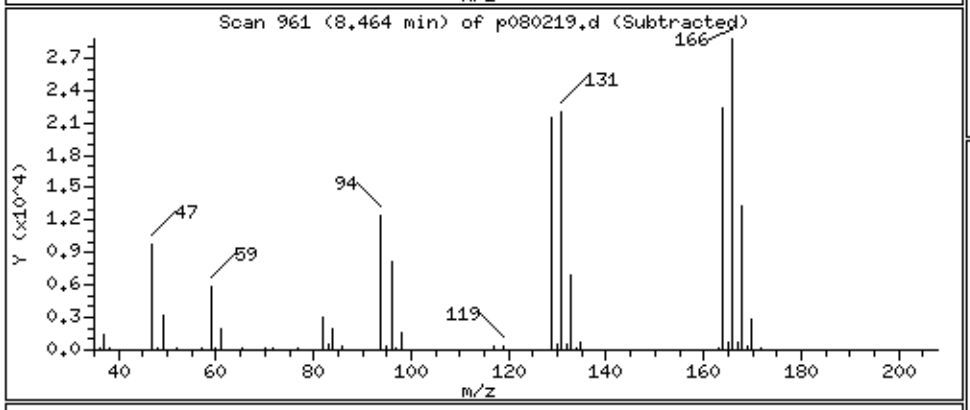
Column diameter: 0.25

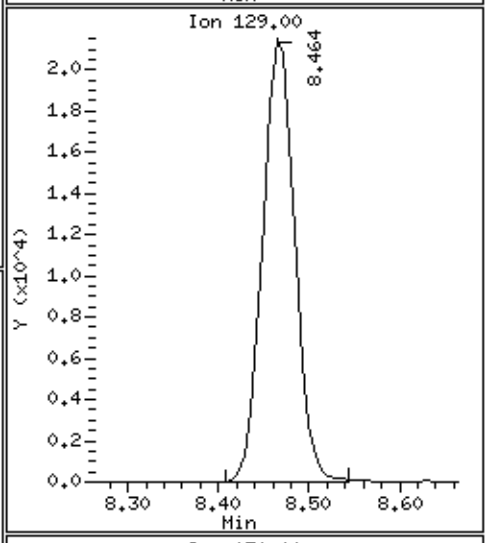
142 Tetrachloroethene

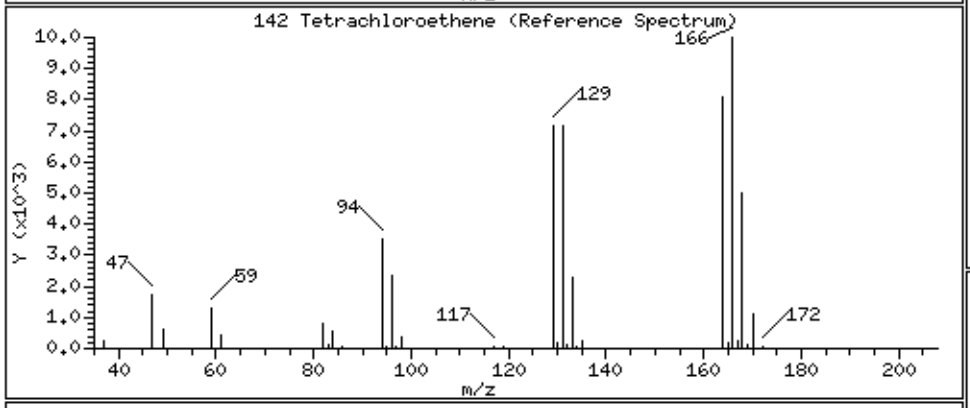
Concentration: 11.322 PPBV

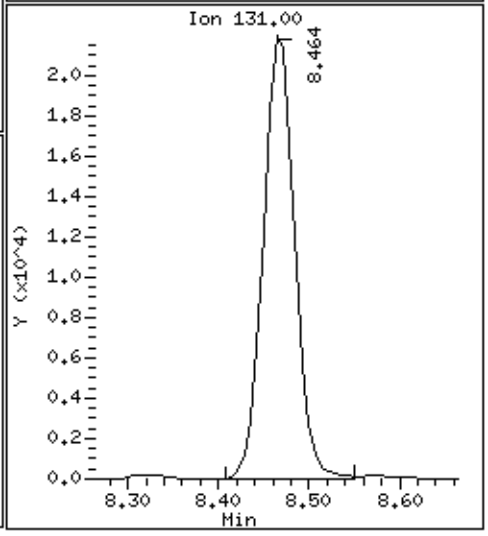


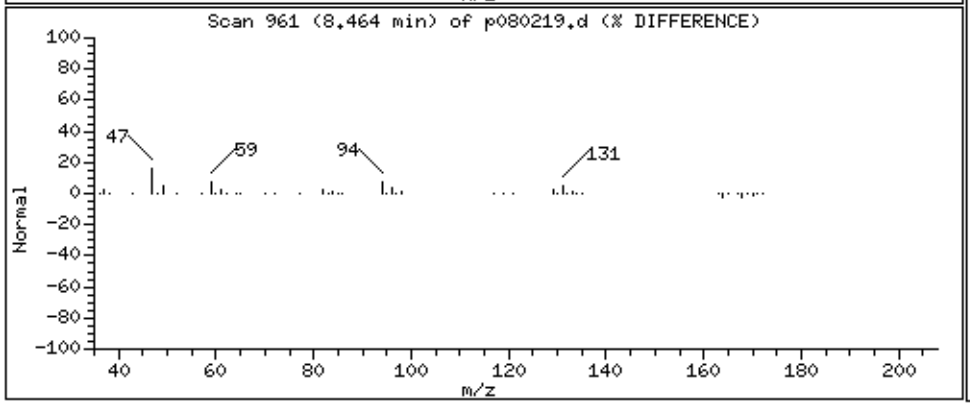












Data File: /chem/msdp.i/02AUG21.b/p080219.d

Date : 02-AUG-2021 21:56

Client ID:

Instrument: msdp.i

Sample Info: 200ml LC684

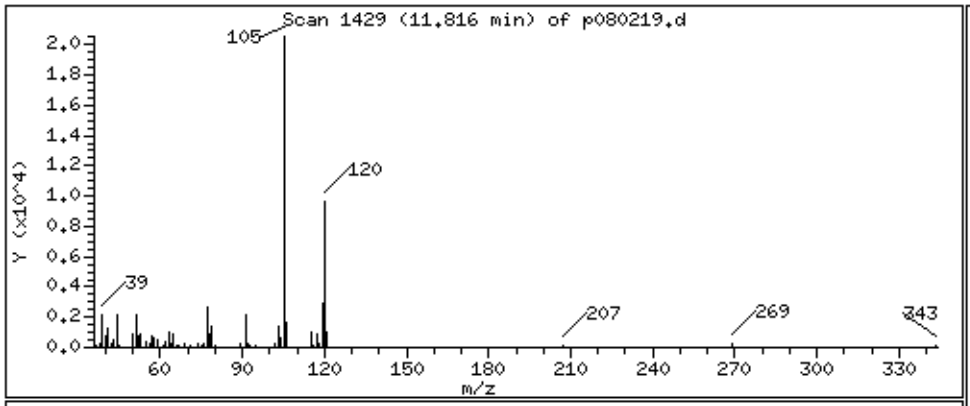
Operator: mb

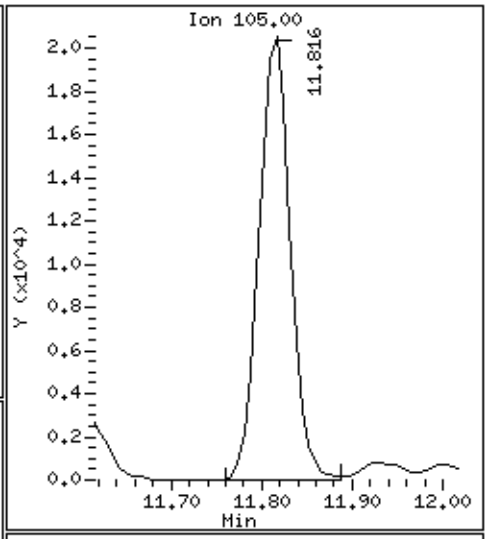
Column phase: RTX-624

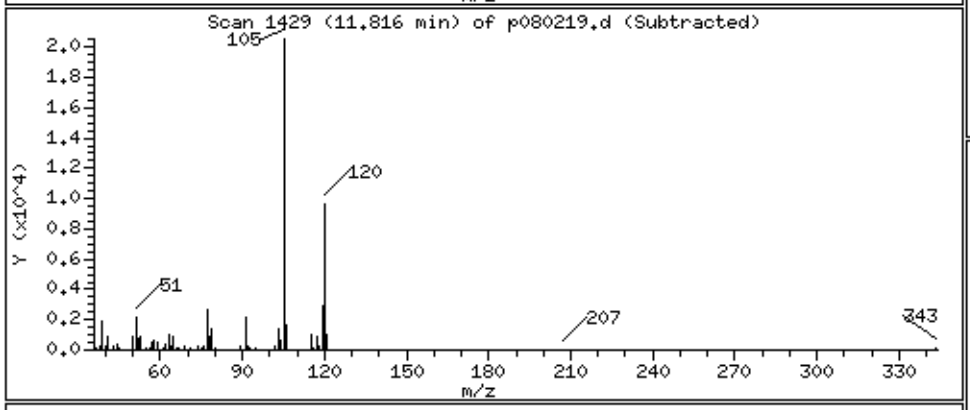
Column diameter: 0.25

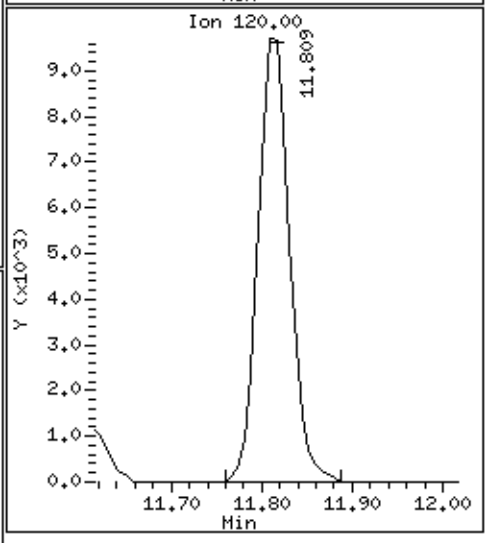
190 1,2,4-Trimethylbenzene

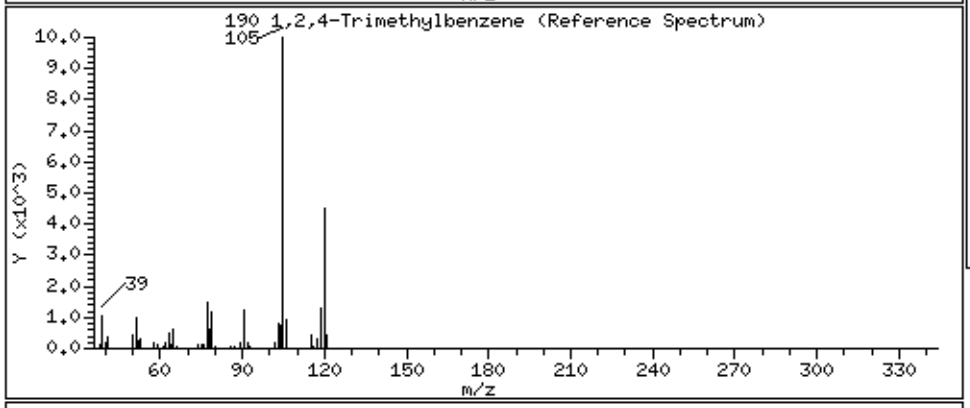
Concentration: 2.735 PPBV

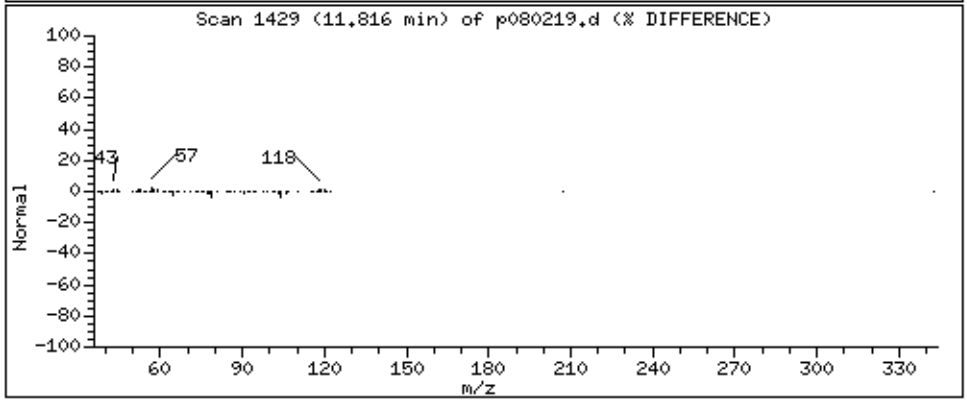












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Client Sample ID: SG-SVM3A-01

Lab ID#: 2107684-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080220**	**Date of Collection:**	**7/29/21 12:55:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**8/2/21 10:25 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-SVM3A-01

Lab ID#: 2107684-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080220**	**Date of Collection:**	**7/29/21 12:55:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**8/2/21 10:25 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	86	7.1	590
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-SVM3A-01

Lab ID#: 2107684-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080220**	**Date of Collection:**	**7/29/21 12:55:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**8/2/21 10:25 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080220.d
Lab Smp Id: 2107684-05A
Inj Date : 02-AUG-2021 22:25
Operator : mb Inst ID: msdp.i
Smp Info : 200ml 1L1576
Misc Info : 6.3 Hg->9.7 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 4
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	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	149985	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	118444				48.23- 108.23	78.97
5.785	5.778 (1.000)	49	315522				150.57- 210.57	210.37
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.659 (1.000)	114	563667	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	84070				0.00- 45.71	14.91
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	569093	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	292048				23.78- 83.78	51.32
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	210293	25.4061	25.406		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	104239				27.21- 87.21	49.57
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	623216	25.4617	25.462		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	63909				0.00- 40.44	10.25

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	405122			34.95- 94.95	65.01
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	346539	23.7134	23.713	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	421833			95.92- 155.92	121.73
10.921	10.921 (1.154)	176	338204			66.89- 126.89	97.59
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	534220	41.1886	86.496	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	414033			47.84- 107.84	77.50
8.464	8.464 (0.895)	131	404910			45.29- 105.29	75.79

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080220.d
Lab Smp Id: 2107684-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.7 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	149985	0.46
108 1,4-Difluorobenze	558135	334881	781389	563667	0.99
153 Chlorobenzene-d5	542388	325433	759343	569093	4.92

		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	6.67	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.

Report Date: 06-Aug-2021 12:09

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-05A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.3 Hg->9.7 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.406	101.62	70-130
$ 134 Toluene-d8	25.000	25.462	101.85	70-130
$ 170 4-Bromofluorobenz	25.000	23.713	94.85	70-130

Data File: /chem/msdp.i/02AUG21.b/p080220.d

Date : 02-AUG-2021 22:25

Client ID:

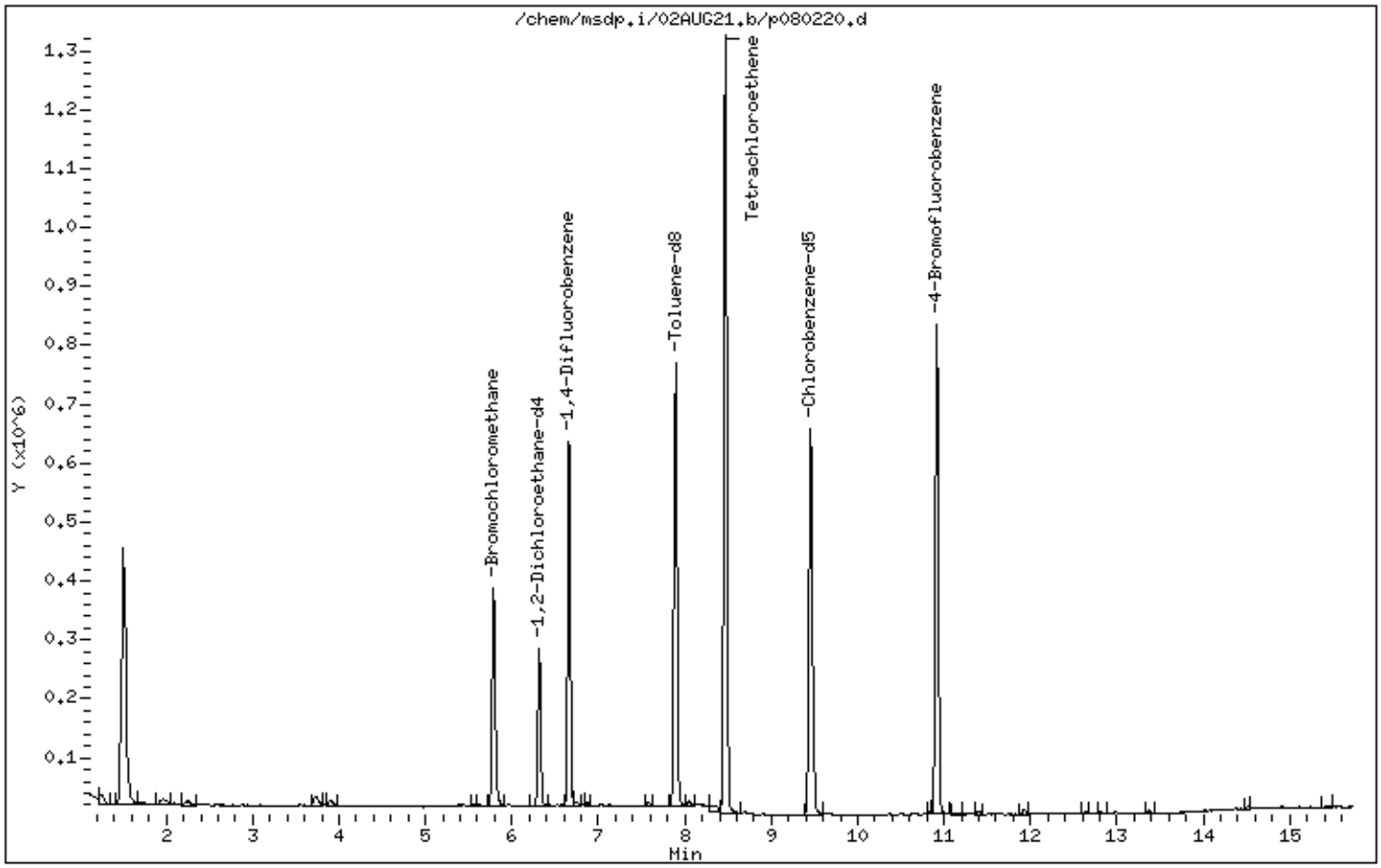
Instrument: msdp.i

Sample Info: 200ml 1L1576

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080220.d

Date : 02-AUG-2021 22:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1576

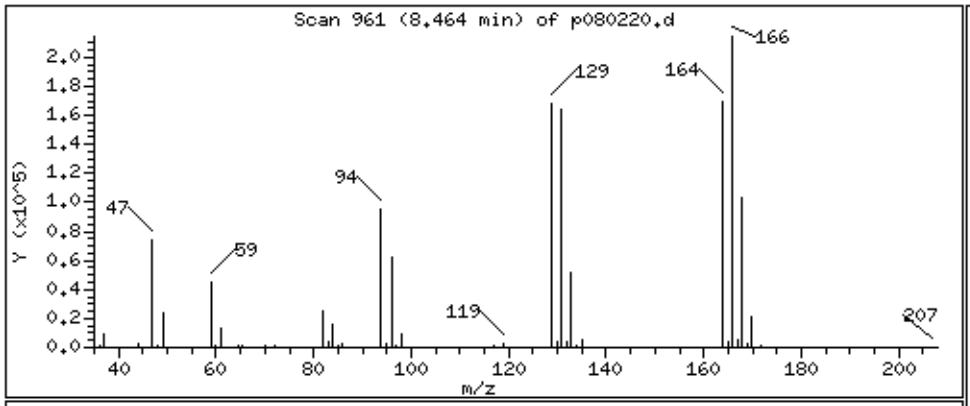
Operator: mb

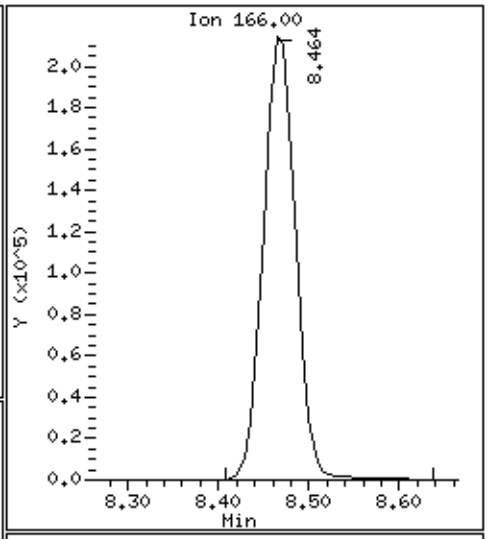
Column phase: RTX-624

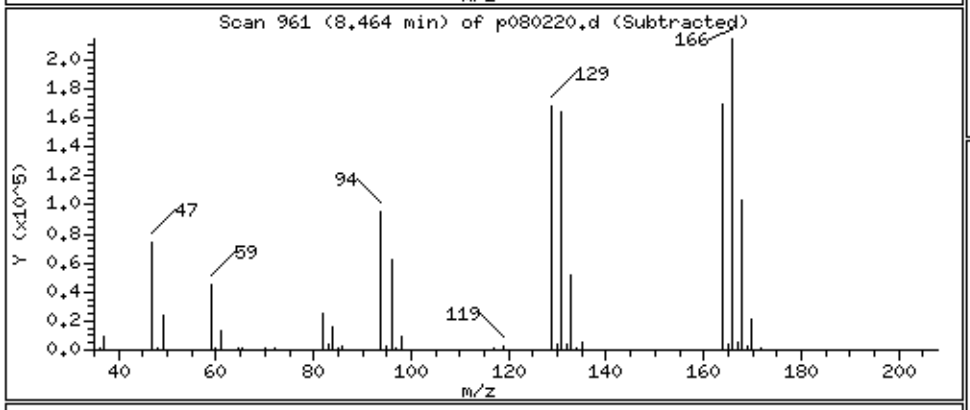
Column diameter: 0.25

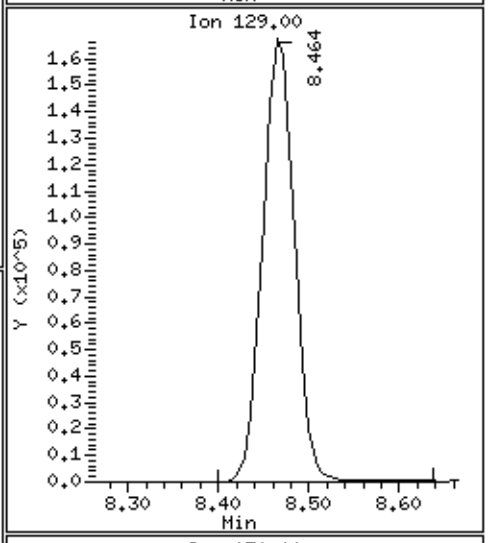
142 Tetrachloroethene

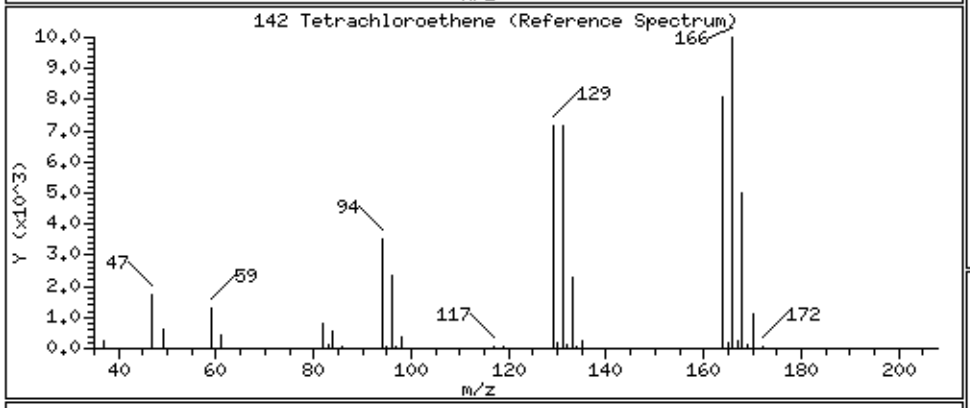
Concentration: 86.496 PPBV

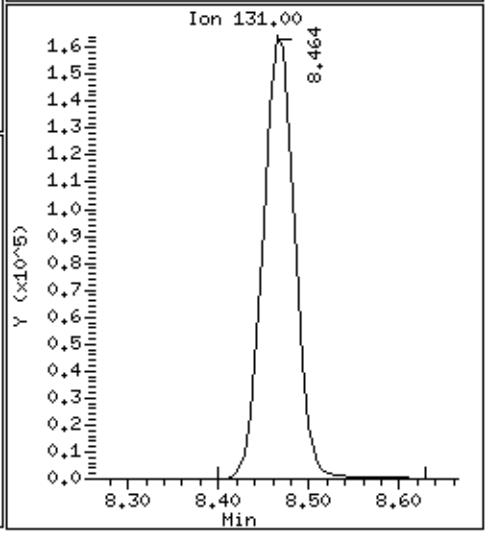


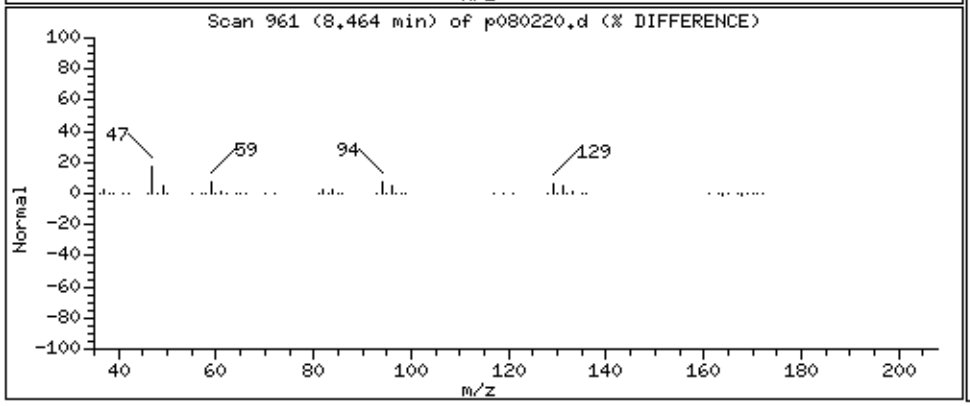












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Client Sample ID: SG-SVM3B-01

Lab ID#: 2107684-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080221**	**Date of Collection:**	**7/29/21 1:21:00 PM**
Dil. Factor:	**2.16**	**Date of Analysis:**	**8/2/21 10:55 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	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	5.0	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	Not Detected	26	Not Detected
Acrolein	4.3	Not Detected	9.9	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	3.4	Not Detected
Bromodichloromethane	1.1	Not Detected	7.2	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.3	Not Detected	13	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-SVM3B-01

Lab ID#: 2107684-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080221**	**Date of Collection:**	**7/29/21 1:21:00 PM**
Dil. Factor:	**2.16**	**Date of Analysis:**	**8/2/21 10:55 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	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	5.3	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	7.4	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	20	7.3	140
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-SVM3B-01

Lab ID#: 2107684-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080221**	**Date of Collection:**	**7/29/21 1:21:00 PM**
Dil. Factor:	**2.16**	**Date of Analysis:**	**8/2/21 10:55 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080221.d
Lab Smp Id: 2107684-06A
Inj Date : 02-AUG-2021 22:55
Operator : mb Inst ID: msdp.i
Smp Info : 200ml 1L1646
Misc Info : 7.1 Hg->9.6 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 5
Dil Factor: 2.16000
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	152393	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	118106				48.23- 108.23	77.50
5.785	5.778 (1.000)	49	320320				150.57- 210.57	210.19
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	567017	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	84719				0.00- 45.71	14.94
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	561275	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	297711				23.78- 83.78	53.04
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	212779	25.3002	25.300		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	106702				27.21- 87.21	50.15
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	617836	25.0927	25.093		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65510				0.00- 40.44	10.60

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	404856			34.95- 94.95	65.53
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	351493	24.3874	24.387	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	426514			95.92- 155.92	121.34
10.921	10.921 (1.154)	176	341407			66.89- 126.89	97.13
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	119506	9.34231	20.179	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	91060			47.84- 107.84	76.20
8.464	8.464 (0.895)	131	89480			45.29- 105.29	74.87

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080221.d
Lab Smp Id: 2107684-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.6 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	152393	2.08
108 1,4-Difluorobenze	558135	334881	781389	567017	1.59
153 Chlorobenzene-d5	542388	325433	759343	561275	3.48

		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.

Report Date: 06-Aug-2021 12:10

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-06A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 7.1 Hg->9.6 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.300	101.20	70-130
$ 134 Toluene-d8	25.000	25.093	100.37	70-130
$ 170 4-Bromofluorobenz	25.000	24.387	97.55	70-130

Data File: /chem/msdp.i/02AUG21.b/p080221.d

Date : 02-AUG-2021 22:55

Client ID:

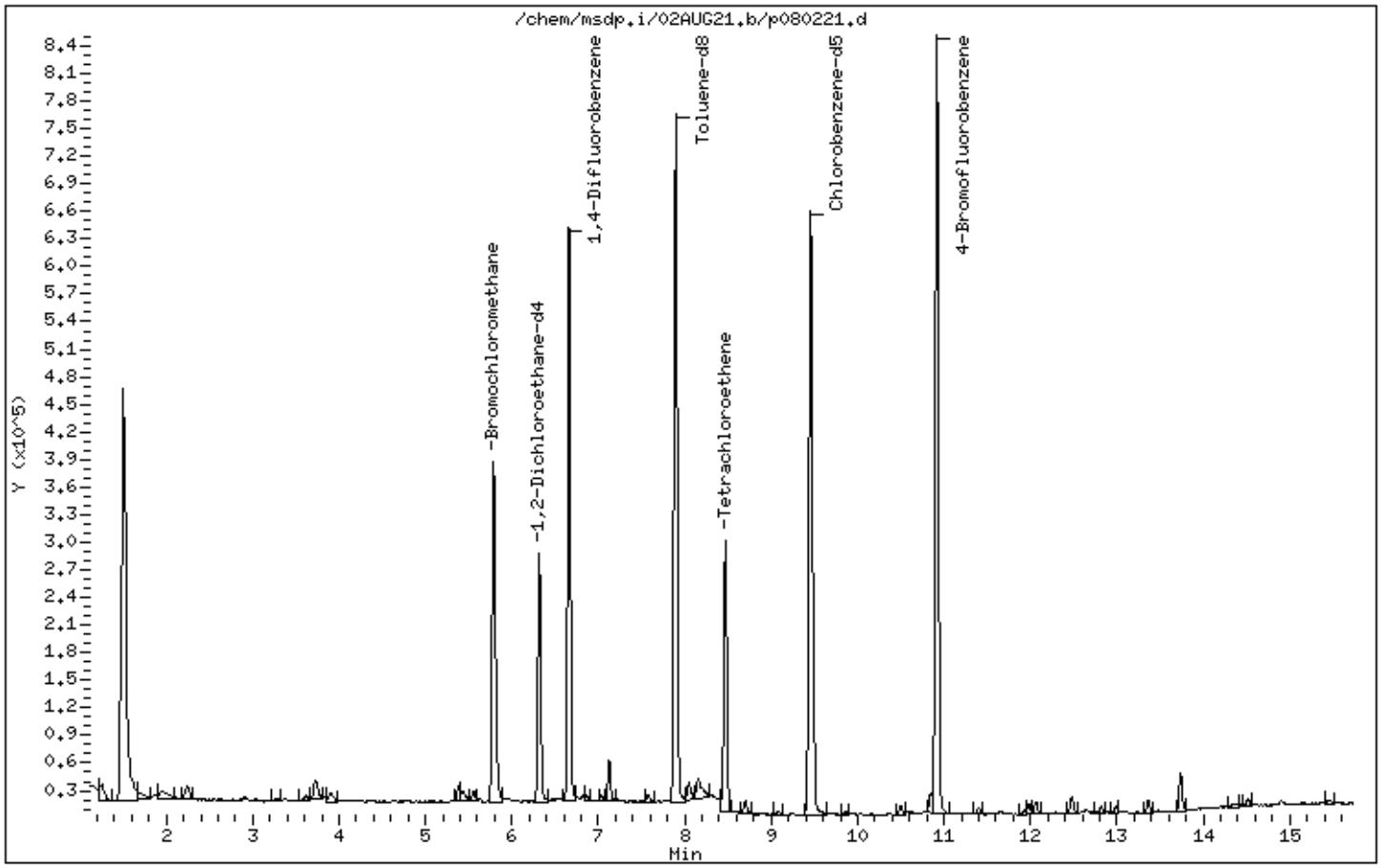
Instrument: msdp.i

Sample Info: 200ml 1L1646

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080221.d

Date : 02-AUG-2021 22:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1646

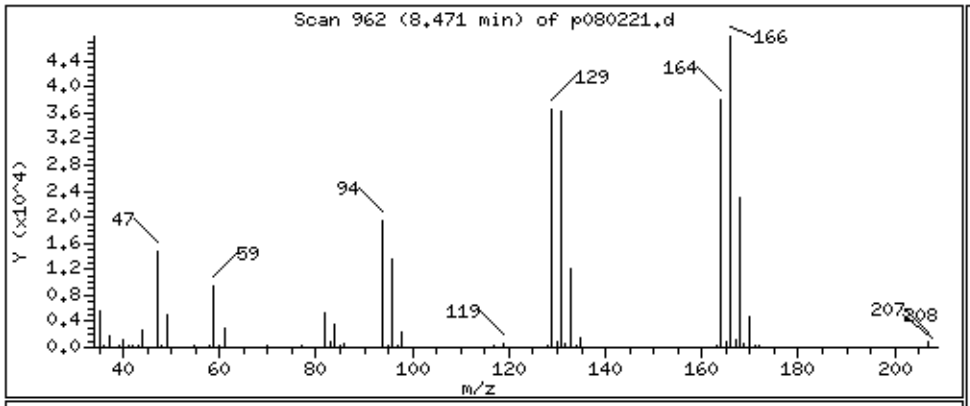
Operator: mb

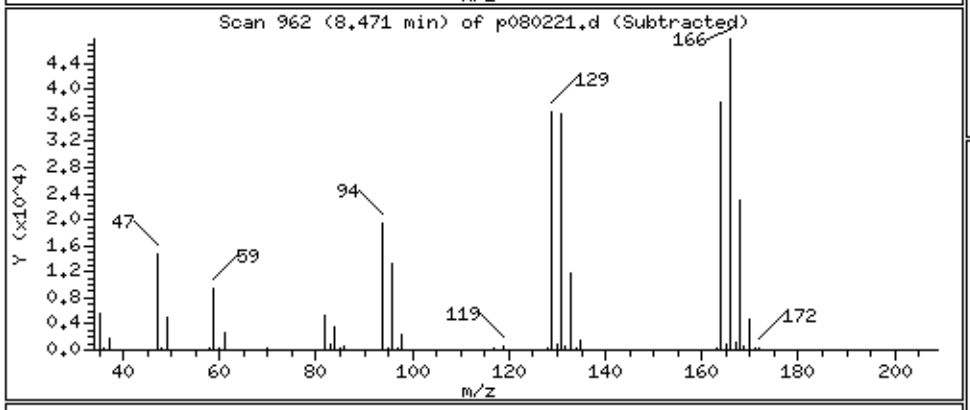
Column phase: RTX-624

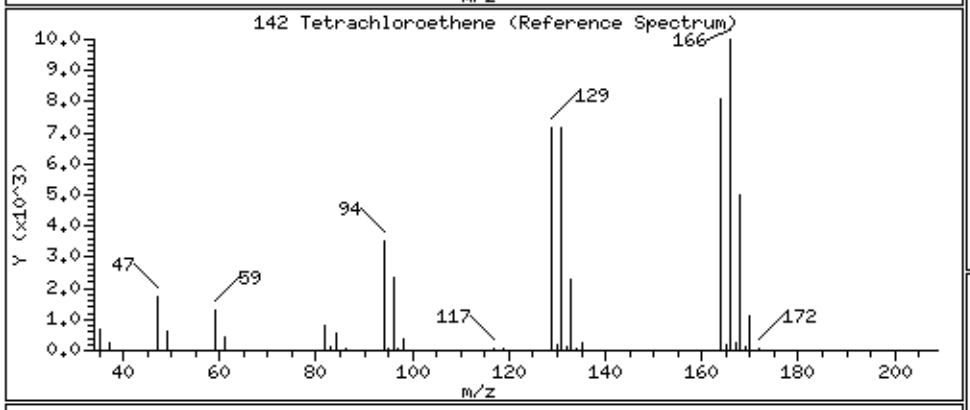
Column diameter: 0.25

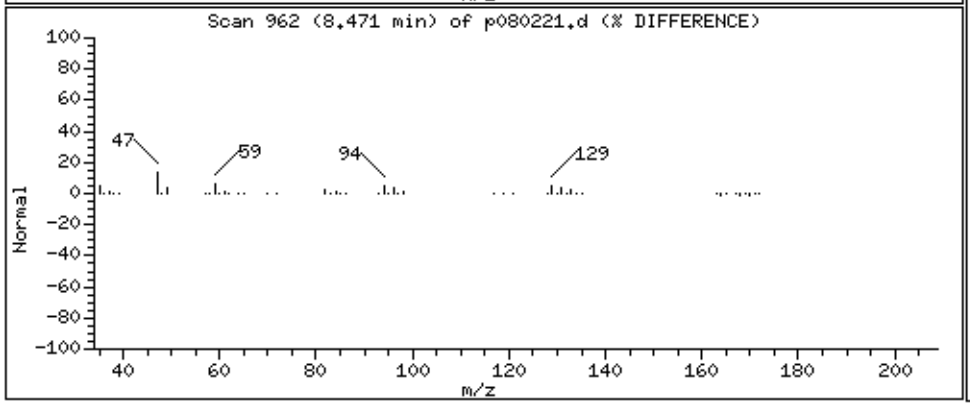
142 Tetrachloroethene

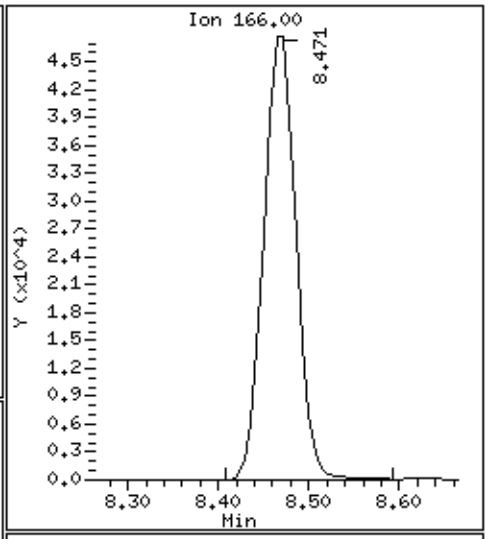
Concentration: 20.179 PPBV

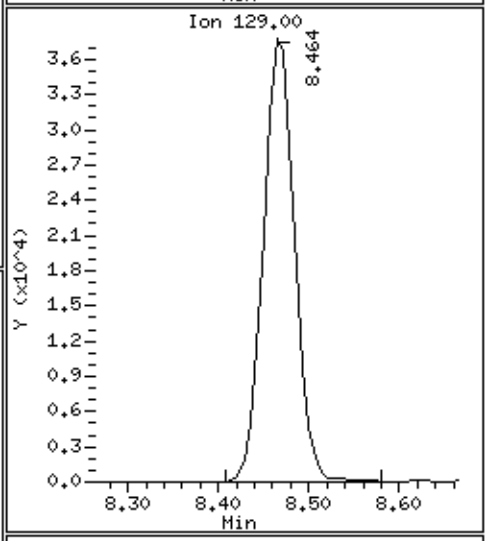


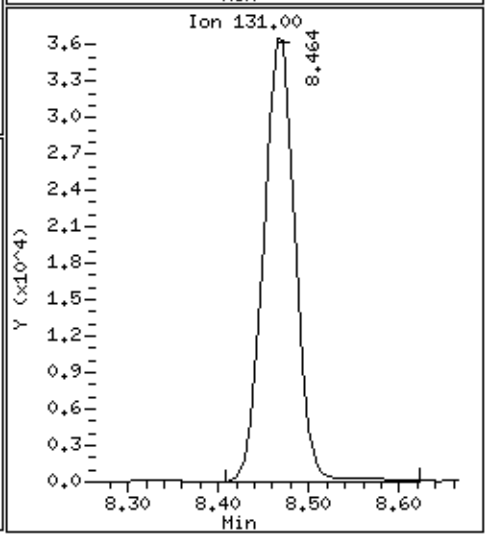












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Client Sample ID: SG-VM65A-01

Lab ID#: 2107684-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080222**	**Date of Collection:**	**7/30/21 9:36:00 AM**
Dil. Factor:	**2.15**	**Date of Analysis:**	**8/2/21 11:24 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	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	15	Not Detected
2,2,4-Trimethylpentane	1.1	22	5.0	100
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	5.0	10	12
3-Chloropropene	4.3	Not Detected	13	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	23	26	54
Acrolein	4.3	Not Detected	9.8	Not Detected
Acrylonitrile	4.3	Not Detected	9.3	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	5.1	3.4	16
Bromodichloromethane	1.1	Not Detected	7.2	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.3	5.0	13	15
Carbon Tetrachloride	1.1	Not Detected	6.8	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	4.3	Not Detected

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Client Sample ID: SG-VM65A-01

Lab ID#: 2107684-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080222**	**Date of Collection:**	**7/30/21 9:36:00 AM**
Dil. Factor:	**2.15**	**Date of Analysis:**	**8/2/21 11:24 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	2.8	3.7	9.8
Dibromochloromethane	1.1	Not Detected	9.2	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Ethyl Acetate	4.3	Not Detected	15	Not Detected
Ethyl Benzene	1.1	1.1	4.7	4.8
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	7.5	Not Detected
Freon 134a	4.3	Not Detected	18	Not Detected
Heptane	1.1	4.6	4.4	19
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected
Hexachloroethane	4.3	Not Detected	42	Not Detected
Hexane	1.1	55	3.8	190
Iodomethane	11	Not Detected	62	Not Detected
Isopropyl ether	4.3	Not Detected	18	Not Detected
m,p-Xylene	1.1	2.3	4.7	10
Methyl tert-butyl ether	4.3	Not Detected	16	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Naphthalene	2.2	Not Detected	11	Not Detected
o-Xylene	1.1	1.1	4.7	4.7
Propylbenzene	1.1	Not Detected	5.3	Not Detected
Propylene	4.3	8.8	7.4	15
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	14	7.3	96
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	9.9	4.0	37
TPH ref. to Gasoline (MW=100)	110	480	440	2000
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	2.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VM65A-01

Lab ID#: 2107684-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080222**	**Date of Collection:**	**7/30/21 9:36:00 AM**
Dil. Factor:	**2.15**	**Date of Analysis:**	**8/2/21 11:24 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080222.d
Lab Smp Id: 2107684-07A
Inj Date : 02-AUG-2021 23:24
Operator : mb Inst ID: msdp.i
Smp Info : 200ml 1L3967
Misc Info : 6.5 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 6
Dil Factor: 2.15000
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	153181	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	116991				48.23- 108.23	76.37
5.785	5.778 (1.000)	49	314652				150.57- 210.57	205.41
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	568652	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	83444				0.00- 45.71	14.67
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	568447	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	296500				23.78- 83.78	52.16
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	212424	25.1281	25.128		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	112836				27.21- 87.21	53.12
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	622971	25.2285	25.228		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	64403				0.00- 40.44	10.34

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	408564			34.95- 94.95	65.58
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	356374	24.4141	24.414	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	436211			95.92- 155.92	122.40
10.921	10.921 (1.154)	176	339197			66.89- 126.89	95.18
5 Propylene					CAS #: 115-07-1		
1.688	1.674 (0.292)	41	28740	4.10005	8.815	80.00- 120.00	100.00
1.688	1.674 (0.292)	42	16996			35.28- 95.28	59.14
1.688	1.674 (0.292)	39	26212			38.35- 98.35	91.20
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	42689	10.6302	22.855	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	163763			302.95- 362.95	383.62
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.822 (0.662)	76	39469	2.31195	4.971	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.909	3.887 (0.676)	45	37328	2.30634	4.959	80.00- 120.00	100.00
3.894	3.887 (0.673)	43	6913			0.00- 47.19	18.52
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	385848	25.5696	54.975	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	292665			37.52- 97.52	75.85
4.704	4.696 (0.813)	86	39404			0.00- 41.48	10.21
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	12767	1.32497	2.849	80.00- 120.00	100.00
5.971	5.957 (1.032)	56	92053			142.57- 202.57	720.99
5.971	5.957 (1.032)	41	63814			62.09- 122.09	499.82
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.279 (1.087)	57	550348	10.4930	22.560	80.00- 120.00	100.00
6.287	6.279 (1.087)	56	207783			2.24- 62.24	37.75
6.287	6.279 (1.087)	41	191812			0.00- 54.39	34.85
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	44796	2.38718	5.132	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	12150			0.00- 52.90	27.12
107 Heptane					CAS #: 142-82-5		
6.451	6.444 (0.968)	71	15888	2.13721	4.595	80.00- 120.00	100.00
6.451	6.444 (0.968)	43	44155			226.53- 286.53	277.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
107 Heptane (continued)							
6.451	6.444 (0.968)	57	26143			100.85- 160.85	164.55
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.193)	91	119096	4.60012	9.890	80.00- 120.00	100.00
7.956	7.948 (1.193)	92	71472			28.38- 88.38	60.01
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	85378	6.59016	14.169	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	67938			47.84- 107.84	79.57
8.464	8.464 (0.895)	131	65456			45.29- 105.29	76.67
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	6139	0.52012	1.118	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	18578			273.74- 333.74	302.63
158 m,p-Xylene					CAS #: 108-38-3		
9.711	9.718 (1.026)	106	15934	1.07789	2.317	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	30866			163.73- 223.73	193.71
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	7172	0.50638	1.089	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	14951			177.45- 237.45	208.46

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080222.d
Lab Smp Id: 2107684-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.5 Hg->10.1 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	153181	2.60
108 1,4-Difluorobenze	558135	334881	781389	568652	1.88
153 Chlorobenzene-d5	542388	325433	759343	568447	4.80

		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.

Report Date: 06-Aug-2021 12:11

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-07A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.5 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.128	100.51	70-130
$ 134 Toluene-d8	25.000	25.228	100.91	70-130
$ 170 4-Bromofluorobenz	25.000	24.414	97.66	70-130

Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

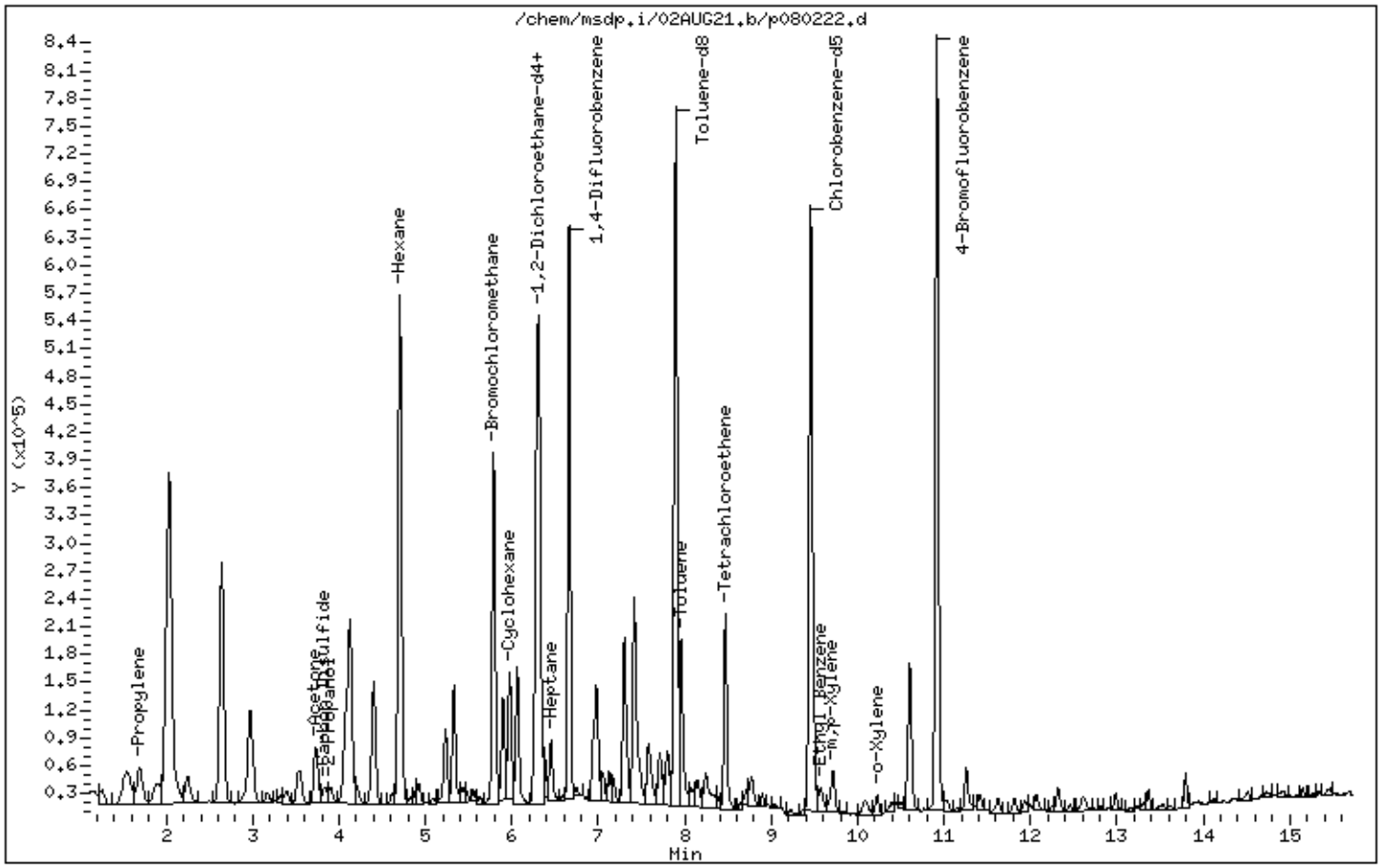
Instrument: msdp.i

Sample Info: 200ml 1L3967

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

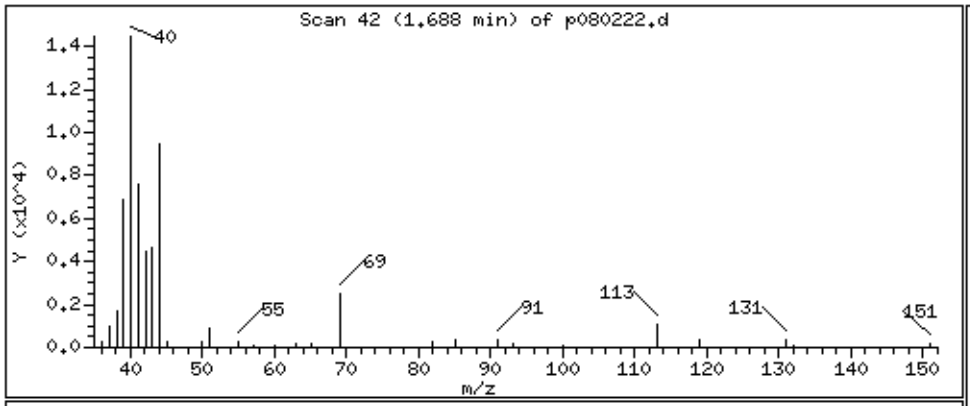
Operator: mb

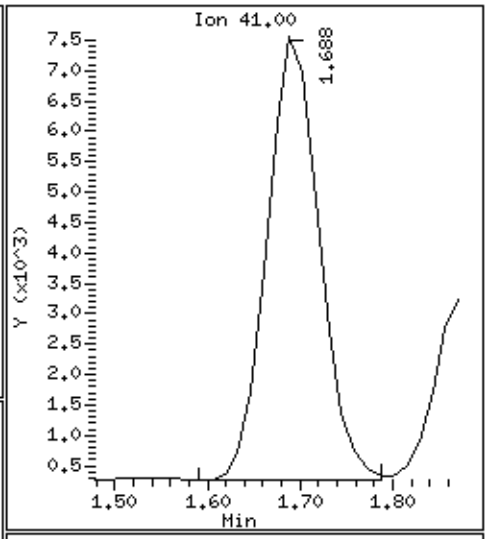
Column phase: RTX-624

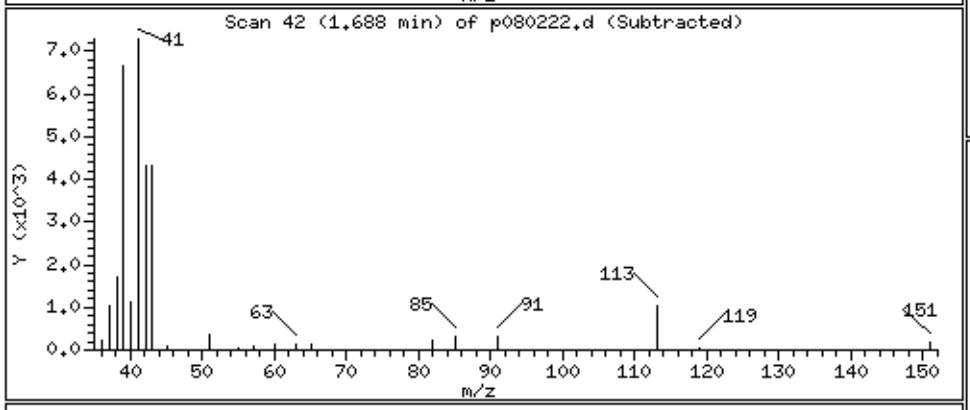
Column diameter: 0.25

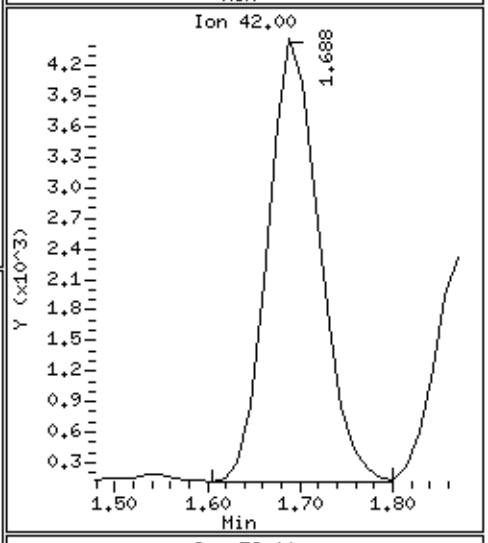
5 Propylene

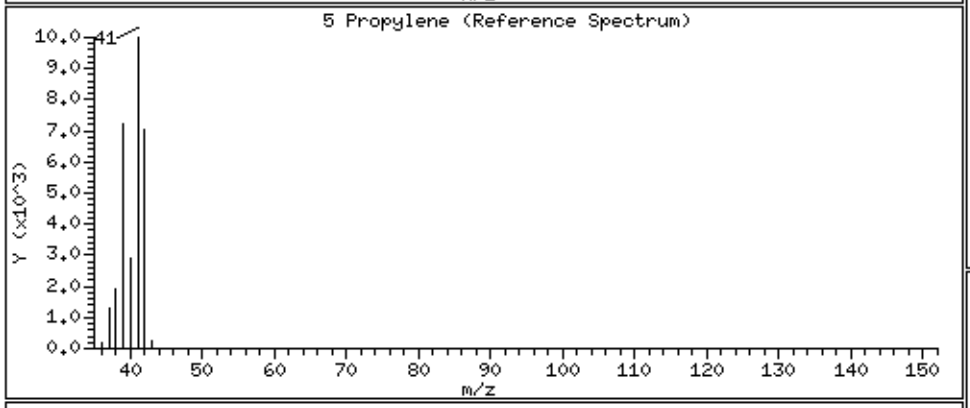
Concentration: 8.815 PPBV

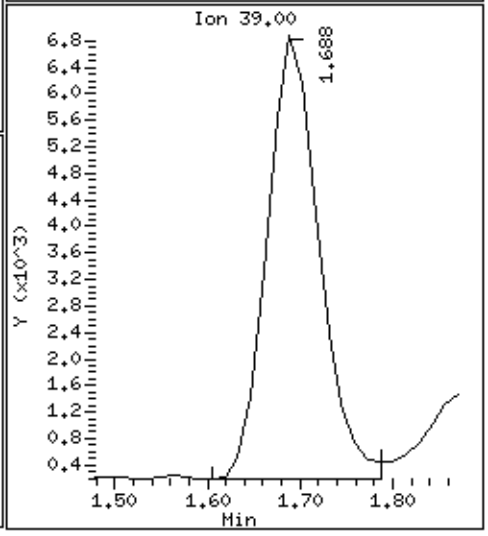


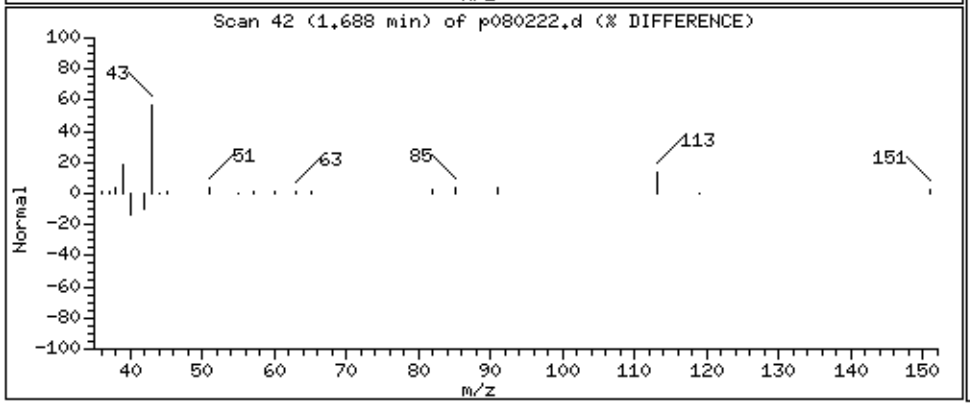












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

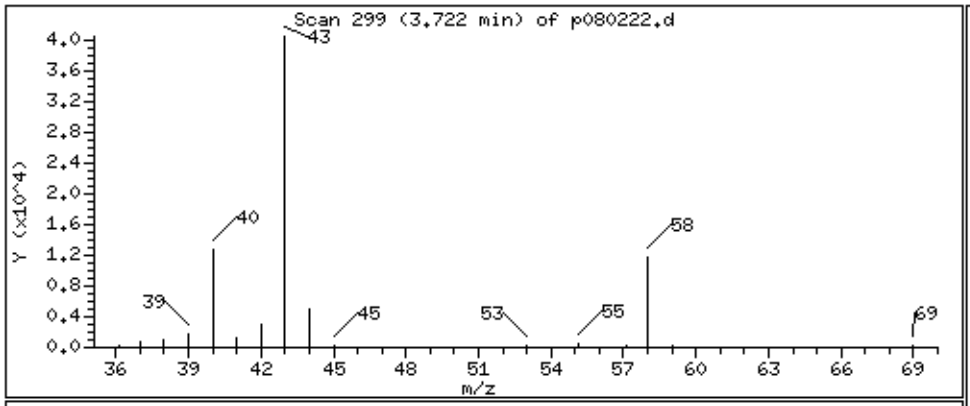
Operator: mb

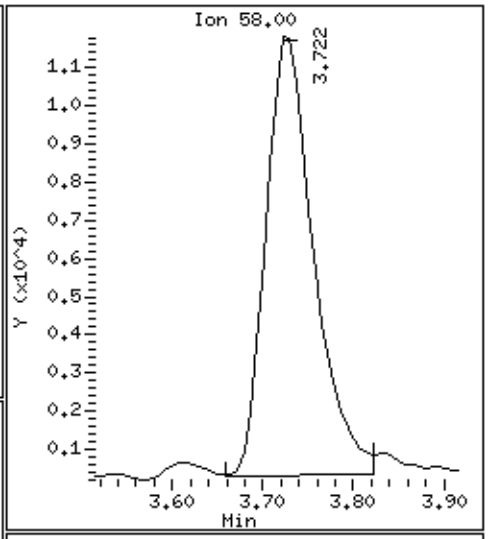
Column phase: RTX-624

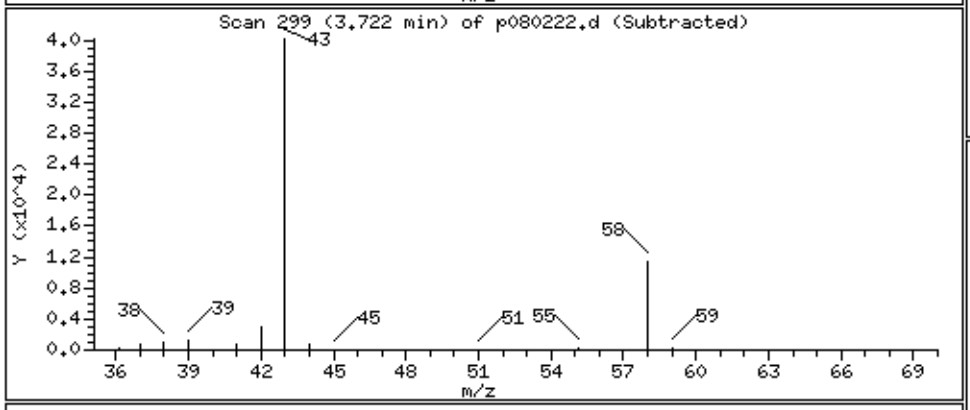
Column diameter: 0.25

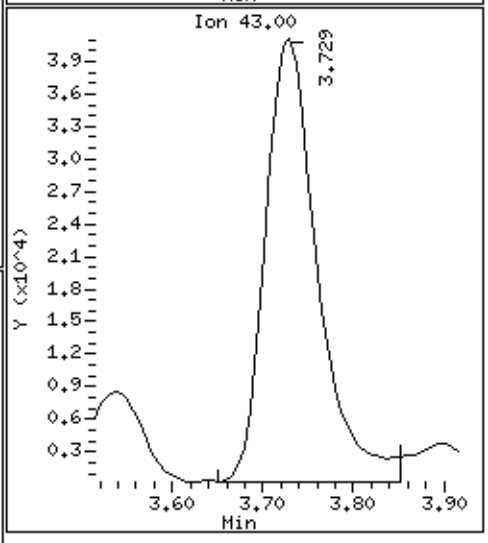
47 Acetone

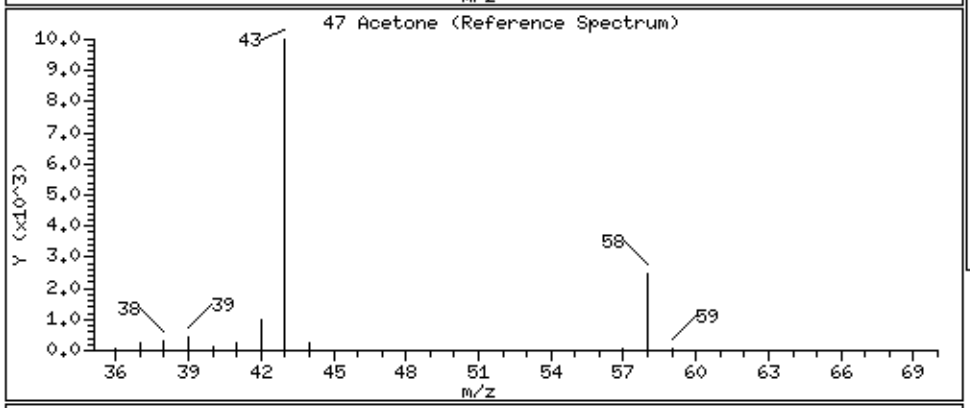
Concentration: 22.855 PPBV

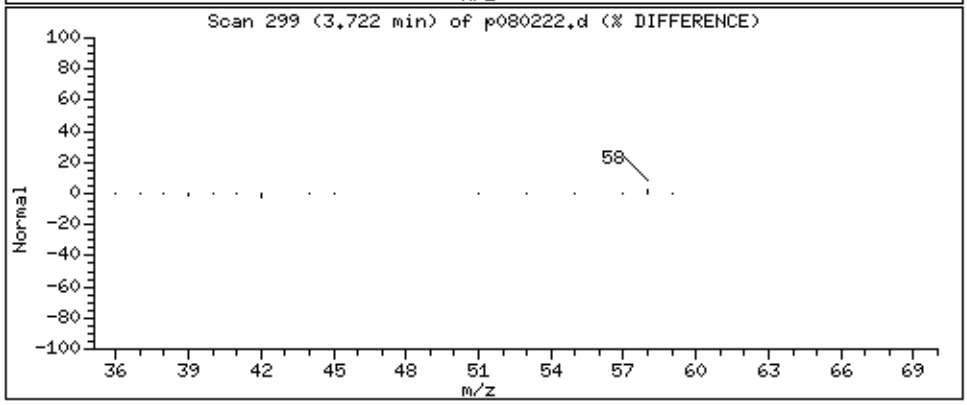












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

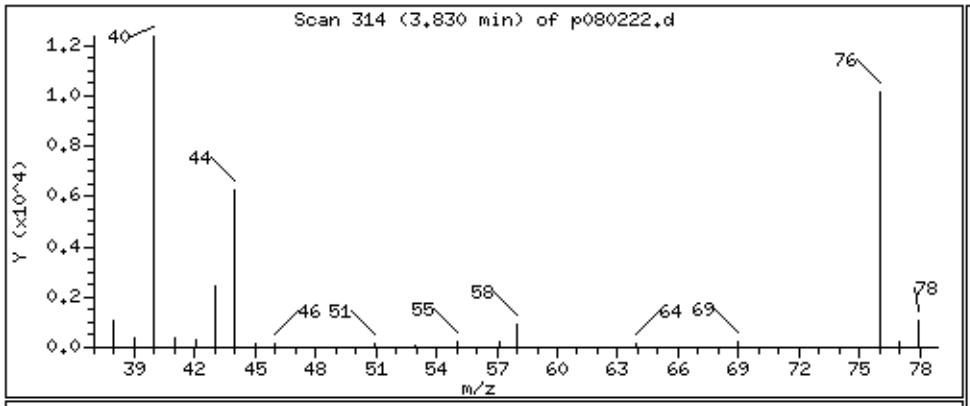
Operator: mb

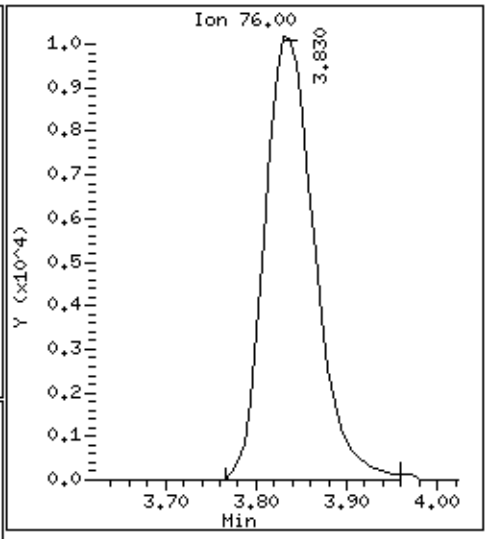
Column phase: RTX-624

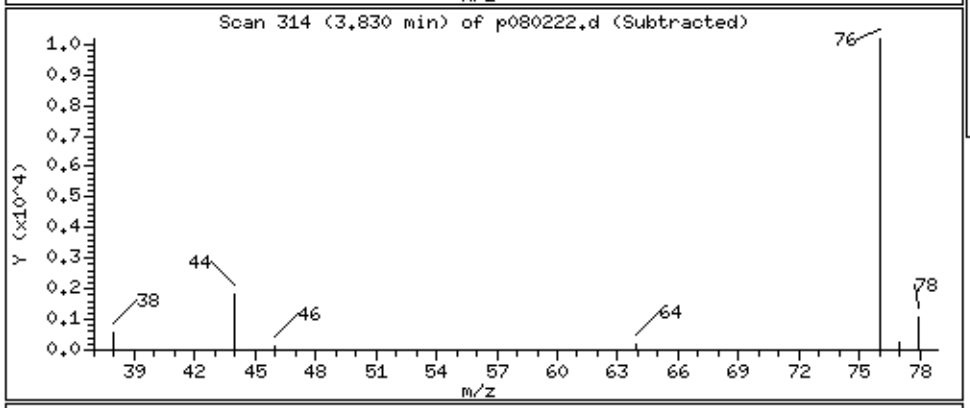
Column diameter: 0.25

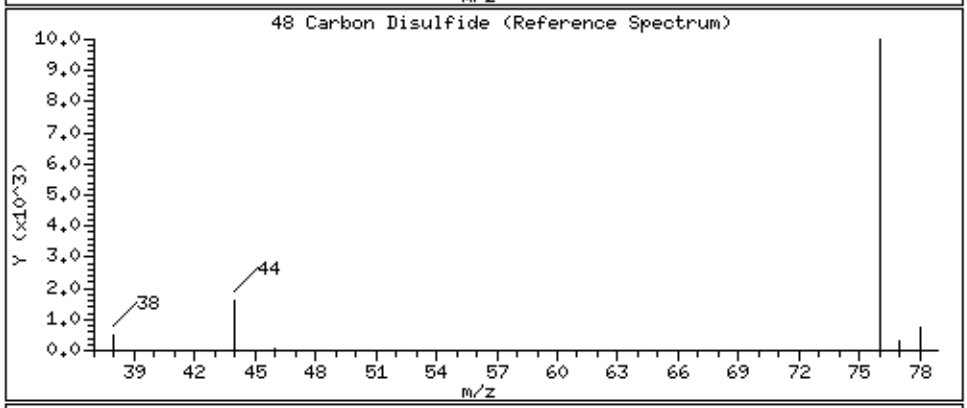
48 Carbon Disulfide

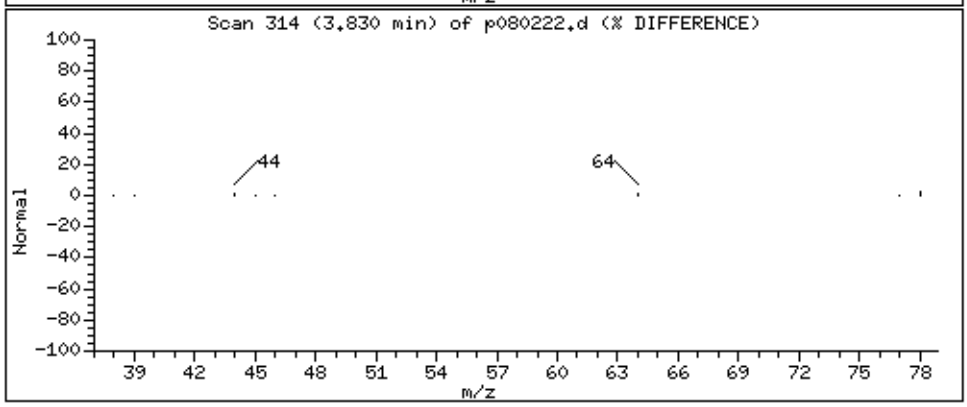
Concentration: 4.971 PPBV











Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

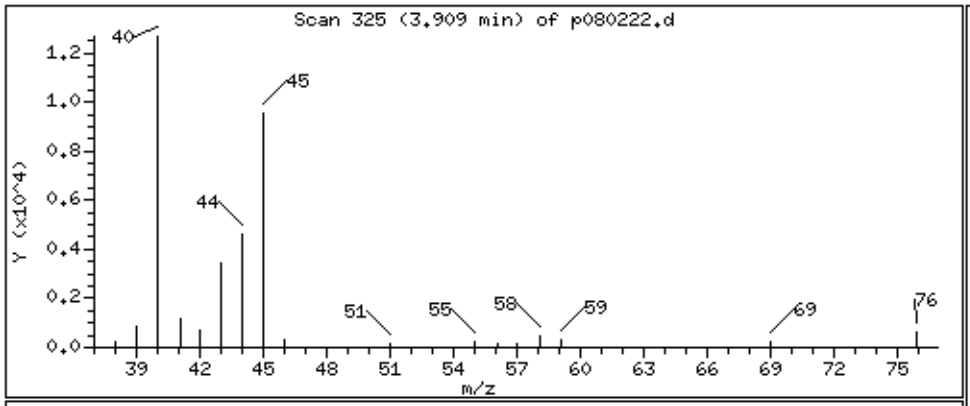
Operator: mb

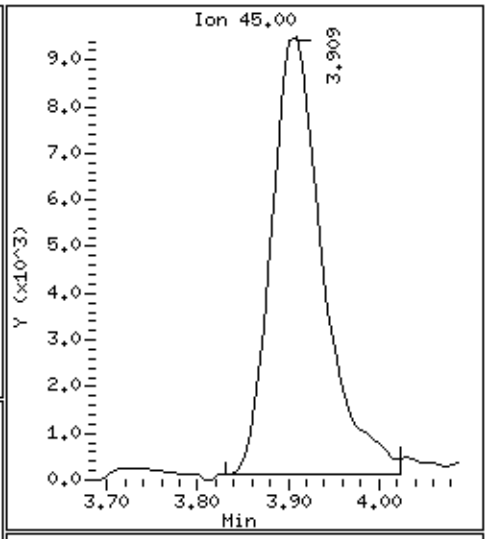
Column phase: RTX-624

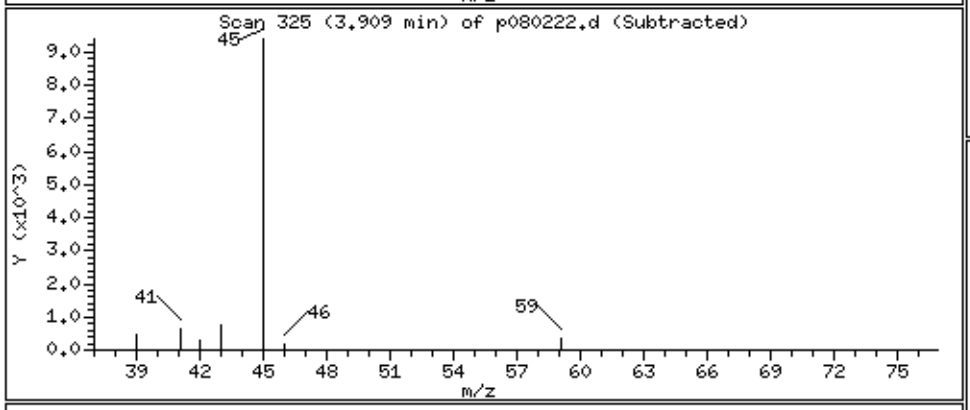
Column diameter: 0.25

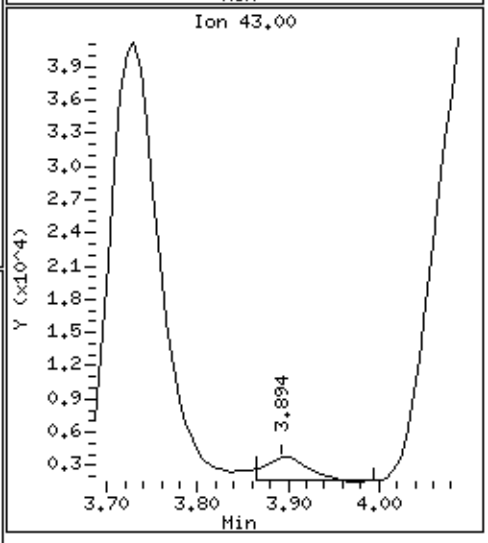
52 2-Propanol

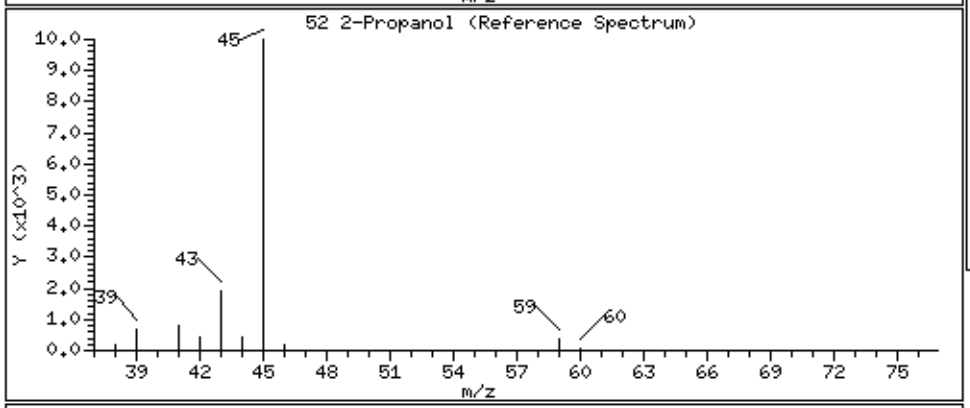
Concentration: 4.959 PPBV

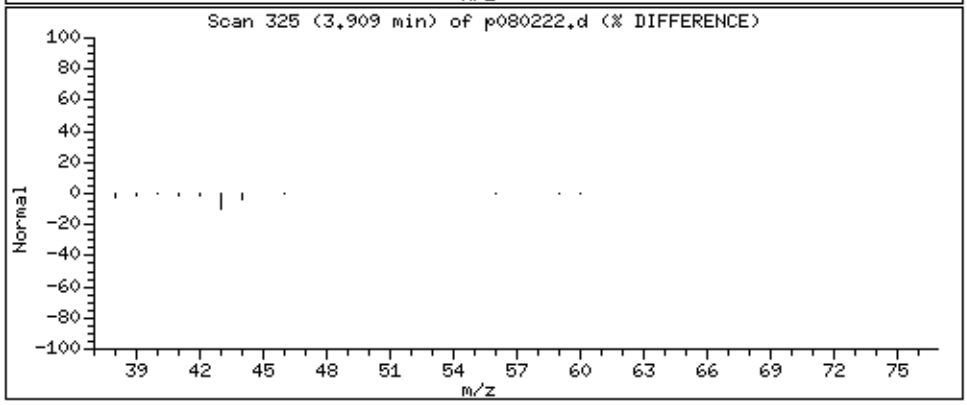












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

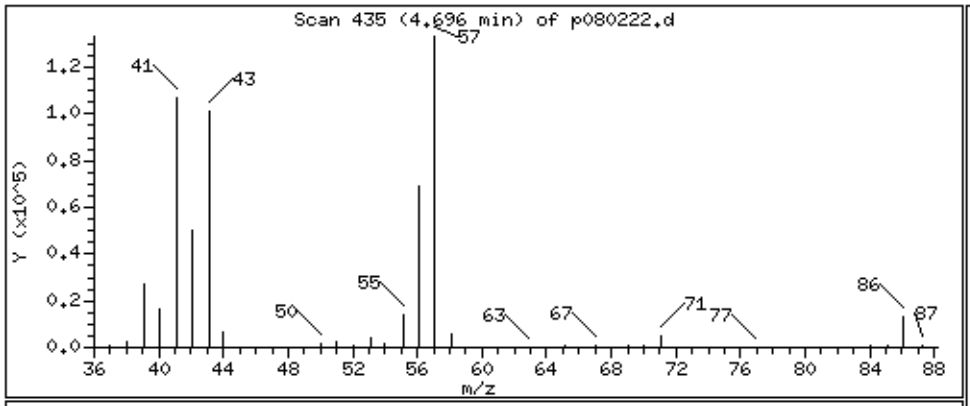
Operator: mb

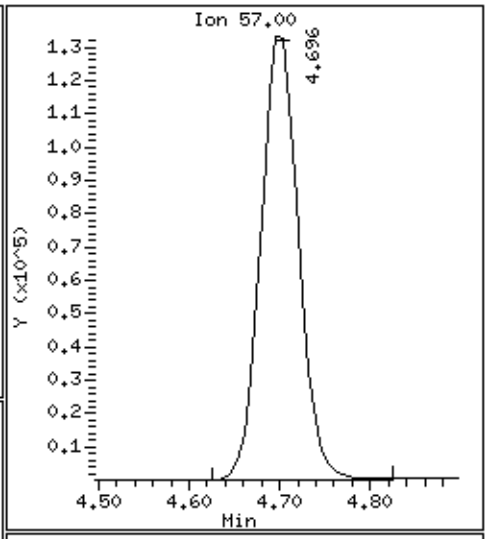
Column phase: RTX-624

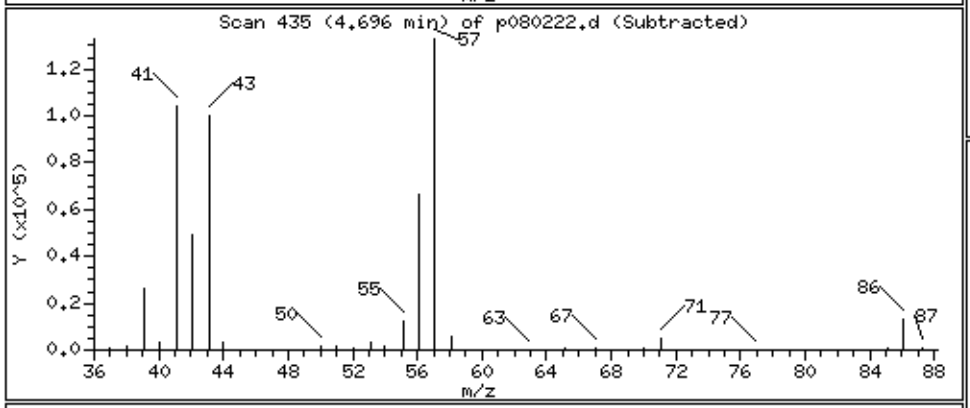
Column diameter: 0.25

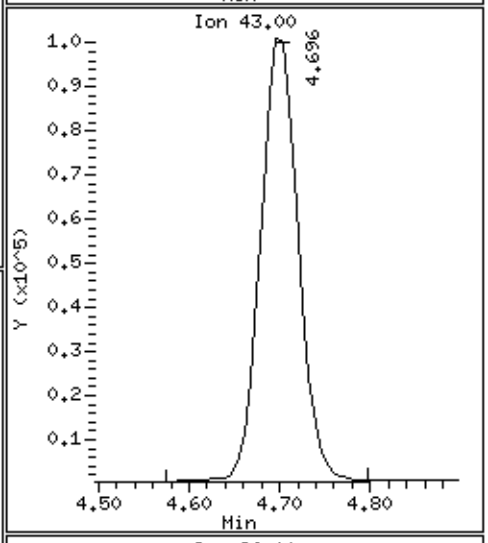
67 Hexane

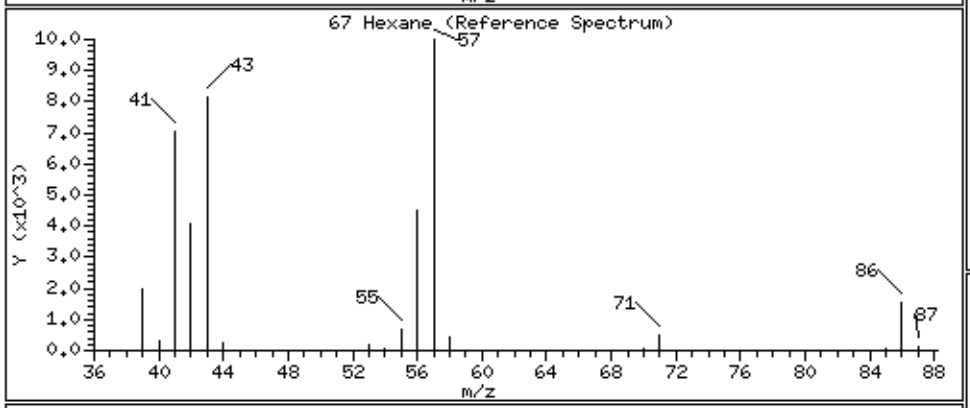
Concentration: 54.975 PPBV

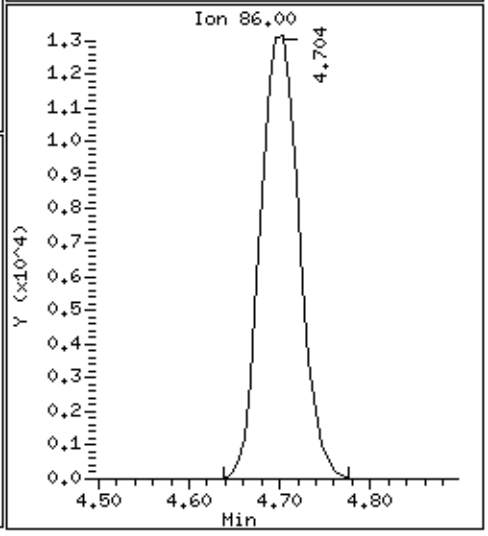


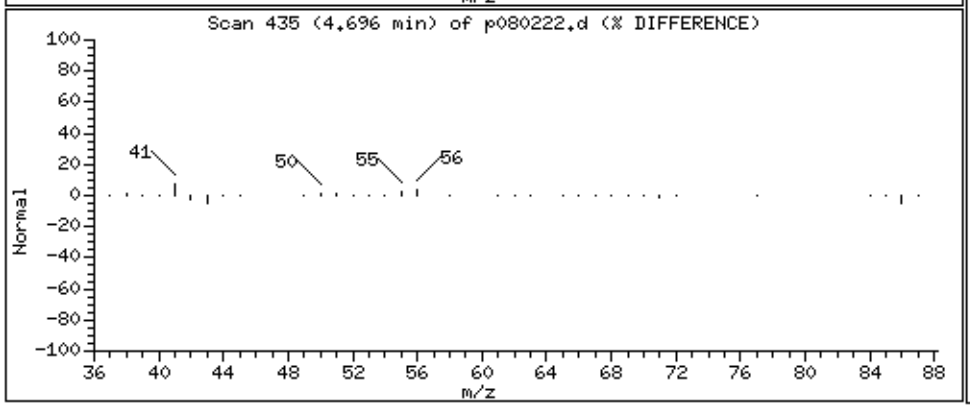












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

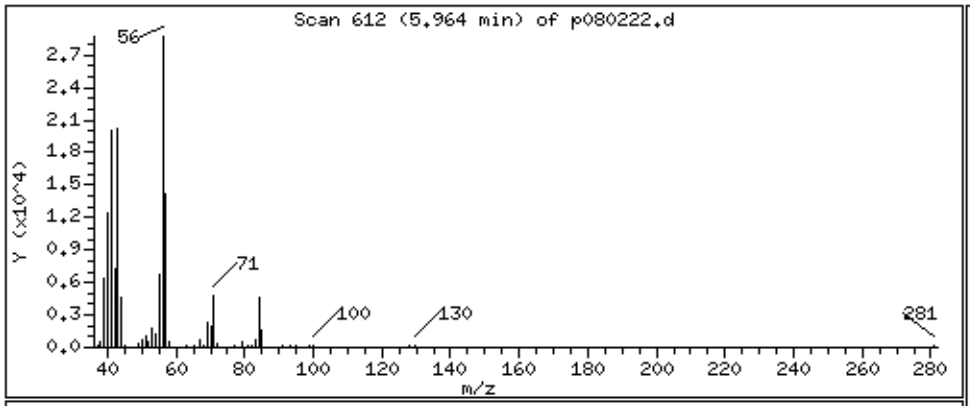
Operator: mb

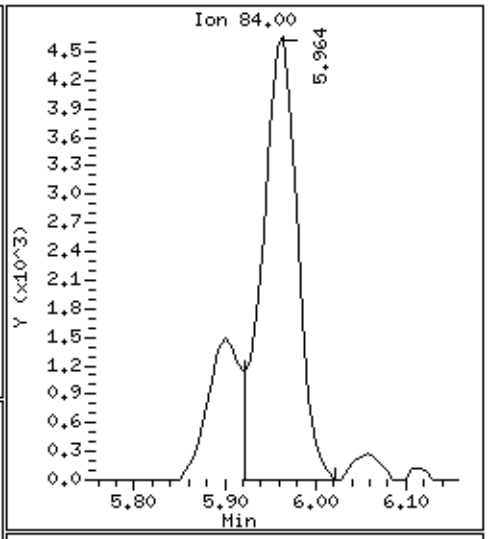
Column phase: RTX-624

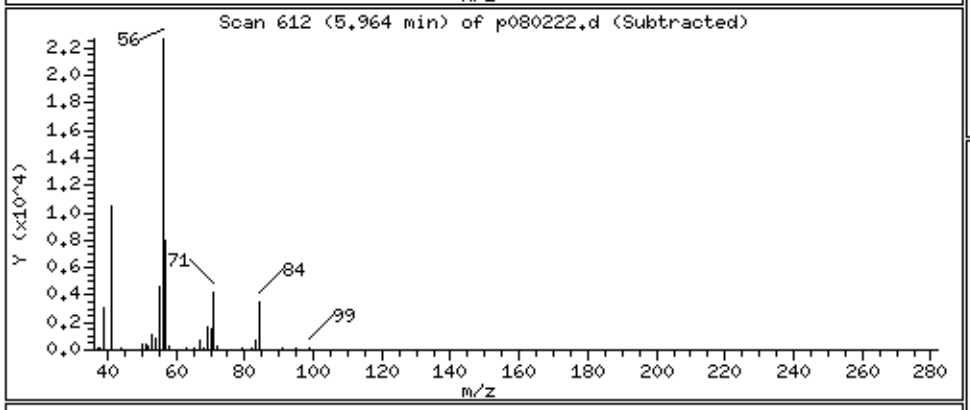
Column diameter: 0.25

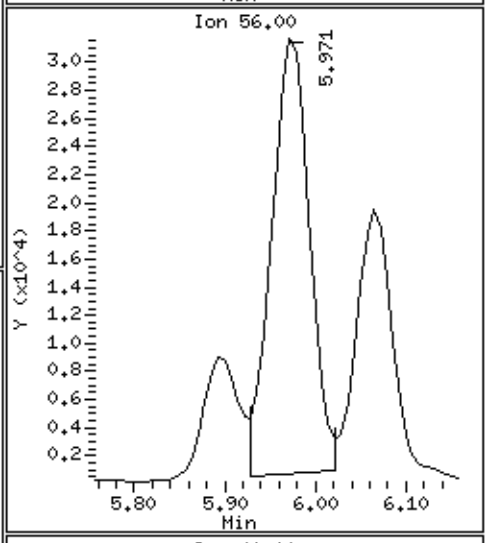
94 Cyclohexane

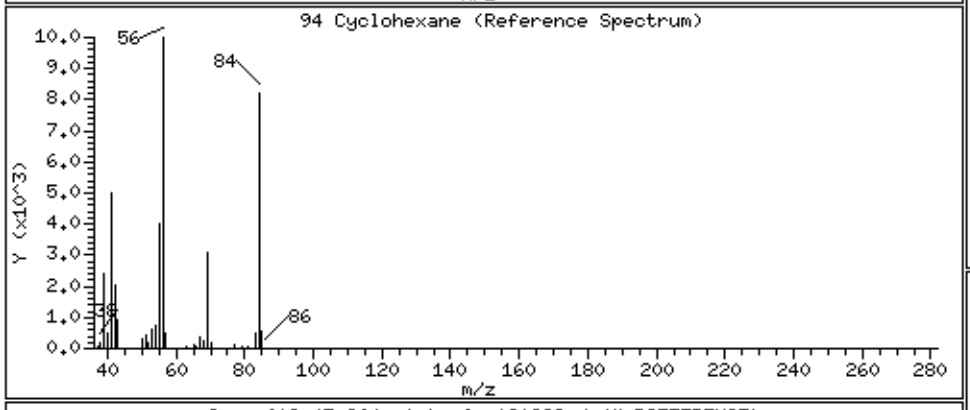
Concentration: 2.849 PPBV

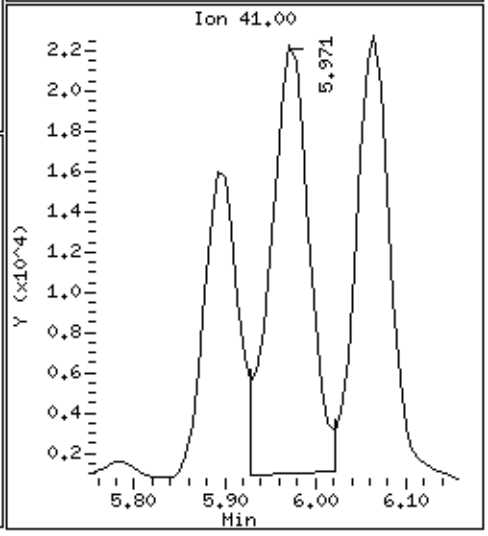


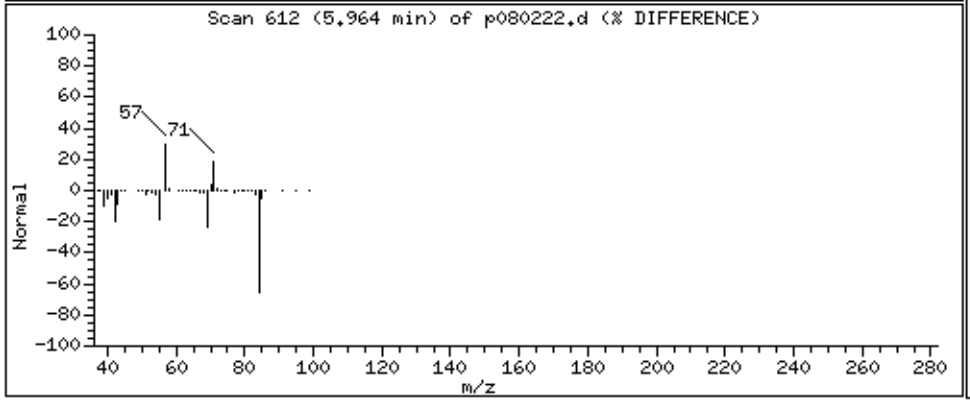












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Page 8

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

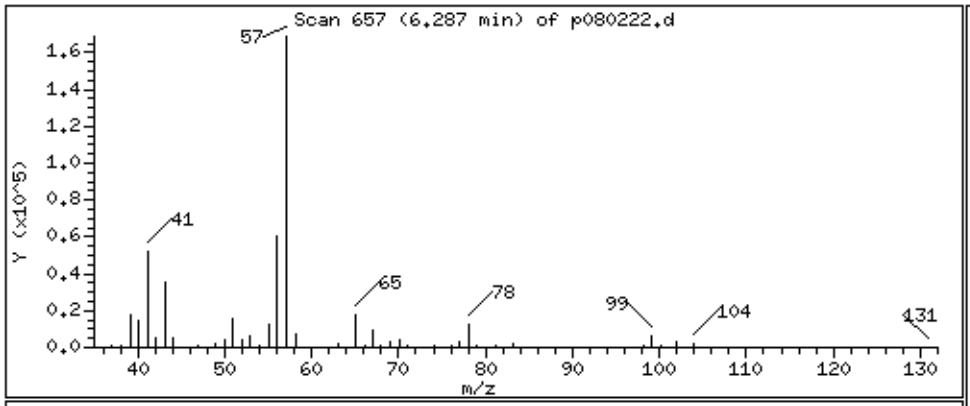
Operator: mb

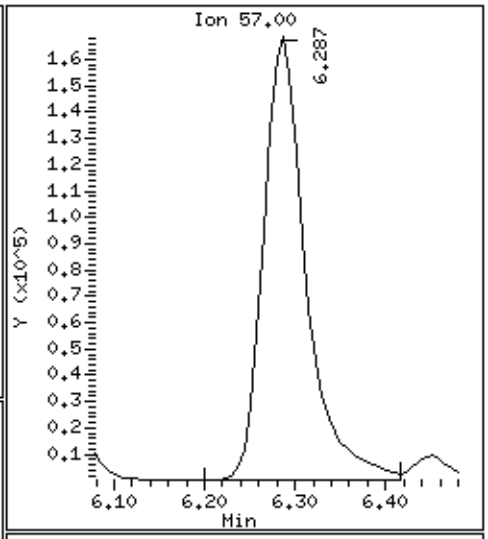
Column phase: RTX-624

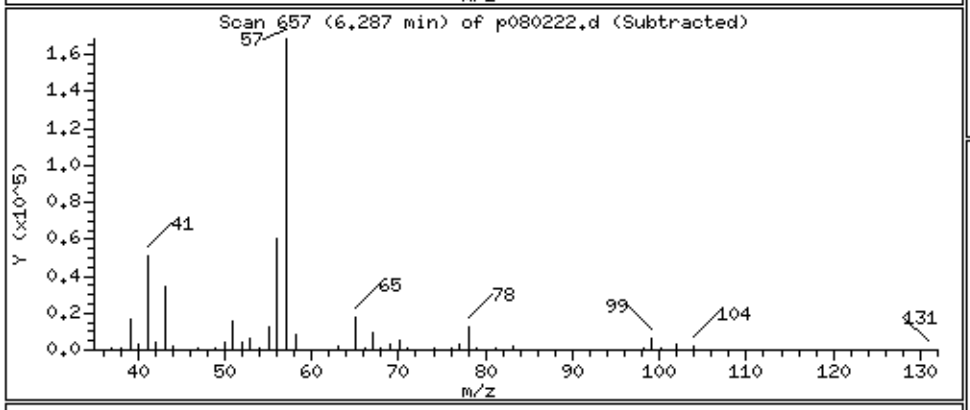
Column diameter: 0.25

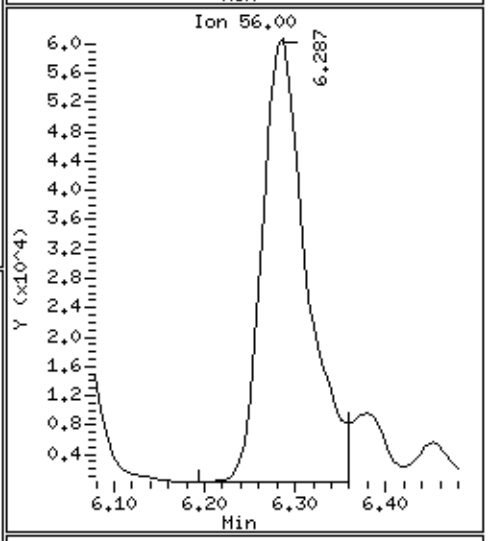
101 2,2,4-Trimethylpentane

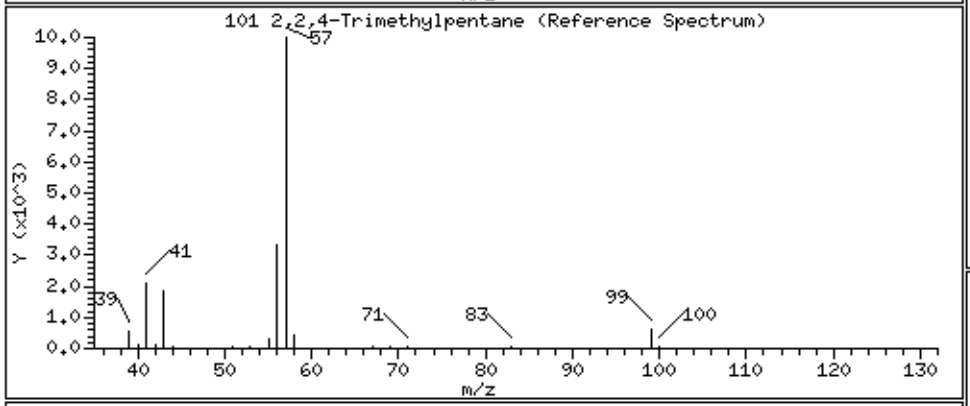
Concentration: 22.560 PPBV

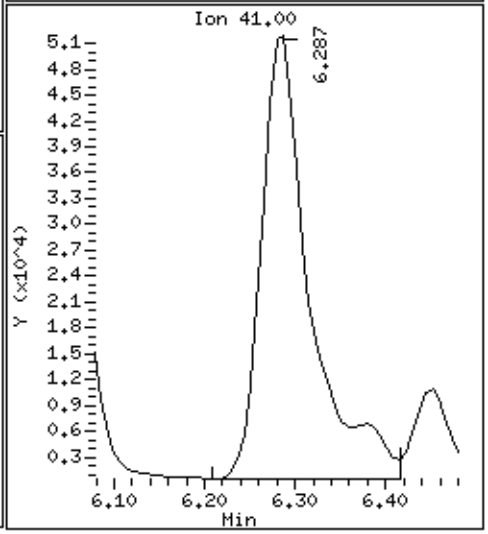


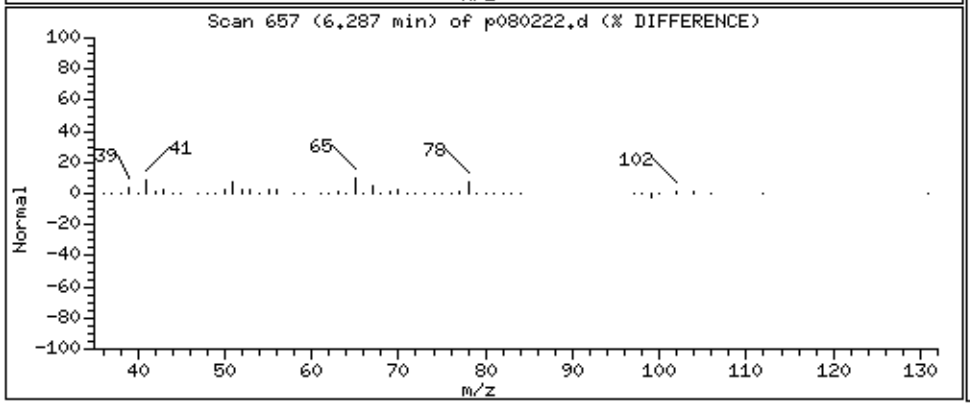












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

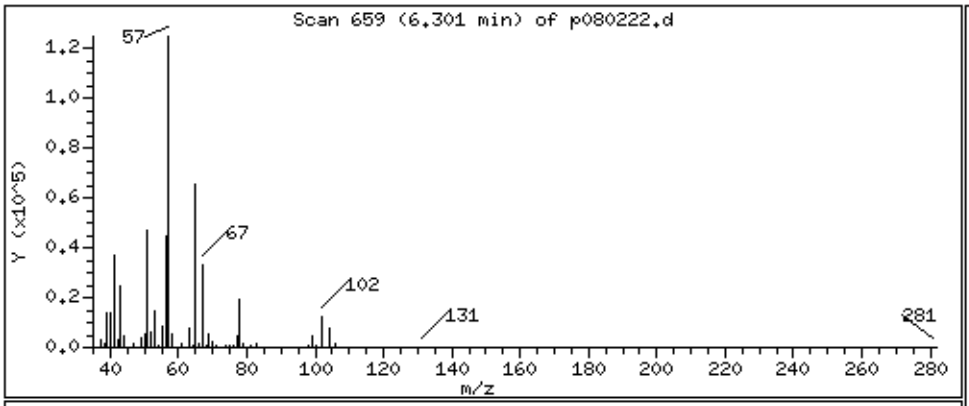
Operator: mb

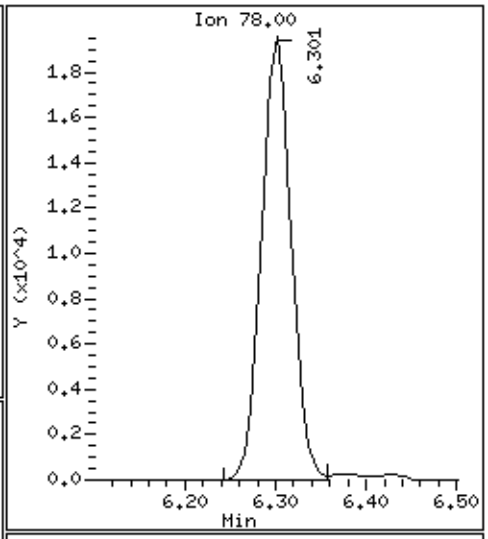
Column phase: RTX-624

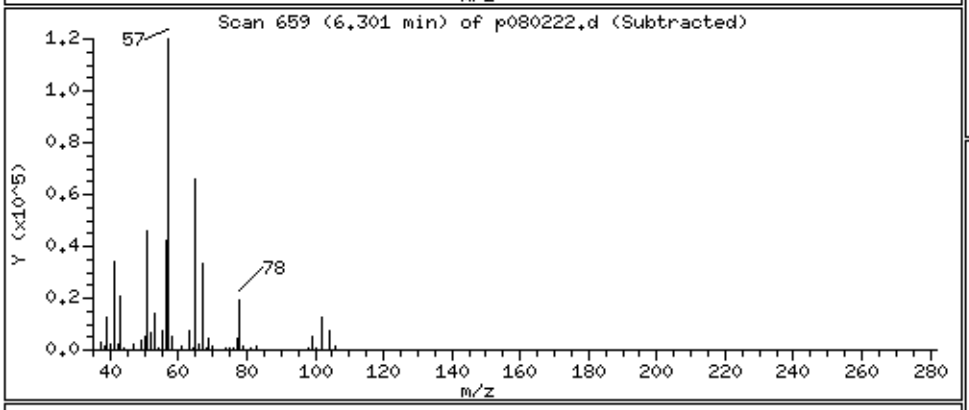
Column diameter: 0.25

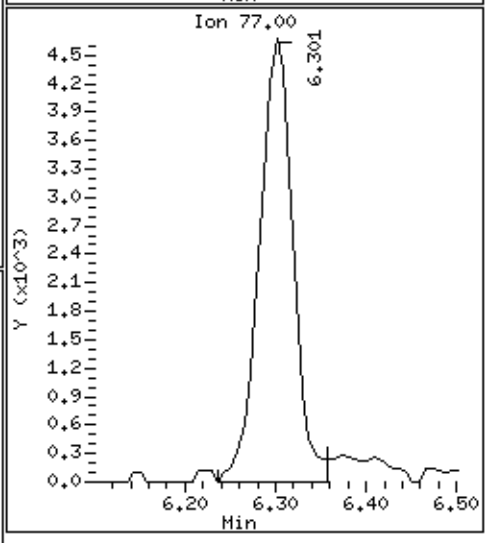
102 Benzene

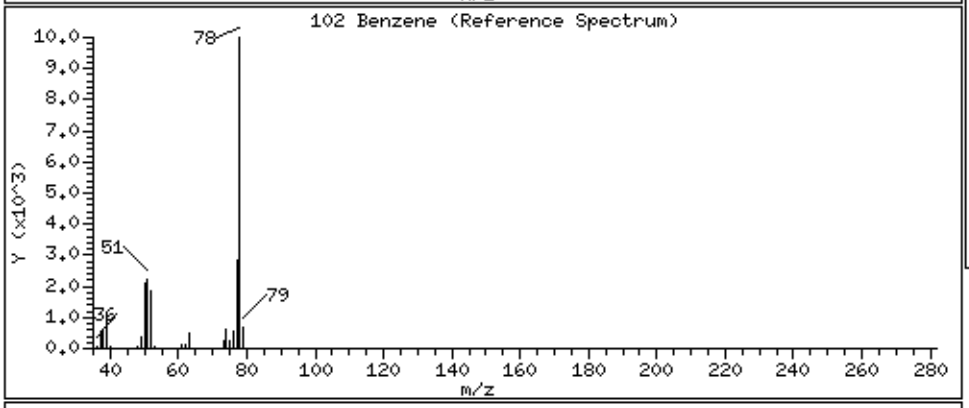
Concentration: 5.132 PPBV

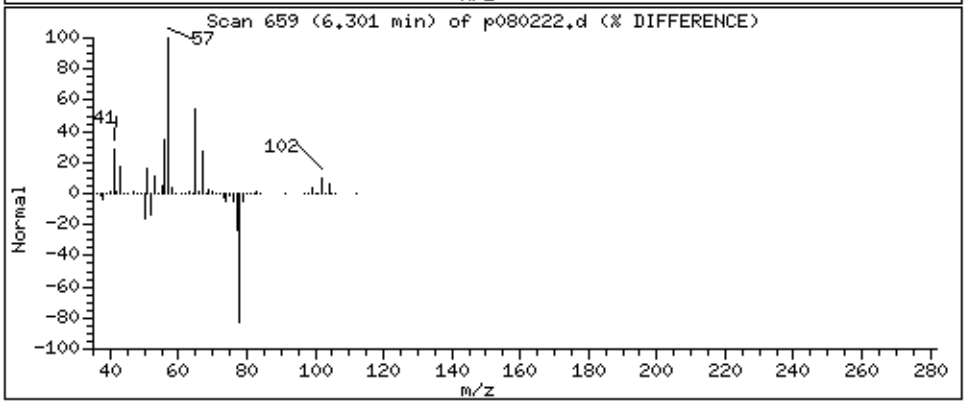












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

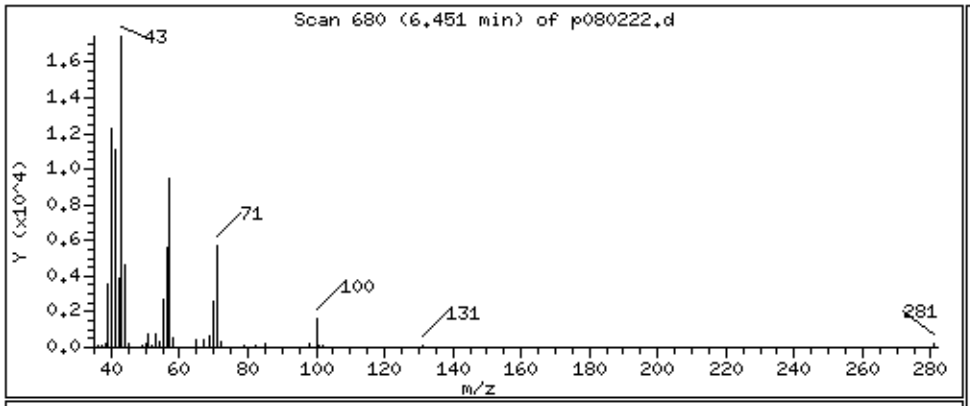
Operator: mb

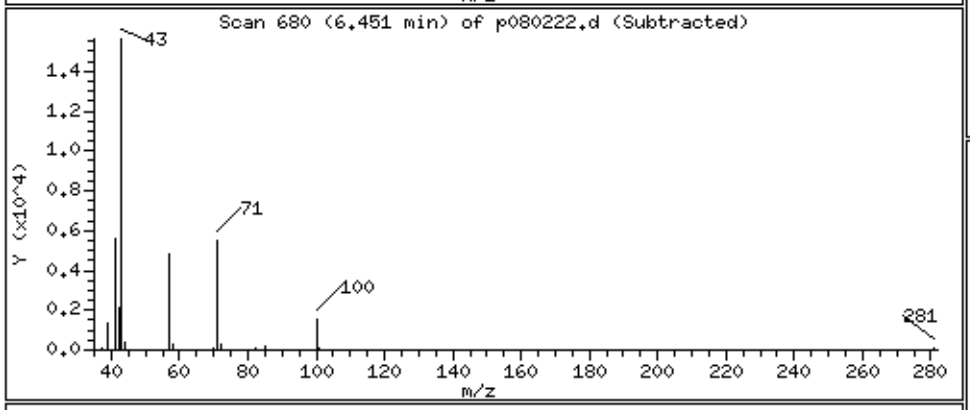
Column phase: RTX-624

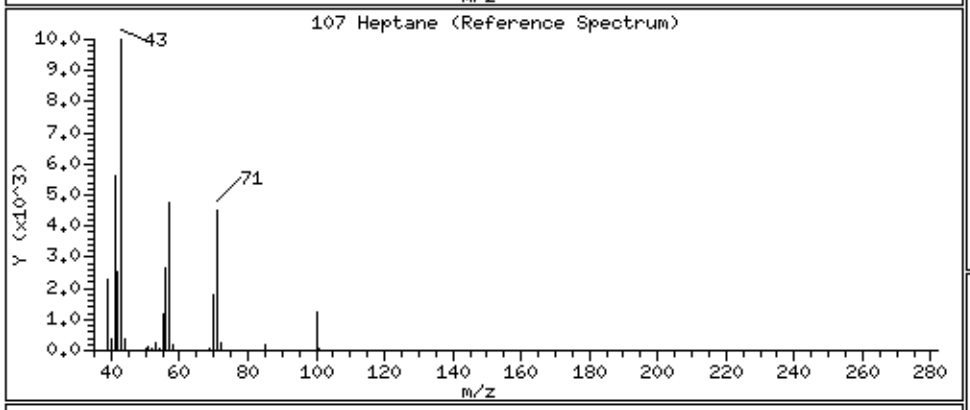
Column diameter: 0.25

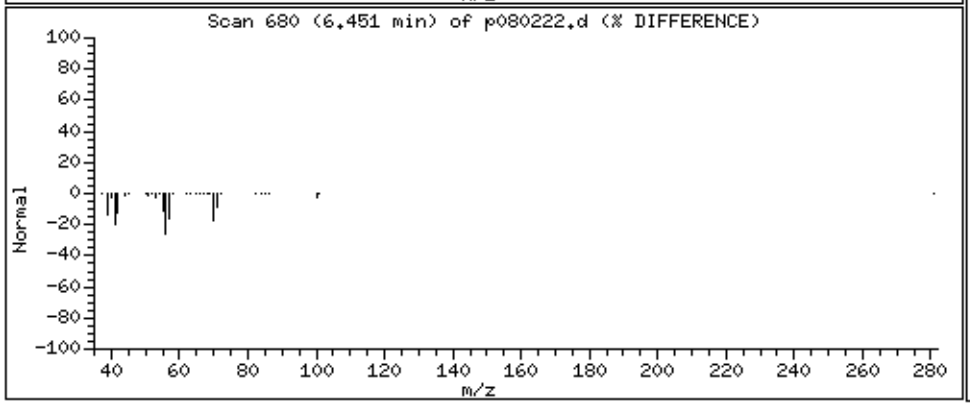
107 Heptane

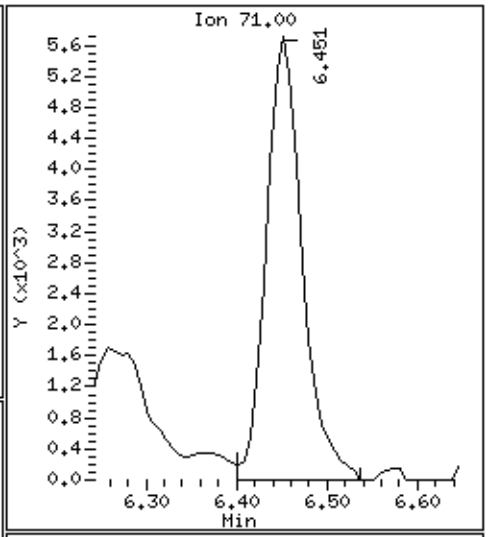
Concentration: 4.595 PPBV

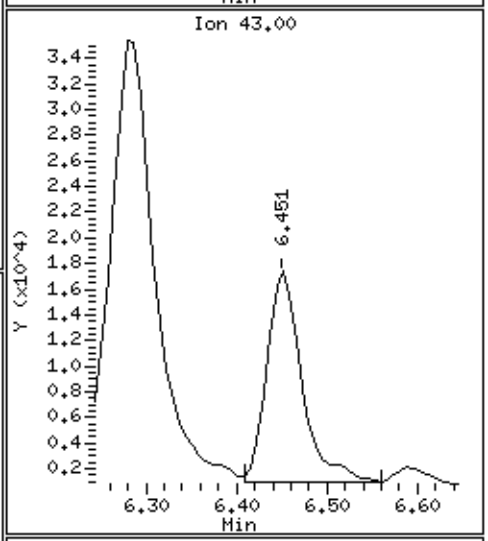


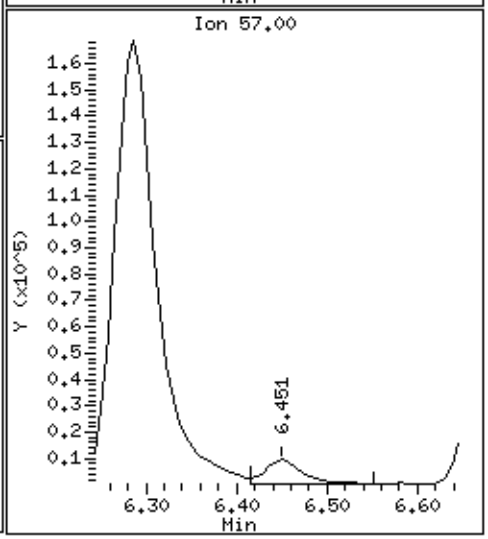












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

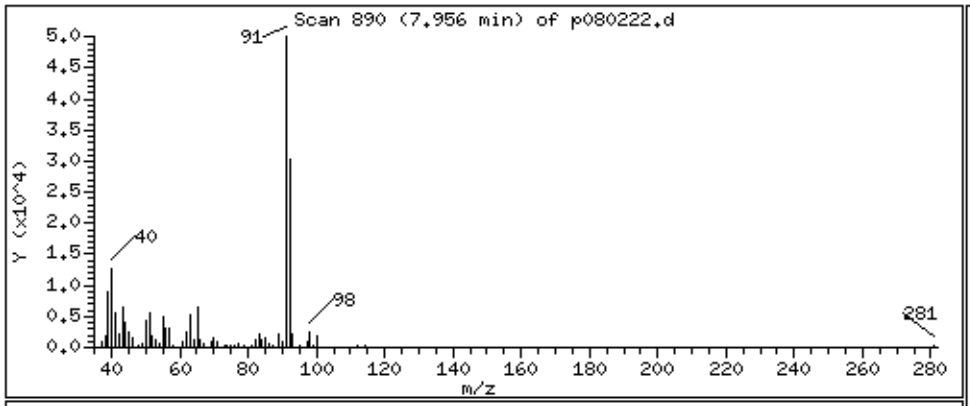
Operator: mb

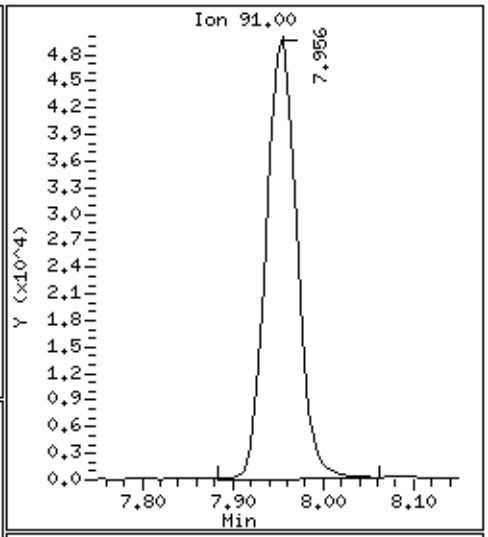
Column phase: RTX-624

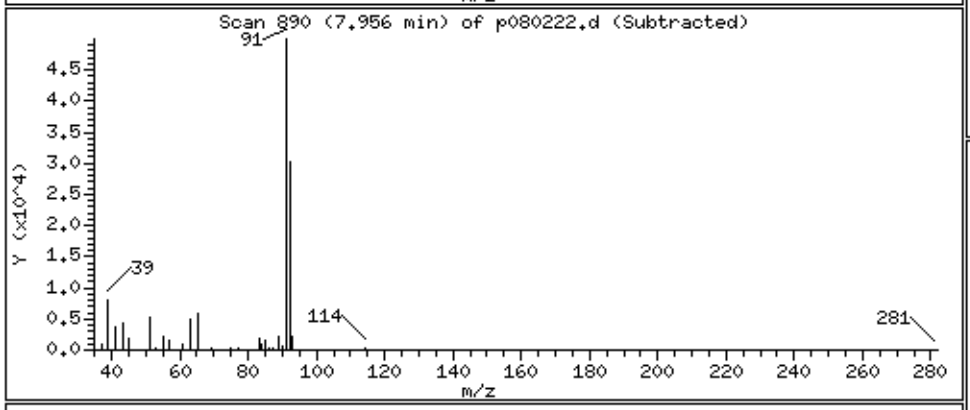
Column diameter: 0.25

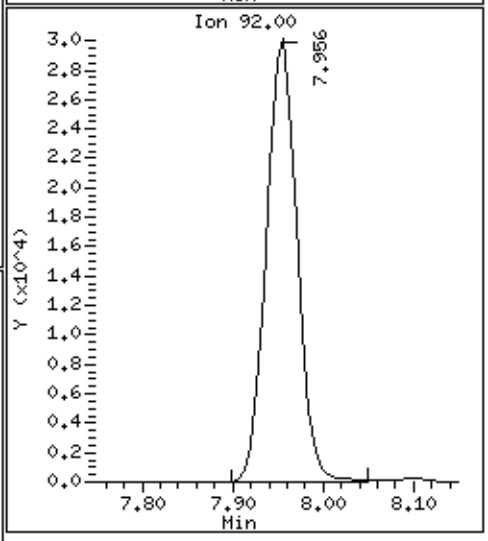
137 Toluene

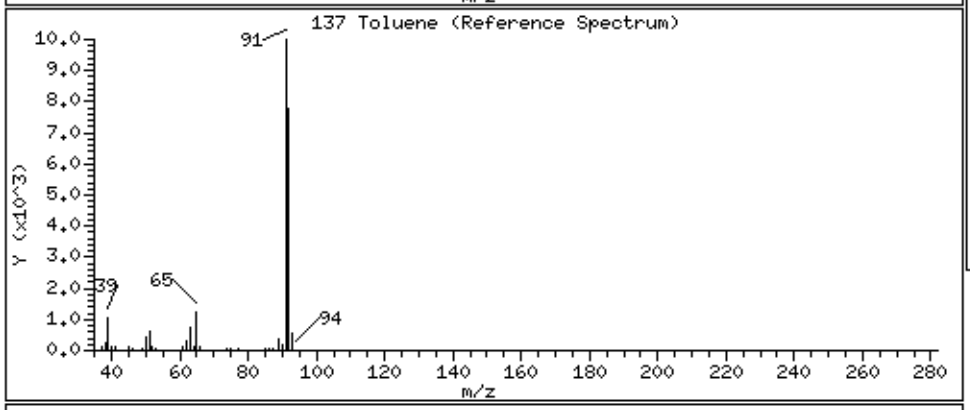
Concentration: 9.890 PPBV

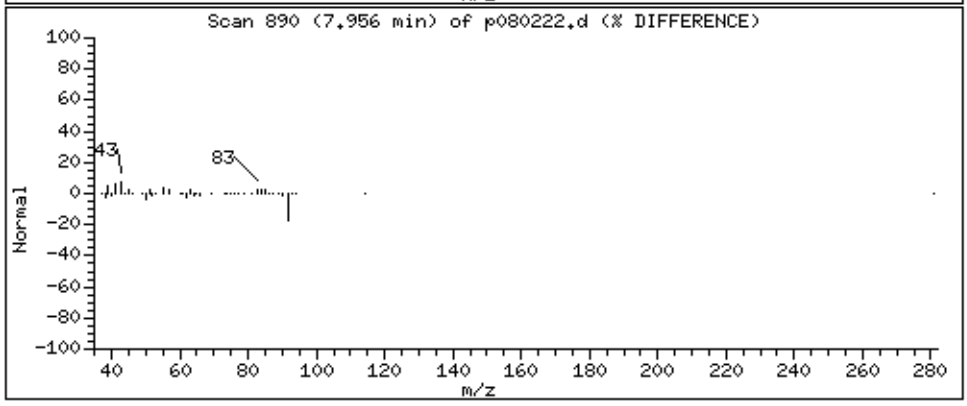












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

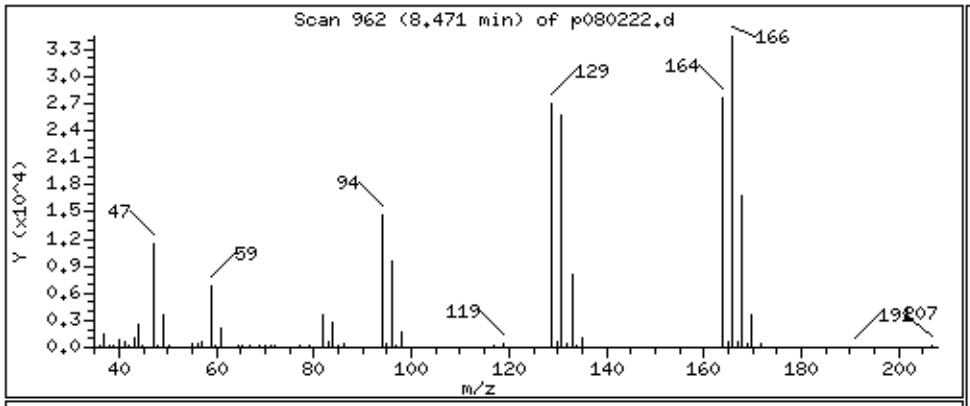
Operator: mb

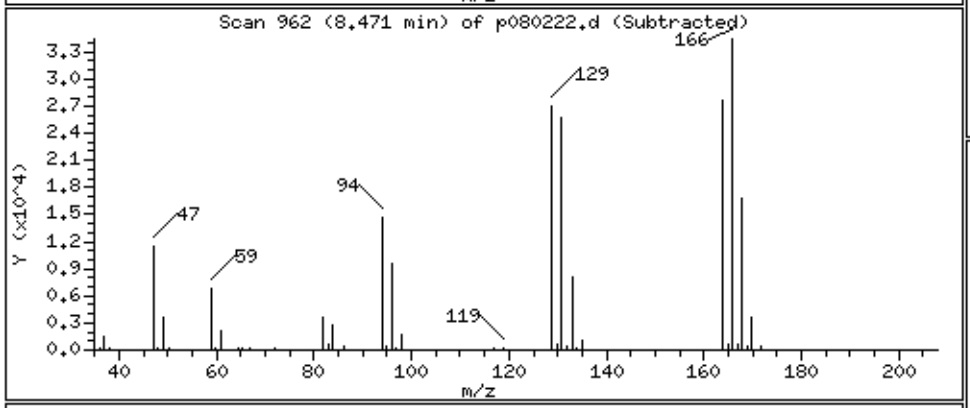
Column phase: RTX-624

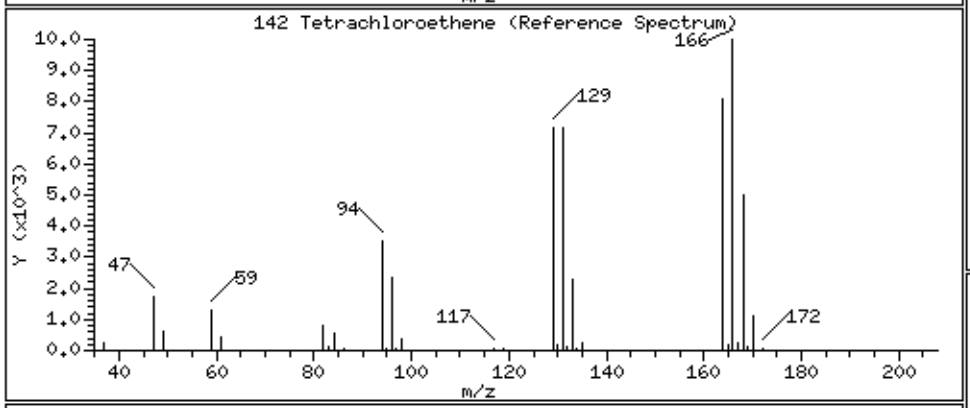
Column diameter: 0.25

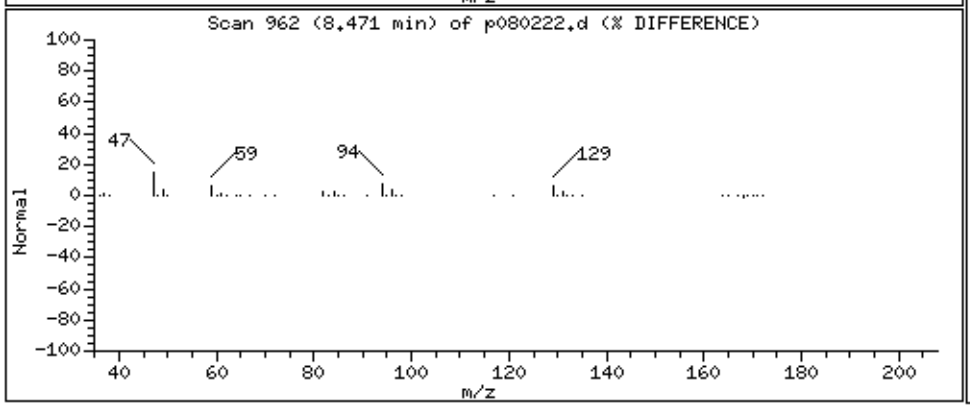
142 Tetrachloroethene

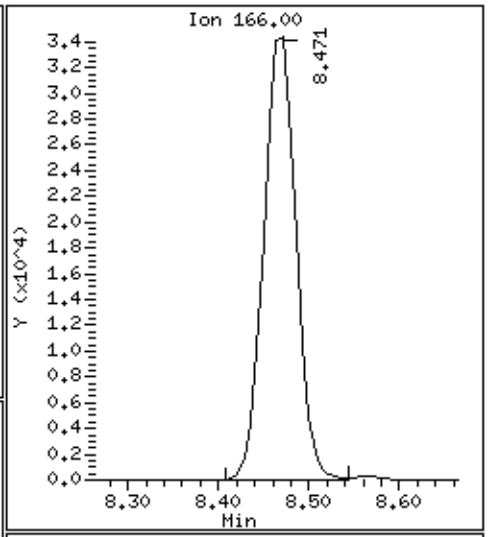
Concentration: 14.169 PPBV

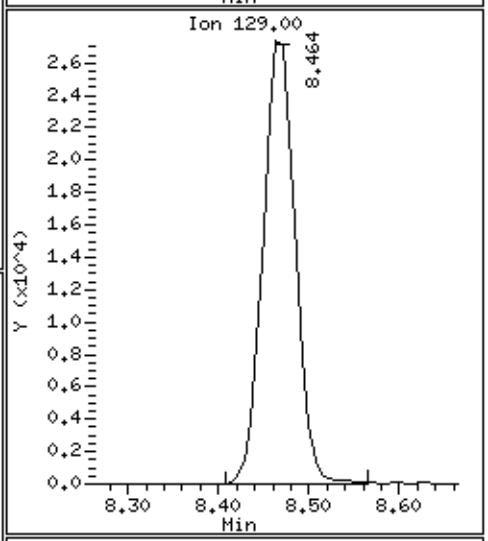


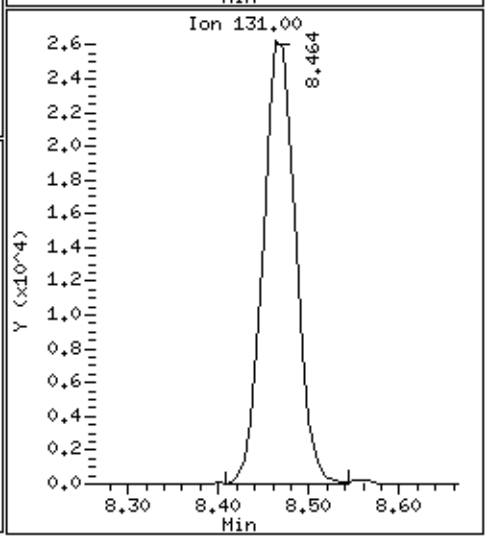












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

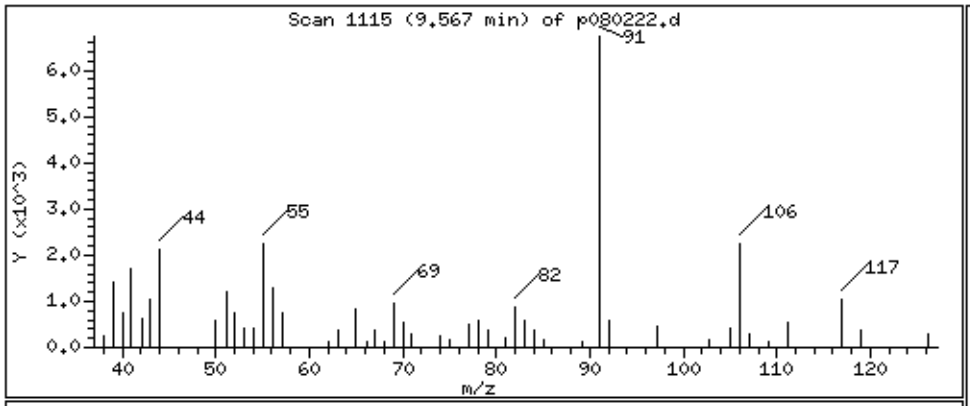
Operator: mb

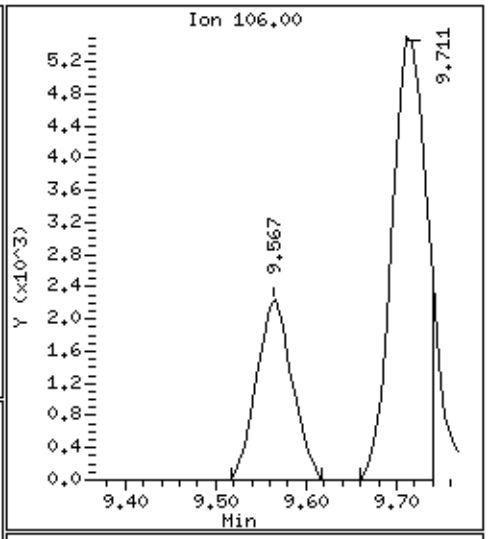
Column phase: RTX-624

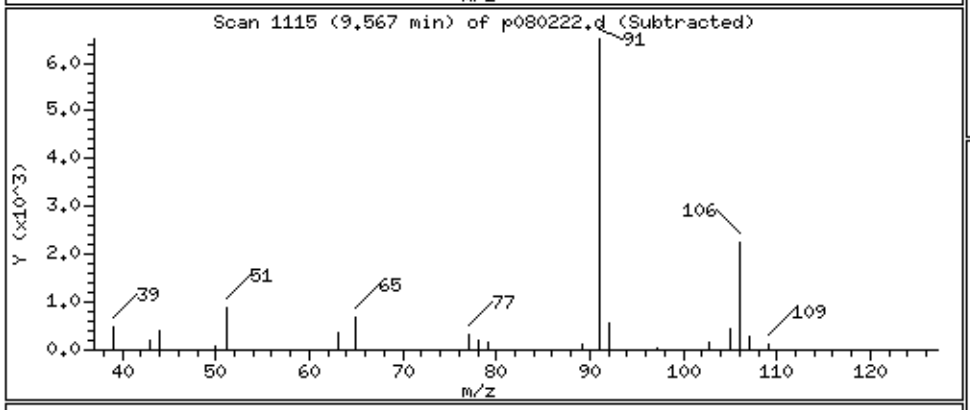
Column diameter: 0.25

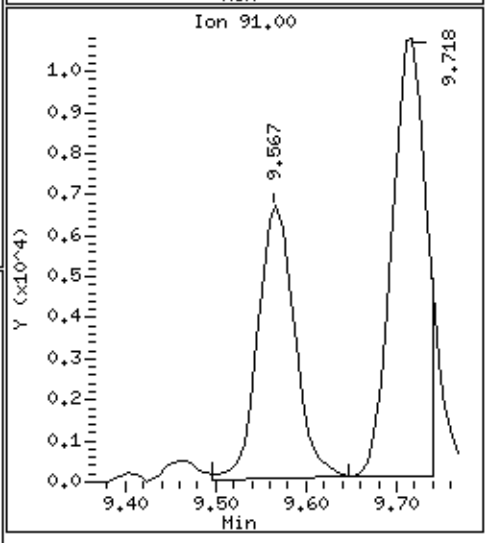
155 Ethyl Benzene

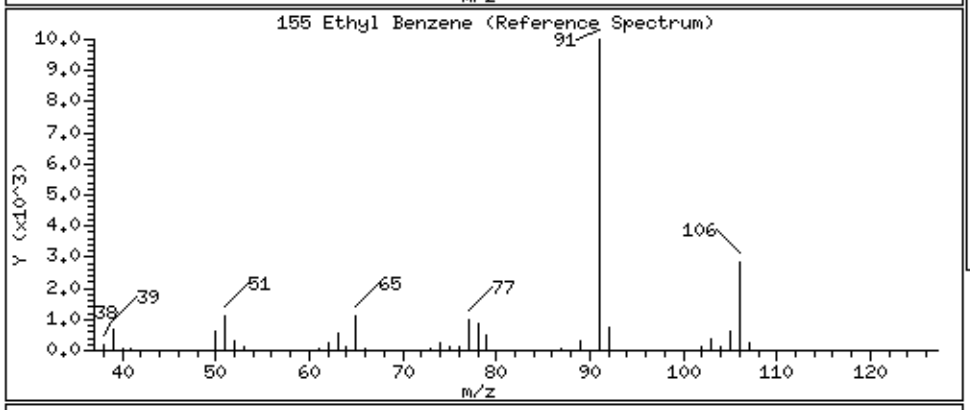
Concentration: 1.118 PPBV

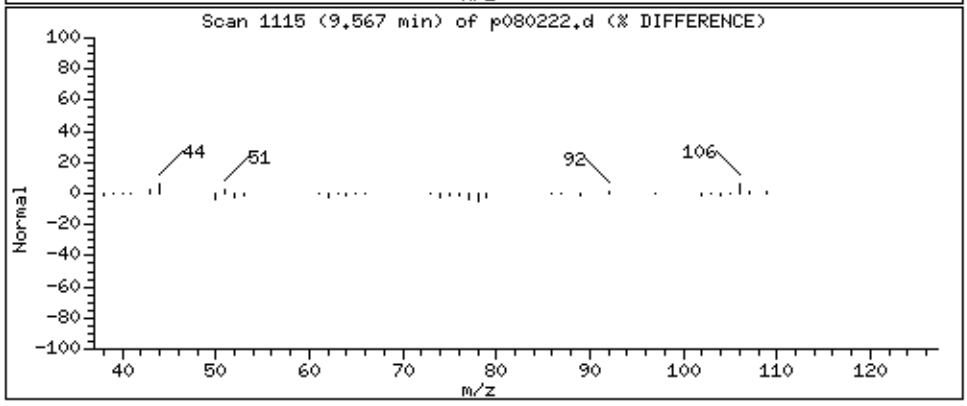












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

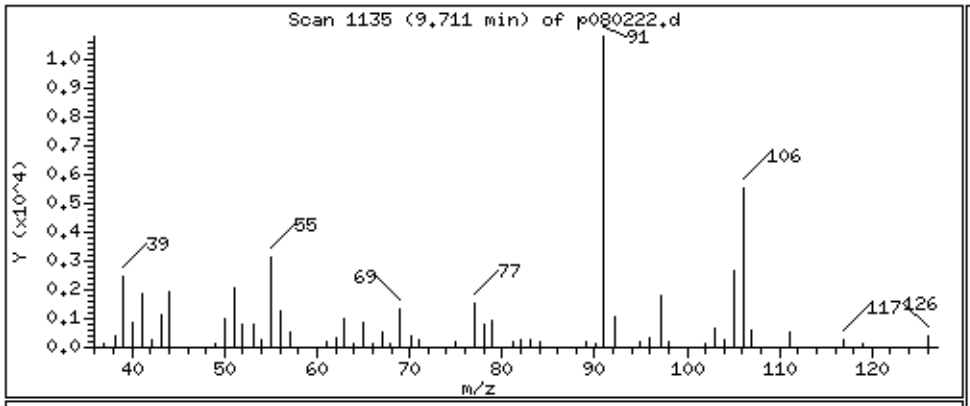
Operator: mb

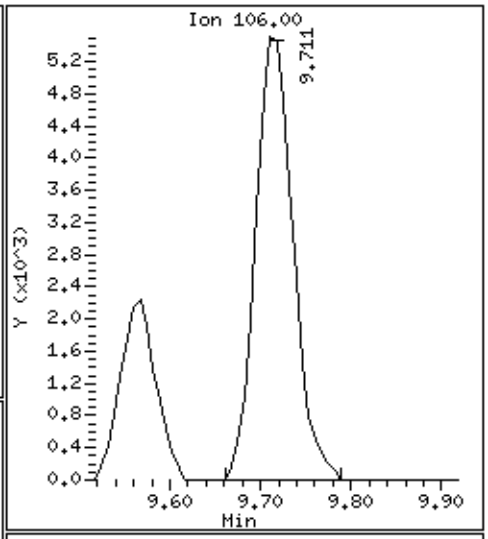
Column phase: RTX-624

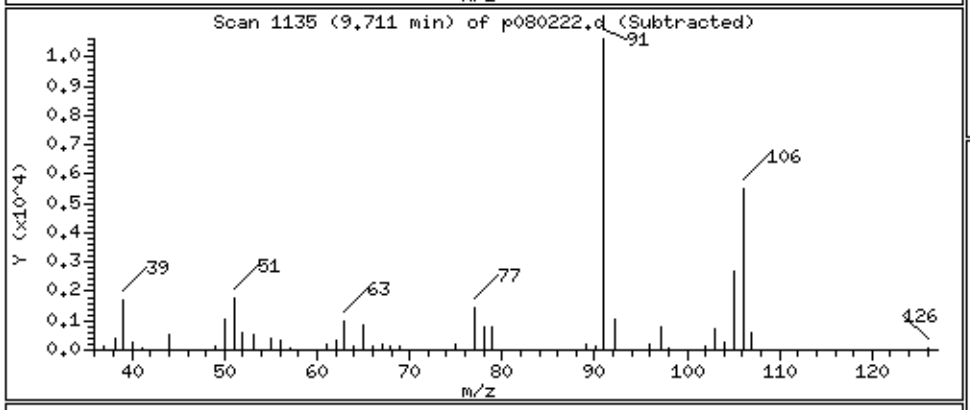
Column diameter: 0.25

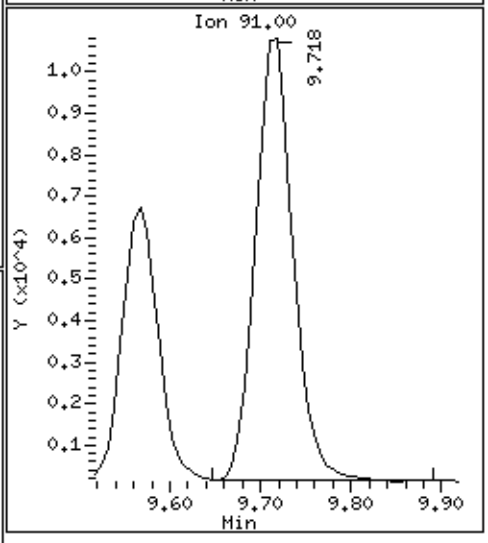
158 m,p-Xylene

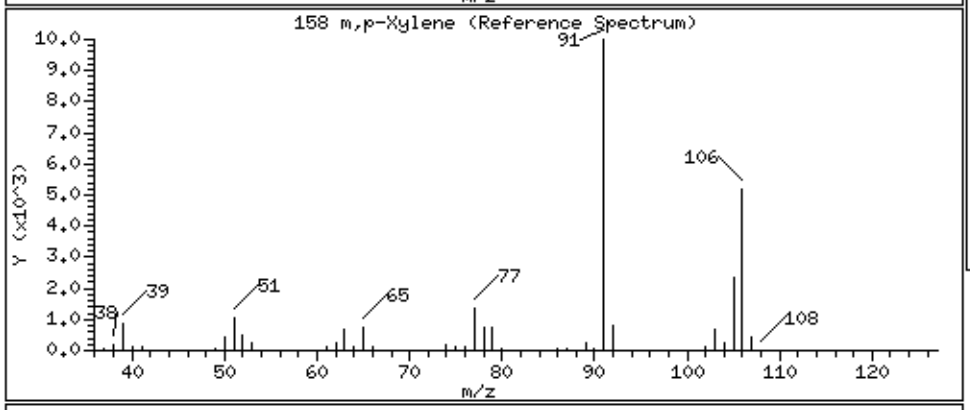
Concentration: 2.317 PPBV

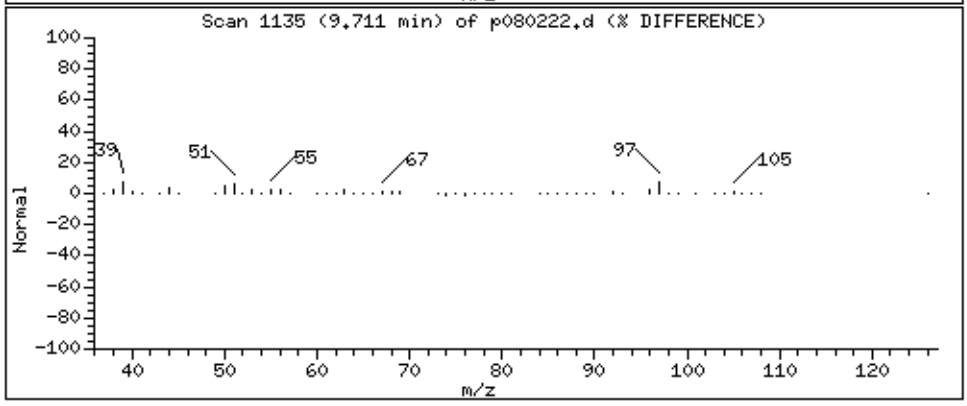












Data File: /chem/msdp.i/02AUG21.b/p080222.d

Date : 02-AUG-2021 23:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L3967

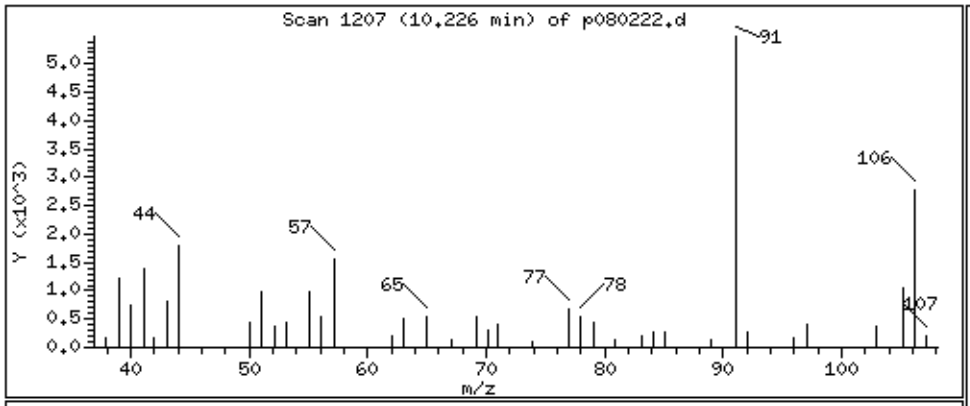
Operator: mb

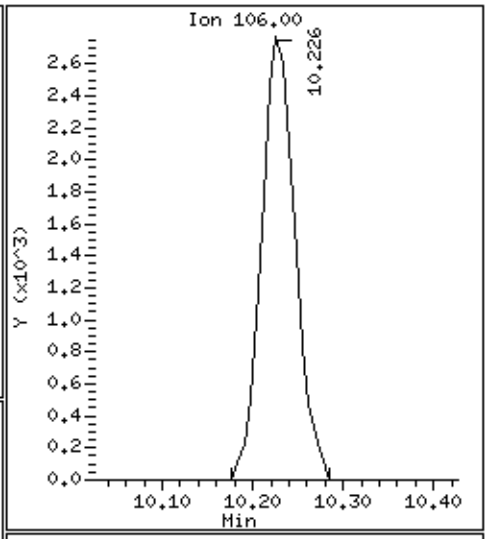
Column phase: RTX-624

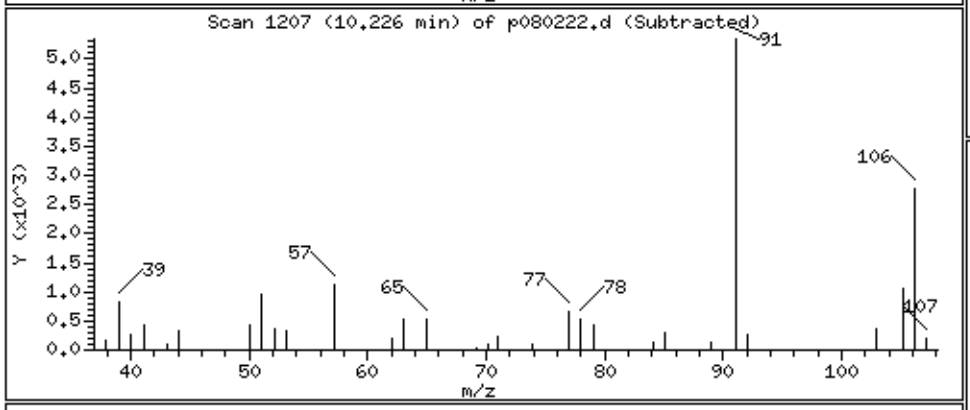
Column diameter: 0.25

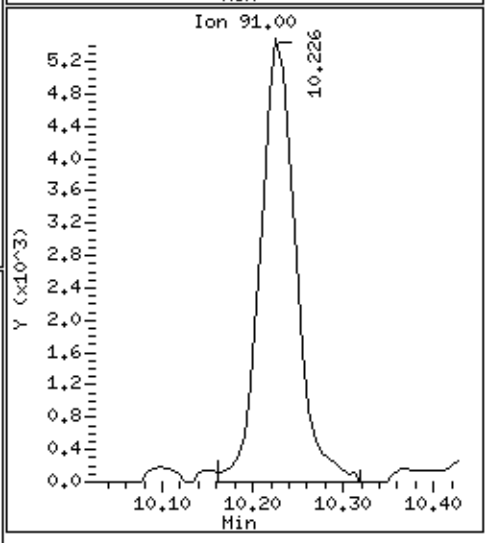
164 o-Xylene

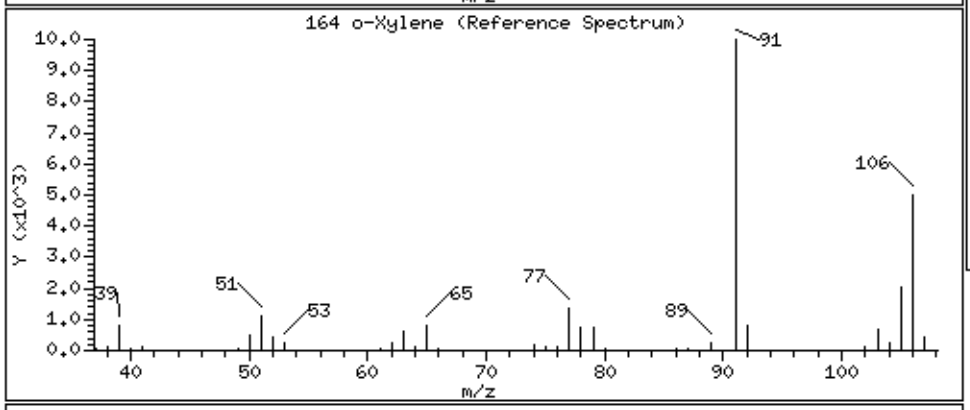
Concentration: 1.089 PPBV

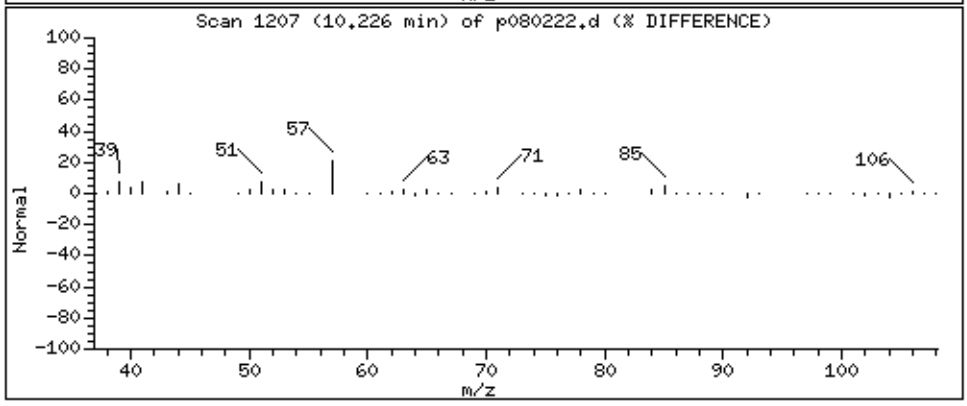












eurofins | Air Toxics

Client Sample ID: SG-VM65B-01

Lab ID#: 2107684-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080223**	**Date of Collection:**	**7/30/21 10:06:00 AM**
Dil. Factor:	**2.04**	**Date of Analysis:**	**8/2/21 11:54 PM**

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	4.0	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	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	4.8	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	8.8	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	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	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	4.0	Not Detected

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Client Sample ID: SG-VM65B-01

Lab ID#: 2107684-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080223**	**Date of Collection:**	**7/30/21 10:06:00 AM**
Dil. Factor:	**2.04**	**Date of Analysis:**	**8/2/21 11:54 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	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	5.7	Not Detected
Freon 12	1.0	1.1	5.0	5.5
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	44	Not Detected
Hexachloroethane	4.1	Not Detected	40	Not Detected
Hexane	1.0	4.1	3.6	14
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	6.4	6.9	43
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	5.5	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-VM65B-01

Lab ID#: 2107684-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080223**	**Date of Collection:**	**7/30/21 10:06:00 AM**
Dil. Factor:	**2.04**	**Date of Analysis:**	**8/2/21 11:54 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080223.d
Lab Smp Id: 2107684-08A
Inj Date : 02-AUG-2021 23:54
Operator : mb Inst ID: msdp.i
Smp Info : 200ml N5523
Misc Info : 5.5 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 7
Dil Factor: 2.04000
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	153738	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	117106				48.23- 108.23	76.17
5.785	5.778 (1.000)	49	321530				150.57- 210.57	209.14
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	570951	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	83536				0.00- 45.71	14.63
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	571824	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	297234				23.78- 83.78	51.98
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	214315	25.2599	25.260		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	106085				27.21- 87.21	49.50
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	614130	24.7704	24.770		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65757				0.00- 40.44	10.71

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	405715			34.95- 94.95	66.06
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	361702	24.6327	24.633	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	432173			95.92- 155.92	119.48
10.921	10.921 (1.154)	176	338970			66.89- 126.89	93.72
8 Freon 12					CAS #: 75-71-8		
1.744	1.716 (0.302)	85	7533	0.54632	1.114	80.00- 120.00	100.00
1.730	1.716 (0.299)	87	2240			2.37- 62.37	29.74
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	30751	2.03044	4.142	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	24538			37.52- 97.52	79.80
4.696	4.696 (0.812)	86	3106			0.00- 41.48	10.10
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	40611	3.11617	6.357	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	32009			47.84- 107.84	78.82
8.464	8.464 (0.895)	131	31243			45.29- 105.29	76.93

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080223.d
Lab Smp Id: 2107684-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 5.5 Hg->9.8 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	153738	2.98
108 1,4-Difluorobenze	558135	334881	781389	570951	2.30
153 Chlorobenzene-d5	542388	325433	759343	571824	5.43

		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	6.67	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.

Report Date: 06-Aug-2021 12:11

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-08A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 5.5 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.260	101.04	70-130
$ 134 Toluene-d8	25.000	24.770	99.08	70-130
$ 170 4-Bromofluorobenz	25.000	24.633	98.53	70-130

Data File: /chem/msdp.i/02AUG21.b/p080223.d

Date : 02-AUG-2021 23:54

Client ID:

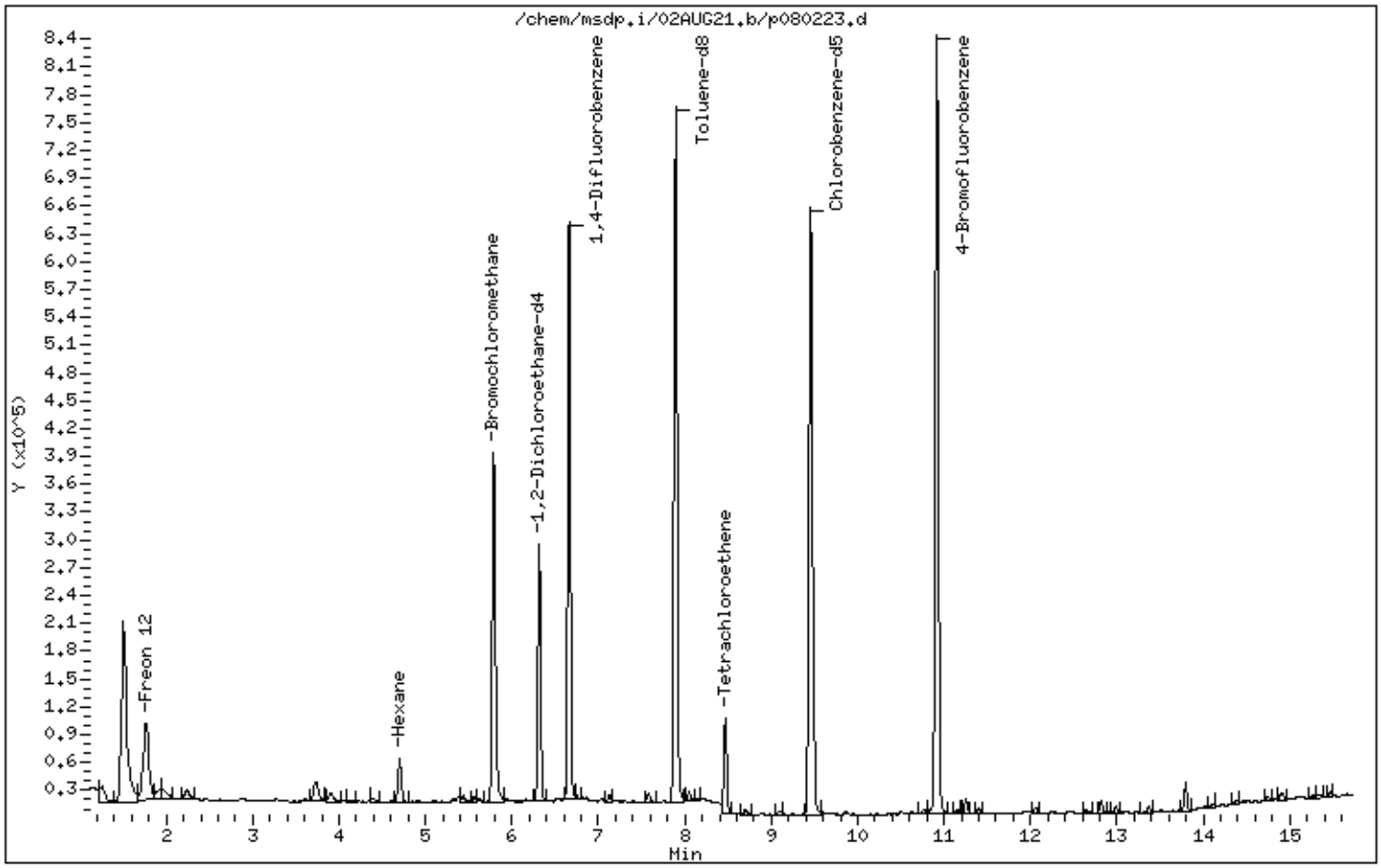
Instrument: msdp.i

Sample Info: 200ml N5523

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080223.d

Date : 02-AUG-2021 23:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5523

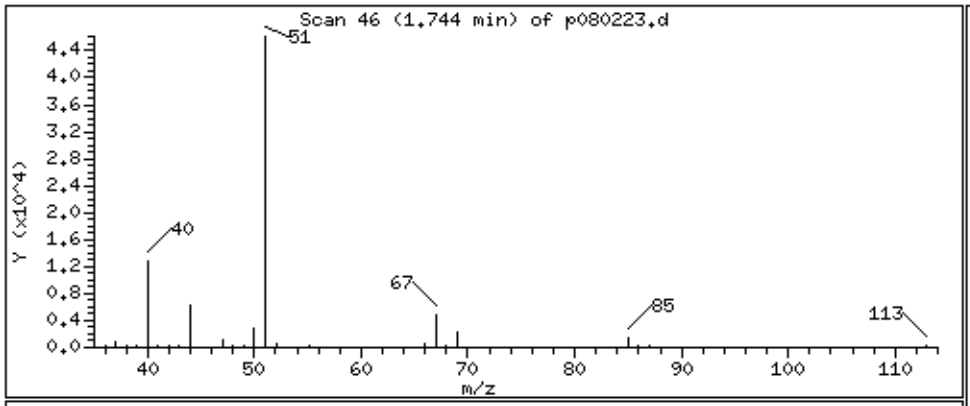
Operator: mb

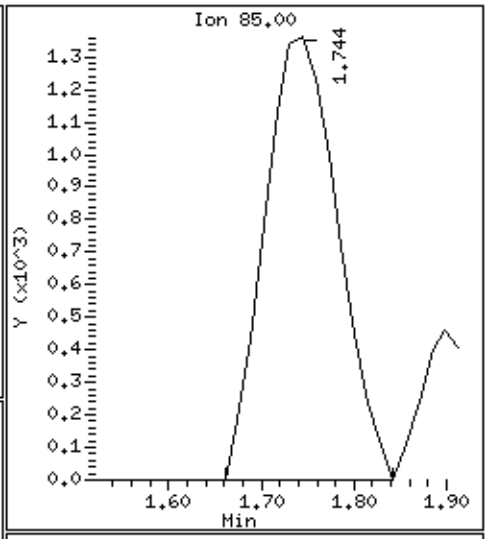
Column phase: RTX-624

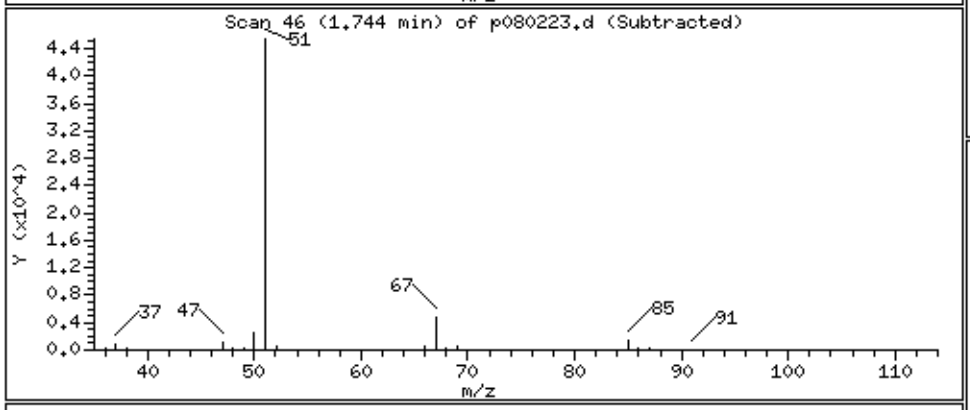
Column diameter: 0.25

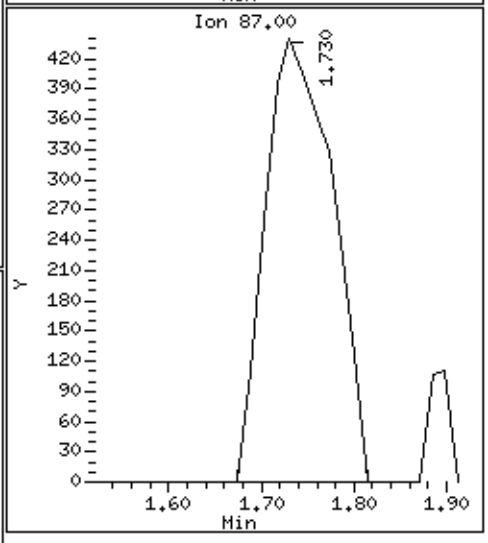
8 Freon 12

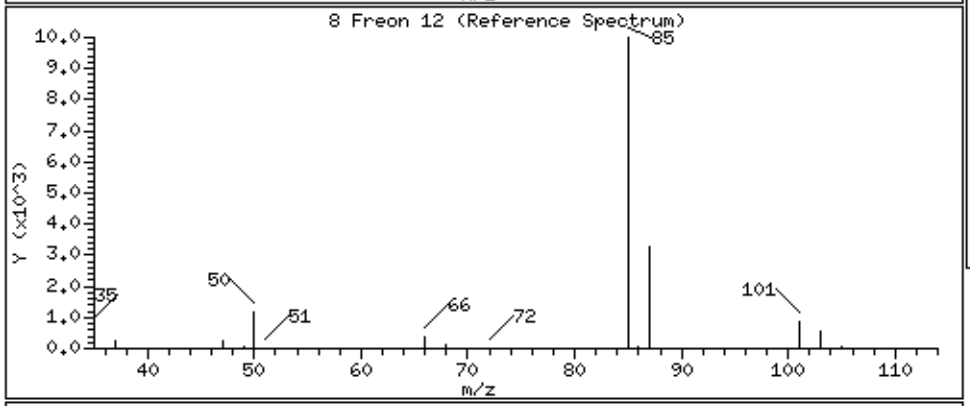
Concentration: 1.114 PPBV

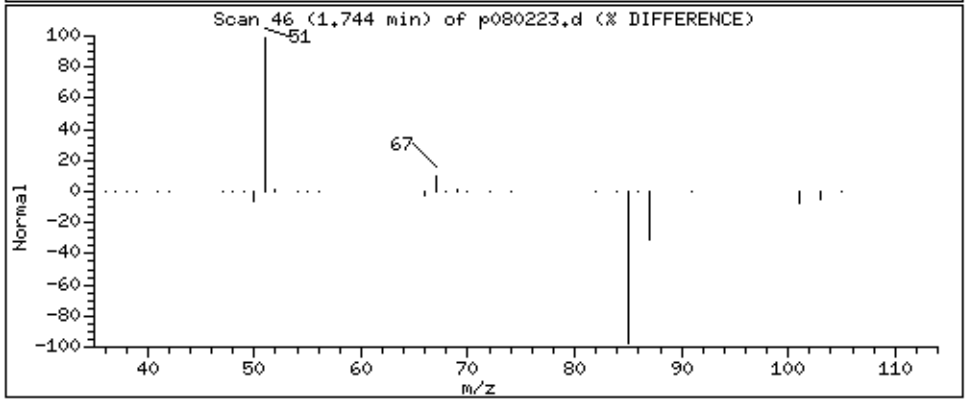












Data File: /chem/msdp.i/02AUG21.b/p080223.d

Date : 02-AUG-2021 23:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5523

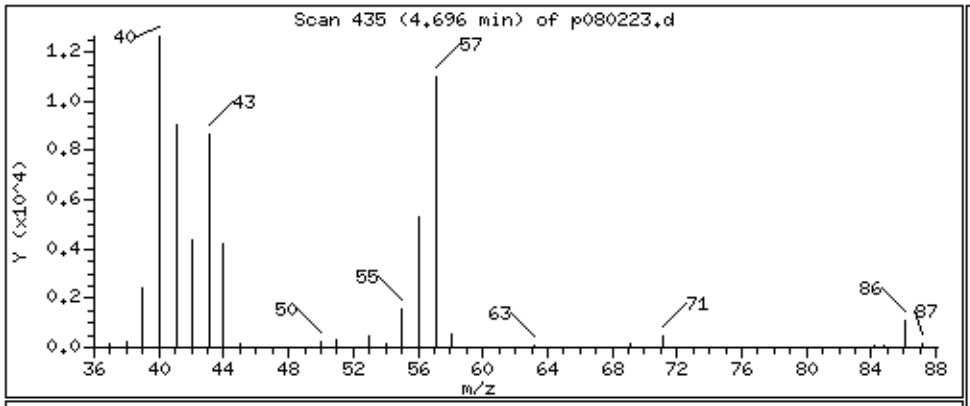
Operator: mb

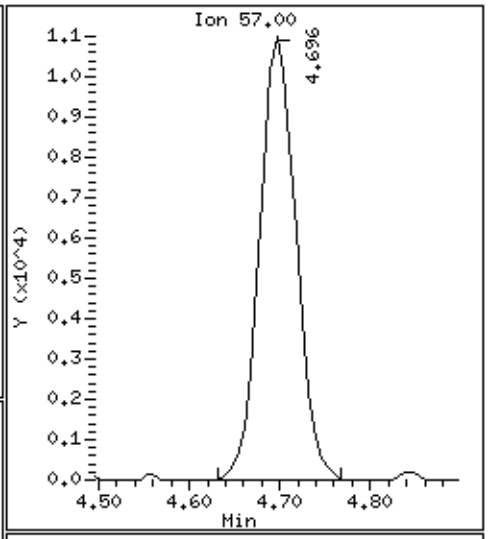
Column phase: RTX-624

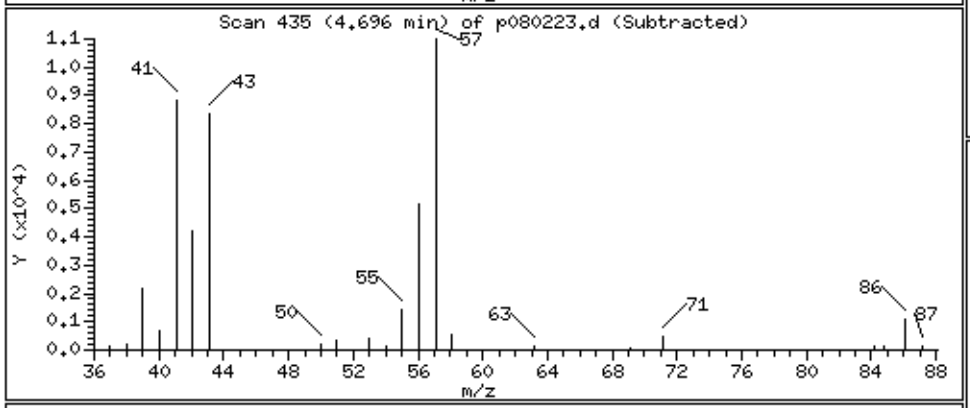
Column diameter: 0.25

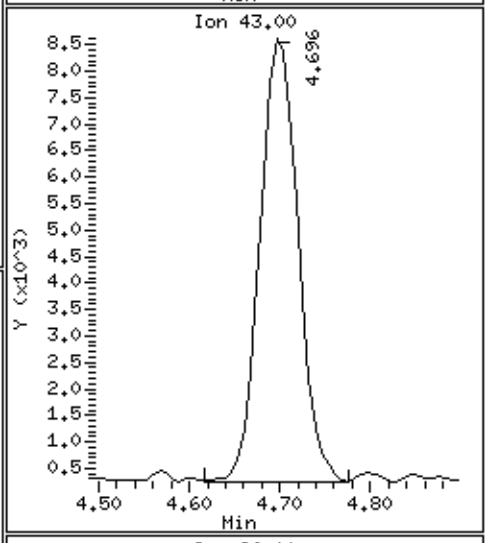
67 Hexane

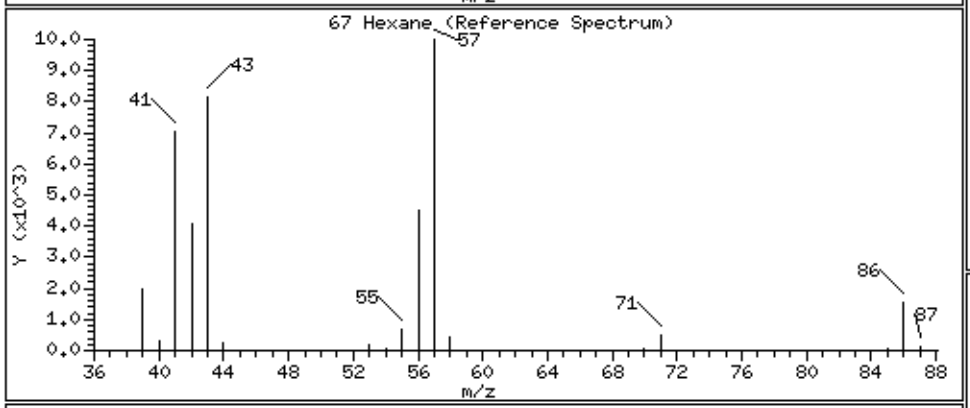
Concentration: 4.142 PPBV

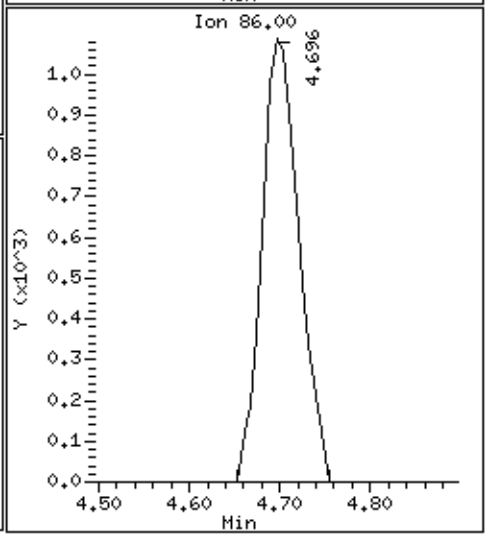


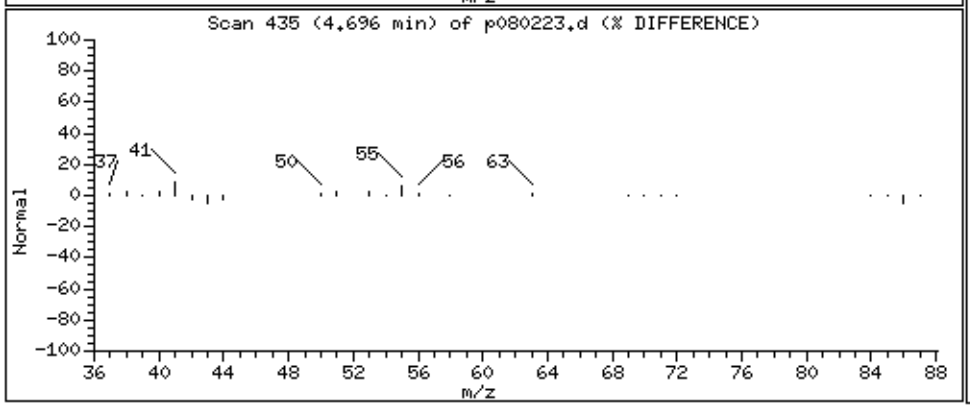












Data File: /chem/msdp.i/02AUG21.b/p080223.d

Date : 02-AUG-2021 23:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5523

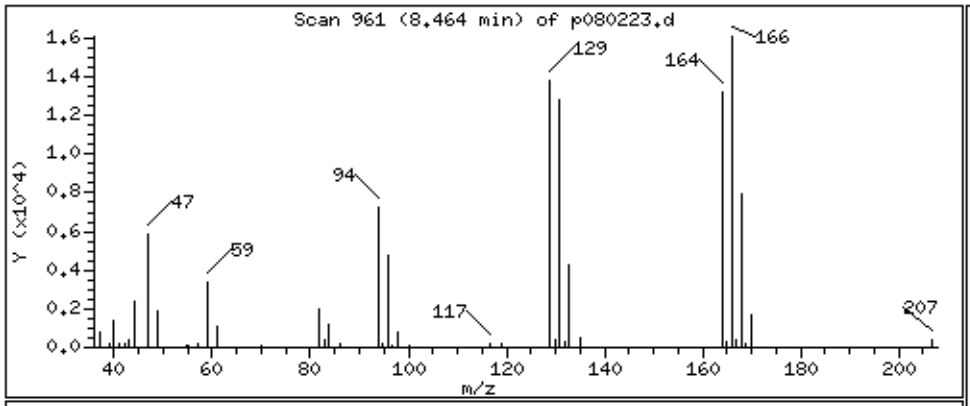
Operator: mb

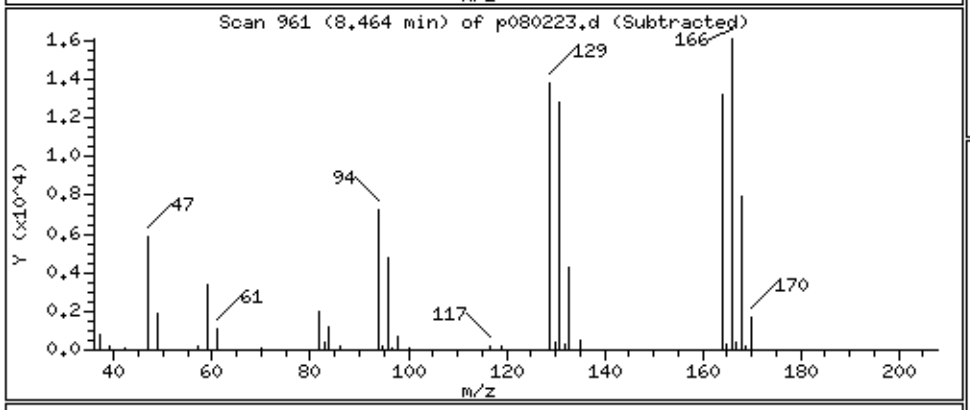
Column phase: RTX-624

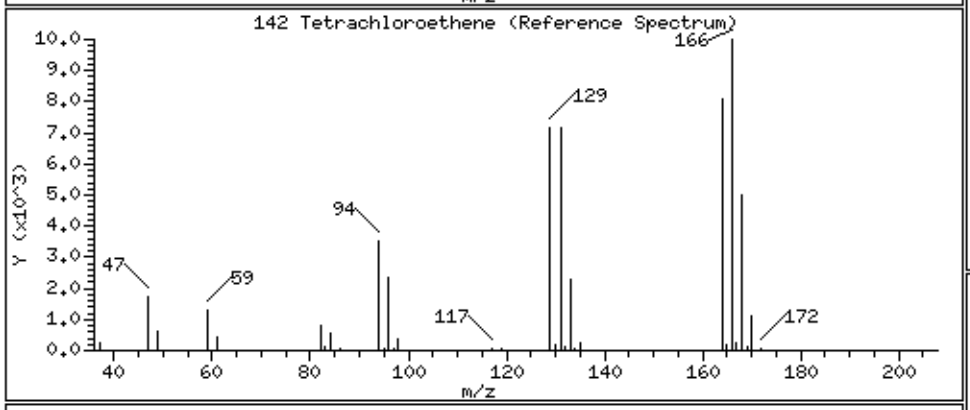
Column diameter: 0.25

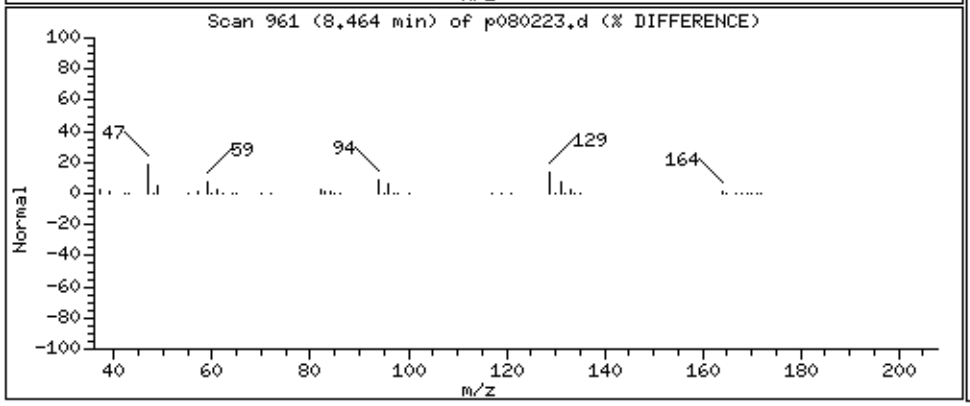
142 Tetrachloroethene

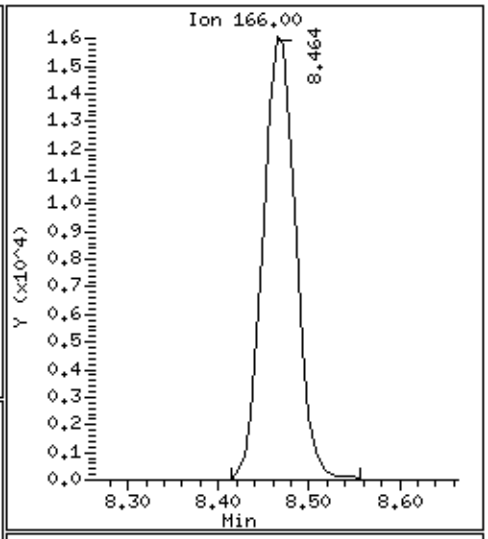
Concentration: 6.357 PPBV

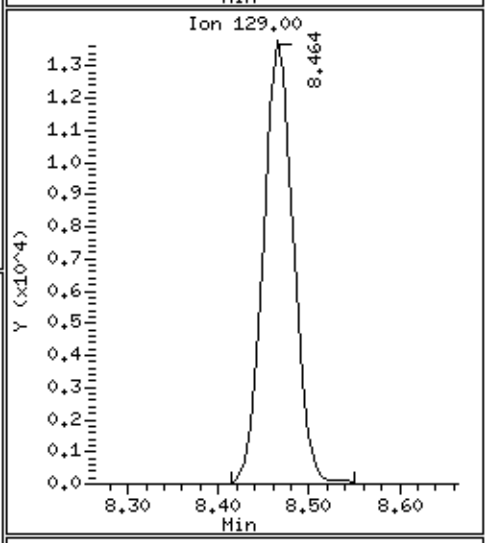


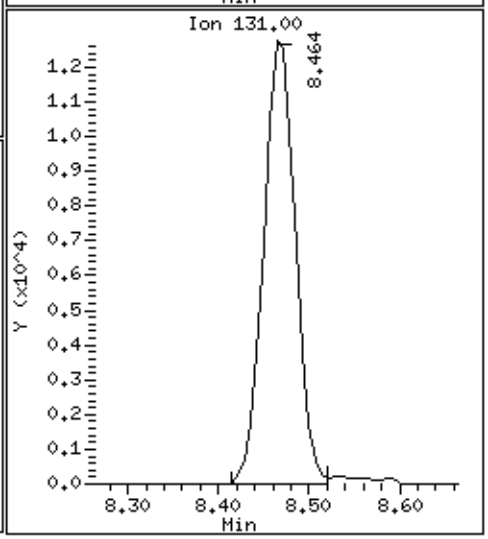












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Client Sample ID: SG-VM66A-01

Lab ID#: 2107684-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080224**	**Date of Collection:**	**7/30/21 11:14:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**8/3/21 12:23 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	9.1	5.0	42
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	2.5	3.4	8.1
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	4.4	13	14
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	1.3	4.2	5.0

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Client Sample ID: SG-VM66A-01

Lab ID#: 2107684-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080224**	**Date of Collection:**	**7/30/21 11:14:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**8/3/21 12:23 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	Not Detected	20	Not Detected
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	29	3.8	100
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	28	7.2	190
Tetrahydrofuran	1.1	1.1	3.1	3.4
Toluene	1.1	2.8	4.0	10
TPH ref. to Gasoline (MW=100)	110	150	440	610
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-VM66A-01

Lab ID#: 2107684-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080224**	**Date of Collection:**	**7/30/21 11:14:00 AM**
Dil. Factor:	**2.13**	**Date of Analysis:**	**8/3/21 12:23 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080224.d
Lab Smp Id: 2107684-09A
Inj Date : 03-AUG-2021 00:23
Operator : mb Inst ID: msdp.i
Smp Info : 200ml O0702
Misc Info : 6.3 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 8
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		
5.785	5.778 (1.000)	130	152205	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	116024				48.23- 108.23	76.23
5.785	5.778 (1.000)	49	320390				150.57- 210.57	210.50
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	575731	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	83259				0.00- 45.71	14.46
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	580168	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	302025				23.78- 83.78	52.06
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	219126	26.0871	26.087		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	107881				27.21- 87.21	49.23
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	625785	25.0309	25.031		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65716				0.00- 40.44	10.50

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	408068			34.95- 94.95	65.21
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	363051	24.3690	24.369	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	439672			95.92- 155.92	121.10
10.921	10.921 (1.154)	176	347067			66.89- 126.89	95.60
48 Carbon Disulfide					CAS #: 75-15-0		
3.837	3.822 (0.663)	76	35314	2.08183	4.434	80.00- 120.00	100.00
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	201832	13.4609	28.672	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	154843			37.52- 97.52	76.72
4.696	4.696 (0.812)	86	22139			0.00- 41.48	10.97
85 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.549	5.549 (0.959)	98	2641	0.59154	1.260	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	4897			125.75- 185.75	185.37
5.549	5.549 (0.959)	61	7842			332.40- 392.40	296.83
89 Tetrahydrofuran					CAS #: 109-99-9		
5.785	5.771 (1.000)	42	6173	0.53953	1.149	80.00- 120.00	100.00
5.785	5.771 (1.000)	71	1681			0.00- 55.82	27.24
5.785	5.771 (1.000)	72	1312			0.00- 57.59	21.26
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.279 (1.085)	57	222118	4.26206	9.078	80.00- 120.00	100.00
6.279	6.279 (1.085)	56	83697			2.24- 62.24	37.68
6.279	6.279 (1.085)	41	71889			0.00- 54.39	32.37
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	22589	1.18897	2.532	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	6030			0.00- 52.90	26.70
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.193)	91	34040	1.29864	2.766	80.00- 120.00	100.00
7.956	7.948 (1.193)	92	19353			28.38- 88.38	56.85
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	175408	13.2659	28.256	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	135206			47.84- 107.84	77.08
8.471	8.464 (0.895)	131	126914			45.29- 105.29	72.35

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080224.d
Lab Smp Id: 2107684-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.3 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	152205	1.95
108 1,4-Difluorobenze	558135	334881	781389	575731	3.15
153 Chlorobenzene-d5	542388	325433	759343	580168	6.97

		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.

Report Date: 06-Aug-2021 12:18

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-09A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.3 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.087	104.35	70-130
$ 134 Toluene-d8	25.000	25.031	100.12	70-130
$ 170 4-Bromofluorobenz	25.000	24.369	97.48	70-130

Data File: /chem/msdp.i/02AUG21.b/p080224.d

Page 1

Date : 03-AUG-2021 00:23

Client ID:

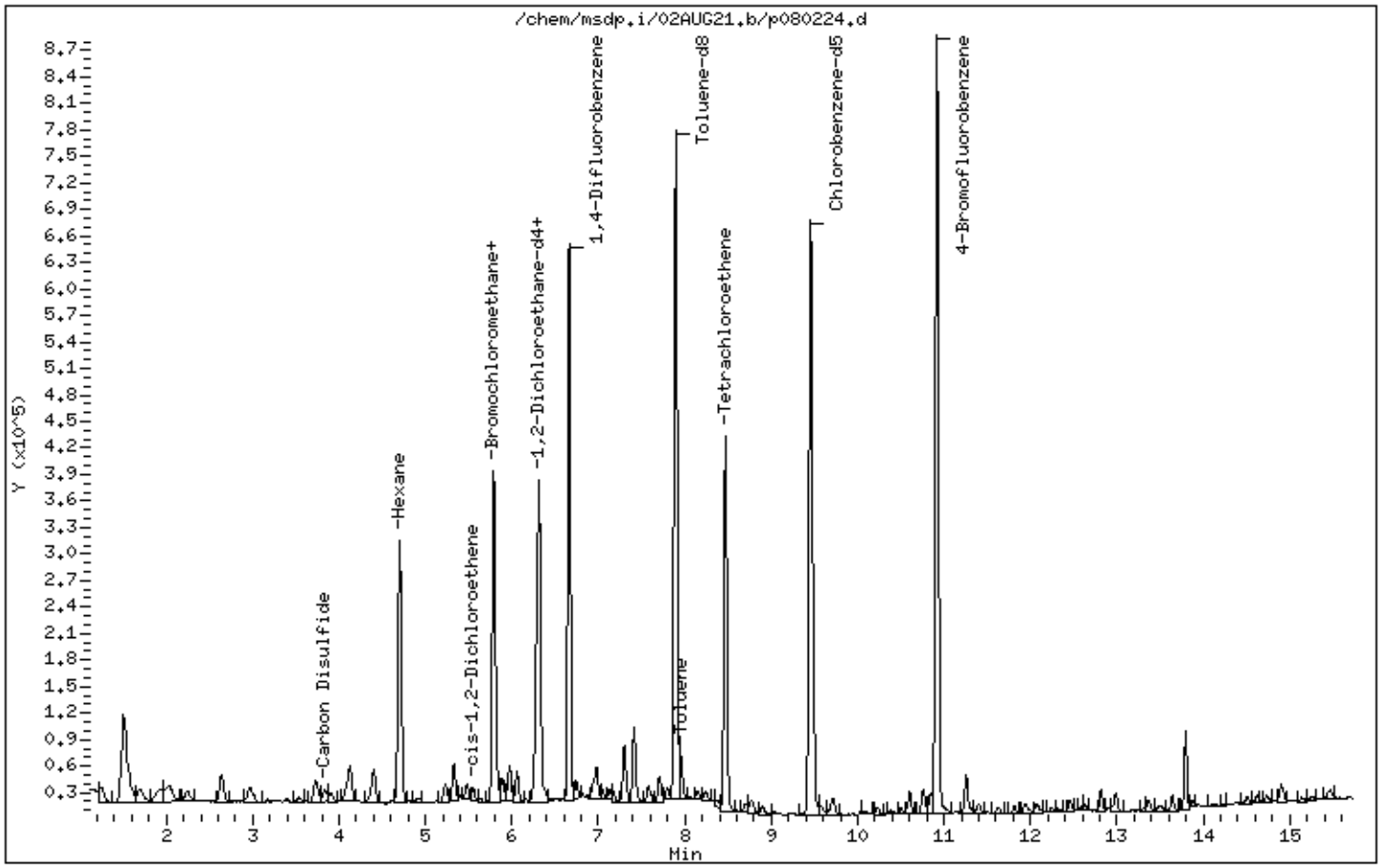
Instrument: msdp.i

Sample Info: 200ml 00702

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

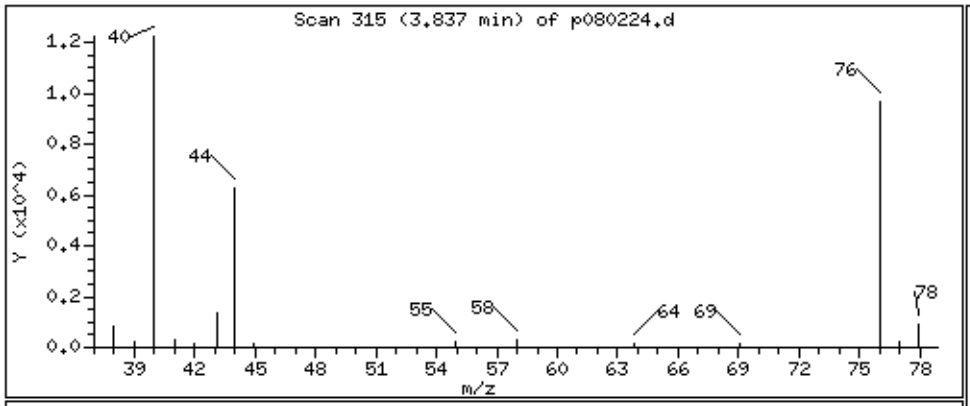
Operator: mb

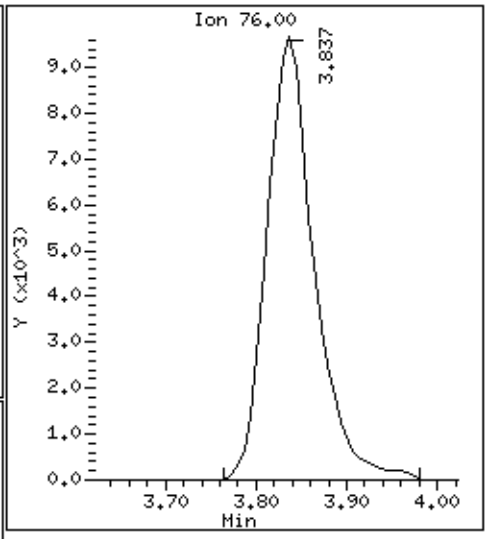
Column phase: RTX-624

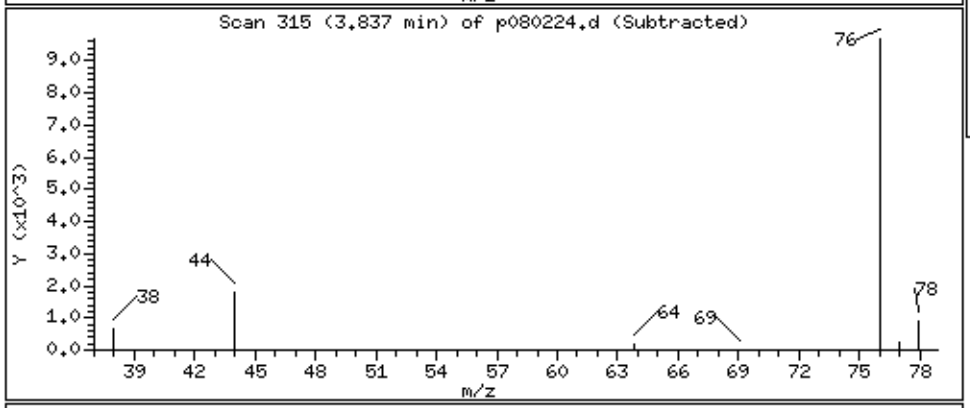
Column diameter: 0.25

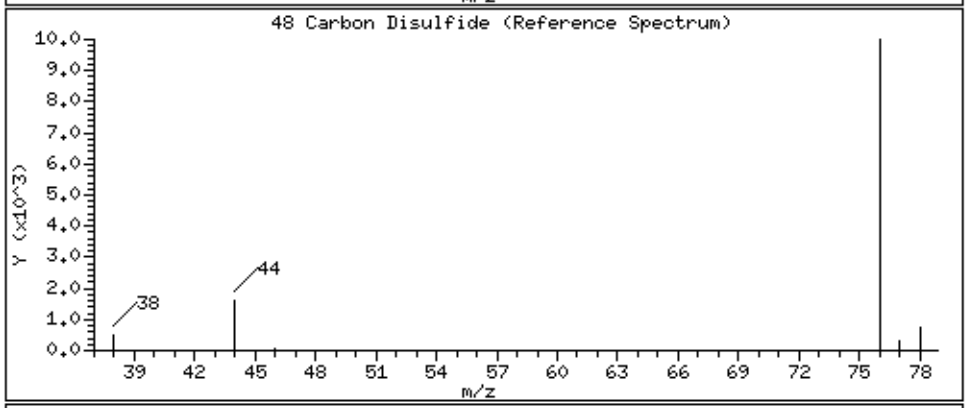
48 Carbon Disulfide

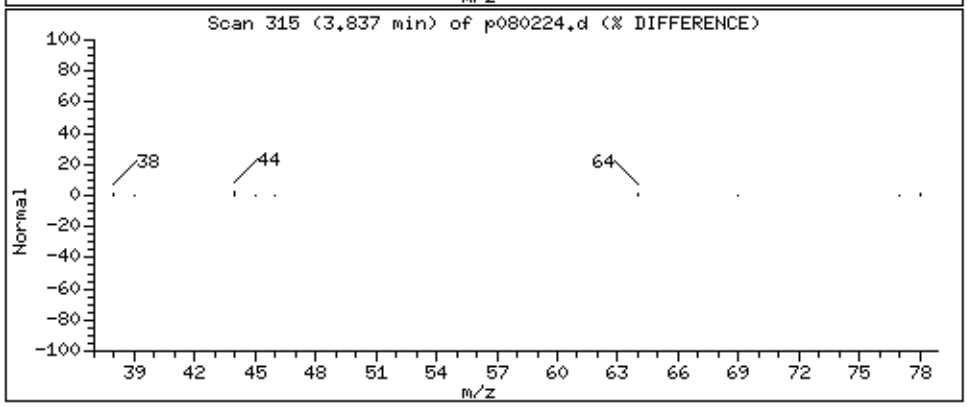
Concentration: 4.434 PPBV











Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

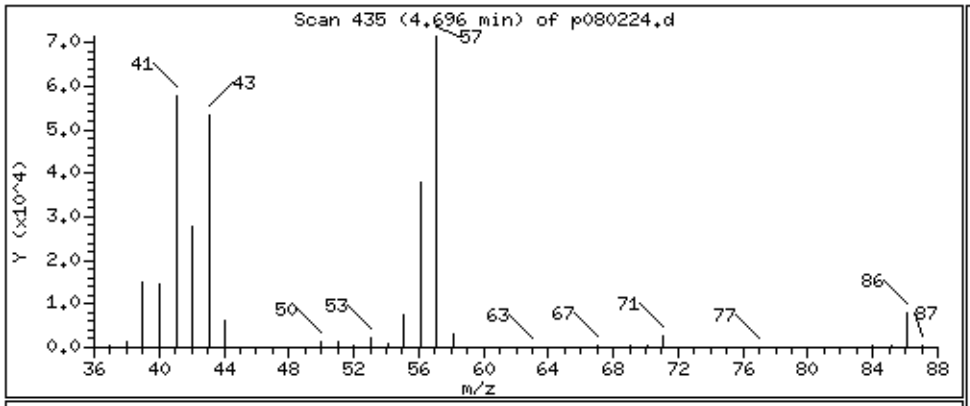
Operator: mb

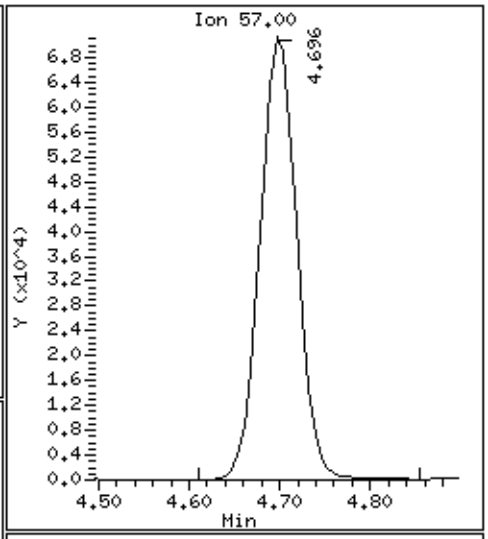
Column phase: RTX-624

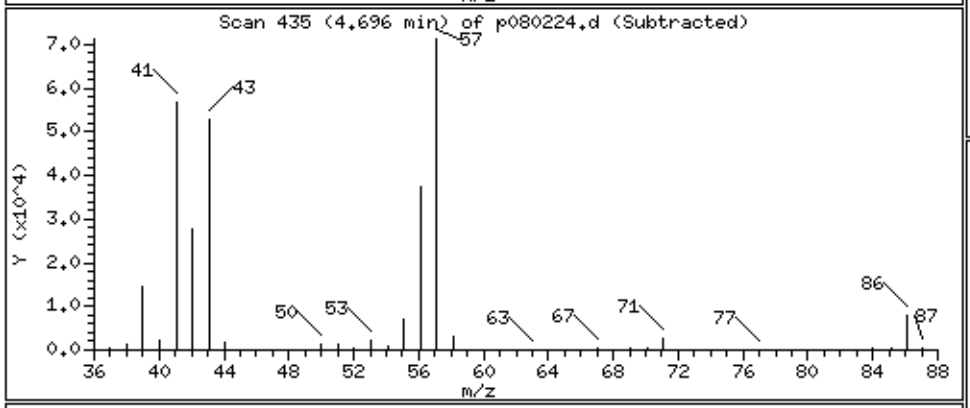
Column diameter: 0.25

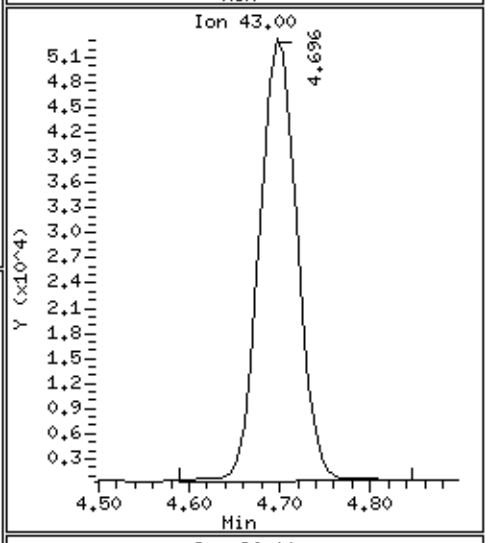
67 Hexane

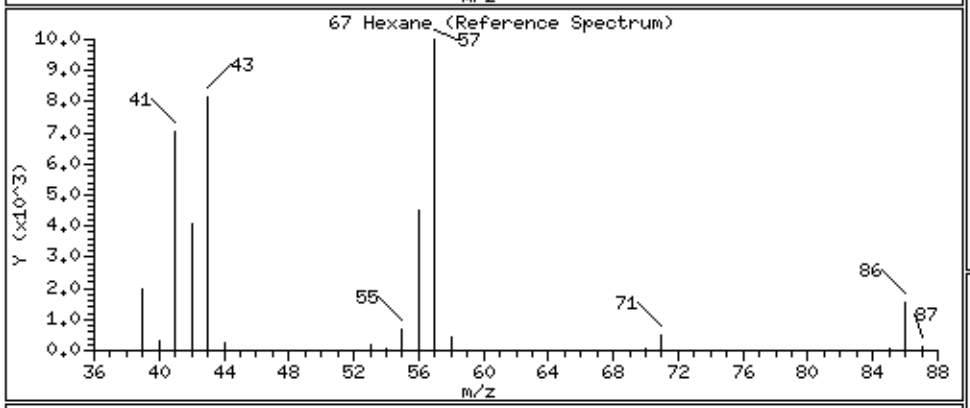
Concentration: 28.672 PPBV

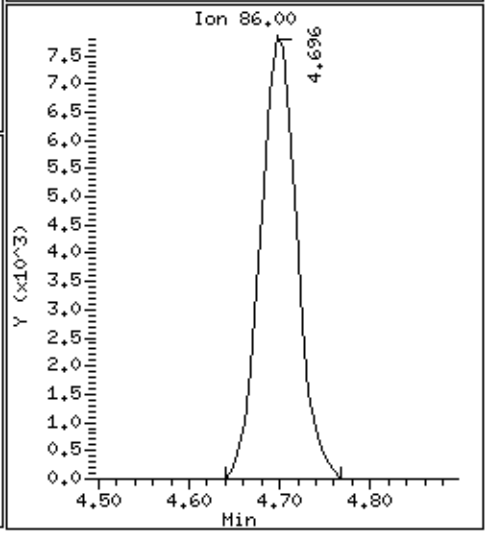


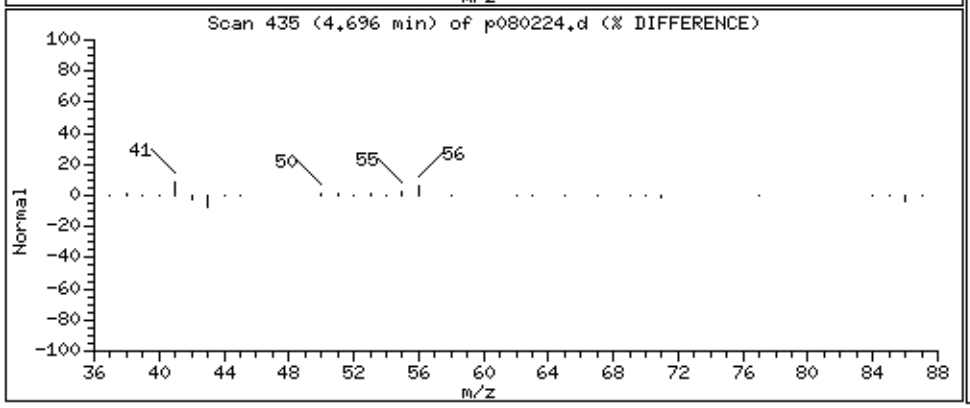












Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

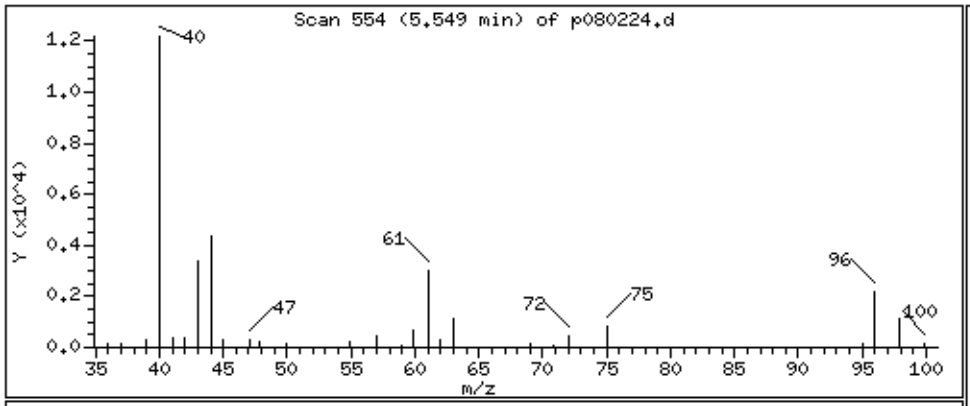
Operator: mb

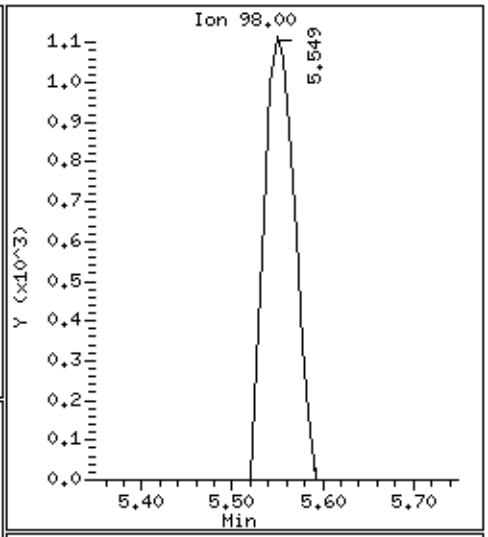
Column phase: RTX-624

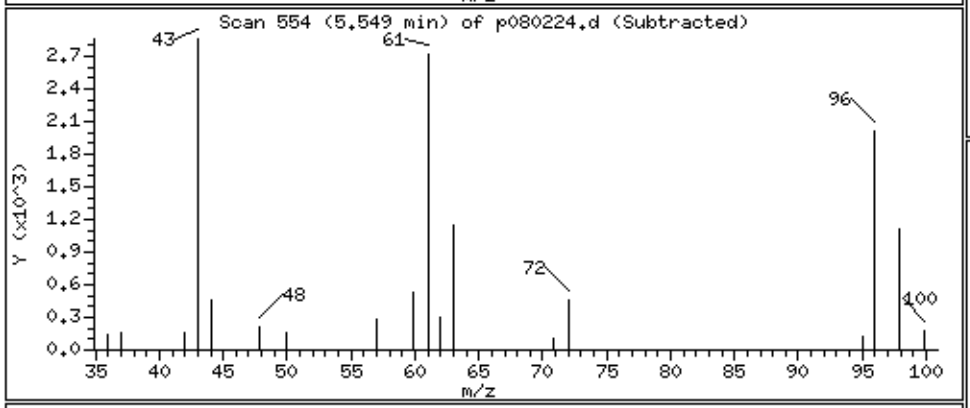
Column diameter: 0.25

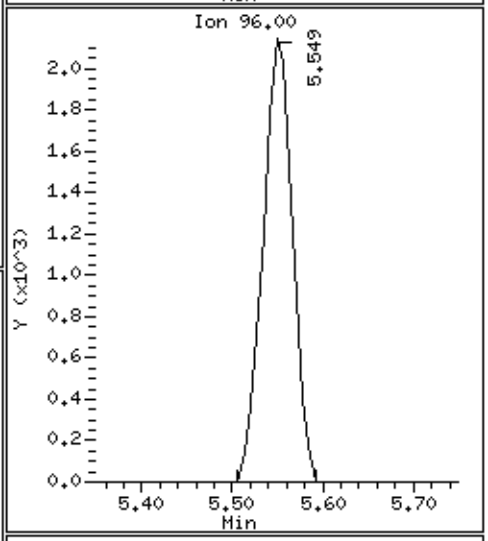
85 cis-1,2-Dichloroethene

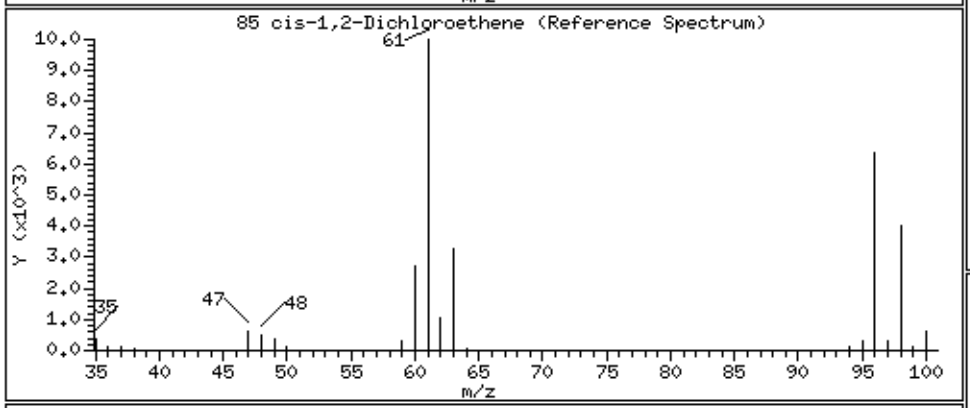
Concentration: 1.260 PPBV

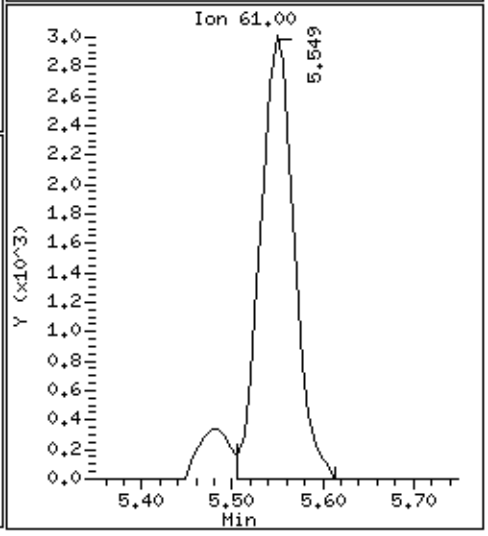


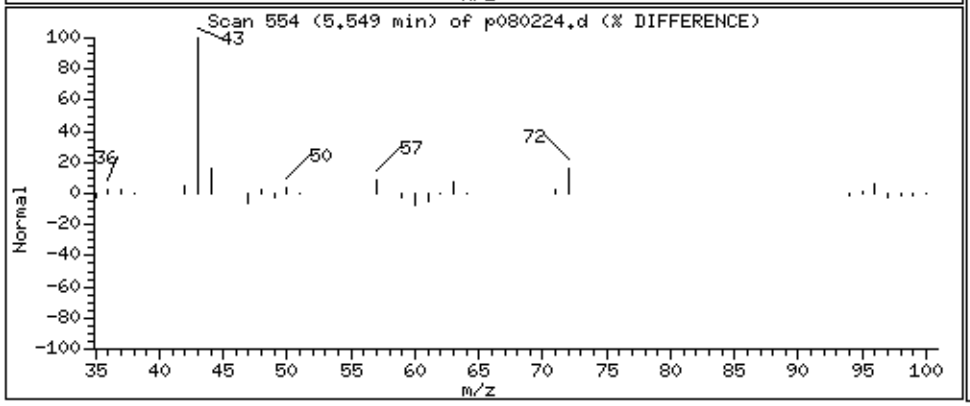












Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

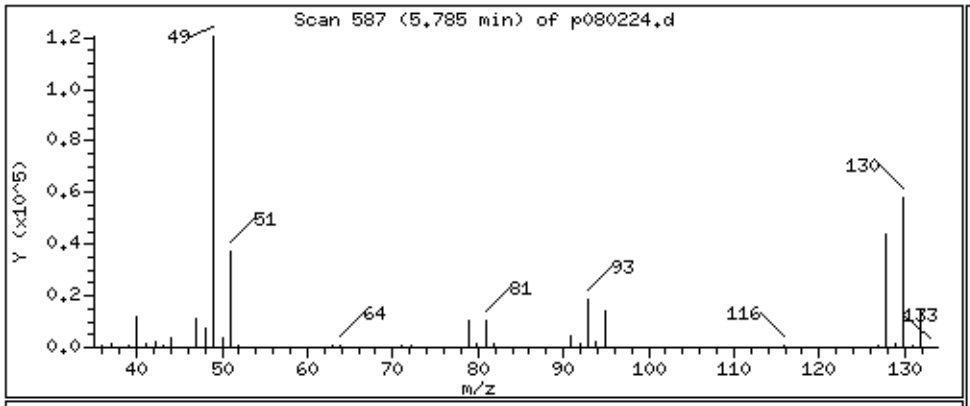
Operator: mb

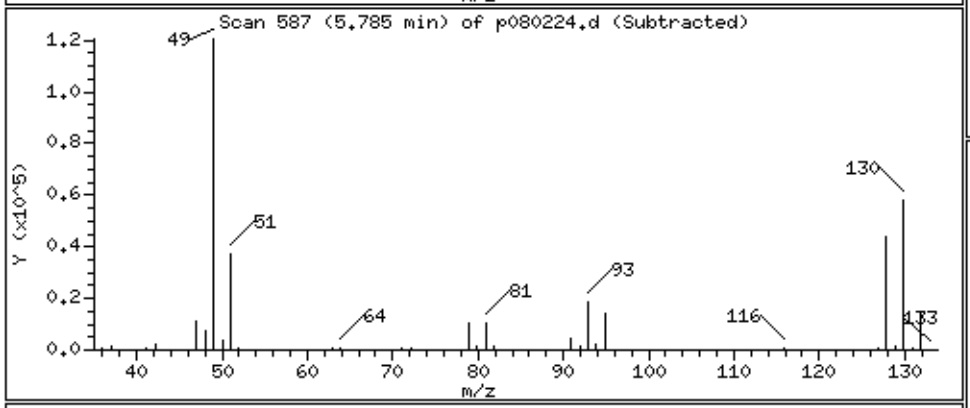
Column phase: RTX-624

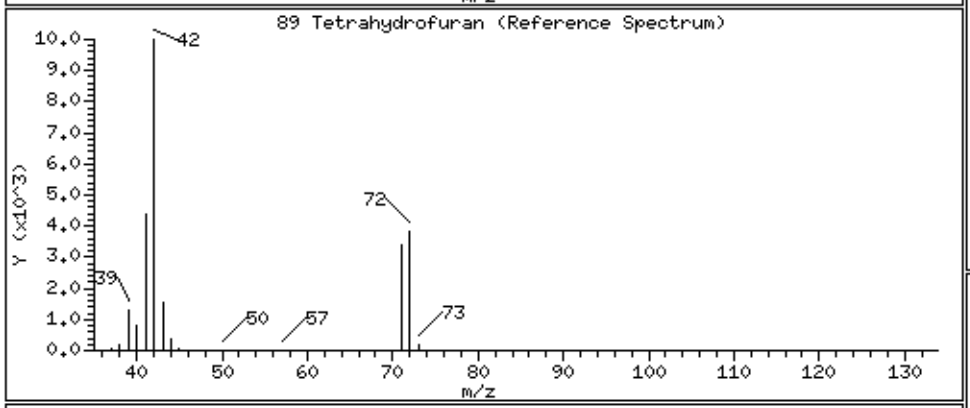
Column diameter: 0.25

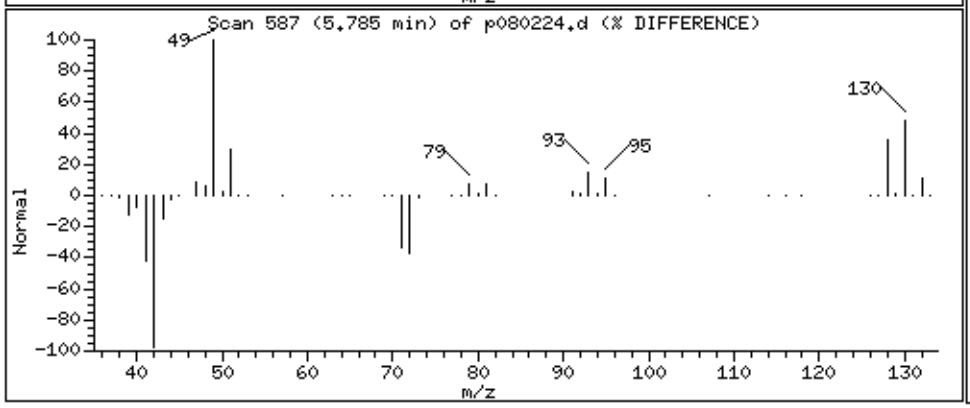
89 Tetrahydrofuran

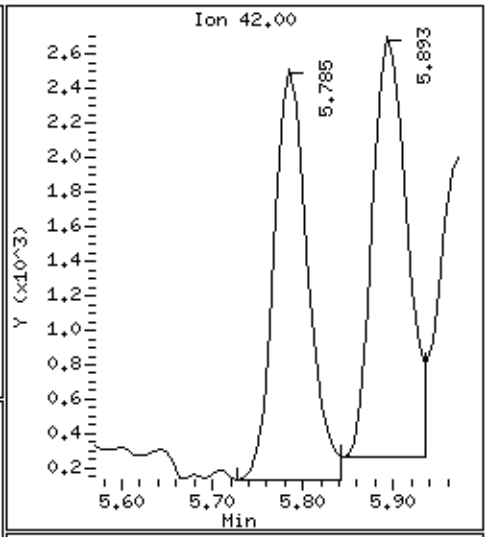
Concentration: 1.149 PPBV

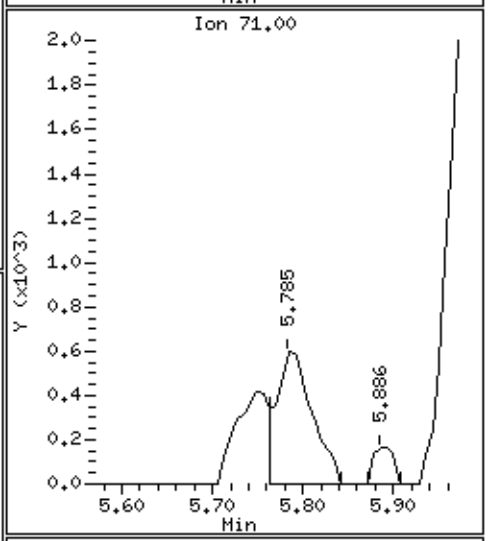


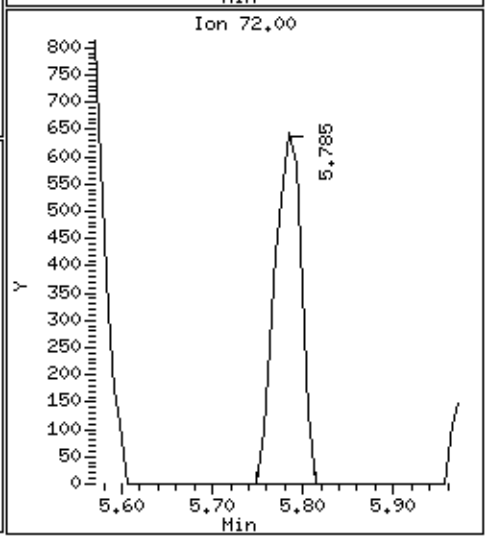












Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

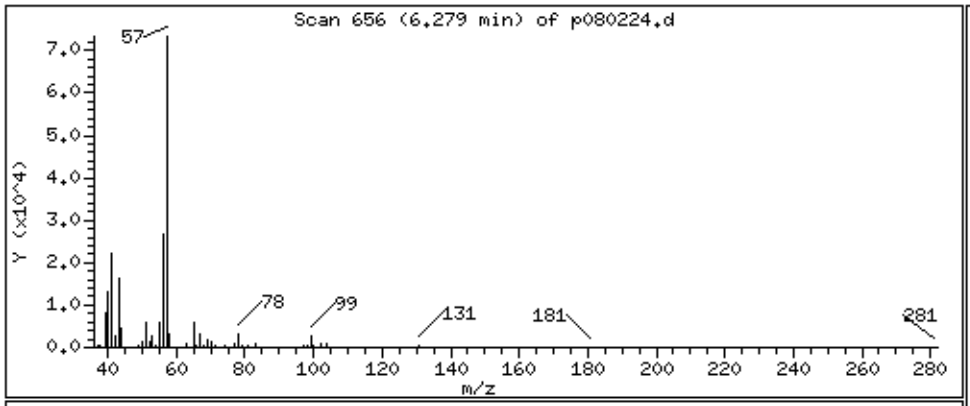
Operator: mb

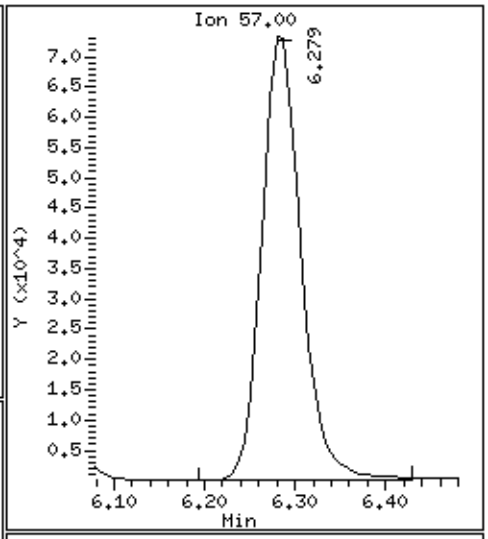
Column phase: RTX-624

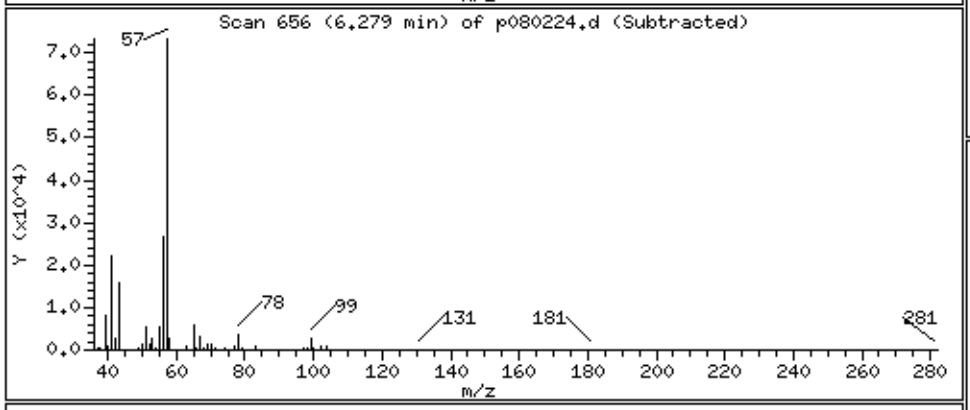
Column diameter: 0.25

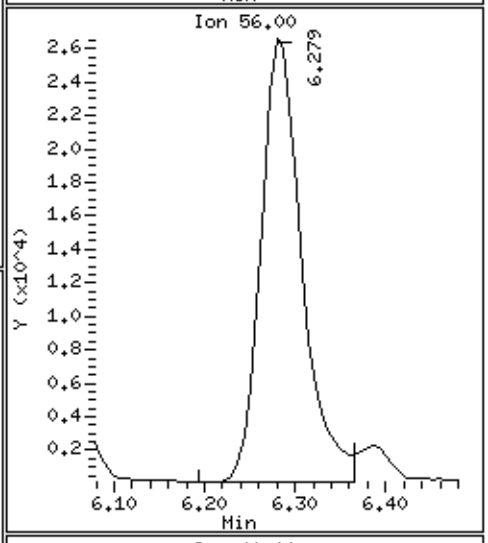
101 2,2,4-Trimethylpentane

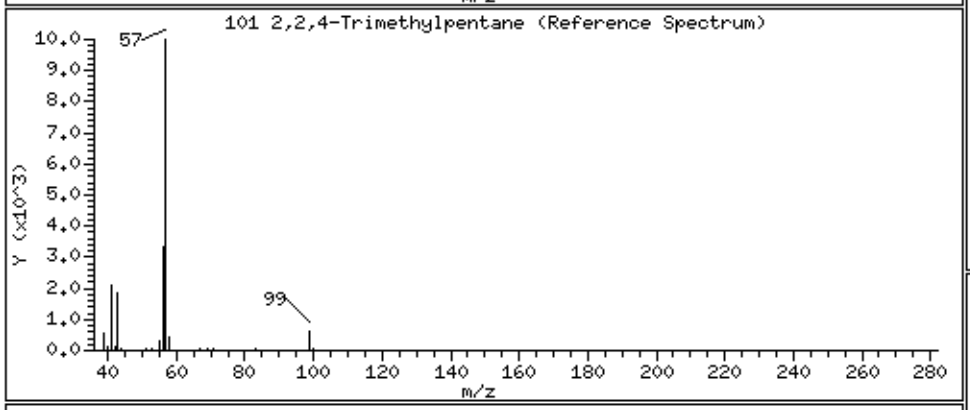
Concentration: 9.078 PPBV

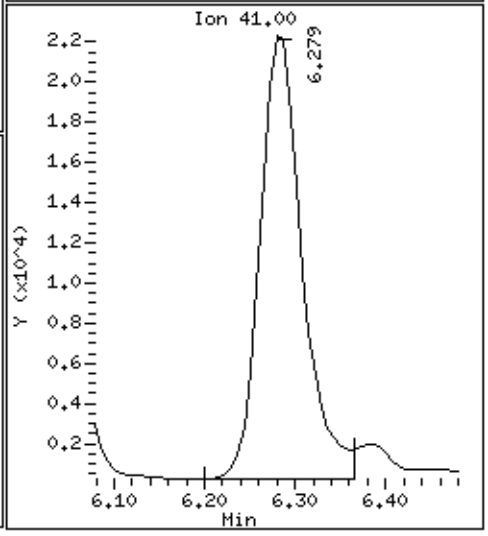


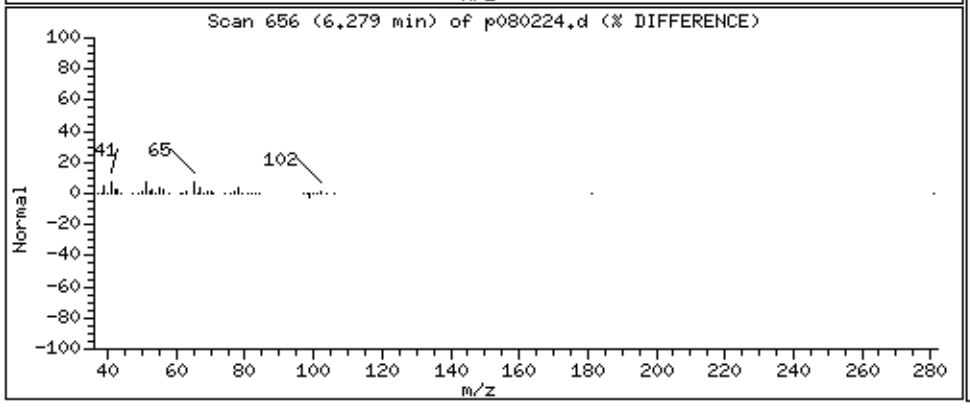












Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

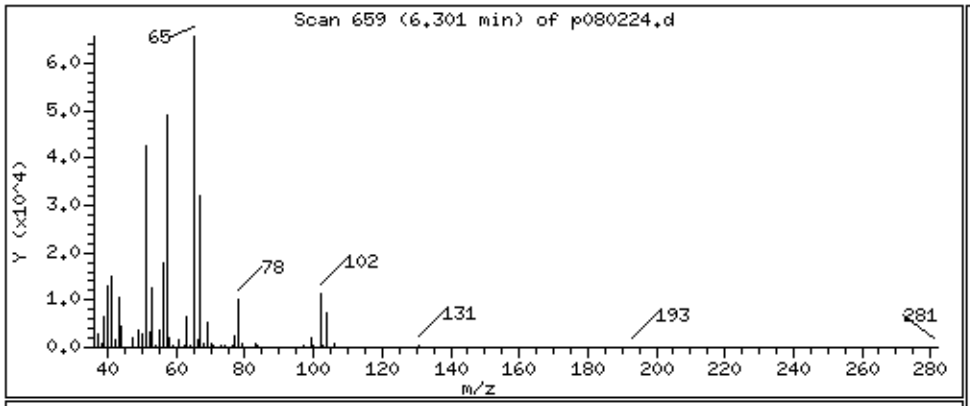
Operator: mb

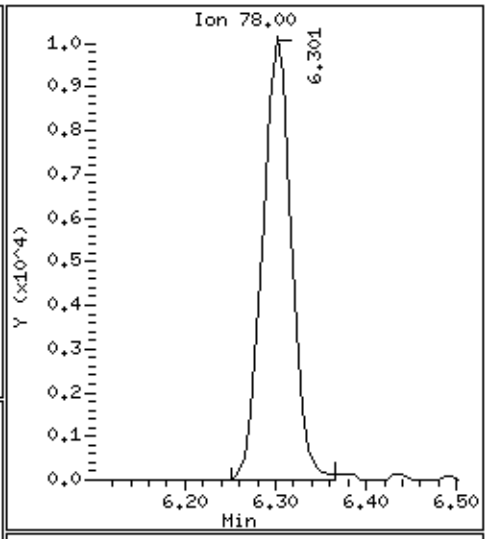
Column phase: RTX-624

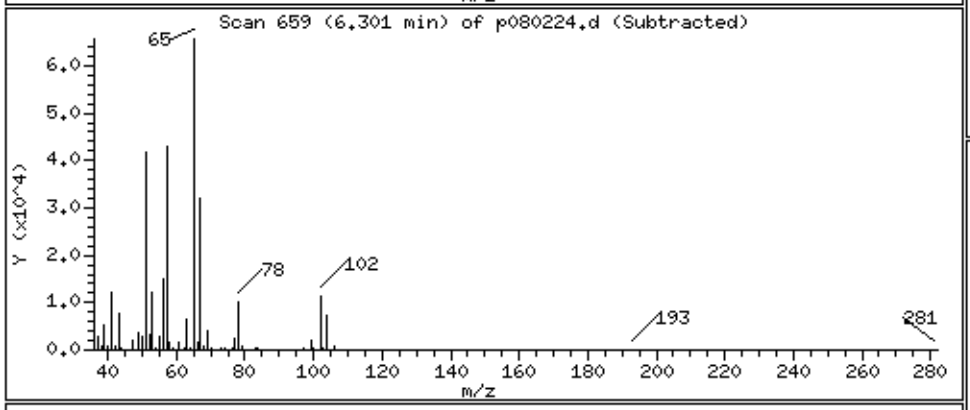
Column diameter: 0.25

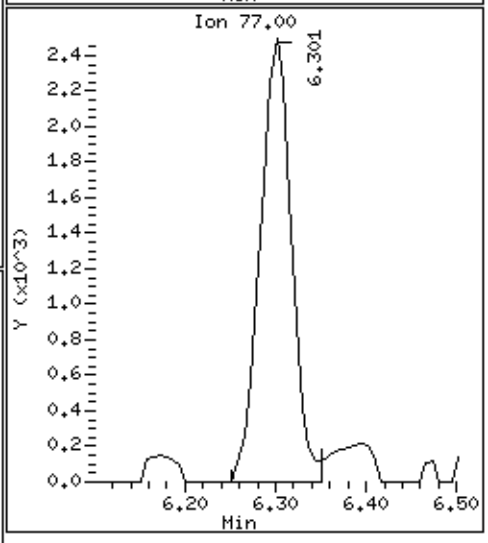
102 Benzene

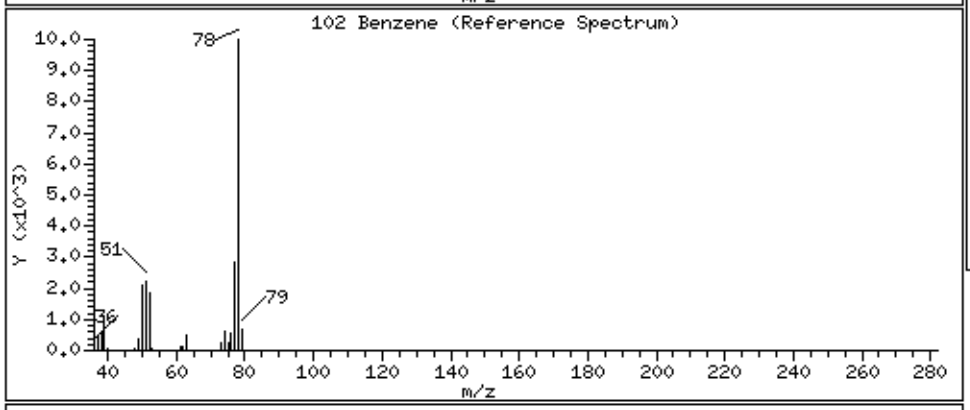
Concentration: 2.532 PPBV

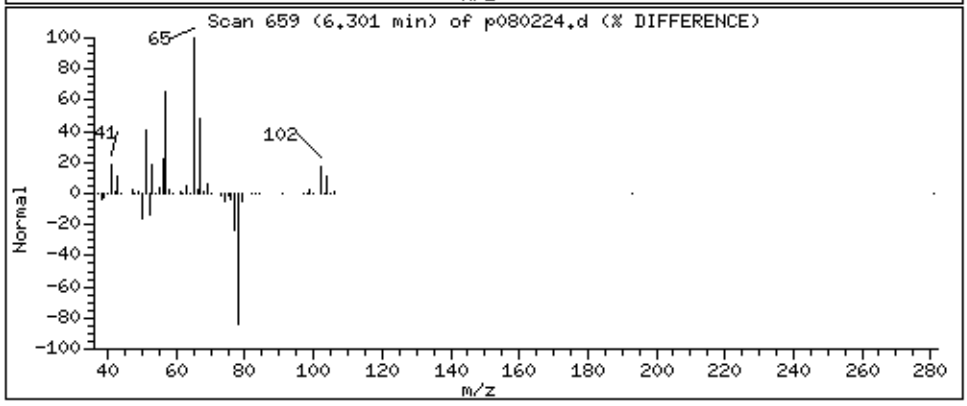












Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

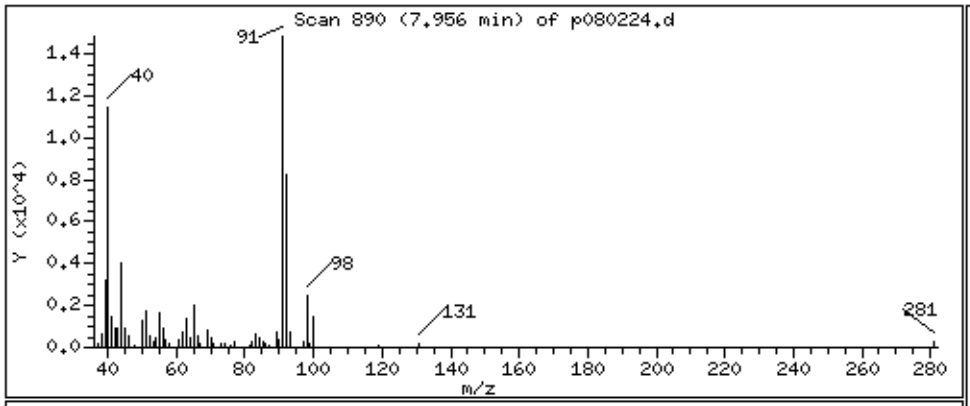
Operator: mb

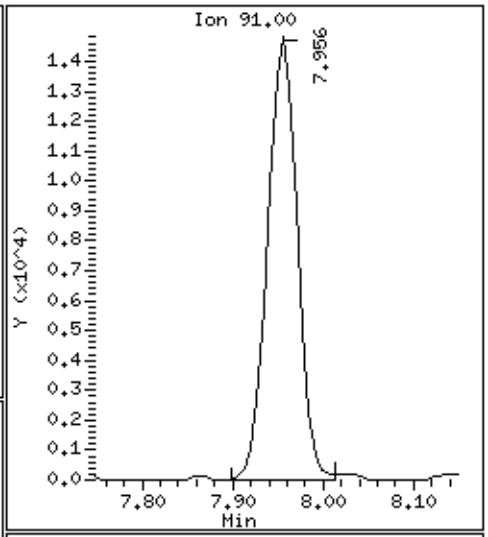
Column phase: RTX-624

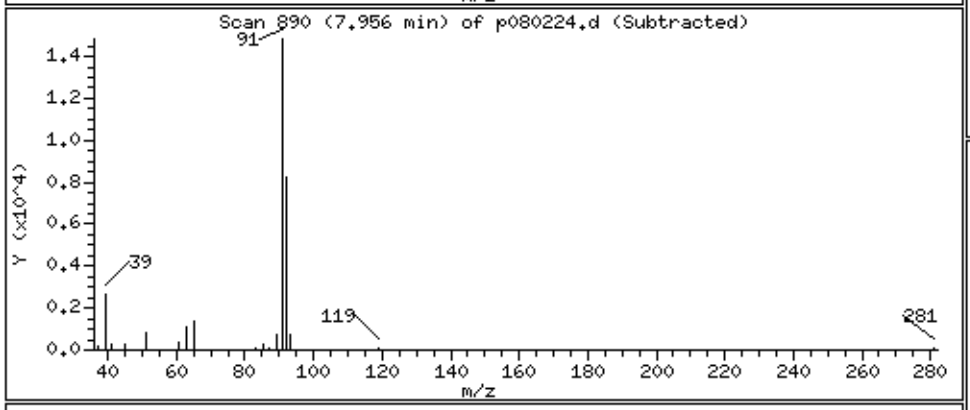
Column diameter: 0.25

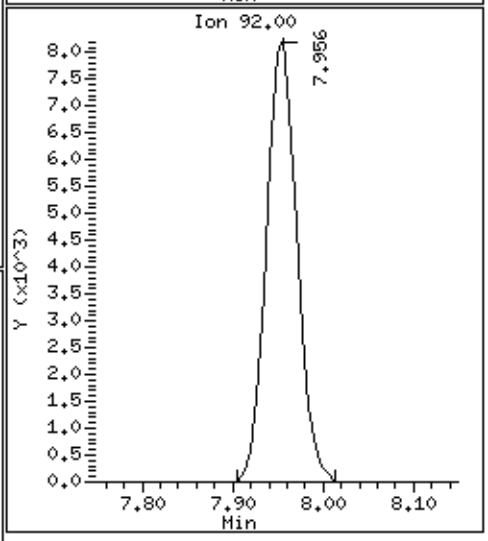
137 Toluene

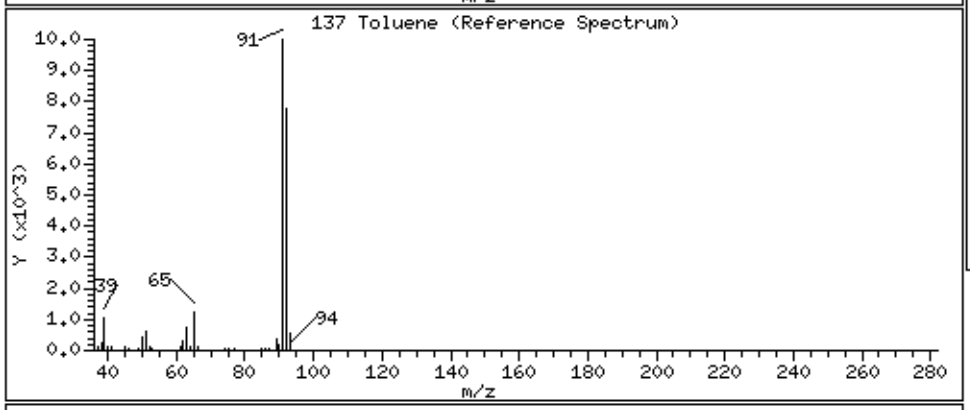
Concentration: 2.766 PPBV

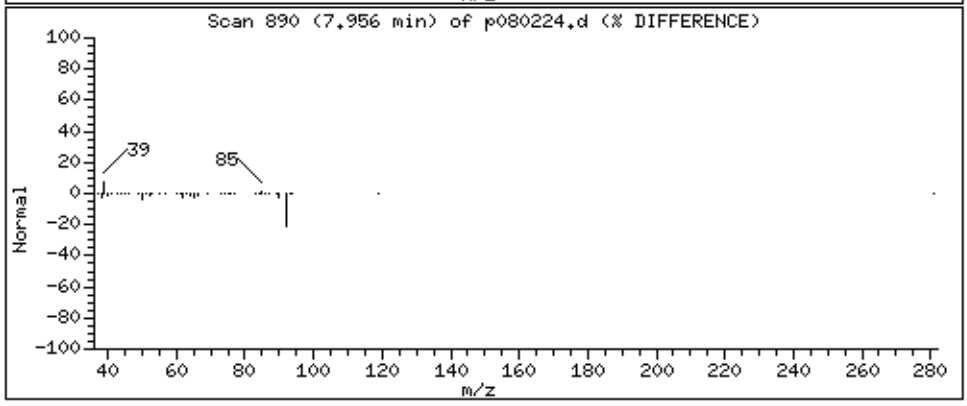












Data File: /chem/msdp.i/02AUG21.b/p080224.d

Date : 03-AUG-2021 00:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00702

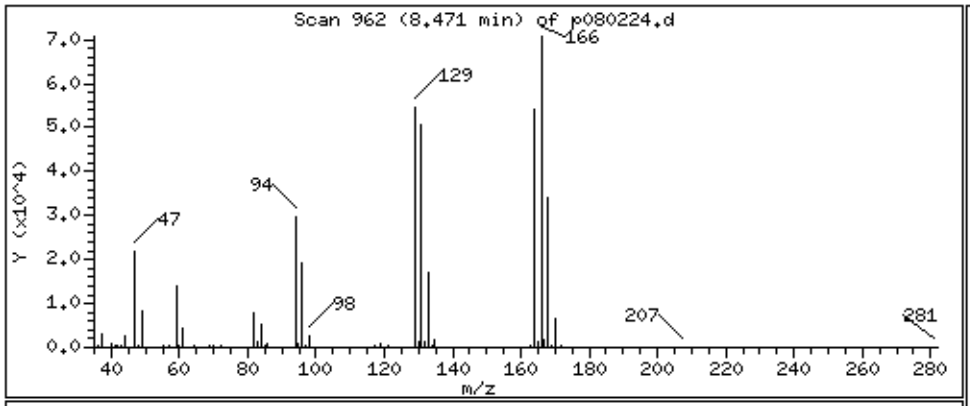
Operator: mb

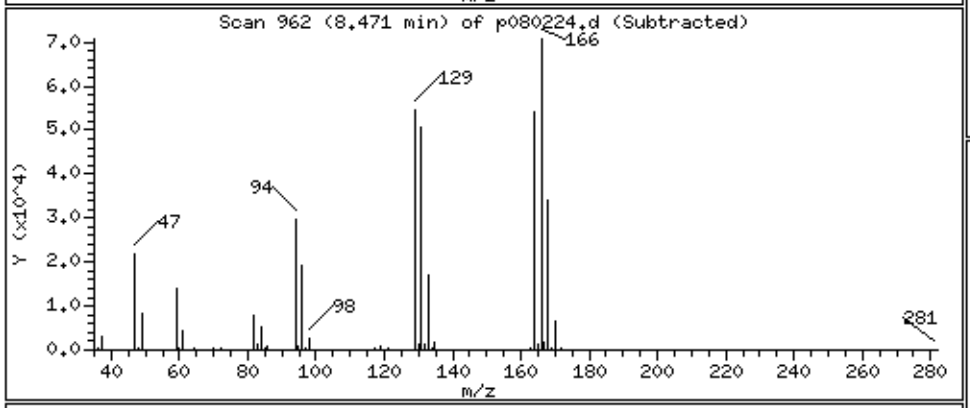
Column phase: RTX-624

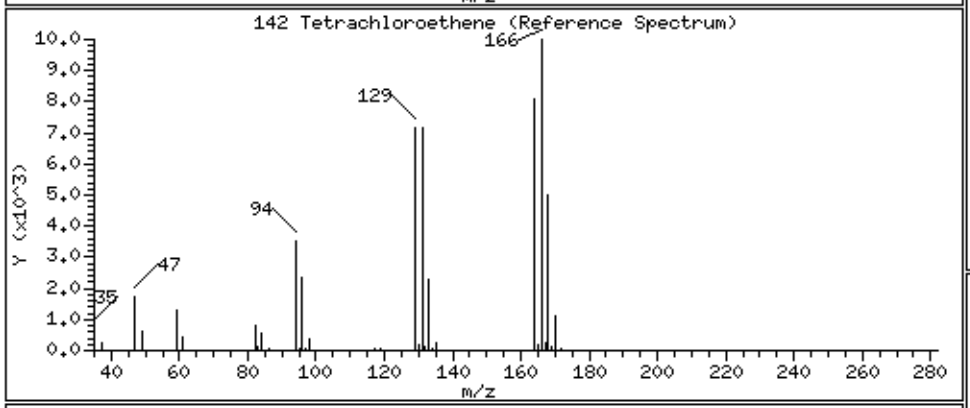
Column diameter: 0.25

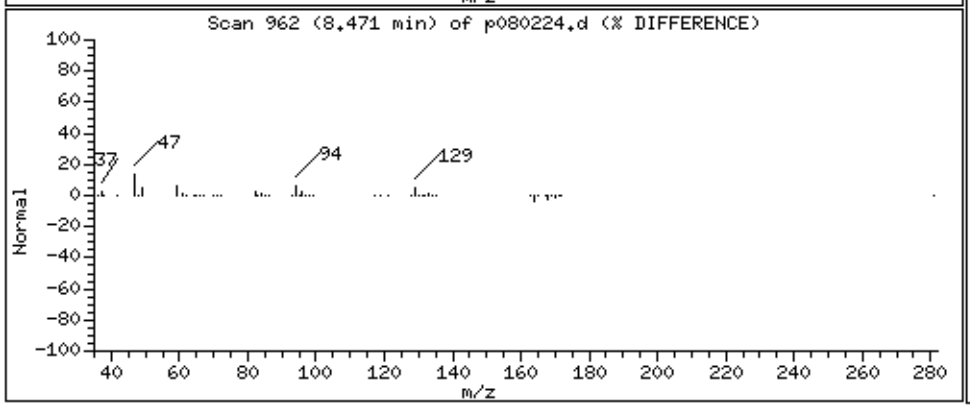
142 Tetrachloroethene

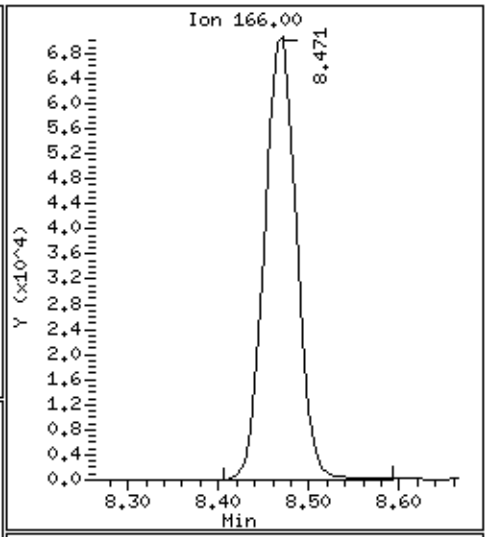
Concentration: 28.256 PPBV

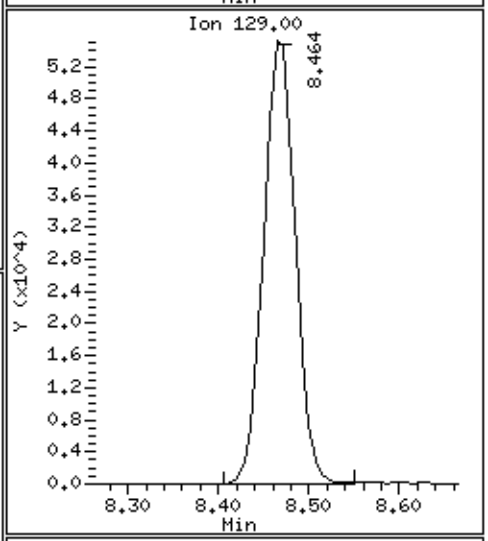


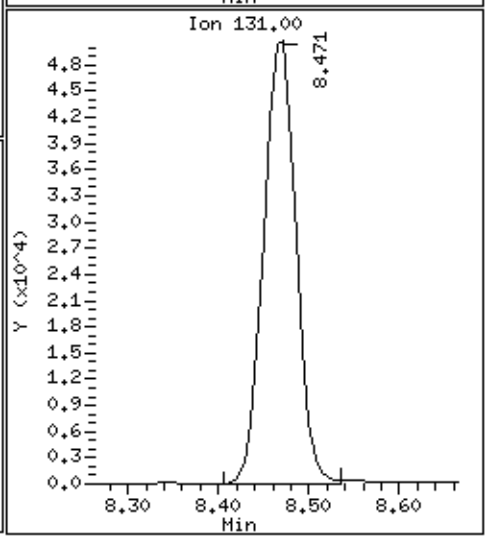












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Client Sample ID: SG-VM66B-01

Lab ID#: 2107684-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080226**	**Date of Collection:**	**7/30/21 12:06:00 PM**
Dil. Factor:	**2.22**	**Date of Analysis:**	**8/3/21 01:22 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	7.6	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.5	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
1,1-Difluoroethane	4.4	Not Detected	12	Not Detected
1,2,3-Trichloropropane	4.4	Not Detected	27	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	43	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.5	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.5	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	6.7	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	1.1	17	5.2	79
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	Not Detected	26	Not Detected
Acrolein	4.4	Not Detected	10	Not Detected
Acrylonitrile	4.4	Not Detected	9.6	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	Not Detected	7.0	Not Detected
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Chloroform	1.1	Not Detected	5.4	Not Detected
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-VM66B-01

Lab ID#: 2107684-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080226**	**Date of Collection:**	**7/30/21 12:06:00 PM**
Dil. Factor:	**2.22**	**Date of Analysis:**	**8/3/21 01:22 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	1.1	3.8	3.8
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
Dibromomethane	4.4	Not Detected	32	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	5.5	Not Detected
Freon 113	1.1	Not Detected	8.5	Not Detected
Freon 114	1.1	Not Detected	7.8	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	11	3.9	39
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	5.1	7.5	35
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	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	6.0	Not Detected
Vinyl Acetate	4.4	Not Detected	16	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-VM66B-01

Lab ID#: 2107684-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080226**	**Date of Collection:**	**7/30/21 12:06:00 PM**
Dil. Factor:	**2.22**	**Date of Analysis:**	**8/3/21 01:22 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080226.d
Lab Smp Id: 2107684-10A
Inj Date : 03-AUG-2021 01:22
Operator : mb Inst ID: msdp.i
Smp Info : 200ml 1L1569
Misc Info : 7.1 Hg->10.2 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 10
Dil Factor: 2.22000
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	156840	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123223				48.23- 108.23	78.57
5.785	5.778 (1.000)	49	335256				150.57- 210.57	213.76
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	580835	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	84494				0.00- 45.71	14.55
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	600664	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	311614				23.78- 83.78	51.88
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	222823	25.7433	25.743		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	112348				27.21- 87.21	50.42
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	644878	25.5679	25.568		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66628				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)							
7.891	7.891 (1.184)	100	416299			34.95- 94.95	64.55
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	385949	25.0220	25.022	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	466531			95.92- 155.92	120.88
10.921	10.921 (1.154)	176	367393			66.89- 126.89	95.19
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	76740	4.96681	11.026	80.00- 120.00	100.00
4.704	4.696 (0.813)	43	58405			37.52- 97.52	76.11
4.704	4.696 (0.813)	86	7831			0.00- 41.48	10.21
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	4976	0.50437	1.120	80.00- 120.00	100.00
5.971	5.957 (1.032)	56	43897			142.57- 202.57	882.03
5.971	5.957 (1.032)	41	29264			62.09- 122.09	588.00
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.279 (1.087)	57	408786	7.61210	16.899	80.00- 120.00	100.00
6.287	6.279 (1.087)	56	135035			2.24- 62.24	33.03
6.287	6.279 (1.087)	41	117750			0.00- 54.39	28.80
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	31460	2.29809	5.102	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	23853			47.84- 107.84	75.82
8.471	8.464 (0.895)	131	22837			45.29- 105.29	72.59

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080226.d
Lab Smp Id: 2107684-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 7.1 Hg->10.2 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	156840	5.06
108 1,4-Difluorobenze	558135	334881	781389	580835	4.07
153 Chlorobenzene-d5	542388	325433	759343	600664	10.74

		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	6.67	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.

Report Date: 06-Aug-2021 12:19

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-10A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 7.1 Hg->10.2 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.743	102.97	70-130
$ 134 Toluene-d8	25.000	25.568	102.27	70-130
$ 170 4-Bromofluorobenz	25.000	25.022	100.09	70-130

Data File: /chem/msdp.i/02AUG21.b/p080226.d

Date : 03-AUG-2021 01:22

Client ID:

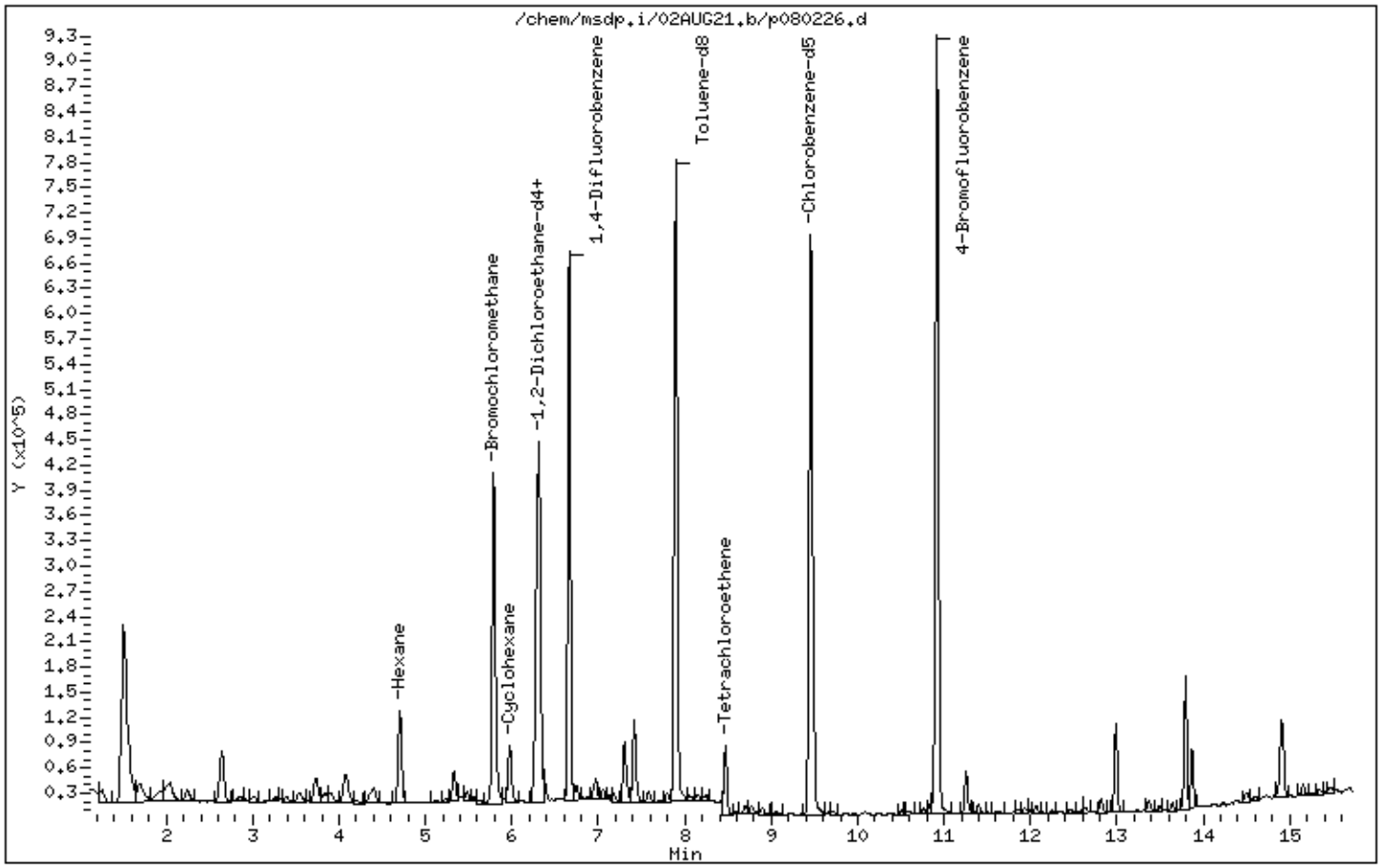
Instrument: msdp.i

Sample Info: 200ml 1L1569

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080226.d

Date : 03-AUG-2021 01:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1569

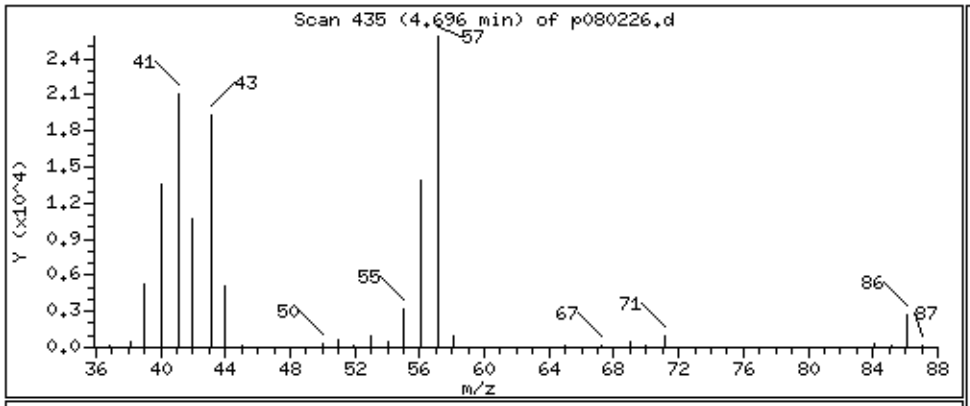
Operator: mb

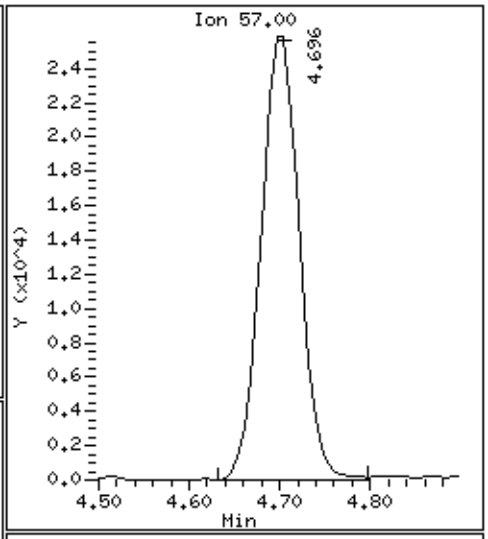
Column phase: RTX-624

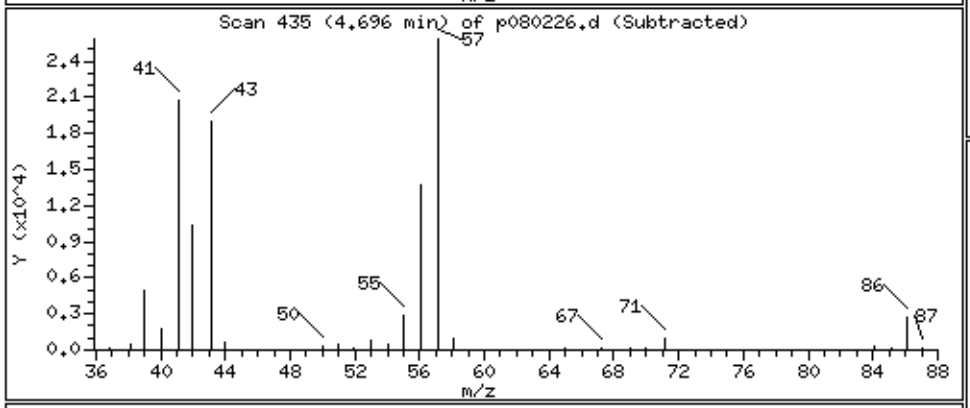
Column diameter: 0.25

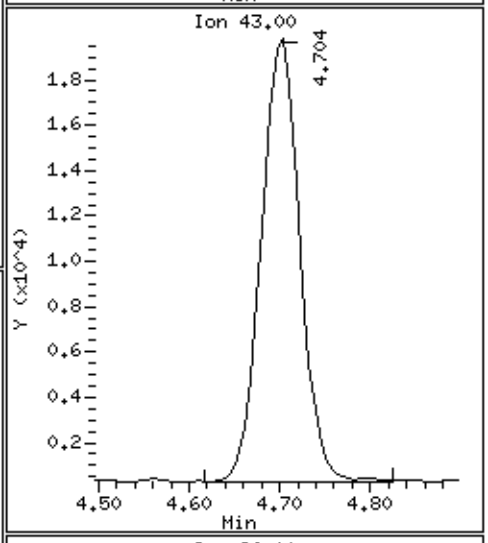
67 Hexane

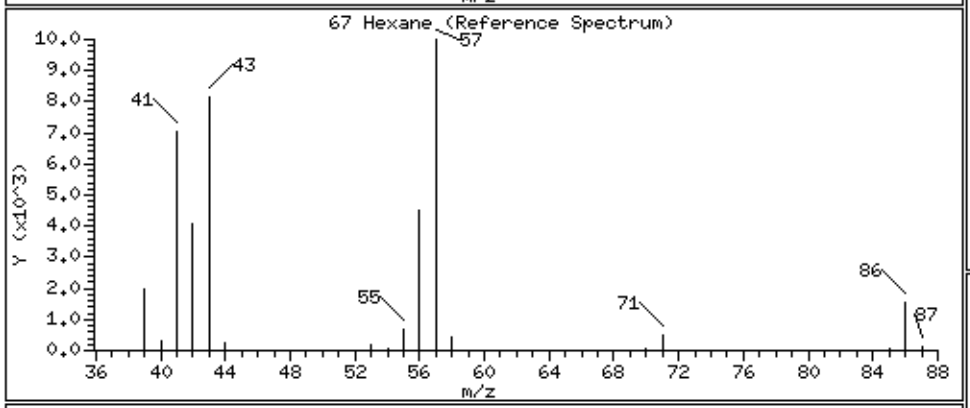
Concentration: 11.026 PPBV

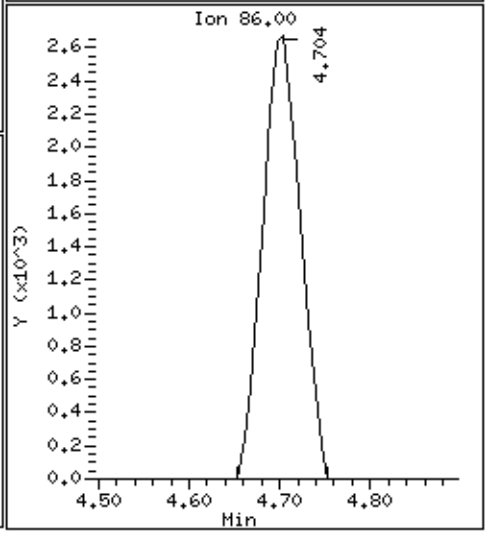


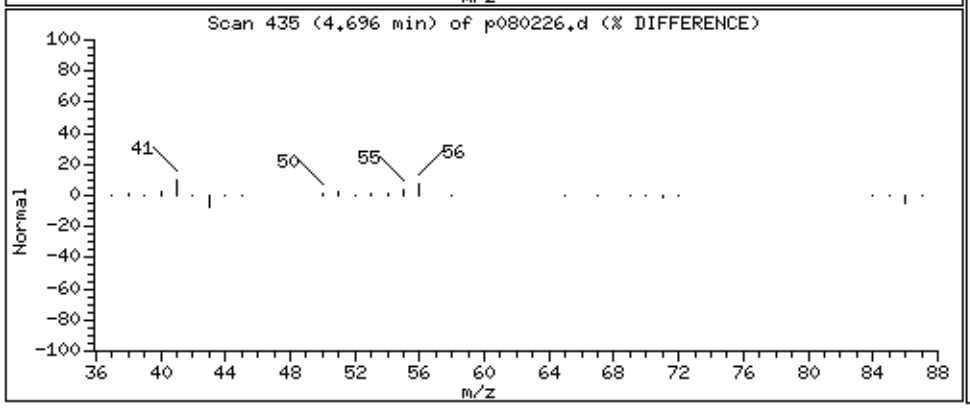












Data File: /chem/msdp.i/02AUG21.b/p080226.d

Date : 03-AUG-2021 01:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1569

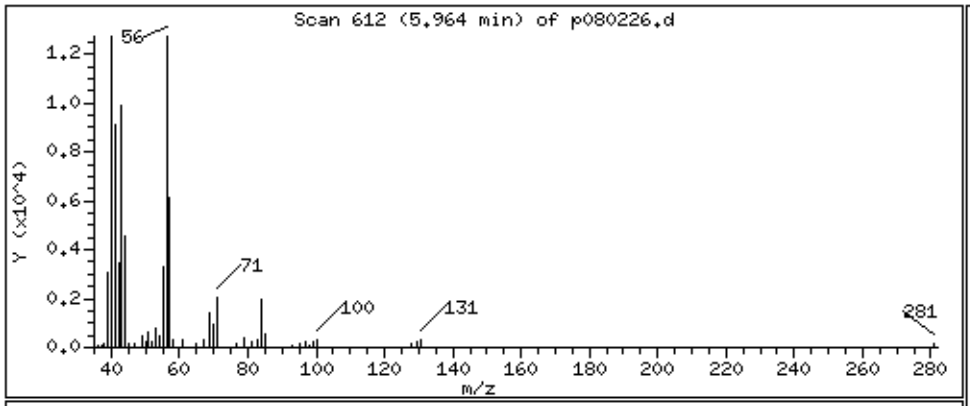
Operator: mb

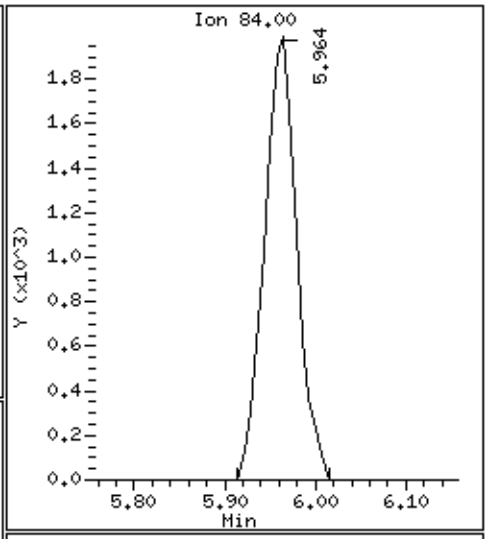
Column phase: RTX-624

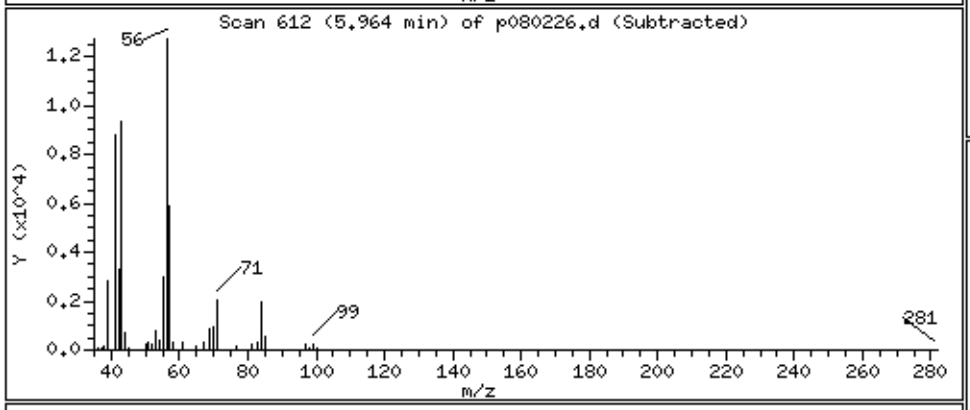
Column diameter: 0.25

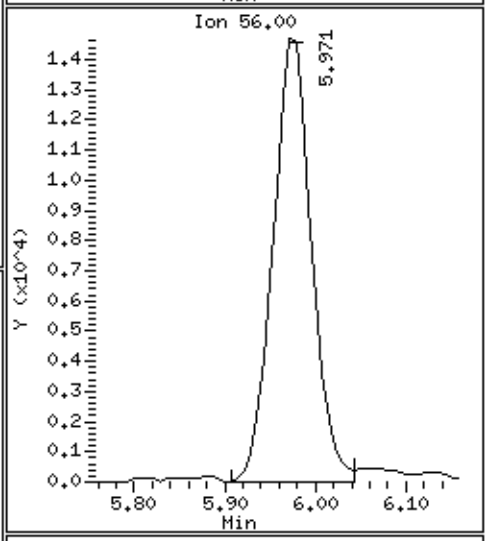
94 Cyclohexane

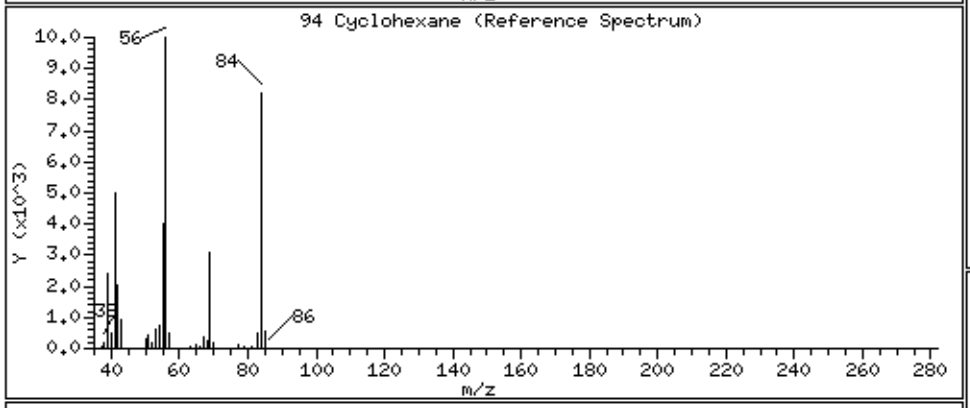
Concentration: 1.120 PPBV

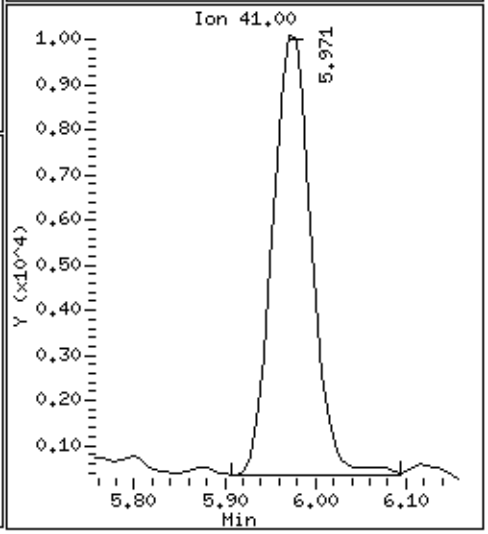


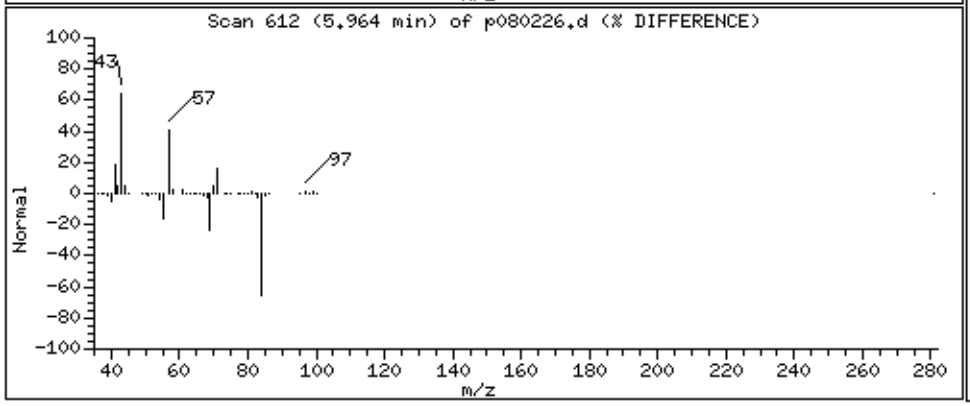












Data File: /chem/msdp.i/02AUG21.b/p080226.d

Date : 03-AUG-2021 01:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1569

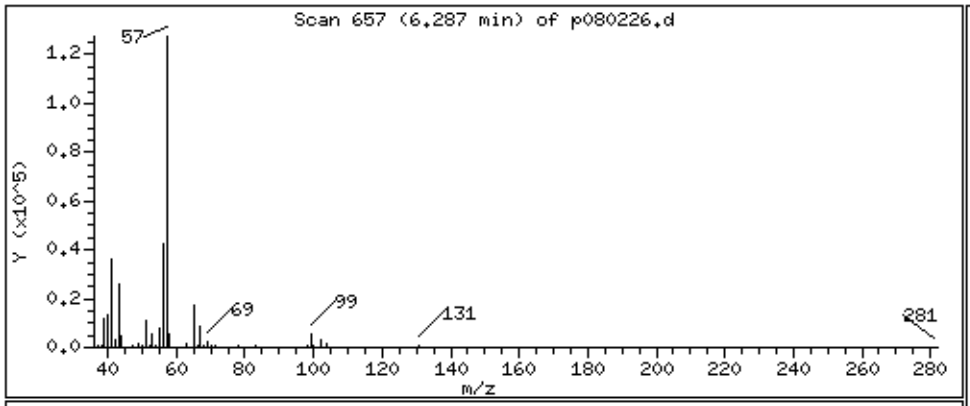
Operator: mb

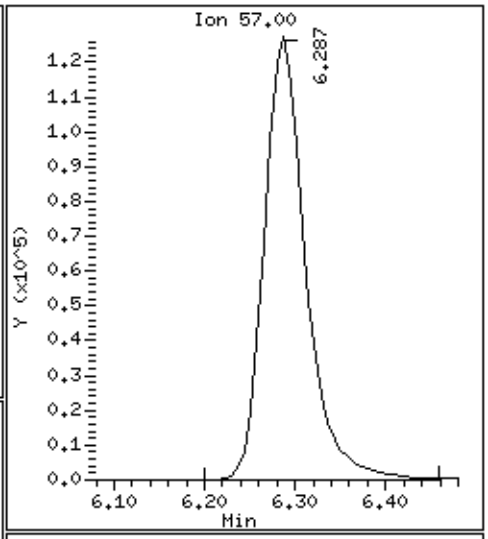
Column phase: RTX-624

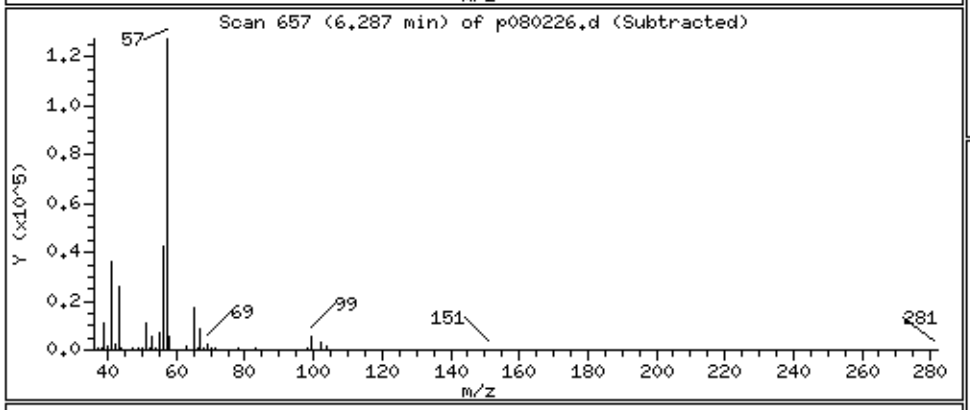
Column diameter: 0.25

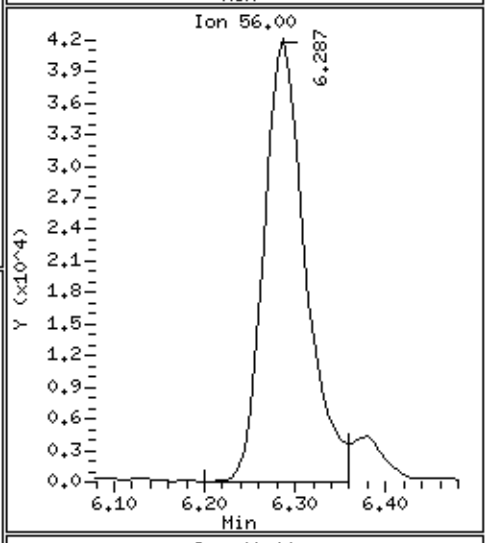
101 2,2,4-Trimethylpentane

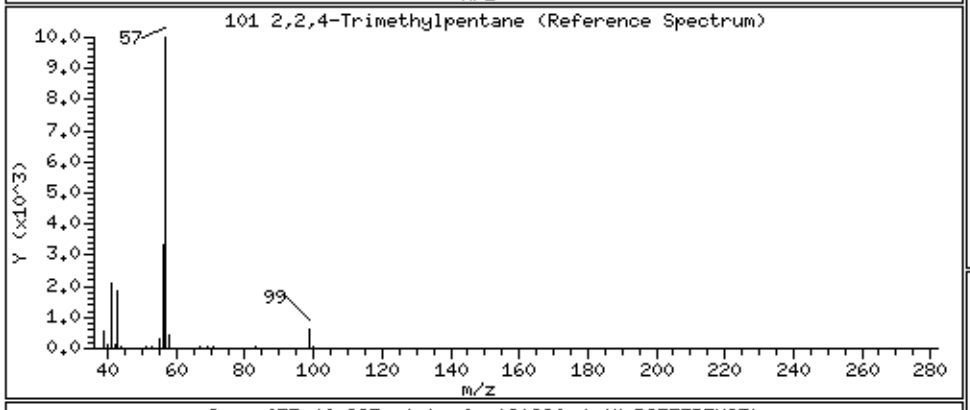
Concentration: 16.899 PPBV

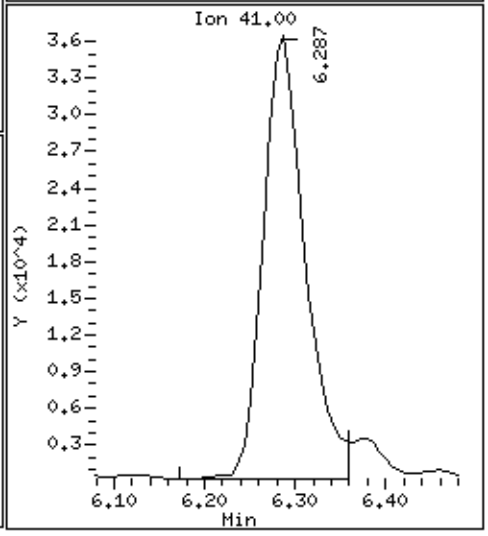


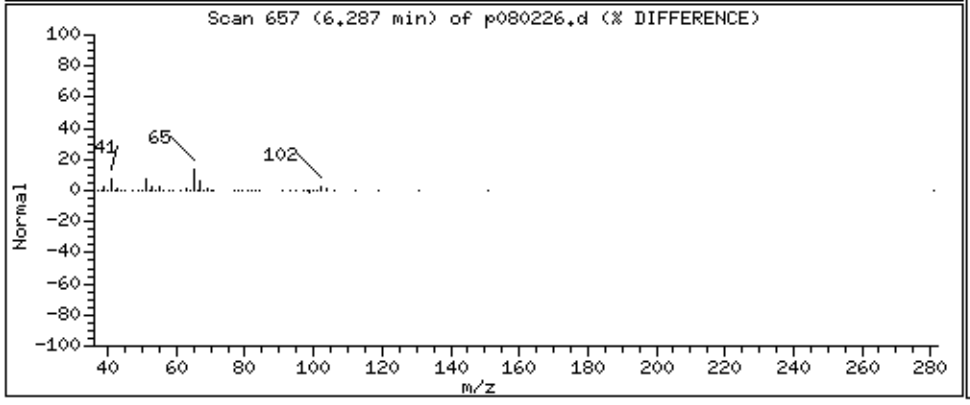












Data File: /chem/msdp.i/02AUG21.b/p080226.d

Date : 03-AUG-2021 01:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1569

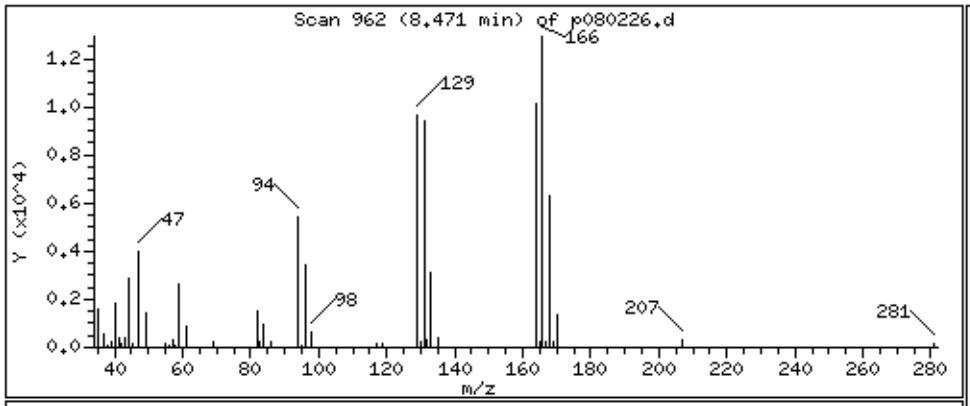
Operator: mb

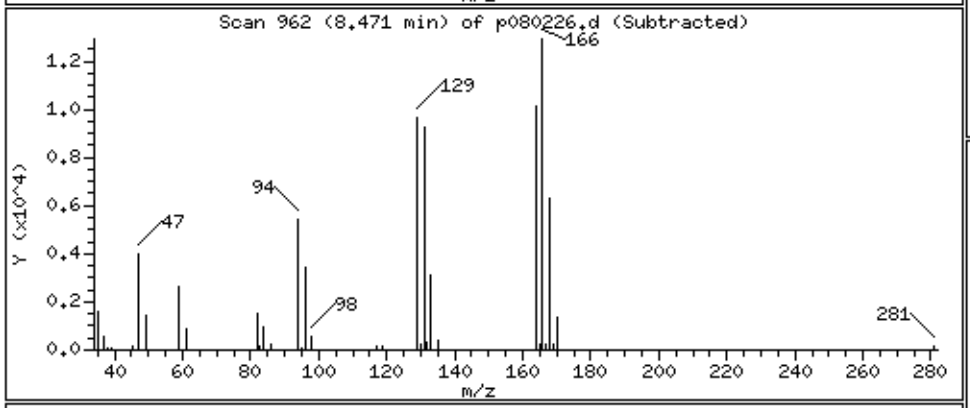
Column phase: RTX-624

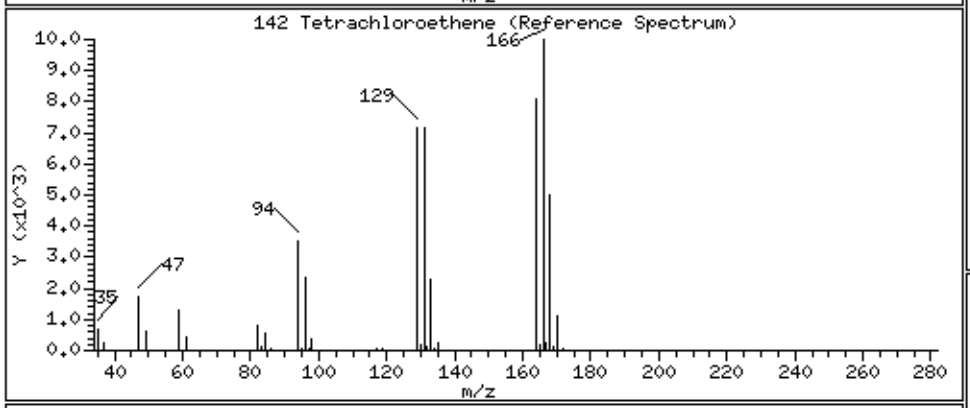
Column diameter: 0.25

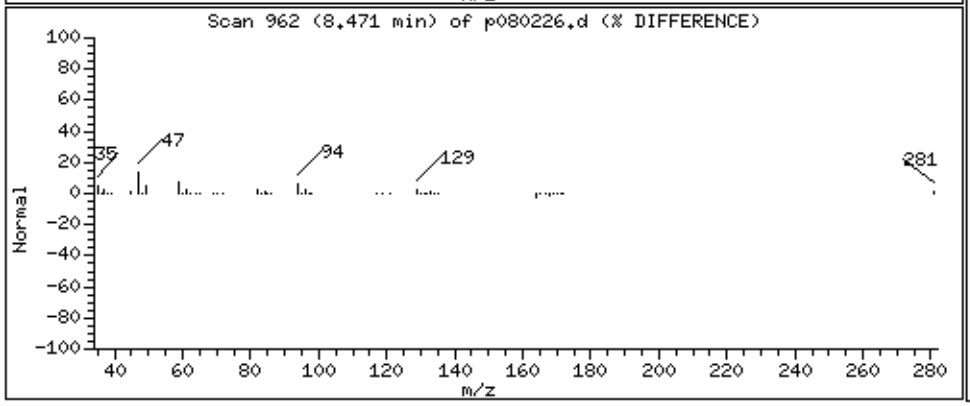
142 Tetrachloroethene

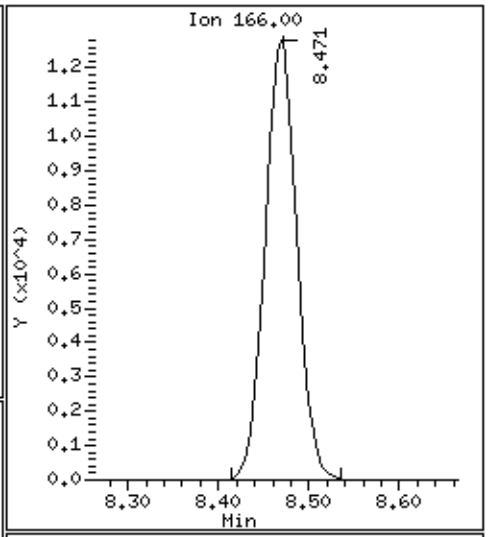
Concentration: 5.102 PPBV

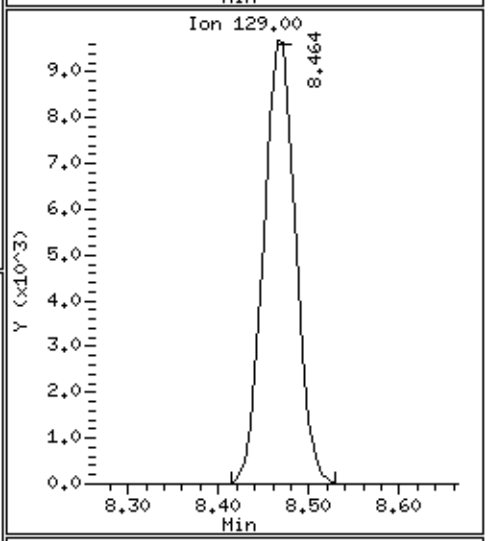


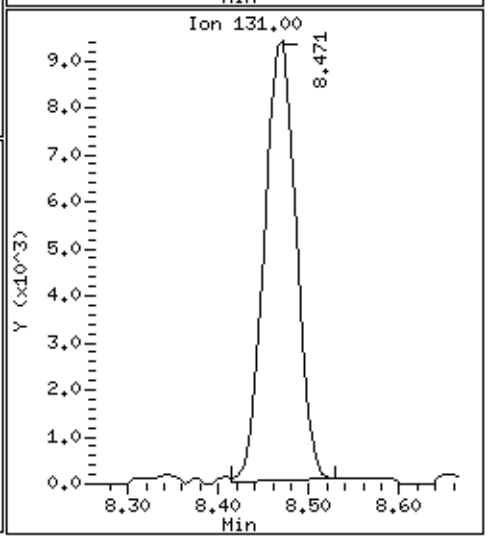












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Client Sample ID: SG-VM66B-02

Lab ID#: 2107684-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080227**	**Date of Collection:**	**7/30/21 12:06:00 PM**
Dil. Factor:	**2.16**	**Date of Analysis:**	**8/3/21 01:51 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	16	5.0	76
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	Not Detected	26	Not Detected
Acrolein	4.3	Not Detected	9.9	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	3.4	Not Detected
Bromodichloromethane	1.1	Not Detected	7.2	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Carbon Disulfide	4.3	Not Detected	13	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-VM66B-02

Lab ID#: 2107684-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080227**	**Date of Collection:**	**7/30/21 12:06:00 PM**
Dil. Factor:	**2.16**	**Date of Analysis:**	**8/3/21 01:51 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	Not Detected	6.1	Not Detected
Freon 12	1.1	Not Detected	5.3	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	10	3.8	37
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	7.4	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	5.5	7.3	37
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-VM66B-02

Lab ID#: 2107684-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080227**	**Date of Collection:**	**7/30/21 12:06:00 PM**
Dil. Factor:	**2.16**	**Date of Analysis:**	**8/3/21 01:51 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/02AUG21.b/p080227.d
Lab Smp Id: 2107684-11A
Inj Date : 03-AUG-2021 01:51
Operator : mb Inst ID: msdp.i
Smp Info : 200ml 1L1754
Misc Info : 6.9 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 11
Dil Factor: 2.16000
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	145270	25.0000			80.00- 120.00	100.00
5.792	5.778 (1.000)	128	112829				48.23- 108.23	77.67
5.792	5.778 (1.000)	49	304379				150.57- 210.57	209.53
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	534268	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	78063				0.00- 45.71	14.61
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.467	9.460 (1.000)	117	542487	25.0000			80.00- 120.00	100.00
9.467	9.460 (1.000)	82	287568				23.78- 83.78	53.01
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.090)	65	205343	25.6133	25.613		80.00- 120.00	100.00
6.315	6.308 (1.090)	67	103155				27.21- 87.21	50.24
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.898	7.891 (1.185)	98	581580	25.0681	25.068		80.00- 120.00	100.00
7.898	7.891 (1.185)	70	61678				0.00- 40.44	10.61

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	380950			34.95- 94.95	65.50
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	346634	24.8832	24.883	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	419206			95.92- 155.92	120.94
10.921	10.921 (1.154)	176	331745			66.89- 126.89	95.70
67 Hexane					CAS #: 110-54-3		
4.704	4.696 (0.812)	57	69911	4.88520	10.552	80.00- 120.00	100.00
4.704	4.696 (0.812)	43	52037			37.52- 97.52	74.43
4.704	4.696 (0.812)	86	6840			0.00- 41.48	9.78
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.279 (1.085)	57	376893	7.57717	16.367	80.00- 120.00	100.00
6.287	6.279 (1.085)	56	127066			2.24- 62.24	33.71
6.287	6.279 (1.085)	41	111663			0.00- 54.39	29.63
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	31270	2.52917	5.463	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	22374			47.84- 107.84	71.55
8.471	8.464 (0.895)	131	22902			45.29- 105.29	73.24

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080227.d
Lab Smp Id: 2107684-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.9 Hg->9.8 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	145270	-2.69
108 1,4-Difluorobenze	558135	334881	781389	534268	-4.28
153 Chlorobenzene-d5	542388	325433	759343	542487	0.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.25
108 1,4-Difluorobenze	6.66	6.33	6.99	6.67	0.11
153 Chlorobenzene-d5	9.46	9.13	9.79	9.47	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: 06-Aug-2021 12:19

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107684-11A
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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.9 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.613	102.45	70-130
$ 134 Toluene-d8	25.000	25.068	100.27	70-130
$ 170 4-Bromofluorobenz	25.000	24.883	99.53	70-130

Data File: /chem/msdp.i/02AUG21.b/p080227.d

Date : 03-AUG-2021 01:51

Client ID:

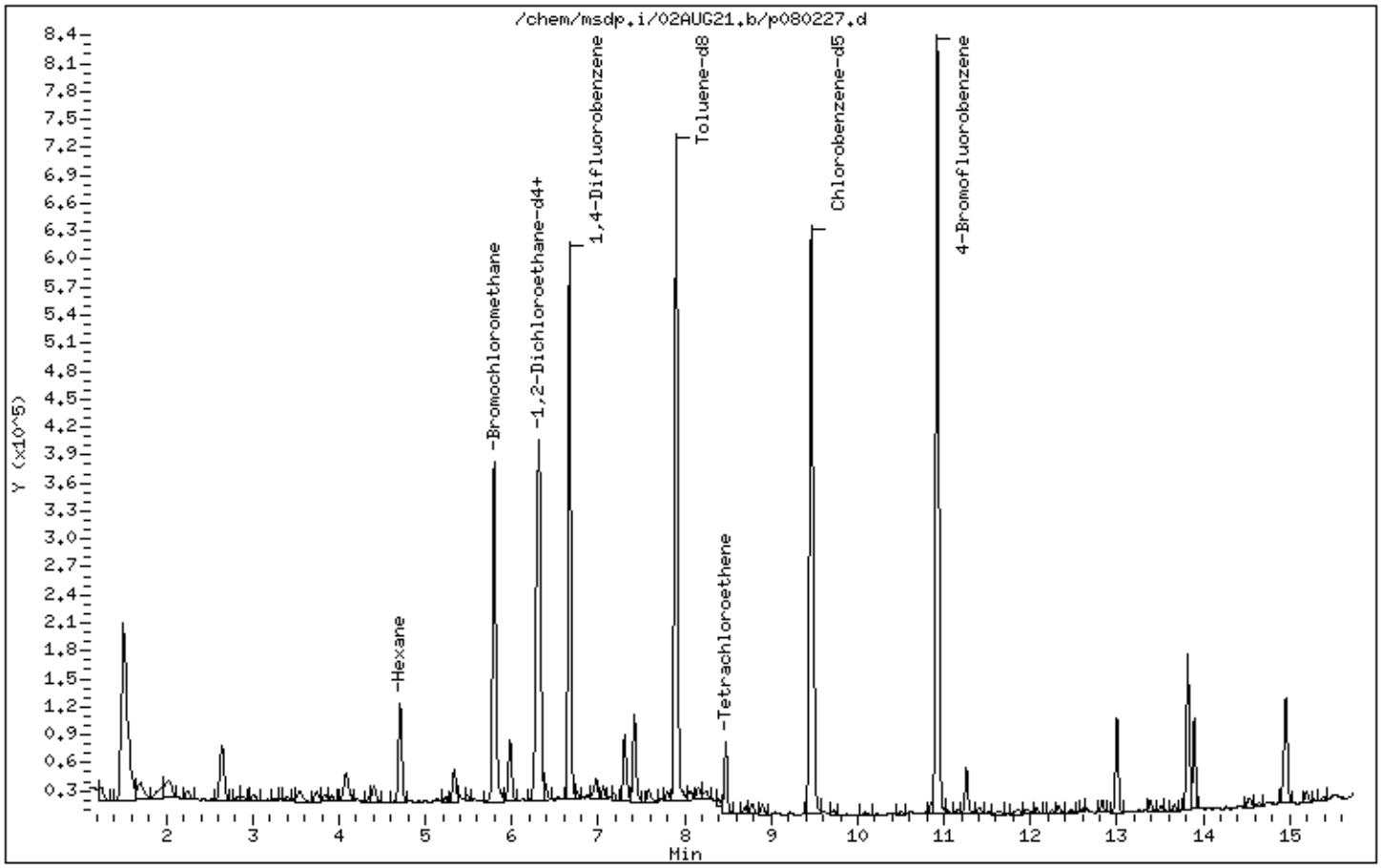
Instrument: msdp.i

Sample Info: 200ml 1L1754

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080227.d

Date : 03-AUG-2021 01:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1754

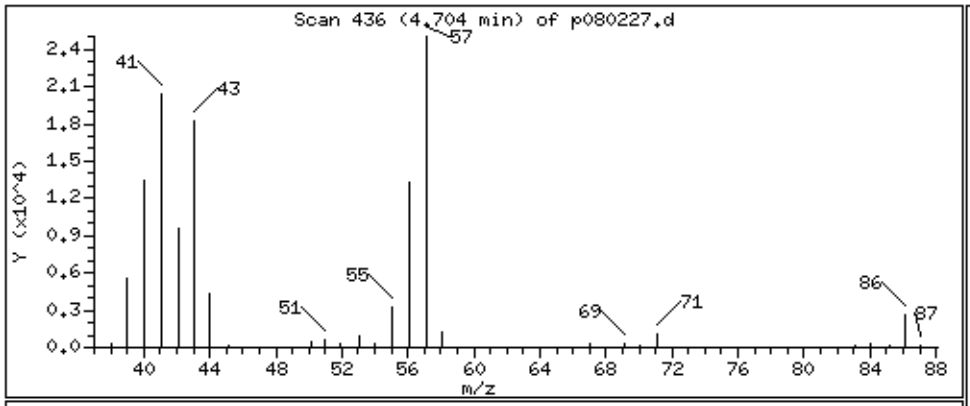
Operator: mb

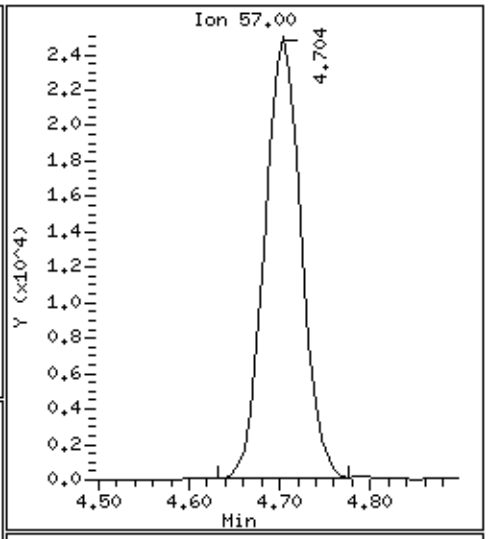
Column phase: RTX-624

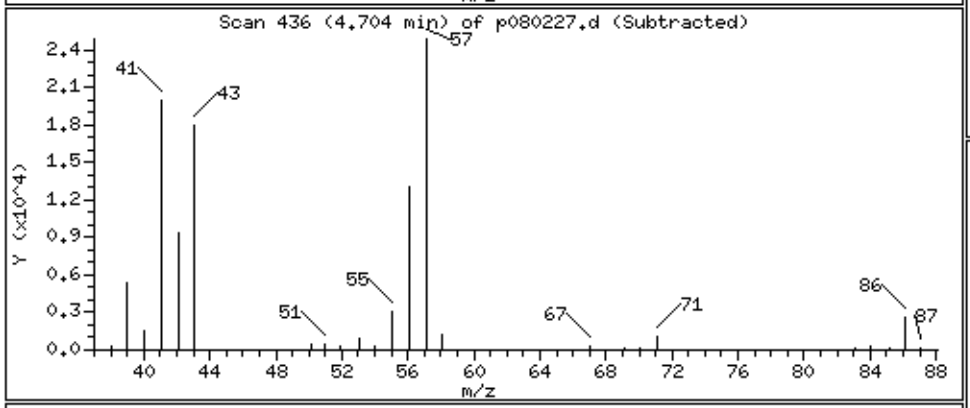
Column diameter: 0.25

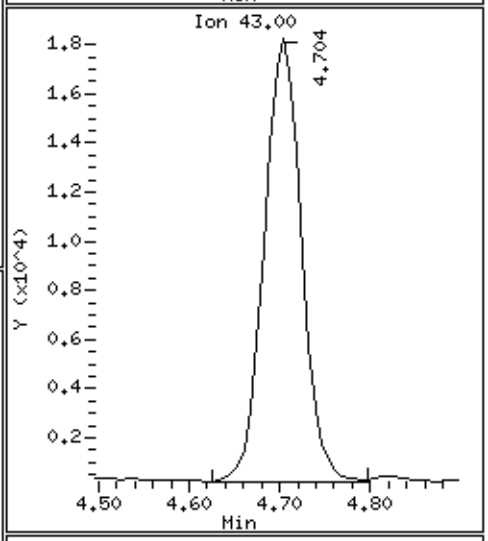
67 Hexane

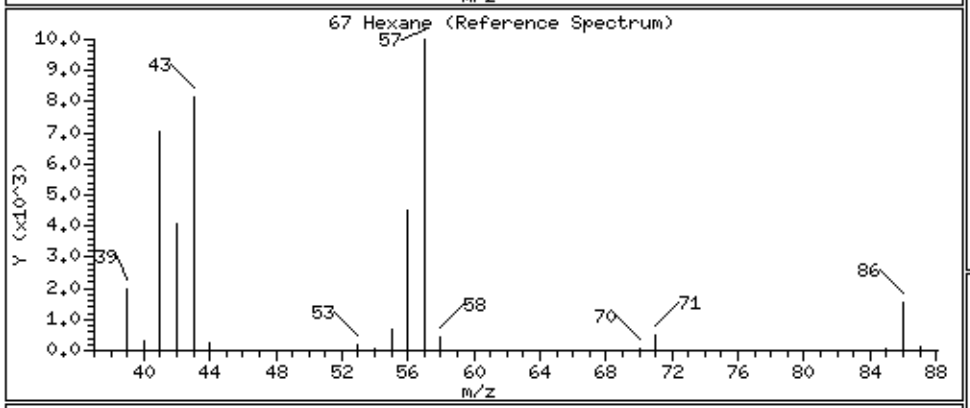
Concentration: 10.552 PPBV

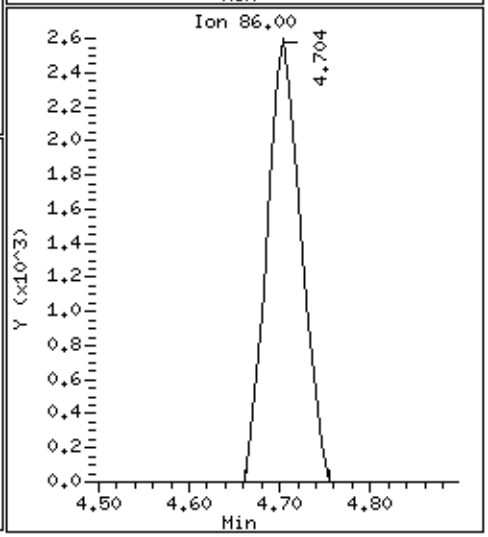


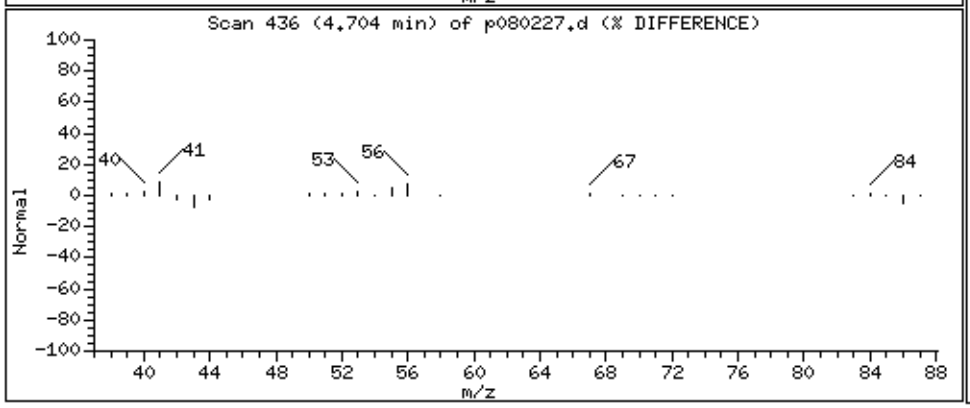












Data File: /chem/msdp.i/02AUG21.b/p080227.d

Date : 03-AUG-2021 01:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1754

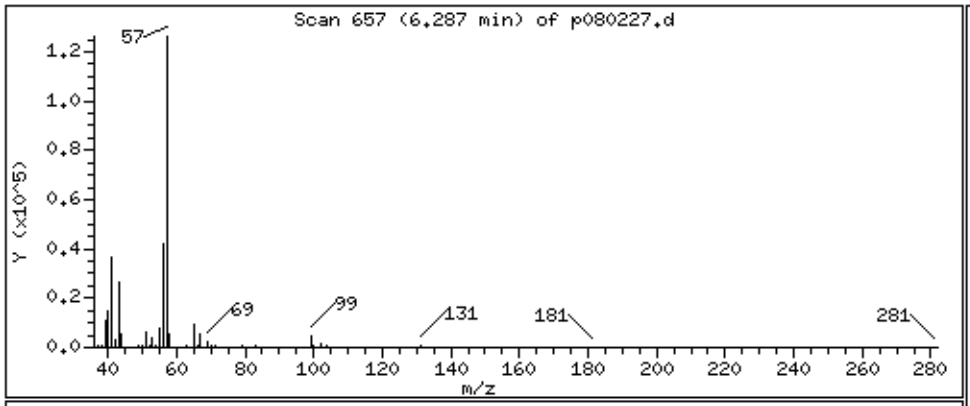
Operator: mb

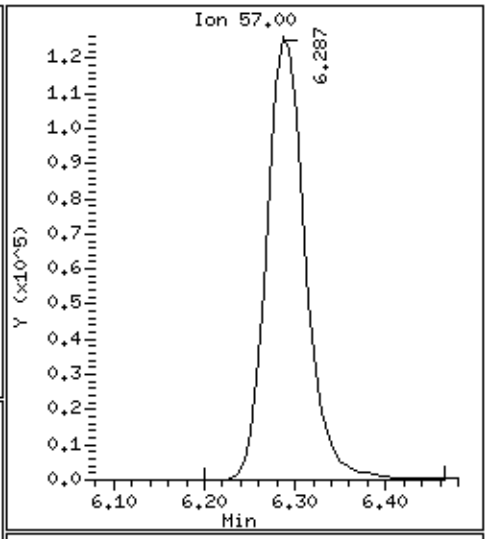
Column phase: RTX-624

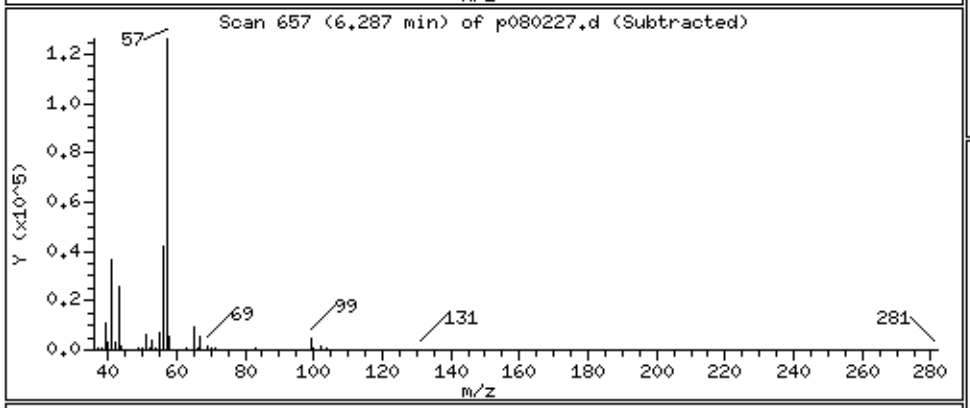
Column diameter: 0.25

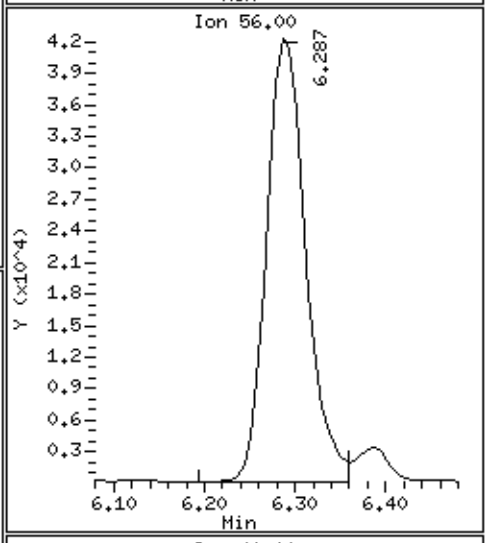
101 2,2,4-Trimethylpentane

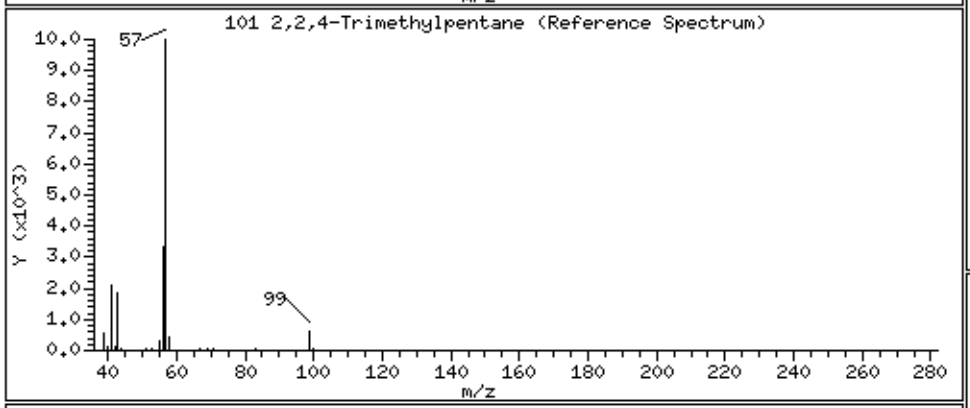
Concentration: 16.367 PPBV

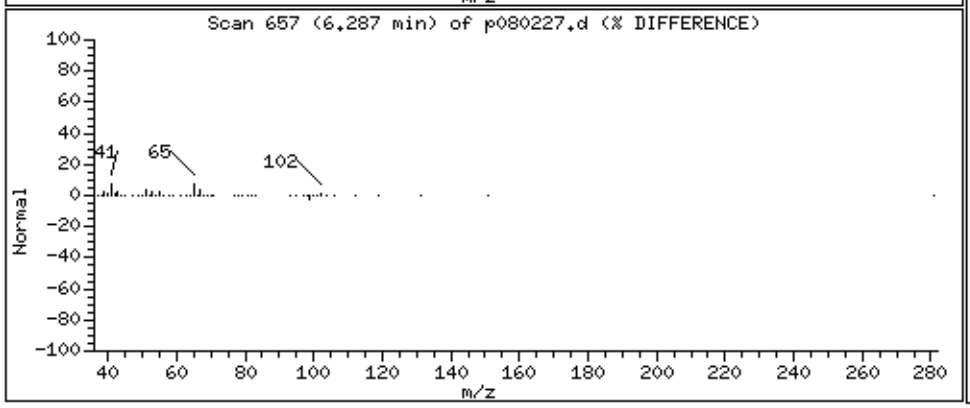


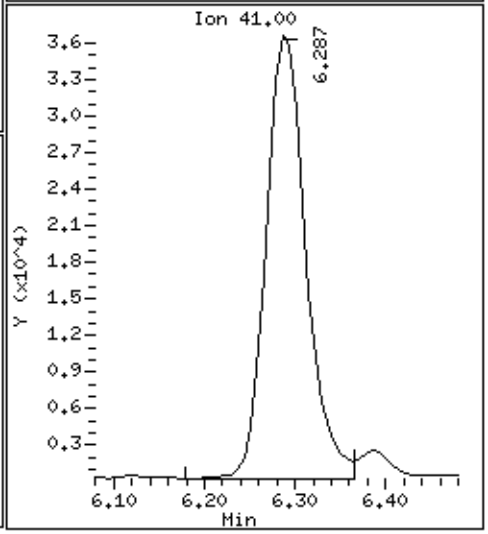












Data File: /chem/msdp.i/02AUG21.b/p080227.d

Date : 03-AUG-2021 01:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1754

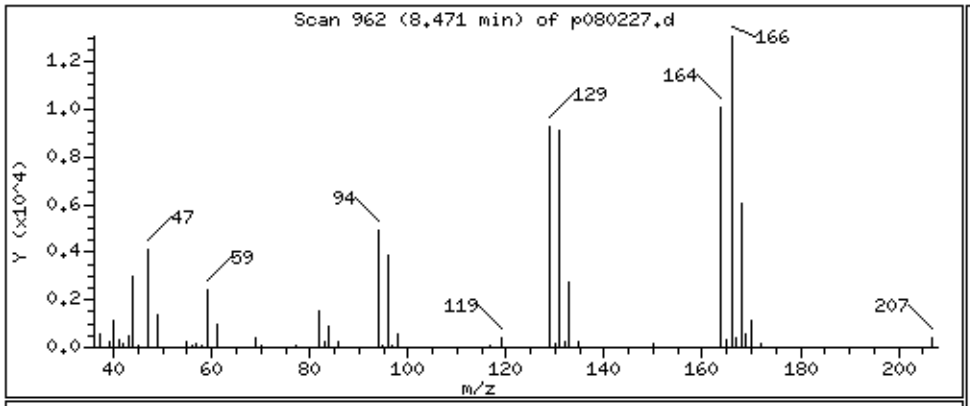
Operator: mb

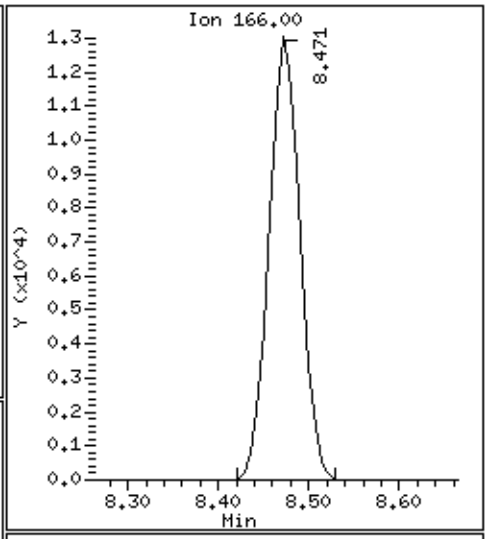
Column phase: RTX-624

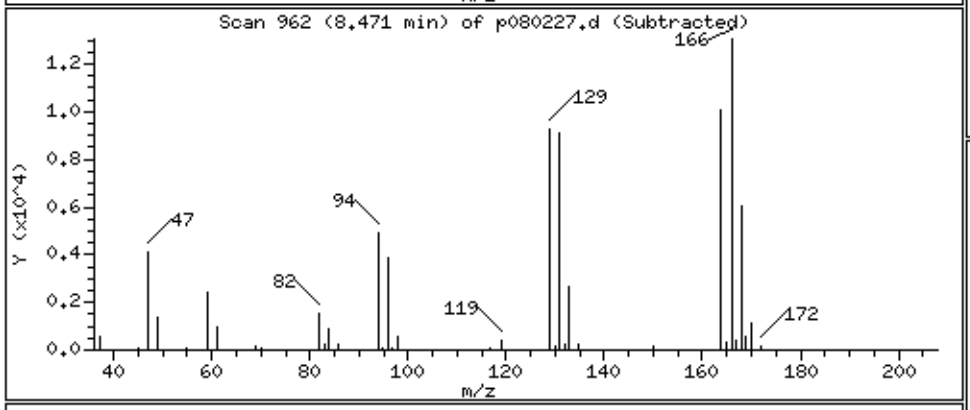
Column diameter: 0.25

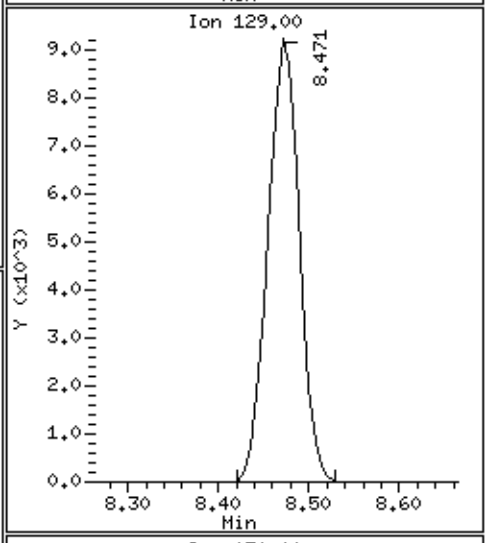
142 Tetrachloroethene

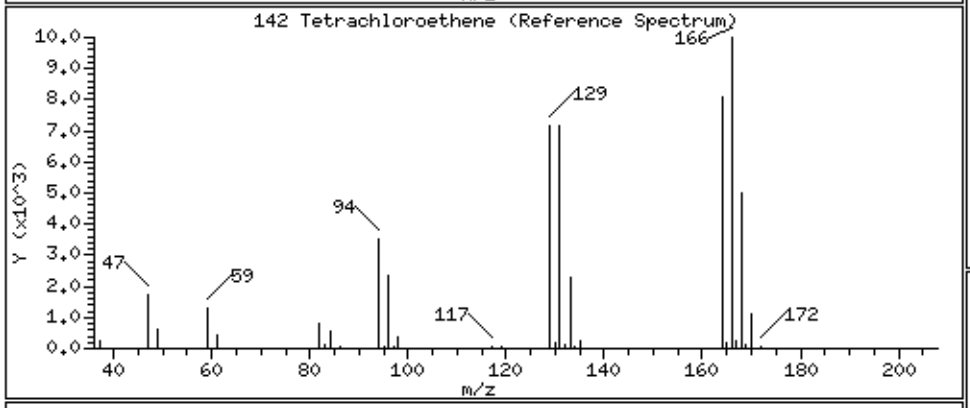
Concentration: 5.463 PPBV

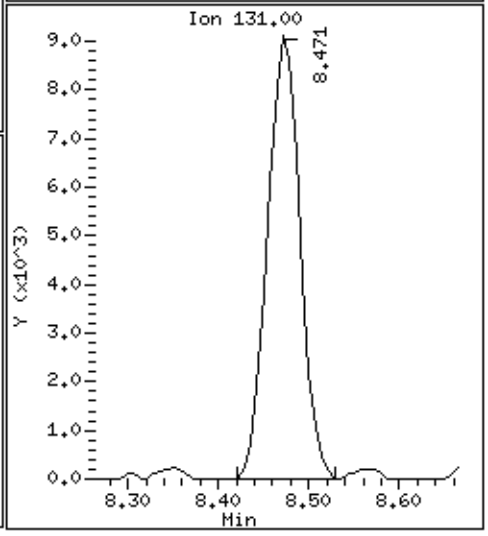


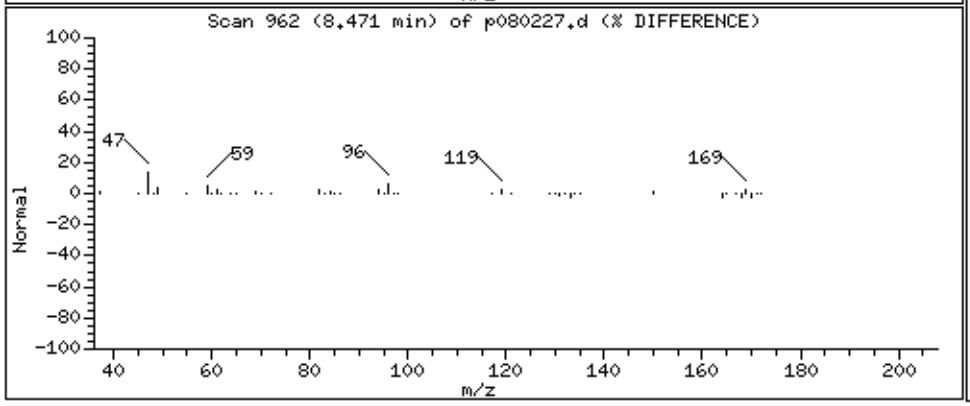












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 2107684-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080207a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 01:34 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#: 2107684-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080207a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 01:34 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#: 2107684-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080207a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 01:34 PM**	

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080207a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 02-AUG-2021 13:34
Operator : LD Inst ID: msdp.i
Smp Info : 200ml 35157
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.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	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	167113	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	126398				48.23- 108.23	75.64
5.785	5.778 (1.000)	49	325414				150.57- 210.57	194.73
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	640508	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93109				0.00- 45.71	14.54
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	625083	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	322606				23.78- 83.78	51.61
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.090)	65	231907	25.1457	25.146		80.00- 120.00	100.00
6.308	6.308 (1.090)	67	114035				27.21- 87.21	49.17
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	684868	24.6237	24.624		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	69163				0.00- 40.44	10.10

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	449033			34.95- 94.95	65.56
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	393777	24.5322	24.532	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	478973			95.92- 155.92	121.64
10.921	10.921 (1.154)	176	377837			66.89- 126.89	95.95

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080207a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: Humid

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	167113	11.94
108 1,4-Difluorobenze	558135	334881	781389	640508	14.76
153 Chlorobenzene-d5	542388	325433	759343	625083	15.25

		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	6.66	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: 02-Aug-2021 14:07

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
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/02AUG21.b/p21q0519a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.146	100.58	70-130
$ 134 Toluene-d8	25.000	24.624	98.49	70-130
$ 170 4-Bromofluorobenz	25.000	24.532	98.13	70-130

Data File: /chem/msdp.i/02AUG21.b/p080207a.d

Date : 02-AUG-2021 13:34

Client ID: Lab Blank

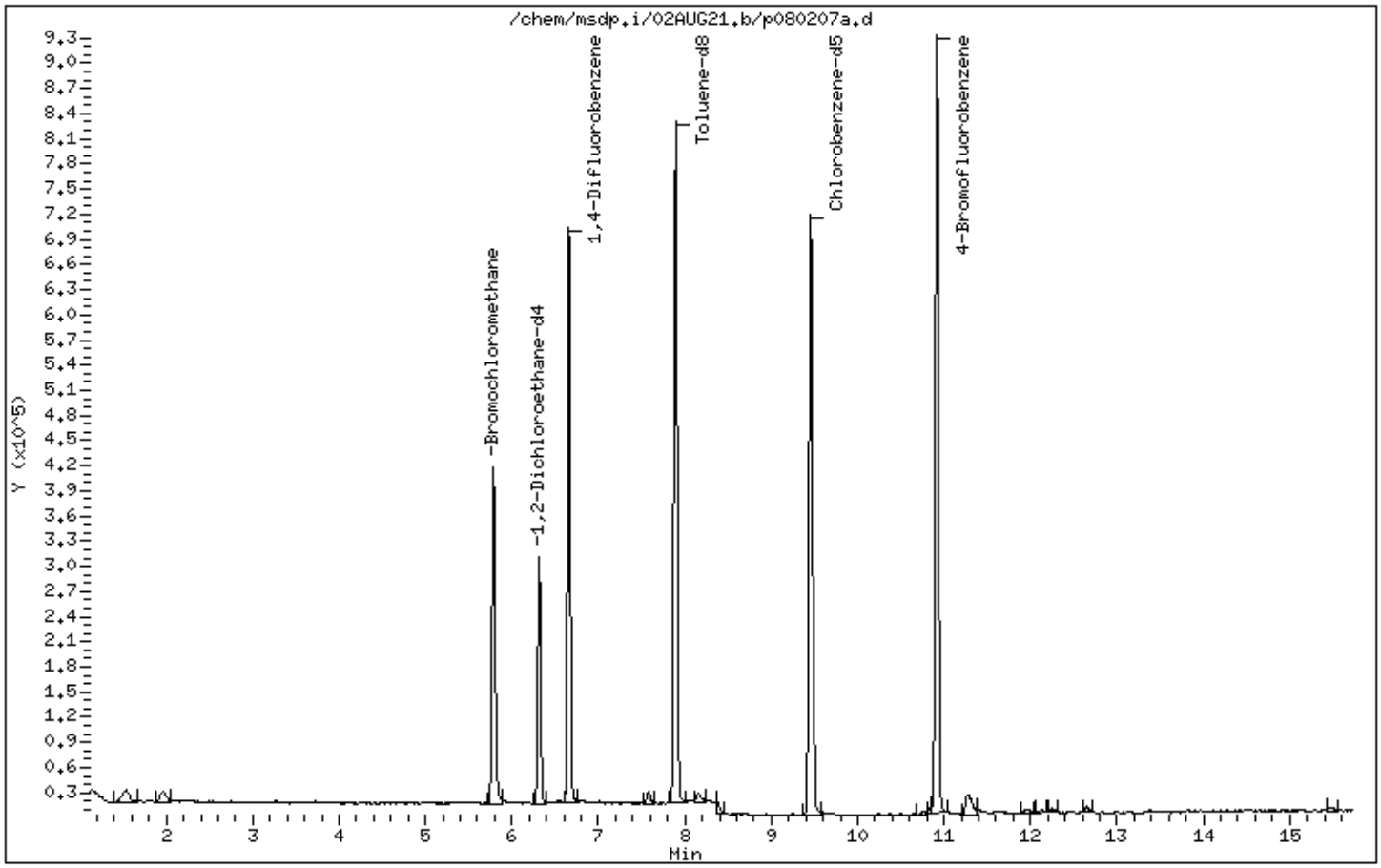
Instrument: msdp.i

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. :2107684

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY						
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#	TOTAL OUT
1	SG-SVM1A-01	101		101		98		
2	SG-SVM1B-01	103		100		100		
3	SG-SVM2A-01	101		101		95		
4	SG-SVM2B-01	101		101		98		
5	SG-SVM3A-01	102		102		95		
6	SG-SVM3B-01	101		100		98		
7	SG-VM65A-01	100		101		98		
8	SG-VM65B-01	101		99		98		
9	SG-VM66A-01	104		100		97		
10	SG-VM66B-01	103		102		100		
11	SG-VM66B-02	102		100		100		
12	Lab Blank	100		98		98		
13	CCV	104		101		101		
14	LCS	101		99		99		
15	LCSD	102		101		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: p080202.d Date : 2021-08-02 10:30:00 SDG No. : 2107684

		Bromochloromethane	RT	1,4-Difluorobenzene	RT	Chlorobenzene-d5	RT
	24-HOUR CCV	149292	5.78	558135	6.66	542388	9.46
	UPPER LIMIT	209008	6.11	781389	6.99	759343	9.79
	LOWER LIMIT	89575	5.45	334881	6.33	325432	9.13
	CLIENT SAMPLE NO.						
1	SG-SVM1A-01	166076	5.78	602162	6.66	607087	9.46
2	SG-SVM1B-01	157636	5.79	587556	6.67	597552	9.46
3	SG-SVM2A-01	151091	5.79	562528	6.67	561178	9.46
4	SG-SVM2B-01	152829	5.79	567820	6.67	557695	9.46
5	SG-SVM3A-01	149985	5.79	563667	6.67	569093	9.46
6	SG-SVM3B-01	152393	5.79	567017	6.67	561275	9.46
7	SG-VM65A-01	153181	5.79	568652	6.67	568447	9.46
8	SG-VM65B-01	153738	5.79	570951	6.67	571824	9.46
9	SG-VM66A-01	152205	5.79	575731	6.67	580168	9.46
10	SG-VM66B-01	156840	5.79	580835	6.67	600664	9.46
11	SG-VM66B-02	145270	5.79	534268	6.67	542487	9.47
12	Lab Blank	167113	5.79	640508	6.66	625083	9.46
13	CCV	149292	5.78	558135	6.66	542388	9.46
14	LCS	155775	5.78	592853	6.66	564064	9.46
15	LCSD	162538	5.79	610537	6.67	590330	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: p080203.d & p080204.d

Lab Sample ID: 14A & 14AA

CAS Number	Compound	Original Amount	Duplicate Amount	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	103	103	0	
79-34-5	1,1,2,2-Tetrachloroethane	107	107	0	
79-00-5	1,1,2-Trichloroethane	110	108	1.8	
75-34-3	1,1-Dichloroethane	106	105	0.95	
75-35-4	1,1-Dichloroethene	97	98	1.0	
120-82-1	1,2,4-Trichlorobenzene	121	128	5.6	
95-63-6	1,2,4-Trimethylbenzene	104	104	0	
106-93-4	1,2-Dibromoethane (EDB)	114	113	0.88	
95-50-1	1,2-Dichlorobenzene	108	107	0.93	
107-06-2	1,2-Dichloroethane	118	117	0.85	
78-87-5	1,2-Dichloropropane	106	107	0.94	
108-67-8	1,3,5-Trimethylbenzene	106	104	1.9	
106-99-0	1,3-Butadiene	121	116	4.2	
541-73-1	1,3-Dichlorobenzene	110	110	0	
106-46-7	1,4-Dichlorobenzene	111	110	0.90	
123-91-1	1,4-Dioxane	97	99	2.0	
540-84-1	2,2,4-Trimethylpentane	105	104	0.96	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	96	96	0	
591-78-6	2-Hexanone	104	103	0.97	
67-63-0	2-Propanol	110	109	0.91	
107-05-1	3-Chloropropene	90	94	4.3	
622-96-8	4-Ethyltoluene	104	104	0	
108-10-1	4-Methyl-2-pentanone	102	102	0	
67-64-1	Acetone	108	103	4.7	
100-44-7	alpha-Chlorotoluene	102	102	0	
71-43-2	Benzene	104	104	0	
75-27-4	Bromodichloromethane	114	113	0.88	
75-25-2	Bromoform	114	113	0.88	
74-83-9	Bromomethane	92	90	2.2	
75-15-0	Carbon Disulfide	96	95	1.0	
56-23-5	Carbon Tetrachloride	111	111	0	
108-90-7	Chlorobenzene	110	108	1.8	
75-00-3	Chloroethane	96	96	0	
67-66-3	Chloroform	107	107	0	
74-87-3	Chloromethane	102	99	3.0	
156-59-2	cis-1,2-Dichloroethene	105	104	0.96	

10061-01-5	cis-1,3-Dichloropropene	106	107	0.94
98-82-8	Cumene	104	102	1.9
110-82-7	Cyclohexane	94	96	2.1
124-48-1	Dibromochloromethane	116	115	0.87
64-17-5	Ethanol	93	90	3.3
100-41-4	Ethyl Benzene	108	104	3.8
75-69-4	Freon 11	109	108	0.92
76-13-1	Freon 113	100	99	1.0
76-14-2	Freon 114	108	103	4.7
75-71-8	Freon 12	110	107	2.8
142-82-5	Heptane	99	100	1.0
87-68-3	Hexachlorobutadiene	127	134	5.4
110-54-3	Hexane	104	103	0.97
108-38-3	m,p-Xylene	105	103	1.9
1634-04-4	Methyl tert-butyl ether	93	92	1.1
75-09-2	Methylene Chloride	119	116	2.6
91-20-3	Naphthalene	104	111	6.5
95-47-6	o-Xylene	105	103	1.9
103-65-1	Propylbenzene	106	105	0.95
115-07-1	Propylene	112	109	2.7
100-42-5	Styrene	100	98	2.0
127-18-4	Tetrachloroethene	113	111	1.8
109-99-9	Tetrahydrofuran	119	117	1.7
108-88-3	Toluene	103	103	0
156-60-5	trans-1,2-Dichloroethene	97	96	1.0
10061-02-6	trans-1,3-Dichloropropene	112	111	0.90
79-01-6	Trichloroethene	107	109	1.9
108-05-4	Vinyl Acetate	99	96	3.1
75-01-4	Vinyl Chloride	99	93	6.2

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

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

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					
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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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					
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

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					
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

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					
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

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					
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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Curve Type : Average

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	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

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					
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

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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					
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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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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	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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	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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	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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	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

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	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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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					
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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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					
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

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	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD	
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

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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					
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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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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	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

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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					
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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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

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	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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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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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
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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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

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
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

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: 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#	Canister#	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)

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)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (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:

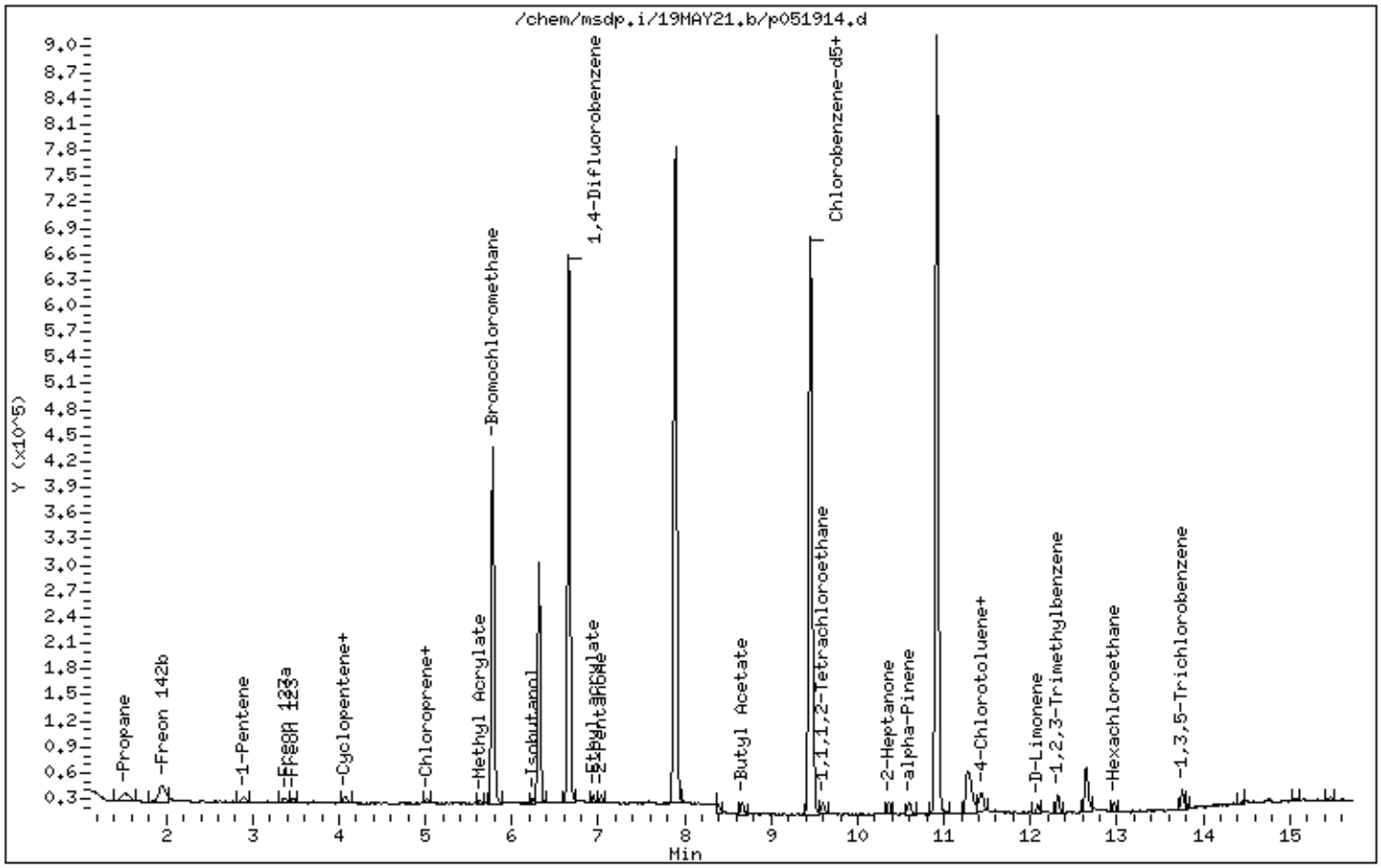
Instrument: msdp.i

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

				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

				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:

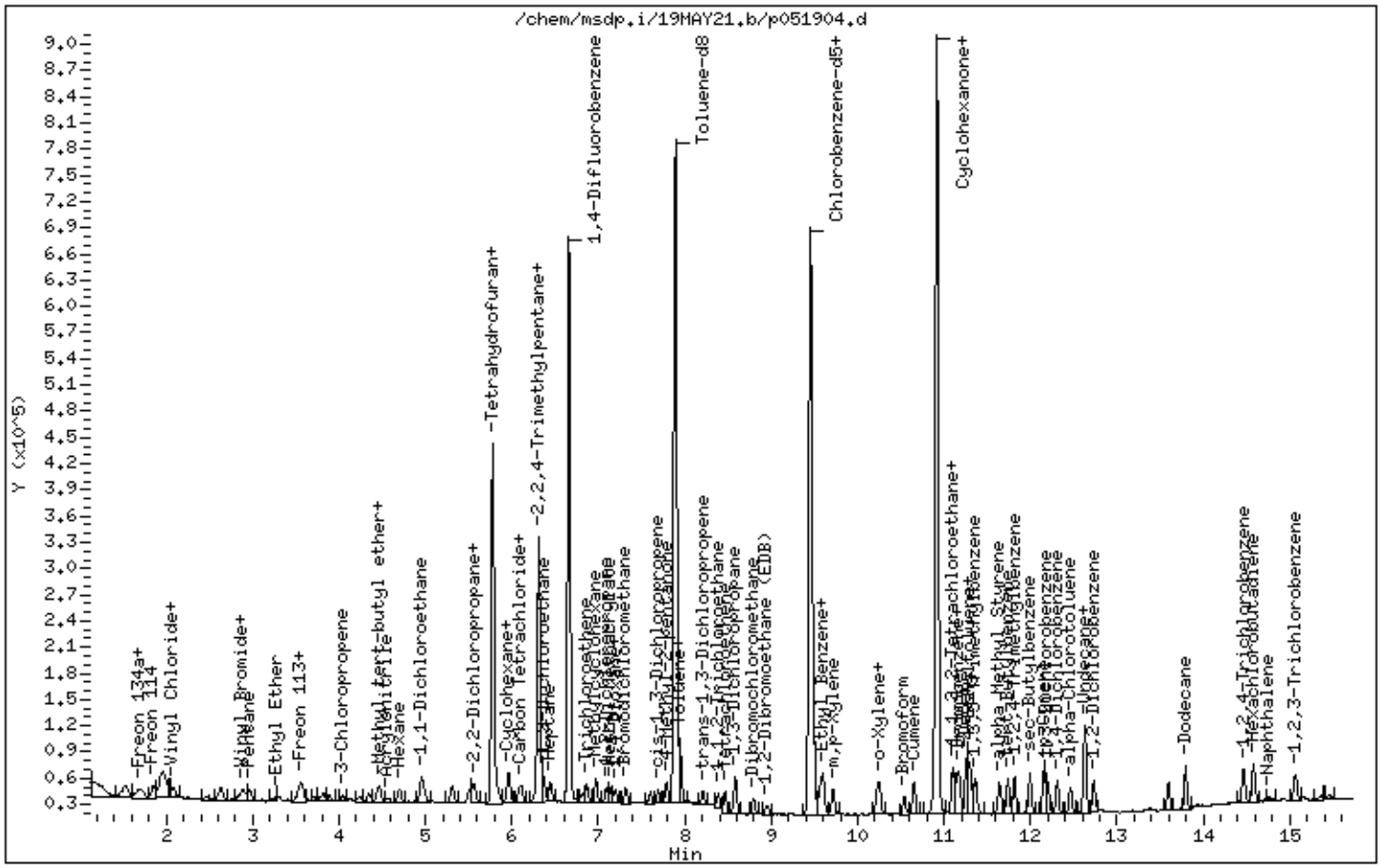
Instrument: msdp.i

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)	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:

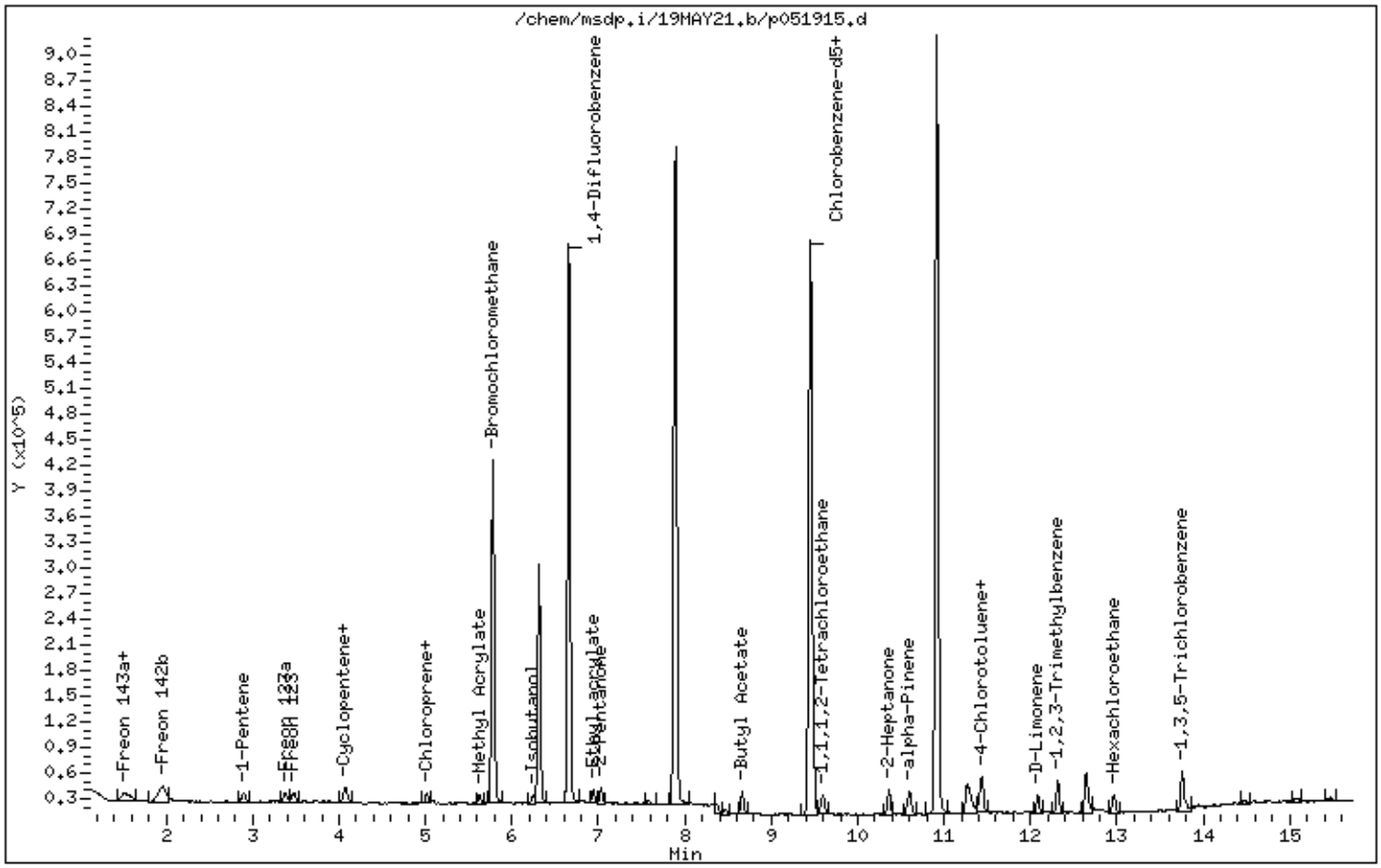
Instrument: msdp.i

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

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	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
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
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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
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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:

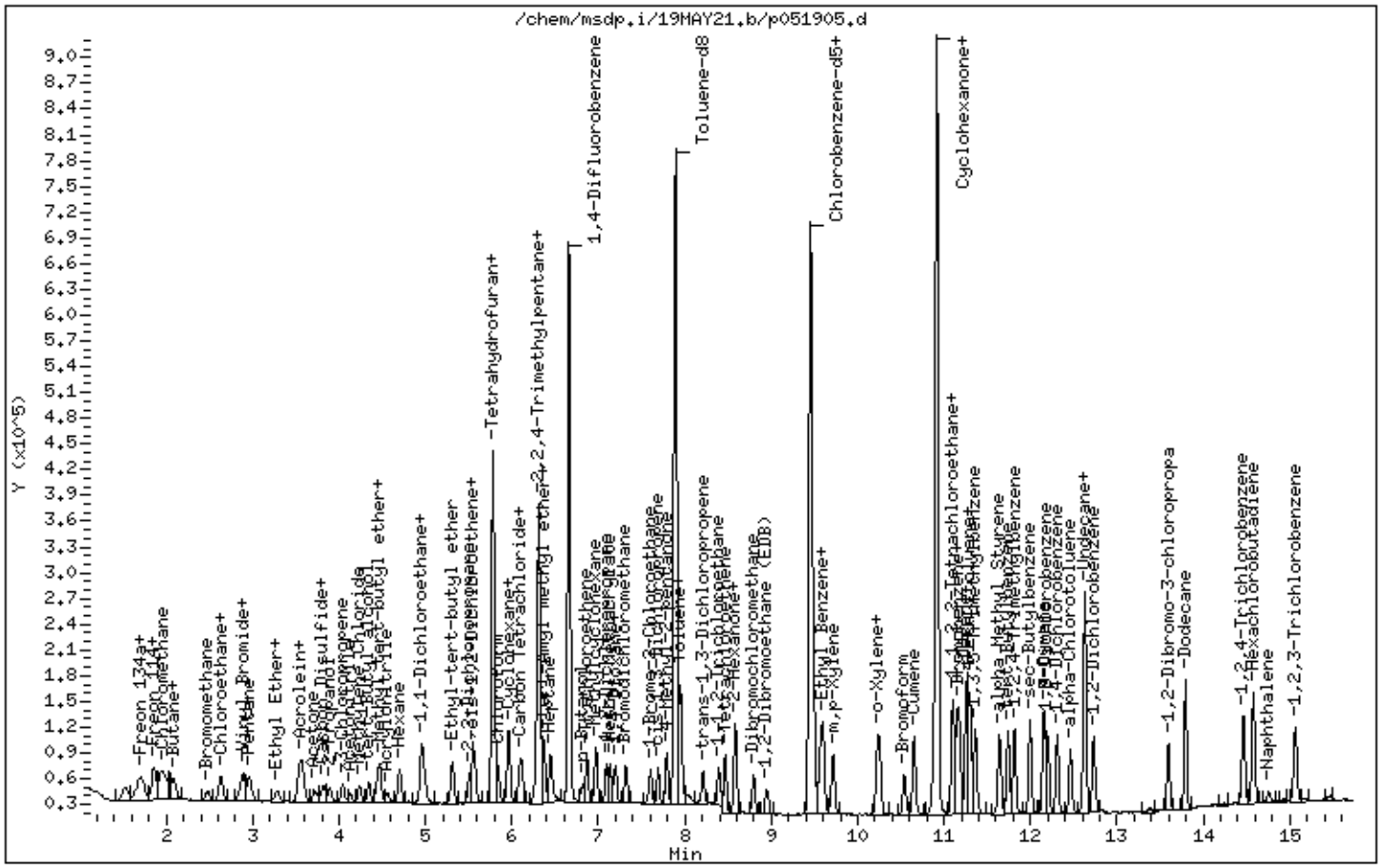
Instrument: msdp.i

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

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:

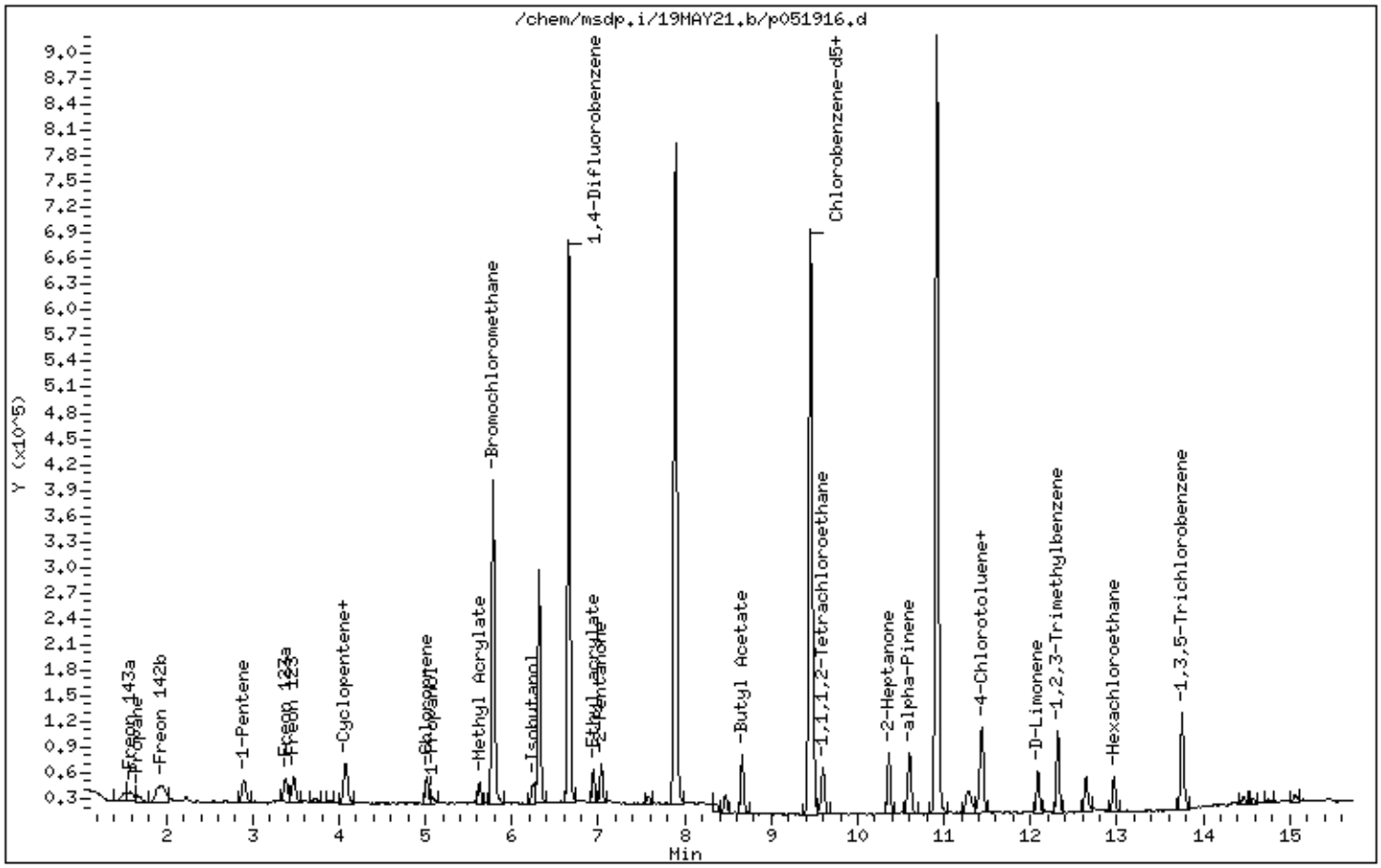
Instrument: msdp.i

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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (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
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* 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:

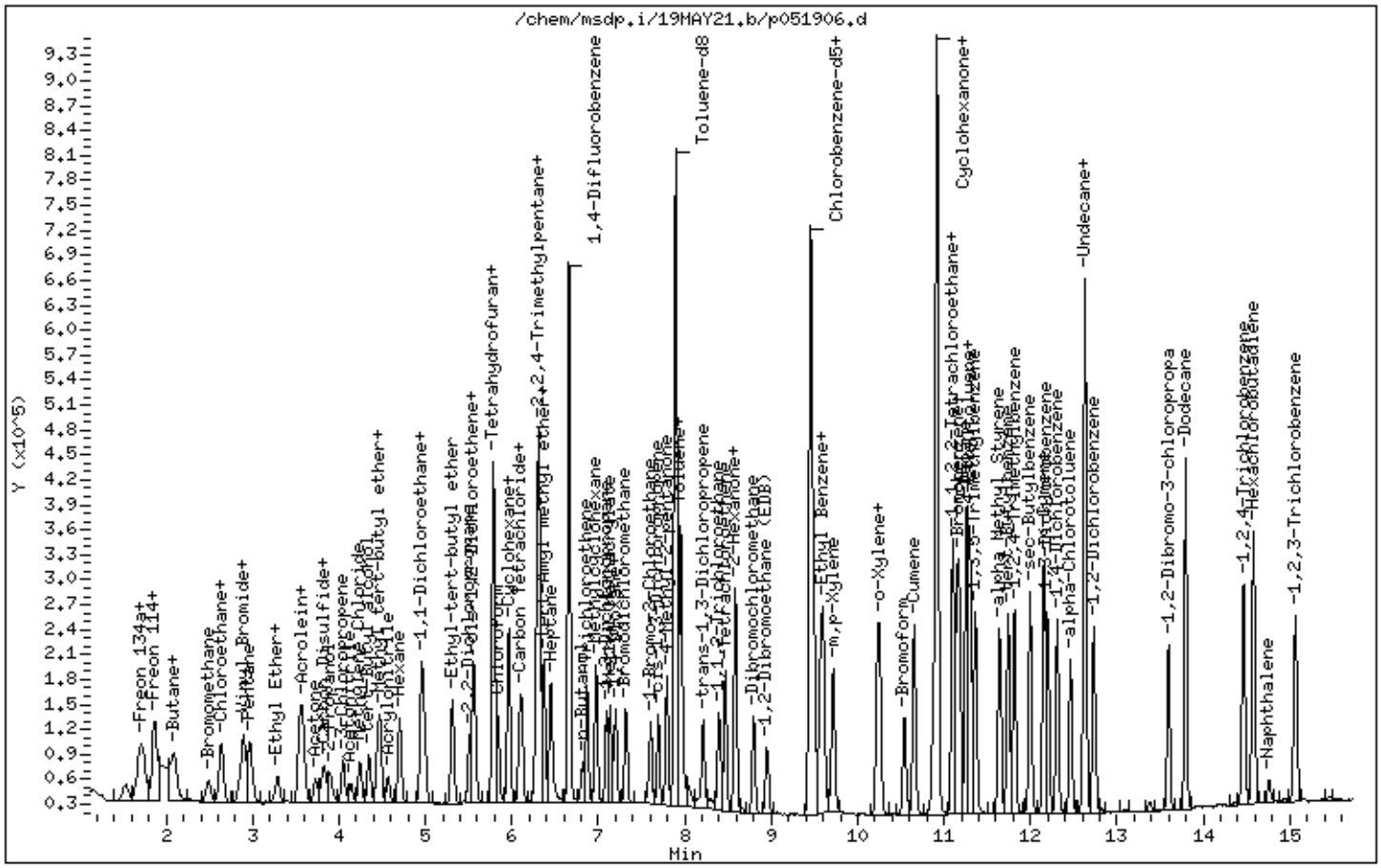
Instrument: msdp.i

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

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	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:

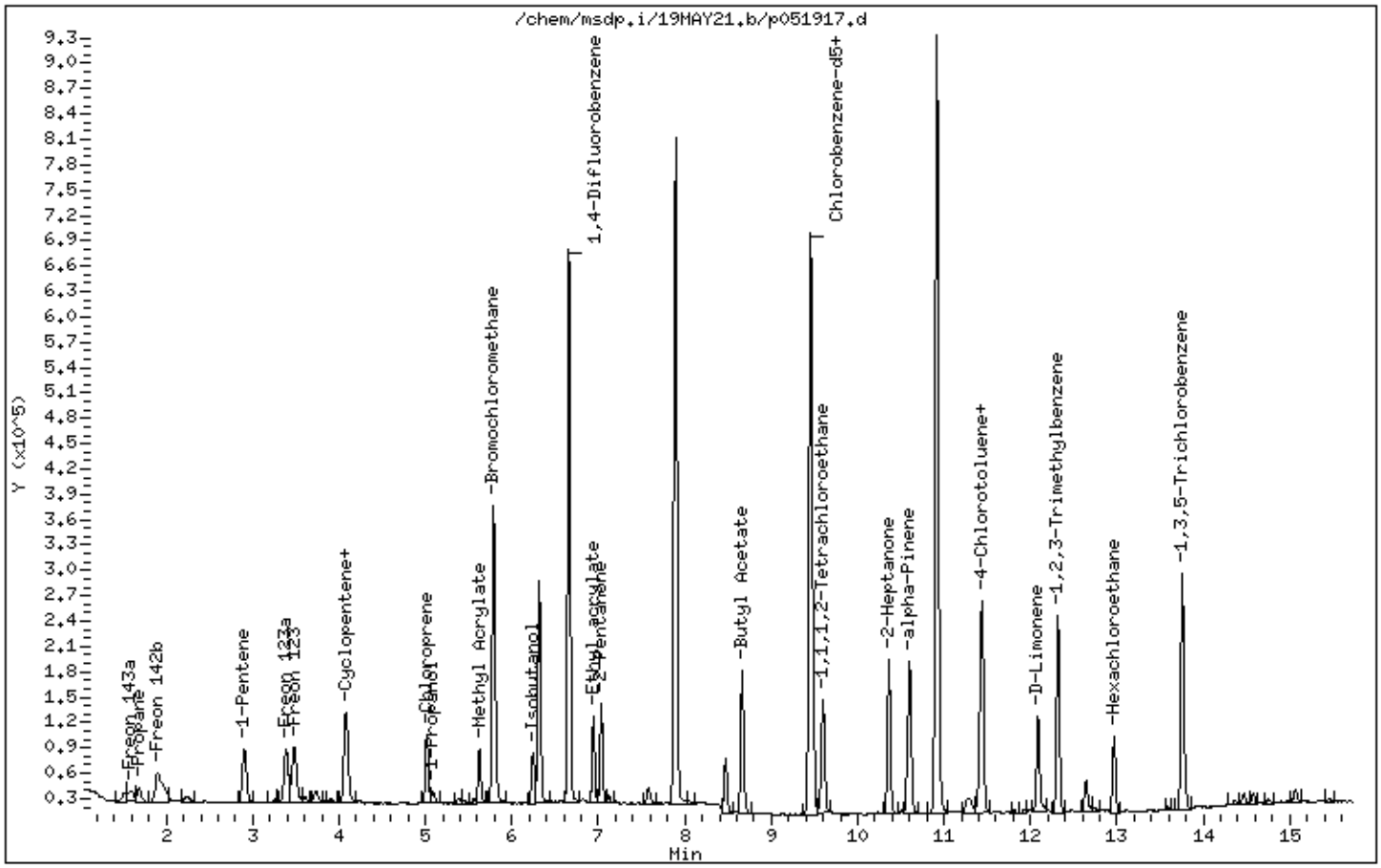
Instrument: msdp.i

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

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	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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
52 2-Propanol					CAS #: 67-63-0		
3.880	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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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92 Chloroform (continued)							
5.835	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
==	====== ========	====	========	=======	=======	=======	==========	=====
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

				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

Date : 19-MAY-2021 15:27

Client ID:

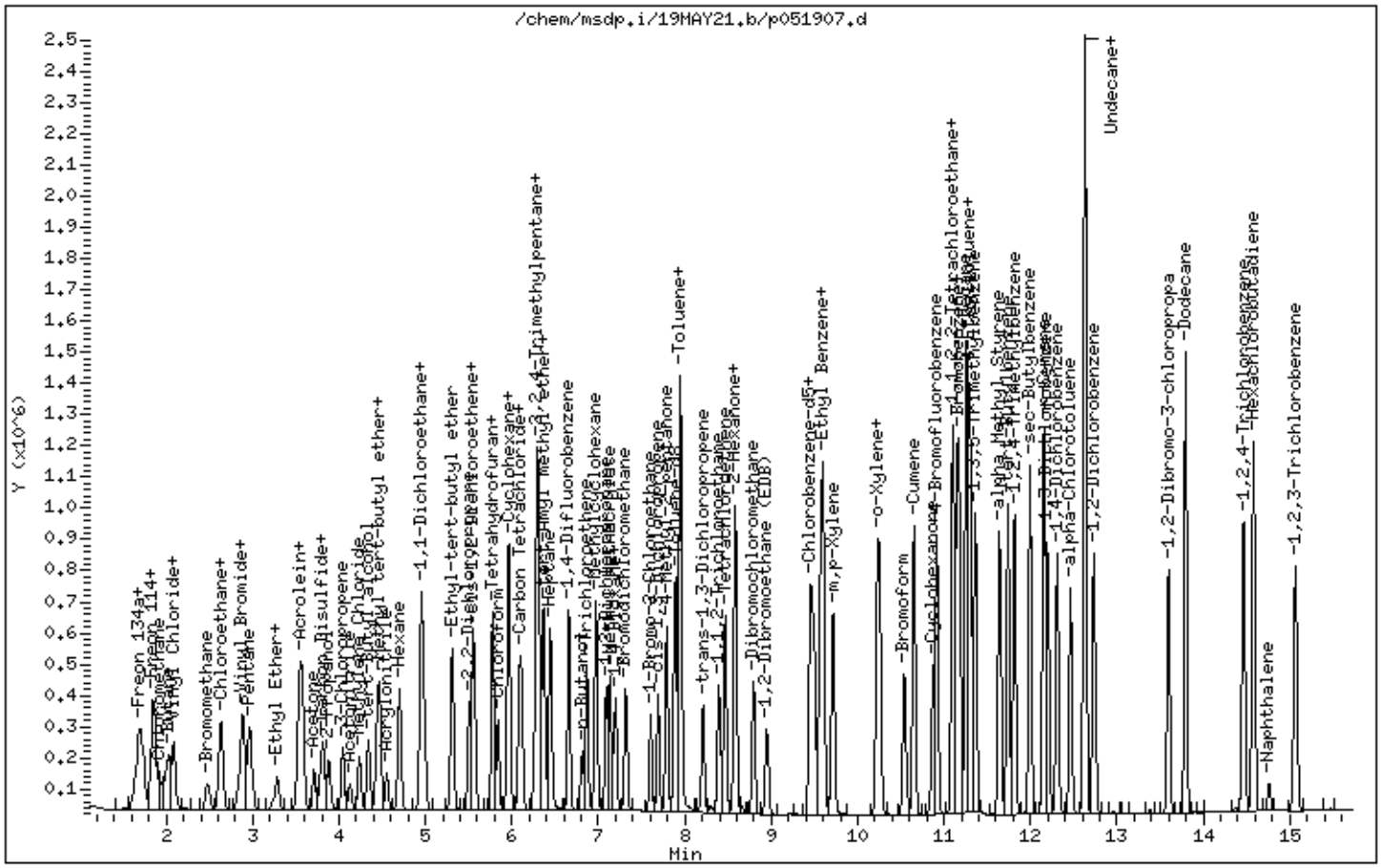
Instrument: msdp.i

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:

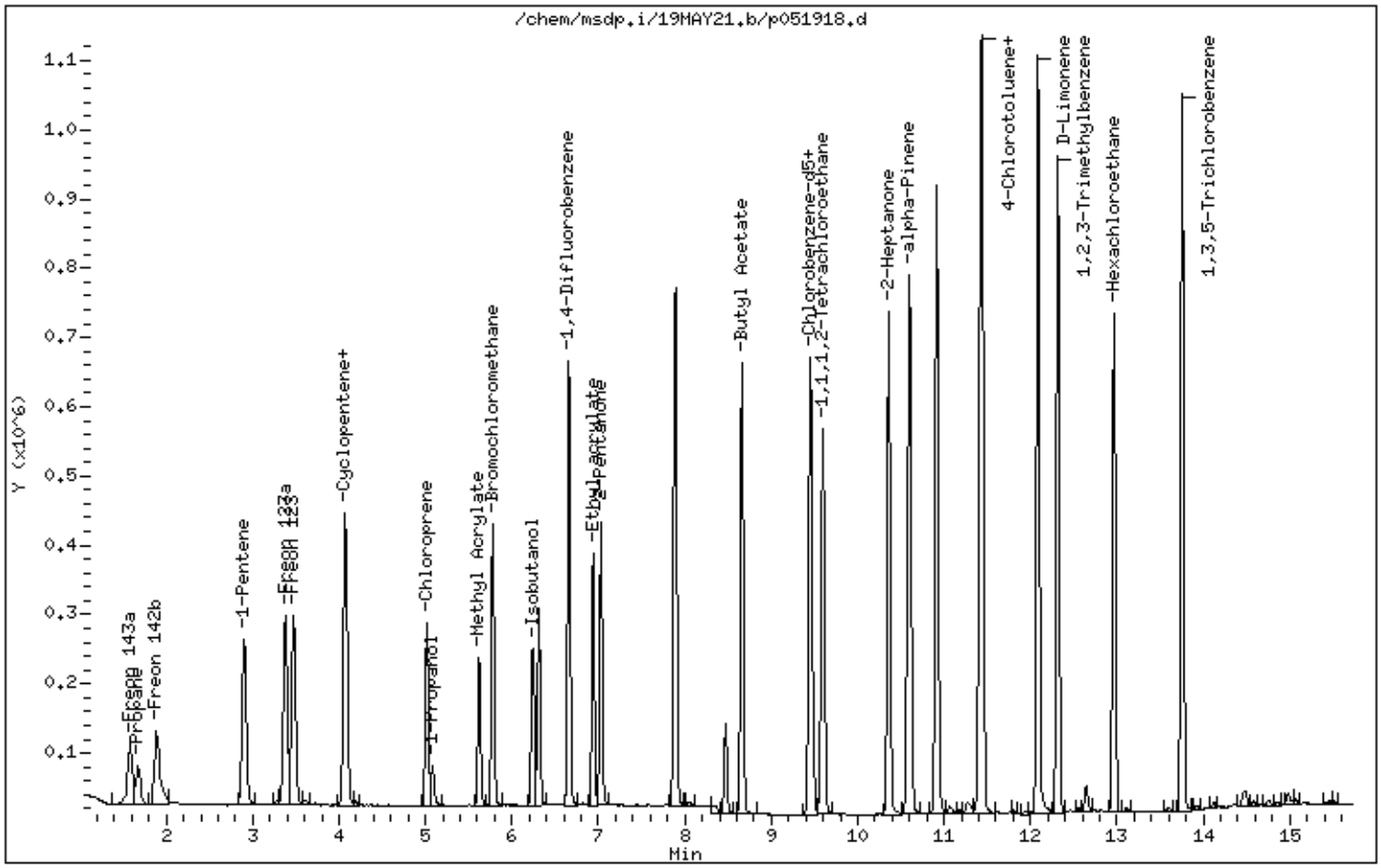
Instrument: msdp.i

Sample Info: 20mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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
==	====== ========	====	========	=======	=======	==========	=====
* 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
==	====== ========	====	========	=======	=======	==========	=====
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

Date : 19-MAY-2021 15:55

Client ID:

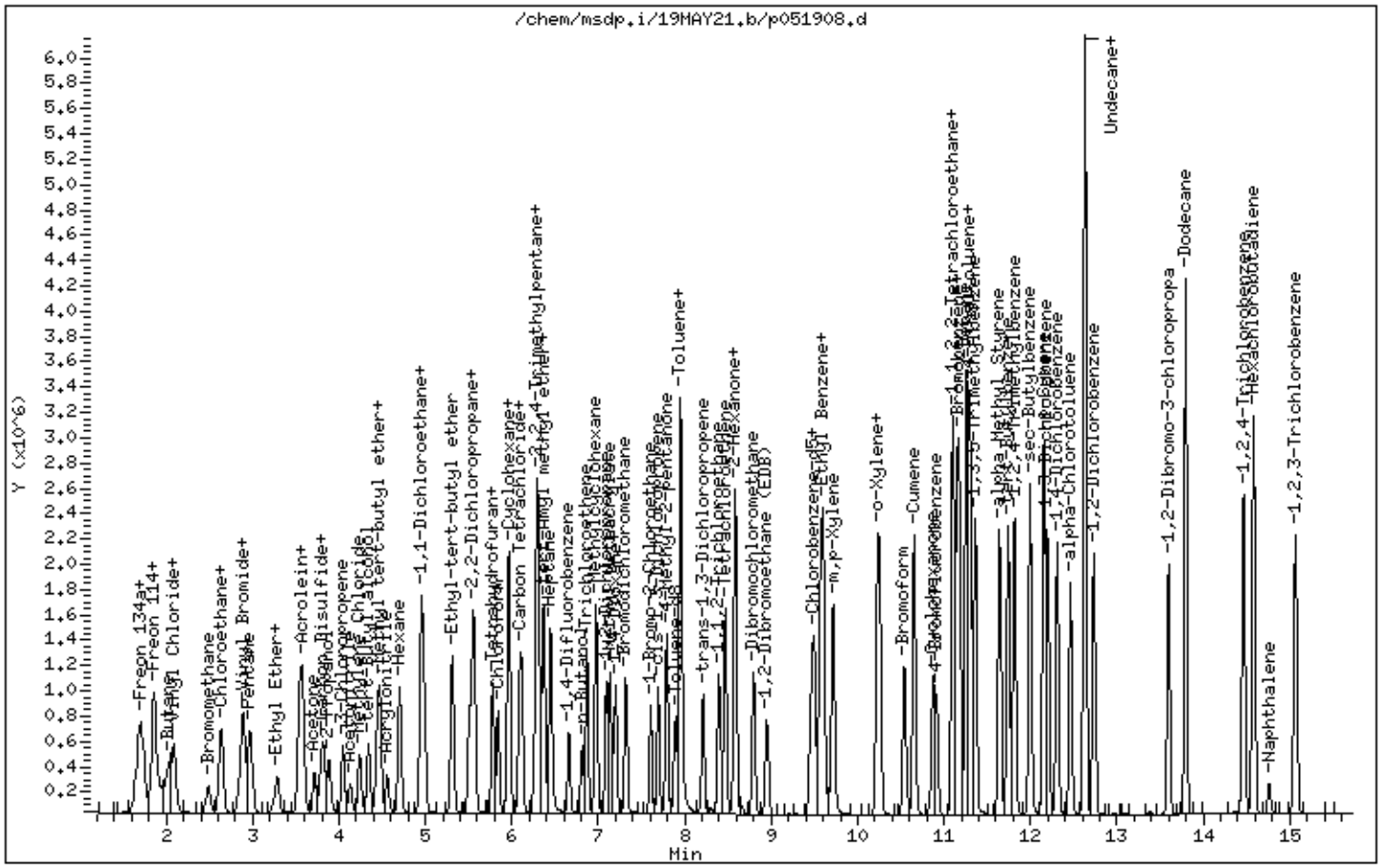
Instrument: msdp.i

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

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:

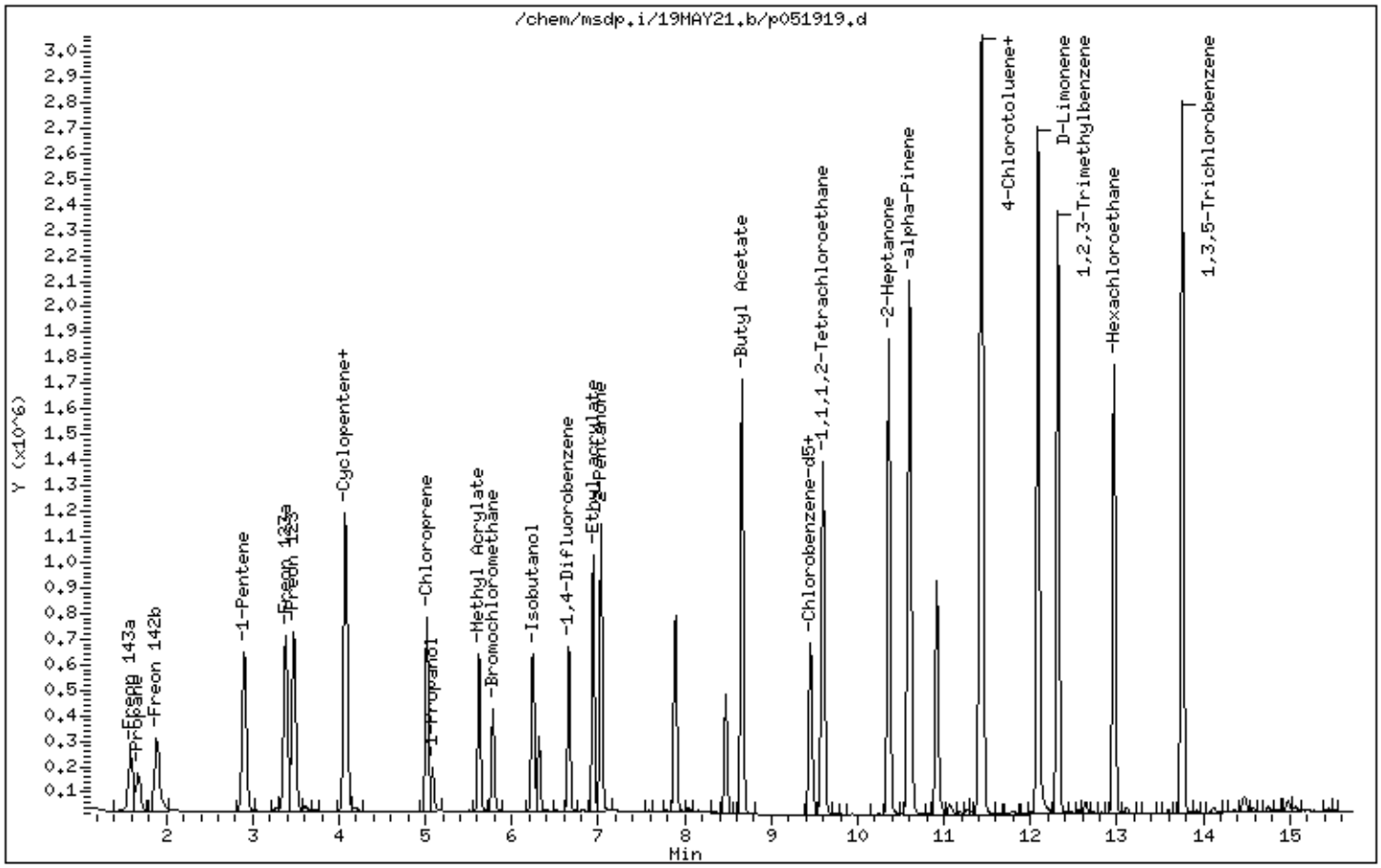
Instrument: msdp.i

Sample Info: 50mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

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

				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
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* 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

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	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

				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	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:

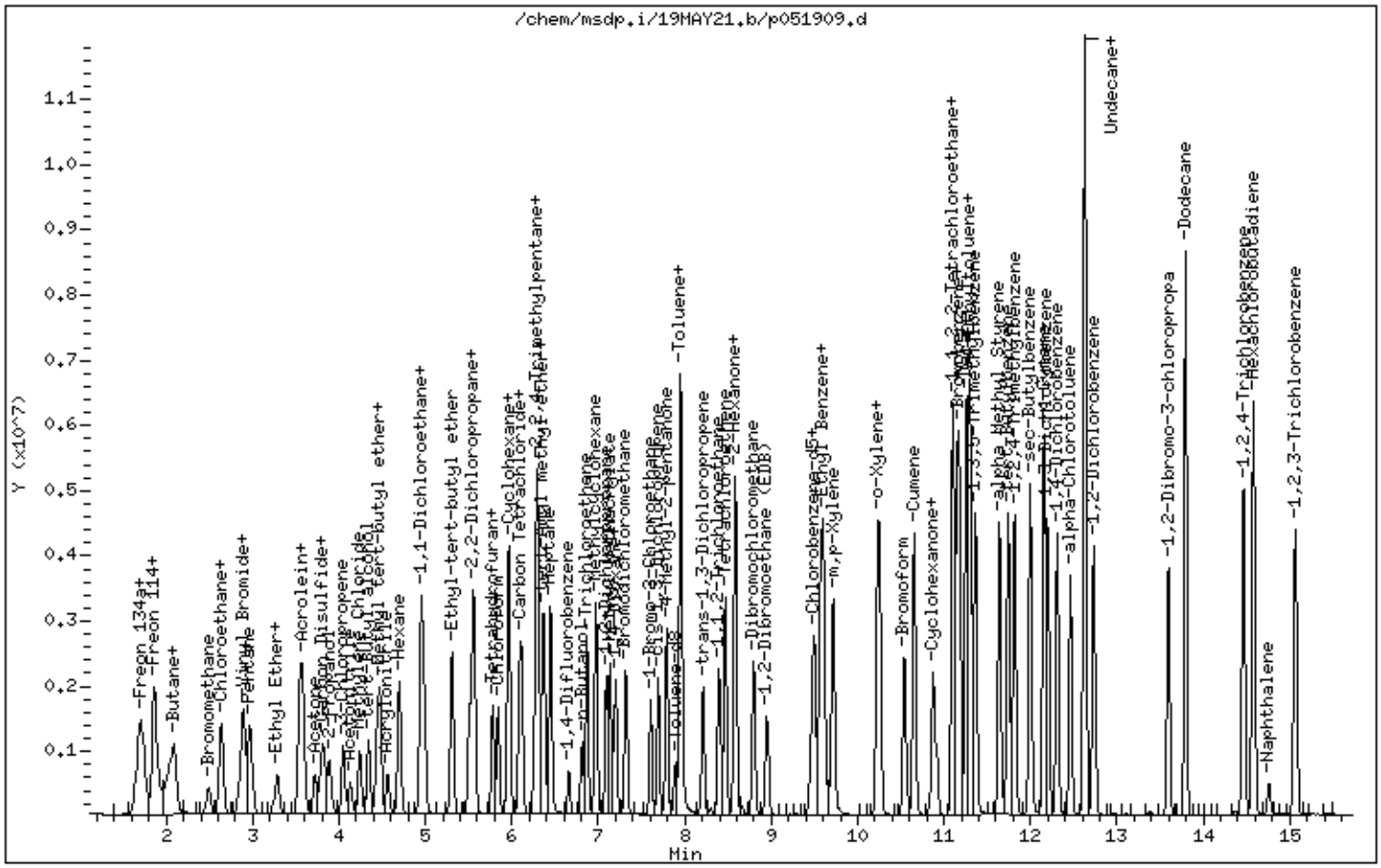
Instrument: msdp.i

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	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:

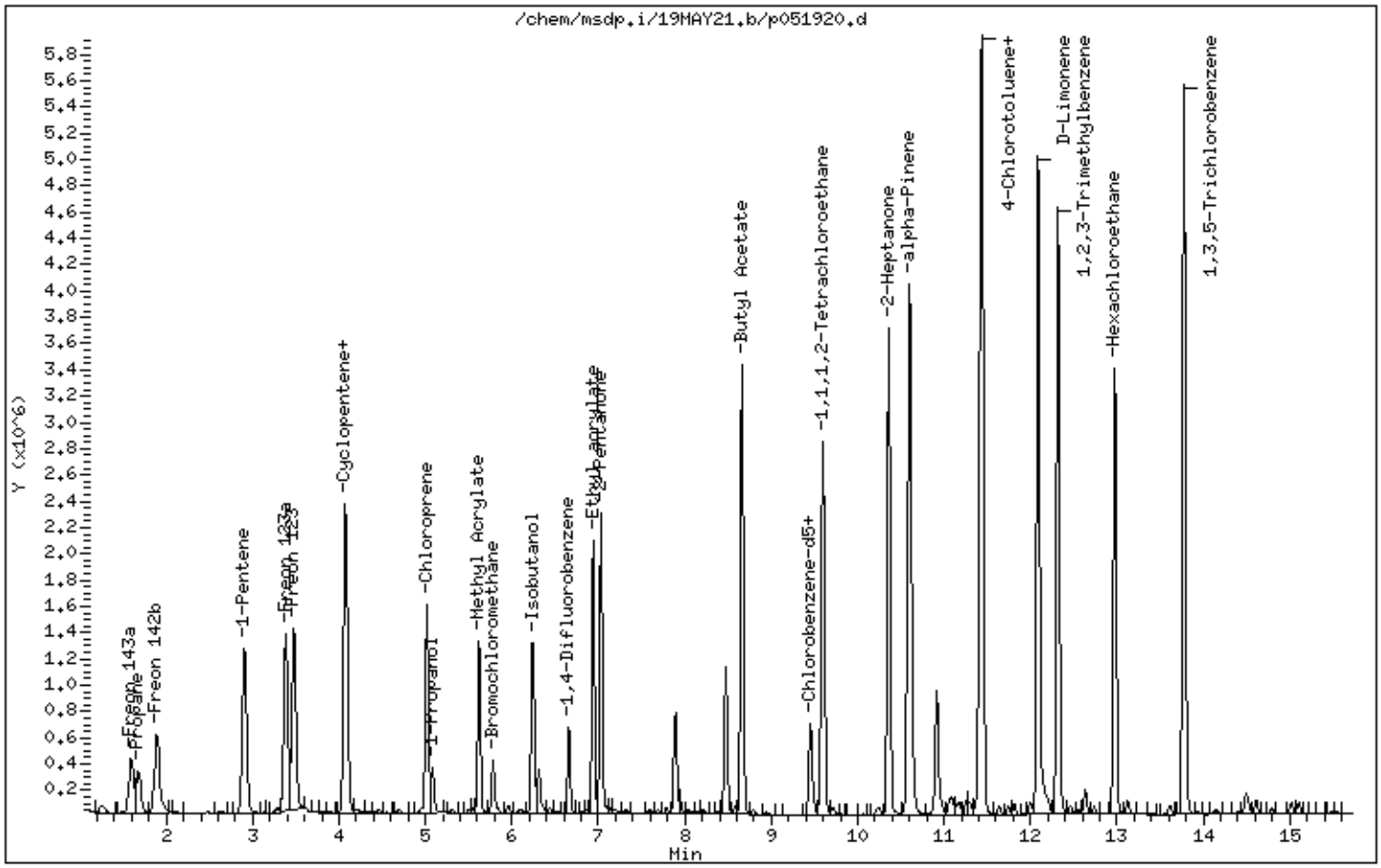
Instrument: msdp.i

Sample Info: 100mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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
* 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)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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
==	====== ========	====	========		=======	=======	==========	=====
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	

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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

				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	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:

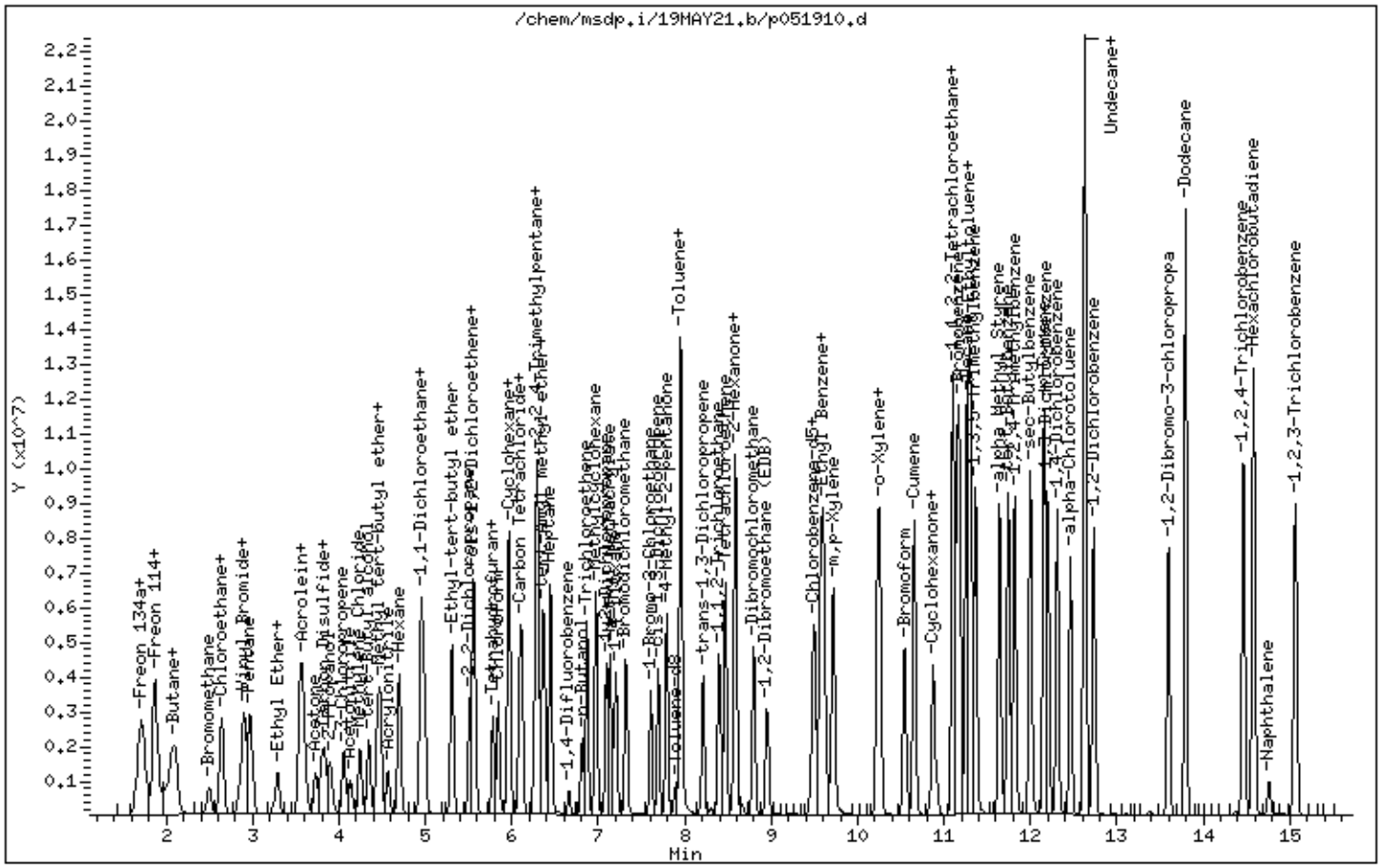
Instrument: msdp.i

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

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	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:

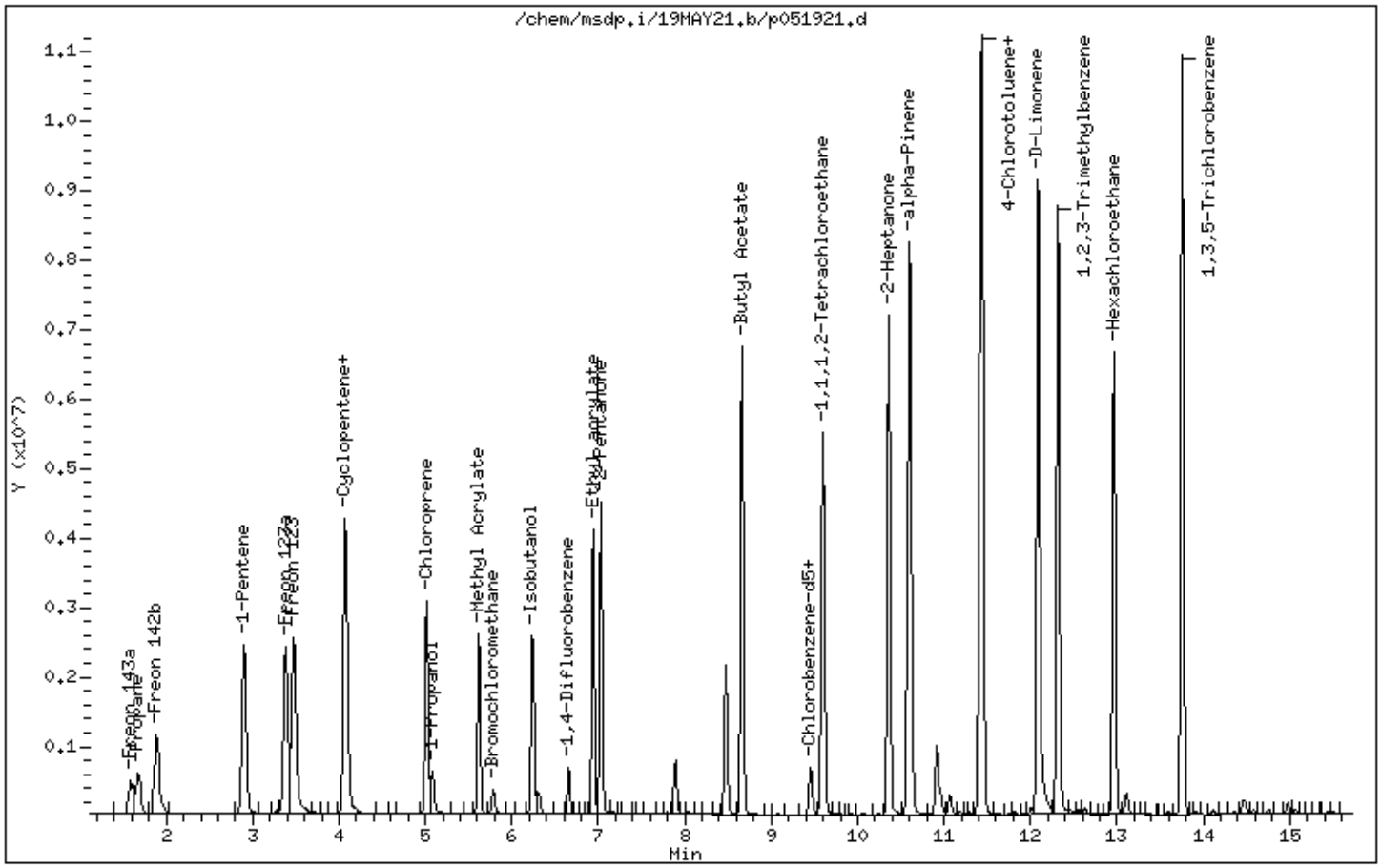
Instrument: msdp.i

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)	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:

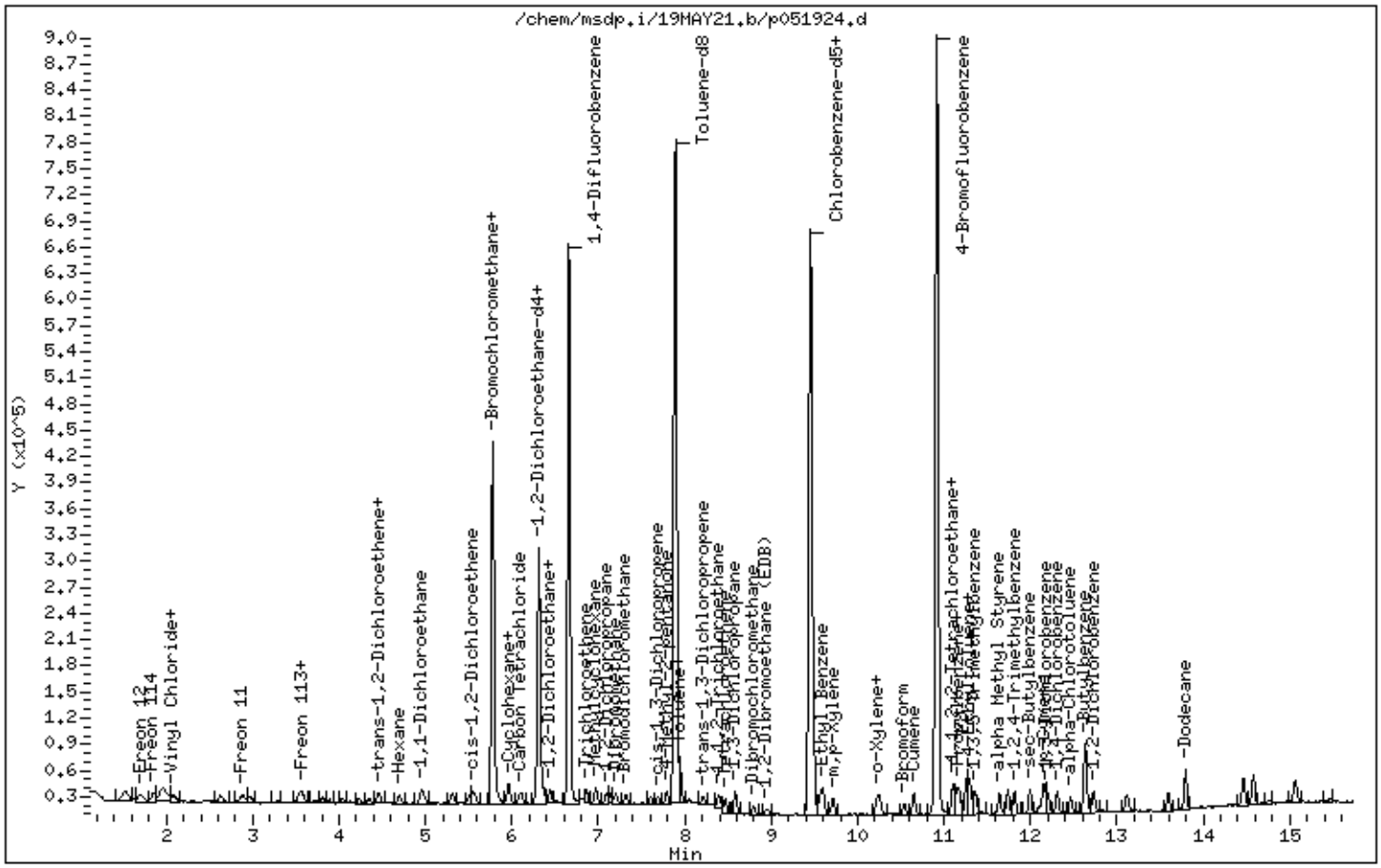
Instrument: msdp.i

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

Date : 20-MAY-2021 00:33

Client ID: ICV

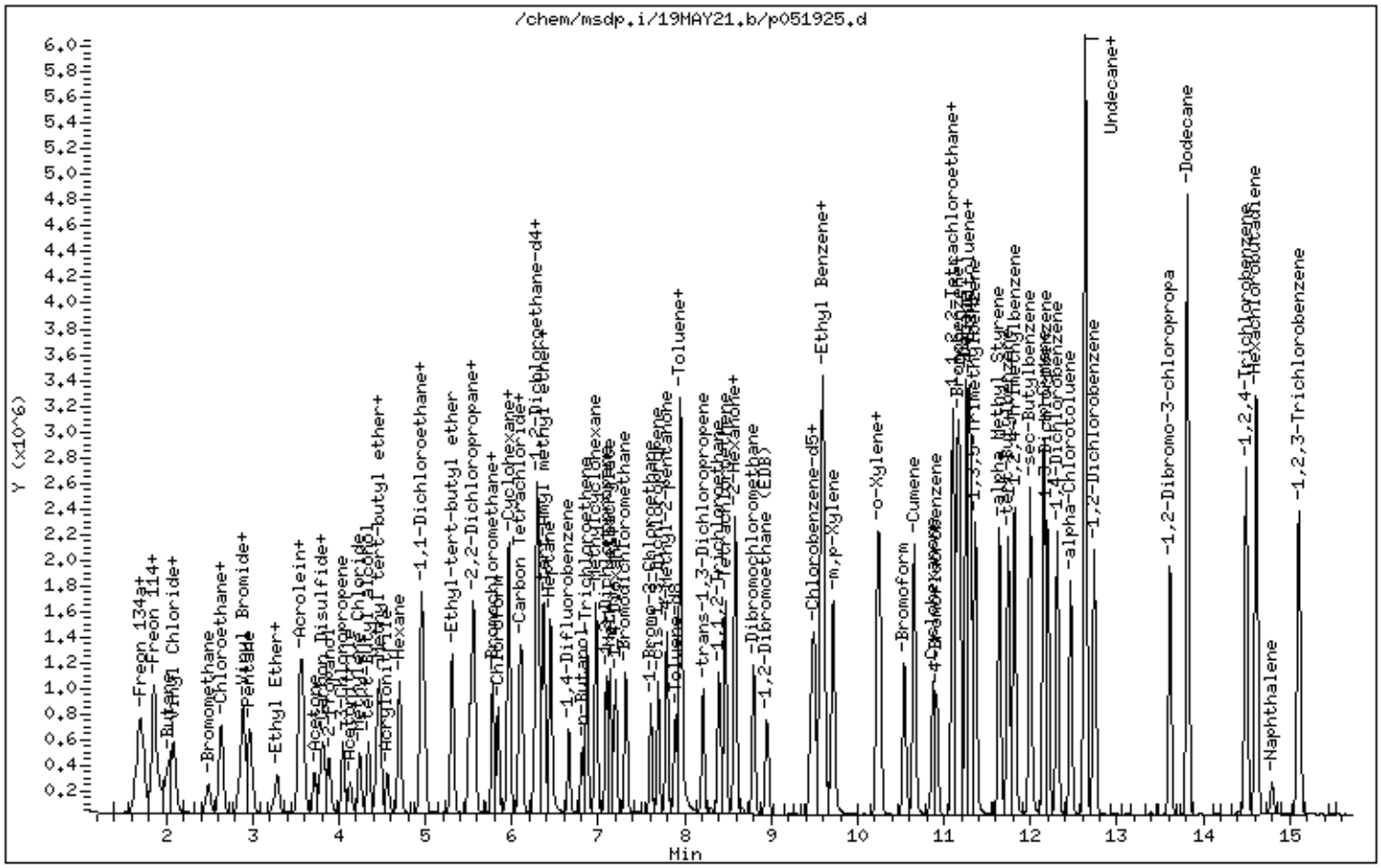
Instrument: msdp.i

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		~1000	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
500 400 —
2000 400 —
2000 400 —
500 400 —
500 800 —
500 400 —
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	500	400	8.96
165 Styrene	500	400	—
167 Bromoform	500	400	—
168 Cumene	500	800	—
175 1,1,2,2-Tetrachloroeth	500	400	—
178 Propylbenzene	500	400	—
179 1,2,3-Trichloropropane	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	4.91
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~~ MO 11/02/20 (?) 800	– MO 11/2/20 (?)

* 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 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 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

ppbv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	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	SC ↓
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

Page 417 of 540

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	0.000000	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 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	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#: 2107684-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:30 AM**	

Compound	%Recovery
1,1,1,2-Tetrachloroethane	108
1,1,1-Trichloroethane	103
1,1,2,2-Tetrachloroethane	110
1,1,2-Trichloroethane	111
1,1-Dichloroethane	107
1,1-Dichloroethene	91
1,1-Difluoroethane	98
1,2,3-Trichloropropane	106
1,2,4-Trichlorobenzene	94
1,2,4-Trimethylbenzene	105
1,2-Dibromo-3-chloropropane	108
1,2-Dibromoethane (EDB)	113
1,2-Dichlorobenzene	107
1,2-Dichloroethane	120
1,2-Dichloropropane	109
1,3,5-Trimethylbenzene	107
1,3-Butadiene	118
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	109
1,4-Dioxane	102
2,2,4-Trimethylpentane	107
2-Butanone (Methyl Ethyl Ketone)	96
2-Hexanone	117
2-Propanol	112
3-Chloropropene	91
4-Ethyltoluene	105
4-Methyl-2-pentanone	109
Acetone	103
Acrolein	107
Acrylonitrile	113
alpha-Chlorotoluene	104
Benzene	104
Bromodichloromethane	115
Bromoform	113
Bromomethane	94
Carbon Disulfide	95
Carbon Tetrachloride	111
Chlorobenzene	109
Chloroethane	95
Chloroform	108
Chloromethane	117
cis-1,2-Dichloroethene	105

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Client Sample ID: CCV

Lab ID#: 2107684-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:30 AM**	

Compound	%Recovery
cis-1,3-Dichloropropene	107
Cumene	104
Cyclohexane	95
Dibromochloromethane	114
Dibromomethane	116
Ethanol	110
Ethyl Acetate	122
Ethyl Benzene	105
Ethyl-tert-butyl ether	100
Freon 11	109
Freon 12	111
Freon 113	99
Freon 114	105
Freon 134a	113
Heptane	100
Hexachlorobutadiene	100
Hexachloroethane	130
Hexane	102
Iodomethane	115
Isopropyl ether	117
m,p-Xylene	102
Methyl tert-butyl ether	94
Methylene Chloride	123
Naphthalene	87
o-Xylene	105
Propylbenzene	106
Propylene	115
Styrene	102
tert-Amyl methyl ether	100
tert-Butyl alcohol	99
Tetrachloroethene	111
Tetrahydrofuran	122
Toluene	105
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	97
trans-1,3-Dichloropropene	111
Trichloroethene	109
Vinyl Acetate	99
Vinyl Bromide	95
Vinyl Chloride	96

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107684-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:30 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080202.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 02-AUG-2021 10:30
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2125A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:15 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	149292	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	115436			48.23- 108.23	77.32
5.778	5.778 (1.000)	49	318913			150.57- 210.57	213.62
* 108 1,4-Difluorobenzene						CAS #: 540-36-3	
6.659	6.659 (1.000)	114	558135	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	79966			0.00- 45.71	14.33
* 153 Chlorobenzene-d5						CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	542388	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	286741			23.78- 83.78	52.87
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.308	6.308 (1.092)	65	214819	25.0000	26.073	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	121269			27.21- 87.21	56.45
$ 134 Toluene-d8						CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	614745	25.0000	25.364	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	64397			0.00- 40.44	10.48

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	399371			34.95- 94.95	64.97
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	352282	25.0000	25.293	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	428587			95.92- 155.92	121.66
10.921	10.921 (1.154)	176	341156			66.89- 126.89	96.84
4 Freon 134a					CAS #: 811-97-2		
1.646	1.646 (0.285)	83	268022	50.0000	56.722	80.00- 120.00	100.00
1.646	1.646 (0.285)	69	215013			59.44- 119.44	80.22
1.744	1.744 (0.302)	51	1291453			419.06- 479.06	481.85
5 Propylene					CAS #: 115-07-1		
1.674	1.674 (0.290)	41	392414	50.0000	57.440	80.00- 120.00	100.00
1.674	1.674 (0.290)	42	259735			35.28- 95.28	66.19
1.674	1.674 (0.290)	39	266320			38.35- 98.35	67.87
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	166689	50.0000	49.258	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1291453			597.63- 657.63	774.77
1.702	1.702 (0.295)	47	136447			33.72- 93.72	81.86
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	741578	50.0000	55.383	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	239352			2.37- 62.37	32.28
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.744 (0.302)	67	77746	50.0000	58.780	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1291453			1501.01-1561.01	1661.11
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	687802	50.0000	52.329	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	221461			2.30- 62.30	32.20
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	854965	50.0000	56.527	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	277760			2.44- 62.44	32.49
1.870	1.870 (0.324)	58	24221			0.00- 33.36	2.83
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	454197	50.0000	58.469	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	114862			0.00- 56.26	25.29
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.352)	58	80819	50.0000	44.913	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	779968			823.29- 883.29	965.07
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	447406	50.0000	47.875	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	136917			0.00- 59.69	30.60
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	444368	50.0000	59.121	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	404564			52.37- 112.37	91.04
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	282458	50.0000	47.006	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	268200			64.07- 124.07	94.95
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	160367	50.0000	47.722	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	47279			0.04- 60.04	29.48
2.612	2.612 (0.452)	49	67147			4.54- 64.54	41.87
31 Isopentane					CAS #: 78-78-4		
2.633	2.633 (0.456)	43	577009	50.0000	56.429	80.00- 120.00	100.00
2.633	2.633 (0.456)	57	331679			34.12- 94.12	57.48
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	263514	50.0000	47.444	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	269830			69.27- 129.27	102.40
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	773022	50.0000	54.327	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	499892			34.72- 94.72	64.67
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.898 (0.502)	67	614351	50.0000	50.094	80.00- 120.00	100.00
2.898	2.898 (0.502)	69	187334			0.84- 60.84	30.49
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	938499	50.0000	56.466	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	123382			0.00- 44.98	13.15
2.970	2.970 (0.514)	72	54154			0.00- 37.39	5.77
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	129307	50.0000	46.114	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	273427			163.46- 223.46	211.46
3.278	3.278 (0.567)	45	449228			250.40- 310.40	347.41

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	81100	50.0000	54.778	80.00- 120.00	100.00
3.278	3.278 (0.567)	45	449228			511.19- 571.19	553.91
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	137870	50.0000	53.666	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	186370			111.10- 171.10	135.18
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	523856	50.0000	49.552	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	333495			33.56- 93.56	63.66
3.550	3.550 (0.614)	101	632725			89.21- 149.21	120.78
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	288927	50.0000	45.749	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	183720			34.02- 94.02	63.59
3.579	3.579 (0.619)	61	625127			168.77- 228.77	216.36
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	201368	50.0000	51.450	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	755646			302.95- 362.95	375.25
48 Carbon Disulfide					CAS #: 75-15-0		
3.822	3.822 (0.662)	76	791654	50.0000	47.580	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	637151	50.0000	57.606	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	296023			12.22- 72.22	46.46
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	887019	50.0000	56.232	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	166732			0.00- 47.19	18.80
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.045 (0.700)	76	126729	50.0000	45.592	80.00- 120.00	100.00
4.045	4.045 (0.700)	41	649242			396.19- 456.19	512.31
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	438014	50.0000	59.578	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	224855			20.95- 80.95	51.34
4.123	4.123 (0.714)	38	48189			0.00- 41.17	11.00
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.231 (0.732)	49	627248	50.0000	61.700	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	265648			22.03- 82.03	42.35
4.231	4.231 (0.732)	51	184460			0.18- 60.18	29.41

				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	911741	50.0000	49.564	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	220016			0.00- 51.11	24.13
4.338	4.338 (0.751)	57	101398			0.00- 40.49	11.12
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	859298	50.0000	46.868	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	306484			3.10- 63.10	35.67
4.446	4.446 (0.769)	41	329531			1.28- 61.28	38.35
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.474 (0.774)	98	205547	50.0000	48.710	80.00- 120.00	100.00
4.474	4.474 (0.774)	61	605870			255.84- 315.84	294.76
4.474	4.474 (0.774)	96	324640			127.59- 187.59	157.94
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	330755	50.0000	56.306	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	394097			88.05- 148.05	119.15
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.813)	57	753195	50.0000	51.213	80.00- 120.00	100.00
4.696	4.696 (0.813)	43	578251			37.52- 97.52	76.77
4.696	4.696 (0.813)	86	81669			0.00- 41.48	10.84
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.961 (0.859)	63	675159	50.0000	53.400	80.00- 120.00	100.00
4.961	4.961 (0.859)	65	197580			0.00- 59.70	29.26
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.856)	45	1996430	50.0000	58.367	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	293327			0.00- 48.18	14.69
4.954	4.954 (0.857)	59	174995			0.00- 40.15	8.77
73 Vinyl Acetate					CAS #: 108-05-4		
4.990	4.990 (0.864)	86	80326	50.0000	49.435	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2342923			2432.48-2492.48	2916.74
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1480754	50.0000	50.011	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	435777			1.00- 61.00	29.43
5.305	5.305 (0.918)	41	331608			0.00- 48.73	22.39
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	577075	50.0000	51.399	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	185147			2.28- 62.28	32.08
5.506	5.506 (0.953)	97	137175			0.00- 53.93	23.77

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	230051	50.0000	52.533	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	352470			125.75- 185.75	153.21
5.549	5.549 (0.960)	61	844652			332.40- 392.40	367.16
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	162802	50.0000	48.246	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2571891			1214.50-1274.50	1579.77
5.556	5.556 (0.962)	57	82682			14.68- 74.68	50.79
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	204033	50.0000	60.789	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	844652			452.04- 512.04	413.98
5.570	5.570 (0.964)	70	84111			22.77- 82.77	41.22
89 Tetrahydrofuran					CAS #: 109-99-9		
5.771	5.771 (0.999)	42	686097	50.0000	61.136	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	143515			0.00- 55.82	20.92
5.771	5.771 (0.999)	72	154969			0.00- 57.59	22.59
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	702747	50.0000	54.101	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	458471			34.70- 94.70	65.24
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	447758	50.0000	47.679	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	845859			142.57- 202.57	188.91
5.957	5.957 (1.031)	41	505097			62.09- 122.09	112.81
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.964 (1.032)	97	756226	50.0000	51.534	80.00- 120.00	100.00
5.964	5.964 (1.032)	99	481714			34.02- 94.02	63.70
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	761715	50.0000	55.345	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	765367			70.64- 130.64	100.48
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	200384	50.0000	52.744	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	503887			226.85- 286.85	251.46
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.279 (1.087)	57	2727229	50.0000	53.352	80.00- 120.00	100.00
6.279	6.279 (1.087)	56	922241			2.24- 62.24	33.82
6.279	6.279 (1.087)	41	744703			0.00- 54.39	27.31

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 (0.946)	78	960174	50.0000	52.132	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	226522			0.00- 52.90	23.59
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	260492	50.0000	50.158	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1050644			372.79- 432.79	403.33
6.358	6.358 (0.955)	55	409326			112.09- 172.09	157.14
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	572640	50.0000	59.751	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	175426			0.79- 60.79	30.63
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	365220	50.0000	50.054	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1149036			226.53- 286.53	314.61
6.444	6.444 (0.968)	57	545435			100.85- 160.85	149.34
110 n-Butanol					CAS #: 71-36-3		
6.809	6.809 (1.023)	56	380375	50.0000	56.804	80.00- 120.00	100.00
6.809	6.809 (1.023)	41	289362			40.99- 100.99	76.07
6.809	6.809 (1.023)	43	240857			27.38- 87.38	63.32
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	488039	50.0000	54.607	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	523992			76.29- 136.29	107.37
6.867	6.867 (1.031)	97	315152			33.63- 93.63	64.58
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	513534	50.0000	54.385	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	363642			41.07- 101.07	70.81
7.096	7.096 (1.066)	41	302664			22.53- 82.53	58.94
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	392655	50.0000	52.687	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	958095			179.84- 239.84	244.00
7.139	7.139 (0.755)	100	154138			9.59- 69.59	39.26
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	256273	50.0000	51.069	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	275666			68.28- 128.28	107.57
7.175	7.175 (1.077)	57	96426			2.68- 62.68	37.63
118 Dibromomethane					CAS #: 74-95-3		
7.203	7.203 (0.761)	174	466123	50.0000	57.913	80.00- 120.00	100.00
7.203	7.203 (0.761)	93	429539			60.09- 120.09	92.15

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
118 Dibromomethane (continued)							
7.203	7.203 (0.761)	95	374886			48.38- 108.38	80.43
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	797480	50.0000	57.549	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	506971			35.24- 95.24	63.57
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	625943	50.0000	53.467	80.00- 120.00	100.00
7.698	7.698 (1.156)	77	199863			2.42- 62.42	31.93
7.691	7.691 (1.155)	39	474806			37.16- 97.16	75.85
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	655975	50.0000	50.721	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	310528			15.78- 75.78	47.34
6.974	6.974 (1.047)	55	823599			84.64- 144.64	125.55
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.171)	58	523450	50.0000	54.590	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1603219			242.35- 302.35	306.28
7.798	7.798 (1.171)	85	158367			3.24- 63.24	30.25
137 Toluene					CAS #: 108-88-3		
7.948	7.948 (1.194)	91	1339317	50.0000	52.706	80.00- 120.00	100.00
7.948	7.948 (1.194)	92	773768			28.38- 88.38	57.77
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.194)	57	582696	50.0000	53.780	80.00- 120.00	100.00
7.948	7.948 (1.194)	85	457712			56.00- 116.00	78.55
7.948	7.948 (1.194)	43	1683345			228.66- 288.66	288.89
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.213 (0.868)	75	591688	50.0000	55.435	80.00- 120.00	100.00
8.213	8.213 (0.868)	77	186227			1.24- 61.24	31.47
8.213	8.213 (0.868)	39	433057			34.11- 94.11	73.19
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	488945	50.0000	55.422	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	299924			31.96- 91.96	61.34
8.400	8.400 (0.888)	83	407629			52.93- 112.93	83.37
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	685812	50.0000	55.480	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	528110			47.84- 107.84	77.01
8.464	8.464 (0.895)	131	516237			45.29- 105.29	75.27

				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	736591	50.0000	58.439	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1596967			162.87- 222.87	216.81
8.586	8.586 (0.908)	100	102316			0.00- 45.94	13.89
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	666318	50.0000	55.217	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	962431			94.99- 154.99	144.44
8.579	8.579 (1.288)	78	213601			2.05- 62.05	32.06
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	942338	50.0000	57.167	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	736032			47.45- 107.45	78.11
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	797815	50.0000	56.384	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	755151			64.21- 124.21	94.65
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	968273	50.0000	55.888	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	281304			0.00- 59.64	29.05
7.605	7.605 (1.142)	144	94149			0.00- 39.63	9.72
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1170193	50.0000	54.333	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	369687			1.74- 61.74	31.59
9.496	9.496 (1.004)	77	607161			25.04- 85.04	51.89
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	593382	50.0000	52.689	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1790978			273.74- 333.74	301.83
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	1725514	50.0000	59.550	80.00- 120.00	100.00
9.596	9.596 (1.014)	57	1293684			54.16- 114.16	74.97
9.596	9.596 (1.014)	85	340056			0.00- 53.90	19.71
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	722578	50.0000	51.229	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1379834			163.73- 223.73	190.96
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	709355	50.0000	52.490	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1405686			177.45- 237.45	198.16
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1181208	50.0000	51.109	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	546767			17.88- 77.88	46.29
167 Bromoform					CAS #: 75-25-2		
10.541	10.541 (1.114)	173	919656	50.0000	56.601	80.00- 120.00	100.00
10.541	10.541 (1.114)	171	470126			21.25- 81.25	51.12
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2211349	50.0000	52.090	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	645837			0.00- 58.52	29.21
10.649	10.649 (1.126)	51	336268			0.00- 43.00	15.21
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	895441	50.0000	58.980	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	258105			1.94- 61.94	28.82
10.871	10.871 (1.149)	42	627996			37.89- 97.89	70.13
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1134772	50.0000	54.766	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	731971			35.20- 95.20	64.50
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	714274	50.0000	55.321	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	696346			67.21- 127.21	97.49
11.179	11.179 (1.182)	77	386119			29.02- 89.02	54.06
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	667674	50.0000	53.042	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2613877			366.49- 426.49	391.49
11.150	11.150 (1.179)	105	99247			0.00- 44.85	14.86
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	350045	50.0000	53.004	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	979296			280.55- 340.55	279.76
11.100	11.100 (1.173)	61	169977			15.49- 75.49	48.56
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	167073	50.0000	38.591	80.00- 120.00	100.00
11.165	11.165 (1.180)	89	142042			49.11- 109.11	85.02
11.179	11.179 (1.182)	75	979296			426.44- 486.44	586.15
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1706725	50.0000	51.685	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	434154			0.00- 57.66	25.44
11.258	11.258 (1.190)	142	62489			0.00- 34.09	3.66

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	720439	50.0000	52.629	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2207121			284.55- 344.55	306.36
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	581856	50.0000	54.288	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1928652			315.17- 375.17	331.47
11.301	11.301 (1.195)	65	288445			21.55- 81.55	49.57
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1007369	50.0000	53.450	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1915791			164.93- 224.93	190.18
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	954598	50.0000	50.985	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	528234			25.30- 85.30	55.34
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1942509	50.0000	55.105	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	472095			0.00- 54.25	24.30
11.738	11.738 (1.241)	91	1119666			31.27- 91.27	57.64
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.816 (1.249)	105	1864955	50.0000	52.425	80.00- 120.00	100.00
11.816	11.816 (1.249)	120	933079			19.05- 79.05	50.03
192 sec-Butylbenzene					CAS #: 135-98-8		
11.995	11.995 (1.268)	134	603472	50.0000	55.080	80.00- 120.00	100.00
11.995	11.995 (1.268)	105	2772087			437.55- 497.55	459.36
11.995	11.995 (1.268)	91	416135			40.76- 100.76	68.96
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2570516	50.0000	53.082	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	672425			0.00- 55.54	26.16
12.160	12.160 (1.285)	91	535349			0.00- 51.48	20.83
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1329178	50.0000	54.588	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	851386			33.21- 93.21	64.05
12.196	12.196 (1.289)	111	535320			11.31- 71.31	40.27
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1338646	50.0000	54.404	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	858487			33.90- 93.90	64.13
12.311	12.311 (1.301)	111	508165			9.45- 69.45	37.96

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
199 alpha-Chlorotoluene						CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1766384	50.0000	52.277	80.00- 120.00		100.00
12.461	12.461 (1.317)	126	413835			0.00- 53.26		23.43
201 Undecane						CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2041680	50.0000	53.527	80.00- 120.00		100.00
12.640	12.640 (1.336)	43	1997357			58.12- 118.12		97.83
202 Butylbenzene						CAS #: 104-51-8		
12.626	12.626 (1.335)	134	646240	50.0000	52.544	80.00- 120.00		100.00
12.626	12.626 (1.335)	91	2216666			314.79- 374.79		343.01
12.626	12.626 (1.335)	92	1168965			154.29- 214.29		180.89
204 1,2-Dichlorobenzene						CAS #: 95-50-1		
12.740	12.740 (1.347)	146	1277648	50.0000	53.513	80.00- 120.00		100.00
12.740	12.740 (1.347)	148	814480			33.84- 93.84		63.75
12.733	12.733 (1.346)	111	522263			12.73- 72.73		40.88
206 1,2-Dibromo-3-chloropropane						CAS #: 96-12-8		
13.600	13.600 (1.438)	157	785213	50.0000	54.300	80.00- 120.00		100.00
13.600	13.600 (1.438)	75	642033			52.48- 112.48		81.77
13.600	13.600 (1.438)	155	610759			47.41- 107.41		77.78
207 Dodecane						CAS #: 112-40-3		
13.801	13.801 (1.459)	57	1729271	61.8000	57.198	80.00- 120.00		100.00
13.801	13.801 (1.459)	43	1571607			52.87- 112.87		90.88
213 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1046982	63.0000	59.352	80.00- 120.00		100.00
14.467	14.467 (1.529)	182	1013407			65.33- 125.33		96.79
215 Hexachlorobutadiene						CAS #: 87-68-3		
14.581	14.581 (1.541)	225	800346	64.4000	64.468	80.00- 120.00		100.00
14.581	14.581 (1.541)	223	504199			33.17- 93.17		63.00
216 Naphthalene						CAS #: 91-20-3		
14.768	14.768 (1.561)	128	248974	6.35000	5.523	80.00- 120.00		100.00
14.768	14.768 (1.561)	127	31497			0.00- 42.88		12.65
222 1,2,3-Trichlorobenzene						CAS #: 87-61-6		
15.068	15.068 (1.593)	180	949407	66.6000	60.882	80.00- 120.00		100.00
15.068	15.068 (1.593)	182	902508			65.75- 125.75		95.06
15.068	15.068 (1.593)	145	316194			5.23- 65.23		33.30

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.43891	0.010	-4.29295	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.10143	0.010	-1.45804	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.64950	0.010	-1.17308	30.00000	Averaged
4 Freon 134a	0.79126	0.89764	0.010	-13.44463	30.00000	Averaged
5 Propylene	1.14402	1.31425	0.010	-14.87973	30.00000	Averaged
7 1,1-Difluoroethane	0.56667	0.55826	0.010	1.48384	30.00000	Averaged
8 Freon 12	2.24223	2.48364	0.010	-10.76645	30.00000	Averaged
9 Chlorodifluoromethane	0.22149	0.26038	0.010	-17.56085	30.00000	Averaged
10 Freon 114	2.20100	2.30353	0.010	-4.65834	30.00000	Averaged
12 Isobutane	2.53275	2.86339	0.010	-13.05442	30.00000	Averaged
15 Chloromethane	1.30082	1.52116	0.010	-16.93864	30.00000	Averaged
18 Butane	0.30133	0.27067	0.010	10.17365	30.00000	Averaged
19 Vinyl Chloride	1.56492	1.49842	0.010	4.24935	30.00000	Averaged
20 1,3-Butadiene	1.25865	1.48824	0.010	-18.24153	30.00000	Averaged
24 Bromomethane	1.00624	0.94599	0.010	5.98754	30.00000	Averaged
30 Chloroethane	0.56273	0.53709	0.010	4.55616	30.00000	Averaged
31 Isopentane	1.71230	1.93248	0.010	-12.85887	30.00000	Averaged
32 Vinyl Bromide	0.93008	0.88254	0.010	5.11115	30.00000	Averaged
33 Freon 11	2.38274	2.58895	0.010	-8.65415	30.00000	Averaged
34 Dichlorofluoromethane	2.05367	2.05754	0.010	-0.18838	30.00000	Averaged
35 Pentane	2.78321	3.14315	0.010	-12.93247	30.00000	Averaged
38 Ethyl Ether	0.46955	0.43307	0.010	7.77087	30.00000	Averaged
39 Ethanol	0.24792	0.27162	0.010	-9.55672	30.00000	Averaged
42 Acrolein	0.43020	0.46175	0.010	-7.33255	30.00000	Averaged
43 Freon 113	1.77031	1.75446	0.010	0.89505	30.00000	Averaged
44 1,1-Dichloroethene	1.05757	0.96765	0.010	8.50195	30.00000	Averaged
47 Acetone	0.65540	0.67441	0.010	-2.90003	30.00000	Averaged
48 Carbon Disulfide	2.78620	2.65135	0.010	4.84013	30.00000	Averaged
49 Iodomethane	1.85215	2.13390	0.010	-15.21176	30.00000	Averaged
52 2-Propanol	2.64148	2.97074	0.010	-12.46502	30.00000	Averaged
54 3-Chloropropene	0.46546	0.42443	0.010	8.81515	30.00000	Averaged
57 Acetonitrile	1.23114	1.46697	0.010	-19.15501	30.00000	Averaged
59 Methylene Chloride	1.70236	2.10073	0.010	-23.40114	30.00000	Averaged
62 tert-Butyl alcohol	3.08038	3.05353	0.010	0.87142	30.00000	Averaged
63 Methyl tert-butyl ether	3.07018	2.87790	0.010	6.26300	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.70664	0.68840	0.010	2.58064	30.00000	Averaged
66 Acrylonitrile	0.98368	1.10774	0.010	-12.61153	30.00000	Averaged
67 Hexane	2.46279	2.52255	0.010	-2.42638	30.00000	Averaged
71 1,1-Dichloroethane	2.11721	2.26119	0.010	-6.80065	30.00000	Averaged
72 Isopropyl ether	5.72778	6.68629	0.010	-16.73440	30.00000	Averaged
73 Vinyl Acetate	0.27210	0.26902	0.010	1.12916	30.00000	Averaged
79 Ethyl-tert-butyl ether	4.95812	4.95923	0.010	-0.02235	30.00000	Averaged
84 2,2-Dichloropropane	1.88008	1.93270	0.010	-2.79847	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.73332	0.77047	0.010	-5.06574	30.00000	Averaged
86 2-Butanone	0.56506	0.54524	0.010	3.50769	30.00000	Averaged
87 Ethyl Acetate	0.56205	0.68333	0.010	-21.57871	30.00000	Averaged
89 Tetrahydrofuran	1.87928	2.29782	0.010	-22.27140	30.00000	Averaged
92 Chloroform	2.17519	2.35359	0.010	-8.20125	30.00000	Averaged
94 Cyclohexane	1.57260	1.49960	0.010	4.64207	30.00000	Averaged
96 1,1,1-Trichloroethane	2.45732	2.53269	0.010	-3.06745	30.00000	Averaged
97 Carbon Tetrachloride	2.30469	2.55108	0.010	-10.69064	30.00000	Averaged
99 1,1-Dichloropropene	0.17017	0.17951	0.010	-5.48815	30.00000	Averaged
101 2,2,4-Trimethylpentane	8.56002	9.13383	0.010	-6.70332	30.00000	Averaged
102 Benzene	0.82499	0.86016	0.010	-4.26347	30.00000	Averaged
105 tert-Amyl methyl ether	0.23262	0.23336	0.010	-0.31581	30.00000	Averaged
106 1,2-Dichloroethane	0.42928	0.51299	0.010	-19.50235	30.00000	Averaged
107 Heptane	0.32683	0.32718	0.010	-0.10813	30.00000	Averaged
110 n-Butanol	0.29994	0.34076	0.010	-13.60771	30.00000	Averaged
111 Trichloroethene	0.40032	0.43721	0.010	-9.21414	30.00000	Averaged
114 1,2-Dichloropropane	0.42295	0.46004	0.010	-8.77098	30.00000	Averaged
116 Methyl Methacrylate	0.34351	0.36197	0.010	-5.37490	30.00000	Averaged
117 1,4-Dioxane	0.22478	0.22958	0.010	-2.13742	30.00000	Averaged
118 Dibromomethane	0.37098	0.42969	0.010	-15.82618	30.00000	Averaged
122 Bromodichloromethane	0.62070	0.71441	0.010	-15.09882	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.52438	0.56075	0.010	-6.93410	30.00000	Averaged
127 Methylcyclohexane	0.57930	0.58765	0.010	-1.44187	30.00000	Averaged
131 4-Methyl-2-pentanone	0.42950	0.46893	0.010	-9.17921	30.00000	Averaged
137 Toluene	1.13821	1.19981	0.010	-5.41247	30.00000	Averaged
136 Octane	0.48532	0.52200	0.010	-7.55920	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.49197	0.54545	0.010	-10.86923	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.40664	0.45073	0.010	-10.84305	30.00000	Averaged
142 Tetrachloroethene	0.56977	0.63221	0.010	-10.95952	30.00000	Averaged
143 2-Hexanone	0.58097	0.67902	0.010	-16.87748	30.00000	Averaged
144 1,3-Dichloropropane	0.54052	0.59691	0.010	-10.43389	30.00000	Averaged
146 Dibromochloromethane	0.75978	0.86869	0.010	-14.33467	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.65220	0.73546	0.010	-12.76745	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.77603	0.86742	0.010	-11.77611	30.00000	Averaged
154 Chlorobenzene	0.99271	1.07874	0.010	-8.66643	30.00000	Averaged
155 Ethyl Benzene	0.51909	0.54701	0.010	-5.37835	30.00000	Averaged
156 Nonane	1.33556	1.59066	0.010	-19.10092	30.00000	Averaged
158 m,p-Xylene	0.65013	0.66611	0.010	-2.45766	30.00000	Averaged
164 o-Xylene	0.62290	0.65392	0.010	-4.97994	30.00000	Averaged
165 Styrene	1.06528	1.08889	0.010	-2.21721	30.00000	Averaged
167 Bromoform	0.74891	0.84778	0.010	-13.20253	30.00000	Averaged
168 Cumene	1.95673	2.03853	0.010	-4.18027	30.00000	Averaged
169 Cyclohexanone	0.69978	0.82546	0.010	-17.95981	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.95505	1.04609	0.010	-9.53221	30.00000	Averaged
177 Bromobenzene	0.59512	0.65845	0.010	-10.64200	30.00000	Averaged
178 Propylbenzene	0.58019	0.61549	0.010	-6.08447	30.00000	Averaged
179 1,2,3-Trichloropropane	0.30440	0.32269	0.010	-6.00908	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.19955	0.15402	0.010	22.81811	30.00000	Averaged
182 Decane	1.52203	1.57334	0.010	-3.37097	30.00000	Averaged
183 4-Ethyltoluene	0.63096	0.66414	0.010	-5.25793	30.00000	Averaged
184 2-Chlorotoluene	0.49401	0.53638	0.010	-8.57637	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.86871	0.92864	0.010	-6.89917	30.00000	Averaged
188 alpha Methyl Styrene	0.86300	0.87999	0.010	-1.96977	30.00000	Averaged
189 tert-Butylbenzene	1.62480	1.79070	0.010	-10.21021	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.63968	1.71921	0.010	-4.84993	30.00000	Averaged
192 sec-Butylbenzene	0.50500	0.55631	0.010	-10.16088	30.00000	Averaged
194 p-Cymene	2.23203	2.36963	0.010	-6.16449	30.00000	Averaged
195 1,3-Dichlorobenzene	1.12231	1.22530	0.010	-9.17637	30.00000	Averaged
196 1,4-Dichlorobenzene	1.13414	1.23403	0.010	-8.80715	30.00000	Averaged
199 alpha-Chlorotoluene	1.55742	1.62834	0.010	-4.55356	30.00000	Averaged
201 Undecane	1.75810	1.88212	0.010	-7.05438	30.00000	Averaged
202 Butylbenzene	0.56690	0.59574	0.010	-5.08745	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
204 1,2-Dichlorobenzene	1.10047	1.17780	0.010	-7.02639	30.00000	Averaged
206 1,2-Dibromo-3-chloropropane	0.66653	0.72385	0.010	-8.59994	30.00000	Averaged
207 Dodecane	1.39351	1.28975	0.010	7.44655	30.00000	Averaged
213 1,2,4-Trichlorobenzene	0.81307	0.76600	0.010	5.78961	30.00000	Averaged
215 Hexachlorobutadiene	0.57222	0.57282	0.010	-0.10615	30.00000	Averaged
216 Naphthalene	2.07796	1.80722	0.010	13.02934	30.00000	Averaged
222 1,2,3-Trichlorobenzene	0.71877	0.65706	0.010	8.58517	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080202.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 02-AUG-2021
Calibration Time: 11:55
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	163500	98100	228900	149292	-8.69
108 1,4-Difluorobenze	617655	370593	864717	558135	-9.64
153 Chlorobenzene-d5	600967	360580	841354	542388	-9.75

		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.

Data File: /chem/msdp.i/02AUG21.b/p080202.d

Date : 02-AUG-2021 10:30

Client ID: CCV

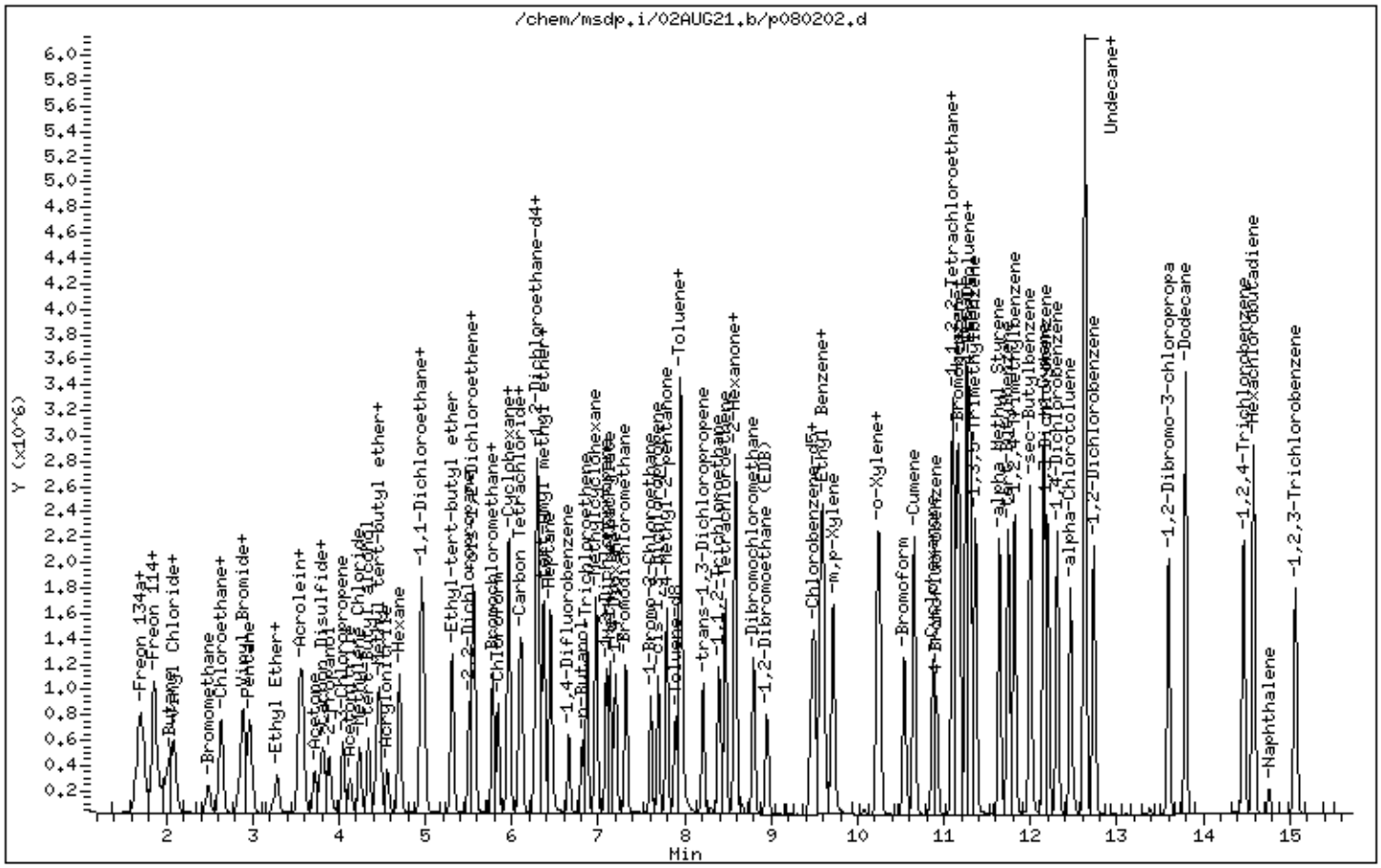
Instrument: msdp.i

Sample Info: 100mL 3018-2125A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107684-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:58 AM**	

Compound	%Recovery	Method Limits
1,1,1-Trichloroethane	103	70-130
1,1,2,2-Tetrachloroethane	107	70-130
1,1,2-Trichloroethane	110	70-130
1,1-Dichloroethane	106	70-130
1,1-Dichloroethene	97	70-130
1,2,4-Trichlorobenzene	121	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2-Dibromoethane (EDB)	114	70-130
1,2-Dichlorobenzene	108	70-130
1,2-Dichloroethane	118	70-130
1,2-Dichloropropane	106	70-130
1,3,5-Trimethylbenzene	106	70-130
1,3-Butadiene	121	70-130
1,3-Dichlorobenzene	110	70-130
1,4-Dichlorobenzene	111	70-130
1,4-Dioxane	97	70-130
2,2,4-Trimethylpentane	105	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
2-Hexanone	104	70-130
2-Propanol	110	70-130
3-Chloropropene	90	70-130
4-Ethyltoluene	104	70-130
4-Methyl-2-pentanone	102	70-130
Acetone	108	70-130
alpha-Chlorotoluene	102	70-130
Benzene	104	70-130
Bromodichloromethane	114	70-130
Bromoform	114	70-130
Bromomethane	92	70-130
Carbon Disulfide	96	70-130
Carbon Tetrachloride	111	70-130
Chlorobenzene	110	70-130
Chloroethane	96	70-130
Chloroform	107	70-130
Chloromethane	102	70-130
cis-1,2-Dichloroethene	105	70-130
cis-1,3-Dichloropropene	106	70-130
Cumene	104	70-130
Cyclohexane	94	70-130
Dibromochloromethane	116	70-130
Ethanol	93	70-130
Ethyl Benzene	108	70-130

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Client Sample ID: LCS

Lab ID#: 2107684-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:58 AM**	

Compound	%Recovery	Method Limits
Freon 11	109	70-130
Freon 12	110	70-130
Freon 113	100	70-130
Freon 114	108	70-130
Heptane	99	70-130
Hexachlorobutadiene	127	70-130
Hexane	104	70-130
m,p-Xylene	105	70-130
Methyl tert-butyl ether	93	70-130
Methylene Chloride	119	70-130
Naphthalene	104	60-140
o-Xylene	105	70-130
Propylbenzene	106	70-130
Propylene	112	70-130
Styrene	100	70-130
Tetrachloroethene	113	70-130
Tetrahydrofuran	119	70-130
Toluene	103	70-130
trans-1,2-Dichloroethene	97	70-130
trans-1,3-Dichloropropene	112	70-130
Trichloroethene	107	70-130
Vinyl Acetate	99	70-130
Vinyl Chloride	99	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080203.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 02-AUG-2021 10:58
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:15 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	
5.778	5.778 (1.000)	130	155775	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	118100				48.23- 108.23	75.81
5.778	5.778 (1.000)	49	317019				150.57- 210.57	203.51
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.659 (1.000)	114	592853	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	86075				0.00- 45.71	14.52
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	564064	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	295182				23.78- 83.78	52.33
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.308	6.308 (1.092)	65	216671	25.2037	25.204		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	126178				27.21- 87.21	58.23
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	639098	24.8251	24.825		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	66821				0.00- 40.44	10.46

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	412555			34.95- 94.95	64.55
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	360083	24.8598	24.860	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	438370			95.92- 155.92	121.74
10.921	10.921 (1.154)	176	349660			66.89- 126.89	97.11
4 Freon 134a					CAS #: 811-97-2		
1.646	1.646 (0.285)	83	294173	59.6660	59.666	80.00- 120.00	100.00
1.646	1.646 (0.285)	69	232164			59.44- 119.44	78.92
1.744	1.744 (0.302)	51	1317942			419.06- 479.06	448.02
5 Propylene					CAS #: 115-07-1		
1.688	1.674 (0.292)	41	400395	56.1691	56.169	80.00- 120.00	100.00
1.688	1.674 (0.292)	42	268183			35.28- 95.28	66.98
1.688	1.674 (0.292)	39	274265			38.35- 98.35	68.50
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	174631	49.4577	49.458	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1317942			597.63- 657.63	754.70
1.702	1.702 (0.295)	47	136885			33.72- 93.72	78.38
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	769784	55.0974	55.097	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	244318			2.37- 62.37	31.74
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.744 (0.304)	67	75246	54.5227	54.523	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1317942			1501.01-1561.01	1751.51
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	737178	53.7518	53.752	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	231343			2.30- 62.30	31.38
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	882709	55.9329	55.933	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	282552			2.44- 62.44	32.01
1.870	1.870 (0.324)	58	26606			0.00- 33.36	3.01
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	415487	51.2604	51.260	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	103820			0.00- 56.26	24.99
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.353)	58	93562	49.8310	49.831	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)							
2.039	2.032 (0.353)	43	853062			823.29- 883.29	911.76
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	481783	49.4086	49.408	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	143612			0.00- 59.69	29.81
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	474194	60.4636	60.464	80.00- 120.00	100.00
2.096	2.089 (0.363)	39	572590			52.37- 112.37	120.75
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	288401	45.9979	45.998	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	267810			64.07- 124.07	92.86
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	169054	48.2134	48.213	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	48055			0.04- 60.04	28.43
2.612	2.612 (0.452)	49	70333			4.54- 64.54	41.60
31 Isopentane					CAS #: 78-78-4		
2.641	2.633 (0.457)	43	594870	55.7553	55.755	80.00- 120.00	100.00
2.641	2.633 (0.457)	57	339995			34.12- 94.12	57.15
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	278061	47.9801	47.980	80.00- 120.00	100.00
2.848	2.841 (0.493)	108	273025			69.27- 129.27	98.19
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	811079	54.6296	54.630	80.00- 120.00	100.00
2.891	2.884 (0.500)	103	529526			34.72- 94.72	65.29
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.898 (0.503)	67	636600	49.7483	49.748	80.00- 120.00	100.00
2.906	2.898 (0.503)	69	196024			0.84- 60.84	30.79
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	920644	53.0869	53.087	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	120759			0.00- 44.98	13.12
2.970	2.970 (0.514)	72	54290			0.00- 37.39	5.90
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.570)	74	141097	48.2255	48.225	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	286899			163.46- 223.46	203.33
3.285	3.278 (0.569)	45	471265			250.40- 310.40	334.00

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	83569	54.0967	54.097	80.00- 120.00	100.00
3.285	3.278 (0.569)	45	471265			511.19- 571.19	563.92
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	146972	54.8283	54.828	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	201735			111.10- 171.10	137.26
43 Freon 113					CAS #: 76-13-1		
3.557	3.550 (0.616)	151	551192	49.9686	49.968	80.00- 120.00	100.00
3.557	3.550 (0.616)	153	354253			33.56- 93.56	64.27
3.550	3.550 (0.614)	101	668466			89.21- 149.21	121.28
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.621)	96	320793	48.6810	48.681	80.00- 120.00	100.00
3.586	3.579 (0.621)	98	201272			34.02- 94.02	62.74
3.586	3.579 (0.621)	61	683025			168.77- 228.77	212.92
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	220849	54.0791	54.079	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	796188			302.95- 362.95	360.51
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.822 (0.663)	76	834038	48.0413	48.041	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	699140	60.5800	60.580	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	316588			12.22- 72.22	45.28
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	909485	55.2575	55.257	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	171291			0.00- 47.19	18.83
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.045 (0.701)	76	130928	45.1430	45.143	80.00- 120.00	100.00
4.052	4.045 (0.701)	41	673884			396.19- 456.19	514.70
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	434664	56.6615	56.661	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	230534			20.95- 80.95	53.04
4.123	4.123 (0.714)	38	49313			0.00- 41.17	11.35
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.231 (0.733)	49	633498	59.7222	59.722	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	267685			22.03- 82.03	42.26
4.238	4.231 (0.733)	51	187042			0.18- 60.18	29.53

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 (0.752)	59	915462	47.6956	47.696	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	214318			0.00- 51.11	23.41
4.345	4.338 (0.752)	57	97339			0.00- 40.49	10.63
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	888874	46.4642	46.464	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	316410			3.10- 63.10	35.60
4.446	4.446 (0.769)	41	339322			1.28- 61.28	38.17
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.481	4.474 (0.776)	98	213884	48.5761	48.576	80.00- 120.00	100.00
4.481	4.474 (0.776)	61	636411			255.84- 315.84	297.55
4.481	4.474 (0.776)	96	336469			127.59- 187.59	157.31
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	344971	56.2819	56.282	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	401075			88.05- 148.05	116.26
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.813)	57	795106	51.8132	51.813	80.00- 120.00	100.00
4.696	4.696 (0.813)	43	599597			37.52- 97.52	75.41
4.696	4.696 (0.813)	86	83302			0.00- 41.48	10.48
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.961 (0.860)	63	699138	52.9957	52.996	80.00- 120.00	100.00
4.969	4.961 (0.860)	65	204005			0.00- 59.70	29.18
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.856)	45	1980326	55.4871	55.487	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	297306			0.00- 48.18	15.01
4.947	4.954 (0.856)	59	180815			0.00- 40.15	9.13
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.990 (0.865)	86	83866	49.4659	49.466	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	1771065			2432.48-2492.48	2111.77
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1513282	48.9829	48.983	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	448655			1.00- 61.00	29.65
5.305	5.305 (0.918)	41	325501			0.00- 48.73	21.51
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.954)	77	593589	50.6699	50.670	80.00- 120.00	100.00
5.513	5.506 (0.954)	79	191237			2.28- 62.28	32.22
5.513	5.506 (0.954)	97	144288			0.00- 53.93	24.31

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	239428	52.3989	52.399	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	371493			125.75- 185.75	155.16
5.549	5.549 (0.960)	61	890574			332.40- 392.40	371.96
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	169687	48.1941	48.194	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2621610			1214.50-1274.50	1544.96
5.556	5.556 (0.962)	57	84613			14.68- 74.68	49.86
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	205524	58.6853	58.685	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	890574			452.04- 512.04	433.32
5.577	5.570 (0.965)	70	84768			22.77- 82.77	41.24
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	694923	59.3453	59.345	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	145139			0.00- 55.82	20.89
5.778	5.771 (1.000)	72	161364			0.00- 57.59	23.22
92 Chloroform					CAS #: 67-66-3		
5.842	5.835 (1.011)	83	727972	53.7105	53.710	80.00- 120.00	100.00
5.842	5.835 (1.011)	85	471083			34.70- 94.70	64.71
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	461683	47.1160	47.116	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	883444			142.57- 202.57	191.35
5.957	5.957 (1.031)	41	514348			62.09- 122.09	111.41
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.964 (1.033)	97	790458	51.6249	51.625	80.00- 120.00	100.00
5.971	5.964 (1.033)	99	507638			34.02- 94.02	64.22
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.055)	119	799778	55.6927	55.693	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	794960			70.64- 130.64	99.40
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	205643	50.9584	50.958	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	519614			226.85- 286.85	252.68
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.279 (1.087)	57	2796485	52.4299	52.430	80.00- 120.00	100.00
6.279	6.279 (1.087)	56	936032			2.24- 62.24	33.47
6.279	6.279 (1.087)	41	748509			0.00- 54.39	26.77

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	1018651	52.0679	52.068	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	237817			0.00- 52.90	23.35
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	266468	48.3039	48.304	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1066575			372.79- 432.79	400.26
6.358	6.358 (0.955)	55	415292			112.09- 172.09	155.85
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	600023	58.9420	58.942	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	181679			0.79- 60.79	30.28
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	385507	49.7403	49.740	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1177952			226.53- 286.53	305.56
6.444	6.444 (0.968)	57	555387			100.85- 160.85	144.07
110 n-Butanol					CAS #: 71-36-3		
6.809	6.809 (1.023)	56	325371	45.7443	45.744	80.00- 120.00	100.00
6.809	6.809 (1.023)	41	247941			40.99- 100.99	76.20
6.809	6.809 (1.023)	43	204695			27.38- 87.38	62.91
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	509662	53.6870	53.687	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	554317			76.29- 136.29	108.76
6.867	6.867 (1.031)	97	333511			33.63- 93.63	65.44
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.089 (1.066)	63	532957	53.1371	53.137	80.00- 120.00	100.00
7.096	7.089 (1.066)	62	380691			41.07- 101.07	71.43
7.096	7.096 (1.066)	41	301848			22.53- 82.53	56.64
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	396956	51.2177	51.218	80.00- 120.00	100.00
7.139	7.132 (0.755)	41	975579			179.84- 239.84	245.76
7.139	7.139 (0.755)	100	156723			9.59- 69.59	39.48
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	259082	48.6052	48.605	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	277593			68.28- 128.28	107.14
7.175	7.175 (1.077)	57	97603			2.68- 62.68	37.67
118 Dibromomethane					CAS #: 74-95-3		
7.203	7.203 (0.761)	174	489661	58.4998	58.500	80.00- 120.00	100.00
7.203	7.203 (0.761)	93	448317			60.09- 120.09	91.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.203	7.203 (0.761)	95	389549			48.38- 108.38	79.55
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	837832	56.9207	56.921	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	531925			35.24- 95.24	63.49
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	661592	53.2027	53.203	80.00- 120.00	100.00
7.691	7.698 (1.155)	77	207139			2.42- 62.42	31.31
7.691	7.691 (1.155)	39	488762			37.16- 97.16	73.88
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	671278	48.8646	48.865	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	317738			15.78- 75.78	47.33
6.974	6.974 (1.047)	55	840145			84.64- 144.64	125.16
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.171)	58	517483	50.8069	50.807	80.00- 120.00	100.00
7.798	7.791 (1.171)	43	1544701			242.35- 302.35	298.50
7.798	7.798 (1.171)	85	152892			3.24- 63.24	29.55
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.195)	91	1391078	51.5373	51.537	80.00- 120.00	100.00
7.956	7.948 (1.195)	92	807311			28.38- 88.38	58.03
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.194)	57	610316	53.0301	53.030	80.00- 120.00	100.00
7.948	7.948 (1.194)	85	470672			56.00- 116.00	77.12
7.948	7.948 (1.194)	43	1713272			228.66- 288.66	280.72
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.213 (0.868)	75	621913	56.0273	56.027	80.00- 120.00	100.00
8.213	8.213 (0.868)	77	195958			1.24- 61.24	31.51
8.213	8.213 (0.868)	39	445642			34.11- 94.11	71.66
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	505801	55.1290	55.129	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	315049			31.96- 91.96	62.29
8.400	8.400 (0.888)	83	423323			52.93- 112.93	83.69
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	725673	56.4485	56.448	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	562401			47.84- 107.84	77.50
8.464	8.464 (0.895)	131	539616			45.29- 105.29	74.36

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	678773	51.7823	51.782	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1446743			162.87- 222.87	213.14
8.586	8.586 (0.908)	100	96060			0.00- 45.94	14.15
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	680983	53.1274	53.127	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	935759			94.99- 154.99	137.41
8.579	8.579 (1.288)	78	216875			2.05- 62.05	31.85
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	993596	57.9606	57.961	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	778084			47.45- 107.45	78.31
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	839667	57.0612	57.061	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	787048			64.21- 124.21	93.73
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	994172	54.0225	54.022	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	289772			0.00- 59.64	29.15
7.605	7.605 (1.142)	144	96894			0.00- 39.63	9.75
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1226749	54.7704	54.770	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	389772			1.74- 61.74	31.77
9.496	9.496 (1.004)	77	638990			25.04- 85.04	52.09
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	630207	53.8087	53.809	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1857512			273.74- 333.74	294.75
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	1771155	58.7767	58.777	80.00- 120.00	100.00
9.596	9.596 (1.014)	57	1317182			54.16- 114.16	74.37
9.603	9.596 (1.015)	85	349657			0.00- 53.90	19.74
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	588144	46.9003	46.900	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	564064			57.42- 117.42	95.91
9.596	9.603 (1.014)	95	213783			5.70- 65.70	36.35
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	770515	52.5283	52.528	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1478717			163.73- 223.73	191.91

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	739391	52.6100	52.610	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1482315			177.45- 237.45	200.48
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1200191	49.9344	49.934	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	560017			17.88- 77.88	46.66
167 Bromoform					CAS #: 75-25-2		
10.541	10.541 (1.114)	173	966597	57.2042	57.204	80.00- 120.00	100.00
10.541	10.541 (1.114)	171	494826			21.25- 81.25	51.19
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2287303	51.8089	51.809	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	660063			0.00- 58.52	28.86
10.649	10.649 (1.126)	51	339051			0.00- 43.00	14.82
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	671346	42.5203	42.520	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	190937			1.94- 61.94	28.44
10.871	10.871 (1.149)	42	461795			37.89- 97.89	68.79
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.107 (1.173)	83	1157842	53.7322	53.732	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	754006			35.20- 95.20	65.12
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	756241	56.3206	56.320	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	732630			67.21- 127.21	96.88
11.179	11.179 (1.182)	77	441548			29.02- 89.02	58.39
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	696974	53.2422	53.242	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2726763			366.49- 426.49	391.23
11.150	11.150 (1.179)	105	100866			0.00- 44.85	14.47
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	366997	53.4360	53.436	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1150865			280.55- 340.55	313.59
11.100	11.100 (1.173)	61	174229			15.49- 75.49	47.47
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	321101	71.3182	71.318	80.00- 120.00	100.00(R)
11.179	11.165 (1.182)	89	220502			49.11- 109.11	68.67
11.179	11.179 (1.182)	75	1150865			426.44- 486.44	358.41

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	1727057	50.2914	50.291	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	441531			0.00- 57.66	25.57
11.258	11.258 (1.190)	142	64319			0.00- 34.09	3.72
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.286 (1.193)	120	739709	51.9601	51.960	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2302628			284.55- 344.55	311.29
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	607809	54.5304	54.530	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2007157			315.17- 375.17	330.23
11.301	11.301 (1.195)	65	297966			21.55- 81.55	49.02
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1037628	52.9395	52.939	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1998620			164.93- 224.93	192.61
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	857989	44.0641	44.064	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	465790			25.30- 85.30	54.29
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1977011	53.9287	53.929	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	488066			0.00- 54.25	24.69
11.738	11.738 (1.241)	91	1145312			31.27- 91.27	57.93
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.816 (1.249)	105	1919922	51.8962	51.896	80.00- 120.00	100.00
11.816	11.816 (1.249)	120	988427			19.05- 79.05	51.48
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.995 (1.268)	134	620054	54.4192	54.419	80.00- 120.00	100.00
11.996	11.995 (1.268)	105	2848693			437.55- 497.55	459.43
11.996	11.995 (1.268)	91	431050			40.76- 100.76	69.52
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2629018	52.2041	52.204	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	694309			0.00- 55.54	26.41
12.160	12.160 (1.285)	91	543687			0.00- 51.48	20.68
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1397486	55.1881	55.188	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	899847			33.21- 93.21	64.39
12.196	12.196 (1.289)	111	554382			11.31- 71.31	39.67

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	1416889	55.3706	55.371	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	905524			33.90- 93.90	63.91
12.311	12.311 (1.301)	111	537989			9.45- 69.45	37.97
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1797489	51.1531	51.153	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	425049			0.00- 53.26	23.65
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2152231	54.2572	54.257	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2079571			58.12- 118.12	96.62
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	665174	52.0049	52.005	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2273729			314.79- 374.79	341.82
12.626	12.626 (1.335)	92	1197802			154.29- 214.29	180.07
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.740 (1.346)	146	1337985	53.8868	53.887	80.00- 120.00	100.00
12.733	12.740 (1.346)	148	857641			33.84- 93.84	64.10
12.733	12.733 (1.346)	111	551053			12.73- 72.73	41.19
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	827536	55.0277	55.028	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	662515			52.48- 112.48	80.06
13.600	13.600 (1.438)	155	637474			47.41- 107.41	77.03
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	1992637	63.3765	63.376	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1792863			52.87- 112.87	89.97
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1285241	70.0595	70.059	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1231410			65.33- 125.33	95.81
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	949980	73.5809	73.581	80.00- 120.00	100.00
14.581	14.581 (1.541)	223	598660			33.17- 93.17	63.02
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	284251	6.06285	6.063	80.00- 120.00	100.00
14.760	14.768 (1.560)	127	34351			0.00- 42.88	12.08
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.068 (1.593)	180	1161912	71.6463	71.646	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)							
15.068	15.068 (1.593)	182	1107824			65.75- 125.75	95.34
15.068	15.068 (1.593)	145	396117			5.23- 65.23	34.09

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080203.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	155775	4.34
108 1,4-Difluorobenze	558135	334881	781389	592853	6.22
153 Chlorobenzene-d5	542388	325433	759343	564064	4.00

		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.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
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/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	59.666	119.33	70-130
5 Propylene	50.000	56.169	112.34	70-130
7 1,1-Difluoroethan	50.000	49.458	98.92	70-130
8 Freon 12	50.000	55.097	110.19	70-130
9 Chlorodifluoromet	50.000	54.523	109.05	70-130
10 Freon 114	50.000	53.752	107.50	70-130
12 Isobutane	50.000	55.933	111.87	70-130
15 Chloromethane	50.000	51.260	102.52	70-130
18 Butane	50.000	49.831	99.66	70-130
19 Vinyl Chloride	50.000	49.408	98.82	70-130
20 1,3-Butadiene	50.000	60.464	120.93	70-130
24 Bromomethane	50.000	45.998	92.00	70-130
30 Chloroethane	50.000	48.213	96.43	70-130
31 Isopentane	50.000	55.755	111.51	70-130
32 Vinyl Bromide	50.000	47.980	95.96	70-130
33 Freon 11	50.000	54.630	109.26	70-130
34 Dichlorofluoromet	50.000	49.748	99.50	70-130
35 Pentane	50.000	53.087	106.17	70-130
38 Ethyl Ether	50.000	48.225	96.45	70-130
39 Ethanol	58.000	54.097	93.27	70-130
42 Acrolein	58.000	54.828	94.53	70-130
43 Freon 113	50.000	49.968	99.94	70-130
44 1,1-Dichloroethen	50.000	48.681	97.36	70-130
47 Acetone	50.000	54.079	108.16	70-130
48 Carbon Disulfide	50.000	48.041	96.08	70-130
49 Iodomethane	50.000	60.580	121.16	70-130
52 2-Propanol	50.000	55.257	110.51	70-130
54 3-Chloropropene	50.000	45.143	90.29	70-130
57 Acetonitrile	50.000	56.661	113.32	70-130
59 Methylene Chlorid	50.000	59.722	119.44	70-130
62 tert-Butyl alcoho	50.000	47.696	95.39	70-130
63 Methyl tert-butyl	50.000	46.464	92.93	70-130
64 trans-1,2-Dichlor	50.000	48.576	97.15	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	56.282	112.56	70-130
67	Hexane	50.000	51.813	103.63	70-130
71	1,1-Dichloroethan	50.000	52.996	105.99	70-130
72	Isopropyl ether	50.000	55.487	110.97	70-130
73	Vinyl Acetate	50.000	49.466	98.93	70-130
79	Ethyl-tert-butyl	50.000	48.983	97.97	70-130
84	2,2-Dichloropropa	50.000	50.670	101.34	70-130
85	cis-1,2-Dichloroe	50.000	52.399	104.80	70-130
86	2-Butanone	50.000	48.194	96.39	70-130
87	Ethyl Acetate	50.000	58.685	117.37	70-130
89	Tetrahydrofuran	50.000	59.345	118.69	70-130
92	Chloroform	50.000	53.710	107.42	70-130
94	Cyclohexane	50.000	47.116	94.23	70-130
96	1,1,1-Trichloroet	50.000	51.625	103.25	70-130
99	1,1-Dichloroprope	50.000	50.958	101.92	70-130
97	Carbon Tetrachlor	50.000	55.693	111.39	70-130
101	2,2,4-Trimethylpe	50.000	52.430	104.86	70-130
102	Benzene	50.000	52.068	104.14	70-130
105	tert-Amyl methyl	50.000	48.304	96.61	70-130
106	1,2-Dichloroethan	50.000	58.942	117.88	70-130
107	Heptane	50.000	49.740	99.48	70-130
110	n-Butanol	50.000	45.744	91.49	70-130
111	Trichloroethene	50.000	53.687	107.37	70-130
118	Dibromomethane	50.000	58.500	117.00	70-130
127	Methylcyclohexane	50.000	48.865	97.73	70-130
114	1,2-Dichloropropa	50.000	53.137	106.27	70-130
116	Methyl Methacryla	50.000	51.218	102.44	70-130
117	1,4-Dioxane	50.000	48.605	97.21	70-130
122	Bromodichlorometh	50.000	56.921	113.84	70-130
126	cis-1,3-Dichlorop	50.000	53.203	106.41	70-130
131	4-Methyl-2-pentan	50.000	50.807	101.61	70-130
136	Octane	50.000	53.030	106.06	70-130
137	Toluene	50.000	51.537	103.07	70-130
139	trans-1,3-Dichlor	50.000	56.027	112.05	70-130
141	1,1,2-Trichloroet	50.000	55.129	110.26	70-130
142	Tetrachloroethene	50.000	56.448	112.90	70-130
143	2-Hexanone	50.000	51.782	103.56	70-130
144	1,3-Dichloropropa	50.000	53.127	106.25	70-130
146	Dibromochlorometh	50.000	57.961	115.92	70-130
148	1,2-Dibromoethane	50.000	57.061	114.12	70-130
151	1-Bromo-2-Chloroe	50.000	54.022	108.05	70-130
154	Chlorobenzene	50.000	54.770	109.54	70-130
155	Ethyl Benzene	50.000	53.809	107.62	70-130
156	Nonane	50.000	58.777	117.55	70-130
157	1,1,1,2-Tetrachlo	50.000	46.900	93.80	70-130
158	m,p-Xylene	50.000	52.528	105.06	70-130
164	o-Xylene	50.000	52.610	105.22	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165	Styrene	50.000	49.934	99.87	70-130
167	Bromoform	50.000	57.204	114.41	70-130
168	Cumene	50.000	51.809	103.62	70-130
169	Cyclohexanone	50.000	42.520	85.04	70-130
175	1,1,2,2-Tetrachlo	50.000	53.732	107.46	70-130
177	Bromobenzene	50.000	56.320	112.64	70-130
178	Propylbenzene	50.000	53.242	106.48	70-130
179	1,2,3-Trichloropr	50.000	53.436	106.87	70-130
181	trans-1,4-Dichlor	50.000	71.318	142.64*	70-130
182	Decane	50.000	50.291	100.58	70-130
183	4-Ethyltoluene	50.000	51.960	103.92	70-130
184	2-Chlorotoluene	50.000	54.530	109.06	70-130
185	1,3,5-Trimethylbe	50.000	52.939	105.88	70-130
188	alpha Methyl Styr	50.000	44.064	88.13	70-130
189	tert-Butylbenzene	50.000	53.929	107.86	70-130
190	1,2,4-Trimethylbe	50.000	51.896	103.79	70-130
192	sec-Butylbenzene	50.000	54.419	108.84	70-130
194	p-Cymene	50.000	52.204	104.41	70-130
195	1,3-Dichlorobenze	50.000	55.188	110.38	70-130
196	1,4-Dichlorobenze	50.000	55.371	110.74	70-130
199	alpha-Chlorotolue	50.000	51.153	102.31	70-130
201	Undecane	50.000	54.257	108.51	70-130
202	Butylbenzene	50.000	52.005	104.01	70-130
204	1,2-Dichlorobenze	50.000	53.887	107.77	70-130
206	1,2-Dibromo-3-chl	50.000	55.028	110.06	70-130
207	Dodecane	50.000	63.376	126.75	70-130
213	1,2,4-Trichlorobe	58.000	70.059	120.79	70-130
215	Hexachlorobutadie	58.000	73.581	126.86	70-130
216	Naphthalene	5.800	6.063	104.53	60-140
222	1,2,3-Trichlorobe	58.000	71.646	123.53	70-130

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104	1,2-Dichloroethan	25.000	25.204	100.81	70-130
$ 134	Toluene-d8	25.000	24.825	99.30	70-130
$ 170	4-Bromofluorobenz	25.000	24.860	99.44	70-130

Data File: /chem/msdp.i/02AUG21.b/p080203.d

Page 1

Date : 02-AUG-2021 10:58

Client ID: LCS

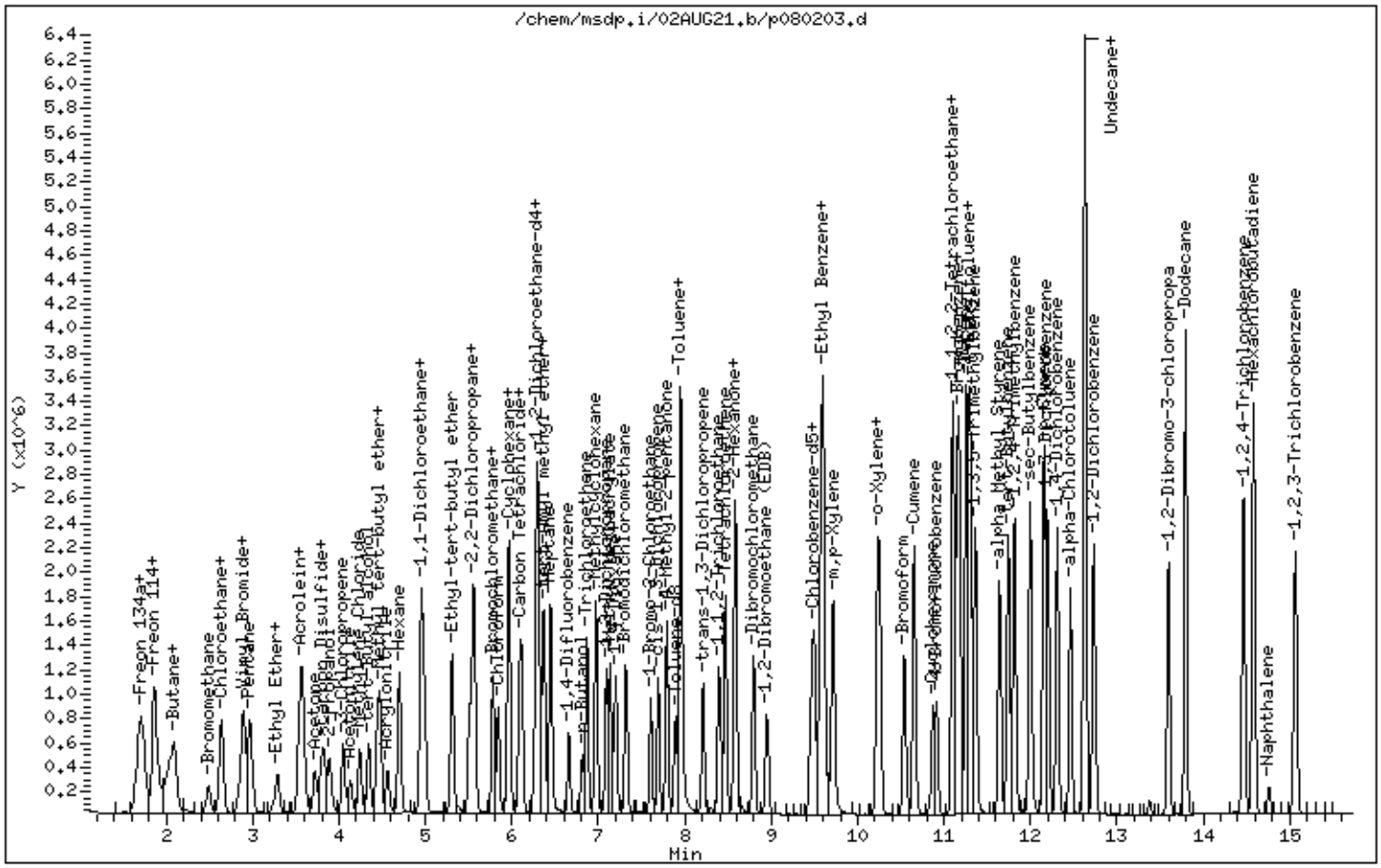
Instrument: msdp.i

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#: 2107684-14AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 11:27 AM**	

Compound	%Recovery	Method Limits
1,1,1-Trichloroethane	103	70-130
1,1,2,2-Tetrachloroethane	107	70-130
1,1,2-Trichloroethane	108	70-130
1,1-Dichloroethane	105	70-130
1,1-Dichloroethene	98	70-130
1,2,4-Trichlorobenzene	128	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2-Dibromoethane (EDB)	113	70-130
1,2-Dichlorobenzene	107	70-130
1,2-Dichloroethane	117	70-130
1,2-Dichloropropane	107	70-130
1,3,5-Trimethylbenzene	104	70-130
1,3-Butadiene	116	70-130
1,3-Dichlorobenzene	110	70-130
1,4-Dichlorobenzene	110	70-130
1,4-Dioxane	99	70-130
2,2,4-Trimethylpentane	104	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
2-Hexanone	103	70-130
2-Propanol	109	70-130
3-Chloropropene	94	70-130
4-Ethyltoluene	104	70-130
4-Methyl-2-pentanone	102	70-130
Acetone	103	70-130
alpha-Chlorotoluene	102	70-130
Benzene	104	70-130
Bromodichloromethane	113	70-130
Bromoform	113	70-130
Bromomethane	90	70-130
Carbon Disulfide	95	70-130
Carbon Tetrachloride	111	70-130
Chlorobenzene	108	70-130
Chloroethane	96	70-130
Chloroform	107	70-130
Chloromethane	99	70-130
cis-1,2-Dichloroethene	104	70-130
cis-1,3-Dichloropropene	107	70-130
Cumene	102	70-130
Cyclohexane	96	70-130
Dibromochloromethane	115	70-130
Ethanol	90	70-130
Ethyl Benzene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 2107684-14AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 11:27 AM**	

Compound	%Recovery	Method Limits
Freon 11	108	70-130
Freon 12	107	70-130
Freon 113	99	70-130
Freon 114	103	70-130
Heptane	100	70-130
Hexachlorobutadiene	134 Q	70-130
Hexane	103	70-130
m,p-Xylene	103	70-130
Methyl tert-butyl ether	92	70-130
Methylene Chloride	116	70-130
Naphthalene	111	60-140
o-Xylene	103	70-130
Propylbenzene	105	70-130
Propylene	109	70-130
Styrene	98	70-130
Tetrachloroethene	111	70-130
Tetrahydrofuran	117	70-130
Toluene	103	70-130
trans-1,2-Dichloroethene	96	70-130
trans-1,3-Dichloropropene	111	70-130
Trichloroethene	109	70-130
Vinyl Acetate	96	70-130
Vinyl Chloride	93	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080204.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 02-AUG-2021 11:27
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:15 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 (PPBV)	CONCENTRATIONS FINAL (PPBV)		
RT	EXP RT (REL RT)	MASS	RESPONSE				TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	162538	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	125589				48.23- 108.23	77.27
5.778	5.778 (1.000)	49	342764				150.57- 210.57	210.88
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	610537	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	89221				0.00- 45.71	14.61
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	590330	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	304192				23.78- 83.78	51.53
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	227775	25.3928	25.393		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	126920				27.21- 87.21	55.72
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	666830	25.1521	25.152		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66658				0.00- 40.44	10.00

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	431983			34.95- 94.95	64.78
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	384023	25.3330	25.333	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	469942			95.92- 155.92	122.37
10.921	10.921 (1.154)	176	368254			66.89- 126.89	95.89
4 Freon 134a					CAS #: 811-97-2		
1.647	1.646 (0.285)	83	303923	59.0784	59.078	80.00- 120.00	100.00
1.647	1.646 (0.285)	69	243339			59.44- 119.44	80.07
1.744	1.744 (0.302)	51	1353999			419.06- 479.06	445.51
5 Propylene					CAS #: 115-07-1		
1.688	1.674 (0.292)	41	404032	54.3207	54.321	80.00- 120.00	100.00
1.688	1.674 (0.292)	42	270574			35.28- 95.28	66.97
1.688	1.674 (0.292)	39	280979			38.35- 98.35	69.54
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.294)	65	182016	49.4040	49.404	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1353999			597.63- 657.63	743.89
1.702	1.702 (0.294)	47	137664			33.72- 93.72	75.63
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	782563	53.6812	53.681	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	253453			2.37- 62.37	32.39
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.744 (0.304)	67	80981	56.2368	56.237	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1353999			1501.01-1561.01	1671.99
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	735208	51.3774	51.377	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	235264			2.30- 62.30	32.00
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	898479	54.5631	54.563	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	292001			2.44- 62.44	32.50
1.870	1.870 (0.323)	58	28302			0.00- 33.36	3.15
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	418897	49.5305	49.530	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	107825			0.00- 56.26	25.74
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.352)	58	94111	48.0376	48.038	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)							
2.039	2.032 (0.352)	43	882653			823.29- 883.29	937.88
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	472370	46.4274	46.427	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	137873			0.00- 59.69	29.19
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	475074	58.0551	58.055	80.00- 120.00	100.00
2.096	2.089 (0.362)	39	424168			52.37- 112.37	89.28
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	295417	45.1562	45.156	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	277476			64.07- 124.07	93.93
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.451)	64	175081	47.8546	47.854	80.00- 120.00	100.00
2.612	2.612 (0.451)	66	50102			0.04- 60.04	28.62
2.612	2.612 (0.451)	49	69120			4.54- 64.54	39.48
31 Isopentane					CAS #: 78-78-4		
2.641	2.633 (0.456)	43	601685	54.0472	54.047	80.00- 120.00	100.00
2.641	2.633 (0.456)	57	356371			34.12- 94.12	59.23
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.492)	106	287570	47.5561	47.556	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	279952			69.27- 129.27	97.35
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	833401	53.7972	53.797	80.00- 120.00	100.00
2.891	2.884 (0.500)	103	544553			34.72- 94.72	65.34
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.898 (0.502)	67	663663	49.7050	49.705	80.00- 120.00	100.00
2.906	2.898 (0.502)	69	203348			0.84- 60.84	30.64
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	938868	51.8849	51.885	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	125300			0.00- 44.98	13.35
2.970	2.970 (0.513)	72	57849			0.00- 37.39	6.16
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	144268	47.2573	47.257	80.00- 120.00	100.00
3.285	3.285 (0.568)	59	302475			163.46- 223.46	209.66
3.285	3.278 (0.568)	45	482600			250.40- 310.40	334.52

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	83749	51.9573	51.957	80.00- 120.00	100.00
3.285	3.278 (0.568)	45	481763			511.19- 571.19	575.24
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.611)	55	146914	52.5263	52.526	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	211554			111.10- 171.10	144.00
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	572493	49.7400	49.740	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	366238			33.56- 93.56	63.97
3.550	3.550 (0.614)	101	692006			89.21- 149.21	120.88
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	335313	48.7669	48.767	80.00- 120.00	100.00
3.586	3.579 (0.620)	98	212645			34.02- 94.02	63.42
3.586	3.579 (0.620)	61	705665			168.77- 228.77	210.45
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	218816	51.3517	51.352	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	812407			302.95- 362.95	371.27
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.822 (0.662)	76	860406	47.4978	47.498	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	751243	62.3859	62.386	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	338461			12.22- 72.22	45.05
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	932733	54.3118	54.312	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	170314			0.00- 47.19	18.26
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.045 (0.700)	76	141662	46.8114	46.811	80.00- 120.00	100.00
4.052	4.045 (0.700)	41	701135			396.19- 456.19	494.94
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	439283	54.8808	54.881	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	229125			20.95- 80.95	52.16
4.131	4.123 (0.714)	38	50075			0.00- 41.17	11.40
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.231 (0.733)	49	642554	58.0552	58.055	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	275693			22.03- 82.03	42.91
4.238	4.231 (0.733)	51	190949			0.18- 60.18	29.72

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 (0.750)	59	959227	47.8961	47.896	80.00- 120.00	100.00
4.338	4.338 (0.750)	41	225663			0.00- 51.11	23.53
4.338	4.338 (0.750)	57	104214			0.00- 40.49	10.86
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	921098	46.1450	46.145	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	332119			3.10- 63.10	36.06
4.446	4.446 (0.768)	41	332879			1.28- 61.28	36.14
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.474 (0.775)	98	220840	48.0687	48.069	80.00- 120.00	100.00
4.482	4.474 (0.775)	61	655032			255.84- 315.84	296.61
4.482	4.474 (0.775)	96	351500			127.59- 187.59	159.17
66 Acrylonitrile					CAS #: 107-13-1		
4.567	4.560 (0.789)	52	354876	55.4886	55.489	80.00- 120.00	100.00
4.567	4.560 (0.789)	53	415521			88.05- 148.05	117.09
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	827314	51.6686	51.668	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	616655			37.52- 97.52	74.54
4.696	4.696 (0.812)	86	88991			0.00- 41.48	10.76
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.961 (0.859)	63	725269	52.6888	52.689	80.00- 120.00	100.00
4.969	4.961 (0.859)	65	208668			0.00- 59.70	28.77
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.855)	45	2039113	54.7568	54.757	80.00- 120.00	100.00
4.947	4.954 (0.855)	87	309115			0.00- 48.18	15.16
4.947	4.954 (0.855)	59	188811			0.00- 40.15	9.26
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.990 (0.864)	86	84587	47.8153	47.815	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1815390			2432.48-2492.48	2146.16
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1589100	49.2966	49.296	80.00- 120.00	100.00
5.305	5.305 (0.917)	87	462308			1.00- 61.00	29.09
5.305	5.305 (0.917)	41	330322			0.00- 48.73	20.79
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.953)	77	619315	50.6661	50.666	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	201304			2.28- 62.28	32.50
5.513	5.506 (0.953)	97	144395			0.00- 53.93	23.32

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	247476	51.9065	51.906	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	382314			125.75- 185.75	154.49
5.549	5.549 (0.959)	61	919418			332.40- 392.40	371.52
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	177372	48.2802	48.280	80.00- 120.00	100.00
5.563	5.563 (0.962)	43	2675575			1214.50-1274.50	1508.45
5.556	5.556 (0.960)	57	87998			14.68- 74.68	49.61
87 Ethyl Acetate					CAS #: 141-78-6		
5.577	5.570 (0.964)	45	211764	57.9510	57.951	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	919418			452.04- 512.04	434.17
5.577	5.570 (0.964)	70	88992			22.77- 82.77	42.02
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (0.999)	42	716751	58.6623	58.662	80.00- 120.00	100.00
5.778	5.771 (0.999)	71	151420			0.00- 55.82	21.13
5.778	5.771 (0.999)	72	168722			0.00- 57.59	23.54
92 Chloroform					CAS #: 67-66-3		
5.843	5.835 (1.010)	83	759515	53.7058	53.706	80.00- 120.00	100.00
5.843	5.835 (1.010)	85	493810			34.70- 94.70	65.02
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	489916	47.9167	47.917	80.00- 120.00	100.00
5.957	5.957 (1.030)	56	912779			142.57- 202.57	186.31
5.957	5.957 (1.030)	41	526701			62.09- 122.09	107.51
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.964 (1.032)	97	819919	51.3207	51.321	80.00- 120.00	100.00
5.971	5.964 (1.032)	99	518540			34.02- 94.02	63.24
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.053)	119	832772	55.5771	55.577	80.00- 120.00	100.00
6.093	6.086 (1.053)	117	831504			70.64- 130.64	99.85
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.918)	110	214133	51.5253	51.525	80.00- 120.00	100.00
6.115	6.115 (0.917)	75	538161			226.85- 286.85	251.32
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.279 (1.085)	57	2892020	51.9648	51.965	80.00- 120.00	100.00
6.279	6.279 (1.085)	56	956402			2.24- 62.24	33.07
6.279	6.279 (1.085)	41	765808			0.00- 54.39	26.48

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	1046574	51.9457	51.946	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	241968			0.00- 52.90	23.12
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	275507	48.4958	48.496	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1112377			372.79- 432.79	403.76
6.358	6.358 (0.954)	55	427399			112.09- 172.09	155.13
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	612126	58.3893	58.389	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	186463			0.79- 60.79	30.46
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.967)	71	399417	50.0424	50.042	80.00- 120.00	100.00
6.444	6.444 (0.967)	43	1206638			226.53- 286.53	302.10
6.444	6.444 (0.967)	57	573975			100.85- 160.85	143.70
110 n-Butanol					CAS #: 71-36-3		
6.810	6.809 (1.021)	56	337581	46.0862	46.086	80.00- 120.00	100.00
6.810	6.809 (1.021)	41	256540			40.99- 100.99	75.99
6.810	6.809 (1.021)	43	204114			27.38- 87.38	60.46
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	531626	54.3786	54.378	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	576568			76.29- 136.29	108.45
6.867	6.867 (1.030)	97	342645			33.63- 93.63	64.45
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.089 (1.064)	63	552292	53.4699	53.470	80.00- 120.00	100.00
7.096	7.089 (1.064)	62	392978			41.07- 101.07	71.15
7.096	7.096 (1.064)	41	298920			22.53- 82.53	54.12
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	418384	51.5806	51.581	80.00- 120.00	100.00
7.139	7.132 (0.755)	41	1002521			179.84- 239.84	239.62
7.139	7.139 (0.755)	100	162982			9.59- 69.59	38.96
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.076)	88	271838	49.5210	49.521	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	285236			68.28- 128.28	104.93
7.175	7.175 (1.076)	57	98970			2.68- 62.68	36.41
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.203 (0.762)	174	505132	57.6630	57.663	80.00- 120.00	100.00
7.203	7.203 (0.761)	93	455544			60.09- 120.09	90.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.203	7.203 (0.761)	95	405083			48.38- 108.38	80.19
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	854385	56.3640	56.364	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	553104			35.24- 95.24	64.74
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.691 (1.155)	75	684258	53.4316	53.432	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	218604			2.42- 62.42	31.95
7.691	7.691 (1.154)	39	497874			37.16- 97.16	72.76
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	698783	49.3935	49.393	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	328089			15.78- 75.78	46.95
6.974	6.974 (1.046)	55	858799			84.64- 144.64	122.90
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	533933	50.9036	50.904	80.00- 120.00	100.00
7.798	7.791 (1.170)	43	1586037			242.35- 302.35	297.05
7.798	7.798 (1.170)	85	161132			3.24- 63.24	30.18
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.193)	91	1427656	51.3605	51.360	80.00- 120.00	100.00
7.956	7.948 (1.193)	92	828240			28.38- 88.38	58.01
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.192)	57	625812	52.8015	52.802	80.00- 120.00	100.00
7.948	7.948 (1.192)	85	481704			56.00- 116.00	76.97
7.948	7.948 (1.192)	43	1759848			228.66- 288.66	281.21
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.213 (0.868)	75	646982	55.6924	55.692	80.00- 120.00	100.00
8.213	8.213 (0.868)	77	200778			1.24- 61.24	31.03
8.213	8.213 (0.868)	39	459201			34.11- 94.11	70.98
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	520863	54.2448	54.245	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	319604			31.96- 91.96	61.36
8.400	8.400 (0.888)	83	433462			52.93- 112.93	83.22
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	747631	55.5690	55.569	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	579741			47.84- 107.84	77.54
8.464	8.464 (0.895)	131	556448			45.29- 105.29	74.43

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	704773	51.3736	51.374	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1479411			162.87- 222.87	209.91
8.586	8.586 (0.908)	100	102249			0.00- 45.94	14.51
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	699664	53.0038	53.004	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	966342			94.99- 154.99	138.12
8.579	8.579 (1.287)	78	230142			2.05- 62.05	32.89
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	1031428	57.4905	57.490	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	808449			47.45- 107.45	78.38
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	871834	56.6110	56.611	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	823203			64.21- 124.21	94.42
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	1030601	54.3800	54.380	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	303765			0.00- 59.64	29.47
7.605	7.605 (1.141)	144	100180			0.00- 39.63	9.72
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1270162	54.1855	54.185	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	404234			1.74- 61.74	31.83
9.496	9.496 (1.004)	77	665054			25.04- 85.04	52.36
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	639615	52.1821	52.182	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1927287			273.74- 333.74	301.32
156 Nonane					CAS #: 111-84-2		
9.603	9.596 (1.015)	43	1843912	58.4686	58.469	80.00- 120.00	100.00
9.603	9.596 (1.015)	57	1406510			54.16- 114.16	76.28
9.603	9.596 (1.015)	85	373686			0.00- 53.90	20.27
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	612427	46.6637	46.664	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	590330			57.42- 117.42	96.39
9.596	9.603 (1.014)	95	218107			5.70- 65.70	35.61
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	793494	51.6880	51.688	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1536889			163.73- 223.73	193.69

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	754765	51.3145	51.314	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1517450			177.45- 237.45	201.05
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1235287	49.1079	49.108	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	580420			17.88- 77.88	46.99
167 Bromoform					CAS #: 75-25-2		
10.541	10.541 (1.114)	173	995693	56.3043	56.304	80.00- 120.00	100.00
10.541	10.541 (1.114)	171	515479			21.25- 81.25	51.77
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2356256	50.9961	50.996	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	684234			0.00- 58.52	29.04
10.649	10.649 (1.126)	51	340031			0.00- 43.00	14.43
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	688293	41.6540	41.654	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	197735			1.94- 61.94	28.73
10.871	10.871 (1.149)	42	471129			37.89- 97.89	68.45
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.107 (1.173)	83	1208165	53.5730	53.573	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	775807			35.20- 95.20	64.21
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	776111	55.2287	55.229	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	757550			67.21- 127.21	97.61
11.179	11.179 (1.182)	77	452104			29.02- 89.02	58.25
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	722383	52.7280	52.728	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2804747			366.49- 426.49	388.26
11.150	11.150 (1.179)	105	107729			0.00- 44.85	14.91
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	378309	52.6322	52.632	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1188231			280.55- 340.55	314.09
11.100	11.100 (1.173)	61	179345			15.49- 75.49	47.41
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	334246	70.9348	70.935	80.00- 120.00	100.00(R)
11.179	11.165 (1.182)	89	230369			49.11- 109.11	68.92
11.179	11.179 (1.182)	75	1188231			426.44- 486.44	355.50

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	1888303	52.5403	52.540	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	487326			0.00- 57.66	25.81
11.258	11.258 (1.190)	142	71726			0.00- 34.09	3.80
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.286 (1.193)	120	773911	51.9439	51.944	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2400765			284.55- 344.55	310.21
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	622471	53.3611	53.361	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2075496			315.17- 375.17	333.43
11.301	11.301 (1.195)	65	295642			21.55- 81.55	47.49
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1067729	52.0514	52.051	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	2035681			164.93- 224.93	190.66
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	881511	43.2578	43.258	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	486250			25.30- 85.30	55.16
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.745 (1.241)	119	2030186	52.9152	52.915	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	504146			0.00- 54.25	24.83
11.738	11.738 (1.241)	91	1198705			31.27- 91.27	59.04
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.816 (1.249)	105	2009680	51.9054	51.905	80.00- 120.00	100.00
11.816	11.816 (1.249)	120	1015636			19.05- 79.05	50.54
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.995 (1.268)	134	642848	53.9095	53.909	80.00- 120.00	100.00
11.996	11.995 (1.268)	105	2954324			437.55- 497.55	459.57
11.996	11.995 (1.268)	91	446869			40.76- 100.76	69.51
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2756185	52.2942	52.294	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	717341			0.00- 55.54	26.03
12.160	12.160 (1.285)	91	573706			0.00- 51.48	20.82
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.203 (1.289)	146	1457964	55.0147	55.015	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	928872			33.21- 93.21	63.71
12.196	12.196 (1.289)	111	575551			11.31- 71.31	39.48

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	1467343	54.7910	54.791	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	936342			33.90- 93.90	63.81
12.311	12.311 (1.301)	111	563552			9.45- 69.45	38.41
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1869764	50.8424	50.842	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	441579			0.00- 53.26	23.62
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2272845	54.7485	54.748	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2191609			58.12- 118.12	96.43
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	694499	51.8817	51.882	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2366476			314.79- 374.79	340.75
12.626	12.626 (1.335)	92	1252306			154.29- 214.29	180.32
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.740 (1.346)	146	1391530	53.5498	53.550	80.00- 120.00	100.00
12.733	12.740 (1.346)	148	889520			33.84- 93.84	63.92
12.733	12.733 (1.346)	111	571738			12.73- 72.73	41.09
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	867048	55.0898	55.090	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	687507			52.48- 112.48	79.29
13.600	13.600 (1.438)	155	674158			47.41- 107.41	77.75
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2352594	71.4958	71.496	80.00- 120.00	100.00(R)
13.801	13.801 (1.459)	43	2108400			52.87- 112.87	89.62
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1420034	73.9630	73.963	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1354523			65.33- 125.33	95.39
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	1050312	77.7325	77.732	80.00- 120.00	100.00(R)
14.581	14.581 (1.541)	223	651967			33.17- 93.17	62.07
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	315885	6.43779	6.438	80.00- 120.00	100.00
14.761	14.768 (1.560)	127	38426			0.00- 42.88	12.16
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.068 (1.593)	180	1353318	79.7360	79.736	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	15.068 (1.593)	182	1289818			65.75- 125.75	95.31
15.069	15.068 (1.593)	145	458322			5.23- 65.23	33.87

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080204.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	162538	8.87
108 1,4-Difluorobenze	558135	334881	781389	610537	9.39
153 Chlorobenzene-d5	542388	325433	759343	590330	8.84

		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	6.67	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.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
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/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	59.078	118.16	70-130
5 Propylene	50.000	54.321	108.64	70-130
7 1,1-Difluoroethan	50.000	49.404	98.81	70-130
8 Freon 12	50.000	53.681	107.36	70-130
9 Chlorodifluoromet	50.000	56.237	112.47	70-130
10 Freon 114	50.000	51.377	102.75	70-130
12 Isobutane	50.000	54.563	109.13	70-130
15 Chloromethane	50.000	49.530	99.06	70-130
18 Butane	50.000	48.038	96.08	70-130
19 Vinyl Chloride	50.000	46.427	92.85	70-130
20 1,3-Butadiene	50.000	58.055	116.11	70-130
24 Bromomethane	50.000	45.156	90.31	70-130
30 Chloroethane	50.000	47.854	95.71	70-130
31 Isopentane	50.000	54.047	108.09	70-130
32 Vinyl Bromide	50.000	47.556	95.11	70-130
33 Freon 11	50.000	53.797	107.59	70-130
34 Dichlorofluoromet	50.000	49.705	99.41	70-130
35 Pentane	50.000	51.885	103.77	70-130
38 Ethyl Ether	50.000	47.257	94.51	70-130
39 Ethanol	58.000	51.957	89.58	70-130
42 Acrolein	58.000	52.526	90.56	70-130
43 Freon 113	50.000	49.740	99.48	70-130
44 1,1-Dichloroethen	50.000	48.767	97.53	70-130
47 Acetone	50.000	51.352	102.70	70-130
48 Carbon Disulfide	50.000	47.498	95.00	70-130
49 Iodomethane	50.000	62.386	124.77	70-130
52 2-Propanol	50.000	54.312	108.62	70-130
54 3-Chloropropene	50.000	46.811	93.62	70-130
57 Acetonitrile	50.000	54.881	109.76	70-130
59 Methylene Chlorid	50.000	58.055	116.11	70-130
62 tert-Butyl alcoho	50.000	47.896	95.79	70-130
63 Methyl tert-butyl	50.000	46.145	92.29	70-130
64 trans-1,2-Dichlor	50.000	48.069	96.14	70-130

SPIKE	COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	55.489	110.98	70-130
67	Hexane	50.000	51.668	103.34	70-130
71	1,1-Dichloroethan	50.000	52.689	105.38	70-130
72	Isopropyl ether	50.000	54.757	109.51	70-130
73	Vinyl Acetate	50.000	47.815	95.63	70-130
79	Ethyl-tert-butyl	50.000	49.296	98.59	70-130
84	2,2-Dichloropropa	50.000	50.666	101.33	70-130
85	cis-1,2-Dichloroe	50.000	51.906	103.81	70-130
86	2-Butanone	50.000	48.280	96.56	70-130
87	Ethyl Acetate	50.000	57.951	115.90	70-130
89	Tetrahydrofuran	50.000	58.662	117.32	70-130
92	Chloroform	50.000	53.706	107.41	70-130
94	Cyclohexane	50.000	47.917	95.83	70-130
96	1,1,1-Trichloroet	50.000	51.321	102.64	70-130
99	1,1-Dichloroprope	50.000	51.525	103.05	70-130
97	Carbon Tetrachlor	50.000	55.577	111.15	70-130
101	2,2,4-Trimethylpe	50.000	51.965	103.93	70-130
102	Benzene	50.000	51.946	103.89	70-130
105	tert-Amyl methyl	50.000	48.496	96.99	70-130
106	1,2-Dichloroethan	50.000	58.389	116.78	70-130
107	Heptane	50.000	50.042	100.08	70-130
110	n-Butanol	50.000	46.086	92.17	70-130
111	Trichloroethene	50.000	54.378	108.76	70-130
118	Dibromomethane	50.000	57.663	115.33	70-130
127	Methylcyclohexane	50.000	49.393	98.79	70-130
114	1,2-Dichloropropa	50.000	53.470	106.94	70-130
116	Methyl Methacryla	50.000	51.581	103.16	70-130
117	1,4-Dioxane	50.000	49.521	99.04	70-130
122	Bromodichlorometh	50.000	56.364	112.73	70-130
126	cis-1,3-Dichlorop	50.000	53.432	106.86	70-130
131	4-Methyl-2-pentan	50.000	50.904	101.81	70-130
136	Octane	50.000	52.802	105.60	70-130
137	Toluene	50.000	51.360	102.72	70-130
139	trans-1,3-Dichlor	50.000	55.692	111.38	70-130
141	1,1,2-Trichloroet	50.000	54.245	108.49	70-130
142	Tetrachloroethene	50.000	55.569	111.14	70-130
143	2-Hexanone	50.000	51.374	102.75	70-130
144	1,3-Dichloropropa	50.000	53.004	106.01	70-130
146	Dibromochlorometh	50.000	57.490	114.98	70-130
148	1,2-Dibromoethane	50.000	56.611	113.22	70-130
151	1-Bromo-2-Chloroe	50.000	54.380	108.76	70-130
154	Chlorobenzene	50.000	54.185	108.37	70-130
155	Ethyl Benzene	50.000	52.182	104.36	70-130
156	Nonane	50.000	58.469	116.94	70-130
157	1,1,1,2-Tetrachlo	50.000	46.664	93.33	70-130
158	m,p-Xylene	50.000	51.688	103.38	70-130
164	o-Xylene	50.000	51.314	102.63	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165	Styrene	50.000	49.108	98.22	70-130
167	Bromoform	50.000	56.304	112.61	70-130
168	Cumene	50.000	50.996	101.99	70-130
169	Cyclohexanone	50.000	41.654	83.31	70-130
175	1,1,2,2-Tetrachlo	50.000	53.573	107.15	70-130
177	Bromobenzene	50.000	55.229	110.46	70-130
178	Propylbenzene	50.000	52.728	105.46	70-130
179	1,2,3-Trichloropr	50.000	52.632	105.26	70-130
181	trans-1,4-Dichlor	50.000	70.935	141.87*	70-130
182	Decane	50.000	52.540	105.08	70-130
183	4-Ethyltoluene	50.000	51.944	103.89	70-130
184	2-Chlorotoluene	50.000	53.361	106.72	70-130
185	1,3,5-Trimethylbe	50.000	52.051	104.10	70-130
188	alpha Methyl Styr	50.000	43.258	86.52	70-130
189	tert-Butylbenzene	50.000	52.915	105.83	70-130
190	1,2,4-Trimethylbe	50.000	51.905	103.81	70-130
192	sec-Butylbenzene	50.000	53.909	107.82	70-130
194	p-Cymene	50.000	52.294	104.59	70-130
195	1,3-Dichlorobenze	50.000	55.015	110.03	70-130
196	1,4-Dichlorobenze	50.000	54.791	109.58	70-130
199	alpha-Chlorotolue	50.000	50.842	101.68	70-130
201	Undecane	50.000	54.748	109.50	70-130
202	Butylbenzene	50.000	51.882	103.76	70-130
204	1,2-Dichlorobenze	50.000	53.550	107.10	70-130
206	1,2-Dibromo-3-chl	50.000	55.090	110.18	70-130
207	Dodecane	50.000	71.496	142.99*	70-130
213	1,2,4-Trichlorobe	58.000	73.963	127.52	70-130
215	Hexachlorobutadie	58.000	77.732	134.02*	70-130
216	Naphthalene	5.800	6.438	111.00	60-140
222	1,2,3-Trichlorobe	58.000	79.736	137.48*	70-130

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104	1,2-Dichloroethan	25.000	25.393	101.57	70-130
$ 134	Toluene-d8	25.000	25.152	100.61	70-130
$ 170	4-Bromofluorobenz	25.000	25.333	101.33	70-130

Data File: /chem/msdp.i/02AUG21.b/p080204.d

Date : 02-AUG-2021 11:27

Client ID: LCSD

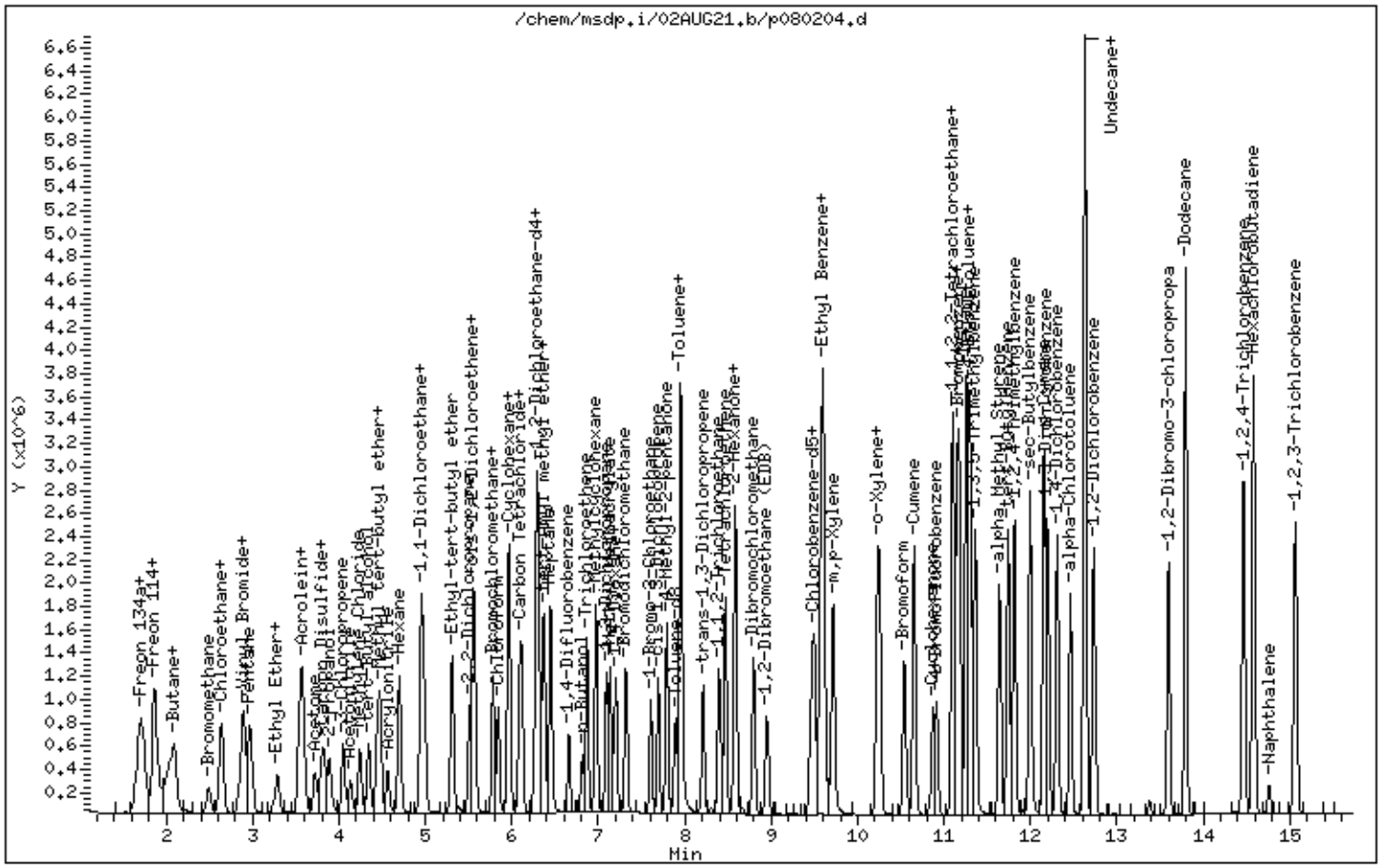
Instrument: msdp.i

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: (114968/119664) * 100 = 96.08%							SOP# 6					
		3234-10	Exp. Date:		8/17/21			Vacuum:	NA				
	BCM	149,292						Please check all standards					
	1,4-DFB	558,135				Surr.# 3234-10		Exp. Date:	8/17/21	Surrogate# NA		Exp. Date:	NA
	CB-d5	542,388				CCV: 3018-2125A		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
√	P080201	BFB Tune Check	3234-10	4	36ng	200ml	1.00	LD	LD	8/2/2021	0948	LD	Exp. 8/17/21. leg validation
√	P080202	CCV	3018-2125A	13	50ppbv (100ppbv)	100mL	1.00	LD	LD	8/2/2021	1030	LD	Exp. 9/28/21; 0 out
√	P080203	LCS	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	8/2/2021	1058	LD	Exp. 9/23/21. 1 out AT-20
√	P080204	LCSD	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	8/2/2021	1127	LD	Exp. 9/23/21; RPD ok
√	P080205	CCVsp	3018-2013	12	50ppbv (200ppbv)	50mL	1.00	LD	LD	8/2/2021	1155	LD	Exp. 8/04/21; 2 out
√	P080206	TPHg Calib	3234-26A	11	500ppbv(625ppbv)	160mL	1.00	LD	LD	8/2/2021	1225	LD	Exp. 9/03/21;
√	P080207	Lab Blank	35157	11	Humid	200ml	1.00	LD	LD	8/2/2021	1334	LD	leg validation
√	P080208	2107362B-14A	B2103	1	5.0 Hg->10 psi	200ml	2.02	mb	LD	8/2/2021	1454	mb	
√	P080209	2107362B-18A	N2012	2	5.0 Hg->10 psi	200ml	2.02	mb	LD	8/2/2021	1523	mb	
√	P080210	2107362B-19A	3344	3	6.0 Hg->10 psi	200ml	2.10	mb	LD	8/2/2021	1552	mb	
√	P080211	2107362B-13A	N3113	4	7.0 Hg->10 psi	200ml	2.19	mb	LD	8/2/2021	1622	mb	
√	P080212	2107362B-16A	N3870	5	6.5 Hg->10 psi	90mL	4.77	mb	LD	8/2/2021	1650	mb	dil TC
√	P080213	2107362B-17A	N6045	6	5.0 Hg->10 psi	50mL	8.06	mb	LD	8/2/2021	1718	mb	dil TC
√	P080214	2107362B-15A	N5570	7	6.0 Hg->10 psi	32mL	13.1	mb	LD	8/2/2021	1746	mb	dil TC
√	P080215	2107684-01A	S1407	8	5.9 Hg->10.1 psi	120mL	350	mb	LD	8/2/2021	1815	mb	Can Dilution 100X, DF=350, dil TC
X	P080216	2107684-02A	O0762	9	6.5 Hg->9.8 psi	90mL	4.73	mb	LD	8/2/2021	1844	mb	overdil rr @ 200ml
√	P080217	2107521-03A	N4306	1	6.5 Hg->2 psi	200ml	1.45	LD	mb	8/2/2021	2057	LD	
√	P080218	2107684-03A	N3823	2	6.9 Hg->10.1 psi	200ml	2.19	LD	mb	8/2/2021	2127	LD	
√	P080219	2107684-04A	LC684	3	4.9 Hg->10.1 psi	200ml	2.02	LD	mb	8/2/2021	2156	LD	
√	P080220	2107684-05A	1L1576	4	6.3 Hg->9.7 psi	200ml	2.10	LD	mb	8/2/2021	2225	LD	
√	P080221	2107684-06A	1L1646	5	7.1 Hg->9.6 psi	200ml	2.16	LD	mb	8/2/2021	2255	LD	
√	P080222	2107684-07A	1L3967	6	6.5 Hg->10.1 psi	200ml	2.15	LD	mb	8/2/2021	2324	LD	green dot Pi: 7.5 psi, Pf: 4.5 psi
√	P080223	2107684-08A	N5523	7	5.5 Hg->9.8 psi	200ml	2.04	LD	mb	8/2/2021	2354	LD	
√	P080224	2107684-09A	O0702	8	6.3 Hg->10 psi	200ml	2.13	LD	mb	8/3/2021	0023	LD	
√	P080225	2107684-02A	O0762	9	6.5 Hg->9.8 psi	200ml	2.13	LD	mb	8/3/2021	0052	LD	

DA 8/6/21

	File #	Entry/Scan Sample ID	Canister#	Cart Pos.	Pressure	mL	DF	Verify Load	Loaded Init	Date Analyzed	Time	Review Init	Comments
√	P080226	2107684-10A	1L1569	10	7.1 Hg->10.2 psi	200ml	2.22	LD	mb	8/3/2021	0122	LD	
√	P080227	2107684-11A	1L1754	11	6.9 Hg->9.8 psi	200ml	2.16	LD	mb	8/3/2021	0151	LD	

EA 8/6/21

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

					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	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

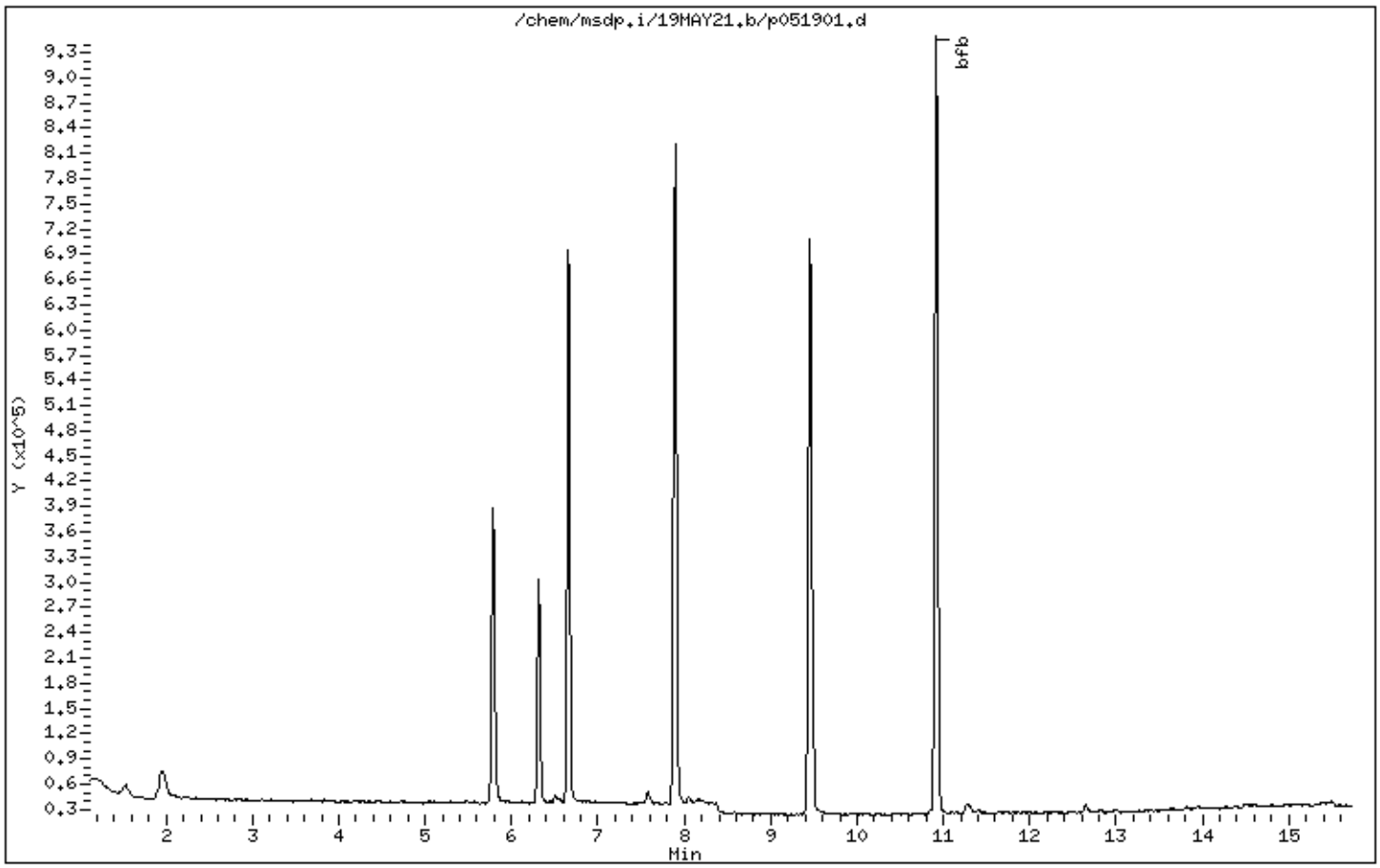
Sample Info: 200ml #3234-10;BFB;BFB

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

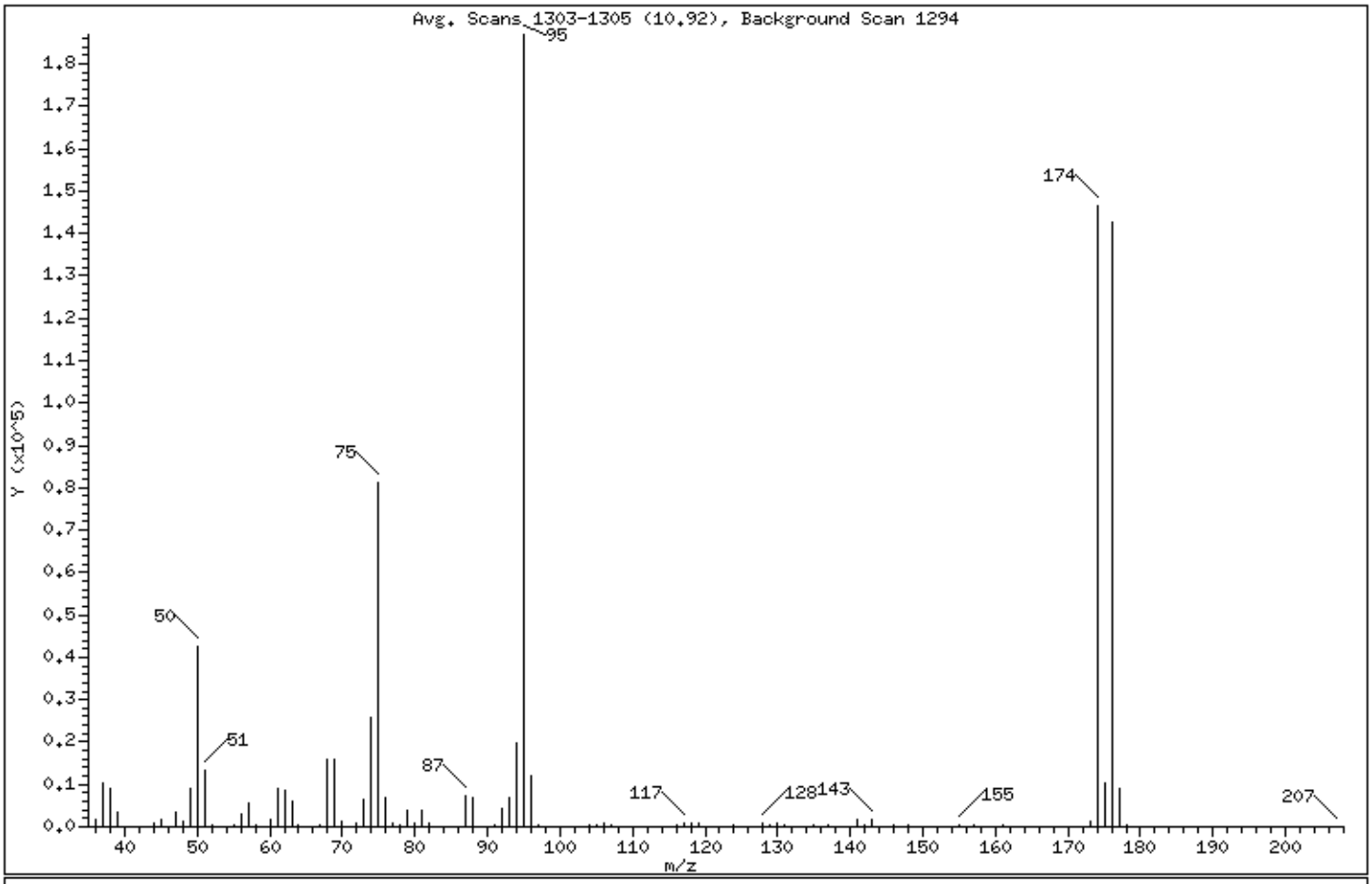
Volume Injected (uL): 1.0

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/02AUG21.b/p080201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 02-AUG-2021 09:48
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/02AUG21.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		
10.914	10.993	-0.079	95	151616			100.00- 100.00	100.00
10.914	10.993	-0.079	50	42439			8.00- 40.00	27.99
10.914	10.993	-0.079	75	70424			30.00- 66.00	46.45
10.914	10.993	-0.079	96	10108			5.00- 9.00	6.67
10.914	10.993	-0.079	173	1172			0.00- 1.99	0.98
10.914	10.993	-0.079	174	119664			50.01- 120.00	78.93
10.914	10.993	-0.079	175	8386			4.00- 9.00	7.01
10.914	10.993	-0.079	176	114968			93.00- 101.00	96.08
10.914	10.993	-0.079	177	7492			5.00- 9.00	6.52

Data File: /chem/msdp.i/02AUG21.b/p080201.d

Date : 02-AUG-2021 09:48

Client ID: BFB

Instrument: msdp.i

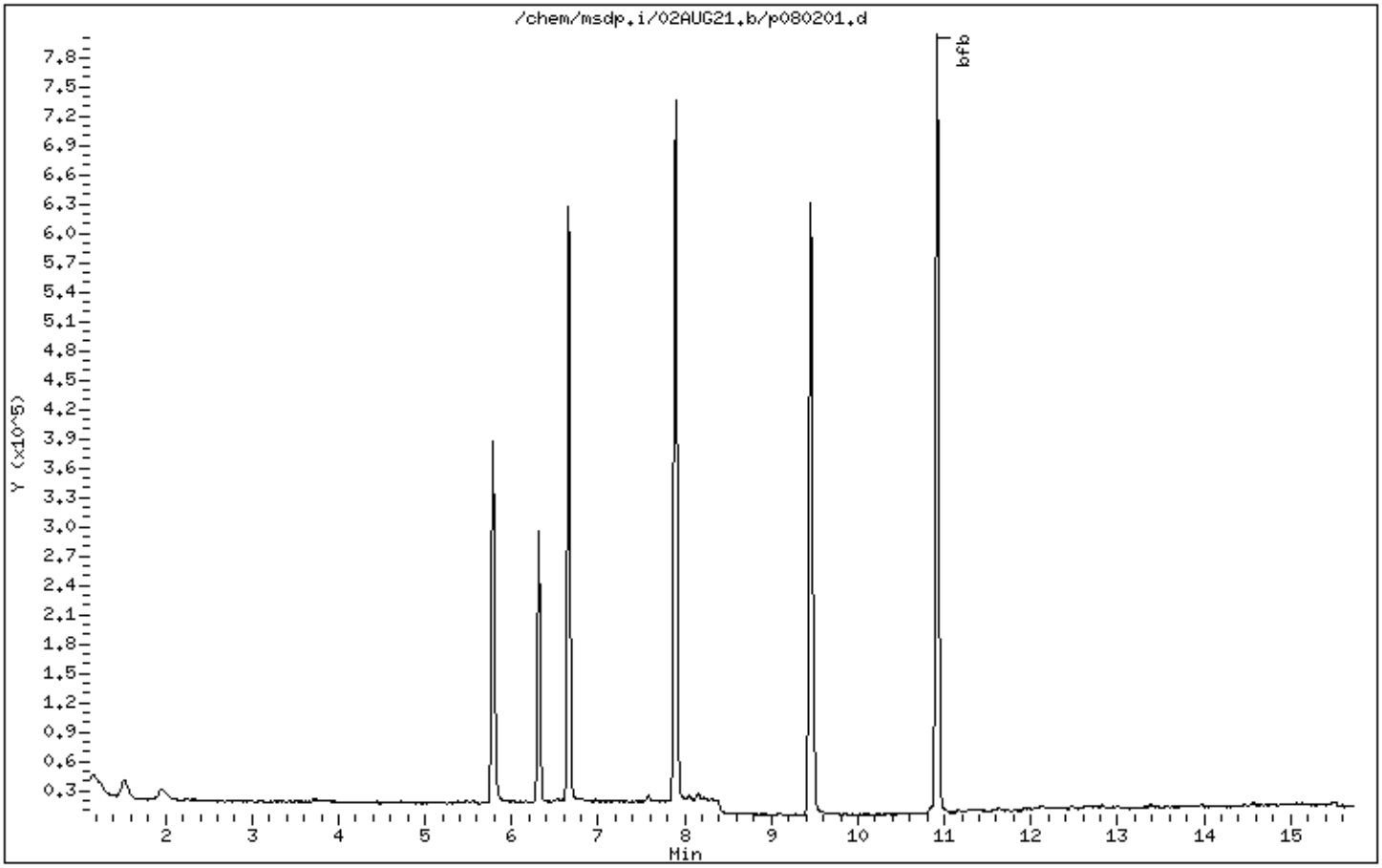
Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/02AUG21.b/p080201.d

Date : 02-AUG-2021 09:48

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

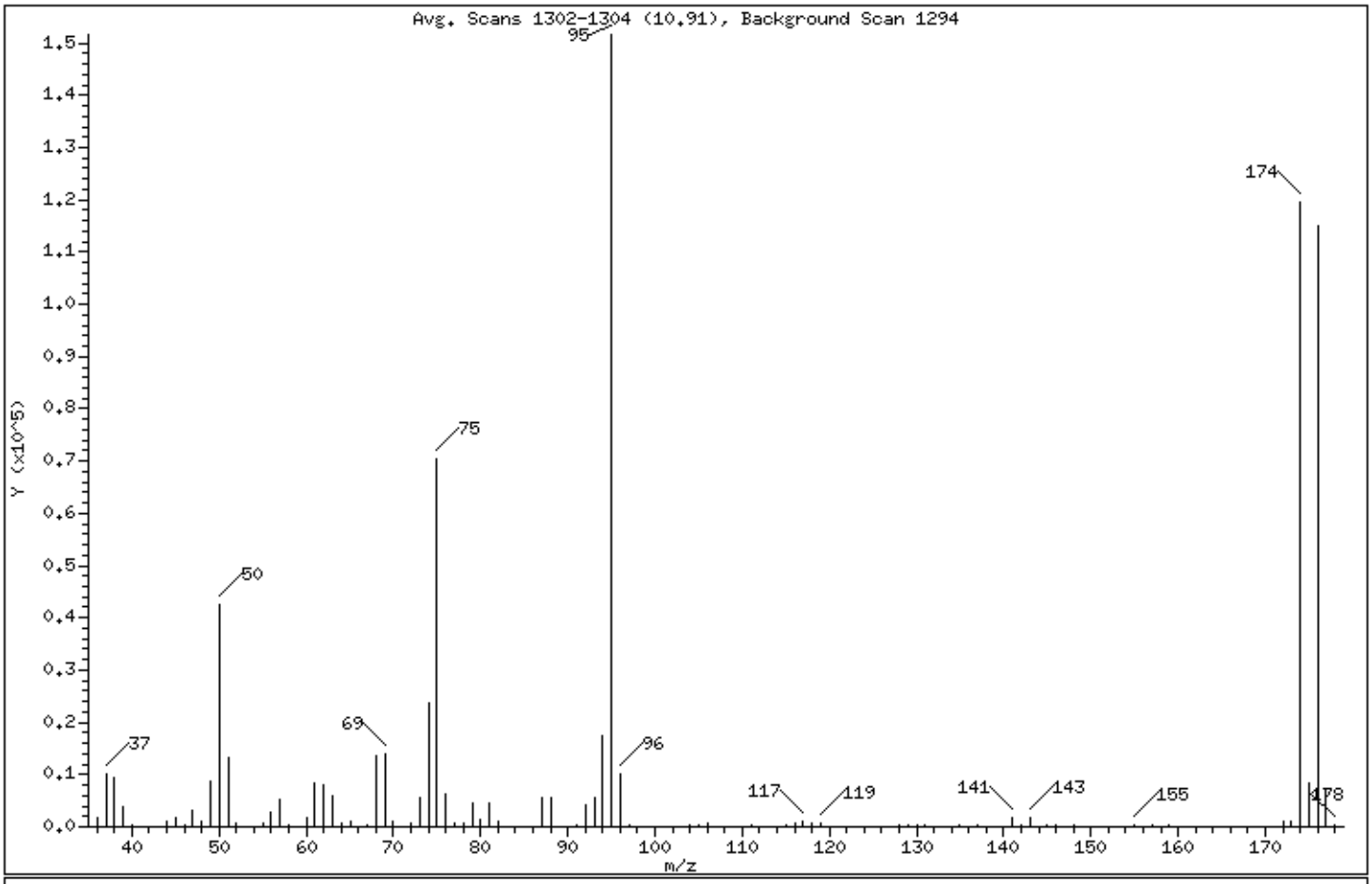
Volume Injected (uL): 1.0

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	27.99
75	30.00 - 66.00% of mass 95	46.45
96	5.00 - 9.00% of mass 95	6.67
173	Less than 1.99% of mass 174	0.77 (0.98)
174	50.01 - 120.00% of mass 95	78.93
175	4.00 - 9.00% of mass 174	5.53 (7.01)
176	93.00 - 101.00% of mass 174	75.83 (96.08)
177	5.00 - 9.00% of mass 176	4.94 (6.52)

Date : 02-AUG-2021 09:48

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: p080201.d
Spectrum: Avg. Scans 1302-1304 (10.91), Background Scan 1294
Location of Maximum: 95.00
Number of points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1669	64.00	771	95.00	151616	140.00	164
37.00	10114	65.00	907	96.00	10108	141.00	1605
38.00	9487	67.00	425	97.00	303	142.00	194
39.00	3707	68.00	13597	98.00	36	143.00	1676
40.00	180	69.00	14110	103.00	33	144.00	33
41.00	29	70.00	1064	104.00	484	145.00	213
43.00	60	72.00	859	105.00	197	146.00	184
44.00	1120	73.00	5716	106.00	778	148.00	417
45.00	1753	74.00	23752	107.00	144	150.00	163
46.00	204	75.00	70424	109.00	117	153.00	121
47.00	3134	76.00	6136	111.00	229	155.00	319
48.00	1130	77.00	794	112.00	137	157.00	279
49.00	8563	78.00	632	113.00	173	159.00	225
50.00	42432	79.00	4555	115.00	187	161.00	147
51.00	13104	80.00	1354	116.00	653	171.00	123
52.00	594	81.00	4561	117.00	1157	172.00	1105
53.00	158	82.00	1069	118.00	640	173.00	1172
54.00	158	83.00	127	119.00	868	174.00	119664
55.00	607	85.00	82	124.00	43	175.00	8386
56.00	2865	86.00	137	126.00	34	176.00	114968
57.00	5338	87.00	5613	128.00	463	177.00	7492
58.00	239	88.00	5735	129.00	269	178.00	283
60.00	1766	91.00	520	130.00	473		
61.00	8203	92.00	4012	131.00	275		
62.00	7926	93.00	5660	135.00	306		
63.00	6097	94.00	17448	137.00	316		

Canister Dilution Form

Workorder #: 2107684

Date Prepared: 8/2/21 **Expiration Date:** 8/28/21 **Initials:** LD

Pressurized By: 8.2.21 **1L pressurized to 15psi = 2000mL**

Sample ID	Sample Can #	Transfer Can #	Volume Sample Added (mL)	Final Volume	Final Dilution Factor	*Syringe ID	Time dilution was made (military)
01A	LC407	9383 AT	100	2000	100X	150301	1306

**All syringes used must be labeled with IDs generated by QA.*

Nitrogen Canister Pressurization Manifold M-006

Eurofins Air Toxics

Logbook# 3224

*Manifold Certification (required every 24 hours and prior to sample pressurization):

Manifold Cert ID	Initials	Canister #	Cert. File #	Certified for : (Check one)			
M006-072521-1208	CK	0258	072908	SIM pptv ___	SIM ___	Low Level ✓	QUAD ✓

*Or indicate logbook page # with cert. information applicable to samples below: NA.

Gauge ID: AT007

Temperature Check → Temp: 22.0°C Date: 8.2.21 Time: 1202 Initials: CK

Required per 20 samples

**Manifold must be purged for ≥ 2 minutes between each sample.

Date	Time**	Initials	Sample/Standard ID	Method Name	Canister #	Initial Pressure	Final Pressure (psi
8-2-21	1209	CK	Dilution 2107603A-01A	Dilution	94918	28.0" Hg	15.2 psi
↓	1219	↓	2108001-01A	TO-15	N5530	4.5" Hg	10psi
	1225		-02A	↓	N1945	4.5" Hg	10psi
	1232		-03A	↓	N5584	4.5" Hg	10psi
↓	1318	↓	2107684-01A	Dilution	9383AT	28" Hg	15psi

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 #: 2107684

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

page 1 of 1

Client: AECOM
Project Name: SMUD 59TH ST.
Project Manager: ROBERT KOHLHARDT Project #60632793.6
Sampler: CHRIS WOMACK
Site Name:

Special Instructions/Notes: REQUEST LEVEL IV DATA
INVOICING TO: SWPP QUEEN
REPORT EMAIL TO:
ROBERT.KOHLHARDT@AECOM.COM

Turnaround Time (Rush surcharges may apply)
Standard _____ Rush 5-DAY TAT (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		7/30/21	
01A	SG-SVM1A-Ø1	LC407	25449	07/30/21	0805	07/30/21	0810	28	5			X			
02A	SG-SVM1B-Ø1	IL2362	21425	07/30/21	0831	07/30/21	0837	28	5			X			
03A	SG-SVM2A-Ø1	IL3884	25468	07/29/21	1407	07/29/21	1412	28	5			X			
04A	SG-SVM2B-Ø1	IL2203	25389	07/29/21	1445	07/29/21	1450	29	5			X			
05A	SG-SVM3A-Ø1	IL1576	25456	07/29/21	1250	07/29/21	1255	29	5			X			
06A	SG-SVM3B-Ø1	IL1646	30684	07/29/21	1315	07/29/21	1321	27	5			X			
07A	SG-VM65A-Ø1	IL3967	25446	07/30/21	0931	07/30/21	0936	27	5			X			
08A	SG-VM65B-Ø1	IL1874	25114	07/30/21	1000	07/30/21	1006	28	5			X			
09A	SG-VM66A-Ø1	IL2325	24627	07/30/21	1105	07/30/21	1114	29	5			X			
10A	SG-VM66B-Ø1	IL1569	30940	07/30/21	1145	07/30/21	1206	28	5			X			
11A	SG-VM66B-Ø2	IL1754	30940	07/30/21	1145	07/30/21	1206	28	5			X			

7/30/21

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
CHRIS WOMACK	30-JUL-2021	1315		7.30.21	1322
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: HD | 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 2107684

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: 08/06/21 5:00 pm
Date Completed:
Date Received: 7/30/21
PO#:
Project#: 60632793.6 SMUD 59th St.

Total $: $ 2,374.50
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Amount$
01A	SG-SVM1A-01	TO-15	7/29/2021	$172.50
02A	SG-SVM1B-01	TO-15	7/29/2021	$172.50
03A	SG-SVM2A-01	TO-15	7/29/2021	$172.50
04A	SG-SVM2B-01	TO-15	7/29/2021	$172.50
05A	SG-SVM3A-01	TO-15	7/29/2021	$172.50
06A	SG-SVM3B-01	TO-15	7/29/2021	$172.50
07A	SG-VM65A-01	TO-15	7/30/2021	$172.50
08A	SG-VM65B-01	TO-15	7/30/2021	$172.50
09A	SG-VM66A-01	TO-15	7/30/2021	$172.50
10A	SG-VM66B-01	TO-15	7/30/2021	$172.50
11A	SG-VM66B-02	TO-15	7/30/2021	$172.50

Misc. Charges	1 Liter Summa Canister (12) @ $20.00 each., Shipment 140023	$240.00
	Soil Gas Manifold (12) @ $15.00 each., Shipment 140023	$180.00
	eCVP (11) @ $3.00 each.	$33.00
	Duplicate Sampling T (3) @ $8.00 each.	$24.00

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

REMARKS: A 15% surcharge is applied for a 5 day turnaround time.

TERMS:

Reporting Method: TO-15 (Sp)-AECOM (SMUD 59th alphanumeric)

eurofins | Air Toxics

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2107684

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

page 1 of 1

Client: AECOM
Project Name: SMUD 59TH ST.
Project Manager: ROBERT KOHLHARDT Project #60632793.6
Sampler: CHRIS WOMACK
Site Name:

Special Instructions/Notes: REQUEST LEVEL IV DATA
INVOICING TO: SWPP QUEEN
REPORT EMAIL TO:
ROBERT.KOHLHARDT@AECOM.COM

Turnaround Time (Rush surcharges may apply)
Standard _____ Rush 5-DAY TAT (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-SVM1A-Ø1	LC407	25449	07/30/21	0805	07/30/21	0810	28	5			X			
02A	SG-SVM1B-Ø1	IL2362	21425	07/30/21	0831	07/30/21	0837	28	5			X			
03A	SG-SVM2A-Ø1	IL3884	25468	07/29/21	1407	07/29/21	1412	28	5			X			
04A	SG-SVM2B-Ø1	IL2203	25389	07/29/21	1445	07/29/21	1450	29	5			X			
05A	SG-SVM3A-Ø1	IL1576	25456	07/29/21	1250	07/29/21	1255	29	5			X			
06A	SG-SVM3B-Ø1	IL1646	30684	07/29/21	1315	07/29/21	1321	27	5			X			
07A	SG-VM65A-Ø1	IL3967	25446	07/30/21	0931	07/30/21	0936	27	5			X			
08A	SG-VM65B-Ø1	IL1874	25114	07/30/21	1000	07/30/21	1006	28	5			X			
09A	SG-VM66A-Ø1	IL2325	24627	07/30/21	1105	07/30/21	1114	29	5			X			
10A	SG-VM66B-Ø1	IL1569	30940	07/30/21	1145	07/30/21	1206	28	5			X			
11A	SG-VM66B-Ø2	IL1754	30940	07/30/21	1145	07/30/21	1206	28	5			X			

7/30/21

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
CHRIS WOMACK	30-JUL-2021	1315		7.30.21	1322
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: HD | 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

Other Records

Air Toxics Ltd.

Curve Response Factors
p080206.d

Compound	Ave. RF	% RSD
TPH	68202	0.00041

LD 8/2/2

Air Toxics Ltd.

File Response Factors

Data File: p080206.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	68201.722517610	

Air Toxics Ltd.

List of Selected Compounds

Data File: p080206.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 1.5345	0.21	1.535	97565	
☑	Unknown Peak 1.8843	0.05	1.884	22172	
☑	Butane	0.67	2.039	315671	
☑	Unknown Peak 2.2466	0.06	2.247	27959	
☑	Unknown Peak 2.5117	0.03	2.512	12657	
☑	Isopentane	3.21	2.641	1503503	
☑	Unknown Peak 2.9701	1.13	2.970	529169	
☑	Unknown Peak 3.1707	0.16	3.171	74462	
☑	Ethanol	1.37	3.242	640545	
☑	Unknown Peak 3.3927	0.39	3.393	180087	
☑	Unknown Peak 3.5360	0.12	3.536	57552	
☑	Unknown Peak 3.7365	0.02	3.737	10535	
☑	Unknown Peak 4.0804	1.52	4.080	708716	
☑	Unknown Peak 4.1090	1.41	4.109	657591	
☑	Unknown Peak 4.4027	0.64	4.403	300697	
☑	Unknown Peak 4.6176	0.09	4.618	40348	
☑	Hexane	0.74	4.696	347649	
☑	Unknown Peak 4.8182	0.07	4.818	31664	
☑	Unknown Peak 4.8826	0.12	4.883	54549	
☑	Unknown Peak 4.9256	0.11	4.926	50820	
☑	Unknown Peak 5.0116	0.06	5.012	28318	
☑	Unknown Peak 5.0832	0.08	5.083	39393	
☑	Unknown Peak 5.2265	1.41	5.226	661134	
☑	Unknown Peak 5.3267	0.57	5.327	266026	
☑	Unknown Peak 5.3840	0.10	5.384	48955	
☑	Bromochloromethane	2.42	5.785	1130423	
☑	Tetrahydrofuran	0.66	5.893	310705	
☑	Cyclohexane	1.58	5.957	740941	
☑	Unknown Peak 6.0574	0.73	6.057	342176	
☐	2,2,4-Trimethylpentane	6.72	6.287	3143255	
☐	Benzene	0.08	6.301	38130	
☑	1,2-Dichloroethane-d4	16.42	6.315	7678353	
☑	Heptane	0.80	6.451	373037	
☑	Unknown Peak 6.5874	0.26	6.587	119855	
☑	1,4-Difluorobenzene	3.52	6.666	1647154	
☑	Unknown Peak 6.7808	0.11	6.781	51143	
☑	Unknown Peak 6.8167	0.12	6.817	54039	
☑	Unknown Peak 6.9384	1.31	6.938	611628	
☑	Methylcyclohexane	2.27	6.974	1063647	
☑	Unknown Peak 7.0530	0.97	7.053	453784	
☑	Unknown Peak 7.1247	0.24	7.125	113547	
☑	Unknown Peak 7.1748	0.13	7.175	60591	
☑	Unknown Peak 7.3037	4.68	7.304	2186687	
☑	Unknown Peak 7.4112	7.14	7.411	3339770	
☑	Unknown Peak 7.5759	0.91	7.576	426716	
☑	Unknown Peak 7.7120	1.88	7.712	880181	
☑	Unknown Peak 7.7908	0.36	7.791	170278	
☑	Toluene-d8	4.42	7.891	2067113	
☐	4-Methyl-2-pentanone	0.02	7.891	7580	
☑	Toluene	4.14	7.956	1935723	
☑	Unknown Peak 8.0344	0.28	8.034	128681	
☑	Unknown Peak 8.1490	0.33	8.149	156249	

Air Toxics Ltd.

List of Selected Compounds

Data File: p080206.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compounds	% Area	RT	Peak Area	10
Unknown Peak 8.2421	0.71	8.242	330808	
Unknown Peak 8.3854	0.14	8.385	65573	
Unknown Peak 8.5215	0.12	8.521	54055	
Unknown Peak 8.7149	0.08	8.715	35299	
Unknown Peak 8.9011	0.05	8.901	21230	
Unknown Peak 8.9727	0.14	8.973	63649	
Unknown Peak 9.1232	0.08	9.123	36110	
Unknown Peak 9.2306	0.06	9.231	27239	
Unknown Peak 9.3739	0.09	9.374	41082	
Chlorobenzene-d5	4.17	9.460	1951988	
Ethyl Benzene	0.82	9.567	384374	
m,p-Xylene	2.81	9.718	1313209	
Unknown Peak 9.9541	0.05	9.954	22236	
Unknown Peak 10.054	0.04	10.054	17994	
o-Xylene	0.99	10.226	464402	
Unknown Peak 10.505	0.05	10.506	23150	
Cumene	0.26	10.649	120784	
Unknown Peak 10.734	0.21	10.735	100542	
4-Bromofluorobenzene	5.17	10.921	2417151	
Propylbenzene	0.18	11.150	83954	
4-Ethyltoluene	1.36	11.258	636841	
1,3,5-Trimethylbenzene	0.46	11.365	215080	
Unknown Peak 11.623	0.56	11.623	261302	
1,2,4-Trimethylbenzene	1.10	11.816	515700	
Unknown Peak 11.945	0.41	11.945	193600	
Unknown Peak 12.117	0.19	12.117	87475	
Unknown Peak 12.239	0.48	12.239	224176	
Unknown Peak 12.317	0.32	12.318	148504	
Unknown Peak 12.482	0.21	12.483	100209	
Unknown Peak 12.547	0.22	12.547	103834	
Unknown Peak 12.597	0.27	12.597	124445	
Unknown Peak 12.647	0.15	12.647	71789	
Unknown Peak 12.740	0.07	12.741	32527	
Unknown Peak 12.826	0.06	12.826	27000	
Unknown Peak 12.919	0.11	12.920	52698	
Unknown Peak 12.955	0.10	12.955	44481	
Unknown Peak 13.034	0.13	13.034	61954	
Unknown Peak 13.177	0.10	13.177	47358	
Unknown Peak 13.378	0.06	13.378	30003	
Unknown Peak 13.521	0.25	13.521	115355	
Unknown Peak 13.772	0.03	13.772	13417	
Unknown Peak 13.836	0.08	13.836	36149	
Unknown Peak 13.951	0.02	13.951	11256	
Unknown Peak 14.015	0.07	14.016	32219	
Unknown Peak 14.366	0.03	14.367	14521	
Unknown Peak 14.538	0.05	14.538	22603	
Unknown Peak 14.796	0.06	14.796	29425	

Air Toxics Ltd.

File Results

Data File: File Information: p080215.d
Sample #: 2107684-01A
Client ID:
Spike Level: 0
Dilution Factor: 350

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9445436.84448483 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080215.d
Sample #: 2107684-01A
Client ID:
Spike Level: 0
Dilution Factor: 350

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.5067	1.507	130867	☐
☑	Unknown Peak 1.9544	1.954	32183	☐
☑	Unknown Peak 4.4816	4.482	11342	☐
☐	cis-1,2-Dichloroethene	5.542	1430092	☐
☑	Bromochloromethane	5.778	1038321	☐
☑	1,2-Dichloroethane-d4	6.308	689332	☐
☑	1,4-Difluorobenzene	6.659	1473266	☐
☐	Trichloroethene	6.867	551977	☐
☑	1,2-Dichloropropane	7.089	24105	☐
☑	Unknown Peak 7.5761	7.576	18192	☐
☑	Toluene-d8	7.891	1822669	☐
☐	Tetrachloroethene	8.464	11570079	☐
☑	Chlorobenzene-d5	9.460	1987184	☐
☑	4-Bromofluorobenzene	10.921	2329141	☐
☑	Unknown Peak 12.647	12.648	19703	☐

Air Toxics Ltd.

File Results

Data File: File Information: p080225.d
Sample #: 2107684-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	29	(10415452.7293656 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080225.d
Sample #: 2107684-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compounds	RT	Peak Area	10
Unknown Peak 1.2546	1.255	80113	
Unknown Peak 1.5065	1.507	700207	
Propylene	1.688	106557	
Unknown Peak 1.7583	1.758	99755	
Unknown Peak 1.9542	1.954	40015	
Unknown Peak 2.2466	2.247	46008	
Unknown Peak 2.9056	2.906	10391	
Unknown Peak 3.4285	3.429	27259	
Acetone	3.729	573280	
2-Propanol	3.901	174818	
Unknown Peak 4.7250	4.725	11841	
Unknown Peak 5.3768	5.377	10513	
Unknown Peak 5.4413	5.441	25238	
cis-1,2-Dichloroethene	5.549	279566	
Unknown Peak 5.6275	5.628	14657	
Bromochloromethane	5.785	1050763	
Unknown Peak 6.1647	6.165	14339	
1,2-Dichloroethane-d4	6.315	662411	
Unknown Peak 6.5086	6.509	108462	
1,4-Difluorobenzene	6.666	1408915	
Trichloroethene	6.867	434343	
Unknown Peak 7.1246	7.125	23136	
Unknown Peak 7.5830	7.583	28052	
Unknown Peak 7.7979	7.798	18175	
Toluene-d8	7.891	1802984	
Unknown Peak 8.0415	8.041	31047	
Unknown Peak 8.1561	8.156	150044	
Unknown Peak 8.3065	8.307	15754	
Tetrachloroethene	8.471	2680383	
Unknown Peak 8.7005	8.700	38820	
Chlorobenzene-d5	9.460	1941271	
Unknown Peak 9.7176	9.718	39539	
Unknown Peak 10.505	10.506	11198	
Unknown Peak 10.627	10.627	10894	
Unknown Peak 10.849	10.849	22491	
4-Bromofluorobenzene	10.921	2323100	
Unknown Peak 11.150	11.150	68455	
Unknown Peak 11.400	11.401	19472	
Unknown Peak 11.931	11.931	22272	
Unknown Peak 12.067	12.067	14009	
Unknown Peak 12.310	12.311	49268	
Unknown Peak 12.733	12.733	16264	
Unknown Peak 12.819	12.819	13674	
Unknown Peak 12.991	12.991	11015	
Unknown Peak 13.184	13.185	18756	
Unknown Peak 13.363	13.364	34011	
Unknown Peak 14.516	14.517	15001	
Unknown Peak 14.918	14.918	23554	
Unknown Peak 15.462	15.462	16077	

Air Toxics Ltd.

File Results

Data File: File Information: p080218.d
Sample #: 2107684-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	11	(9811617.69062539 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080218.d
Sample #: 2107684-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

Compounds	RT	Peak Area	10
Unknown Peak 1.2547	1.255	58628	
Unknown Peak 1.5066	1.507	423215	
Propylene	1.689	234790	
Unknown Peak 1.9543	1.954	53675	
Unknown Peak 2.2395	2.240	65249	
Unknown Peak 2.9128	2.913	19037	
Unknown Peak 3.4286	3.429	45961	
Acetone	3.722	658536	
2-Propanol	3.901	132670	
Unknown Peak 4.3455	4.346	14477	
Unknown Peak 5.3769	5.377	41048	
Unknown Peak 5.4342	5.434	48705	
Unknown Peak 5.5632	5.563	36173	
Unknown Peak 5.6276	5.628	11985	
Bromochloromethane	5.785	988824	
1,2-Dichloroethane-d4	6.315	632469	
1,4-Difluorobenzene	6.666	1359052	
Unknown Peak 6.8167	6.817	14429	
Unknown Peak 7.1247	7.125	41502	
Unknown Peak 7.5760	7.576	28242	
Toluene-d8	7.891	1722258	
Unknown Peak 8.1490	8.149	44059	
Unknown Peak 8.2063	8.206	37078	
Unknown Peak 8.3138	8.314	45891	
Unknown Peak 8.3782	8.378	16447	
Tetrachloroethene	8.464	520818	
Unknown Peak 8.7006	8.701	51399	
Unknown Peak 9.2163	9.216	101701	
Chlorobenzene-d5	9.460	1816493	
Unknown Peak 10.505	10.506	38966	
4-Bromofluorobenzene	10.921	2058524	
Unknown Peak 11.393	11.394	16178	
Unknown Peak 11.651	11.652	12049	
Unknown Peak 11.938	11.938	13964	
Unknown Peak 12.067	12.067	39355	
Unknown Peak 12.482	12.483	16324	
Unknown Peak 12.654	12.655	11026	
Unknown Peak 12.984	12.984	21233	
Unknown Peak 13.363	13.364	47752	
Unknown Peak 13.793	13.794	15896	
Unknown Peak 14.517	14.517	21949	
Unknown Peak 14.910	14.911	27456	

Air Toxics Ltd.

File Results

Data File: File Information: p080219.d
Sample #: 2107684-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	36	(10706133.3163564 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080219.d
Sample #: 2107684-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compounds	RT	Peak Area	10
Unknown Peak 14.781	14.782	31725	
Unknown Peak 14.925	14.925	34270	
Unknown Peak 15.168	15.169	16277	
Unknown Peak 15.433	15.434	12769	
Unknown Peak 15.462	15.462	12946	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080219.d
Sample #: 2107684-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compounds	RT	Peak Area	10
Unknown Peak 1.2546	1.255	74792	
Unknown Peak 1.5064	1.506	635034	
Unknown Peak 1.7023	1.702	73148	
Unknown Peak 1.9542	1.954	41666	
Unknown Peak 2.2393	2.239	46378	
Acetone	3.722	145605	
2-Propanol	3.901	75891	
Unknown Peak 5.5630	5.563	14729	
Unknown Peak 5.6203	5.620	18709	
Bromochloromethane	5.785	985593	
1,2-Dichloroethane-d4	6.315	635343	
1,4-Difluorobenzene	6.666	1383178	
Unknown Peak 6.8667	6.867	18037	
Unknown Peak 7.1245	7.125	13434	
Unknown Peak 7.5758	7.576	30974	
Toluene-d8	7.891	1730473	
Unknown Peak 8.0486	8.049	19650	
Tetrachloroethene	8.464	432178	
Unknown Peak 8.7004	8.700	13989	
Chlorobenzene-d5	9.460	1815095	
Unknown Peak 9.5528	9.553	29183	
Unknown Peak 9.7032	9.703	20420	
4-Bromofluorobenzene	10.921	2111124	
Unknown Peak 11.150	11.150	37212	
Unknown Peak 11.257	11.258	59249	
Unknown Peak 11.357	11.358	39937	
Unknown Peak 11.615	11.616	32264	
1,2,4-Trimethylbenzene	11.816	162379	
Unknown Peak 11.945	11.945	25781	
Unknown Peak 12.074	12.074	21692	
Unknown Peak 12.260	12.260	26271	
Unknown Peak 12.339	12.339	82618	
Unknown Peak 12.525	12.525	50840	
Unknown Peak 12.575	12.576	22639	
Unknown Peak 12.625	12.626	31378	
Unknown Peak 12.840	12.841	53471	
Unknown Peak 12.940	12.941	57402	
Unknown Peak 12.969	12.970	54914	
Unknown Peak 13.048	13.048	116861	
Unknown Peak 13.191	13.192	39538	
Unknown Peak 13.385	13.385	67515	
Unknown Peak 13.478	13.478	71106	
Unknown Peak 13.535	13.536	112490	
Unknown Peak 13.657	13.657	27478	
Unknown Peak 13.764	13.765	15920	
Unknown Peak 13.829	13.829	67890	
Unknown Peak 14.008	14.008	108503	
Unknown Peak 14.065	14.066	16358	
Unknown Peak 14.366	14.366	34765	
Unknown Peak 14.402	14.402	17260	
Unknown Peak 14.524	14.524	46998	
Unknown Peak 14.631	14.631	20403	

Air Toxics Ltd.

File Results

Data File: File Information: p080220.d
Sample #: 2107684-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9153321.46441959 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080220.d
Sample #: 2107684-05A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.2547	1.255	72916	☐
☐	Unknown Peak 1.5065	1.507	1534597	☐
☑	Unknown Peak 1.7164	1.716	22291	☐
☑	Unknown Peak 1.9543	1.954	37570	☐
☑	Unknown Peak 2.2466	2.247	36041	☐
☑	Unknown Peak 3.7294	3.729	69094	☐
☑	Unknown Peak 3.9013	3.901	32645	☐
☑	Unknown Peak 5.5703	5.570	12953	☐
☑	Bromochloromethane	5.785	988327	☐
☑	1,2-Dichloroethane-d4	6.315	635243	☐
☑	1,4-Difluorobenzene	6.666	1378926	☐
☑	Unknown Peak 6.7450	6.745	16076	☐
☑	Unknown Peak 6.8668	6.867	15319	☐
☑	Unknown Peak 7.5831	7.583	20247	☐
☑	Toluene-d8	7.891	1729402	☐
☑	Unknown Peak 8.0487	8.049	20648	☐
☑	Unknown Peak 8.3495	8.350	55624	☐
☐	Tetrachloroethene	8.464	3272246	☐
☑	Chlorobenzene-d5	9.460	1839074	☐
☑	Unknown Peak 10.842	10.842	11014	☐
☑	4-Bromofluorobenzene	10.921	2116625	☐
☑	Unknown Peak 11.150	11.150	11588	☐
☑	Unknown Peak 11.401	11.401	14353	☐
☑	Unknown Peak 11.923	11.924	27165	☐
☑	Unknown Peak 12.640	12.640	11685	☐
☑	Unknown Peak 12.819	12.819	11557	☐
☑	Unknown Peak 13.363	13.364	13286	☐
☑	Unknown Peak 14.516	14.517	10944	☐
☑	Unknown Peak 15.455	15.455	15626	☐

Air Toxics Ltd.

File Results

Data File: File Information: p080221.d
Sample #: 2107684-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.16

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	16	(9986329.01506096 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080221.d
Sample #: 2107684-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.16

Compounds	RT	Peak Area	10
Unknown Peak 1.2548	1.255	74803	
Unknown Peak 1.5066	1.507	1662494	
Unknown Peak 1.6885	1.689	33645	
Unknown Peak 1.9543	1.954	37449	
Unknown Peak 2.2395	2.240	48677	
Unknown Peak 3.2638	3.264	11046	
Unknown Peak 3.6148	3.615	20093	
Unknown Peak 3.7294	3.729	76816	
Unknown Peak 3.9085	3.909	37568	
Unknown Peak 5.3841	5.384	42196	
Unknown Peak 5.4342	5.434	39767	
Unknown Peak 5.5560	5.556	25413	
Bromochloromethane	5.785	1025245	
1,2-Dichloroethane-d4	6.315	637916	
1,4-Difluorobenzene	6.666	1386676	
Unknown Peak 6.8597	6.860	11962	
Unknown Peak 7.0388	7.039	13326	
Unknown Peak 7.1247	7.125	99300	
Unknown Peak 7.5760	7.576	22934	
Toluene-d8	7.891	1725674	
Unknown Peak 8.0488	8.049	54366	
Unknown Peak 8.1562	8.156	102422	
Tetrachloroethene	8.471	737413	
Unknown Peak 8.7006	8.701	37927	
Unknown Peak 9.0802	9.080	11917	
Chlorobenzene-d5	9.460	1853347	
Unknown Peak 9.8682	9.868	10821	
Unknown Peak 10.505	10.506	25658	
Unknown Peak 10.842	10.842	52796	
4-Bromofluorobenzene	10.921	2159375	
Unknown Peak 11.401	11.401	18525	
Unknown Peak 11.931	11.931	10808	
Unknown Peak 11.981	11.981	29074	
Unknown Peak 12.067	12.067	36574	
Unknown Peak 12.482	12.483	48930	
Unknown Peak 12.819	12.819	21280	
Unknown Peak 12.984	12.984	19167	
Unknown Peak 13.363	13.364	32579	
Unknown Peak 13.743	13.743	110898	
Unknown Peak 14.373	14.374	19152	
Unknown Peak 14.517	14.517	19653	
Unknown Peak 15.462	15.463	15359	

Air Toxics Ltd.

File Results

Data File: File Information: p080222.d
Sample #: 2107684-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.15

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	480	(24840326.2185223 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080222.d
Sample #: 2107684-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.15

Compounds	RT	Peak Area	10
Unknown Peak 1.2547	1.255	76603	
Unknown Peak 1.5485	1.549	264882	
Propylene	1.688	197097	
Unknown Peak 1.8844	1.884	136392	
Unknown Peak 2.0318	2.032	1481340	
Unknown Peak 2.2467	2.247	126112	
Unknown Peak 2.6406	2.641	931441	
Unknown Peak 2.9701	2.970	423739	
Unknown Peak 3.1635	3.164	38968	
Unknown Peak 3.3139	3.314	25005	
Unknown Peak 3.3927	3.393	53207	
Unknown Peak 3.5360	3.536	142718	
Acetone	3.722	231266	
Carbon Disulfide	3.830	71508	
2-Propanol	3.909	64441	
Unknown Peak 4.1234	4.123	926853	
Unknown Peak 4.2022	4.202	60869	
Unknown Peak 4.4027	4.403	437317	
Unknown Peak 4.6176	4.618	32306	
Hexane	4.696	1610766	
Unknown Peak 4.8182	4.818	22238	
Unknown Peak 4.8898	4.890	37479	
Unknown Peak 4.9256	4.926	61721	
Unknown Peak 5.0904	5.090	16609	
Unknown Peak 5.2265	5.227	248763	
Unknown Peak 5.3268	5.327	358352	
Unknown Peak 5.4342	5.434	50844	
Unknown Peak 5.4772	5.477	26328	
Unknown Peak 5.5560	5.556	27588	
Unknown Peak 5.6276	5.628	23298	
Bromochloromethane	5.785	1009321	
Unknown Peak 5.8926	5.893	300207	
Cyclohexane	5.964	425898	
Unknown Peak 6.0646	6.065	422338	
2,2,4-Trimethylpentane	6.287	550348	
Benzene	6.301	44796	
1,2-Dichloroethane-d4	6.315	2104135	
Unknown Peak 6.3797	6.380	105231	
Heptane	6.451	176548	
Unknown Peak 6.5803	6.580	11776	
1,4-Difluorobenzene	6.666	1368721	
Unknown Peak 6.7522	6.752	20524	
Unknown Peak 6.9743	6.974	496424	
Unknown Peak 7.0531	7.053	89206	
Unknown Peak 7.1247	7.125	82601	
Unknown Peak 7.1748	7.175	69067	
Unknown Peak 7.3038	7.304	500286	
Unknown Peak 7.4112	7.411	781184	
Unknown Peak 7.5831	7.583	253144	
Unknown Peak 7.7121	7.712	201109	
Unknown Peak 7.7980	7.798	200334	
Toluene-d8	7.891	1866081	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080222.d
Sample #: 2107684-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.15

Compounds	RT	Peak Area	10
Toluene	7.956	523863	
Unknown Peak 8.0774	8.077	69525	
Unknown Peak 8.1418	8.142	111639	
Unknown Peak 8.2493	8.249	195568	
Unknown Peak 8.3782	8.378	34522	
Tetrachloroethene	8.471	535994	
Unknown Peak 8.6433	8.643	19502	
Unknown Peak 8.7220	8.722	54073	
Unknown Peak 8.7722	8.772	120287	
Unknown Peak 8.9011	8.901	33308	
Unknown Peak 9.0301	9.030	15642	
Unknown Peak 9.2163	9.216	18055	
Unknown Peak 9.3739	9.374	16070	
Chlorobenzene-d5	9.460	1878372	
Ethyl Benzene	9.567	107797	
m,p-Xylene	9.711	170468	
Unknown Peak 9.8180	9.818	12341	
Unknown Peak 10.083	10.083	78661	
o-Xylene	10.226	58865	
Unknown Peak 10.391	10.391	34341	
Unknown Peak 10.498	10.499	16147	
Unknown Peak 10.598	10.599	465278	
4-Bromofluorobenzene	10.921	2192032	
Unknown Peak 11.028	11.029	51623	
Unknown Peak 11.143	11.143	10086	
Unknown Peak 11.257	11.258	139365	
Unknown Peak 11.415	11.415	58245	
Unknown Peak 11.623	11.623	61820	
Unknown Peak 11.816	11.817	54496	
Unknown Peak 11.931	11.931	42848	
Unknown Peak 12.067	12.067	53718	
Unknown Peak 12.246	12.246	16843	
Unknown Peak 12.317	12.318	86880	
Unknown Peak 12.454	12.454	22695	
Unknown Peak 12.611	12.612	69479	
Unknown Peak 12.819	12.819	10511	
Unknown Peak 12.991	12.991	54401	
Unknown Peak 13.163	13.163	10911	
Unknown Peak 13.306	13.306	16698	
Unknown Peak 13.363	13.364	56380	
Unknown Peak 13.528	13.528	27266	
Unknown Peak 13.614	13.614	12670	
Unknown Peak 13.800	13.801	82407	
Unknown Peak 14.123	14.123	14263	
Unknown Peak 14.516	14.517	32512	
Unknown Peak 14.731	14.732	18758	
Unknown Peak 14.918	14.918	32380	
Unknown Peak 15.147	15.147	22887	
Unknown Peak 15.276	15.276	10761	
Unknown Peak 15.462	15.463	26858	

Air Toxics Ltd.

File Results

Data File: File Information: p080223.d
Sample #: 2107684-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.04

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	6.5	(9694880.72779937 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080223.d
Sample #: 2107684-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.04

Compounds	RT	Peak Area	10
Unknown Peak 1.2546	1.255	77403	
Unknown Peak 1.5065	1.507	827706	
Freon 12	1.744	380267	
Unknown Peak 1.9123	1.912	46890	
Unknown Peak 1.9542	1.954	32637	
Unknown Peak 2.2394	2.239	35953	
Unknown Peak 3.7293	3.729	85665	
Unknown Peak 3.9012	3.901	39333	
Unknown Peak 4.1233	4.123	13273	
Unknown Peak 4.3955	4.396	16699	
Hexane	4.696	125672	
Unknown Peak 5.4341	5.434	21419	
Unknown Peak 5.5631	5.563	12478	
Bromochloromethane	5.785	1011677	
1,2-Dichloroethane-d4	6.315	628917	
1,4-Difluorobenzene	6.666	1385033	
Unknown Peak 6.7450	6.745	12477	
Unknown Peak 7.1246	7.125	17663	
Unknown Peak 7.5831	7.583	32866	
Toluene-d8	7.891	1722471	
Unknown Peak 8.0486	8.049	27165	
Unknown Peak 8.1561	8.156	10455	
Tetrachloroethene	8.464	261464	
Unknown Peak 8.7005	8.701	15481	
Unknown Peak 9.1016	9.102	13448	
Chlorobenzene-d5	9.460	1865138	
Unknown Peak 10.770	10.771	16934	
4-Bromofluorobenzene	10.921	2178167	
Unknown Peak 11.150	11.150	12264	
Unknown Peak 11.250	11.251	32556	
Unknown Peak 11.408	11.408	17680	
Unknown Peak 12.067	12.067	15155	
Unknown Peak 12.647	12.647	12359	
Unknown Peak 12.819	12.819	33863	
Unknown Peak 12.991	12.991	18707	
Unknown Peak 13.363	13.364	23981	
Unknown Peak 13.800	13.801	65459	
Unknown Peak 14.108	14.109	12234	
Unknown Peak 14.380	14.381	13393	
Unknown Peak 14.746	14.746	10905	
Unknown Peak 14.910	14.911	21648	
Unknown Peak 15.261	15.262	11259	
Unknown Peak 15.362	15.362	13857	
Unknown Peak 15.469	15.470	11654	

Air Toxics Ltd.

File Results

Data File: File Information: p080224.d
Sample #: 2107684-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	150	(14266496.6069 - 9478044.4758898 / 68202) * 2.

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080224.d
Sample #: 2107684-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compounds	RT	Peak Area	10
Unknown Peak 1.2547	1.255	78612	
Unknown Peak 1.5066	1.507	506996	
Unknown Peak 1.7025	1.703	82691	
Unknown Peak 1.9263	1.926	79840	
Unknown Peak 2.0318	2.032	100310	
Unknown Peak 2.2467	2.247	45451	
Unknown Peak 2.6406	2.641	108089	
Unknown Peak 2.9701	2.970	79693	
Unknown Peak 3.5432	3.543	20732	
Unknown Peak 3.7294	3.729	93486	
Carbon Disulfide	3.837	46814	
Unknown Peak 3.9013	3.901	35567	
Unknown Peak 4.1234	4.123	157649	
Unknown Peak 4.4027	4.403	138692	
Hexane	4.696	846443	
Unknown Peak 4.9328	4.933	18933	
Unknown Peak 5.2265	5.227	71274	
Unknown Peak 5.3268	5.327	107064	
Unknown Peak 5.4772	5.477	43829	
cis-1,2-Dichloroethene	5.549	36411	
Unknown Peak 5.6348	5.635	11581	
Tetrahydrofuran	5.785	6173	
Bromochloromethane	5.785	1003161	
Unknown Peak 5.8927	5.893	75574	
Unknown Peak 5.9714	5.971	119072	
Unknown Peak 6.0574	6.057	90384	
2,2,4-Trimethylpentane	6.279	222118	
Benzene	6.301	22589	
1,2-Dichloroethane-d4	6.315	1274453	
1,4-Difluorobenzene	6.666	1393403	
Unknown Peak 6.7451	6.745	45785	
Unknown Peak 6.9743	6.974	132527	
Unknown Peak 7.0531	7.053	24421	
Unknown Peak 7.1247	7.125	27096	
Unknown Peak 7.1748	7.175	30005	
Unknown Peak 7.3038	7.304	163426	
Unknown Peak 7.4112	7.411	240032	
Unknown Peak 7.5760	7.576	65995	
Unknown Peak 7.7049	7.705	77046	
Unknown Peak 7.7980	7.798	36053	
Toluene-d8	7.891	1739730	
Toluene	7.956	110763	
Unknown Peak 8.1490	8.149	25782	
Unknown Peak 8.2421	8.242	26401	
Unknown Peak 8.3639	8.364	21854	
Tetrachloroethene	8.471	1054062	
Unknown Peak 8.7077	8.708	29756	
Unknown Peak 8.7722	8.772	52020	
Unknown Peak 8.9011	8.901	28709	
Chlorobenzene-d5	9.460	1914292	
Unknown Peak 9.5673	9.567	38489	
Unknown Peak 9.7177	9.718	71492	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080224.d
Sample #: 2107684-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.13

Compounds	RT	Peak Area	10
Unknown Peak 10.083	10.083	11840	
Unknown Peak 10.226	10.226	24733	
Unknown Peak 10.383	10.384	17983	
Unknown Peak 10.505	10.506	17825	
Unknown Peak 10.598	10.599	67240	
Unknown Peak 10.756	10.756	83580	
Unknown Peak 10.849	10.850	64492	
4-Bromofluorobenzene	10.921	2270430	
Unknown Peak 11.257	11.258	120110	
Unknown Peak 11.401	11.401	31410	
Unknown Peak 11.630	11.630	24981	
Unknown Peak 11.816	11.817	28841	
Unknown Peak 11.938	11.938	39768	
Unknown Peak 12.067	12.067	33559	
Unknown Peak 12.246	12.246	14854	
Unknown Peak 12.317	12.318	13538	
Unknown Peak 12.454	12.454	42364	
Unknown Peak 12.604	12.604	14410	
Unknown Peak 12.640	12.640	14086	
Unknown Peak 12.812	12.812	59255	
Unknown Peak 12.991	12.991	70960	
Unknown Peak 13.313	13.314	11350	
Unknown Peak 13.363	13.364	38379	
Unknown Peak 13.492	13.493	26817	
Unknown Peak 13.643	13.643	43922	
Unknown Peak 13.800	13.801	194434	
Unknown Peak 13.872	13.872	14291	
Unknown Peak 14.130	14.130	12396	
Unknown Peak 14.237	14.238	10220	
Unknown Peak 14.509	14.510	26149	
Unknown Peak 14.624	14.624	21154	
Unknown Peak 14.731	14.732	19293	
Unknown Peak 14.903	14.904	58839	
Unknown Peak 15.140	15.140	15936	
Unknown Peak 15.261	15.262	17058	
Unknown Peak 15.462	15.463	40797	

Air Toxics Ltd.

File Results

Data File: File Information: p080226.d
Sample #: 2107684-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.22

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	100	(12734398.4176527 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080226.d
Sample #: 2107684-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.22

Compounds	RT	Peak Area	10
Unknown Peak 1.2547	1.255	64984	
Unknown Peak 1.5065	1.507	1009230	
Unknown Peak 1.7024	1.702	122174	
Unknown Peak 1.9263	1.926	71722	
Unknown Peak 2.0389	2.039	111424	
Unknown Peak 2.2395	2.240	46434	
Unknown Peak 2.6406	2.641	222402	
Unknown Peak 2.8483	2.848	23510	
Unknown Peak 3.0059	3.006	24546	
Unknown Peak 3.2638	3.264	14934	
Unknown Peak 3.3927	3.393	17351	
Unknown Peak 3.5431	3.543	39489	
Unknown Peak 3.7294	3.729	105082	
Unknown Peak 3.8368	3.837	34308	
Unknown Peak 3.9013	3.901	46462	
Unknown Peak 4.0804	4.080	125759	
Unknown Peak 4.195	4.195	12287	
Unknown Peak 4.4027	4.403	86932	
Hexane	4.696	321874	
Unknown Peak 5.1333	5.133	10028	
Unknown Peak 5.2336	5.234	13979	
Unknown Peak 5.3267	5.327	98831	
Unknown Peak 5.4843	5.484	32578	
Unknown Peak 5.5703	5.570	10406	
Unknown Peak 5.6204	5.620	13125	
Bromochloromethane	5.785	1064908	
Cyclohexane	5.964	197623	
2,2,4-Trimethylpentane	6.287	408786	
1,2-Dichloroethane-d4	6.315	1587297	
1,4-Difluorobenzene	6.666	1430338	
Unknown Peak 6.7522	6.752	46455	
Unknown Peak 6.9671	6.967	74989	
Unknown Peak 7.0530	7.053	33466	
Unknown Peak 7.1318	7.132	10972	
Unknown Peak 7.1748	7.175	24531	
Unknown Peak 7.3037	7.304	189179	
Unknown Peak 7.4112	7.411	269968	
Unknown Peak 7.5759	7.576	41928	
Unknown Peak 7.7120	7.712	11074	
Unknown Peak 7.7980	7.798	25419	
Toluene-d8	7.891	1797057	
Unknown Peak 8.0487	8.049	20881	
Unknown Peak 8.149	8.149	25996	
Unknown Peak 8.2492	8.249	22010	
Tetrachloroethene	8.471	221896	
Unknown Peak 8.7005	8.701	27886	
Unknown Peak 8.7721	8.772	34249	
Unknown Peak 8.9011	8.901	20909	
Unknown Peak 9.0515	9.052	10475	
Chlorobenzene-d5	9.460	1979031	
Unknown Peak 9.7177	9.718	15541	
Unknown Peak 10.505	10.506	12592	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080226.d
Sample #: 2107684-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.22

	Compounds	RT	Peak Area	10
☐	Unknown Peak 10.584	10.584	12469	☐
☐	Unknown Peak 10.763	10.764	22113	☐
☑	Unknown Peak 10.842	10.842	32377	☐
☑	4-Bromofluorobenzene	10.921	2370806	☐
☑	Unknown Peak 11.257	11.258	124902	☐
☐	Unknown Peak 11.401	11.401	33708	☐
☐	Unknown Peak 11.615	11.616	14463	☐
☐	Unknown Peak 11.852	11.852	11223	☐
☐	Unknown Peak 11.931	11.931	17335	☐
☐	Unknown Peak 12.067	12.067	19456	☐
☐	Unknown Peak 12.246	12.246	12661	☐
☐	Unknown Peak 12.461	12.461	18175	☐
☑	Unknown Peak 12.604	12.604	17141	☐
☐	Unknown Peak 12.640	12.640	15115	☐
☐	Unknown Peak 12.819	12.819	43549	☐
☐	Unknown Peak 12.991	12.991	256579	☐
☑	Unknown Peak 13.370	13.371	31881	☐
☐	Unknown Peak 13.492	13.493	17851	☐
☐	Unknown Peak 13.643	13.643	23492	☐
☑	Unknown Peak 13.800	13.801	352006	☐
☐	Unknown Peak 13.865	13.865	148436	☐
☐	Unknown Peak 14.495	14.495	38193	☐
☑	Unknown Peak 14.610	14.610	15114	☐
☐	Unknown Peak 14.910	14.911	262685	☐
☐	Unknown Peak 15.154	15.154	35358	☐
☐	Unknown Peak 15.254	15.255	10427	☐
☐	Unknown Peak 15.340	15.341	19449	☐
☐	Unknown Peak 15.462	15.462	20861	☐

Air Toxics Ltd.

File Results

Data File: File Information: p080227.d
Sample #: 2107684-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.16

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	98	(12571225.205027 - 9478044.4758898 / 68202) *

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080227.d
Sample #: 2107684-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.16

Compounds	RT	Peak Area	10
Unknown Peak 1.2408	1.241	54695	
Unknown Peak 1.5066	1.507	917952	
Unknown Peak 1.7025	1.703	94352	
Unknown Peak 1.9404	1.940	51424	
Unknown Peak 2.0318	2.032	88564	
Unknown Peak 2.2396	2.240	32654	
Unknown Peak 2.6407	2.641	210359	
Unknown Peak 2.8413	2.841	13750	
Unknown Peak 2.8556	2.856	14183	
Unknown Peak 3.0060	3.006	22948	
Unknown Peak 3.2710	3.271	12040	
Unknown Peak 3.3928	3.393	15383	
Unknown Peak 3.5432	3.543	49920	
Unknown Peak 3.7438	3.744	42736	
Unknown Peak 3.8369	3.837	22435	
Unknown Peak 3.9157	3.916	20997	
Unknown Peak 4.0805	4.080	111734	
Unknown Peak 4.3527	4.353	12294	
Unknown Peak 4.4028	4.403	64972	
Hexane	4.704	298685	
Unknown Peak 5.2337	5.234	14279	
Unknown Peak 5.3340	5.334	97874	
Unknown Peak 5.4844	5.484	14427	
Bromochloromethane	5.792	994441	
Unknown Peak 5.9787	5.979	188246	
2,2,4-Trimethylpentane	6.287	376893	
1,2-Dichloroethane-d4	6.315	1473845	
Unknown Peak 6.3798	6.380	42435	
1,4-Difluorobenzene	6.666	1301200	
Unknown Peak 6.7523	6.752	17678	
Unknown Peak 6.9743	6.974	70298	
Unknown Peak 7.0531	7.053	33134	
Unknown Peak 7.1821	7.182	20560	
Unknown Peak 7.3038	7.304	183296	
Unknown Peak 7.4113	7.411	253931	
Unknown Peak 7.5832	7.583	43506	
Unknown Peak 7.7981	7.798	25412	
Toluene-d8	7.898	1641972	
Unknown Peak 8.0559	8.056	33313	
Unknown Peak 8.1562	8.156	40637	
Unknown Peak 8.2494	8.249	30928	
Unknown Peak 8.3926	8.393	19429	
Tetrachloroethene	8.471	194132	
Unknown Peak 8.7006	8.701	15982	
Unknown Peak 8.7794	8.779	35691	
Unknown Peak 8.9012	8.901	30860	
Chlorobenzene-d5	9.467	1789214	
Unknown Peak 9.7178	9.718	14916	
Unknown Peak 10.090	10.090	11772	
Unknown Peak 10.512	10.513	10341	
Unknown Peak 10.849	10.850	25788	
4-Bromofluorobenzene	10.921	2123521	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080227.d
Sample #: 2107684-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.16

Compounds	RT	Peak Area	10
Unknown Peak 11.021	11.021	13517	
Unknown Peak 11.164	11.165	17265	
Unknown Peak 11.257	11.258	121155	
Unknown Peak 11.408	11.408	20745	
Unknown Peak 11.637	11.638	14546	
Unknown Peak 11.859	11.860	27073	
Unknown Peak 11.938	11.938	26704	
Unknown Peak 12.074	12.074	16641	
Unknown Peak 12.246	12.246	12076	
Unknown Peak 12.325	12.325	25510	
Unknown Peak 12.475	12.476	13030	
Unknown Peak 12.618	12.619	10329	
Unknown Peak 12.826	12.827	30940	
Unknown Peak 12.998	12.998	244543	
Unknown Peak 13.385	13.385	34347	
Unknown Peak 13.514	13.514	19111	
Unknown Peak 13.664	13.665	19952	
Unknown Peak 13.822	13.822	365622	
Unknown Peak 13.893	13.894	219696	
Unknown Peak 14.531	14.531	32953	
Unknown Peak 14.645	14.646	12928	
Unknown Peak 14.954	14.954	324462	
Unknown Peak 15.197	15.198	32650	
Unknown Peak 15.390	15.391	16766	

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 # 2107684	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: MSPP 8/21/21	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: Si, Cr - 1 out LOD. UB-07a.

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
				✓	Initials/Date	A1: MM 08/02/21	A2: 08/3/21	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			D	**a)** Tedlar Bag IDs verified against COC **b)** Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
✓	NA			D	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	✓			✓	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 dil TC A2: 02A-11A-Full loads, 10A 11A dup.

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/ Date	D1: DS 9/6/21	D2:	D3:	D4:
NA						CAR # (if applicable)				
✓						Spectra Verified *(documentation of spectral defense included if applicable)*				
✓						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: DA 9/6/21	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 08-02-2021

WORK ORDER #: 2107361

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:	07/15/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/29/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-VW55A-02	TO-15	5.0 "Hg	10 psi
02A	SG-VW27A-02	TO-15	6.5 "Hg	10 psi
03A	SG-VW27B-02	TO-15	5.5 "Hg	10 psi
04A	SG-VW27B-03	TO-15	5.5 "Hg	10 psi
05A	SG-VW26B-02	TO-15	4.5 "Hg	10 psi
06A	SG-VW16A-02	TO-15	6.0 "Hg	10 psi
07A	SG-VW18A-02	TO-15	6.0 "Hg	10 psi
08A	SG-VW20B-02	TO-15	4.5 "Hg	10 psi
09A	SG-VW24A-04	TO-15	5.5 "Hg	10 psi
10A	SG-VW21A-03	TO-15	6.5 "Hg	10 psi
11A	SG-VW21B-02	TO-15	6.5 "Hg	10 psi
12A	SG-VW28A-02	TO-15	8.5 "Hg	10 psi
13A	SG-VW14-02	TO-15	6.5 "Hg	10 psi
14A	SG-VW59B-01	TO-15	6.0 "Hg	10 psi
15A	SG-VW59A-01	TO-15	6.0 "Hg	10 psi
16A	Lab Blank	TO-15	NA	NA
16B	Lab Blank	TO-15	NA	NA
17A	CCV	TO-15	NA	NA
17B	CCV	TO-15	NA	NA
18A	LCS	TO-15	NA	NA
18AA	LCSD	TO-15	NA	NA
18B	LCS	TO-15	NA	NA
18BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/29/21

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# 2107361

Fifteen 1 Liter Summa Canister samples were received on July 15, 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.

Dilution was performed on samples SG-VW20B-02 and SG-VW59A-01 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-VW55A-02	2107361-01A	07/14/2021	07/15/2021	NA	14	07/28/2021	NA	GOOD
SG-VW27A-02	2107361-02A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW27B-02	2107361-03A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW27B-03	2107361-04A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW26B-02	2107361-05A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW16A-02	2107361-06A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW18A-02	2107361-07A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW20B-02	2107361-08A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW24A-04	2107361-09A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW21A-03	2107361-10A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW21B-02	2107361-11A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW28A-02	2107361-12A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW14-02	2107361-13A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW59B-01	2107361-14A	07/15/2021	07/15/2021	NA	14	07/29/2021	NA	GOOD
SG-VW59A-01	2107361-15A	07/15/2021	07/15/2021	NA	14	07/29/2021	NA	GOOD
Lab Blank	2107361-16A	NA	NA	NA	NA	07/27/2021	NA	GOOD
Lab Blank	2107361-16B	NA	NA	NA	NA	07/28/2021	NA	GOOD
CCV	2107361-17A	NA	NA	NA	NA	07/27/2021	NA	GOOD
CCV	2107361-17B	NA	NA	NA	NA	07/28/2021	NA	GOOD
LCS	2107361-18A	NA	NA	NA	NA	07/27/2021	NA	GOOD
LCSD	2107361-18AA	NA	NA	NA	NA	07/27/2021	NA	GOOD
LCS	2107361-18B	NA	NA	NA	NA	07/28/2021	NA	GOOD
LCSD	2107361-18BB	NA	NA	NA	NA	07/28/2021	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-VW55A-02

Lab ID#: 2107361-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.0	17	11	47
2-Propanol	4.0	15	9.9	36
Acetone	10	14	24	34
Chlorobenzene	1.0	28	4.6	130
Hexane	1.0	3.1	3.6	11
Toluene	1.0	4.2	3.8	16

Client Sample ID: SG-VW27A-02

Lab ID#: 2107361-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	1.1	2.5	3.8	8.7
Tetrachloroethene	1.1	3.4	7.2	23
Toluene	1.1	1.8	4.0	7.0

Client Sample ID: SG-VW27B-02

Lab ID#: 2107361-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2,4-Trimethylbenzene	1.0	2.2	5.1	11
2,2,4-Trimethylpentane	1.0	1.3	4.8	5.9
2-Propanol	4.1	7.1	10	17
4-Ethyltoluene	1.0	2.1	5.1	10
Benzene	1.0	1.2	3.3	3.9
Carbon Disulfide	4.1	5.4	13	17
Cyclohexane	1.0	1.6	3.5	5.6
Ethanol	10	26	19	50
Ethyl Benzene	1.0	3.3	4.5	14
Heptane	1.0	1.3	4.2	5.4
Hexane	1.0	50	3.6	180
m,p-Xylene	1.0	13	4.5	57
o-Xylene	1.0	3.9	4.5	17
Tetrachloroethene	1.0	8.6	7.0	58

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

Client Sample ID: SG-VW27B-02

Lab ID#: 2107361-03A

Toluene	1.0	9.7	3.9	36
TPH ref. to Gasoline (MW=100)	100	220	420	900

Client Sample ID: SG-VW27B-03

Lab ID#: 2107361-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2,4-Trimethylbenzene	1.0	2.3	5.1	11
2,2,4-Trimethylpentane	1.0	1.3	4.8	5.9
4-Ethyltoluene	1.0	2.2	5.1	11
Benzene	1.0	1.3	3.3	4.0
Cyclohexane	1.0	1.6	3.5	5.6
Ethanol	10	25	19	46
Ethyl Benzene	1.0	3.5	4.5	15
Heptane	1.0	1.3	4.2	5.5
Hexane	1.0	50	3.6	170
m,p-Xylene	1.0	13	4.5	58
o-Xylene	1.0	4.0	4.5	18
Tetrachloroethene	1.0	8.1	7.0	55
Toluene	1.0	9.4	3.9	35
TPH ref. to Gasoline (MW=100)	100	180	420	740

Client Sample ID: SG-VW26B-02

Lab ID#: 2107361-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	9.9	18	24	42
Ethanol	9.9	16	19	31
Ethyl Acetate	4.0	11	14	41
Hexane	0.99	11	3.5	39
m,p-Xylene	0.99	1.5	4.3	6.7
Tetrachloroethene	0.99	5.5	6.7	37
Toluene	0.99	29	3.7	110
TPH ref. to Gasoline (MW=100)	99	120	400	490

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

Client Sample ID: SG-VW16A-02

Lab ID#: 2107361-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	10	16	25	37
Chloroform	1.0	3.4	5.1	17
Tetrachloroethene	1.0	5.2	7.1	35

Client Sample ID: SG-VW18A-02

Lab ID#: 2107361-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	10	11	25	27
Ethanol	10	12	20	22
Tetrachloroethene	1.0	73	7.1	490
Toluene	1.0	1.3	4.0	4.8

Client Sample ID: SG-VW20B-02

Lab ID#: 2107361-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	560	36000	1500	98000
4-Methyl-2-pentanone	140	190	580	790

Client Sample ID: SG-VW24A-04

Lab ID#: 2107361-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.1	9.3	11	25
2-Butanone (Methyl Ethyl Ketone)	4.1	4.4	12	13
Acetone	10	79	24	190
Tetrachloroethene	1.0	46	7.0	310

Client Sample ID: SG-VW21A-03

Lab ID#: 2107361-10A

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

Client Sample ID: SG-VW21A-03

Lab ID#: 2107361-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.3	160	12	450
Chloroform	1.1	1.5	5.2	7.2
Freon 12	1.1	2.7	5.3	13
Tetrachloroethene	1.1	16	7.2	110
Toluene	1.1	8.5	4.0	32
Trichloroethene	1.1	3.3	5.8	18

Client Sample ID: SG-VW21B-02

Lab ID#: 2107361-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.3	4.3	10	11
Acetone	11	14	25	34
Chloroform	1.1	4.3	5.2	21
Tetrachloroethene	1.1	21	7.2	140
Toluene	1.1	1.1	4.0	4.2
Trichloroethene	1.1	6.6	5.8	36

Client Sample ID: SG-VW28A-02

Lab ID#: 2107361-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.7	5.2	12	13
Acetone	12	14	28	33
Hexane	1.2	1.3	4.1	4.7
Toluene	1.2	2.2	4.4	8.2

Client Sample ID: SG-VW14-02

Lab ID#: 2107361-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.1	1.7	5.2	8.1

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

Client Sample ID: SG-VW14-02

Lab ID#: 2107361-13A

Tetrachloroethene	1.1	55	7.2	370
Trichloroethene	1.1	2.2	5.8	12

Client Sample ID: SG-VW59B-01

Lab ID#: 2107361-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.2	89	11	240
Hexane	1.0	1.4	3.7	5.0
Tetrachloroethene	1.0	42	7.1	280

Client Sample ID: SG-VW59A-01

Lab ID#: 2107361-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	84	4700	230	13000

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Client Sample ID: SG-VW55A-02

Lab ID#: 2107361-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072722**	**Date of Collection:**	**7/14/21 3:49:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/28/21 12:16 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	17	11	47
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	15	9.9	36
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	14	24	34
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	28	4.6	130
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-VW55A-02

Lab ID#: 2107361-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072722**	**Date of Collection:**	**7/14/21 3:49:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/28/21 12:16 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	3.1	3.6	11
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	Not Detected	6.8	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	4.2	3.8	16
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-VW55A-02

Lab ID#: 2107361-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072722**	**Date of Collection: 7/14/21 3:49:00 PM**	
Dil. Factor:	**2.02**	**Date of Analysis: 7/28/21 12:16 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	94	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072722.d
Lab Smp Id: 2107361-01A
Inj Date : 28-JUL-2021 00:16
Operator : kk Inst ID: msd3.i
Smp Info : 200mL O0252
Misc Info : 5.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 1
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	239034	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	185045				48.46- 108.46	77.41
5.284	5.270 (1.000)	49	336320				120.39- 180.39	140.70
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	790403	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	114822				0.00- 45.52	14.53
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	674024	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	353695				25.46- 85.46	52.48
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	337559	25.6615	25.662		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	162450				21.66- 81.66	48.13
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	736861	22.6341	22.634		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	80486				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	483983			36.47- 96.47	65.68
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	420616	23.5927	23.593	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	478918			93.06- 153.06	113.86
9.601	9.601 (1.114)	176	393879			62.87- 122.87	93.64
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	32600	8.66174	17.497	80.00- 120.00	100.00
1.451	1.479 (0.275)	51	89407			321.86- 381.86	274.25
1.451	1.451 (0.275)	47	19394			45.34- 105.34	59.49
47 Acetone					CAS #: 67-64-1		
3.228	3.214 (0.611)	58	28006	6.98737	14.114	80.00- 120.00	100.00
3.228	3.214 (0.611)	43	91472			299.66- 359.66	326.61
52 2-Propanol					CAS #: 67-63-0		
3.410	3.409 (0.645)	45	105614	7.32688	14.800	80.00- 120.00	100.00
3.410	3.395 (0.645)	43	24859			0.00- 48.61	23.54
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	20240	1.52906	3.089	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	13597			32.99- 92.99	67.18
4.179	4.179 (0.791)	86	4139			0.00- 42.56	20.45
137 Toluene					CAS #: 108-88-3		
7.445	7.437 (1.205)	91	49741	2.05527	4.152	80.00- 120.00	100.00
7.445	7.437 (1.205)	92	28755			28.30- 88.30	57.81
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	260544	14.1433	28.569	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	85099			2.13- 62.13	32.66
8.641	8.641 (1.002)	77	140831			26.35- 86.35	54.05

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072722.d
Lab Smp Id: 2107361-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.0 Hg->10 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	239034	0.02
108 1,4-Difluorobenze	785289	471173	1099405	790403	0.65
153 Chlorobenzene-d5	683596	410158	957034	674024	-1.40

		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	6.18	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: 29-Jul-2021 13:02

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-01A
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/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.662	102.65	70-130
$ 134 Toluene-d8	25.000	22.634	90.54	70-130
$ 170 4-Bromofluorobenz	25.000	23.593	94.37	70-130

Data File: /chem/msd3.i/27JUL21.b/3072722.d

Date : 28-JUL-2021 00:16

Client ID:

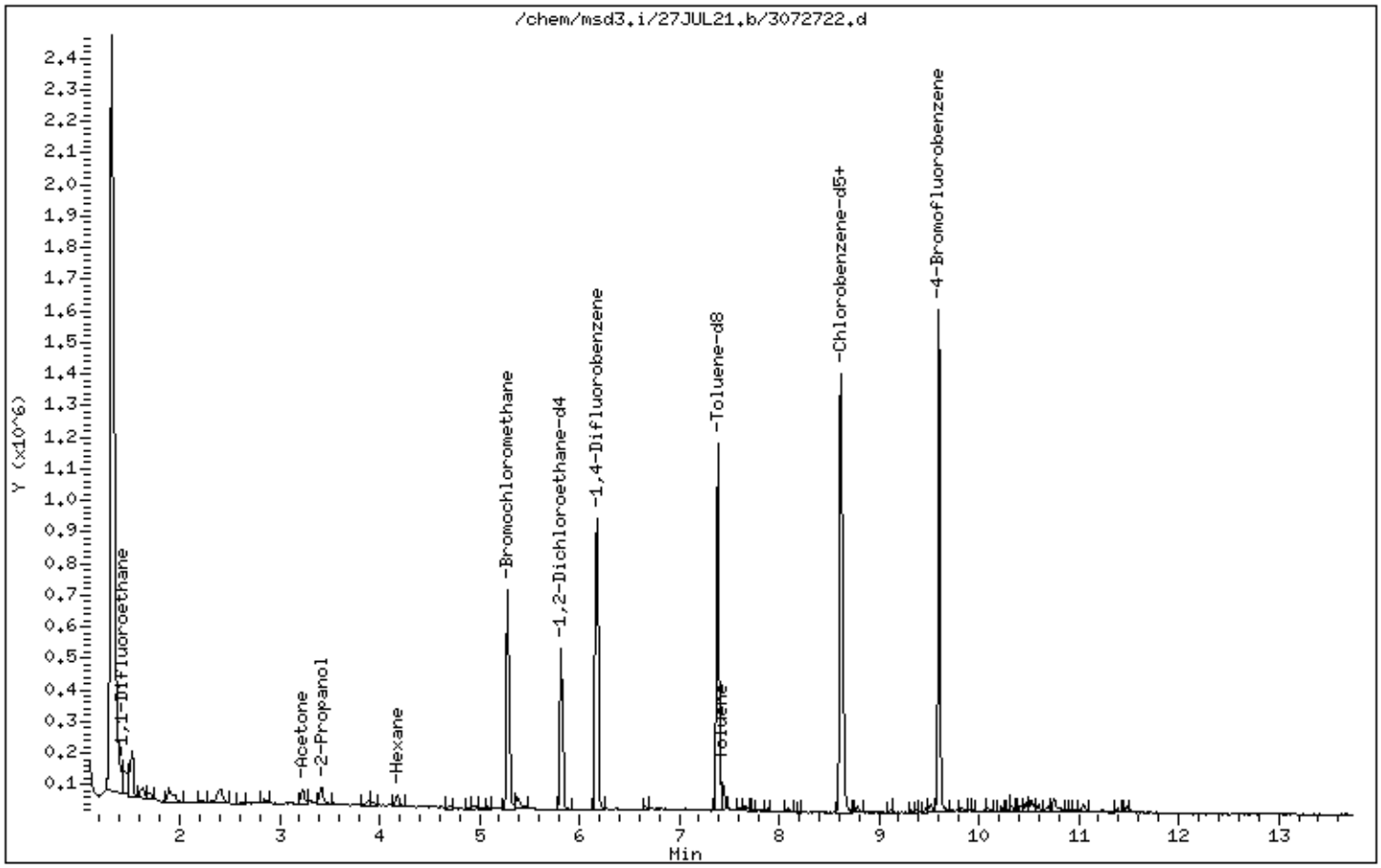
Instrument: msd3.i

Sample Info: 200mL 00252

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072722.d

Date : 28-JUL-2021 00:16

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00252

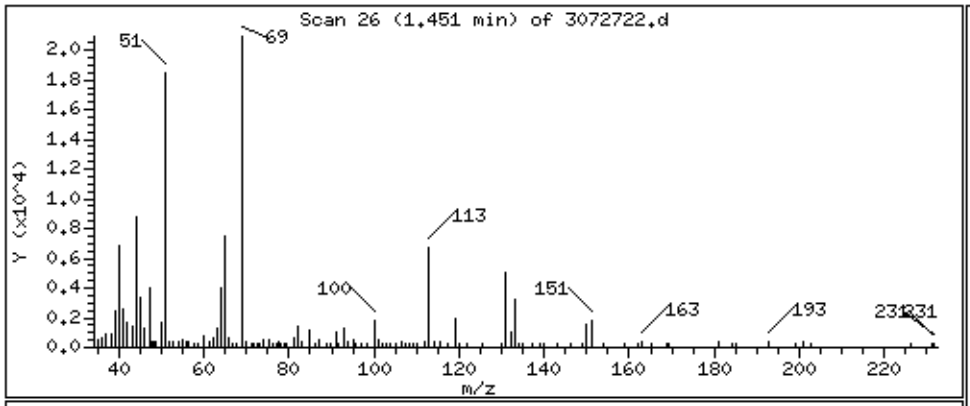
Operator: kk

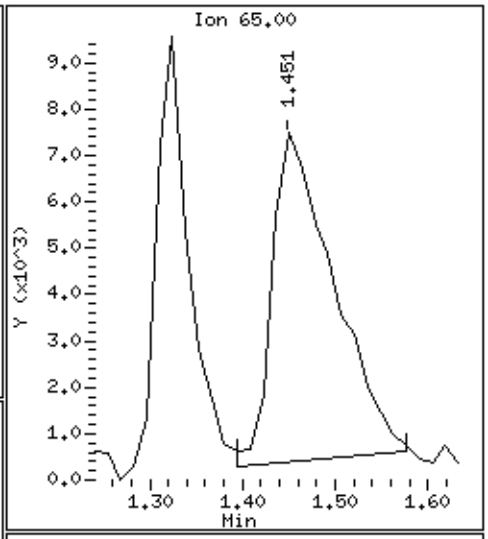
Column phase: RTX-624

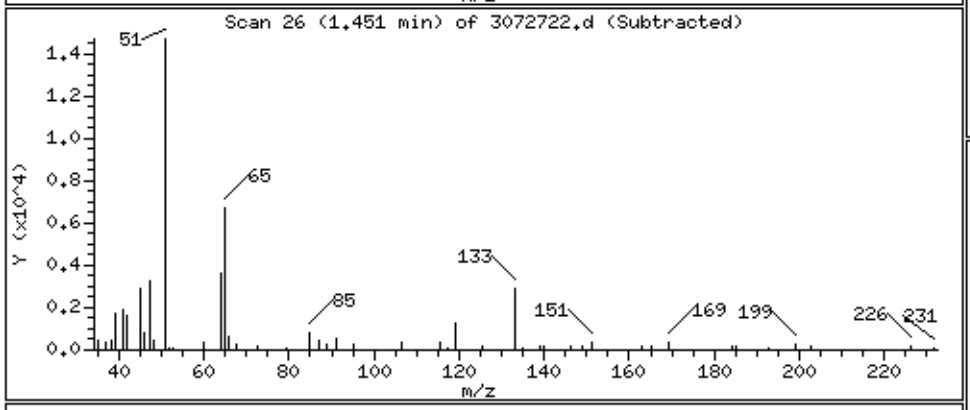
Column diameter: 0.25

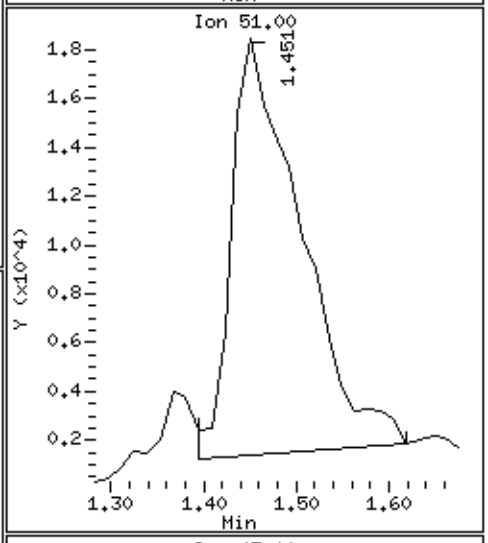
7 1,1-Difluoroethane

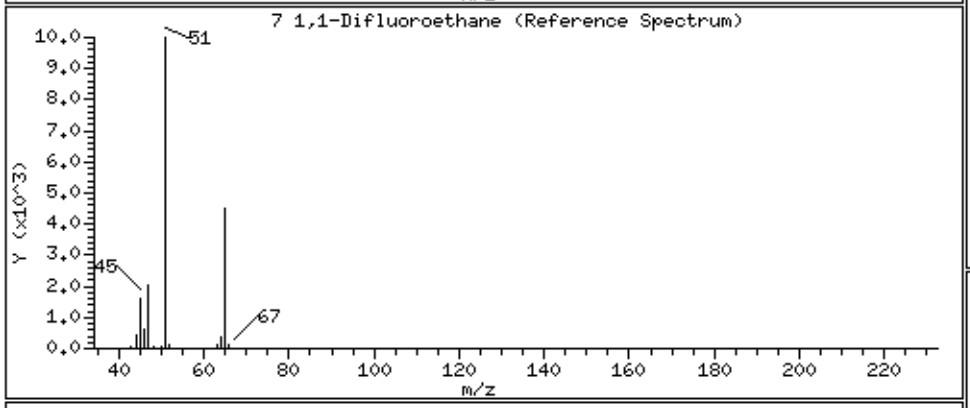
Concentration: 17.497 PPBV

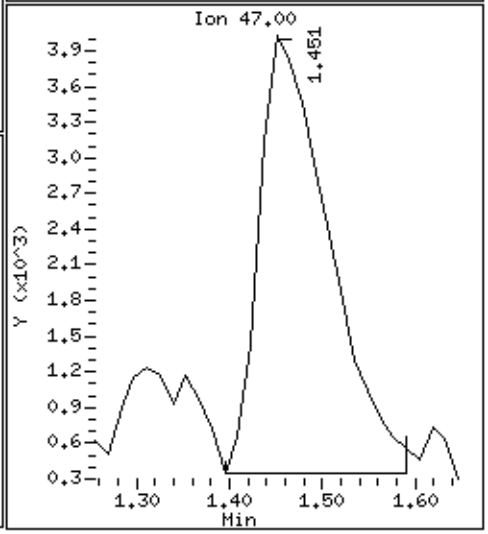


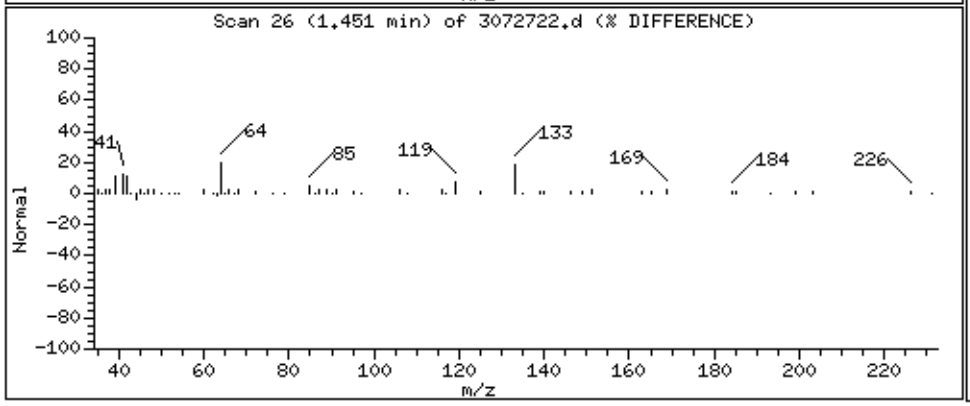












Data File: /chem/msd3.i/27JUL21.b/3072722.d

Date : 28-JUL-2021 00:16

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00252

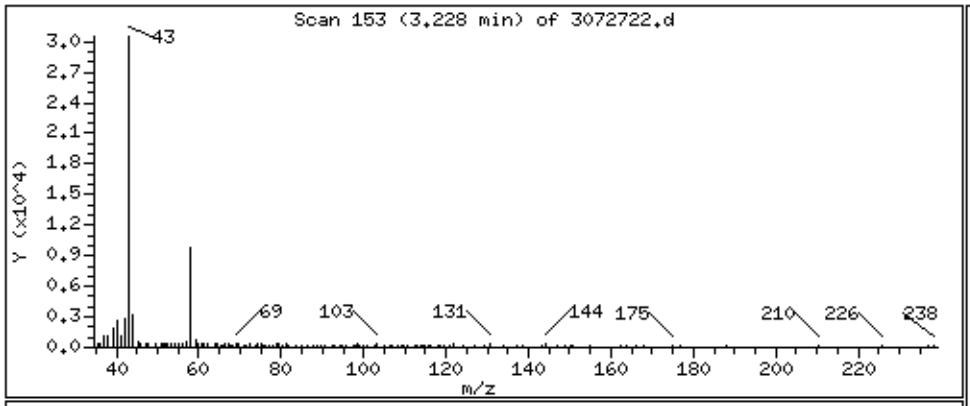
Operator: kk

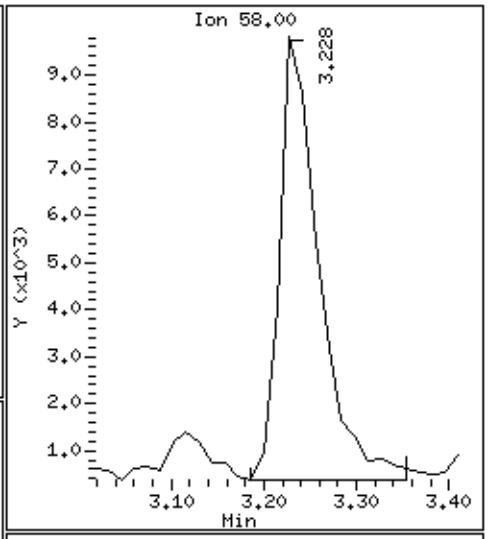
Column phase: RTX-624

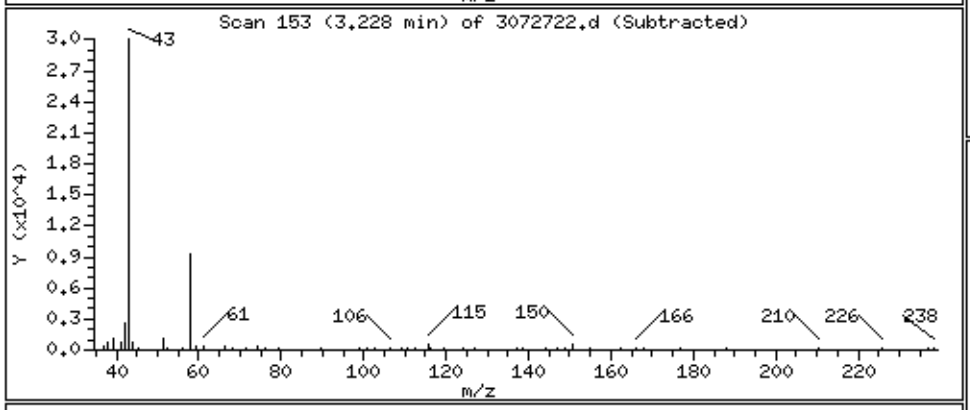
Column diameter: 0.25

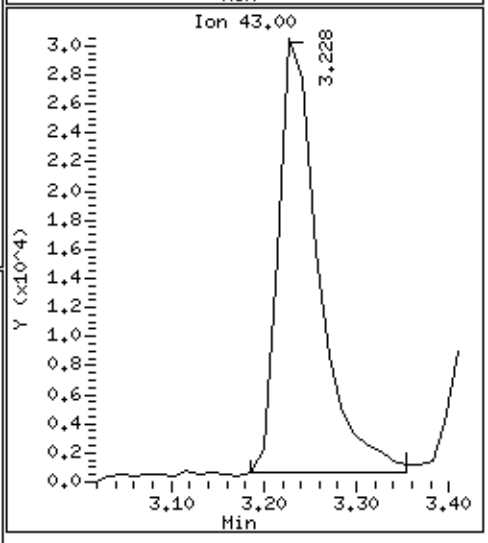
47 Acetone

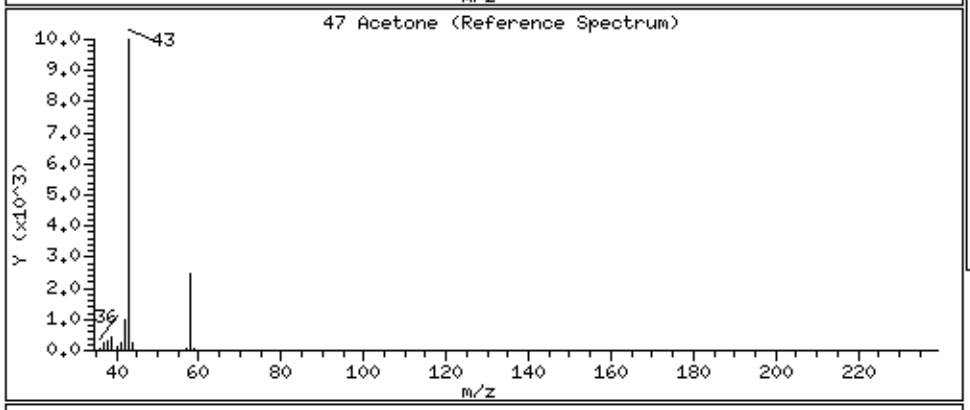
Concentration: 14.114 PPBV

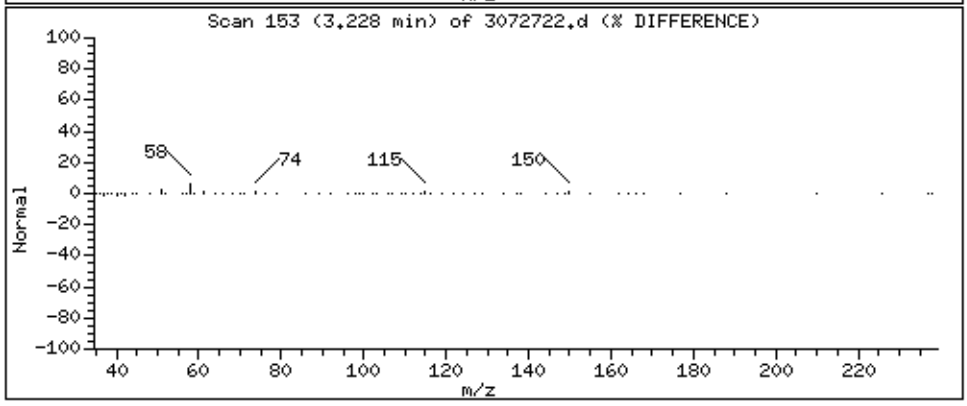












Data File: /chem/msd3.i/27JUL21.b/3072722.d

Date : 28-JUL-2021 00:16

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00252

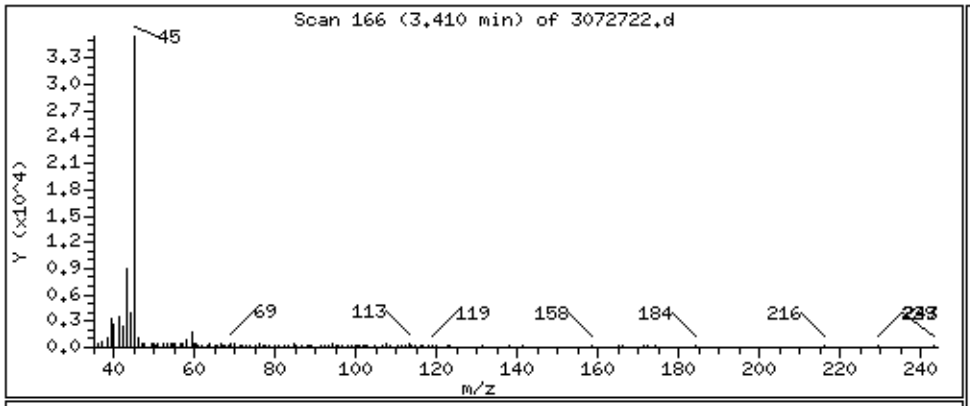
Operator: kk

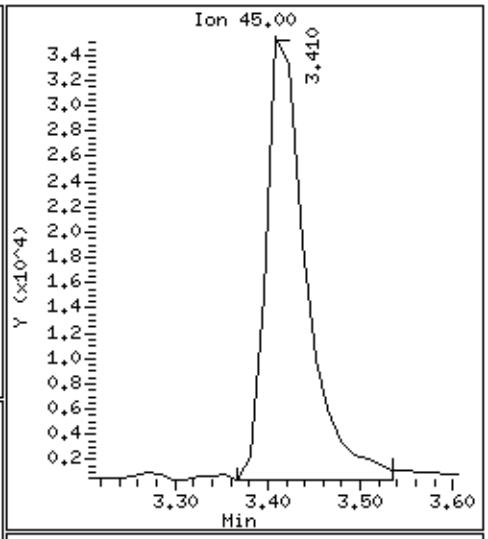
Column phase: RTX-624

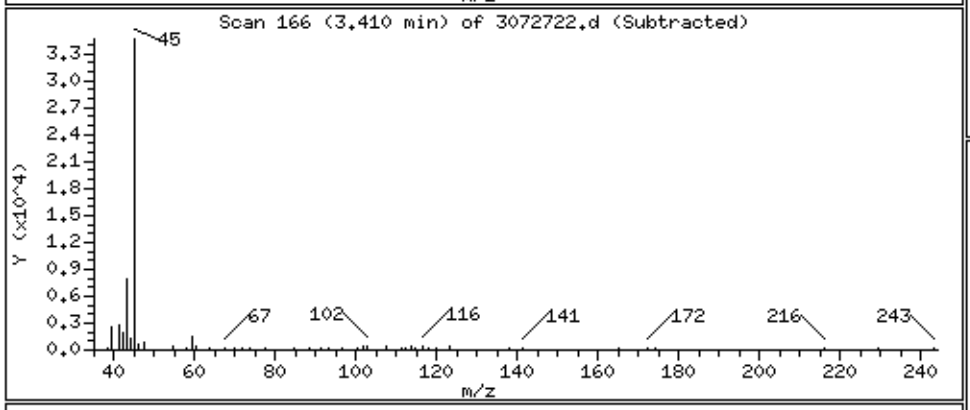
Column diameter: 0.25

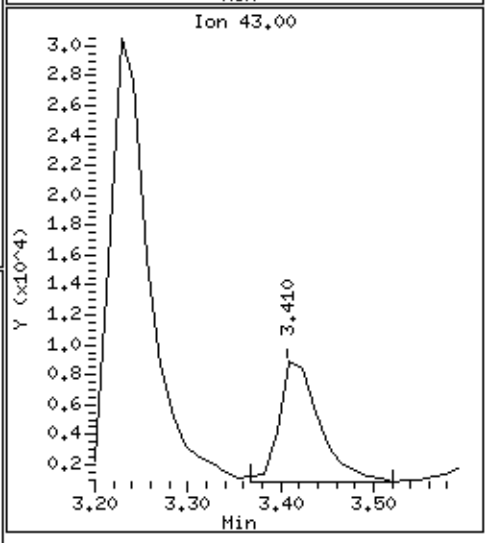
52 2-Propanol

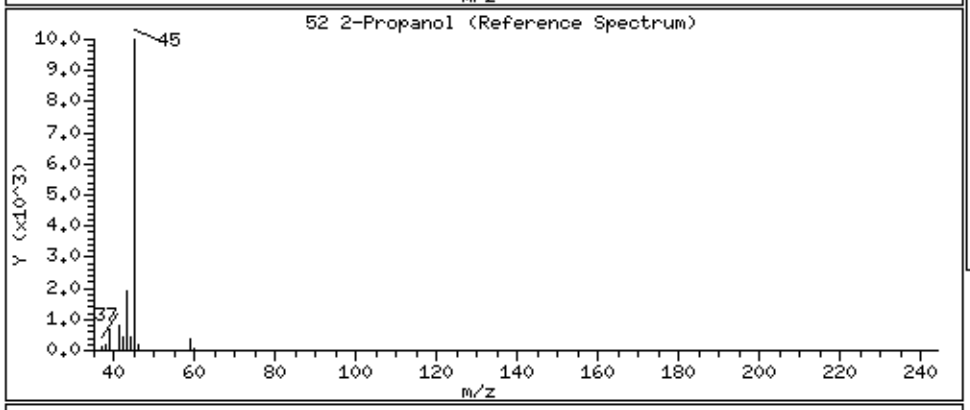
Concentration: 14.800 PPBV

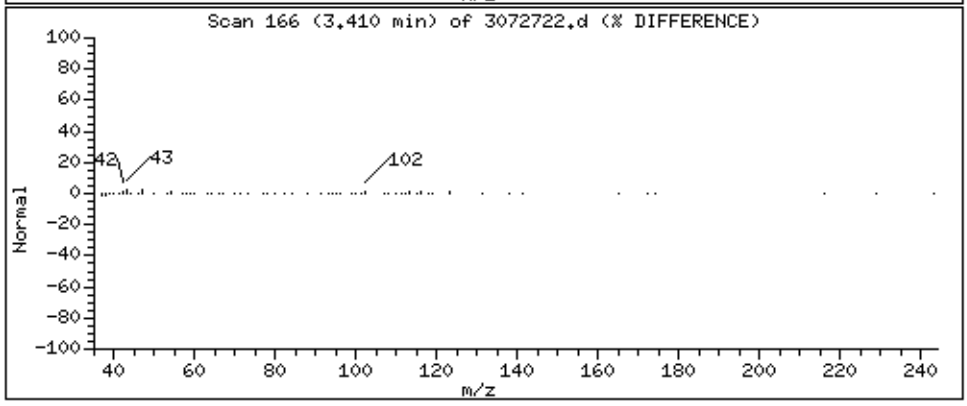












Data File: /chem/msd3.i/27JUL21.b/3072722.d

Date : 28-JUL-2021 00:16

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00252

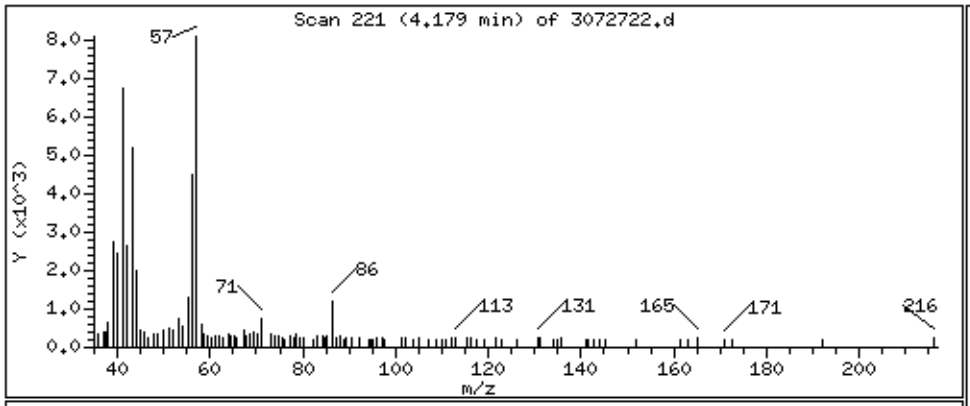
Operator: kk

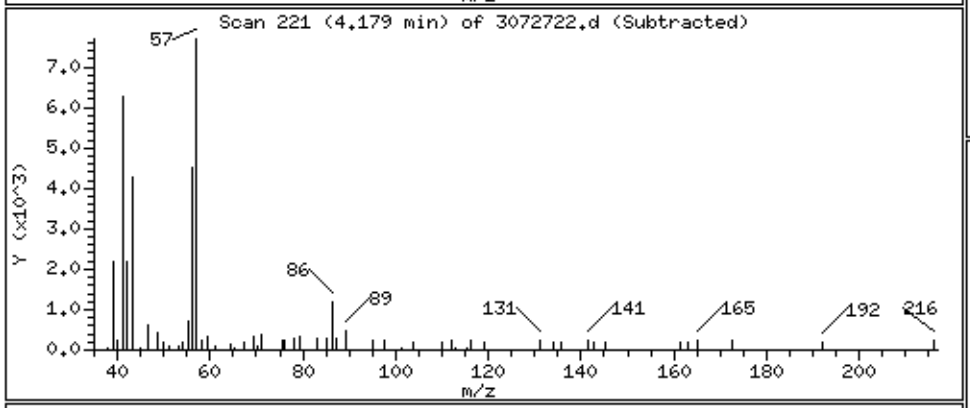
Column phase: RTX-624

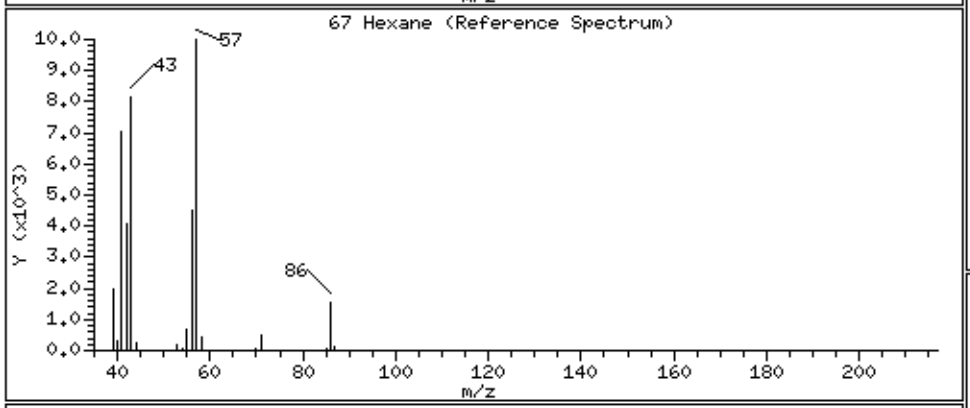
Column diameter: 0.25

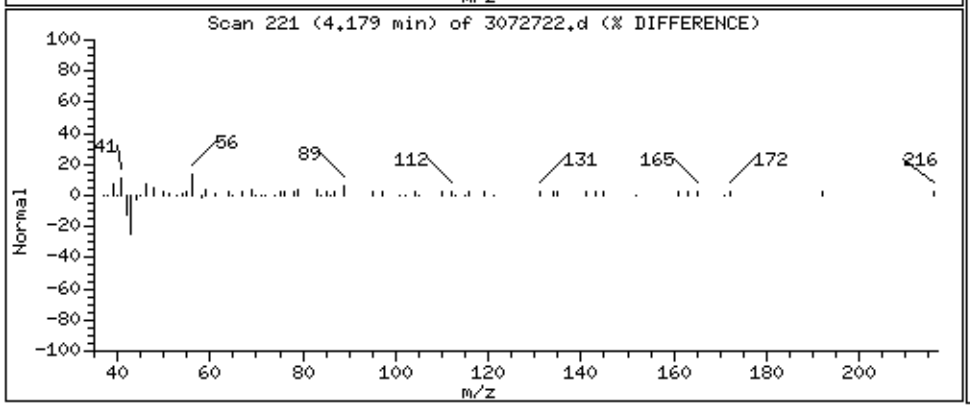
67 Hexane

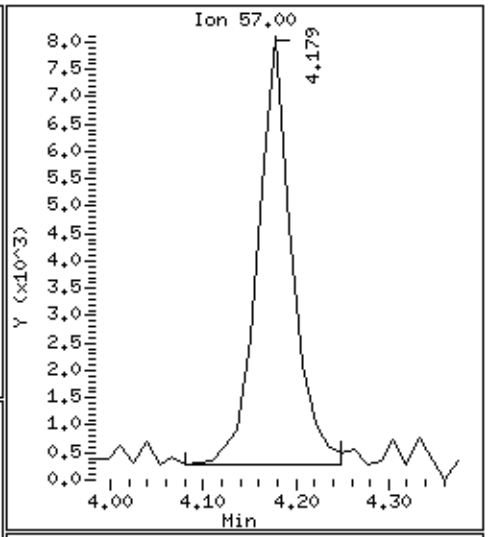
Concentration: 3.089 PPBV

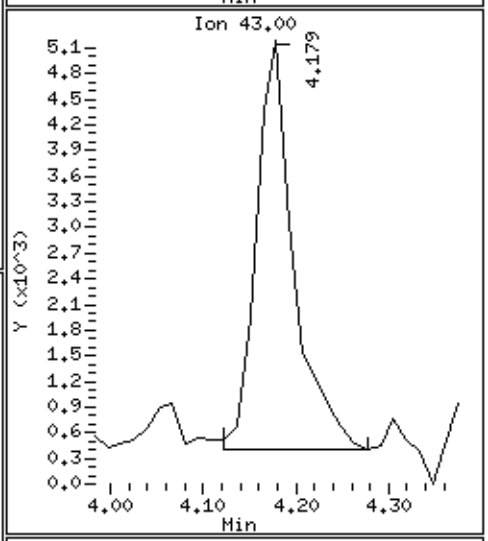


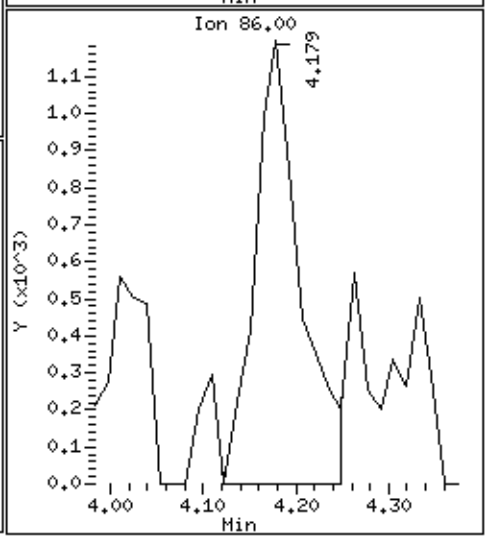












Data File: /chem/msd3.i/27JUL21.b/3072722.d

Date : 28-JUL-2021 00:16

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00252

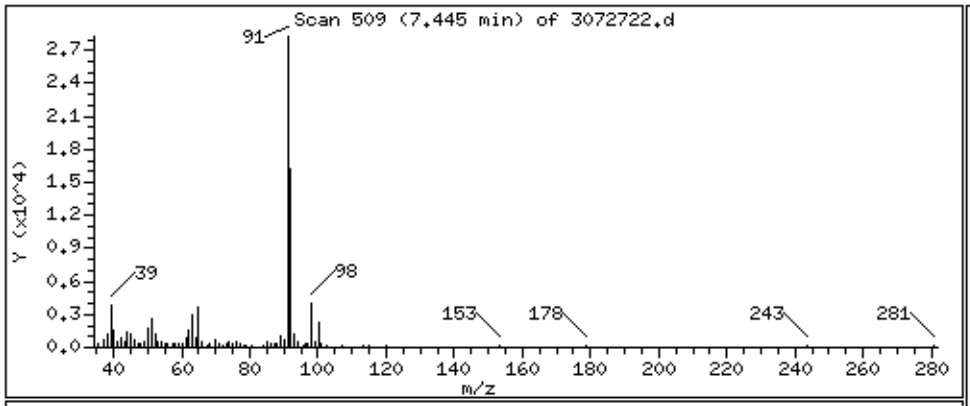
Operator: kk

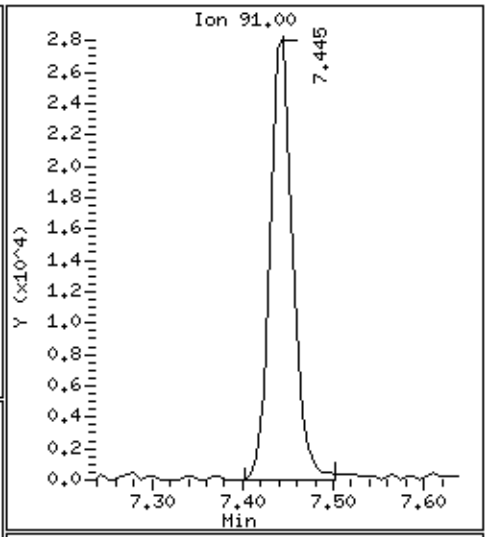
Column phase: RTX-624

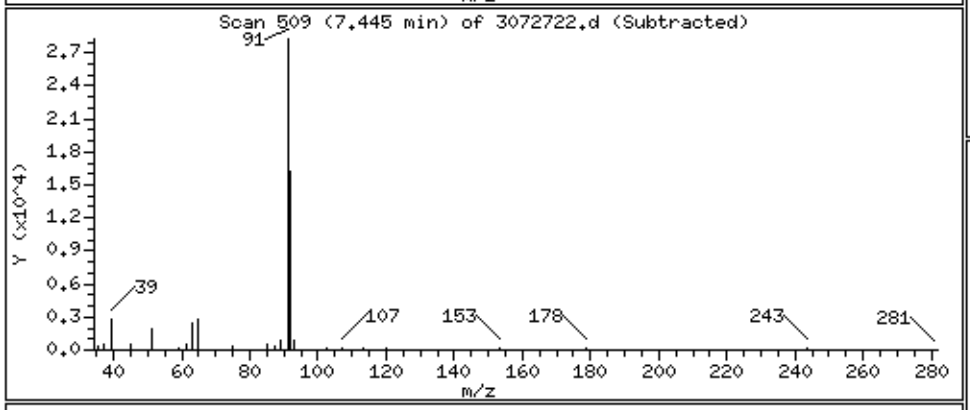
Column diameter: 0.25

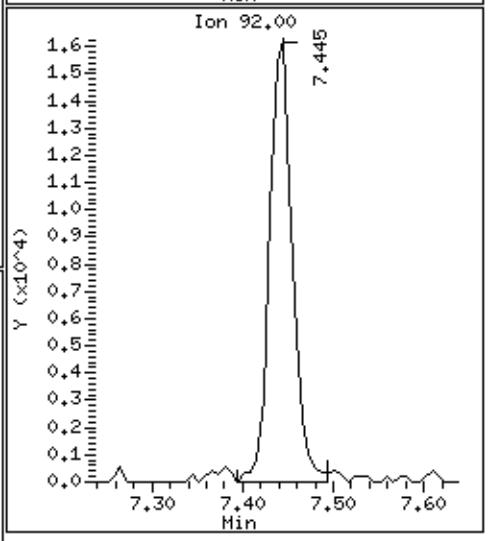
137 Toluene

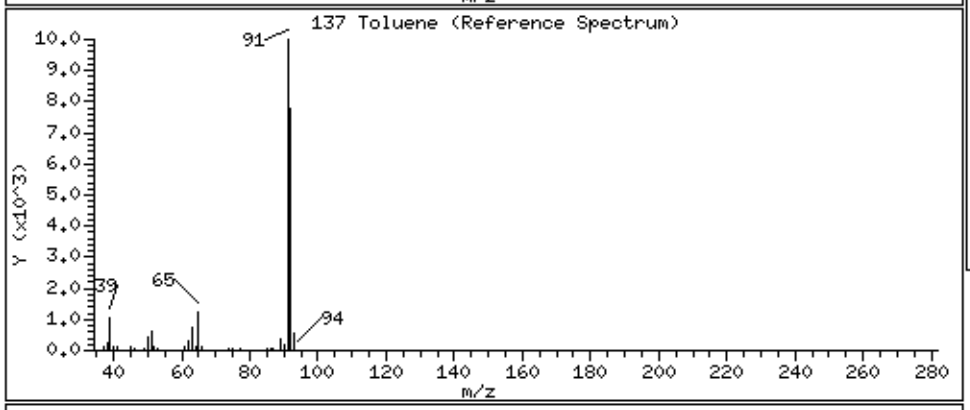
Concentration: 4.152 PPBV

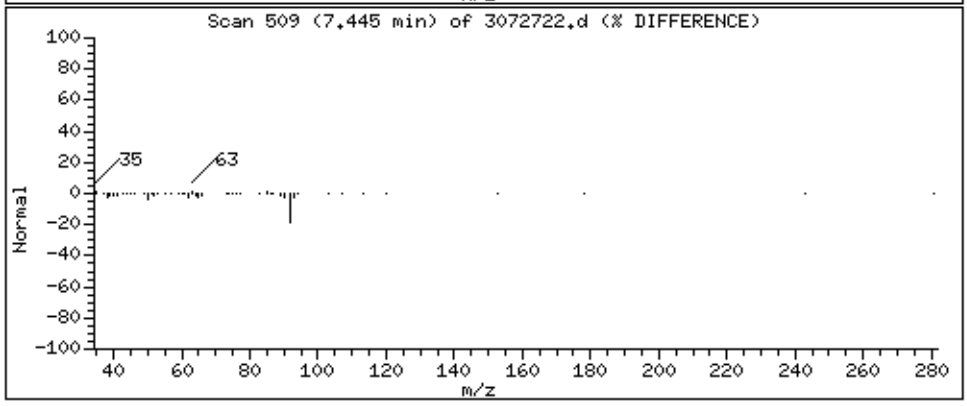












Data File: /chem/msd3.i/27JUL21.b/3072722.d

Date : 28-JUL-2021 00:16

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00252

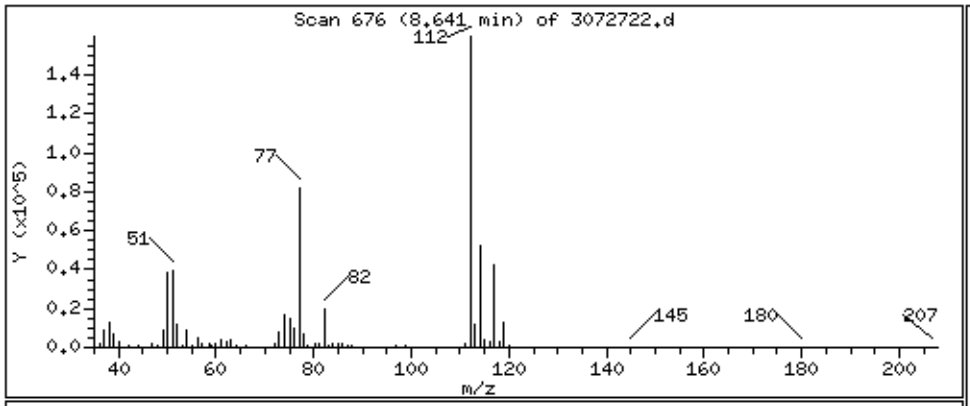
Operator: kk

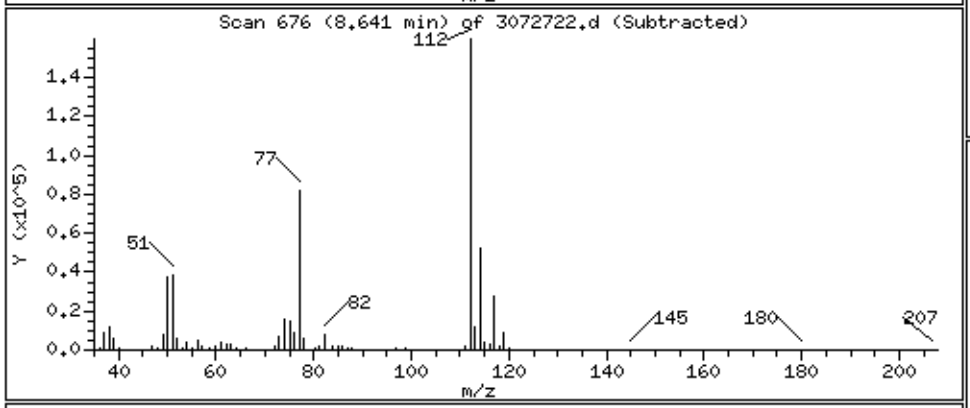
Column phase: RTX-624

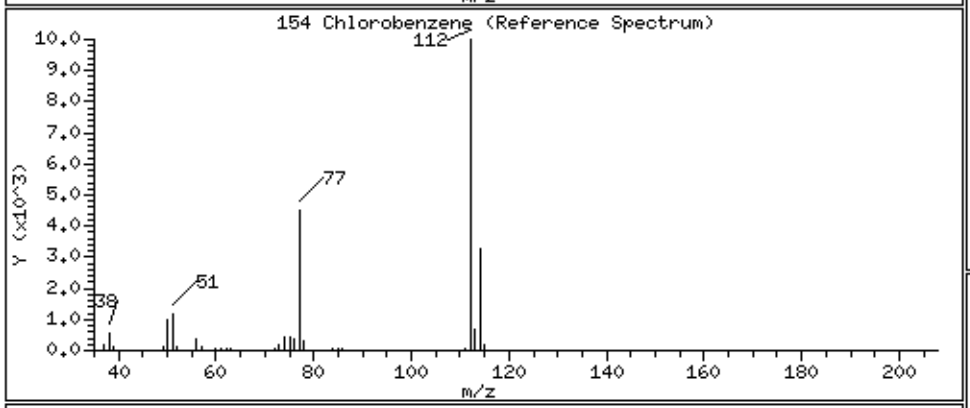
Column diameter: 0.25

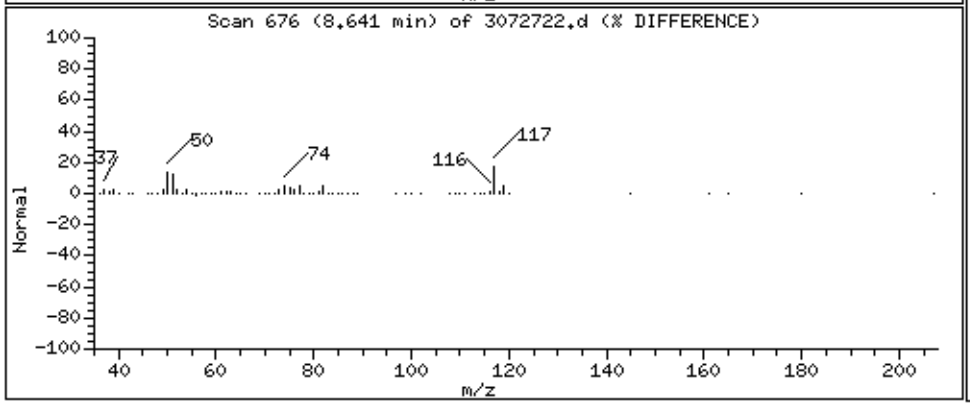
154 Chlorobenzene

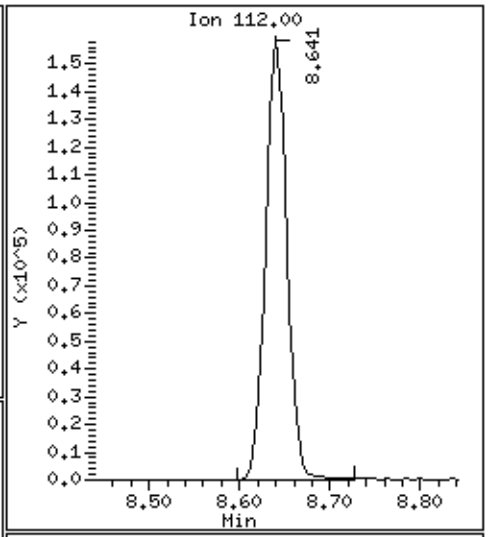
Concentration: 28.569 PPBV

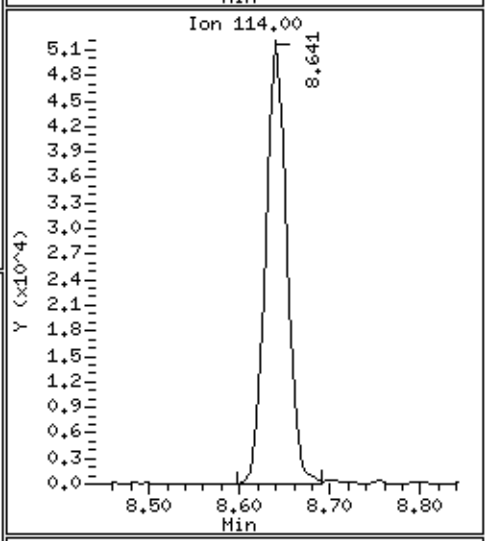


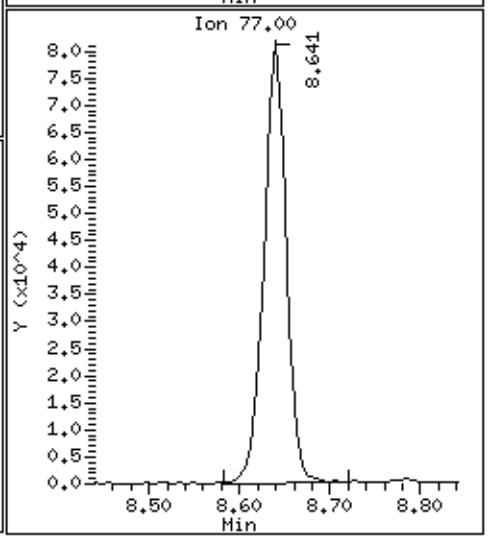












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Client Sample ID: SG-VW27A-02

Lab ID#: 2107361-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072808**	**Date of Collection: 7/15/21 6:03:00 AM**	
Dil. Factor:	**2.14**	**Date of Analysis: 7/28/21 03:25 PM**	

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	5.3	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	13	Not Detected
2-Hexanone	4.3	Not Detected	18	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	5.3	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	9.3	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	7.2	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	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-VW27A-02

Lab ID#: 2107361-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072808**	**Date of Collection:**	**7/15/21 6:03:00 AM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**7/28/21 03:25 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	3.7	Not Detected
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
Ethanol	11	Not Detected	20	Not Detected
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	7.5	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	41	Not Detected
Hexane	1.1	2.5	3.8	8.7
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	5.3	Not Detected
Propylene	4.3	Not Detected	7.4	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	3.4	7.2	23
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	1.8	4.0	7.0
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	5.8	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	2.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW27A-02

Lab ID#: 2107361-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072808**	**Date of Collection: 7/15/21 6:03:00 AM**	
Dil. Factor:	**2.14**	**Date of Analysis: 7/28/21 03:25 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072808.d
Lab Smp Id: 2107361-02A
Inj Date : 28-JUL-2021 15:25
Operator : LD Inst ID: msdp.i
Smp Info : 200ml N2719
Misc Info : 6.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
Dil Factor: 2.14000
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	162169	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123509				48.23- 108.23	76.16
5.785	5.778 (1.000)	49	323912				150.57- 210.57	199.74
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	605971	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	89118				0.00- 45.71	14.71
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	596167	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	313530				23.78- 83.78	52.59
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	222299	24.8388	24.839		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	109642				27.21- 87.21	49.32
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	656464	24.9477	24.948		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67898				0.00- 40.44	10.34

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	421507			34.95- 94.95	64.21
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	370688	24.2139	24.214	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	450758			95.92- 155.92	121.60
10.921	10.921 (1.154)	176	356740			66.89- 126.89	96.24
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	18457	1.15533	2.472	80.00- 120.00	100.00
4.697	4.696 (0.812)	43	14136			37.52- 97.52	76.59
4.697	4.696 (0.812)	86	1601			0.00- 41.48	8.68
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	23825	0.86357	1.848	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	13805			28.38- 88.38	57.94
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	21351	1.57141	3.363	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	17643			47.84- 107.84	82.64
8.464	8.464 (0.895)	131	16661			45.29- 105.29	78.04

Report Date: 29-Jul-2021 13:15

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072808.d
Lab Smp Id: 2107361-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	162169	1.14
108 1,4-Difluorobenze	582857	349714	816000	605971	3.97
153 Chlorobenzene-d5	560035	336021	784049	596167	6.45

		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	6.67	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.

Report Date: 29-Jul-2021 13:15

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-02A
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/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.839	99.36	70-130
$ 134 Toluene-d8	25.000	24.948	99.79	70-130
$ 170 4-Bromofluorobenz	25.000	24.214	96.86	70-130

Data File: /chem/msdp.i/28JUL21.b/p072808.d

Date : 28-JUL-2021 15:25

Client ID:

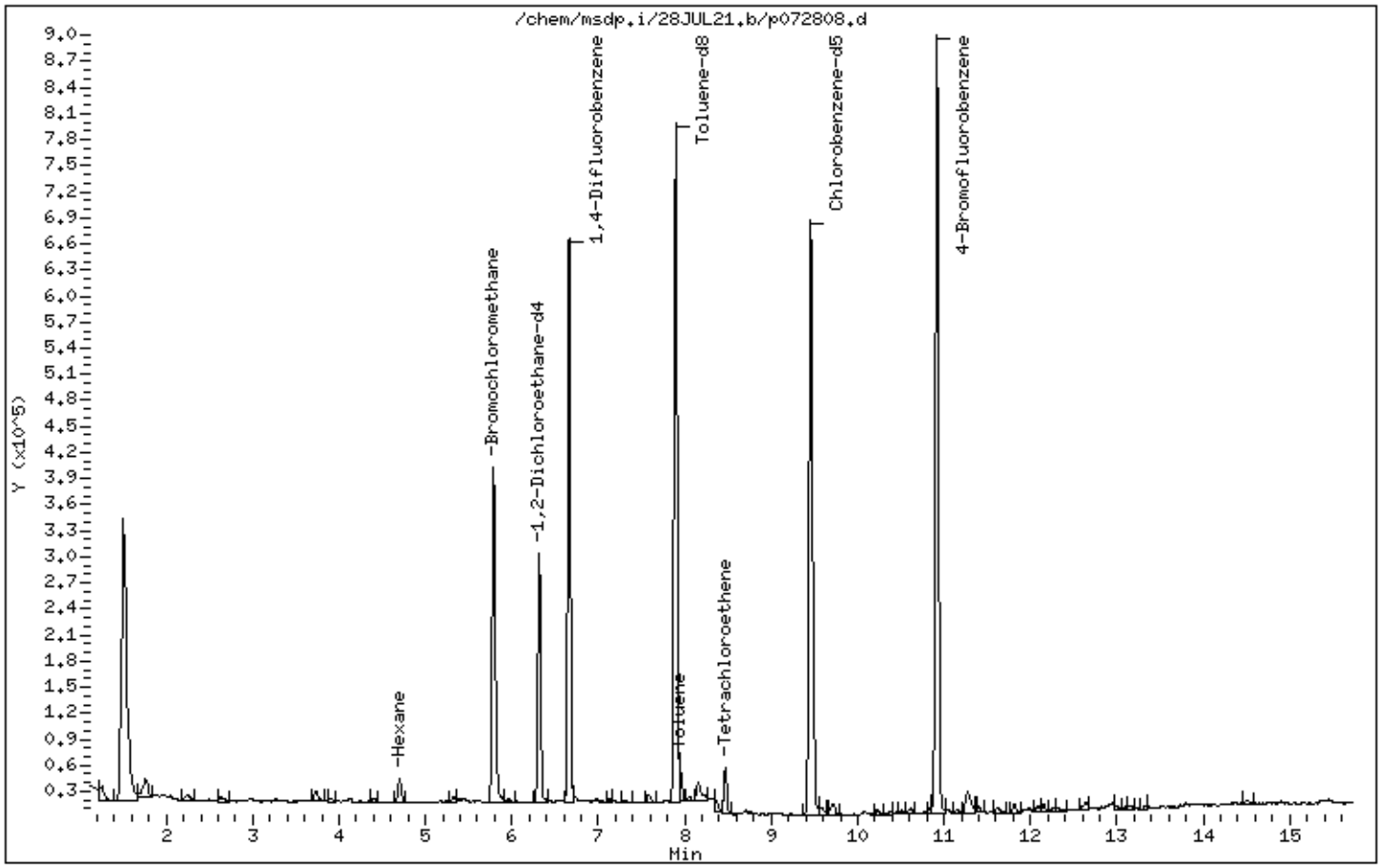
Instrument: msdp.i

Sample Info: 200ml N2719

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072808.d

Date : 28-JUL-2021 15:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2719

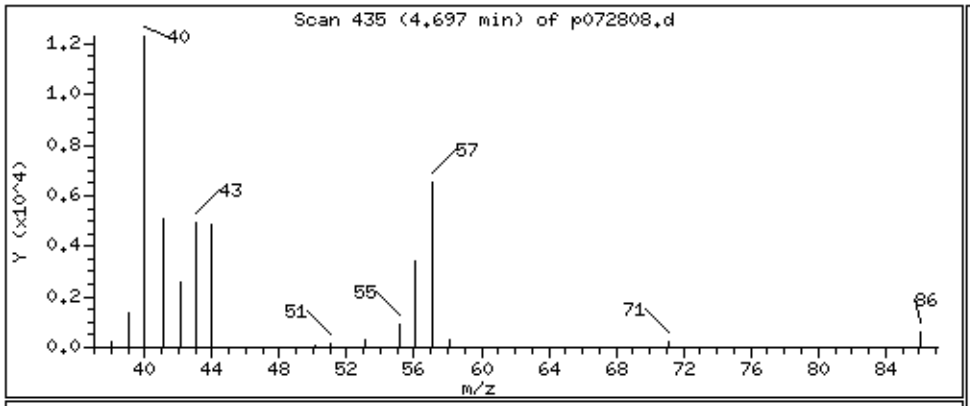
Operator: LD

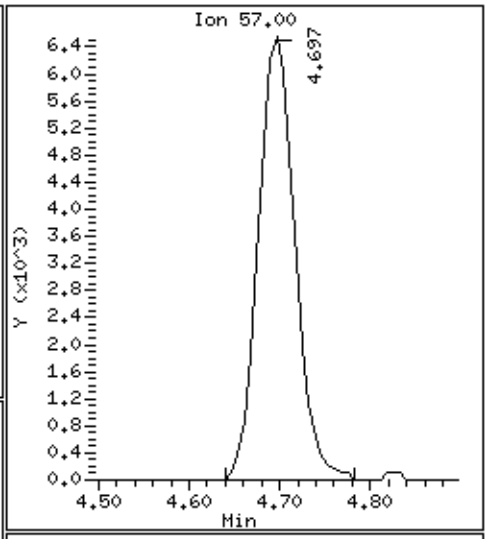
Column phase: RTX-624

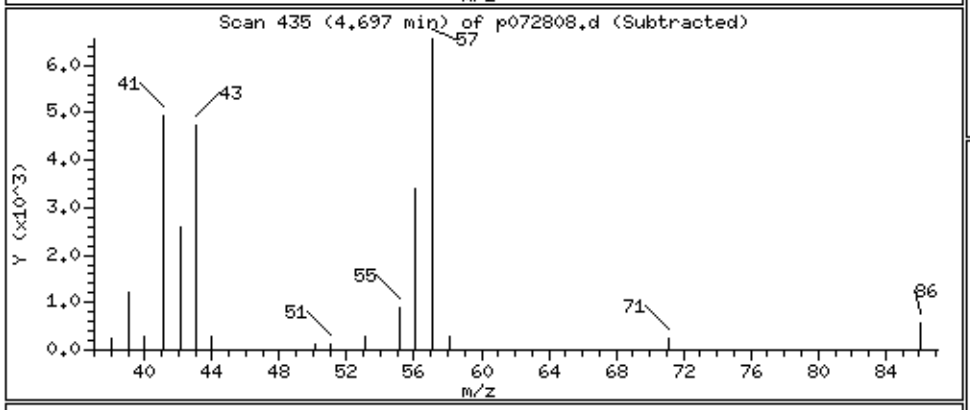
Column diameter: 0.25

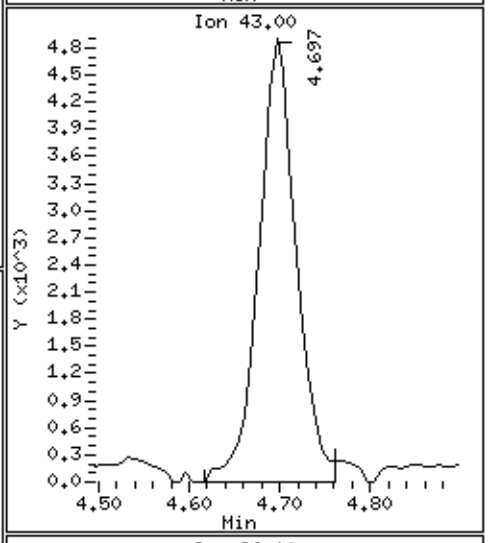
67 Hexane

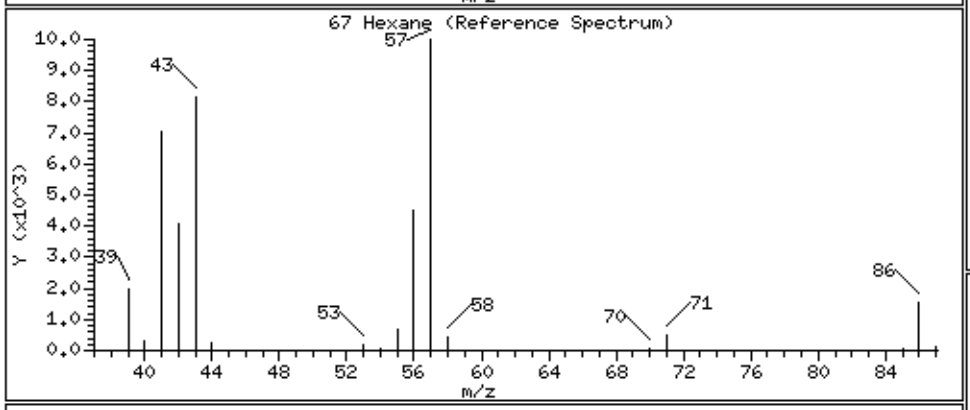
Concentration: 2.472 PPBV

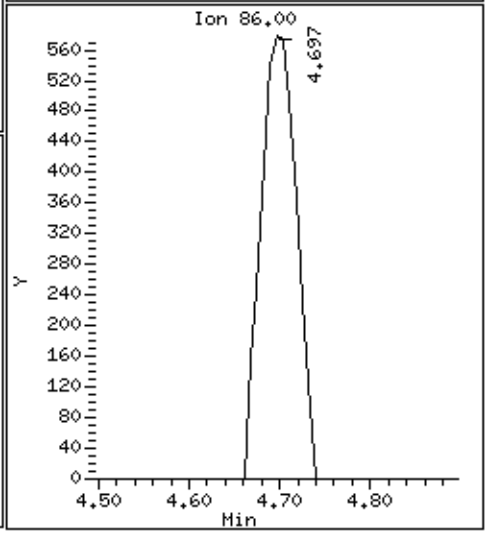


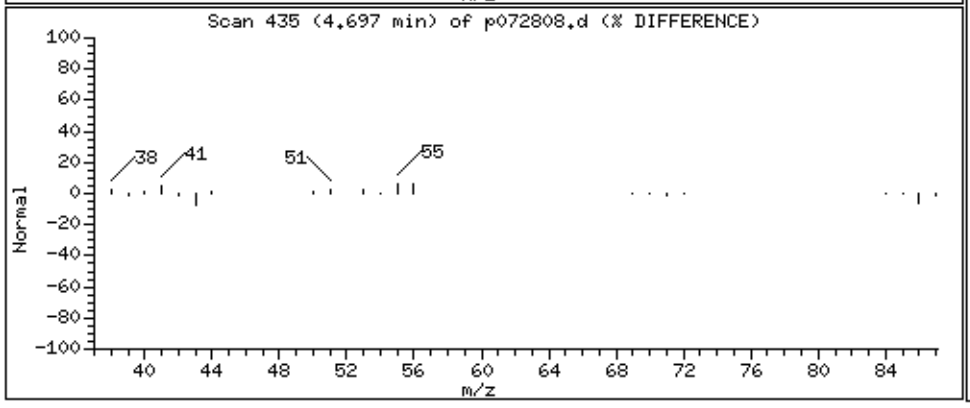












Data File: /chem/msdp.i/28JUL21.b/p072808.d

Date : 28-JUL-2021 15:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2719

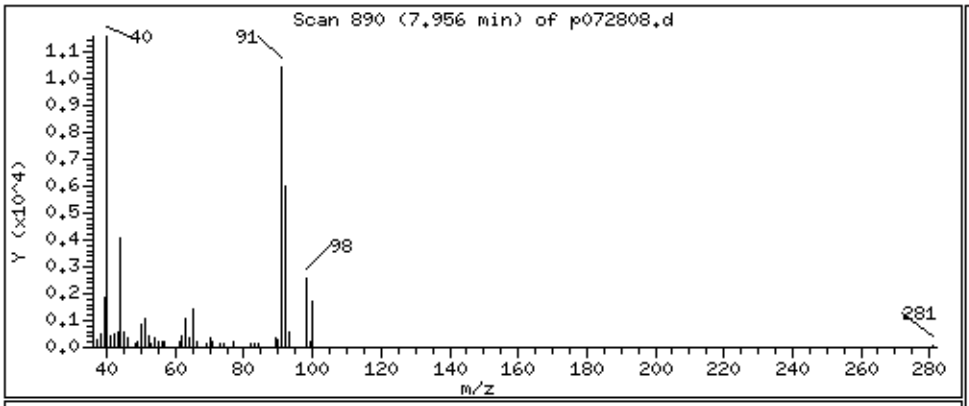
Operator: LD

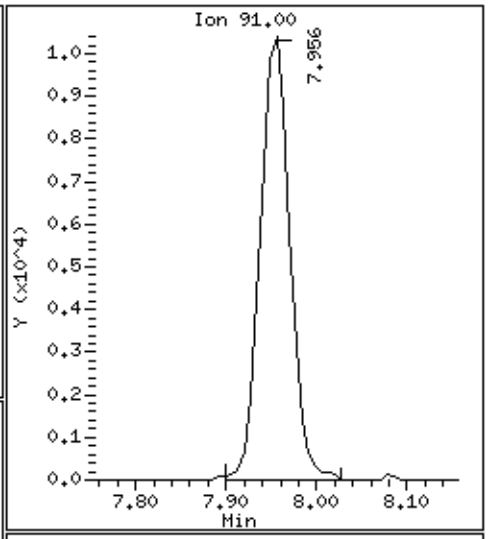
Column phase: RTX-624

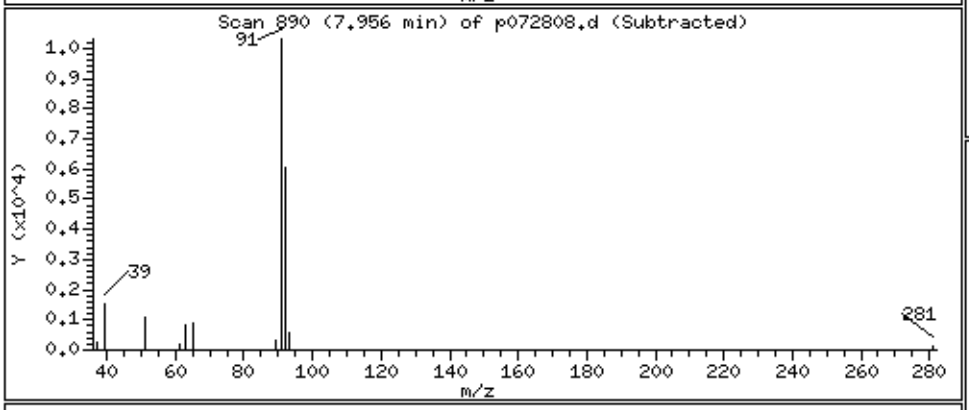
Column diameter: 0.25

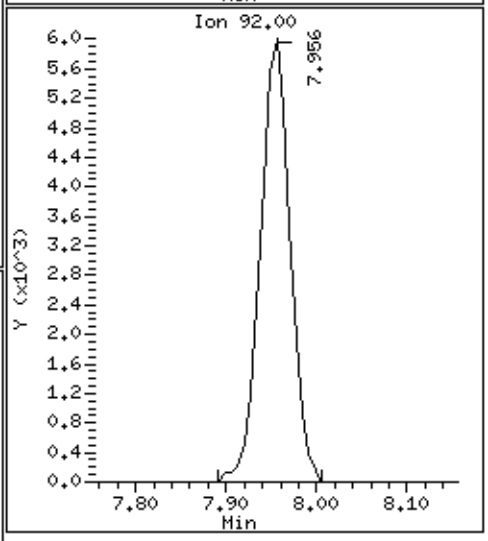
137 Toluene

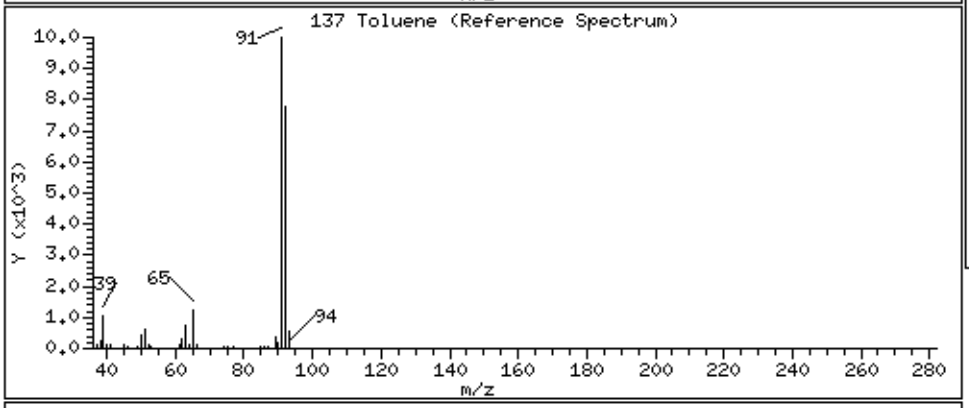
Concentration: 1.848 PPBV

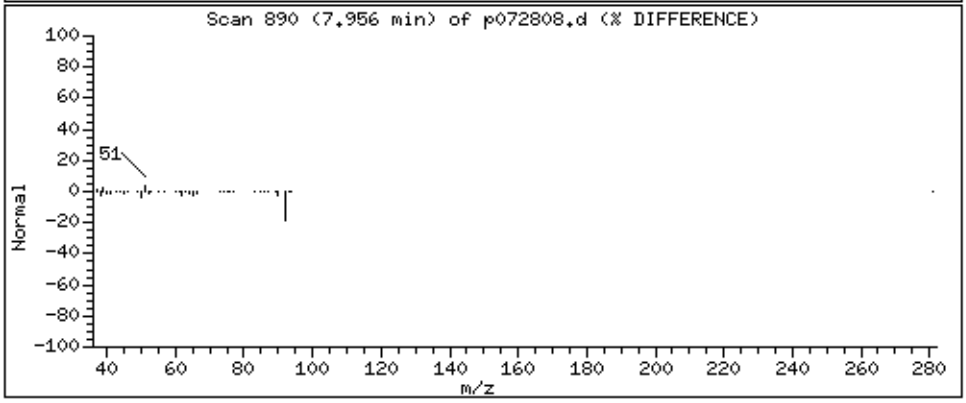












Data File: /chem/msdp.i/28JUL21.b/p072808.d

Date : 28-JUL-2021 15:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2719

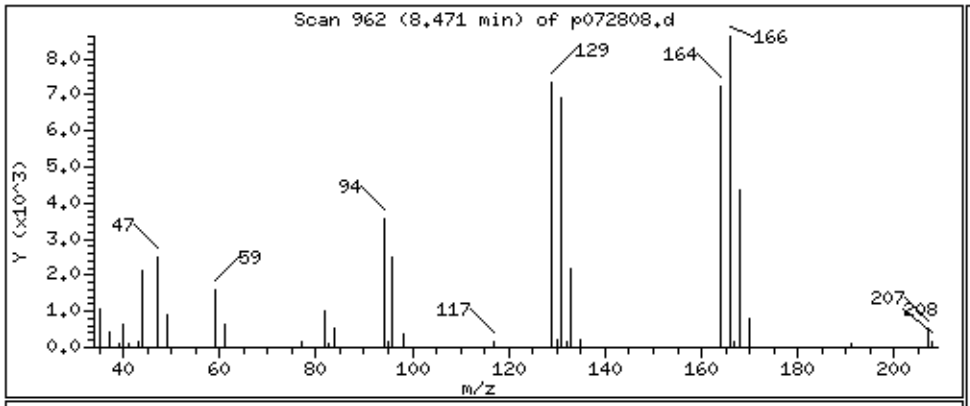
Operator: LD

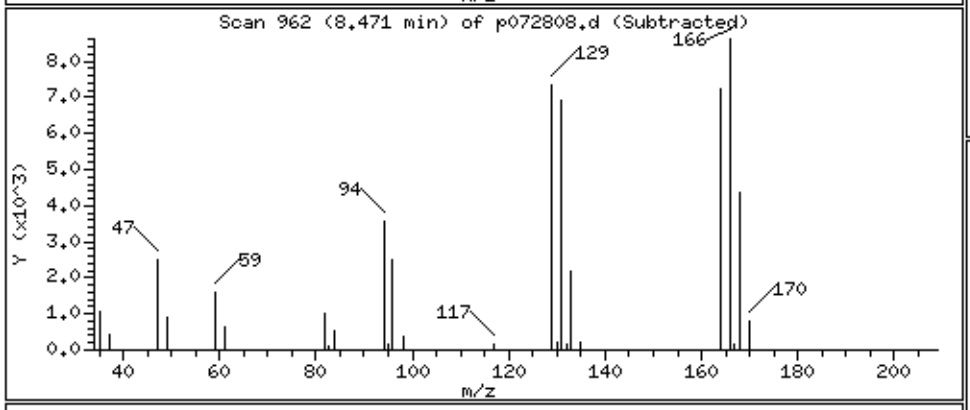
Column phase: RTX-624

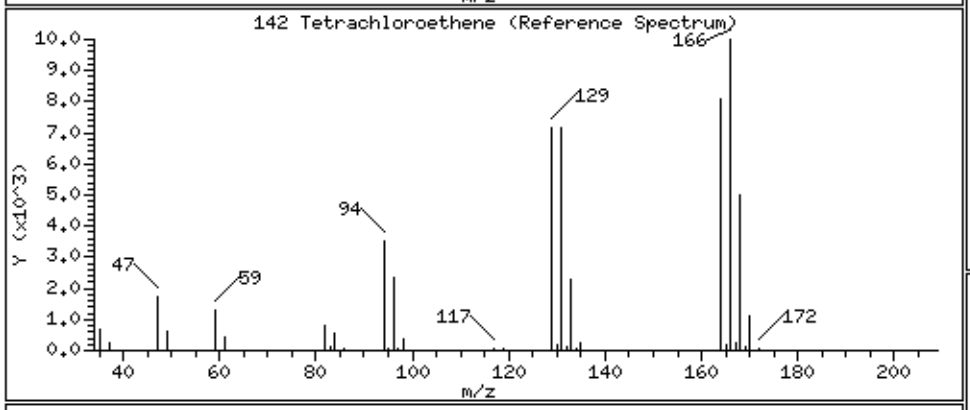
Column diameter: 0.25

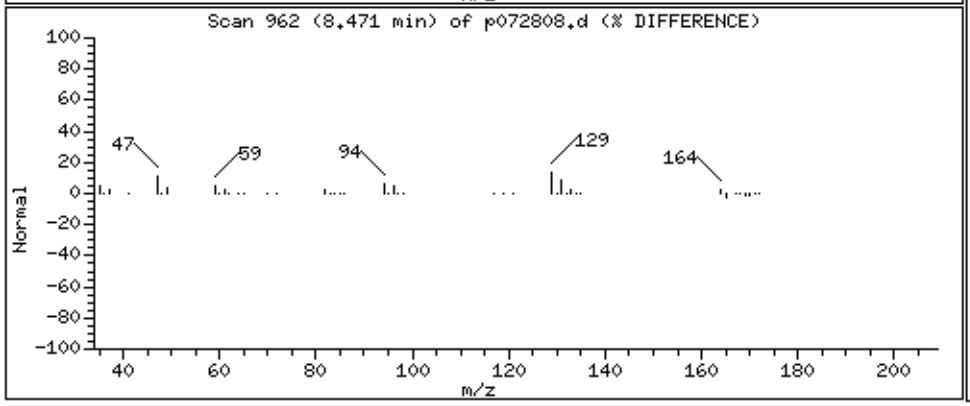
142 Tetrachloroethene

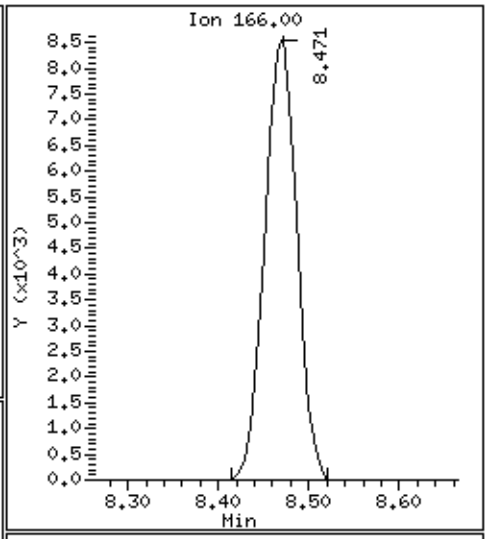
Concentration: 3.363 PPBV

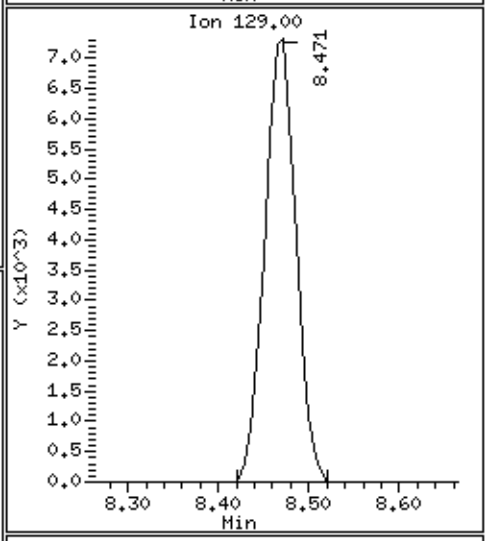


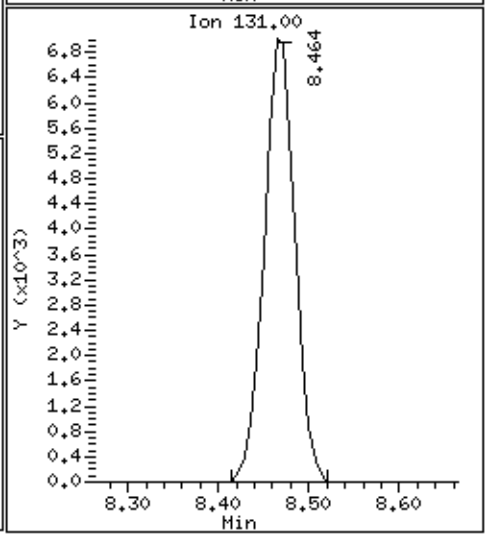












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Client Sample ID: SG-VW27B-02

Lab ID#: 2107361-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072809**	**Date of Collection:**	**7/15/21 6:44:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/28/21 03:55 PM**

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	2.2	5.1	11
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	1.3	4.8	5.9
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	7.1	10	17
3-Chloropropene	4.1	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	2.1	5.1	10
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	1.2	3.3	3.9
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	5.4	13	17
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-VW27B-02

Lab ID#: 2107361-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072809**	**Date of Collection: 7/15/21 6:44:00 AM**	
Dil. Factor:	**2.06**	**Date of Analysis: 7/28/21 03:55 PM**	

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	1.6	3.5	5.6
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
Dibromomethane	4.1	Not Detected	29	Not Detected
Ethanol	10	26	19	50
Ethyl Acetate	4.1	Not Detected	15	Not Detected
Ethyl Benzene	1.0	3.3	4.5	14
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	1.3	4.2	5.4
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Hexachloroethane	4.1	Not Detected	40	Not Detected
Hexane	1.0	50	3.6	180
Iodomethane	10	Not Detected	60	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
m,p-Xylene	1.0	13	4.5	57
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	3.9	4.5	17
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	8.6	7.0	58
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	9.7	3.9	36
TPH ref. to Gasoline (MW=100)	100	220	420	900
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-VW27B-02

Lab ID#: 2107361-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072809**	**Date of Collection:**	**7/15/21 6:44:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/28/21 03:55 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	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/28JUL21.b/p072809.d
Lab Smp Id: 2107361-03A
Inj Date : 28-JUL-2021 15:55
Operator : LD Inst ID: msdp.i
Smp Info : 200ml O0712
Misc Info : 5.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 3
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		
5.785	5.778 (1.000)	130	158239	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	124481				48.23- 108.23	78.67
5.785	5.778 (1.000)	49	321744				150.57- 210.57	203.33
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	596765	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	87255				0.00- 45.71	14.62
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	599089	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	312998				23.78- 83.78	52.25
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	223535	25.5972	25.597		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	111045				27.21- 87.21	49.68
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	657627	25.3774	25.377		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	70661				0.00- 40.44	10.74

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	423983			34.95- 94.95	64.47
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	383660	24.9390	24.939	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	468392			95.92- 155.92	122.09
10.921	10.921 (1.154)	176	369653			66.89- 126.89	96.35
39 Ethanol					CAS #: 64-17-5		
3.250	3.242 (0.562)	46	20175	12.8565	26.484	80.00- 120.00	100.00
3.257	3.285 (0.563)	45	55028			511.19- 571.19	272.75
48 Carbon Disulfide					CAS #: 75-15-0		
3.837	3.823 (0.663)	76	46238	2.62188	5.401	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	57664	3.44893	7.105	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	11000			0.00- 47.19	19.08
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	381852	24.4960	50.462	80.00- 120.00	100.00
4.697	4.696 (0.812)	43	274664			37.52- 97.52	71.93
4.697	4.696 (0.812)	86	39477			0.00- 41.48	10.34
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	7824	0.78603	1.619	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	23673			142.57- 202.57	302.54
5.964	5.957 (1.031)	41	14980			62.09- 122.09	191.44
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.280 (1.087)	57	33263	0.61392	1.265	80.00- 120.00	100.00
6.287	6.280 (1.087)	56	19245			2.24- 62.24	57.86
6.280	6.280 (1.085)	41	15442			0.00- 54.39	46.42
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	11704	0.59432	1.224	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	3488			0.00- 52.90	29.81
107 Heptane					CAS #: 142-82-5		
6.451	6.444 (0.968)	71	5010	0.64218	1.323	80.00- 120.00	100.00
6.451	6.444 (0.968)	43	13336			226.53- 286.53	266.14
6.451	6.444 (0.968)	57	6499			100.85- 160.85	129.70
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	127584	4.69582	9.673	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	72647			28.38- 88.38	56.94

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	56784	4.15886	8.567	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	43023			47.84- 107.84	75.77
8.464	8.464 (0.895)	131	42652			45.29- 105.29	75.11
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	20221	1.62558	3.349	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	64640			273.74- 333.74	319.67
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	99948	6.41539	13.216	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	192774			163.73- 223.73	192.87
164 o-Xylene					CAS #: 95-47-6		
10.234	10.226 (1.082)	106	28474	1.90757	3.930	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	59197			177.45- 237.45	207.90
183 4-Ethyltoluene					CAS #: 622-96-8		
11.258	11.286 (1.190)	120	15551	1.02850	2.119	80.00- 120.00	100.00
11.258	11.286 (1.190)	105	44576			284.55- 344.55	286.63
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	41285	1.05071	2.164	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	20099			19.05- 79.05	48.68

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072809.d
Lab Smp Id: 2107361-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 5.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	158239	-1.32
108 1,4-Difluorobenze	582857	349714	816000	596765	2.39
153 Chlorobenzene-d5	560035	336021	784049	599089	6.97

		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	6.67	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.

Report Date: 29-Jul-2021 13:17

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-03A
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/28JUL21.b/p21q0519a.m
Misc Info: 5.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.597	102.39	70-130
$ 134 Toluene-d8	25.000	25.377	101.51	70-130
$ 170 4-Bromofluorobenz	25.000	24.939	99.76	70-130

Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

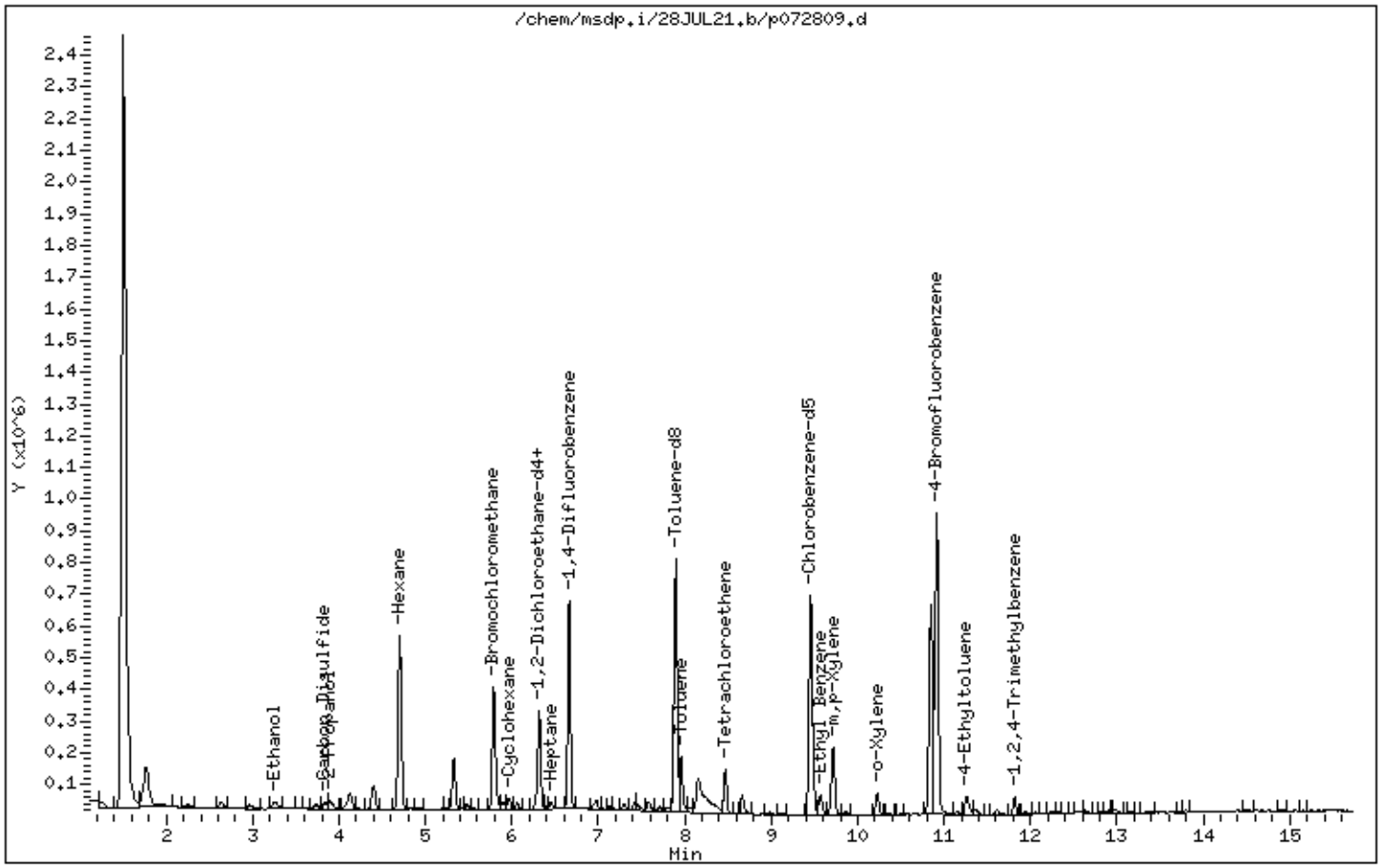
Instrument: msdp.i

Sample Info: 200ml 00712

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

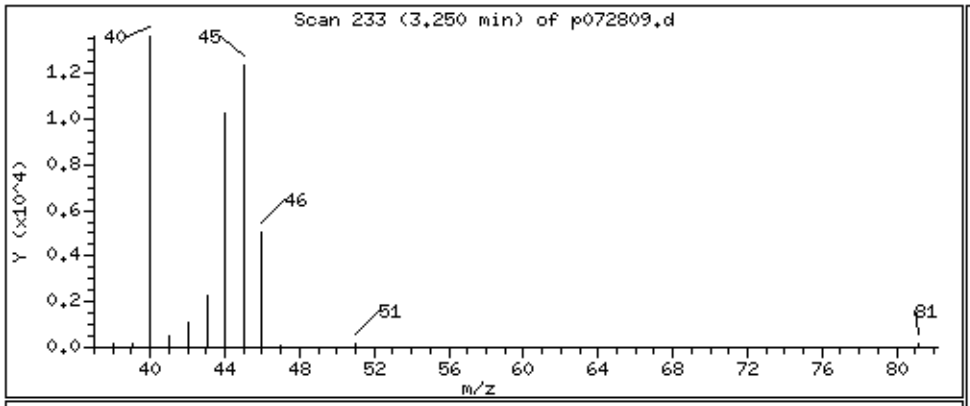
Operator: LD

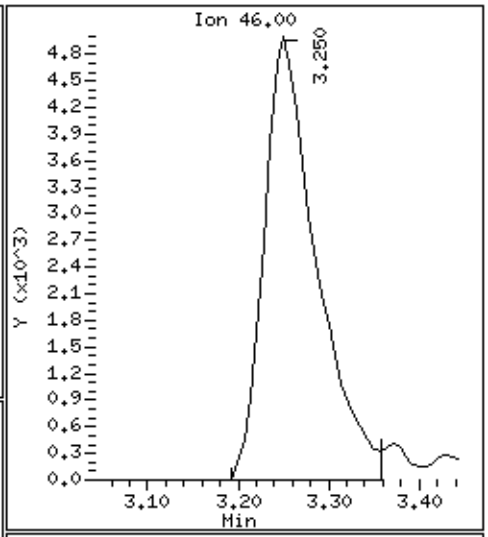
Column phase: RTX-624

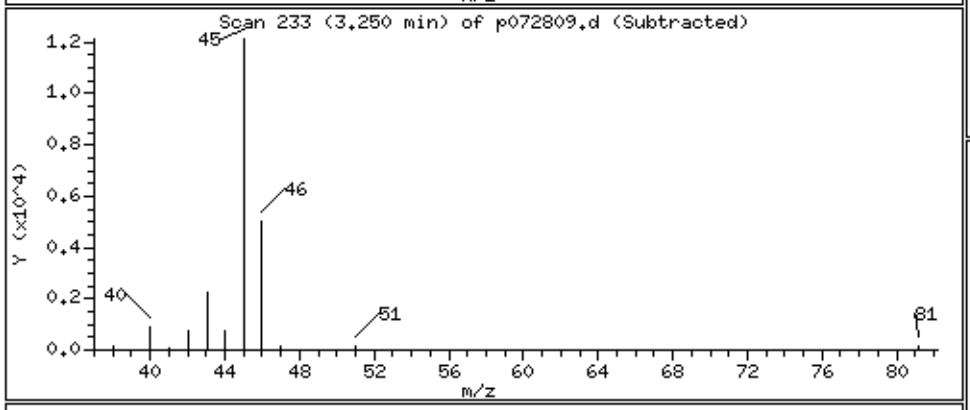
Column diameter: 0.25

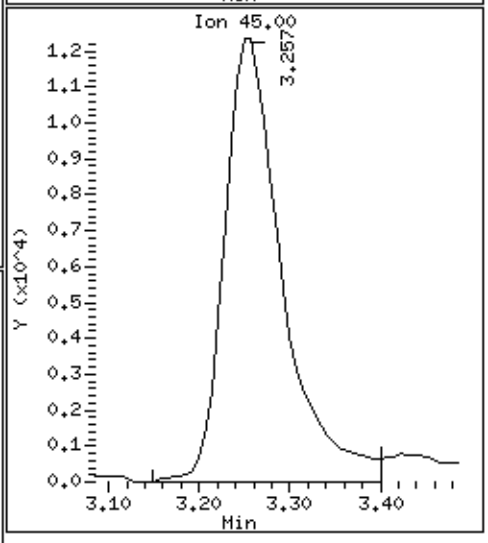
39 Ethanol

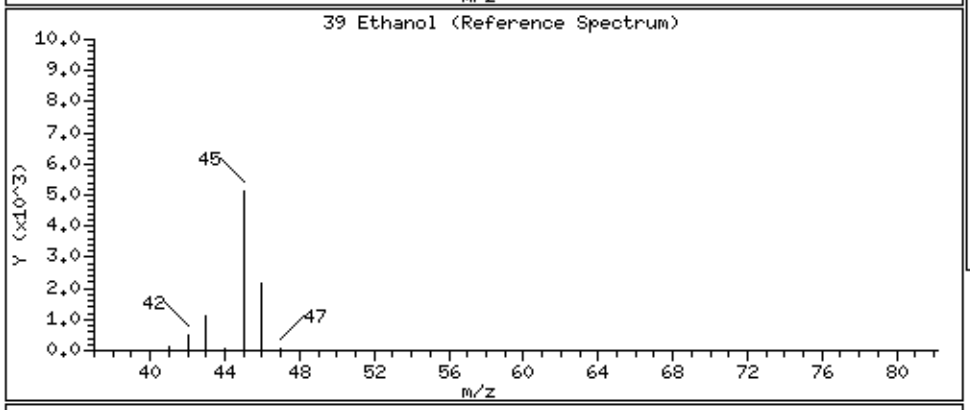
Concentration: 26.484 PPBV

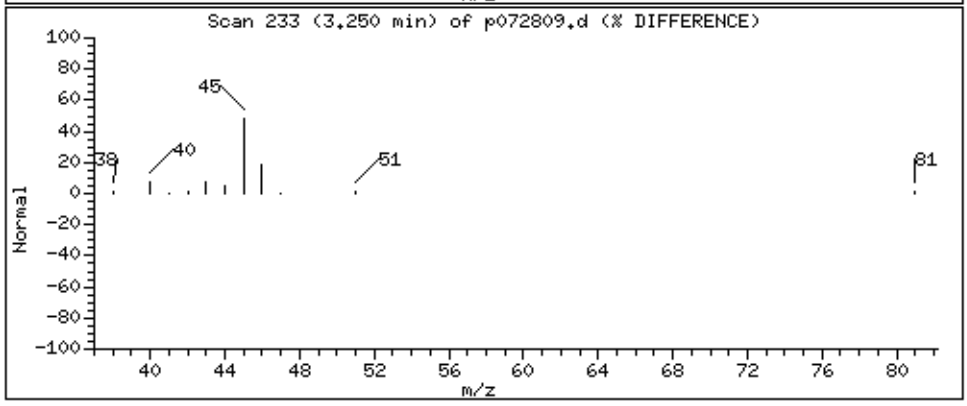












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

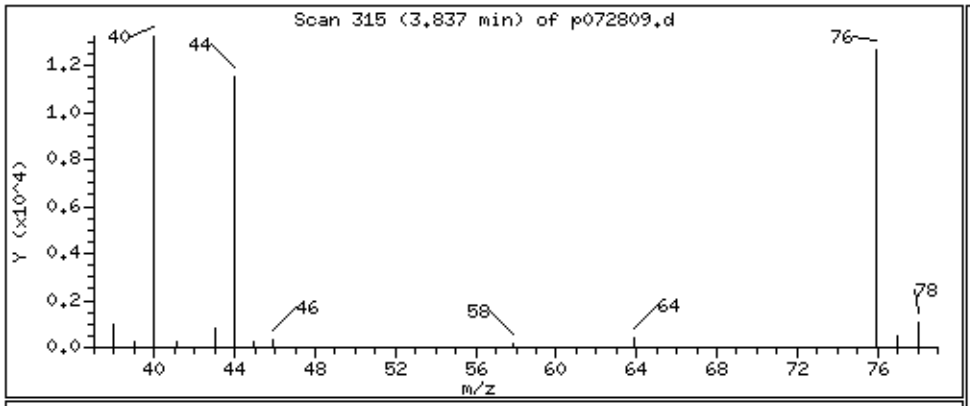
Operator: LD

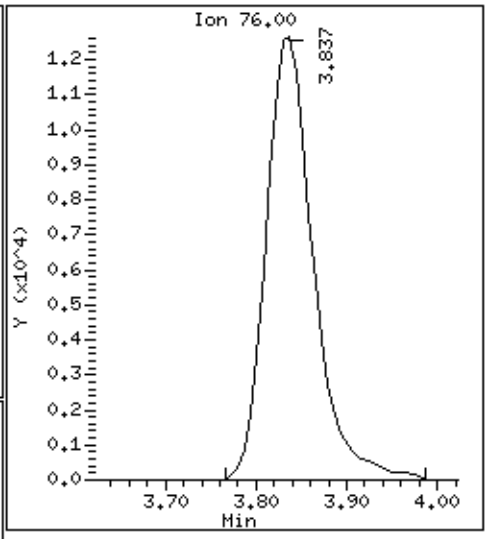
Column phase: RTX-624

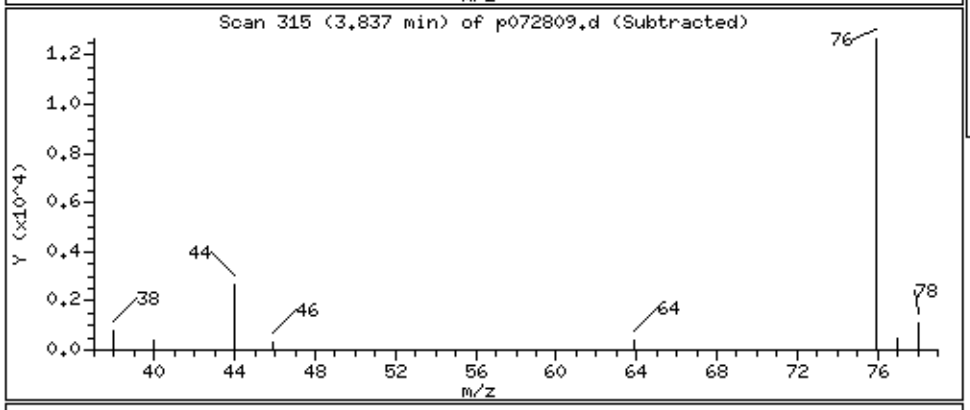
Column diameter: 0.25

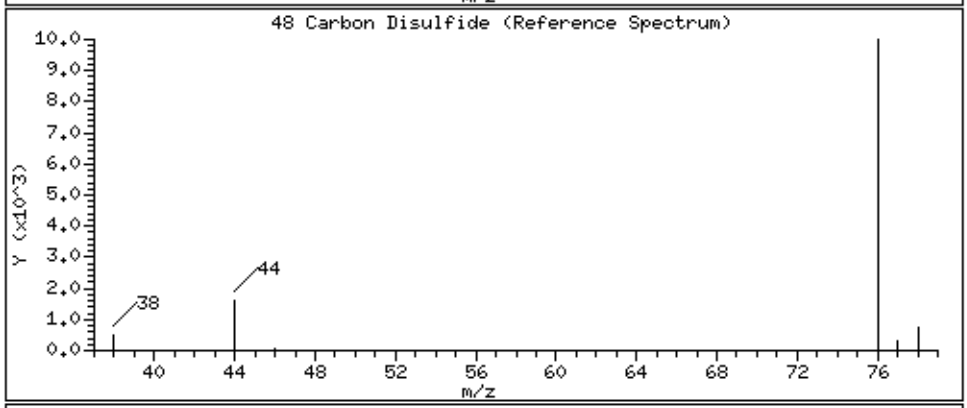
48 Carbon Disulfide

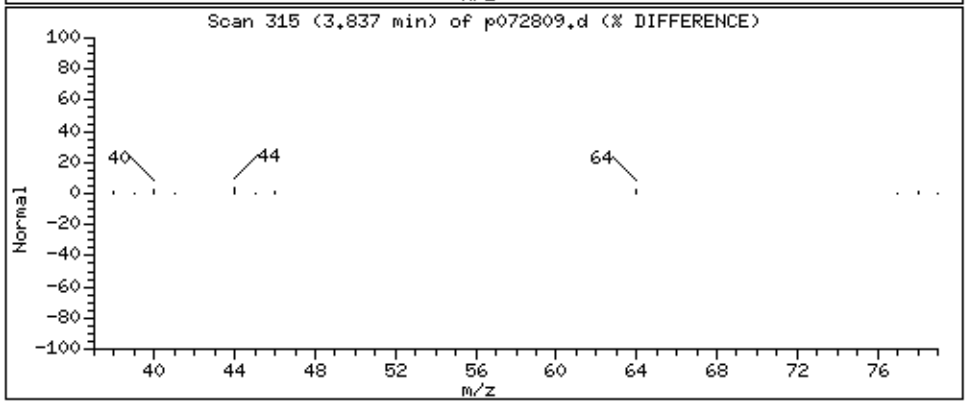
Concentration: 5.401 PPBV











Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

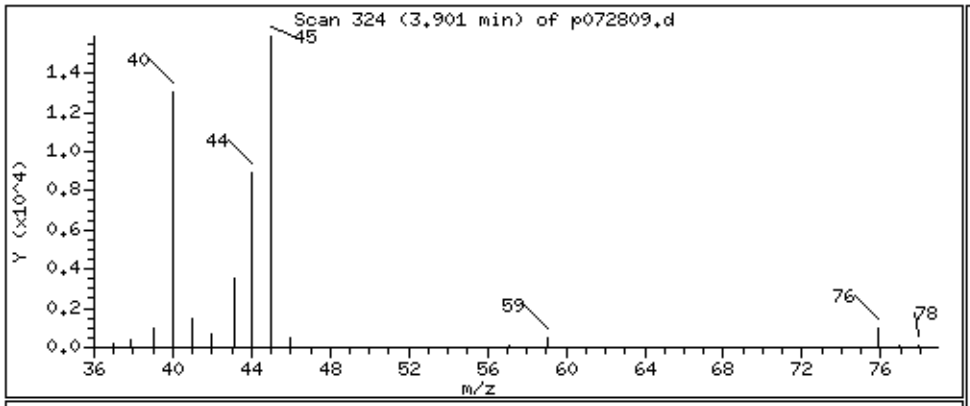
Operator: LD

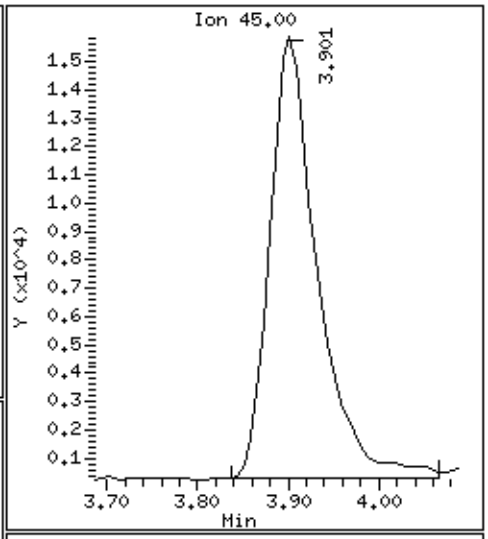
Column phase: RTX-624

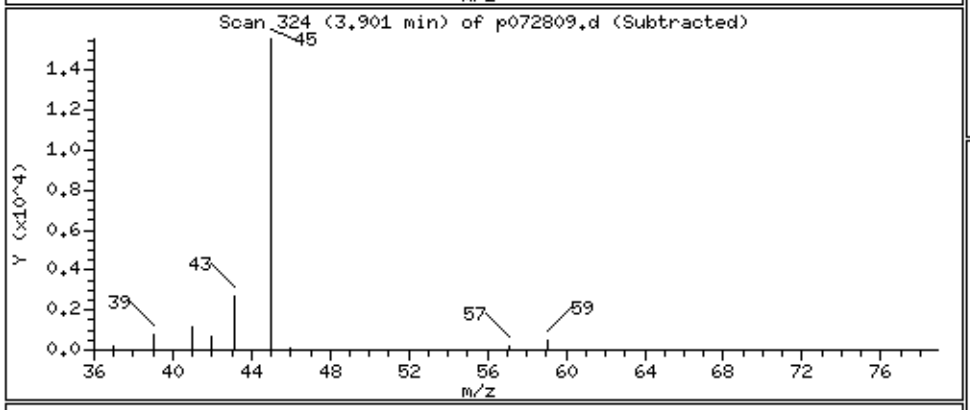
Column diameter: 0.25

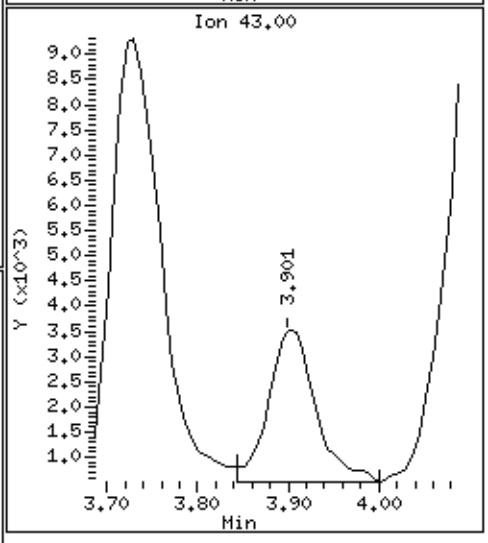
52 2-Propanol

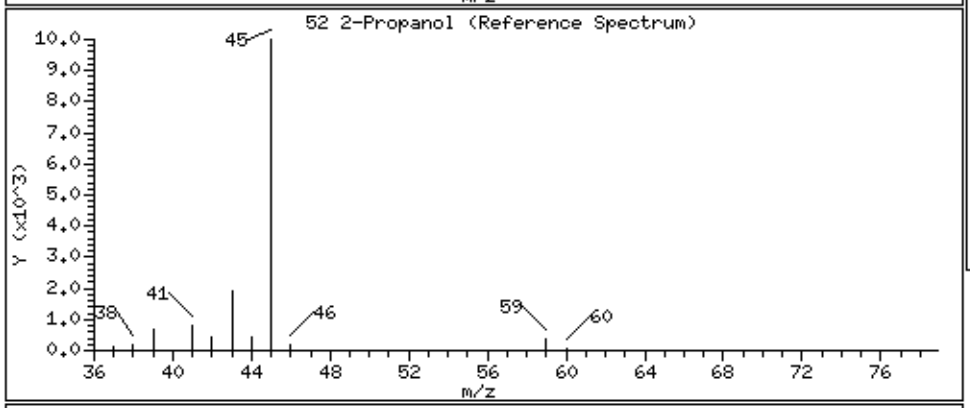
Concentration: 7.105 PPBV

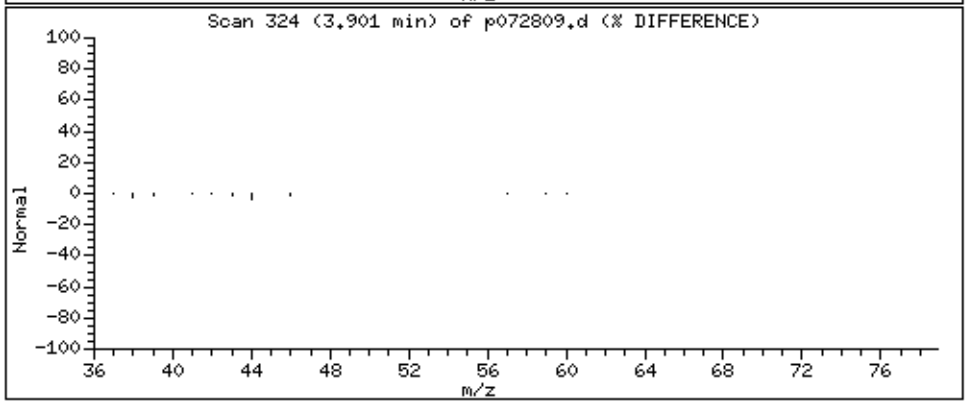












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

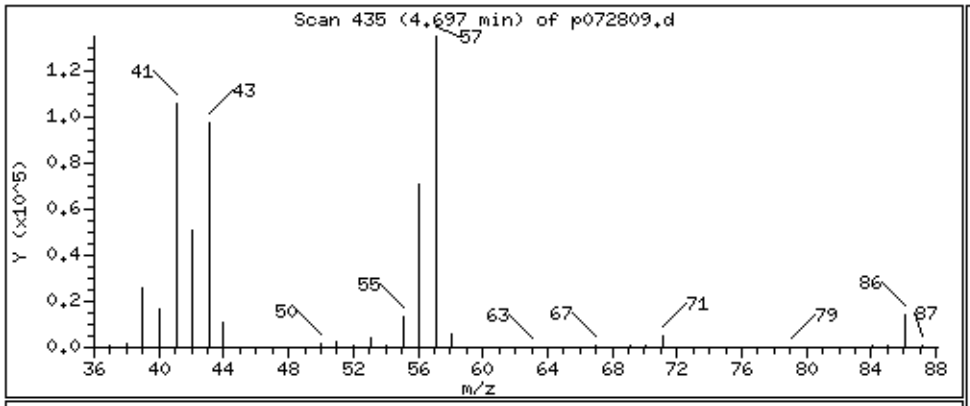
Operator: LD

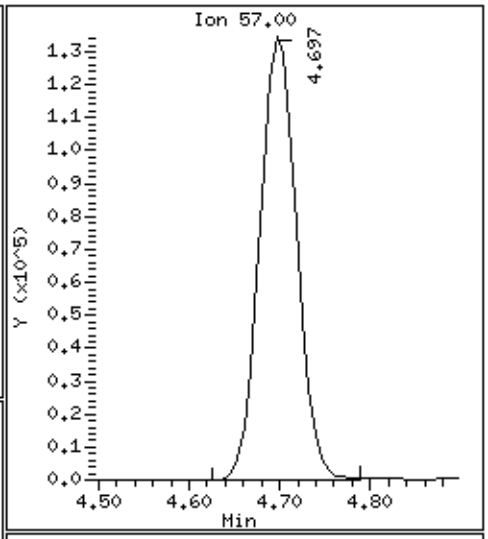
Column phase: RTX-624

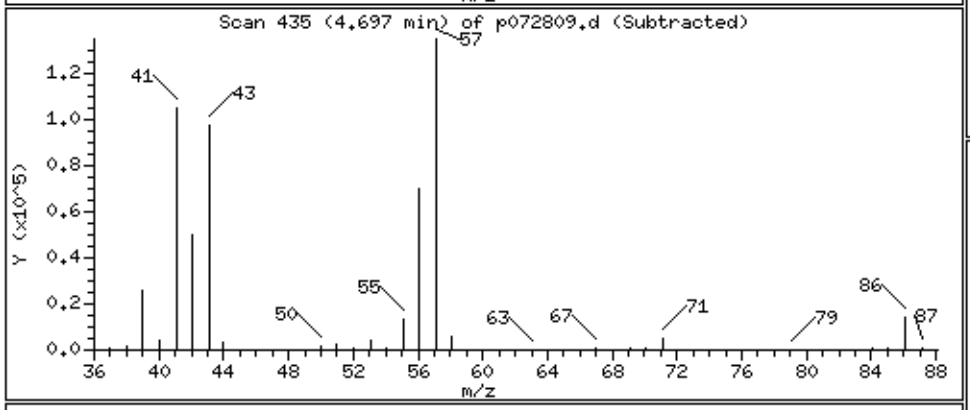
Column diameter: 0.25

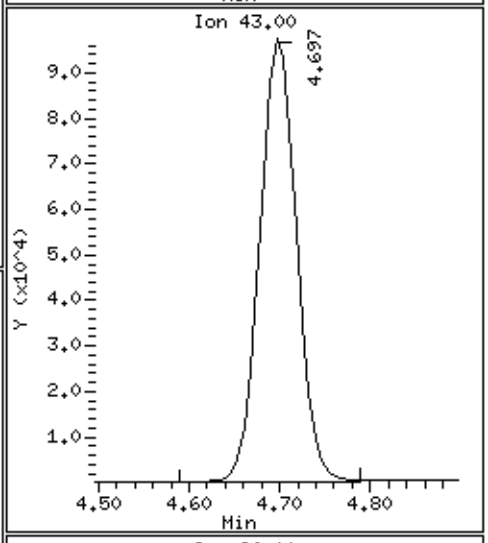
67 Hexane

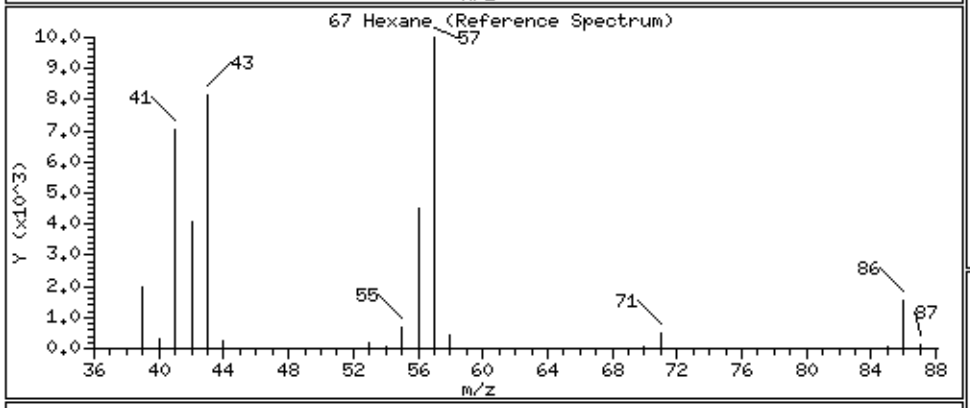
Concentration: 50.462 PPBV

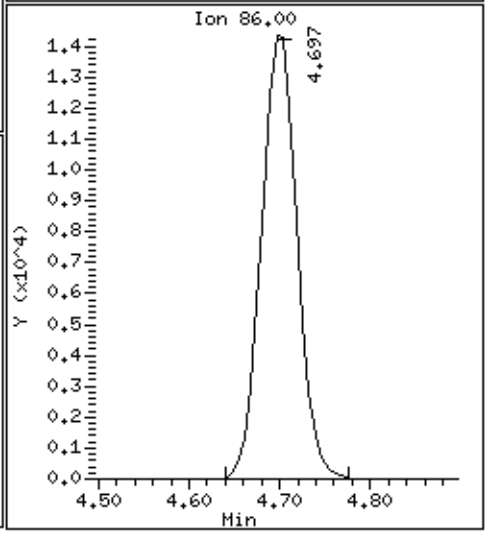


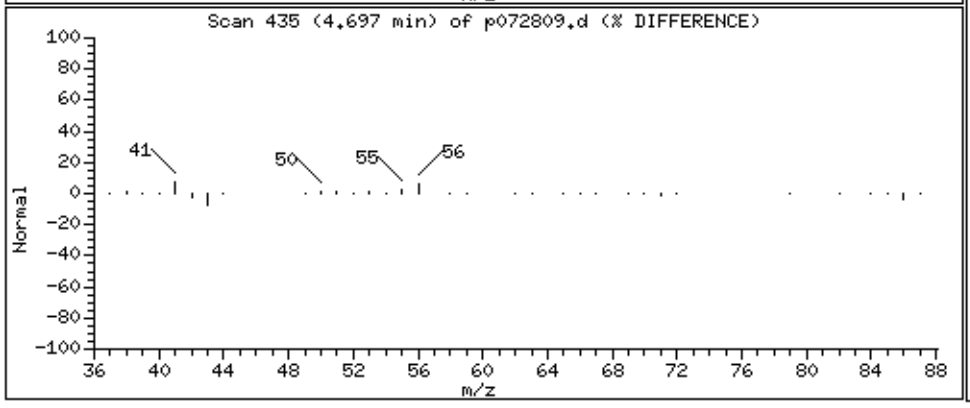












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

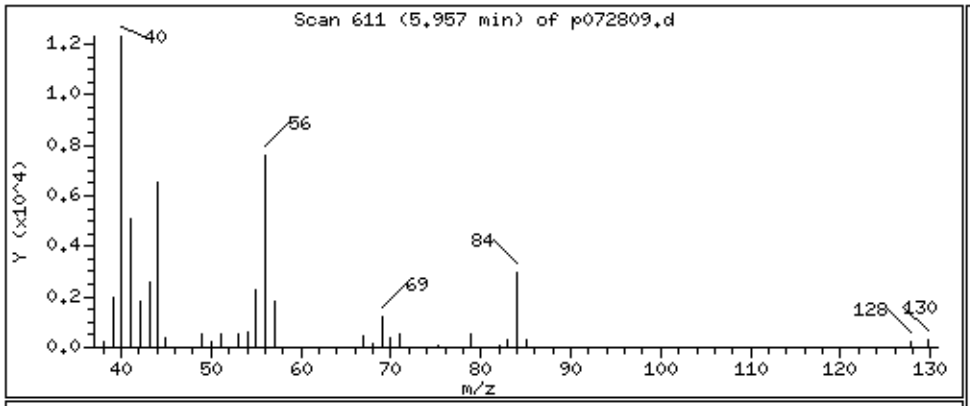
Operator: LD

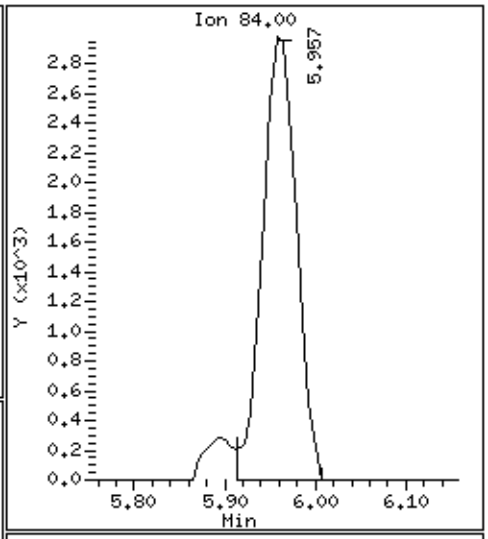
Column phase: RTX-624

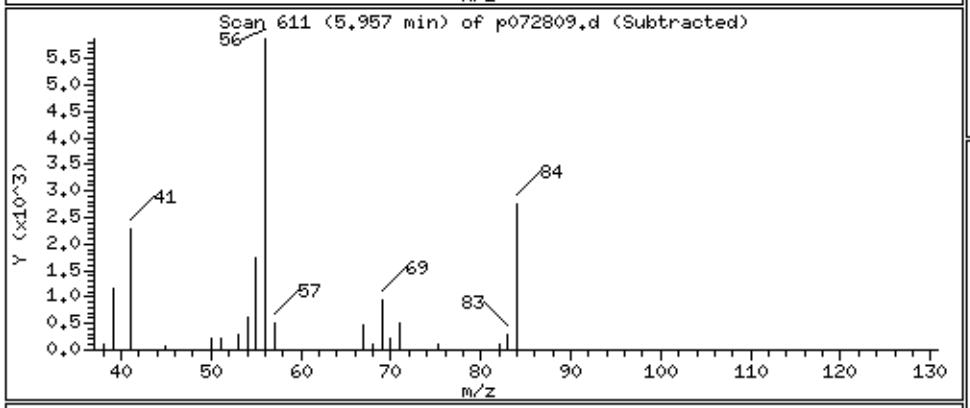
Column diameter: 0.25

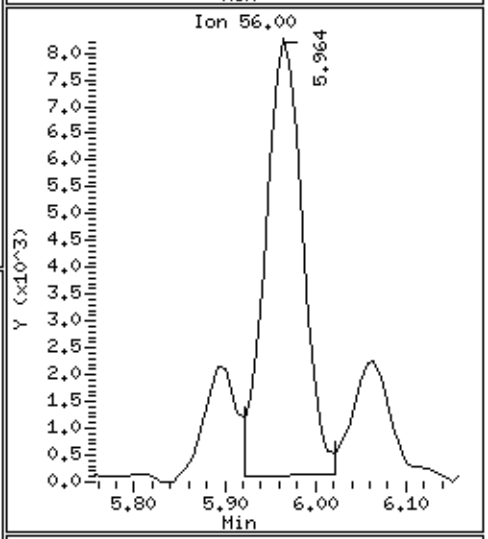
94 Cyclohexane

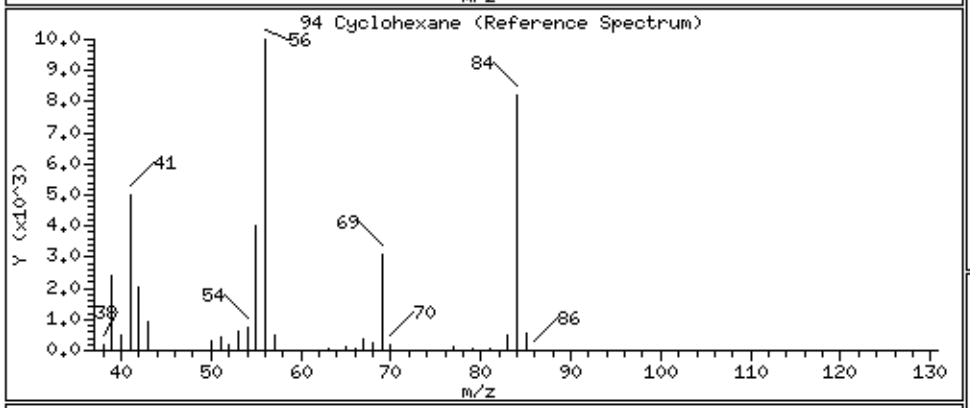
Concentration: 1.619 PPBV

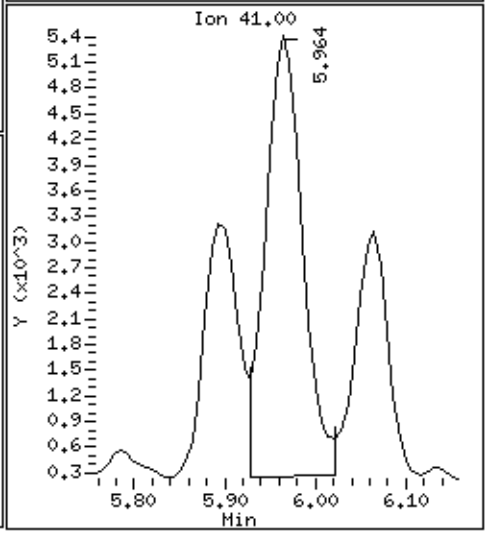


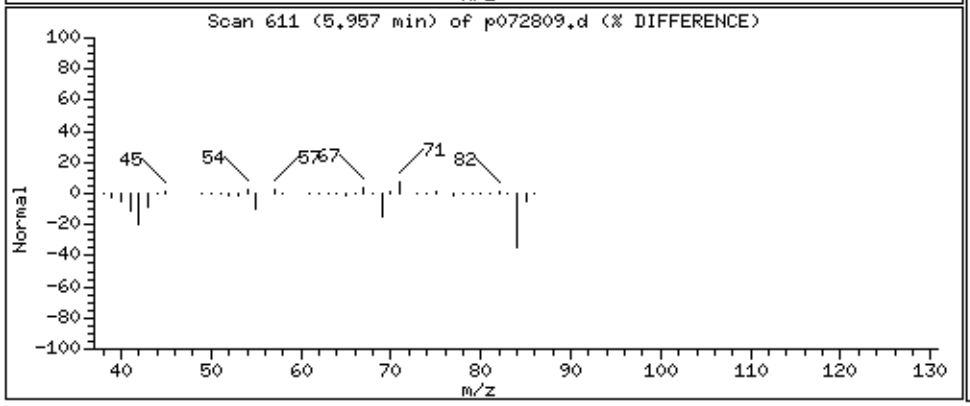












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

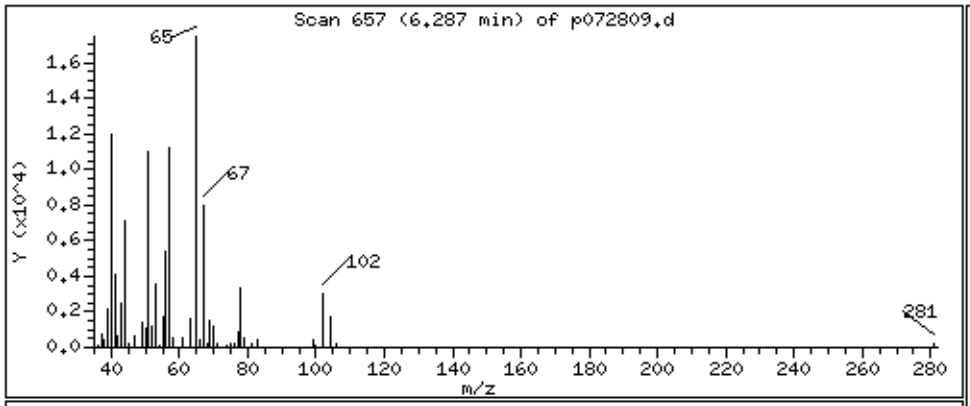
Operator: LD

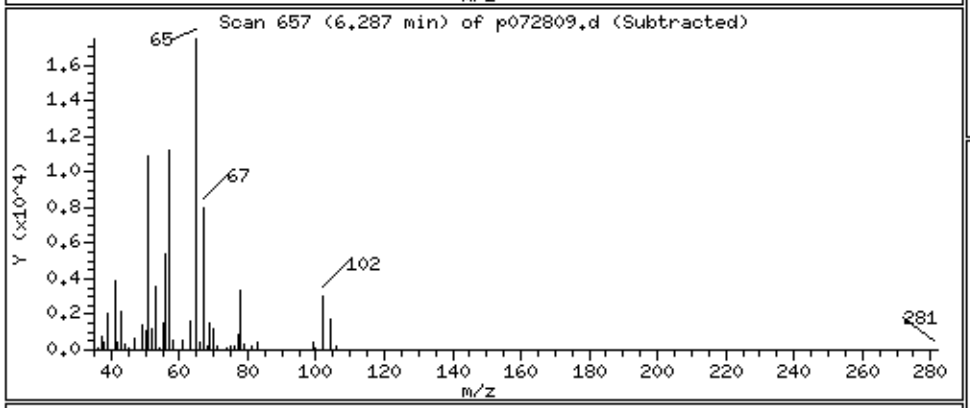
Column phase: RTX-624

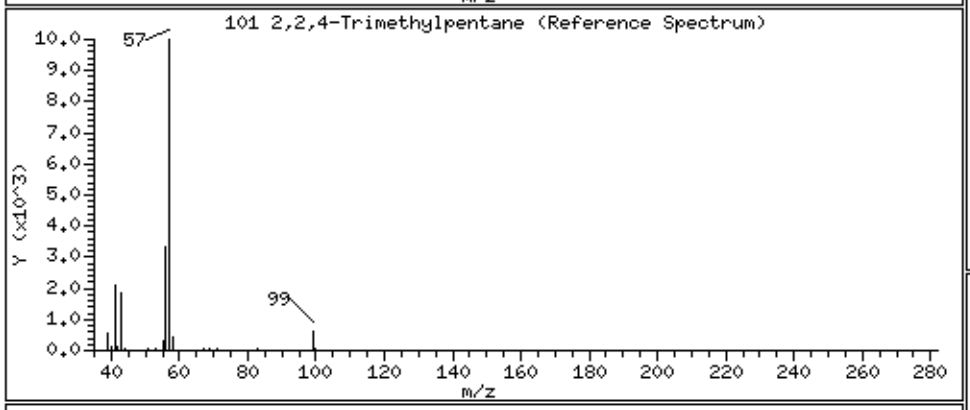
Column diameter: 0.25

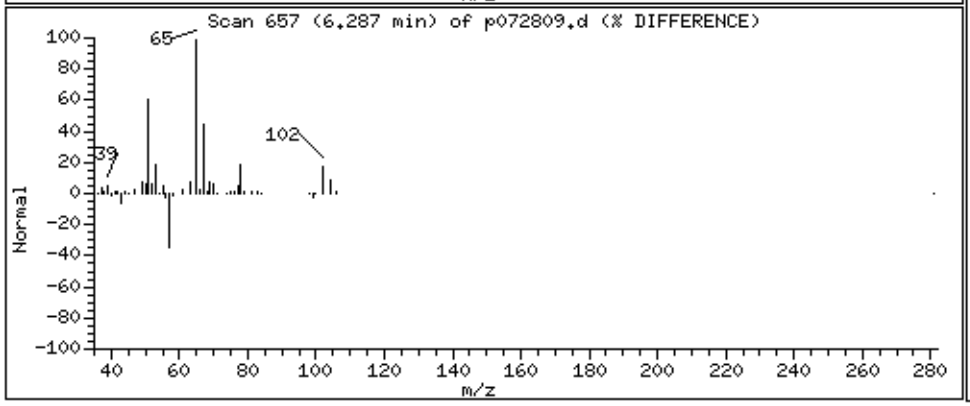
101 2,2,4-Trimethylpentane

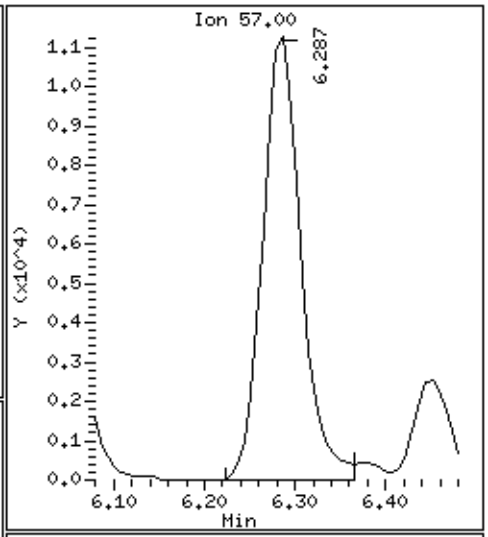
Concentration: 1.265 PPBV

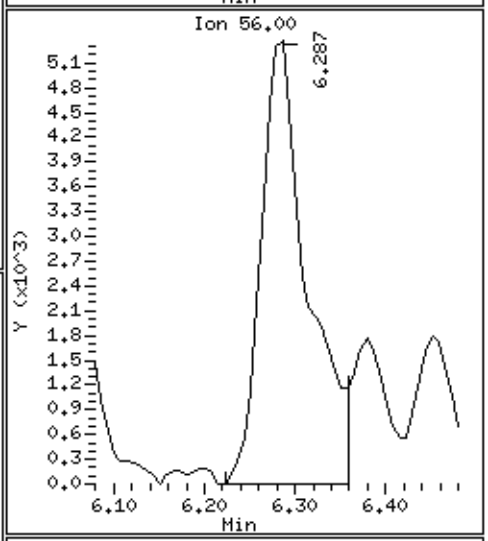


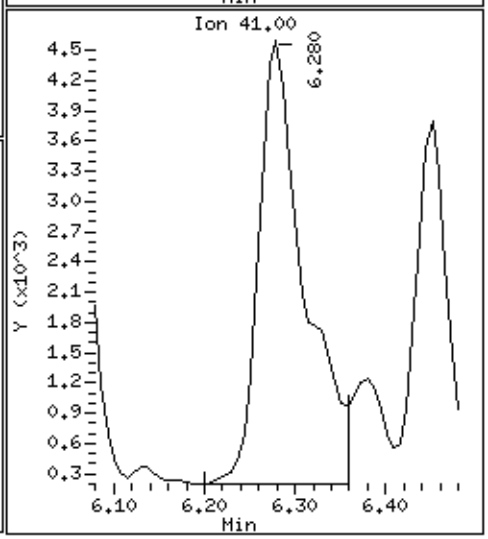












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

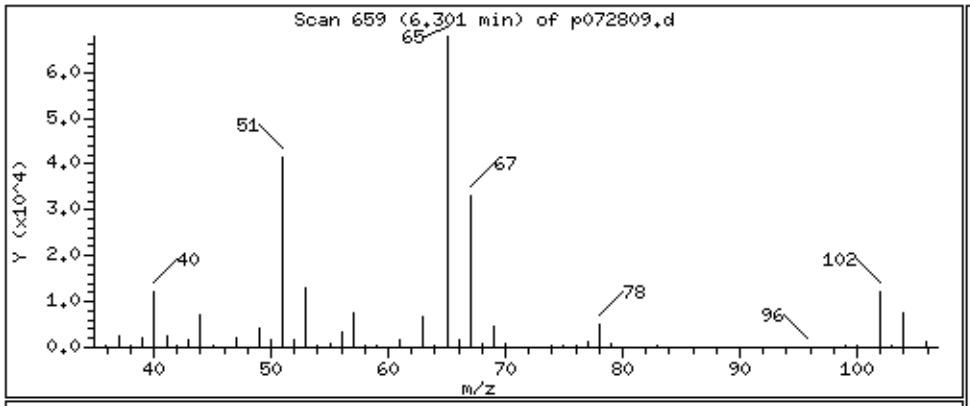
Operator: LD

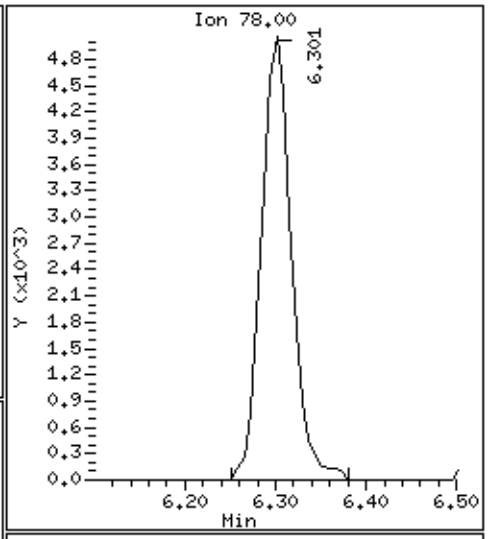
Column phase: RTX-624

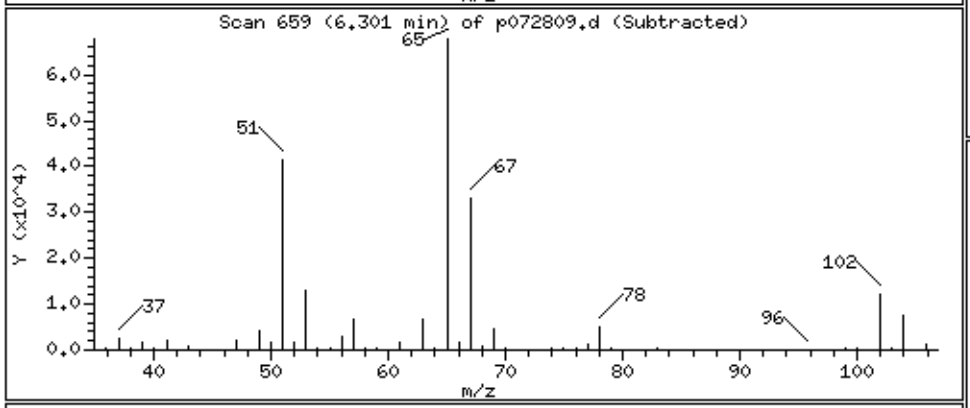
Column diameter: 0.25

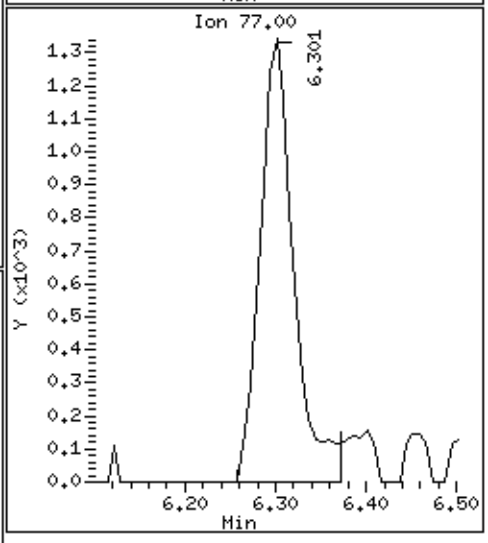
102 Benzene

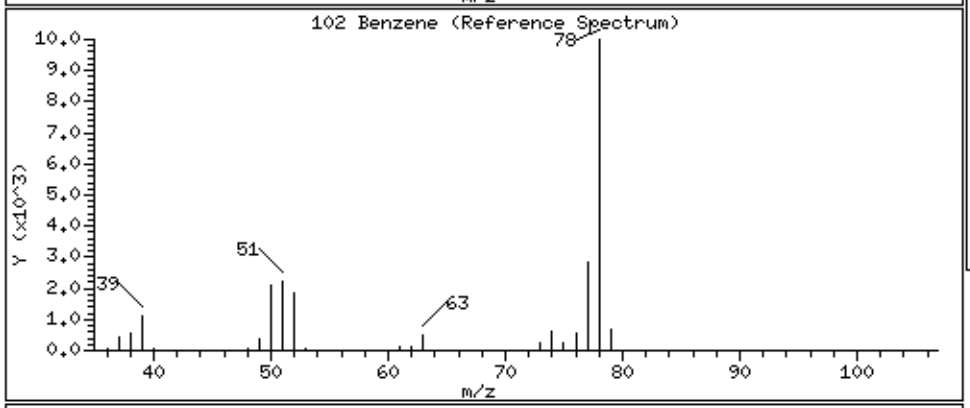
Concentration: 1.224 PPBV

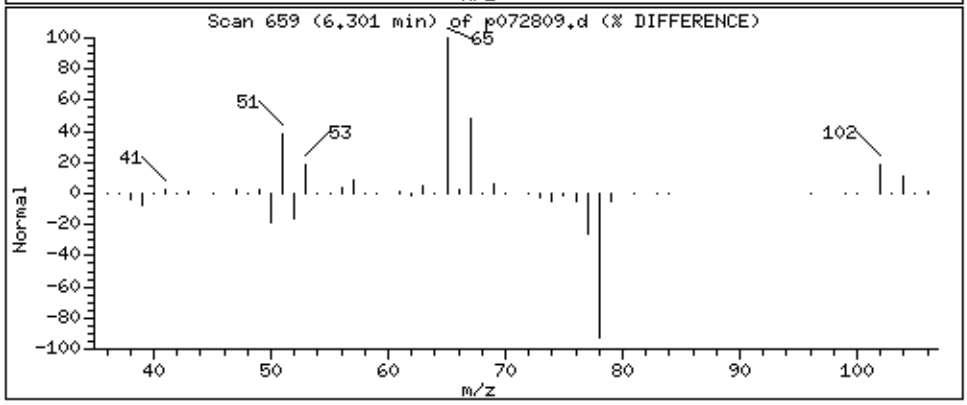












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

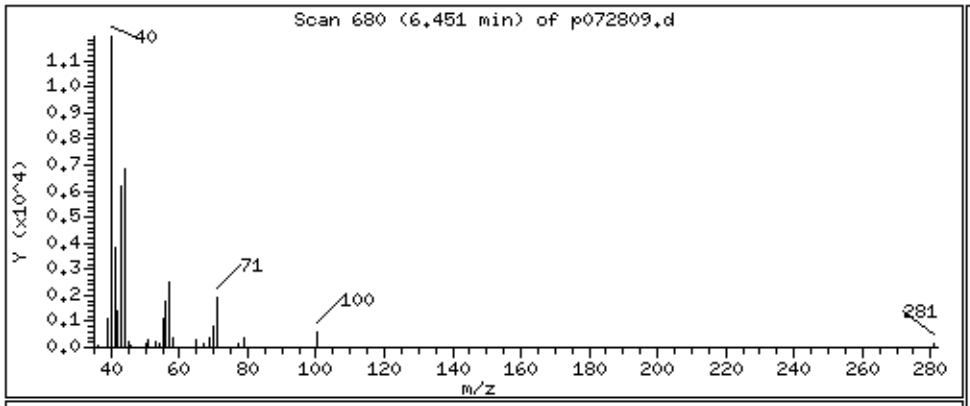
Operator: LD

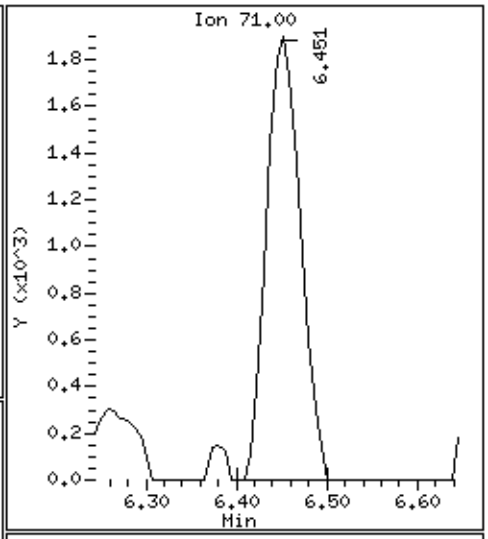
Column phase: RTX-624

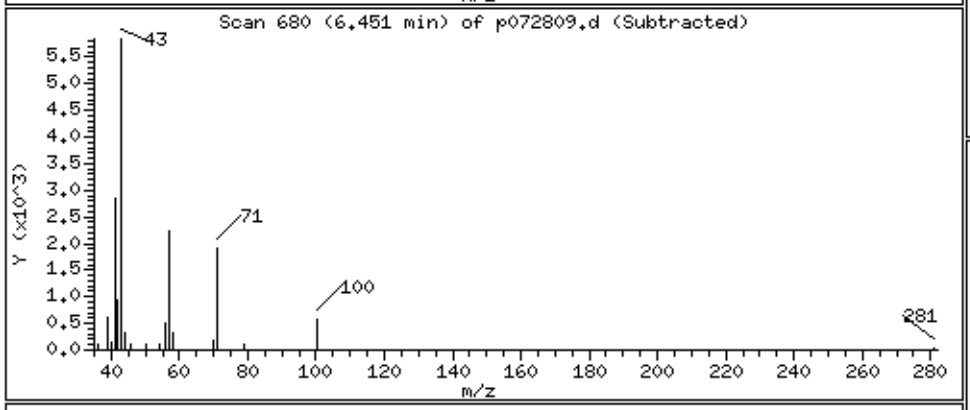
Column diameter: 0.25

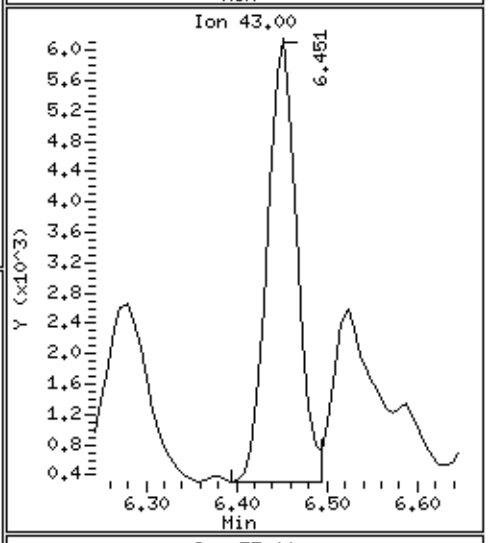
107 Heptane

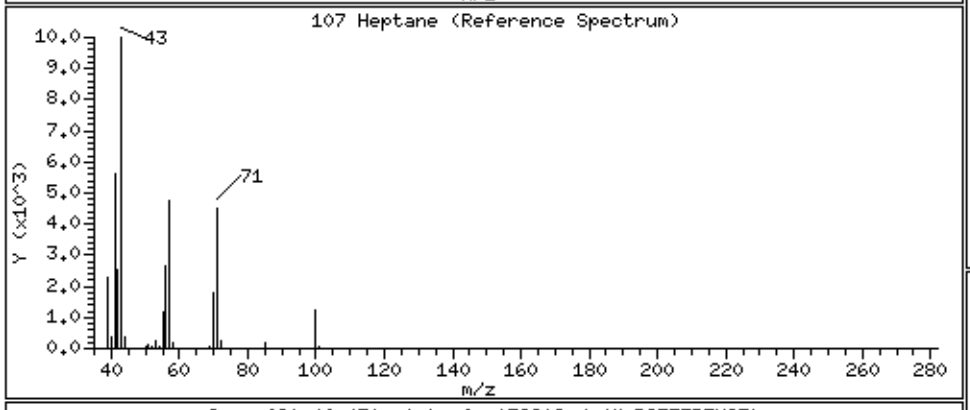
Concentration: 1.323 PPBV

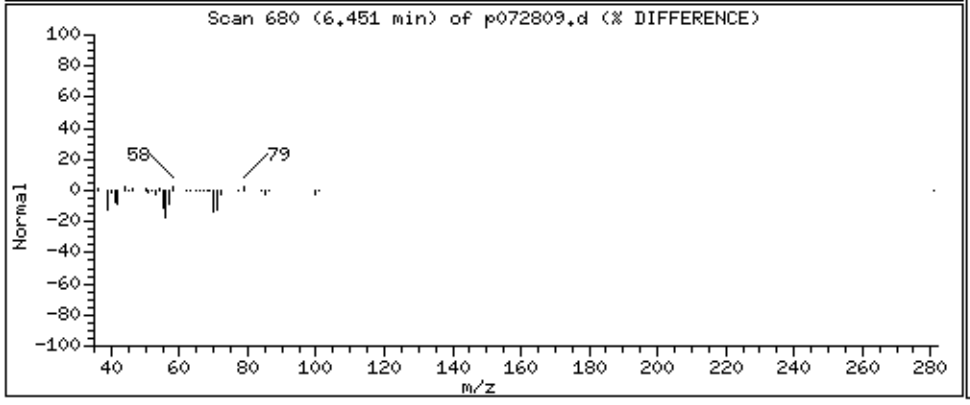


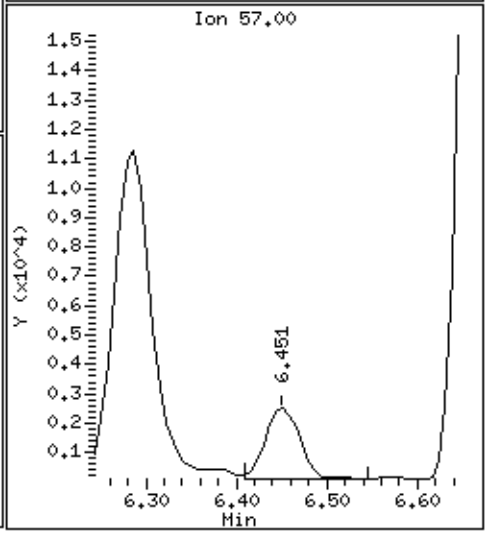












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

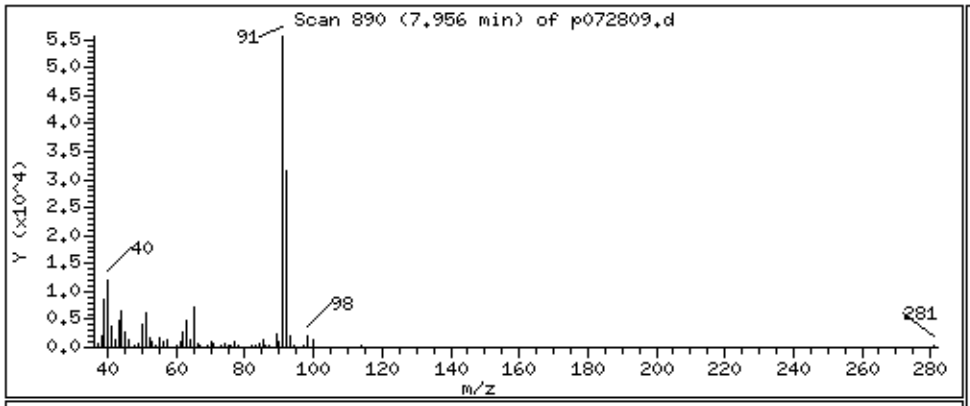
Operator: LD

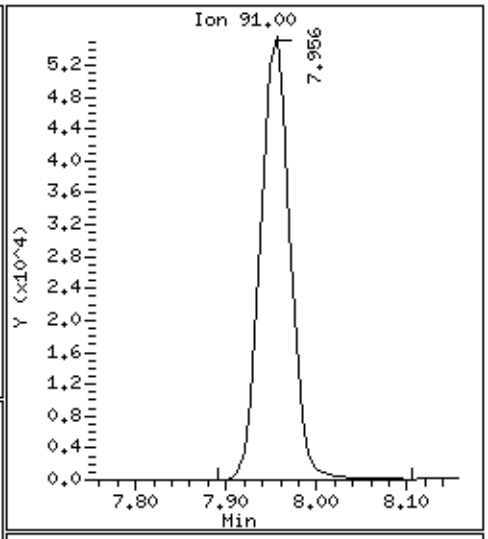
Column phase: RTX-624

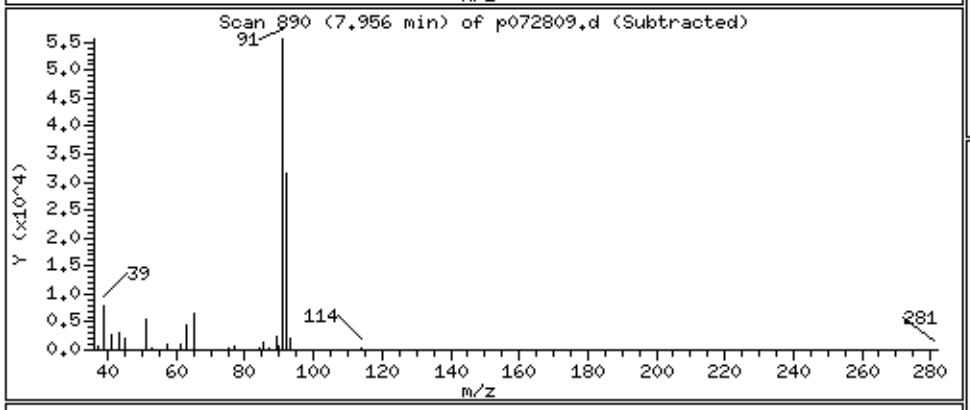
Column diameter: 0.25

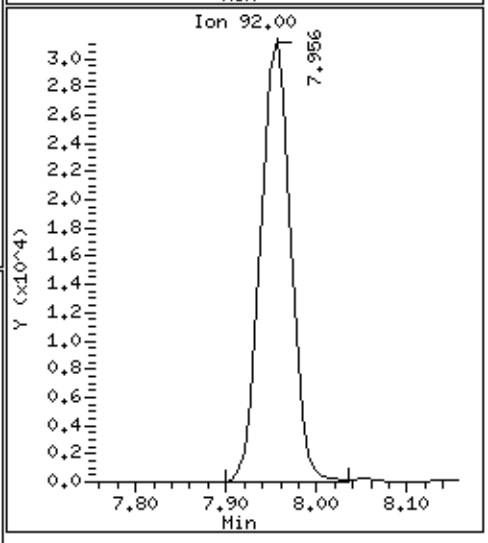
137 Toluene

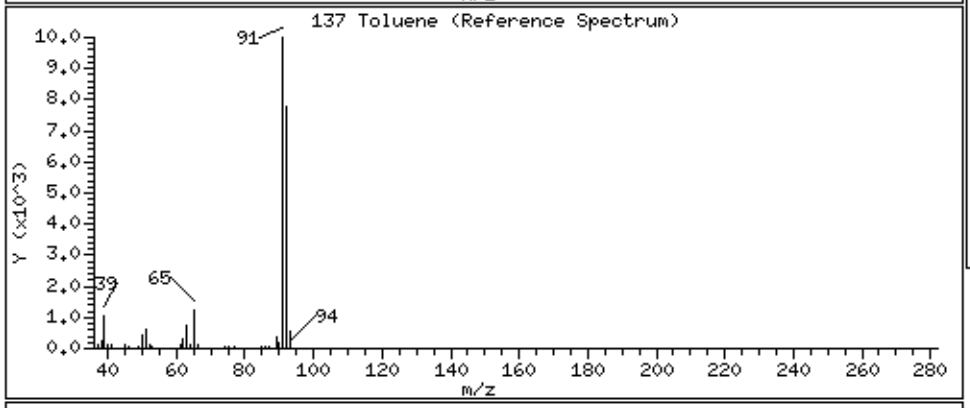
Concentration: 9.673 PPBV

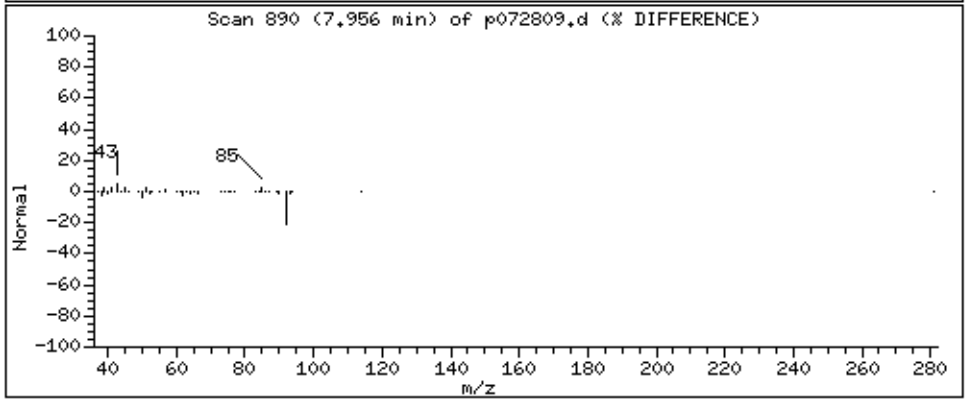












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

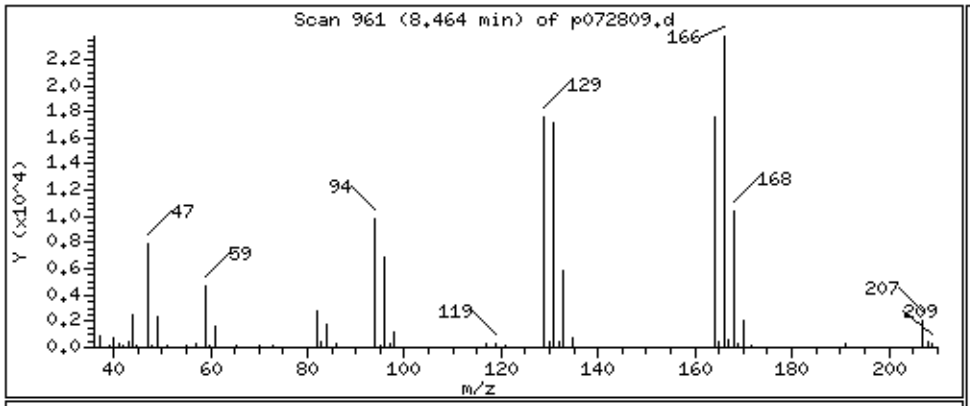
Operator: LD

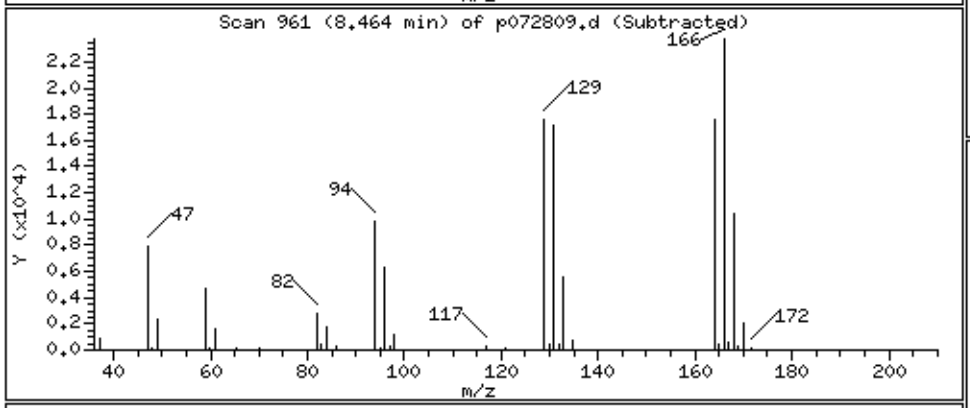
Column phase: RTX-624

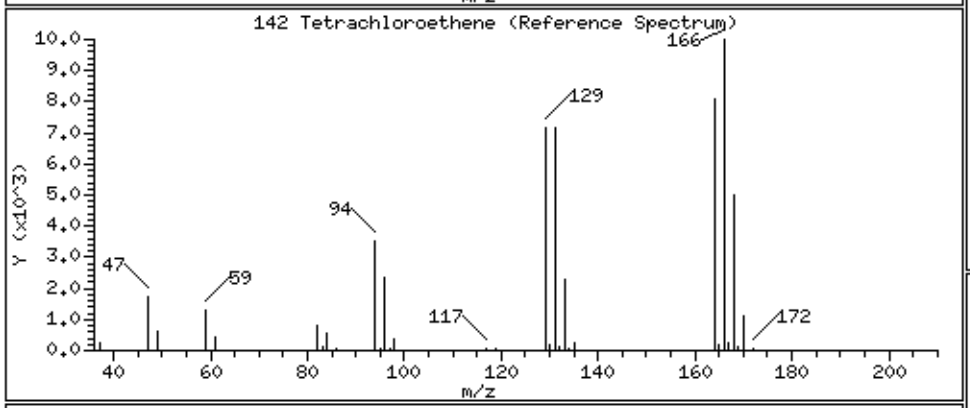
Column diameter: 0.25

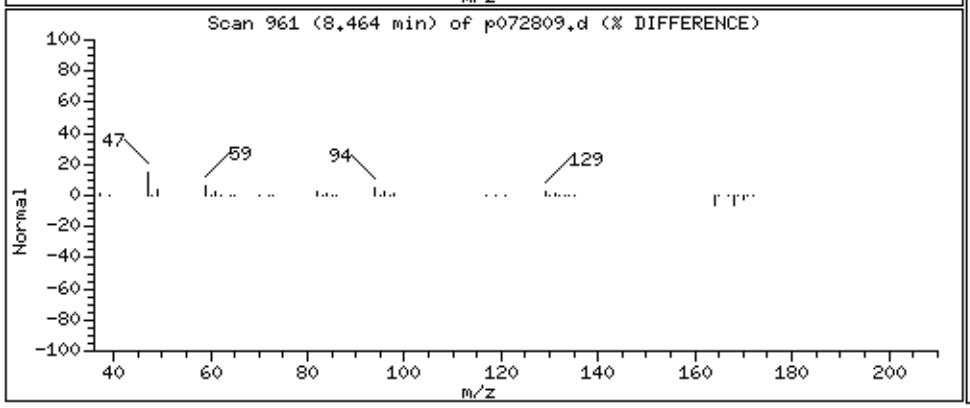
142 Tetrachloroethene

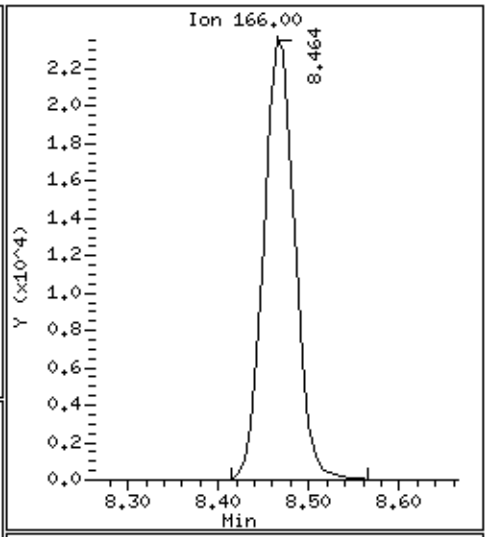
Concentration: 8.567 PPBV

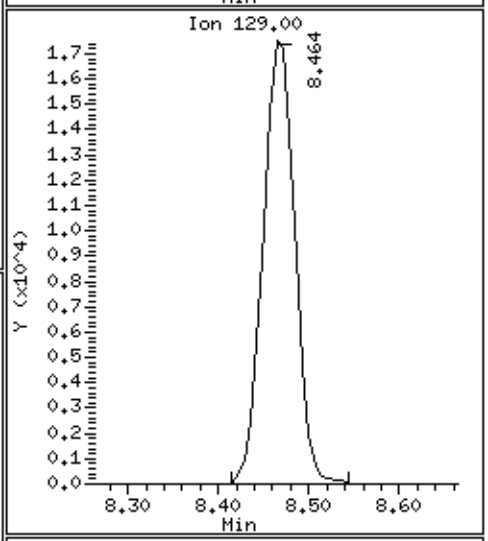


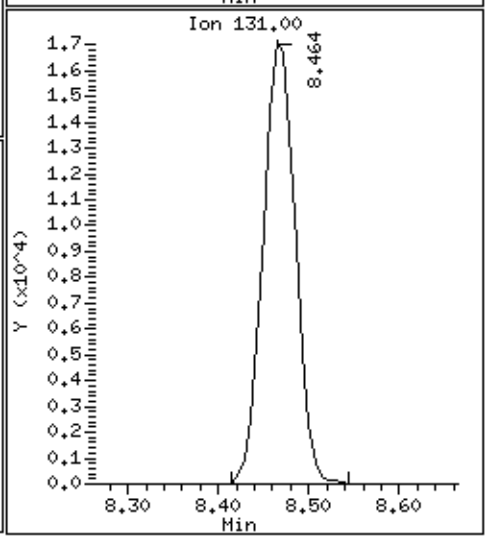












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

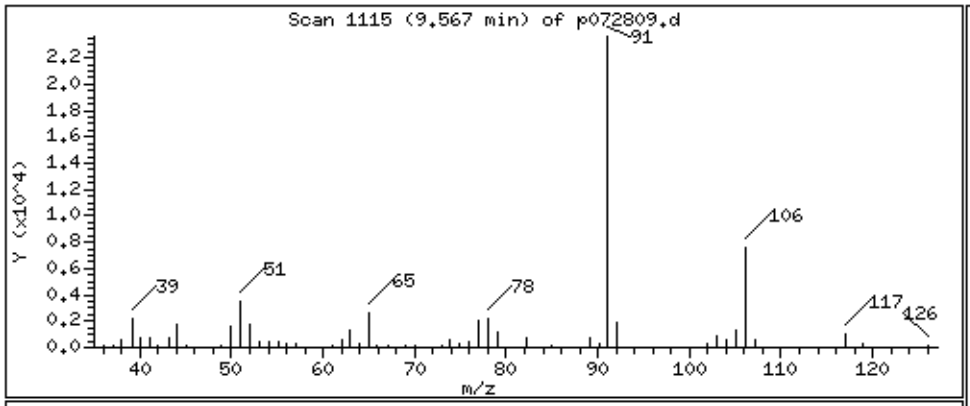
Operator: LD

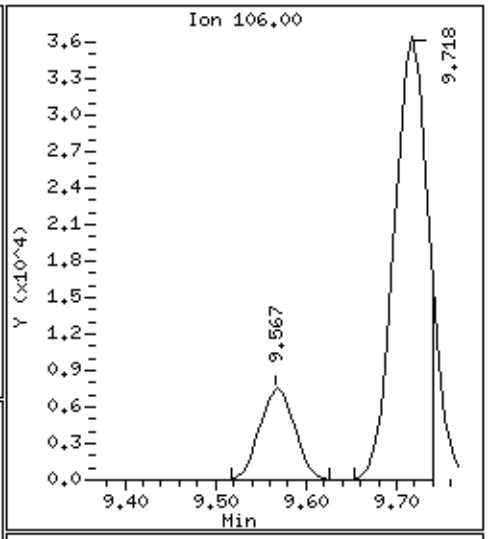
Column phase: RTX-624

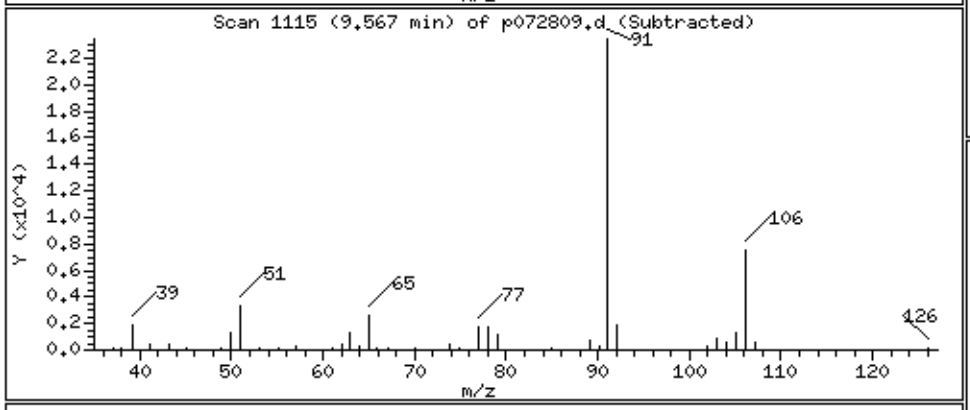
Column diameter: 0.25

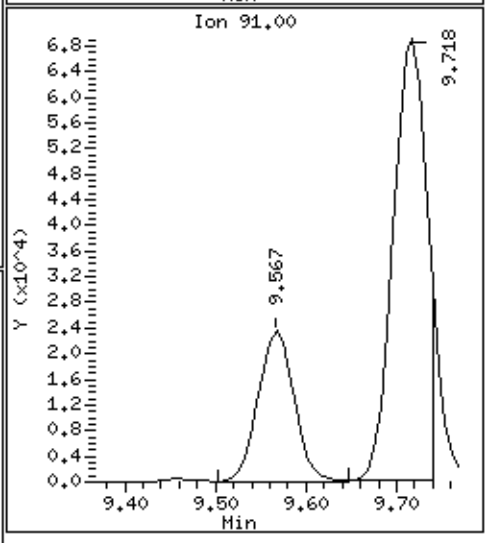
155 Ethyl Benzene

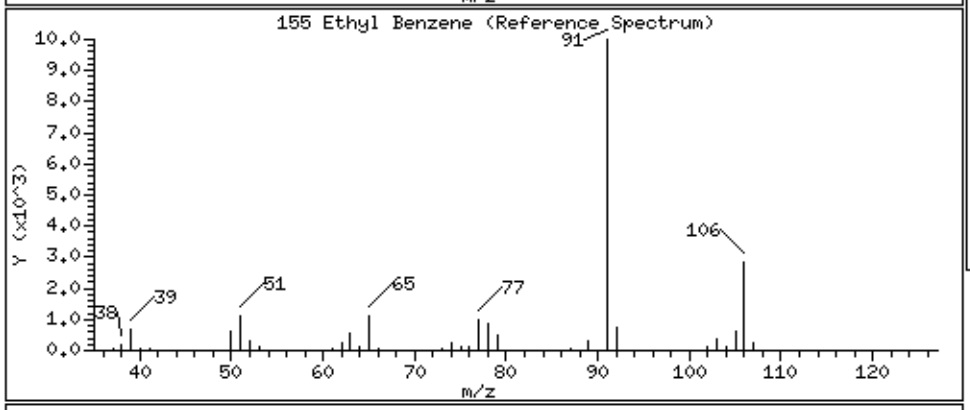
Concentration: 3.349 PPBV

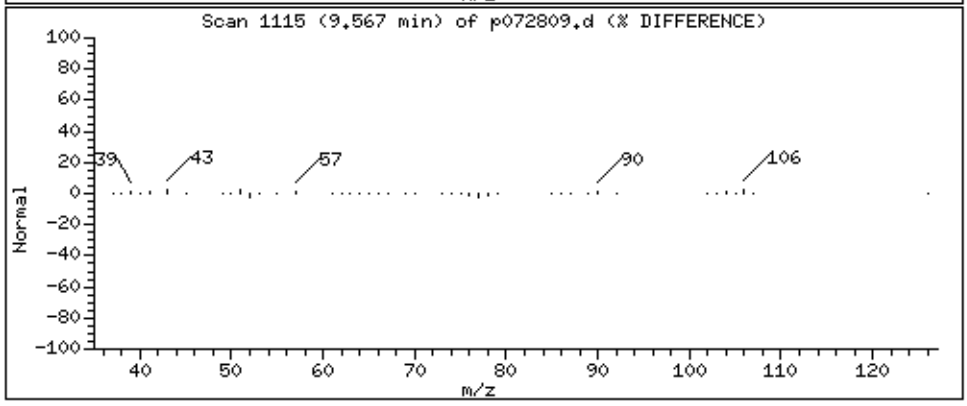












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

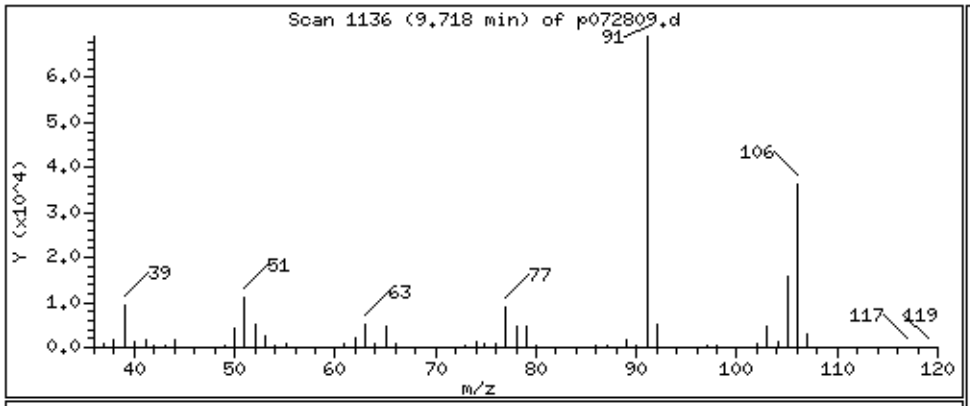
Operator: LD

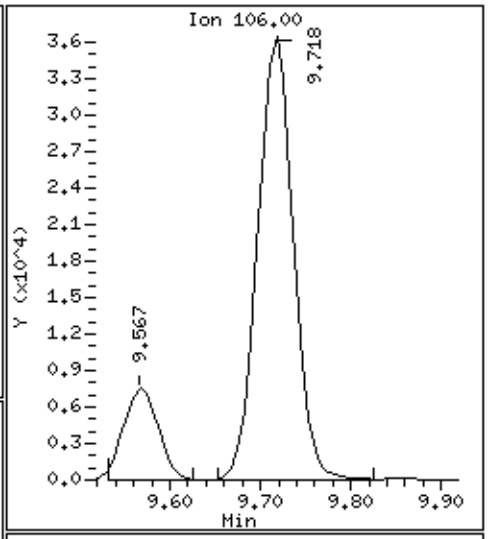
Column phase: RTX-624

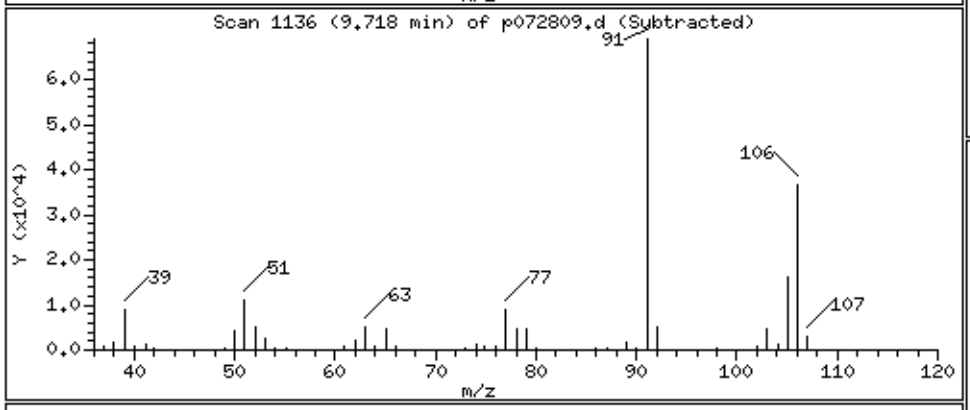
Column diameter: 0.25

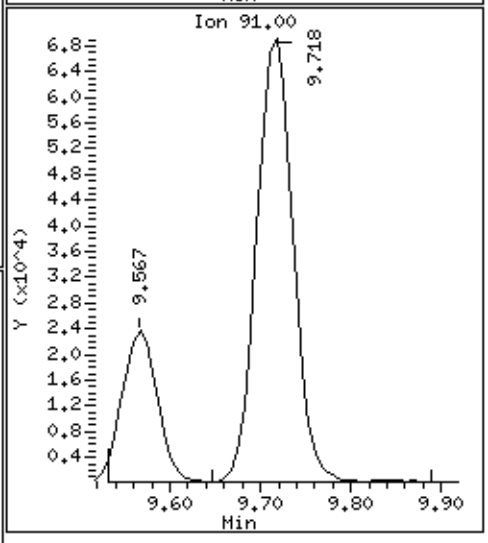
158 m,p-Xylene

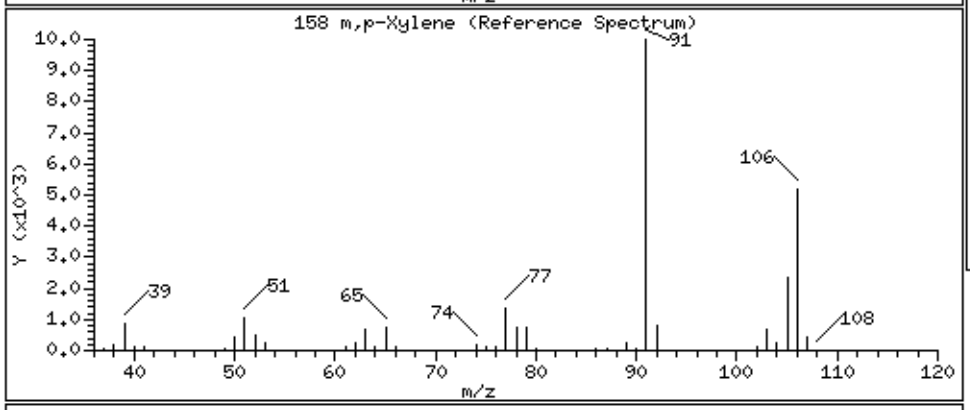
Concentration: 13.216 PPBV

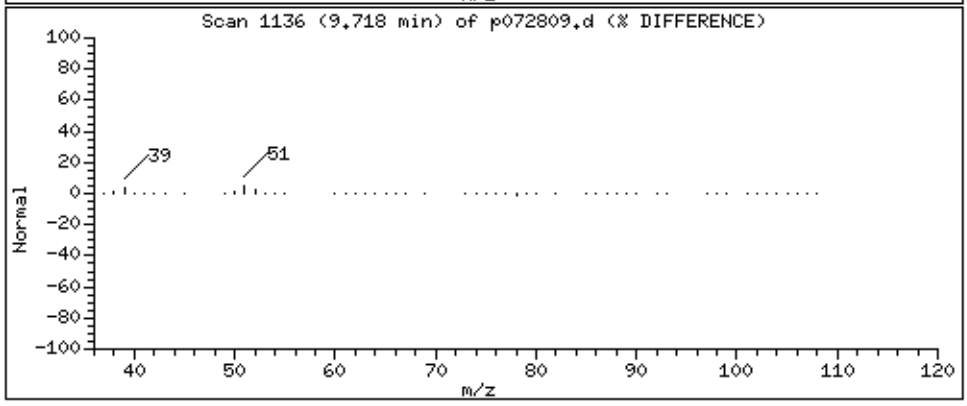












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

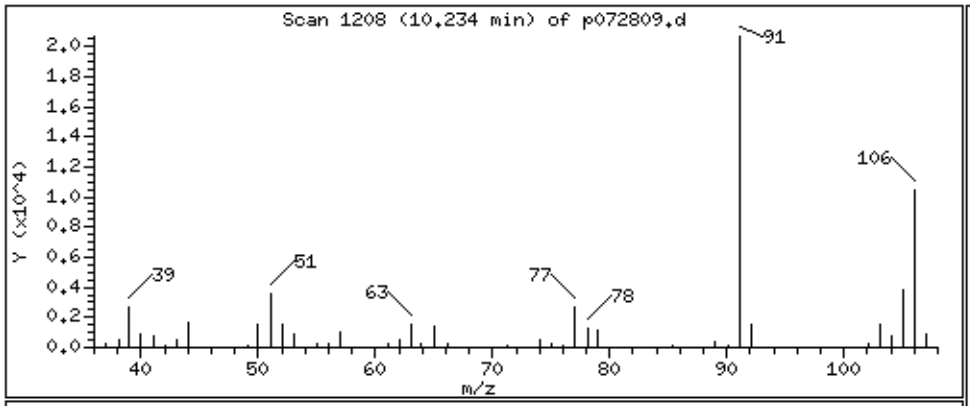
Operator: LD

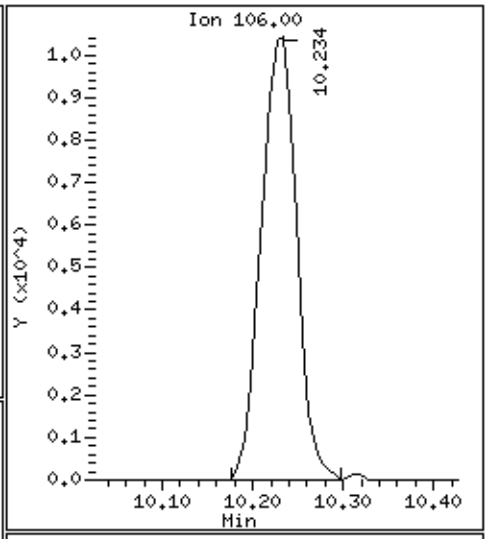
Column phase: RTX-624

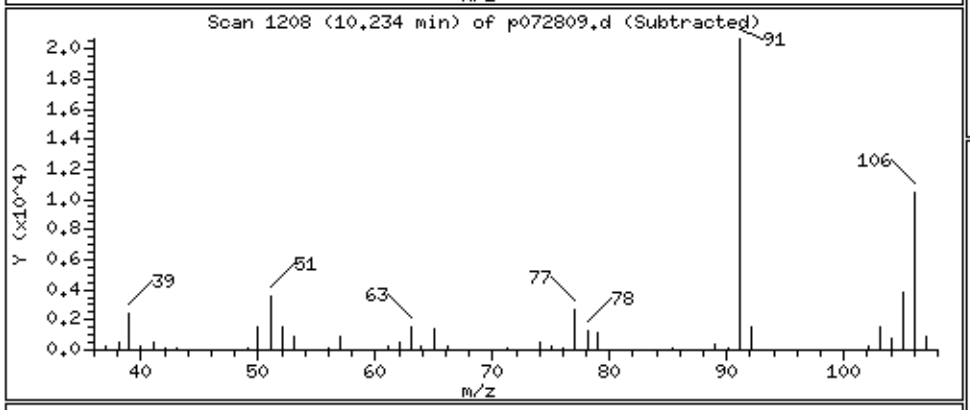
Column diameter: 0.25

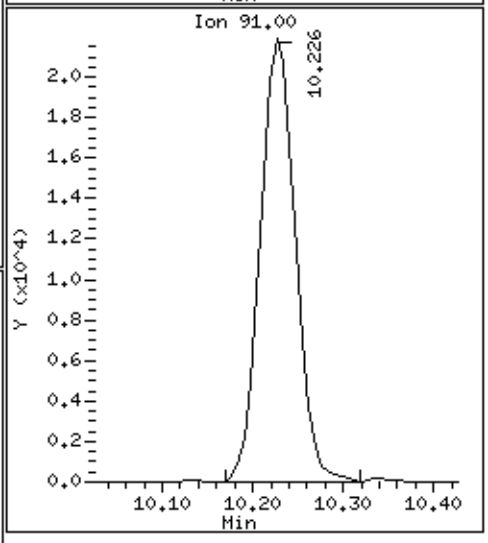
164 o-Xylene

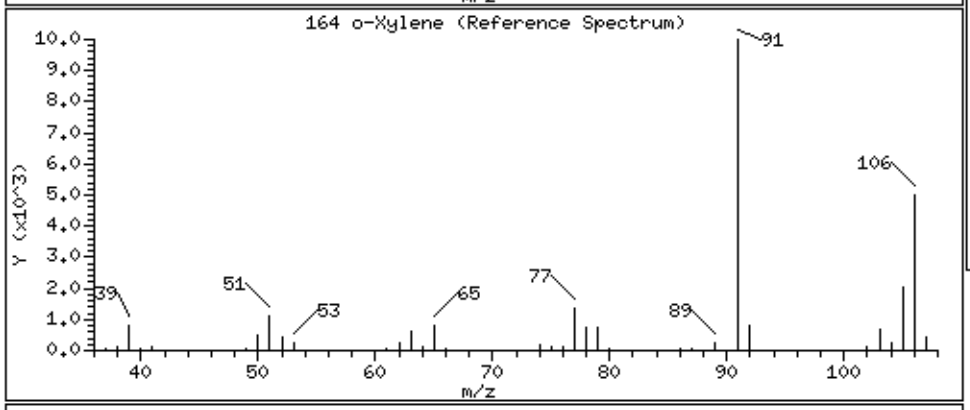
Concentration: 3.930 PPBV

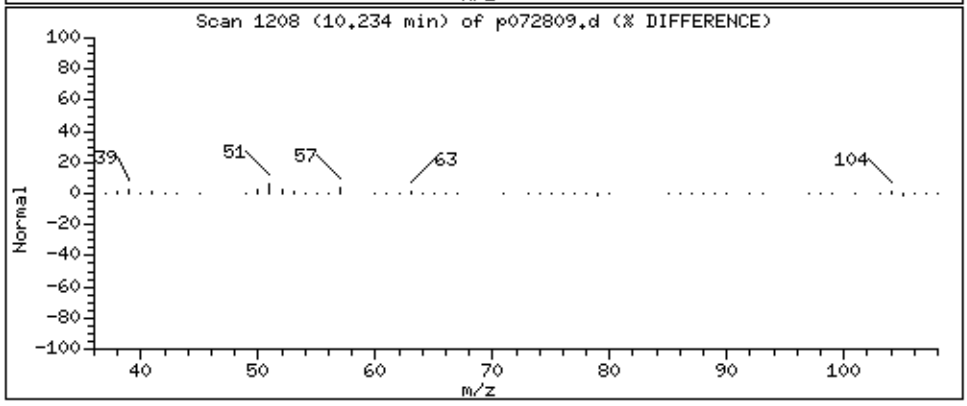












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

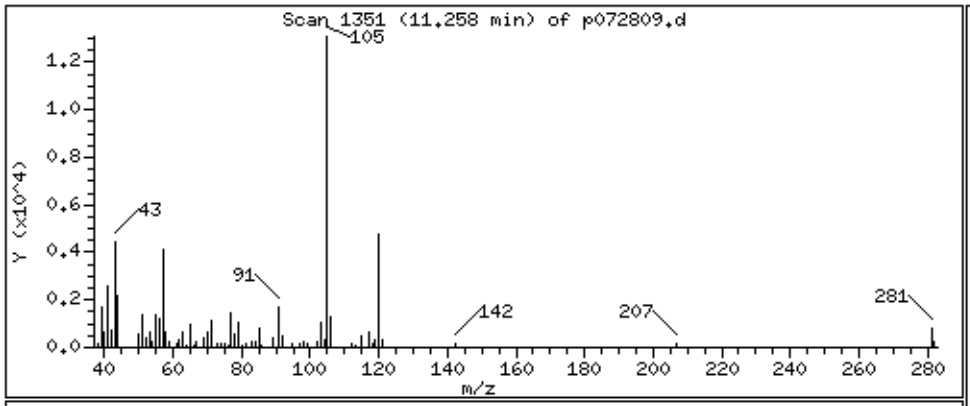
Operator: LD

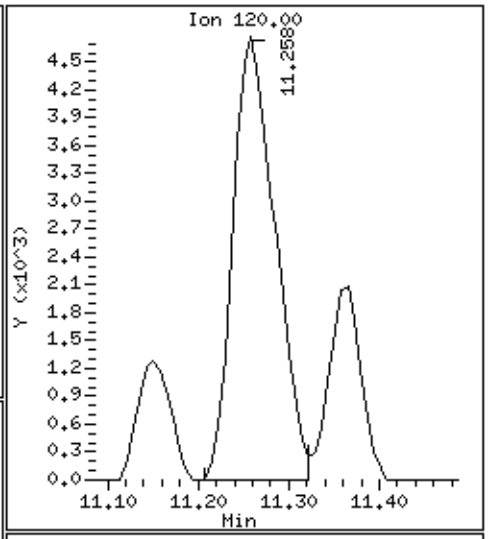
Column phase: RTX-624

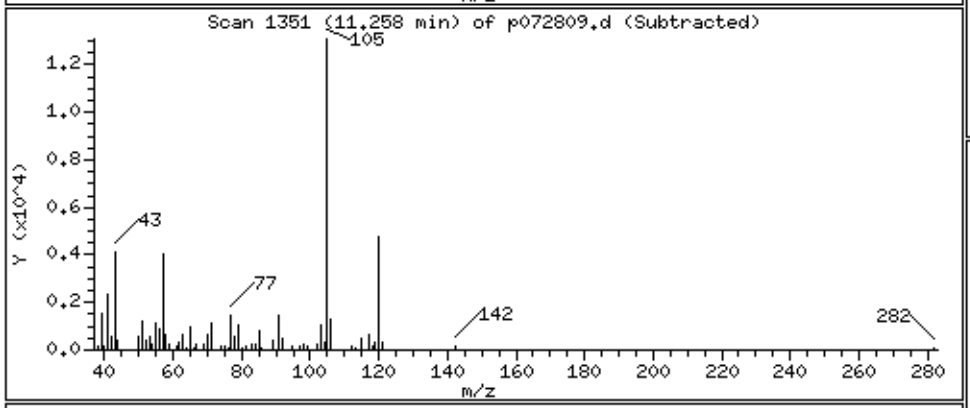
Column diameter: 0.25

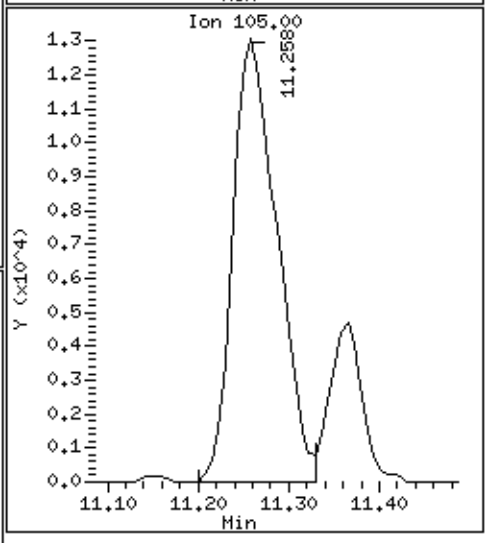
183 4-Ethyltoluene

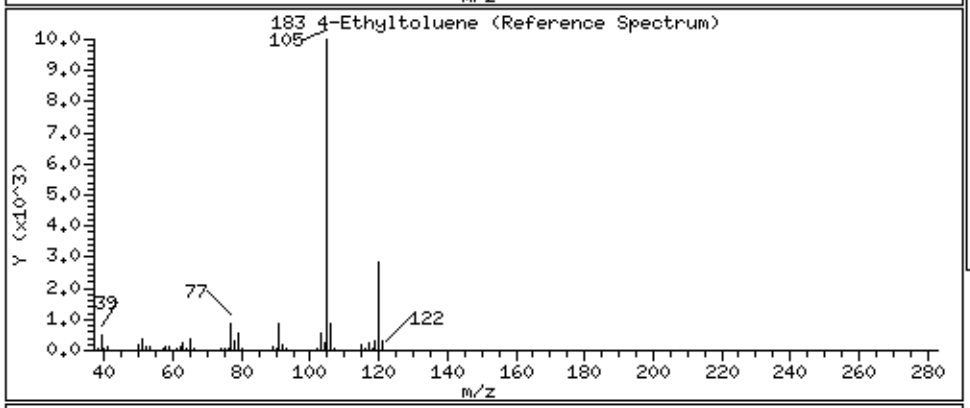
Concentration: 2.119 PPBV

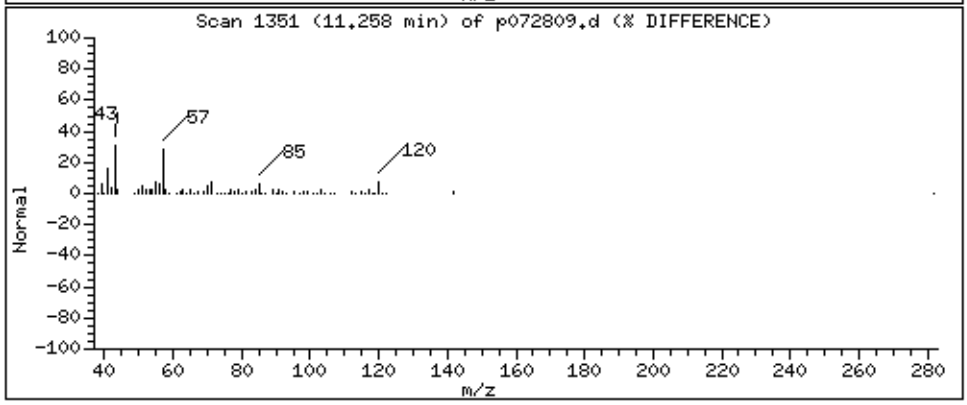












Data File: /chem/msdp.i/28JUL21.b/p072809.d

Date : 28-JUL-2021 15:55

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00712

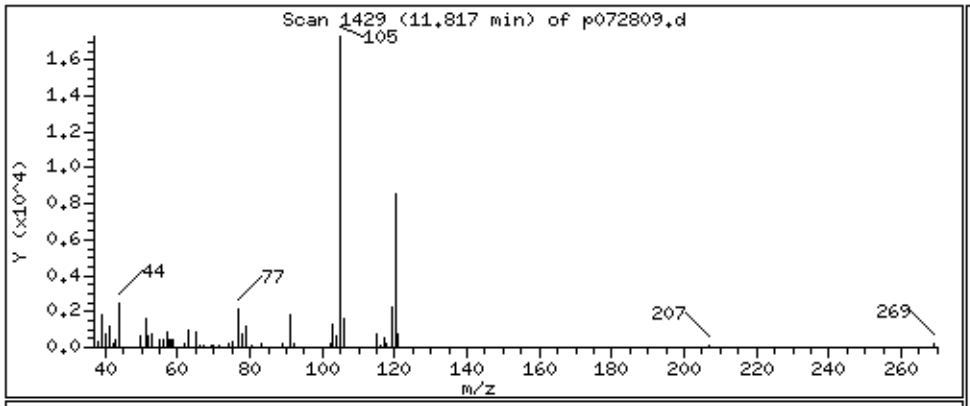
Operator: LD

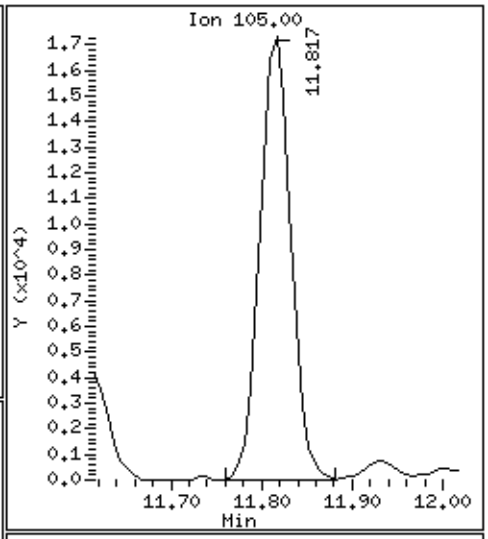
Column phase: RTX-624

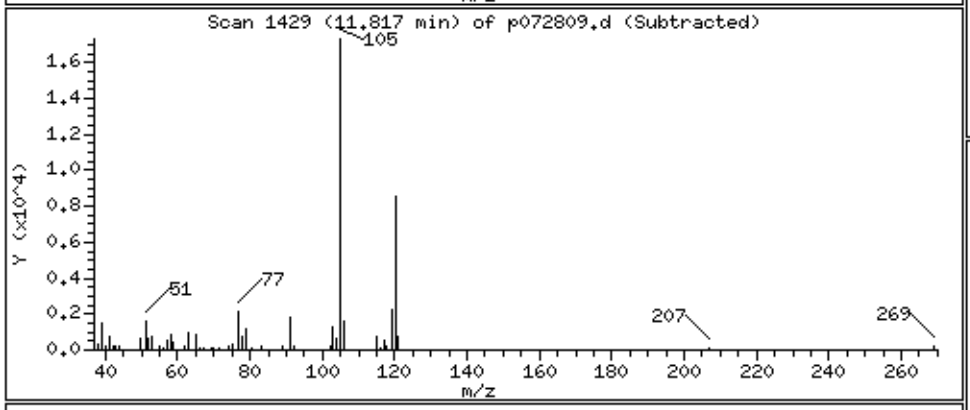
Column diameter: 0.25

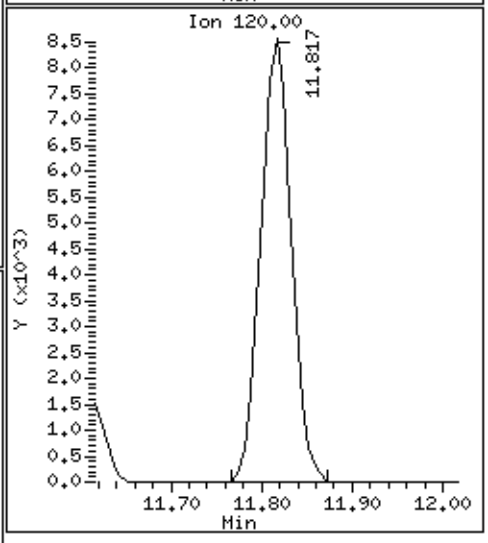
190 1,2,4-Trimethylbenzene

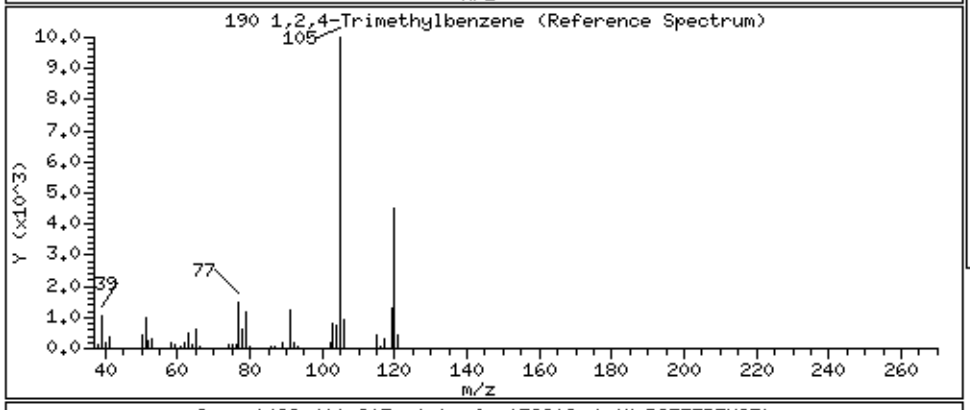
Concentration: 2.164 PPBV

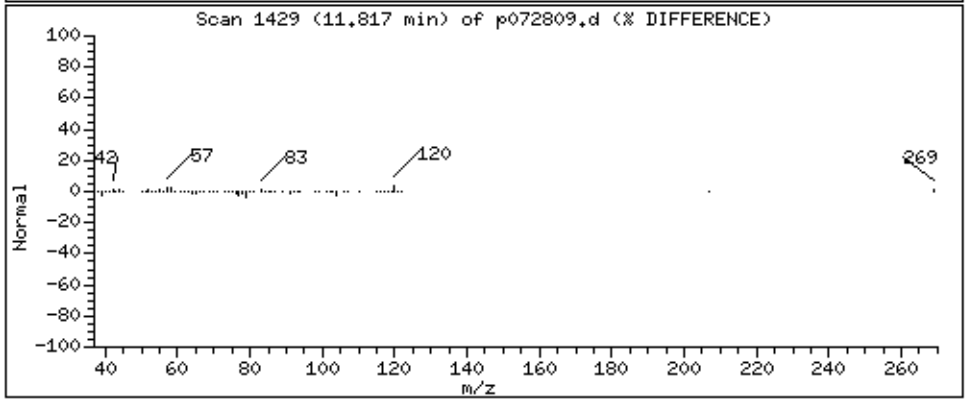












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Client Sample ID: SG-VW27B-03

Lab ID#: 2107361-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072810**	**Date of Collection: 7/15/21 6:44:00 AM**	
Dil. Factor:	**2.06**	**Date of Analysis: 7/28/21 04:24 PM**	

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	2.3	5.1	11
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	1.3	4.8	5.9
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	2.2	5.1	11
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	1.3	3.3	4.0
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-VW27B-03

Lab ID#: 2107361-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072810**	**Date of Collection: 7/15/21 6:44:00 AM**	
Dil. Factor:	**2.06**	**Date of Analysis: 7/28/21 04:24 PM**	

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	1.6	3.5	5.6
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
Dibromomethane	4.1	Not Detected	29	Not Detected
Ethanol	10	25	19	46
Ethyl Acetate	4.1	Not Detected	15	Not Detected
Ethyl Benzene	1.0	3.5	4.5	15
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	1.3	4.2	5.5
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Hexachloroethane	4.1	Not Detected	40	Not Detected
Hexane	1.0	50	3.6	170
Iodomethane	10	Not Detected	60	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
m,p-Xylene	1.0	13	4.5	58
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	4.0	4.5	18
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	8.1	7.0	55
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	9.4	3.9	35
TPH ref. to Gasoline (MW=100)	100	180	420	740
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-VW27B-03

Lab ID#: 2107361-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072810**	**Date of Collection: 7/15/21 6:44:00 AM**	
Dil. Factor:	**2.06**	**Date of Analysis: 7/28/21 04:24 PM**	

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/28JUL21.b/p072810.d
Lab Smp Id: 2107361-04A
Inj Date : 28-JUL-2021 16:24
Operator : LD Inst ID: msdp.i
Smp Info : 200ml O0232
Misc Info : 5.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 4
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		
5.785	5.778 (1.000)	130	158351	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	121054				48.23- 108.23	76.45
5.785	5.778 (1.000)	49	323821				150.57- 210.57	204.50
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	593881	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	87194				0.00- 45.71	14.68
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	591572	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	304837				23.78- 83.78	51.53
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	222340	25.4424	25.442		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	111569				27.21- 87.21	50.18
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	651066	25.2462	25.246		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	69211				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	419136			34.95- 94.95	64.38
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	370301	24.3765	24.376	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	451184			95.92- 155.92	121.84
10.921	10.921 (1.154)	176	360712			66.89- 126.89	97.41
39 Ethanol					CAS #: 64-17-5		
3.257	3.242 (0.563)	46	18841	11.9979	24.716	80.00- 120.00	100.00
3.257	3.285 (0.563)	45	50018			511.19- 571.19	265.47
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	375064	24.0435	49.530	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	272109			37.52- 97.52	72.55
4.696	4.696 (0.812)	86	39959			0.00- 41.48	10.65
94 Cyclohexane					CAS #: 110-82-7		
5.964	5.957 (1.031)	84	7811	0.78417	1.615	80.00- 120.00	100.00
5.964	5.957 (1.031)	56	21748			142.57- 202.57	278.42
5.964	5.957 (1.031)	41	14104			62.09- 122.09	180.56
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.280 (1.085)	57	33200	0.61233	1.261	80.00- 120.00	100.00
6.279	6.280 (1.085)	56	17684			2.24- 62.24	53.27
6.279	6.280 (1.085)	41	15002			0.00- 54.39	45.19
102 Benzene					CAS #: 71-43-2		
6.301	6.301 (0.945)	78	12009	0.61277	1.262	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	3457			0.00- 52.90	28.79
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.967)	71	5028	0.64762	1.334	80.00- 120.00	100.00
6.451	6.444 (0.968)	43	13964			226.53- 286.53	277.72
6.451	6.444 (0.968)	57	7110			100.85- 160.85	141.42
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	123480	4.56683	9.408	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	71398			28.38- 88.38	57.82
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	53086	3.93743	8.111	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	43846			47.84- 107.84	82.59
8.464	8.464 (0.895)	131	42213			45.29- 105.29	79.52
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	21144	1.72138	3.546	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
155 Ethyl Benzene (continued)							
9.567	9.567 (1.011)	91	63240			273.74- 333.74	299.09
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	100251	6.51661	13.424	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	187860			163.73- 223.73	187.39
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	28982	1.96627	4.050	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	59862			177.45- 237.45	206.55
183 4-Ethyltoluene					CAS #: 622-96-8		
11.258	11.286 (1.190)	120	16187	1.08417	2.233	80.00- 120.00	100.00
11.258	11.286 (1.190)	105	46285			284.55- 344.55	285.93
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.817 (1.249)	105	43120	1.11135	2.289	80.00- 120.00	100.00
11.816	11.817 (1.249)	120	20365			19.05- 79.05	47.23

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072810.d
Lab Smp Id: 2107361-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 5.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	158351	-1.25
108 1,4-Difluorobenze	582857	349714	816000	593881	1.89
153 Chlorobenzene-d5	560035	336021	784049	591572	5.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	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.

Report Date: 29-Jul-2021 13:18

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-04A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 5.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.442	101.77	70-130
$ 134 Toluene-d8	25.000	25.246	100.98	70-130
$ 170 4-Bromofluorobenz	25.000	24.376	97.51	70-130

Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

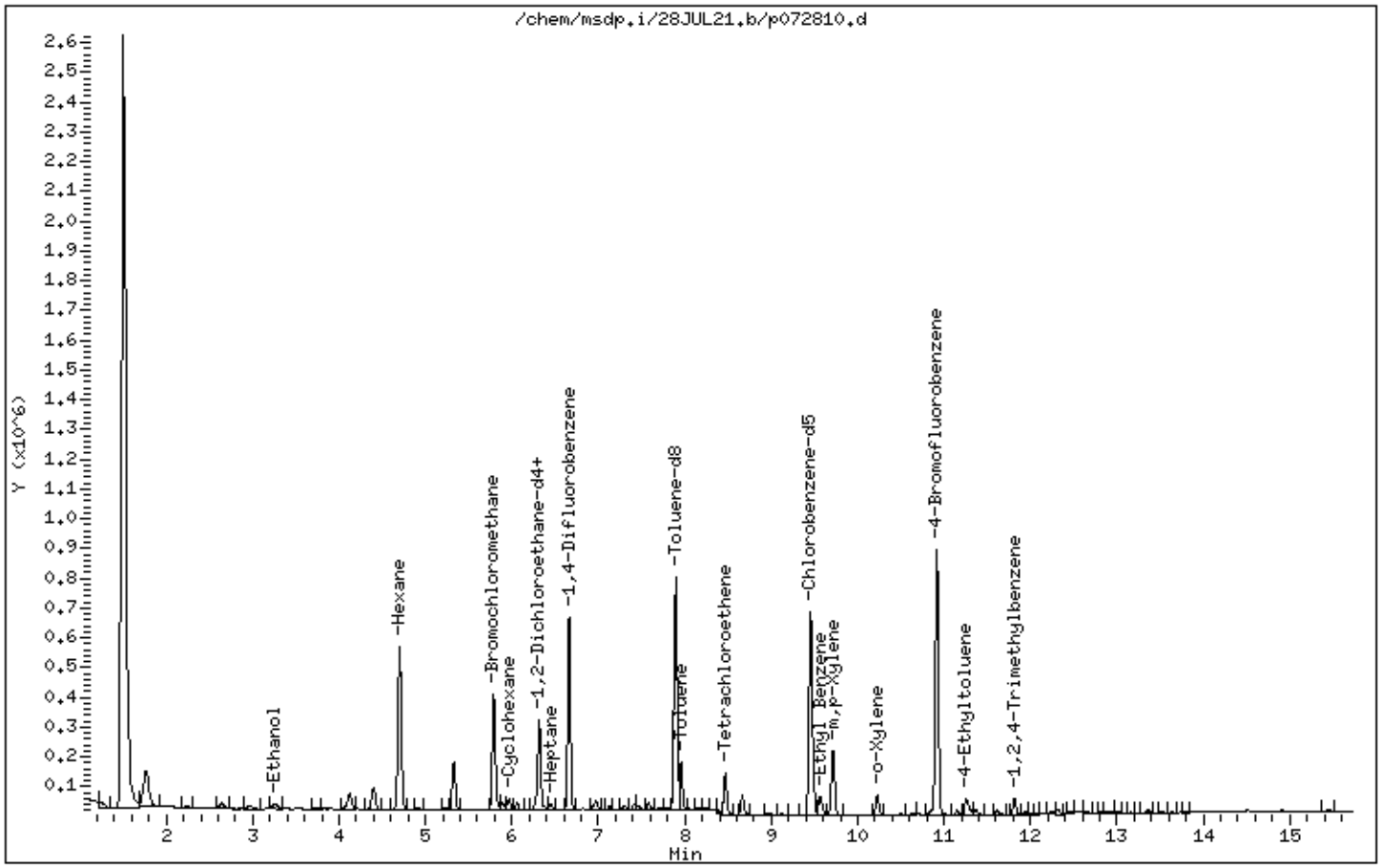
Instrument: msdp.i

Sample Info: 200ml 00232

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

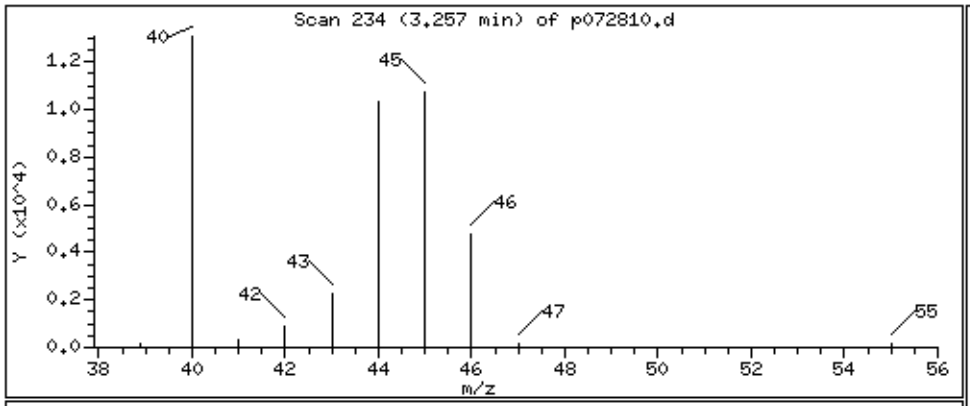
Operator: LD

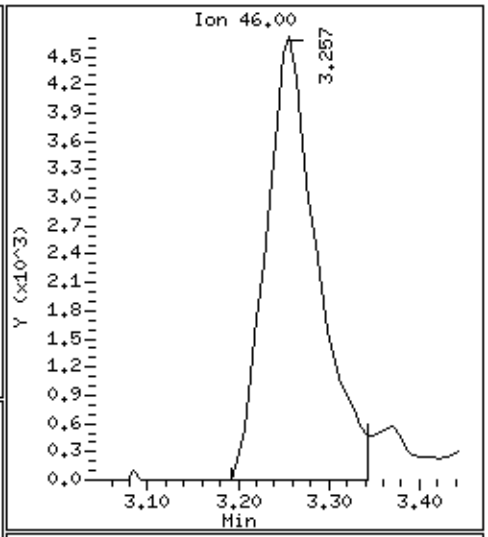
Column phase: RTX-624

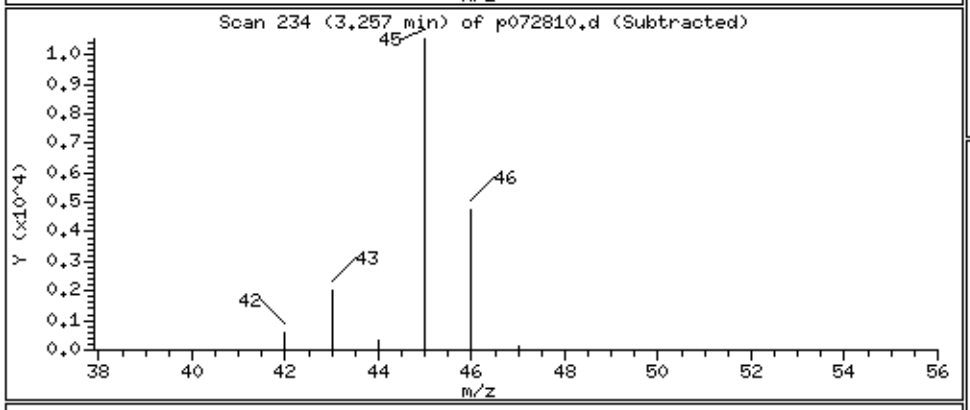
Column diameter: 0.25

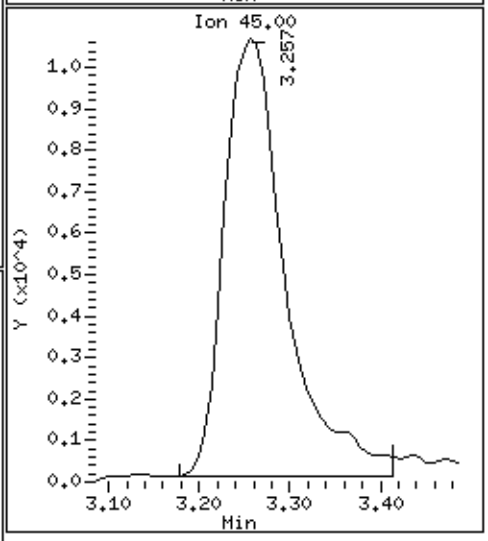
39 Ethanol

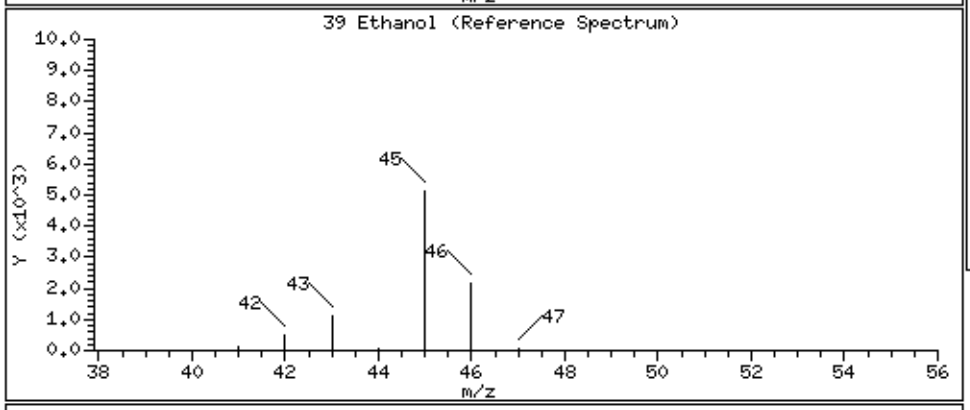
Concentration: 24.716 PPBV

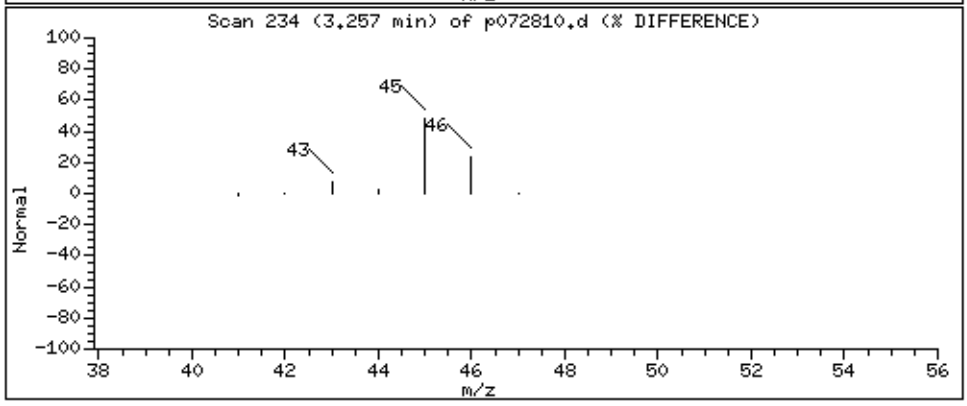












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

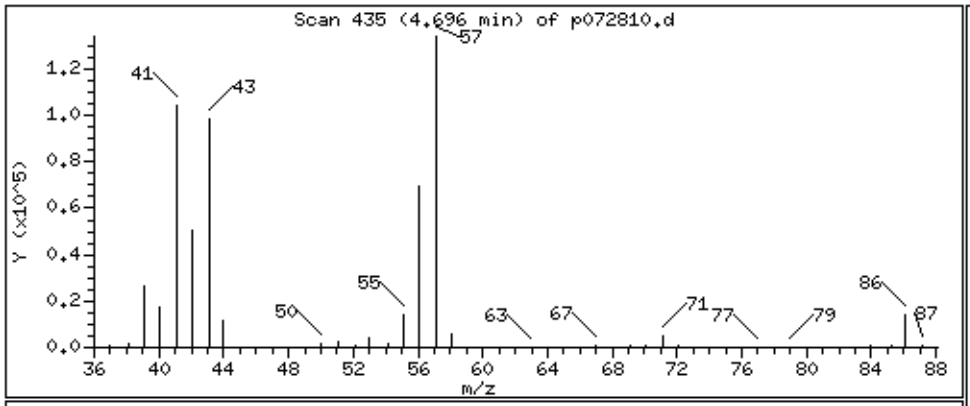
Operator: LD

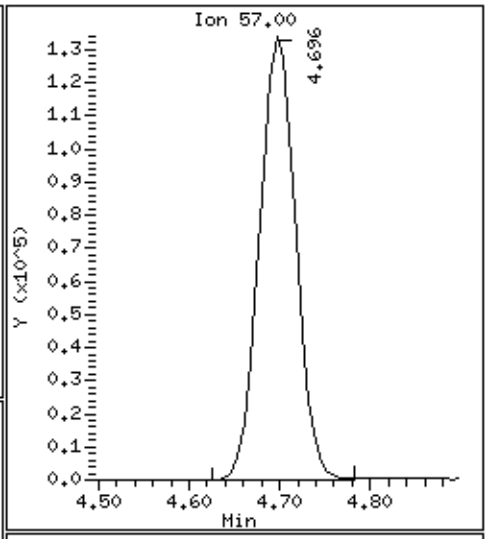
Column phase: RTX-624

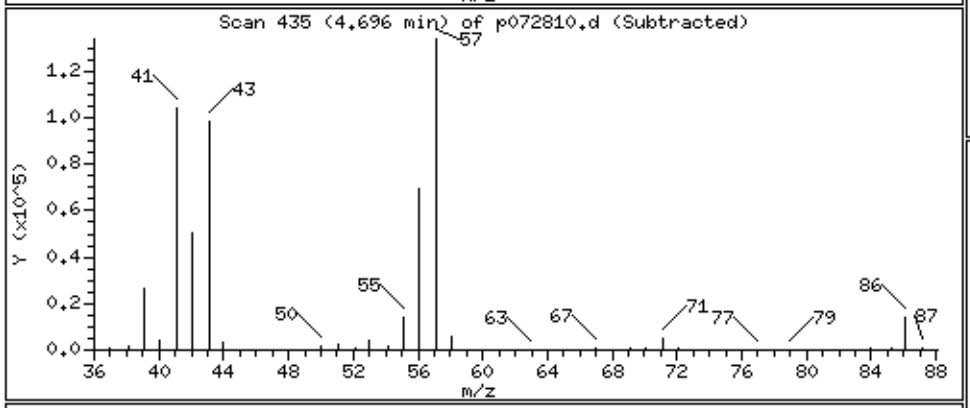
Column diameter: 0.25

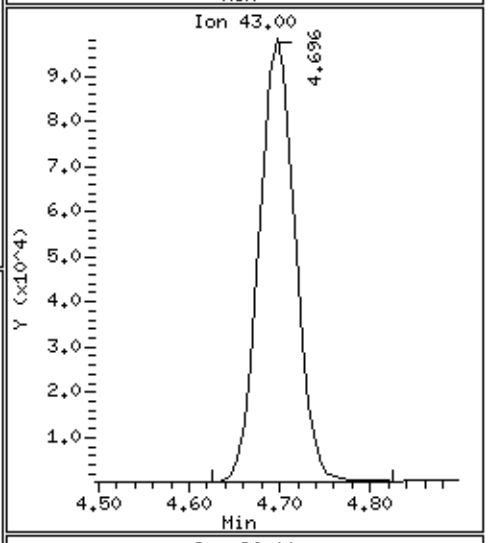
67 Hexane

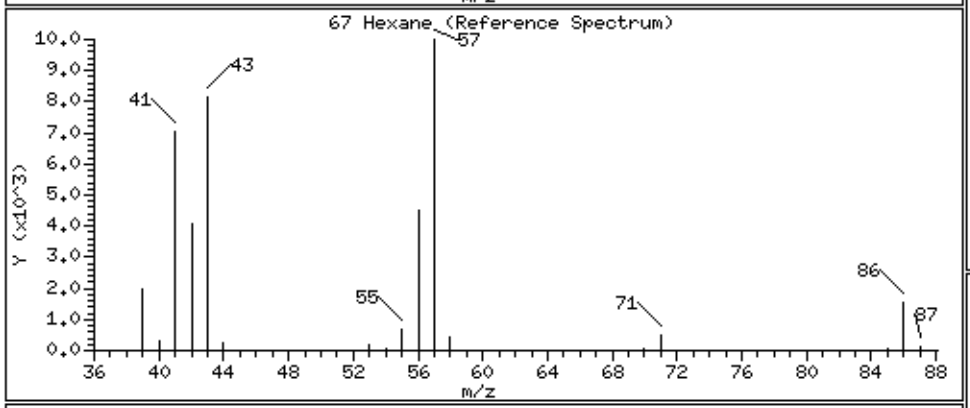
Concentration: 49.530 PPBV

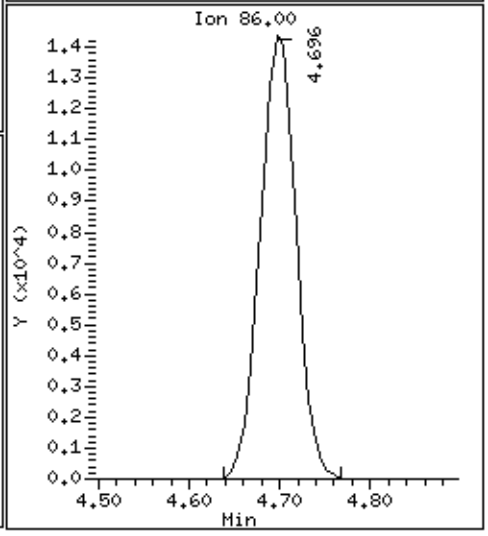


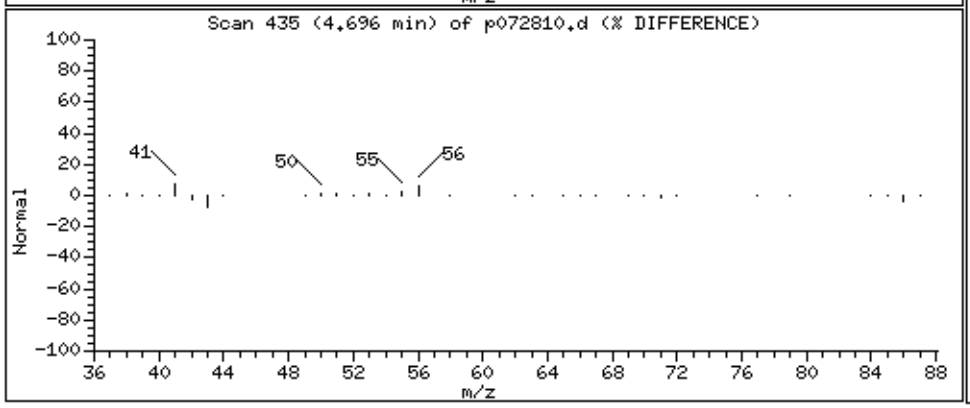












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

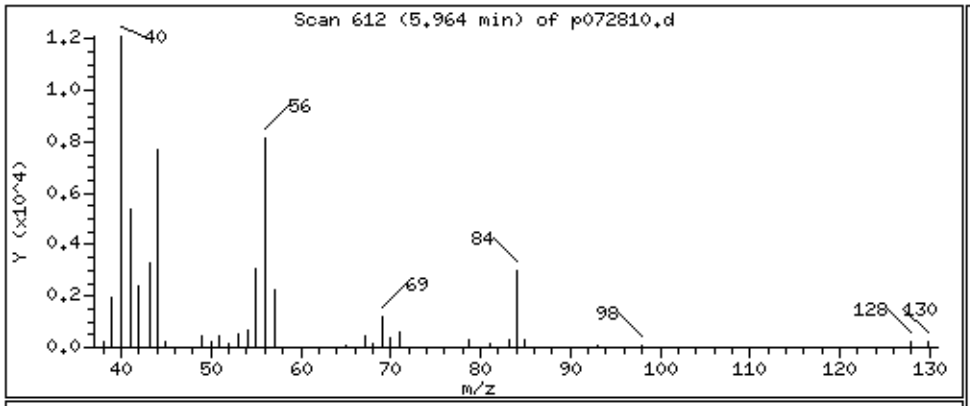
Operator: LD

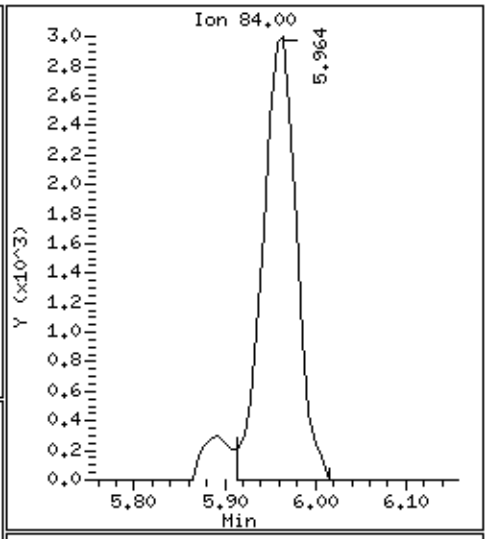
Column phase: RTX-624

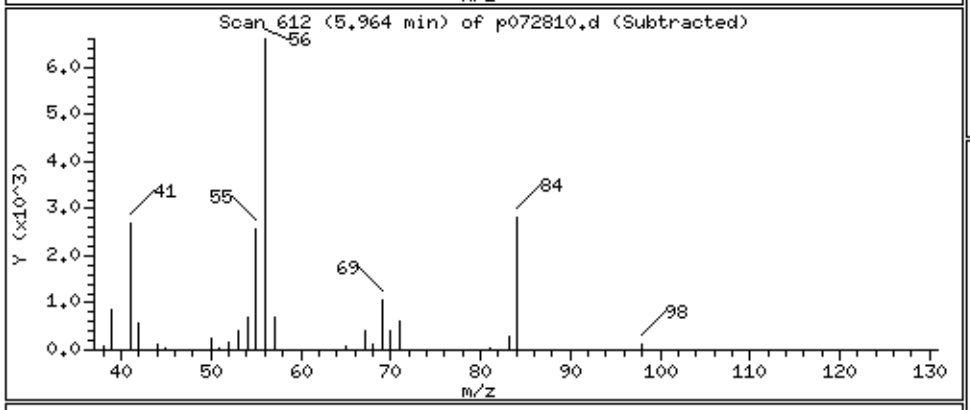
Column diameter: 0.25

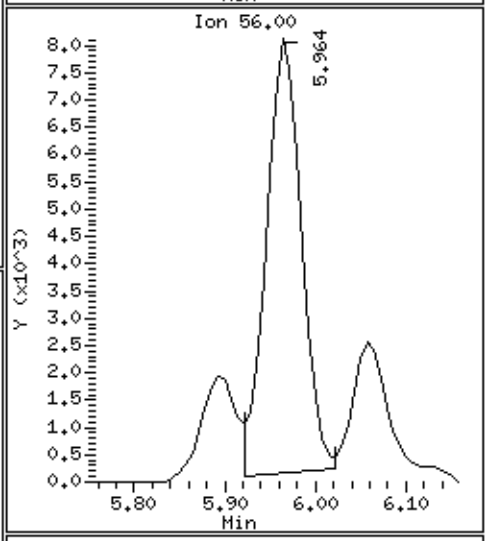
94 Cyclohexane

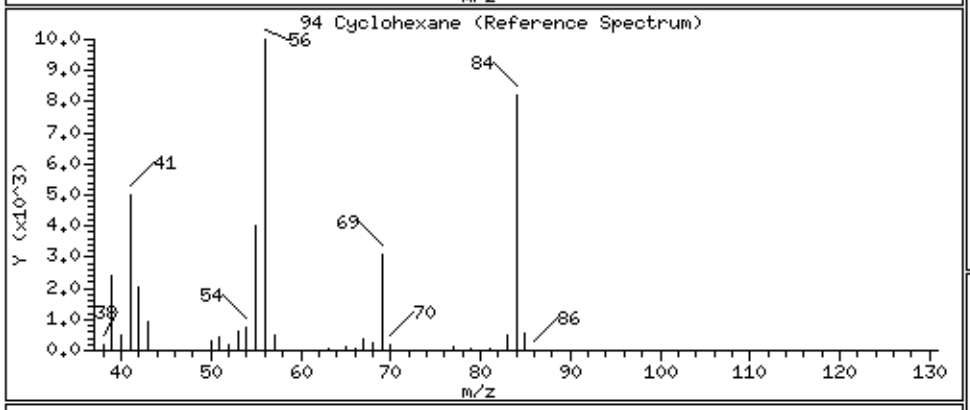
Concentration: 1.615 PPBV

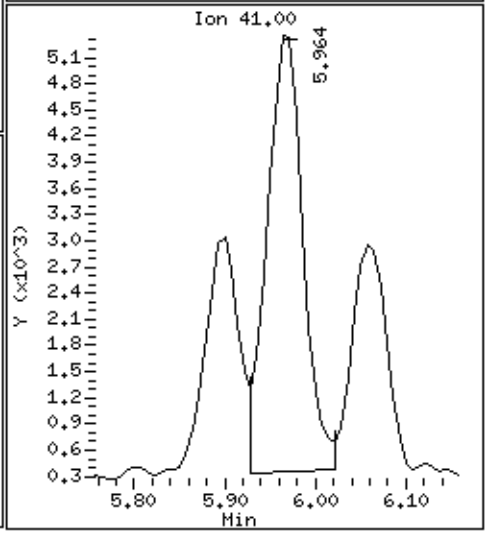


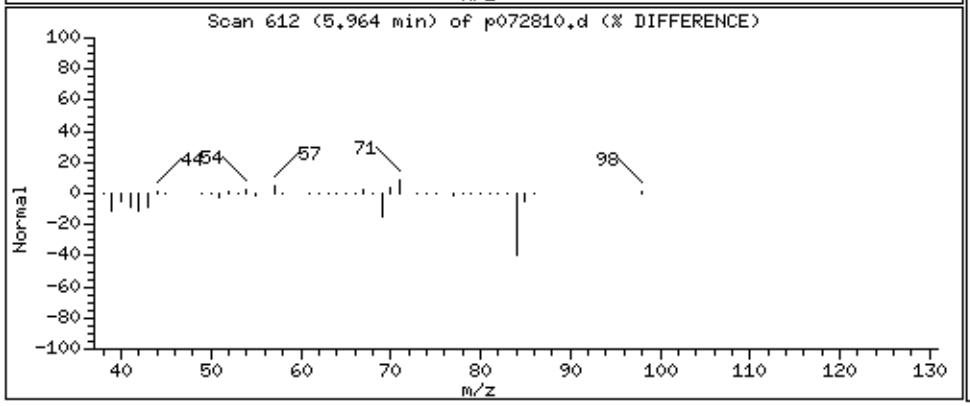












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

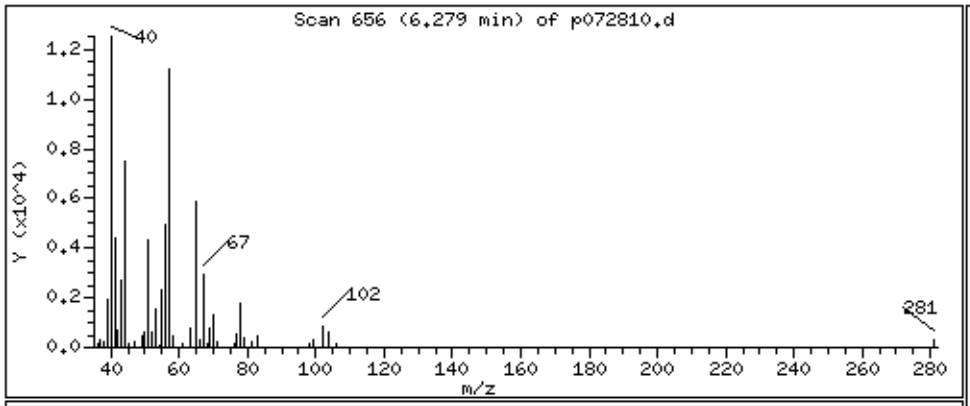
Operator: LD

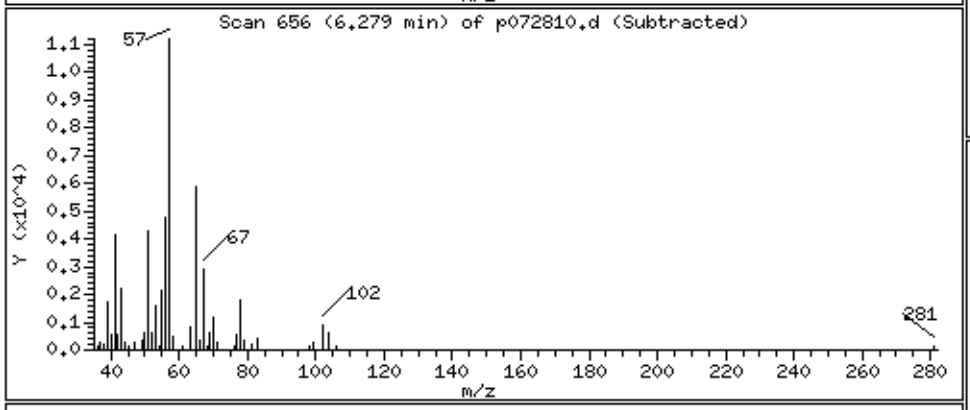
Column phase: RTX-624

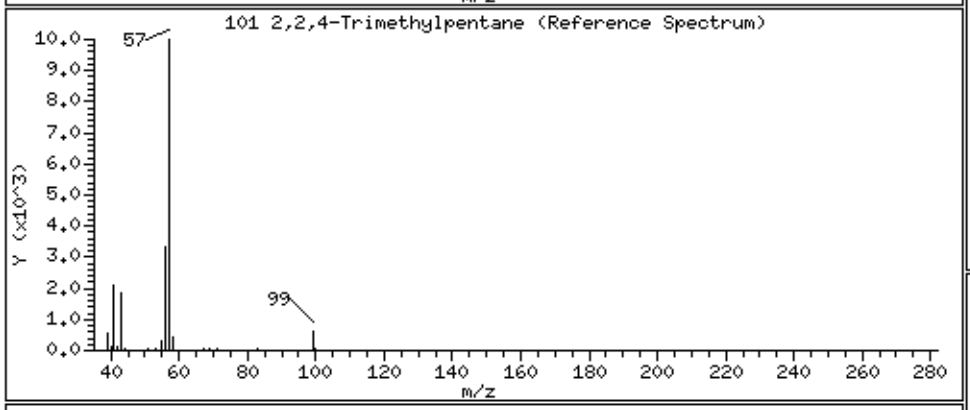
Column diameter: 0.25

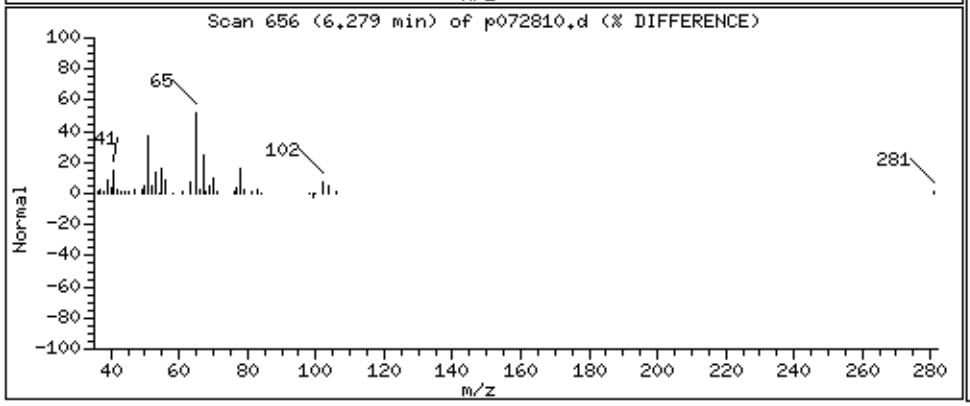
101 2,2,4-Trimethylpentane

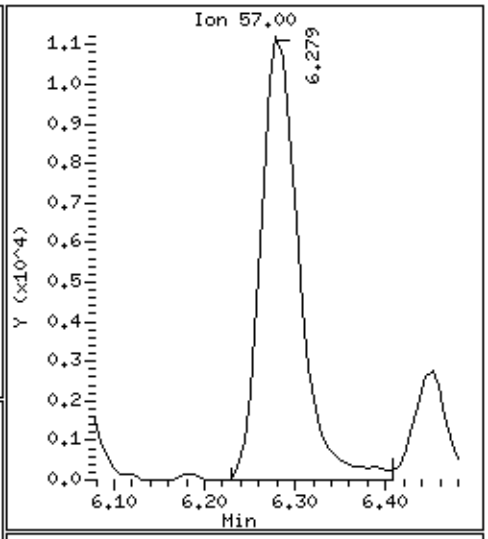
Concentration: 1.261 PPBV

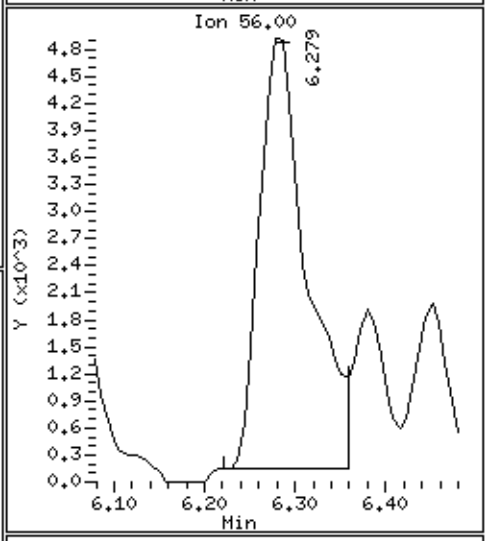


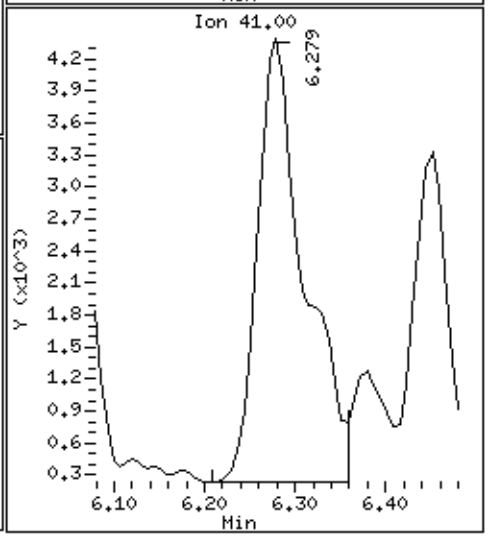












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

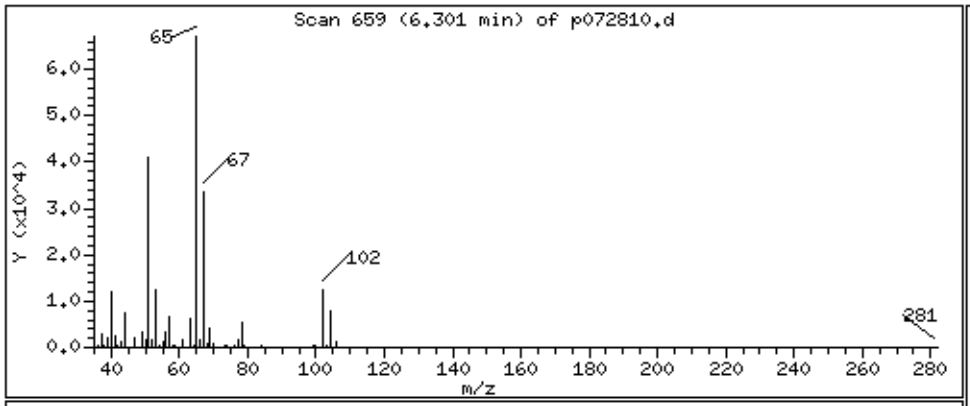
Operator: LD

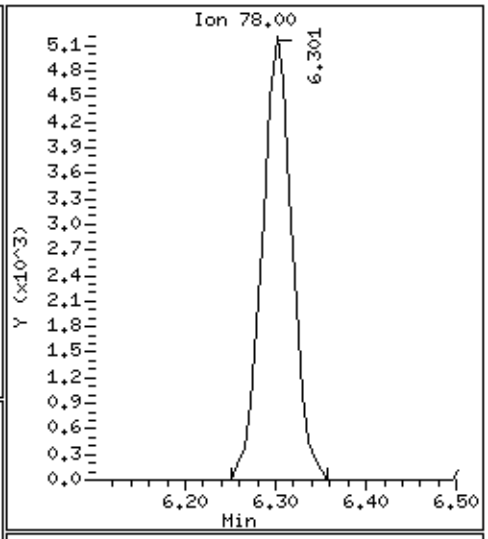
Column phase: RTX-624

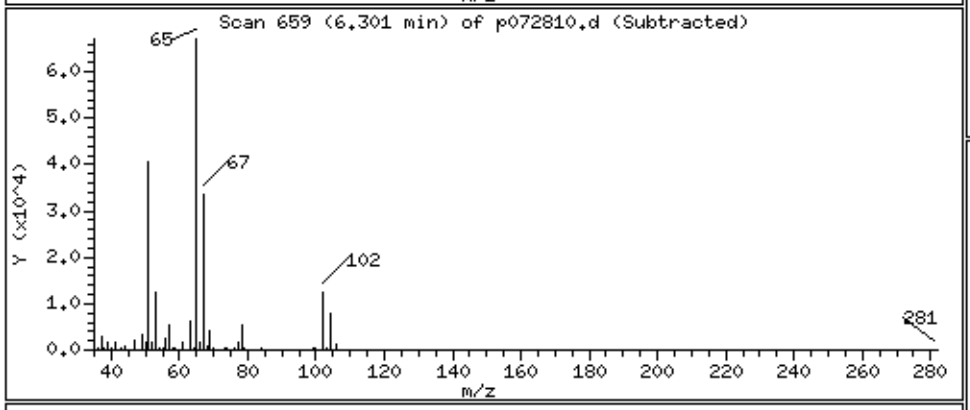
Column diameter: 0.25

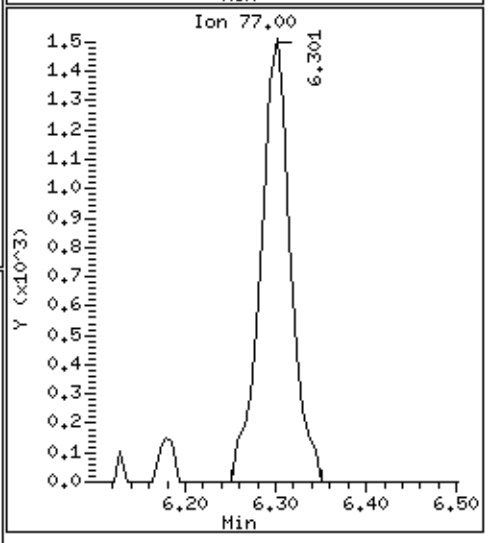
102 Benzene

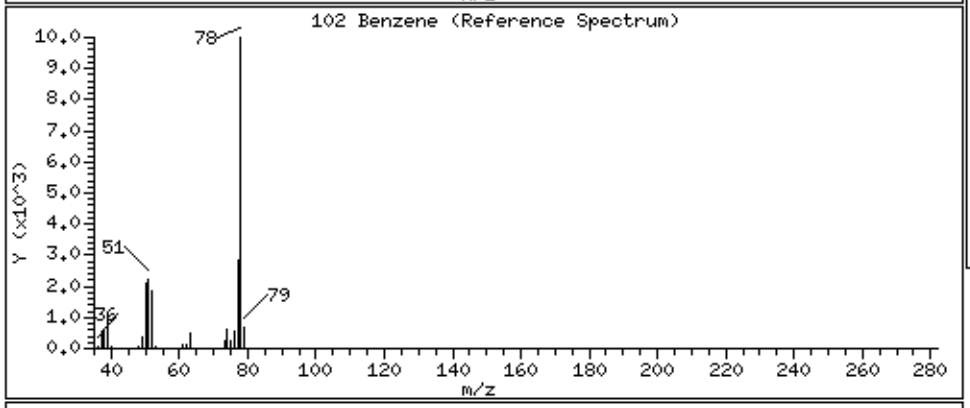
Concentration: 1.262 PPBV

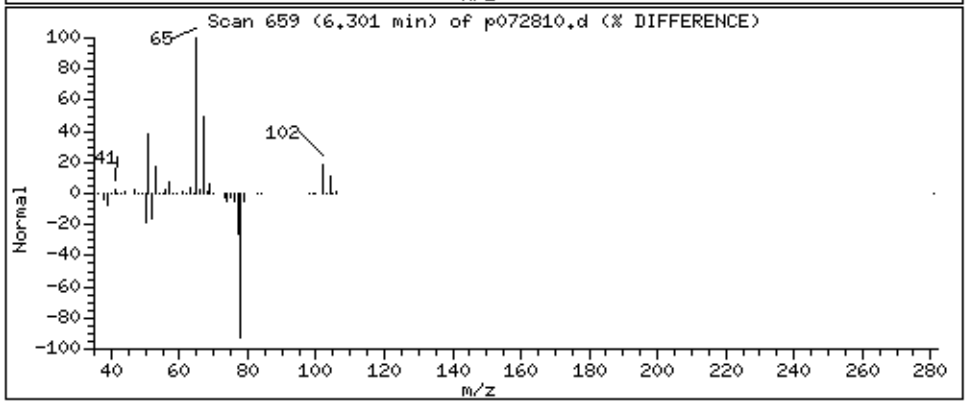












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

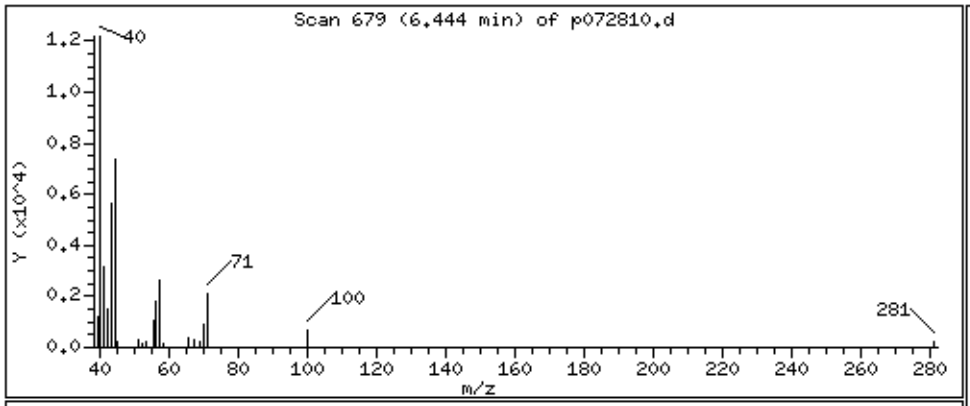
Operator: LD

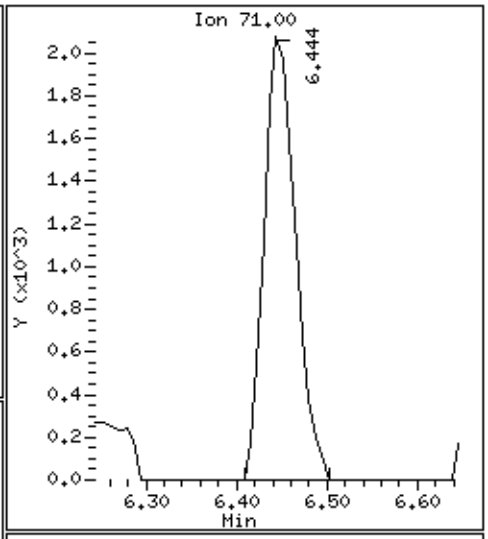
Column phase: RTX-624

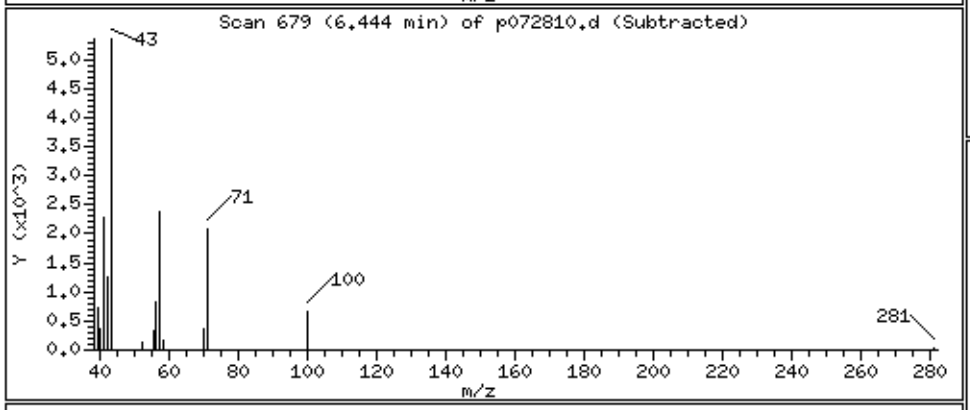
Column diameter: 0.25

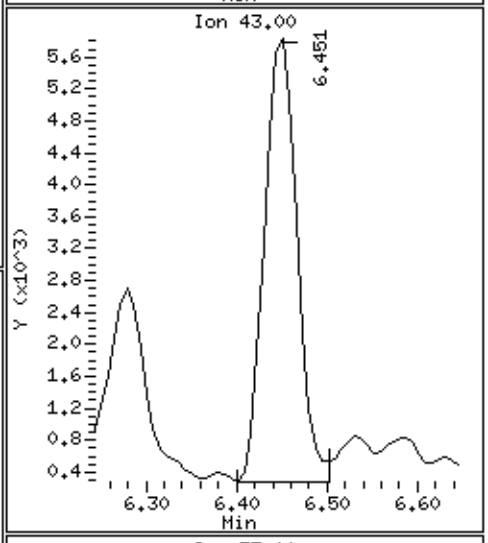
107 Heptane

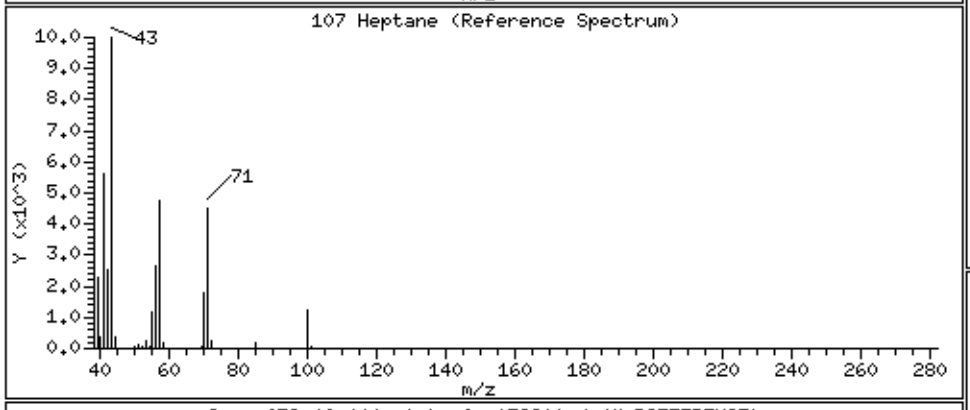
Concentration: 1.334 PPBV

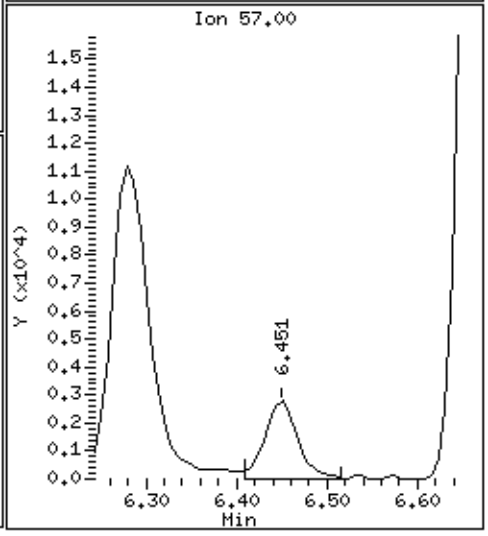


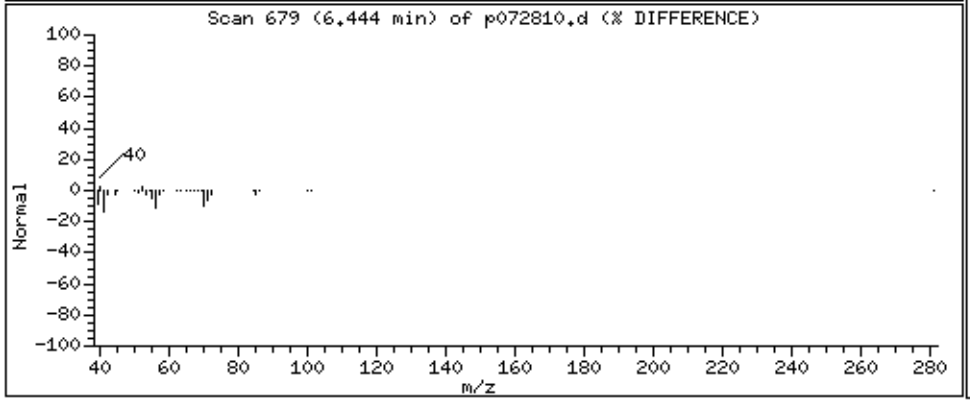












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

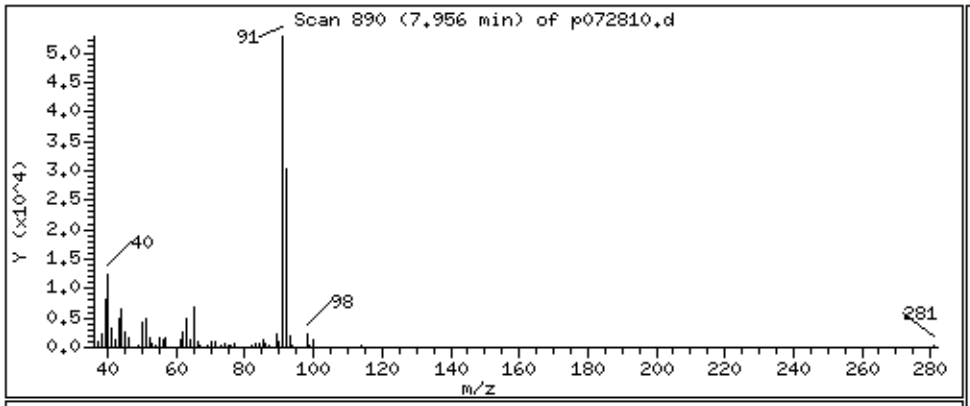
Operator: LD

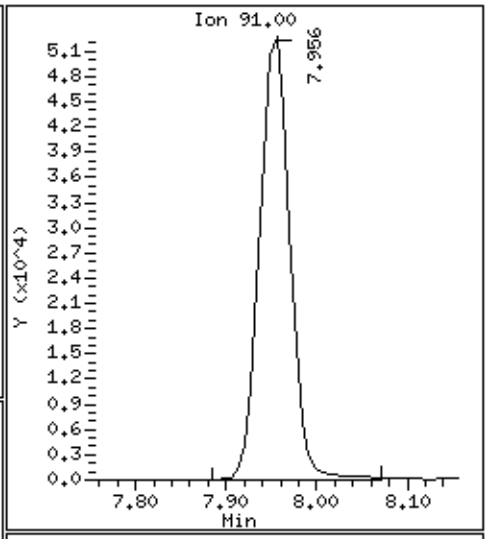
Column phase: RTX-624

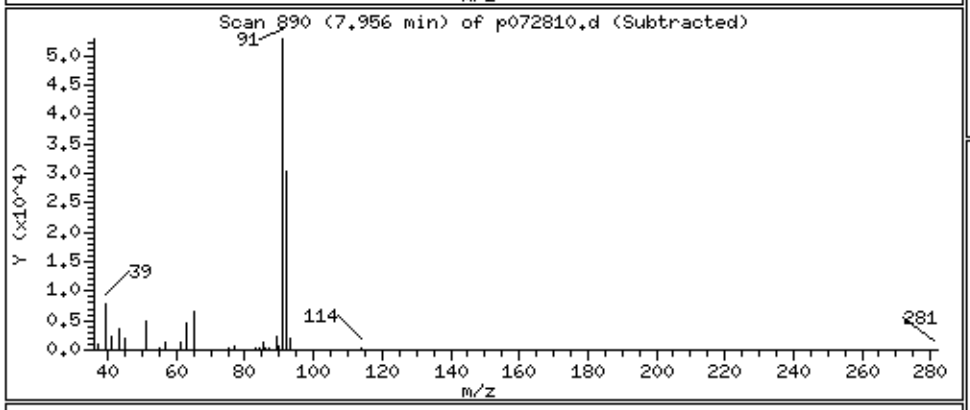
Column diameter: 0.25

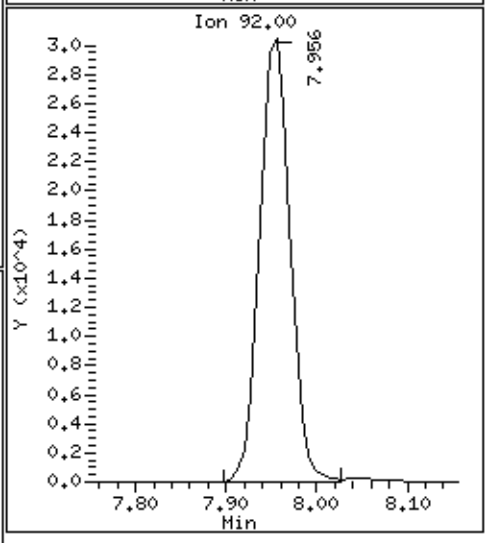
137 Toluene

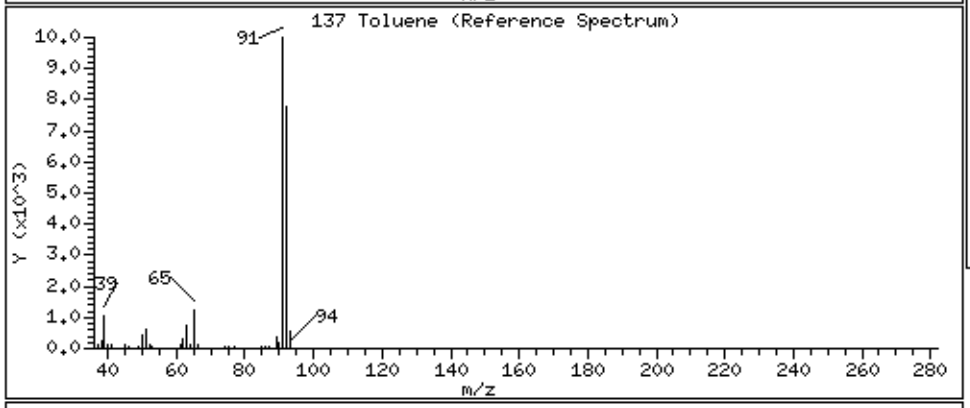
Concentration: 9.408 PPBV

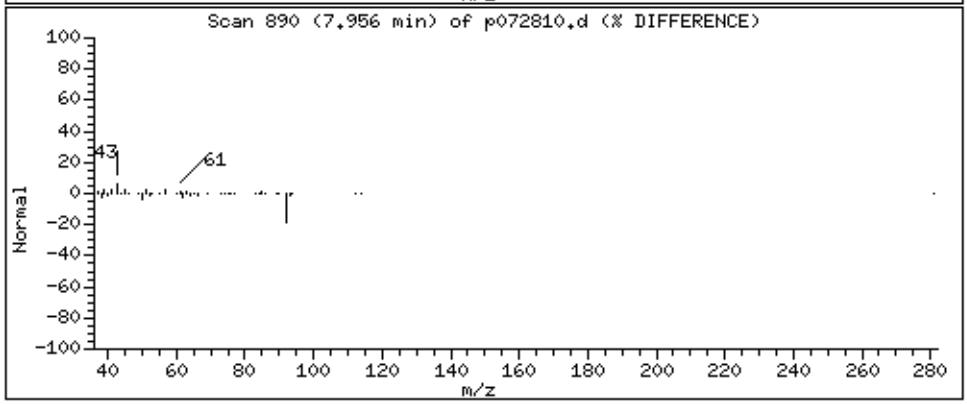












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

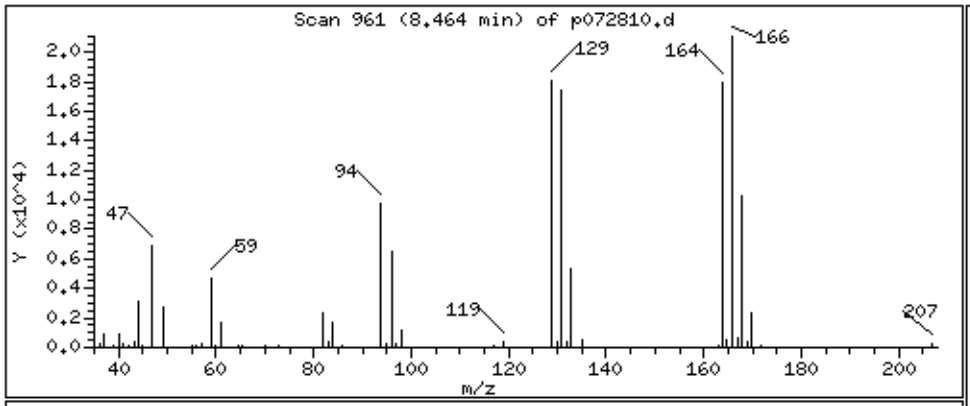
Operator: LD

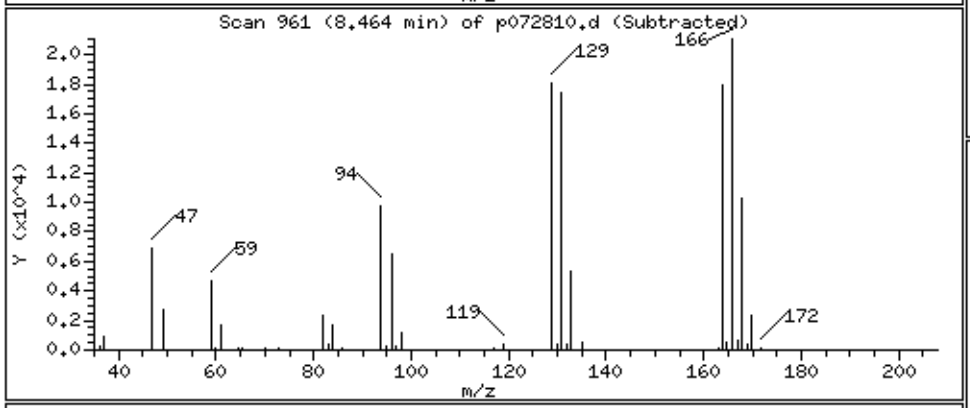
Column phase: RTX-624

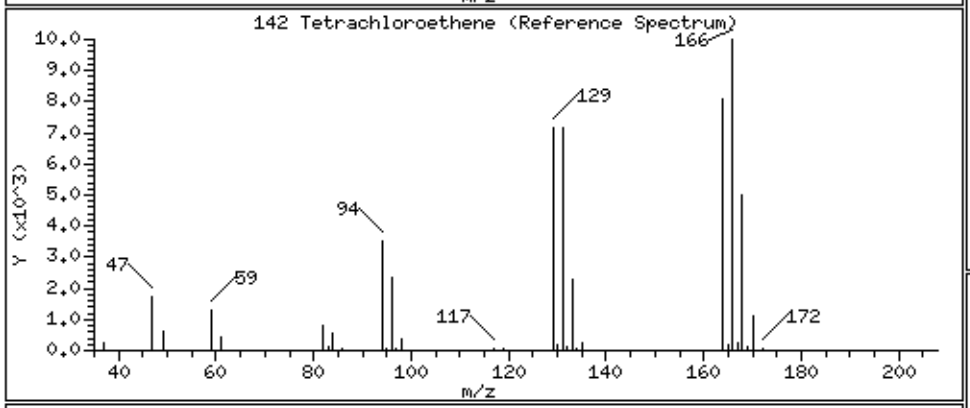
Column diameter: 0.25

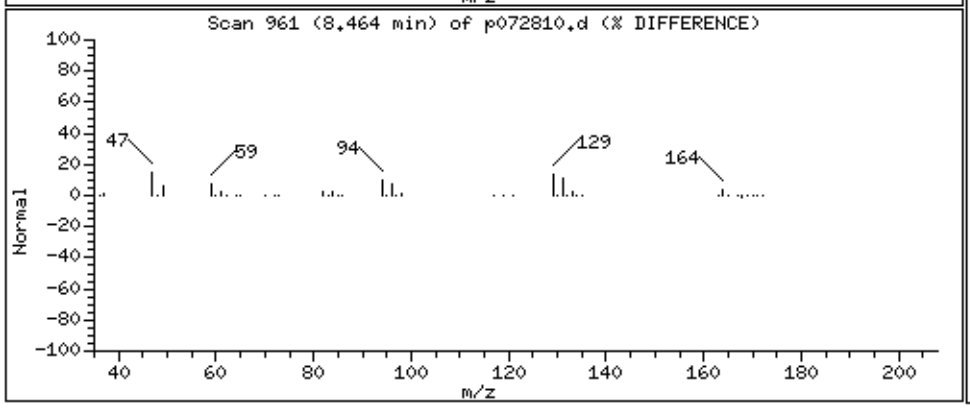
142 Tetrachloroethene

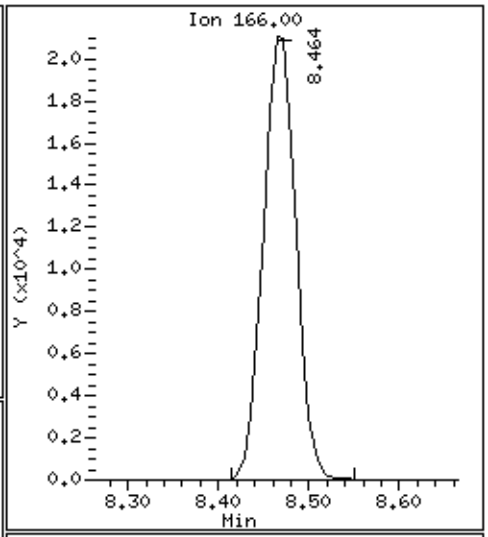
Concentration: 8.111 PPBV

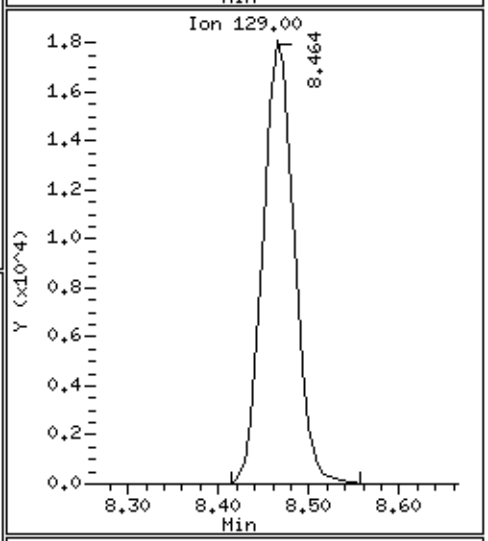


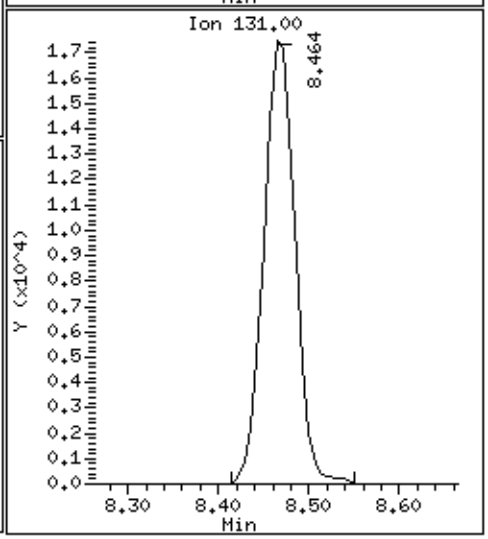












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Page 10

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

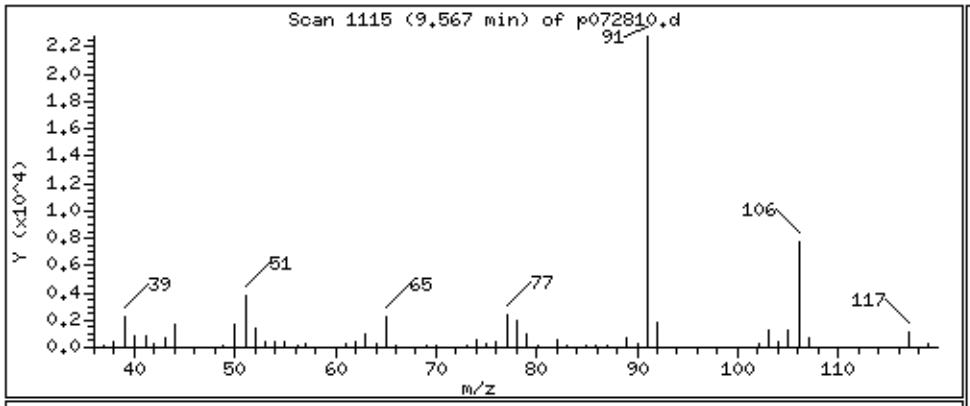
Operator: LD

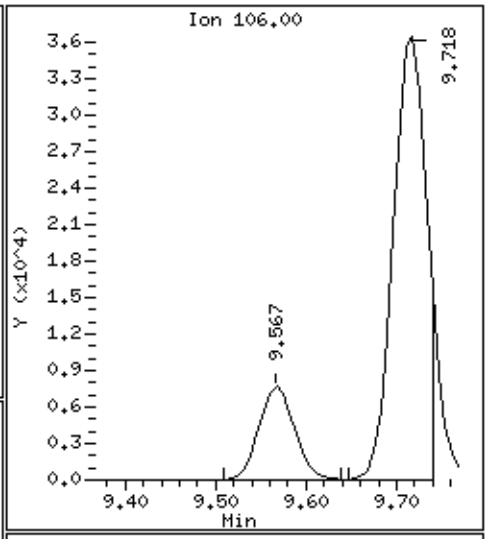
Column phase: RTX-624

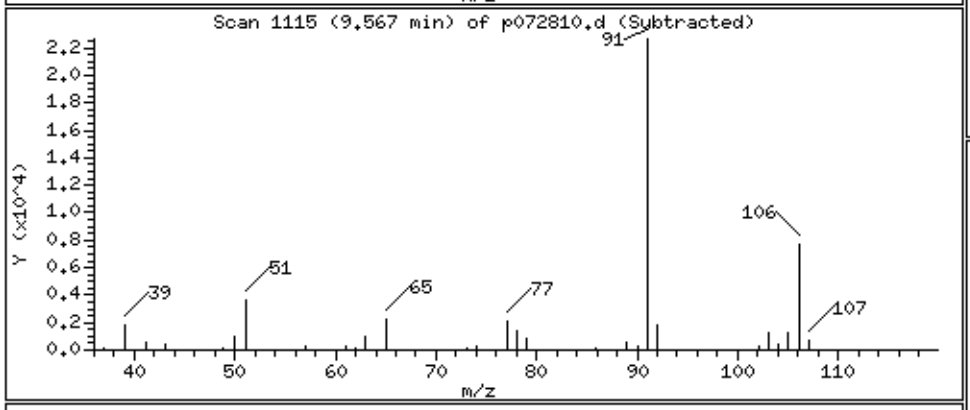
Column diameter: 0.25

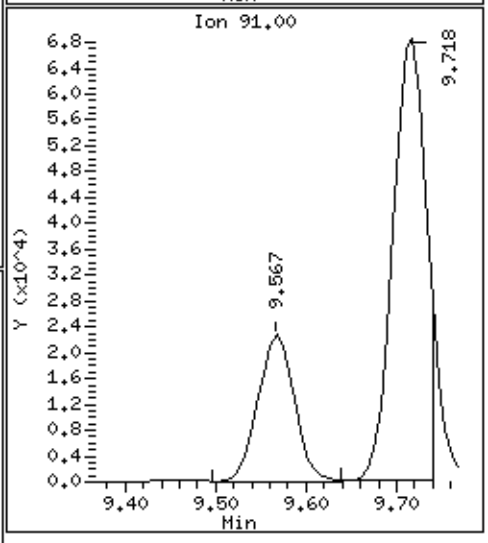
155 Ethyl Benzene

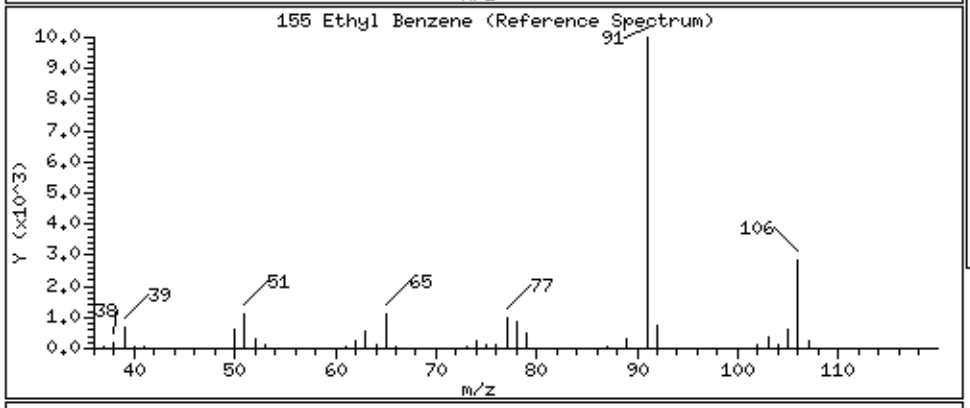
Concentration: 3.546 PPBV

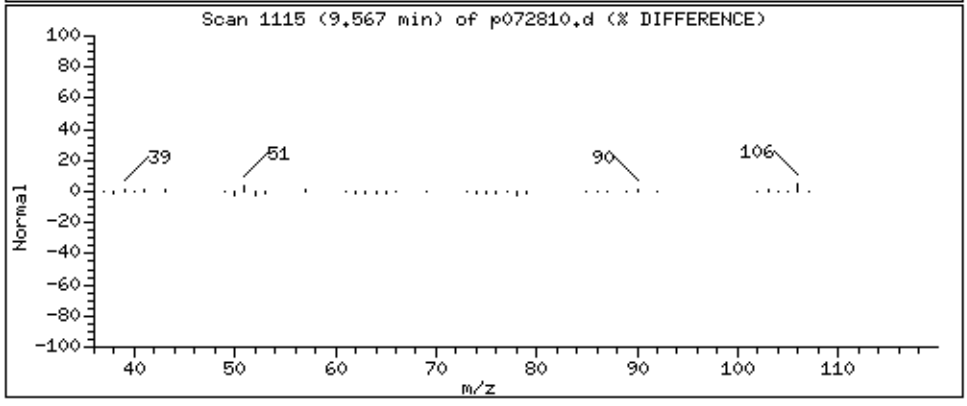












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

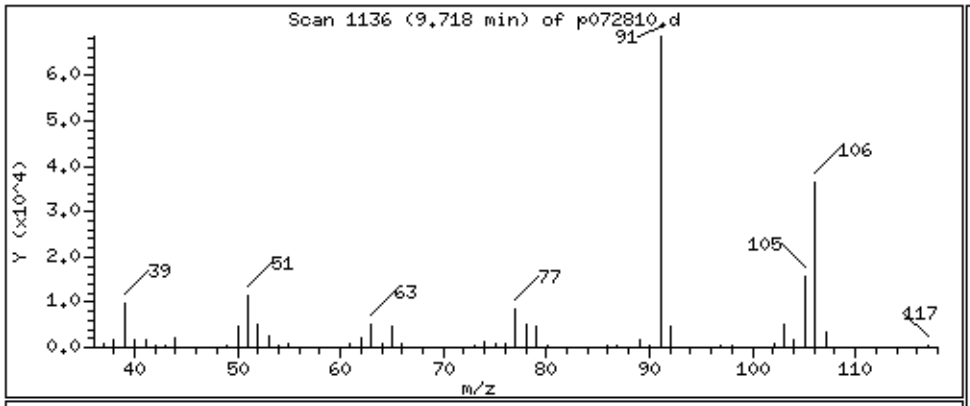
Operator: LD

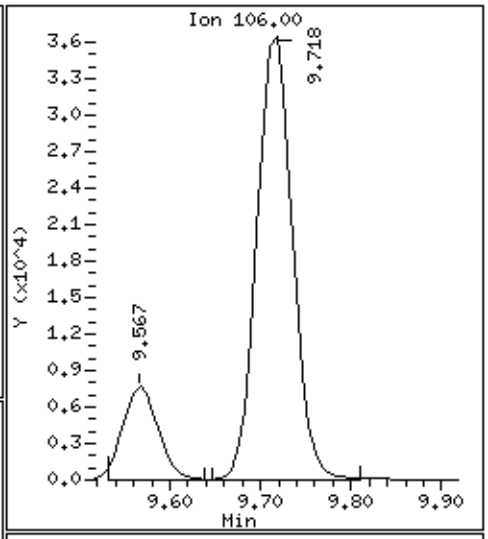
Column phase: RTX-624

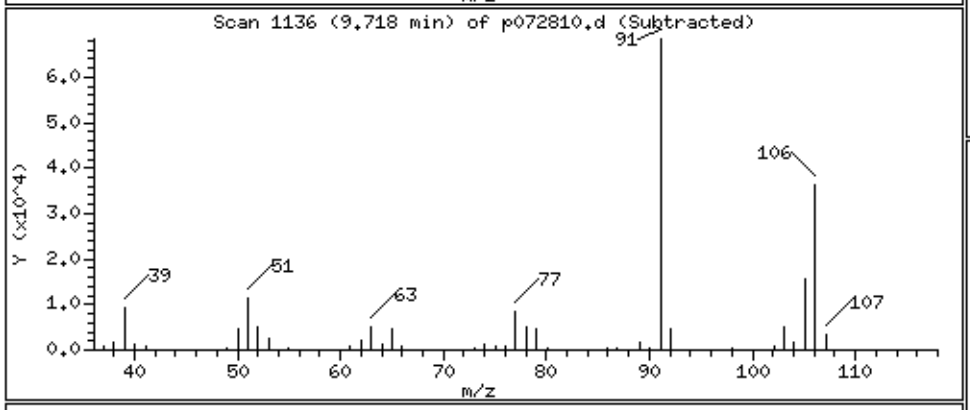
Column diameter: 0.25

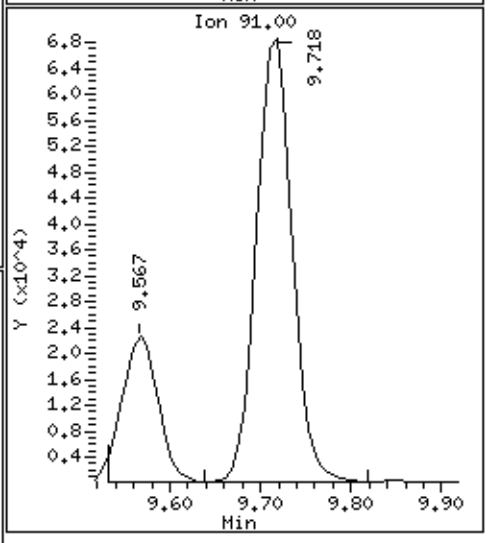
158 m,p-Xylene

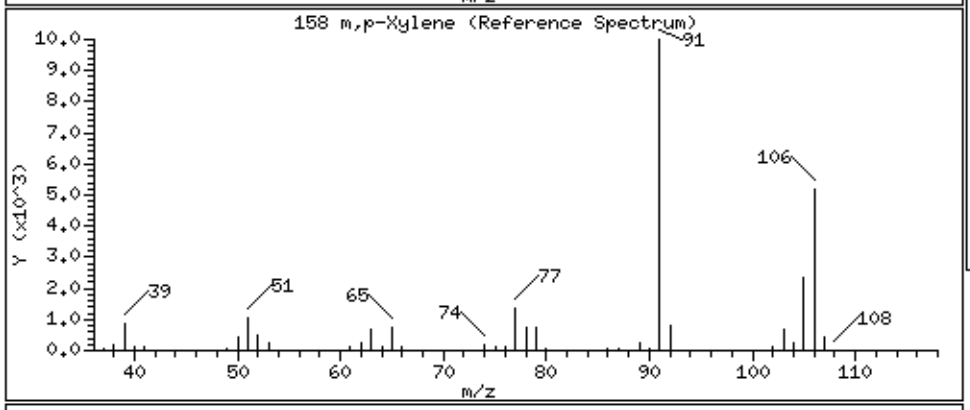
Concentration: 13.424 PPBV

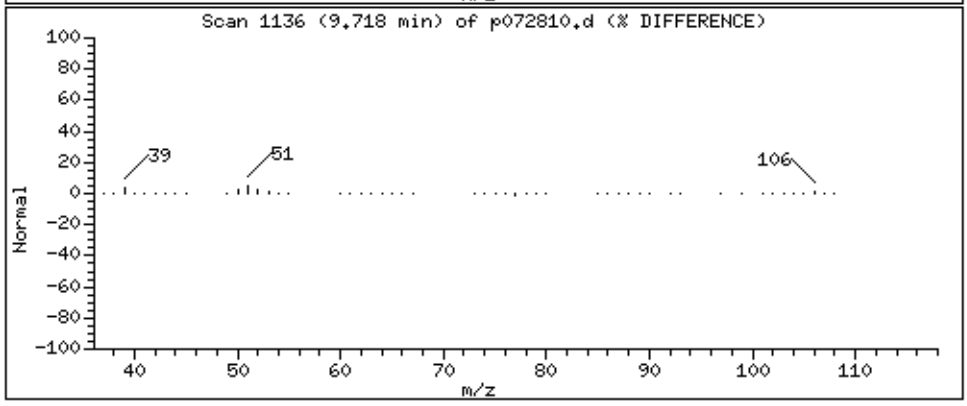












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Page 12

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

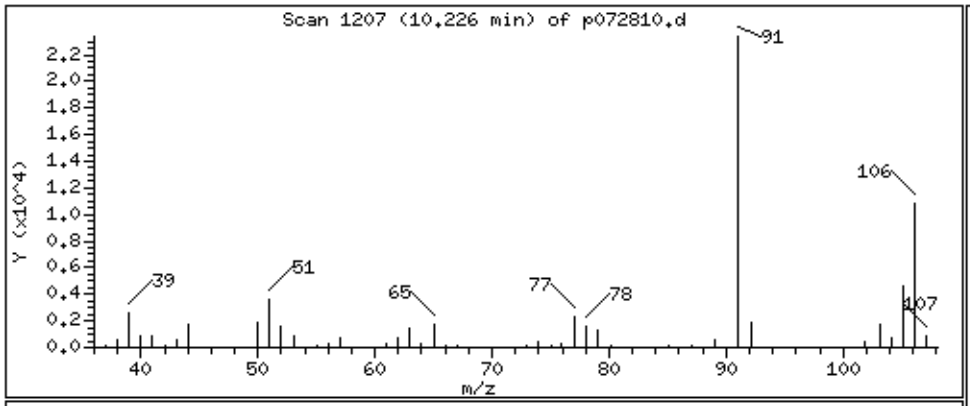
Operator: LD

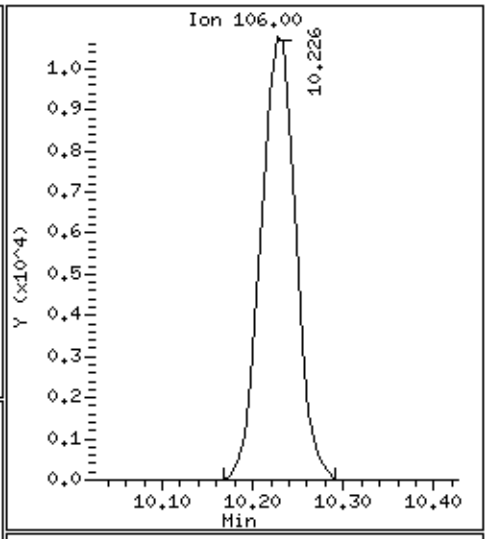
Column phase: RTX-624

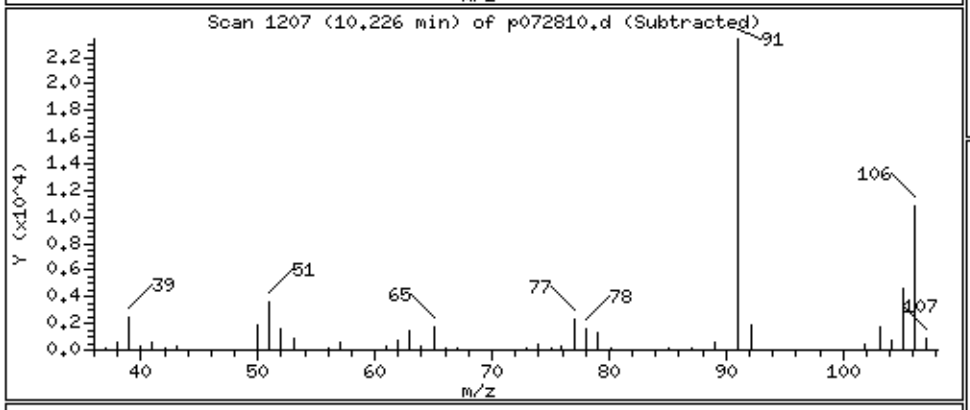
Column diameter: 0.25

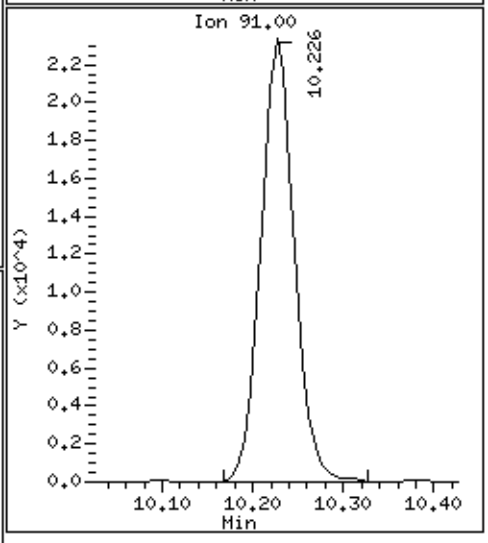
164 o-Xylene

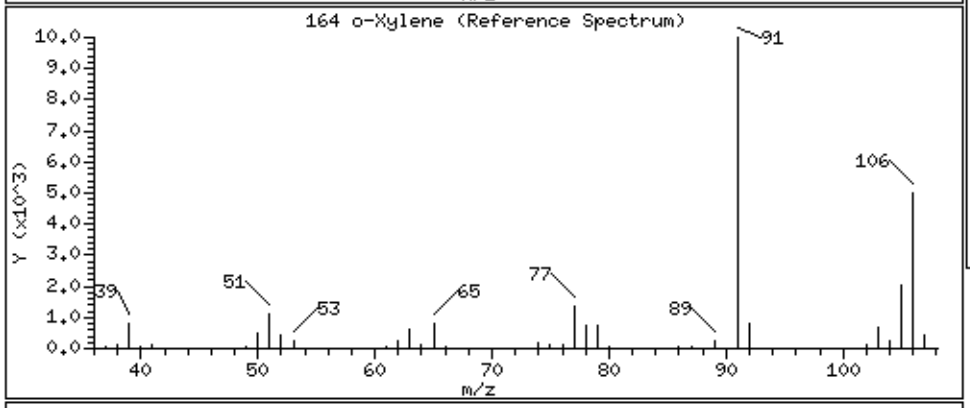
Concentration: 4.050 PPBV

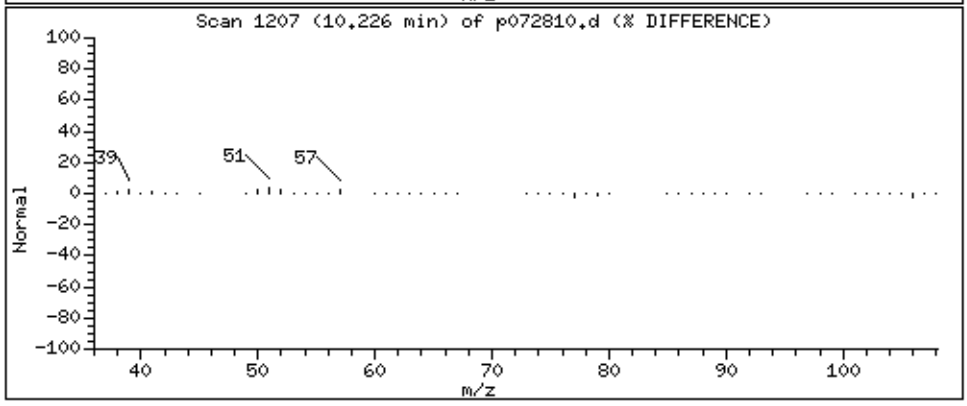












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

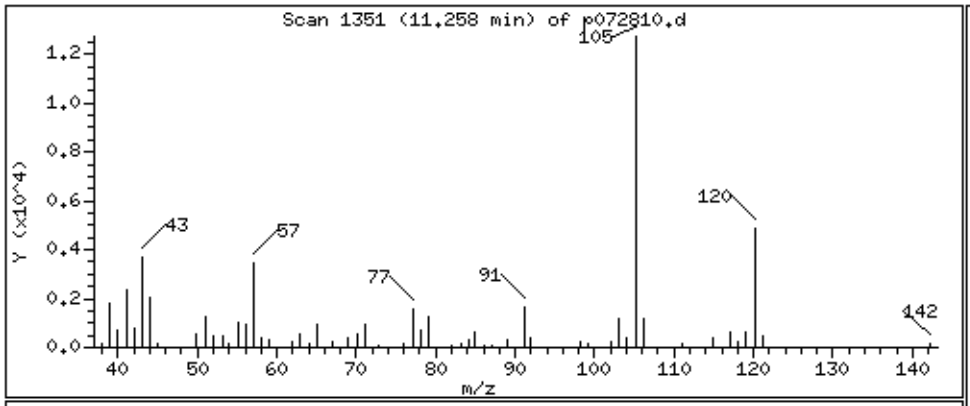
Operator: LD

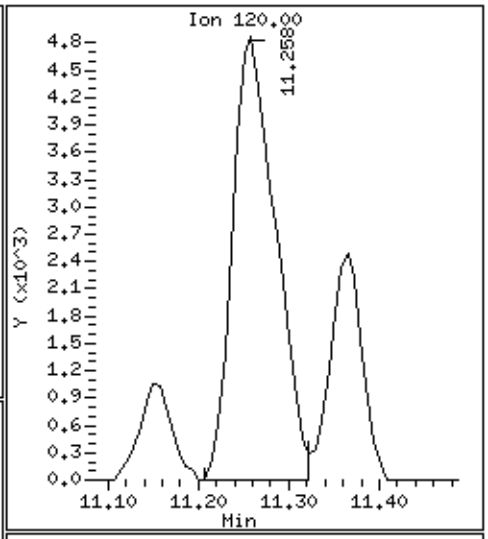
Column phase: RTX-624

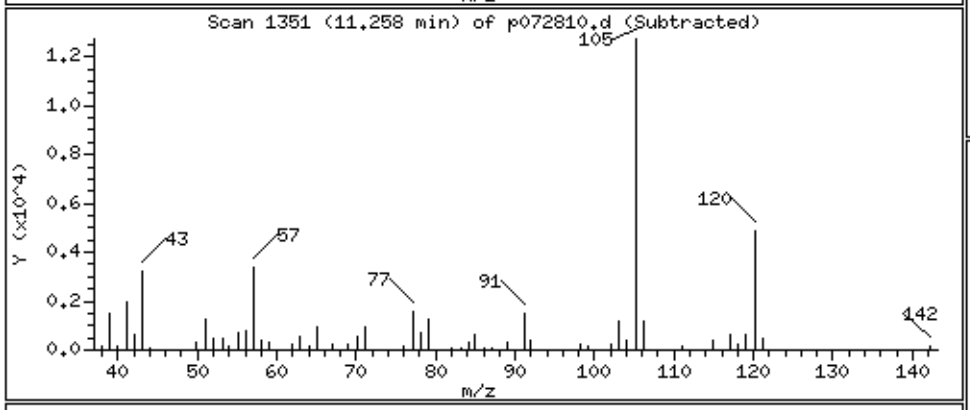
Column diameter: 0.25

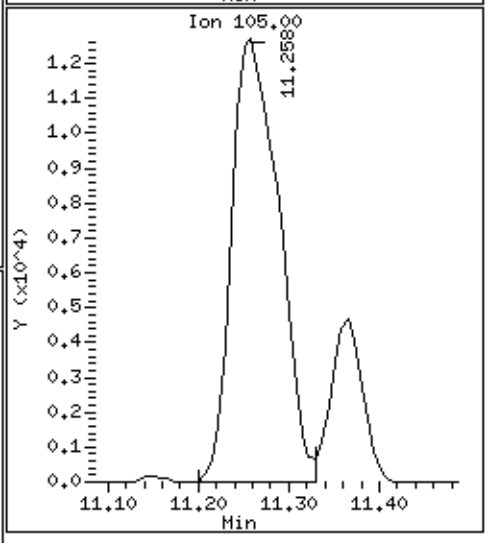
183 4-Ethyltoluene

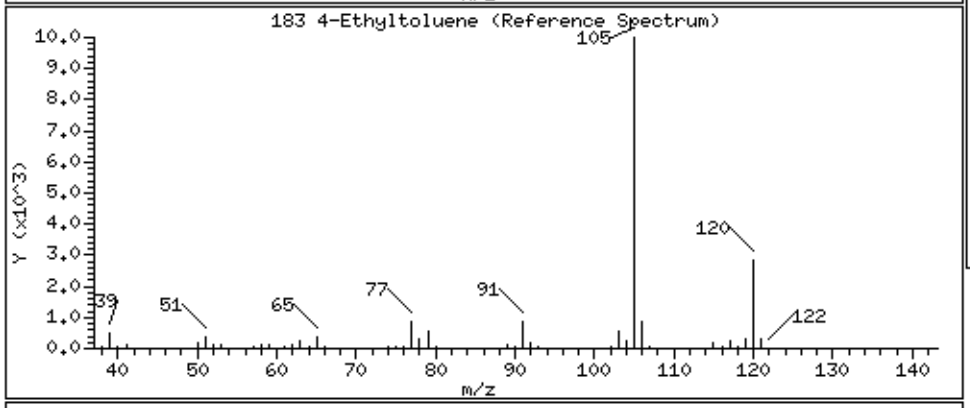
Concentration: 2.233 PPBV

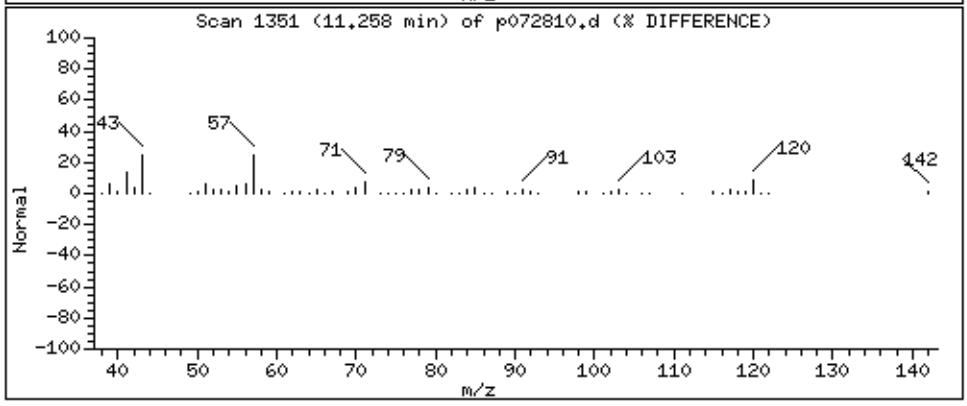












Data File: /chem/msdp.i/28JUL21.b/p072810.d

Date : 28-JUL-2021 16:24

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00232

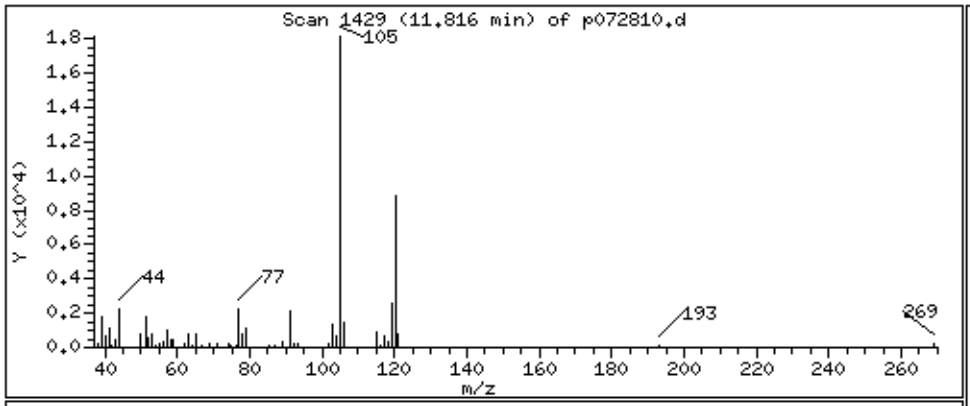
Operator: LD

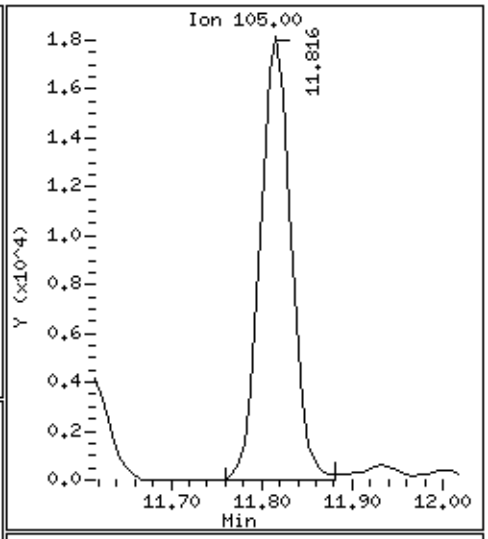
Column phase: RTX-624

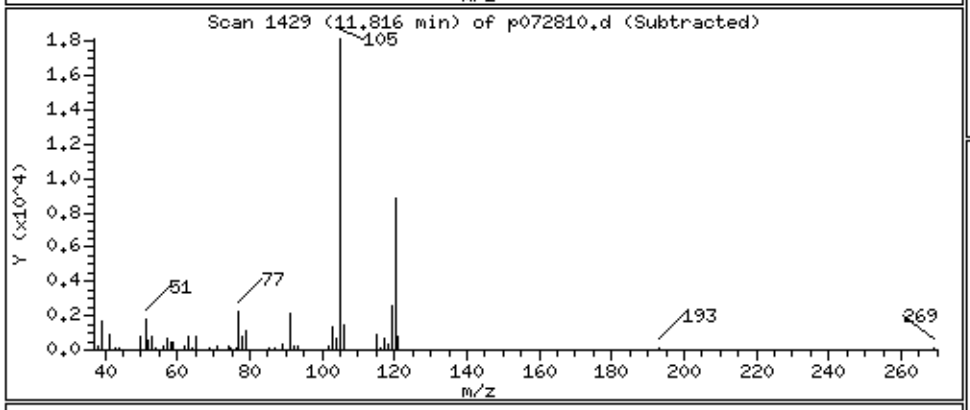
Column diameter: 0.25

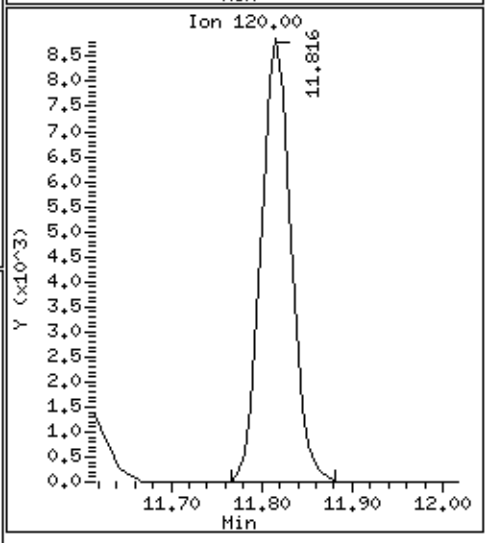
190 1,2,4-Trimethylbenzene

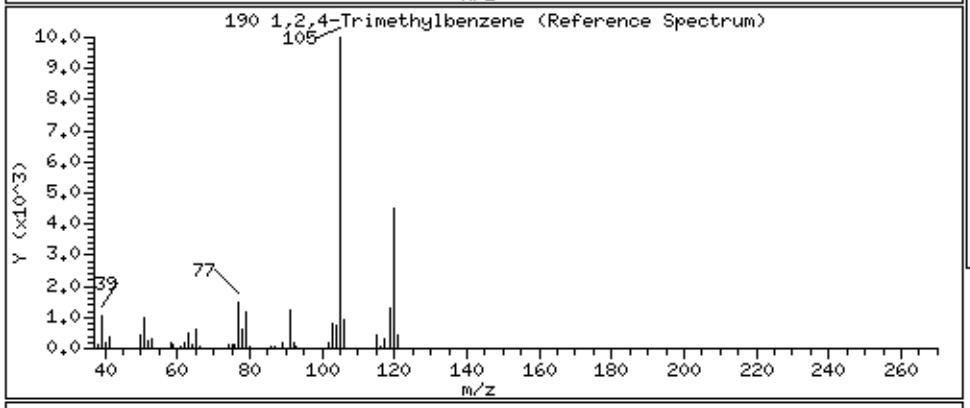
Concentration: 2.289 PPBV

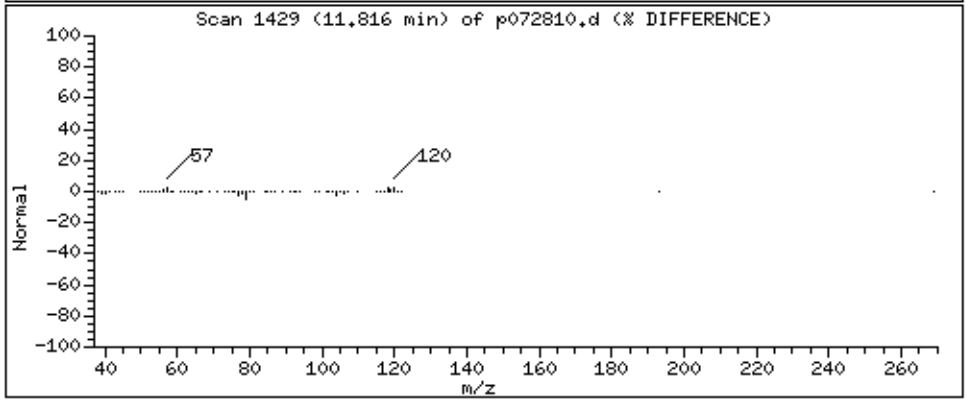












eurofins | Air Toxics

Client Sample ID: SG-VW26B-02

Lab ID#: 2107361-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072811**	**Date of Collection: 7/15/21 7:48:00 AM**	
Dil. Factor:	**1.98**	**Date of Analysis: 7/28/21 04:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	4.0	Not Detected	27	Not Detected
1,1,1-Trichloroethane	0.99	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	0.99	Not Detected	6.8	Not Detected
1,1,2-Trichloroethane	0.99	Not Detected	5.4	Not Detected
1,1-Dichloroethane	0.99	Not Detected	4.0	Not Detected
1,1-Dichloroethene	0.99	Not Detected	3.9	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	29	Not Detected
1,2,4-Trimethylbenzene	0.99	Not Detected	4.9	Not Detected
1,2-Dibromo-3-chloropropane	4.0	Not Detected	38	Not Detected
1,2-Dibromoethane (EDB)	0.99	Not Detected	7.6	Not Detected
1,2-Dichlorobenzene	0.99	Not Detected	6.0	Not Detected
1,2-Dichloroethane	0.99	Not Detected	4.0	Not Detected
1,2-Dichloropropane	0.99	Not Detected	4.6	Not Detected
1,3,5-Trimethylbenzene	0.99	Not Detected	4.9	Not Detected
1,3-Butadiene	0.99	Not Detected	2.2	Not Detected
1,3-Dichlorobenzene	0.99	Not Detected	6.0	Not Detected
1,4-Dichlorobenzene	0.99	Not Detected	6.0	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
2,2,4-Trimethylpentane	0.99	Not Detected	4.6	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	9.7	Not Detected
3-Chloropropene	4.0	Not Detected	12	Not Detected
4-Ethyltoluene	0.99	Not Detected	4.9	Not Detected
4-Methyl-2-pentanone	0.99	Not Detected	4.0	Not Detected
Acetone	9.9	18	24	42
Acrolein	4.0	Not Detected	9.1	Not Detected
Acrylonitrile	4.0	Not Detected	8.6	Not Detected
alpha-Chlorotoluene	0.99	Not Detected	5.1	Not Detected
Benzene	0.99	Not Detected	3.2	Not Detected
Bromodichloromethane	0.99	Not Detected	6.6	Not Detected
Bromoform	0.99	Not Detected	10	Not Detected
Bromomethane	9.9	Not Detected	38	Not Detected
Carbon Disulfide	4.0	Not Detected	12	Not Detected
Carbon Tetrachloride	0.99	Not Detected	6.2	Not Detected
Chlorobenzene	0.99	Not Detected	4.6	Not Detected
Chloroethane	4.0	Not Detected	10	Not Detected
Chloroform	0.99	Not Detected	4.8	Not Detected
Chloromethane	9.9	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	0.99	Not Detected	3.9	Not Detected

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Client Sample ID: SG-VW26B-02

Lab ID#: 2107361-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072811**	**Date of Collection: 7/15/21 7:48:00 AM**	
Dil. Factor:	**1.98**	**Date of Analysis: 7/28/21 04:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	0.99	Not Detected	4.5	Not Detected
Cumene	0.99	Not Detected	4.9	Not Detected
Cyclohexane	0.99	Not Detected	3.4	Not Detected
Dibromochloromethane	0.99	Not Detected	8.4	Not Detected
Dibromomethane	4.0	Not Detected	28	Not Detected
Ethanol	9.9	16	19	31
Ethyl Acetate	4.0	11	14	41
Ethyl Benzene	0.99	Not Detected	4.3	Not Detected
Ethyl-tert-butyl ether	4.0	Not Detected	16	Not Detected
Freon 11	0.99	Not Detected	5.6	Not Detected
Freon 12	0.99	Not Detected	4.9	Not Detected
Freon 113	0.99	Not Detected	7.6	Not Detected
Freon 114	0.99	Not Detected	6.9	Not Detected
Freon 134a	4.0	Not Detected	16	Not Detected
Heptane	0.99	Not Detected	4.0	Not Detected
Hexachlorobutadiene	4.0	Not Detected	42	Not Detected
Hexachloroethane	4.0	Not Detected	38	Not Detected
Hexane	0.99	11	3.5	39
Iodomethane	9.9	Not Detected	57	Not Detected
Isopropyl ether	4.0	Not Detected	16	Not Detected
m,p-Xylene	0.99	1.5	4.3	6.7
Methyl tert-butyl ether	4.0	Not Detected	14	Not Detected
Methylene Chloride	9.9	Not Detected	34	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
o-Xylene	0.99	Not Detected	4.3	Not Detected
Propylbenzene	0.99	Not Detected	4.9	Not Detected
Propylene	4.0	Not Detected	6.8	Not Detected
Styrene	0.99	Not Detected	4.2	Not Detected
tert-Amyl methyl ether	4.0	Not Detected	16	Not Detected
tert-Butyl alcohol	4.0	Not Detected	12	Not Detected
Tetrachloroethene	0.99	5.5	6.7	37
Tetrahydrofuran	0.99	Not Detected	2.9	Not Detected
Toluene	0.99	29	3.7	110
TPH ref. to Gasoline (MW=100)	99	120	400	490
trans-1,2-Dichloroethene	0.99	Not Detected	3.9	Not Detected
trans-1,3-Dichloropropene	0.99	Not Detected	4.5	Not Detected
Trichloroethene	0.99	Not Detected	5.3	Not Detected
Vinyl Acetate	4.0	Not Detected	14	Not Detected
Vinyl Bromide	4.0	Not Detected	17	Not Detected
Vinyl Chloride	0.99	Not Detected	2.5	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW26B-02

Lab ID#: 2107361-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072811**	**Date of Collection: 7/15/21 7:48:00 AM**	
Dil. Factor:	**1.98**	**Date of Analysis: 7/28/21 04:53 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072811.d
Lab Smp Id: 2107361-05A
Inj Date : 28-JUL-2021 16:53
Operator : LD Inst ID: msdp.i
Smp Info : 200ml 3013
Misc Info : 4.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 5
Dil Factor: 1.98000
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	159442	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	120707				48.23- 108.23	75.71
5.785	5.778 (1.000)	49	314782				150.57- 210.57	197.43
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	590093	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	85834				0.00- 45.71	14.55
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	597138	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	303471				23.78- 83.78	50.82
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	221358	25.1567	25.157		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	109198				27.21- 87.21	49.33
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	649345	25.3411	25.341		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68158				0.00- 40.44	10.50

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	414878			34.95- 94.95	63.89
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	380071	24.7864	24.786	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	450229			95.92- 155.92	118.46
10.921	10.921 (1.154)	176	360275			66.89- 126.89	94.79
39 Ethanol					CAS #: 64-17-5		
3.257	3.242 (0.563)	46	13246	8.37730	16.587	80.00- 120.00	100.00
3.250	3.285 (0.562)	45	31205			511.19- 571.19	235.58
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	37033	8.85968	17.542	80.00- 120.00	100.00
3.722	3.715 (0.643)	43	134876			302.95- 362.95	364.20
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	87187	5.55088	10.991	80.00- 120.00	100.00
4.704	4.696 (0.813)	43	77027			37.52- 97.52	88.35
4.697	4.696 (0.812)	86	9882			0.00- 41.48	11.33
87 Ethyl Acetate					CAS #: 141-78-6		
5.578	5.570 (0.964)	45	20618	5.75186	11.389	80.00- 120.00	100.00
5.578	5.549 (0.964)	61	13418			452.04- 512.04	65.08
5.578	5.570 (0.964)	70	7430			22.77- 82.77	36.04
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	395620	14.7257	29.157	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	228583			28.38- 88.38	57.78
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	37894	2.78443	5.513	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	30462			47.84- 107.84	80.39
8.464	8.464 (0.895)	131	33897			45.29- 105.29	89.45
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	12069	0.77721	1.539	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	24575			163.73- 223.73	203.61

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072811.d
Lab Smp Id: 2107361-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 4.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	159442	-0.57
108 1,4-Difluorobenze	582857	349714	816000	590093	1.24
153 Chlorobenzene-d5	560035	336021	784049	597138	6.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.66	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.

Report Date: 29-Jul-2021 13:26

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-05A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 4.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.157	100.63	70-130
$ 134 Toluene-d8	25.000	25.341	101.36	70-130
$ 170 4-Bromofluorobenz	25.000	24.786	99.15	70-130

Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

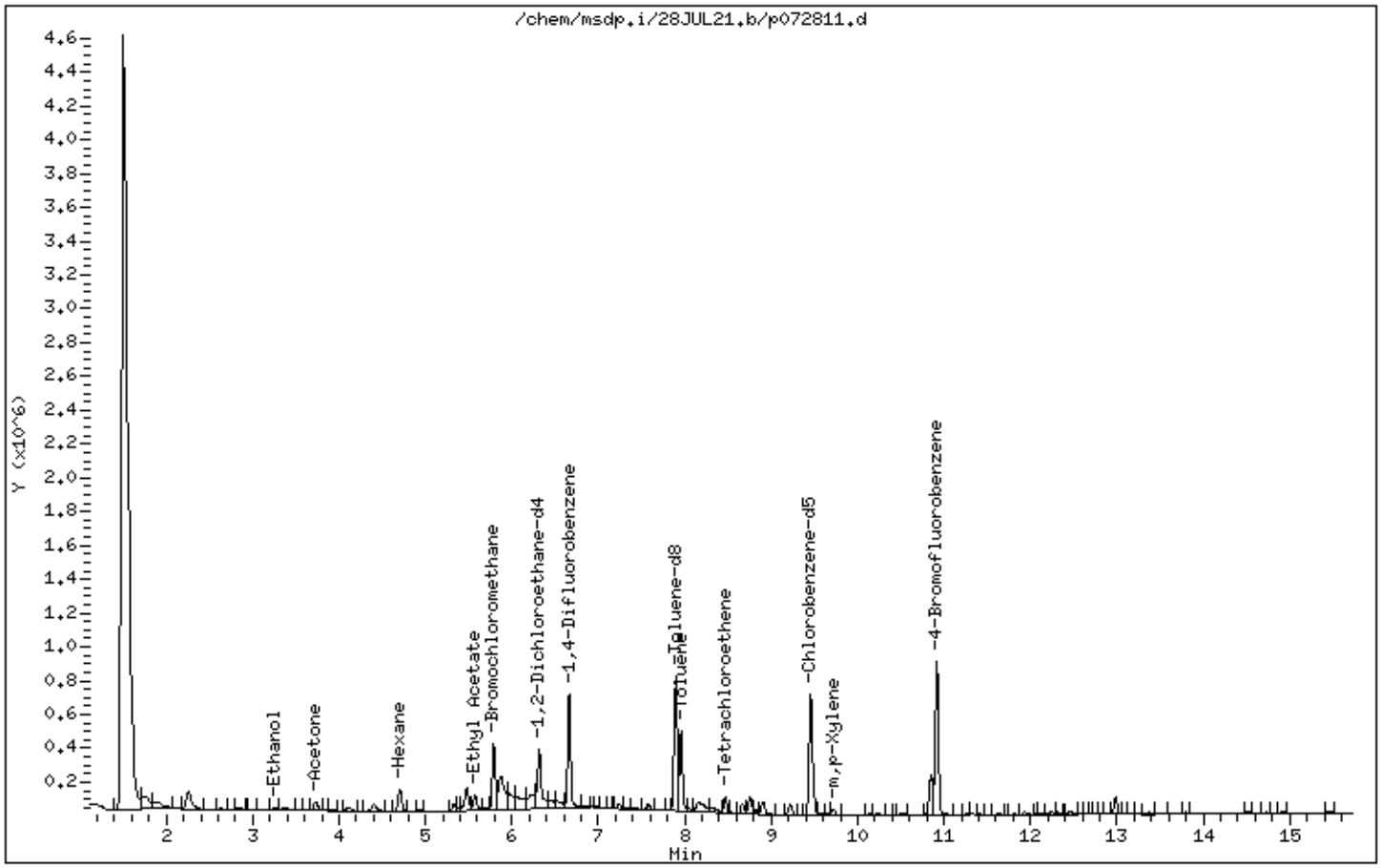
Instrument: msdp.i

Sample Info: 200ml 3013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3013

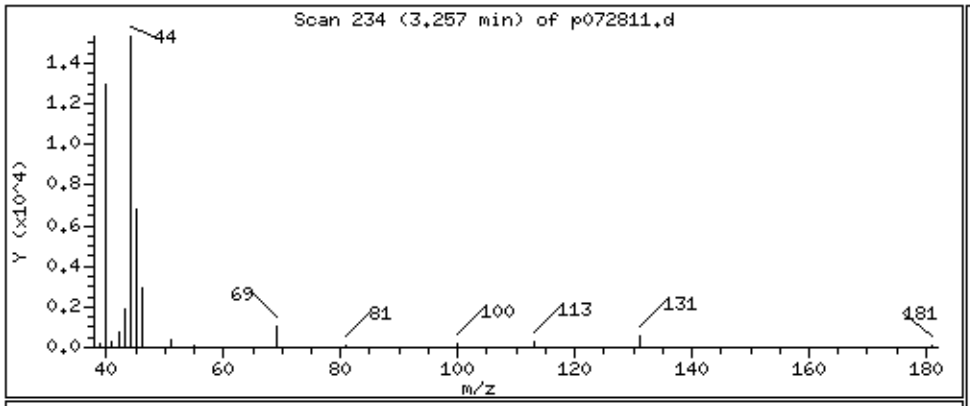
Operator: LD

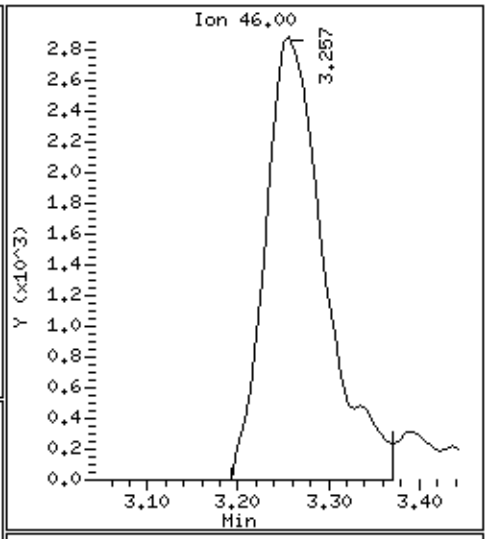
Column phase: RTX-624

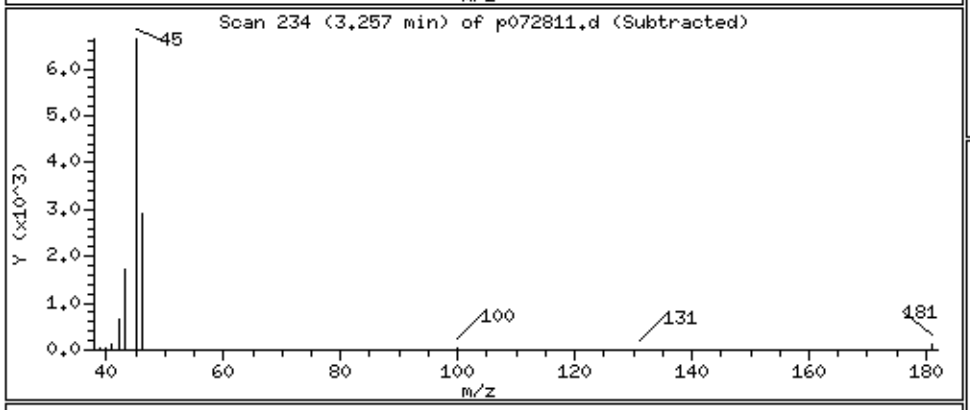
Column diameter: 0.25

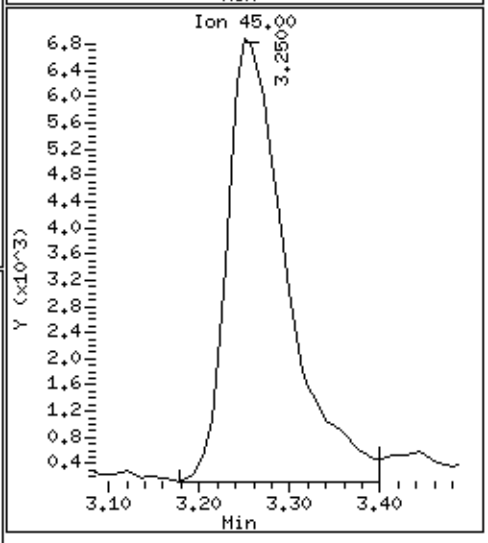
39 Ethanol

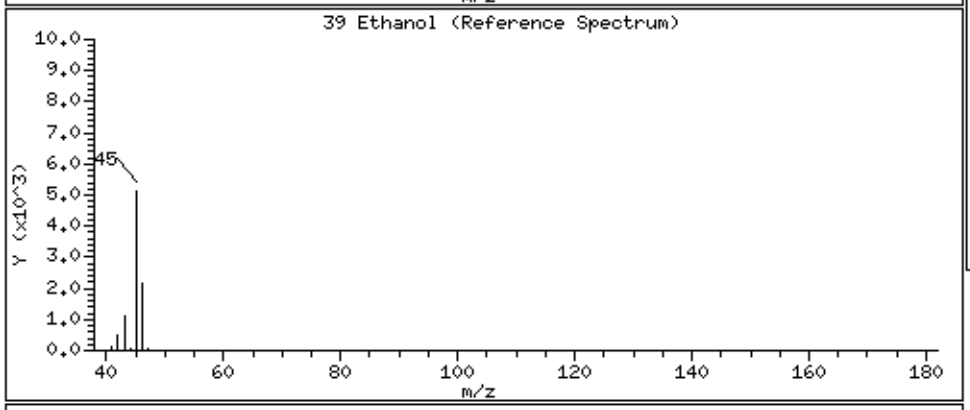
Concentration: 16.587 PPBV

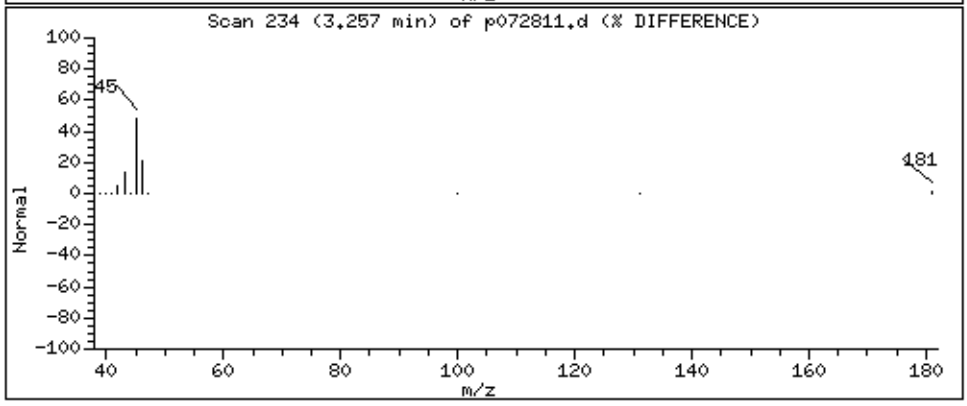












Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3013

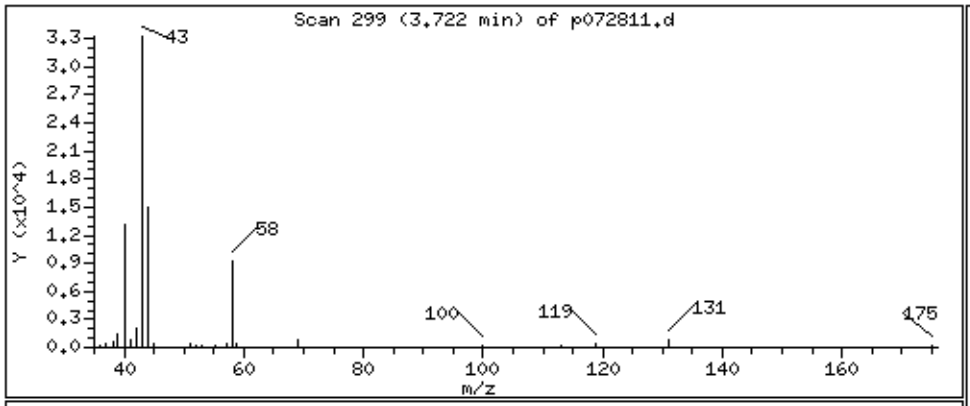
Operator: LD

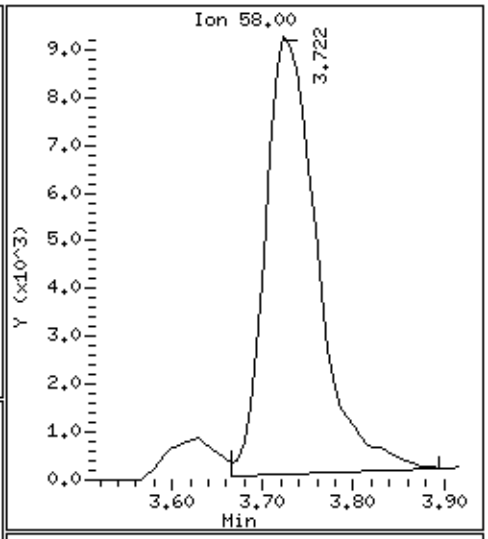
Column phase: RTX-624

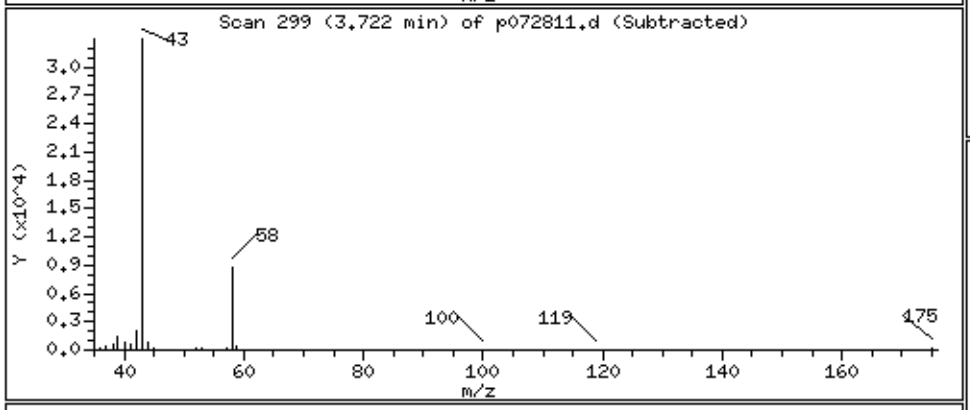
Column diameter: 0.25

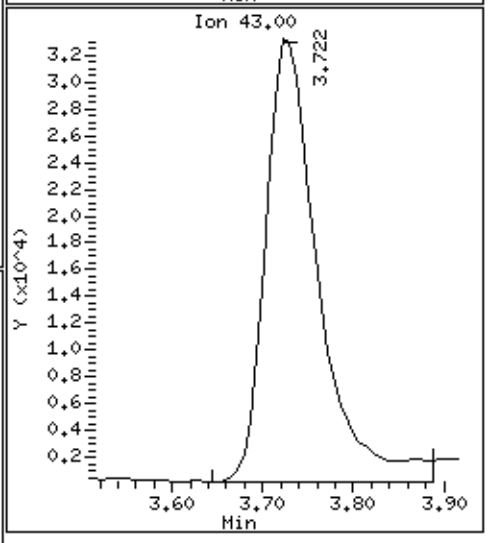
47 Acetone

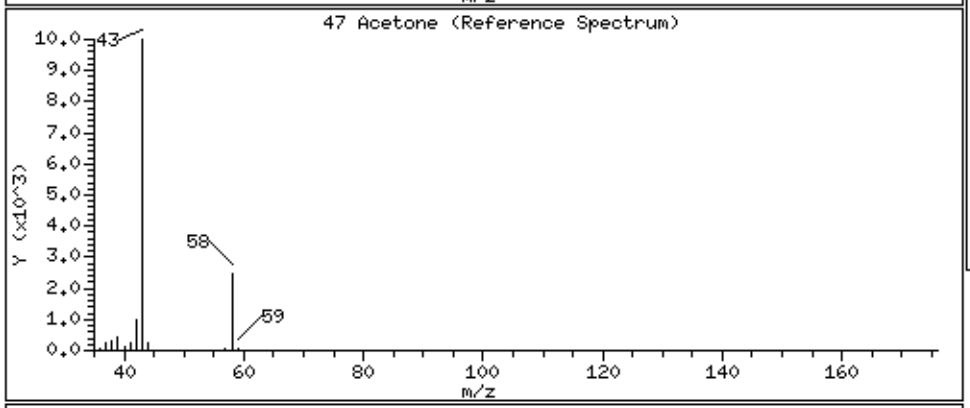
Concentration: 17.542 PPBV

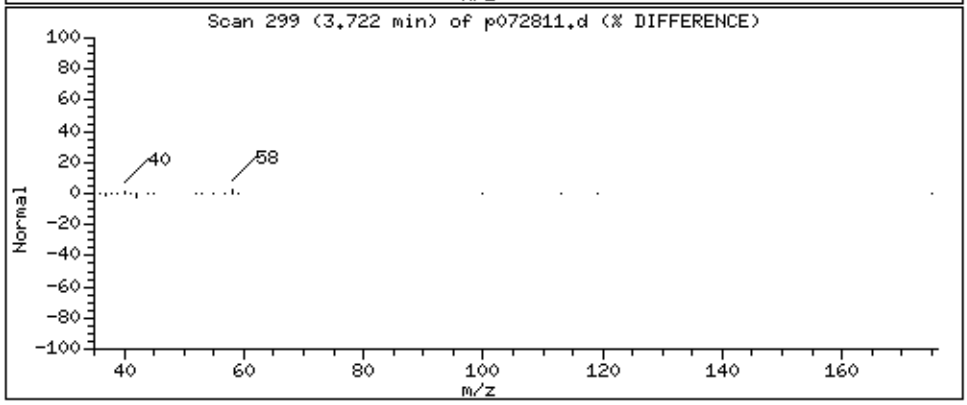












Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3013

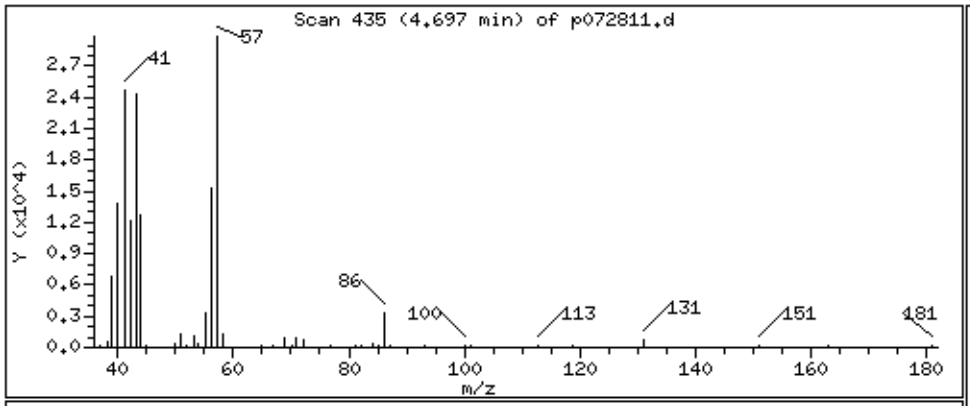
Operator: LD

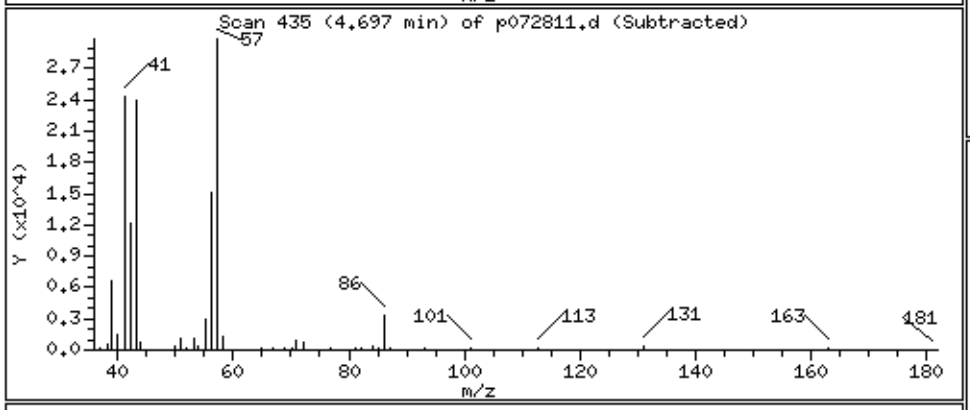
Column phase: RTX-624

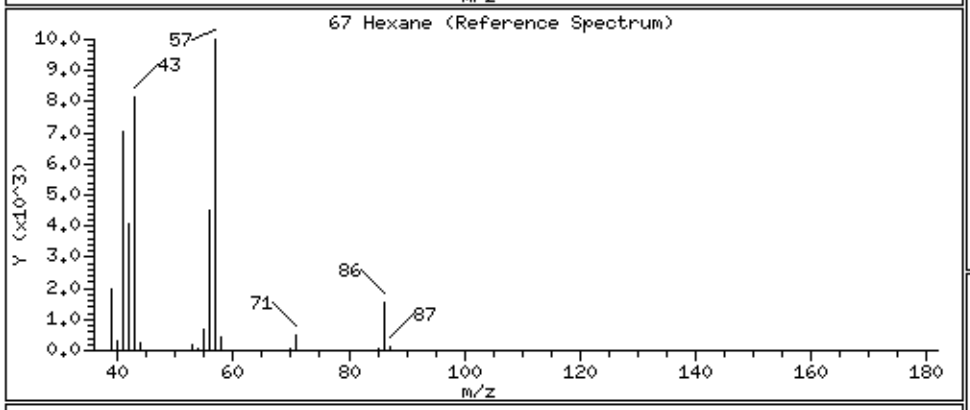
Column diameter: 0.25

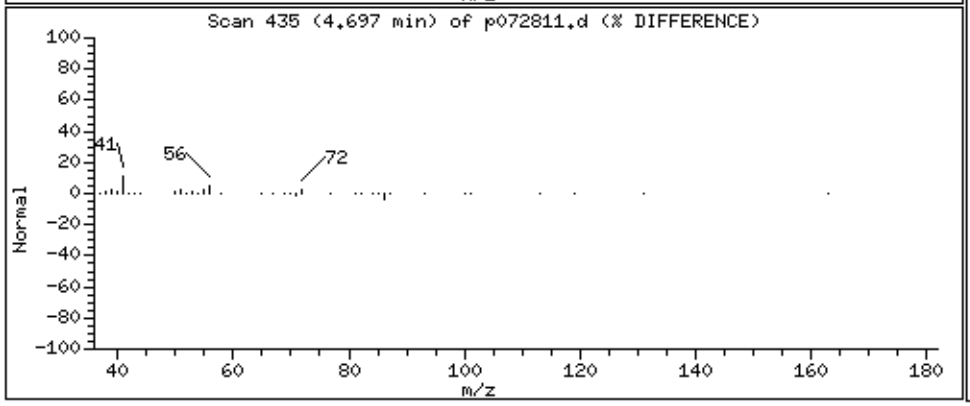
67 Hexane

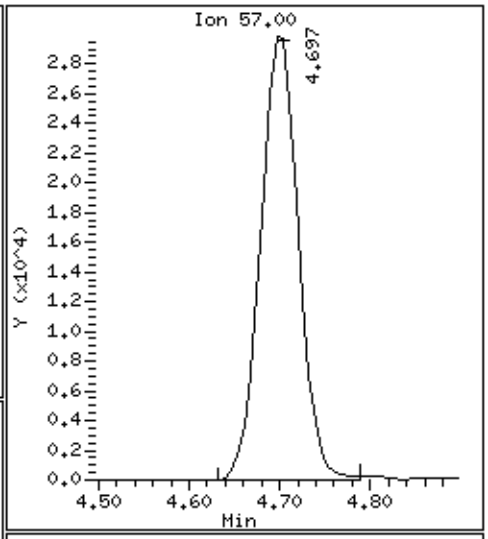
Concentration: 10.991 PPBV

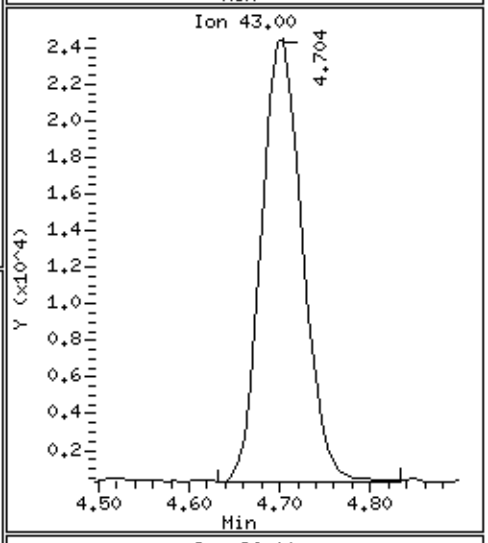


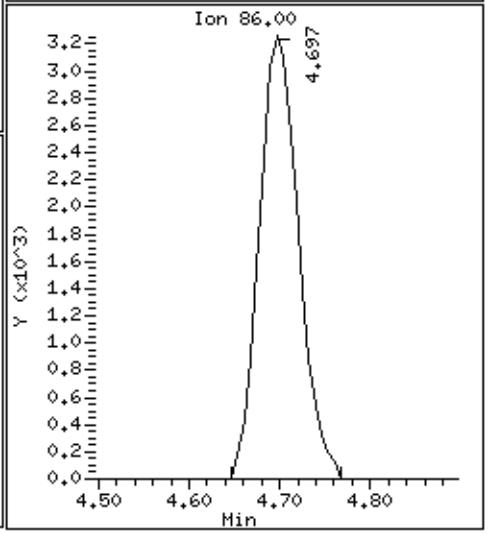












Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3013

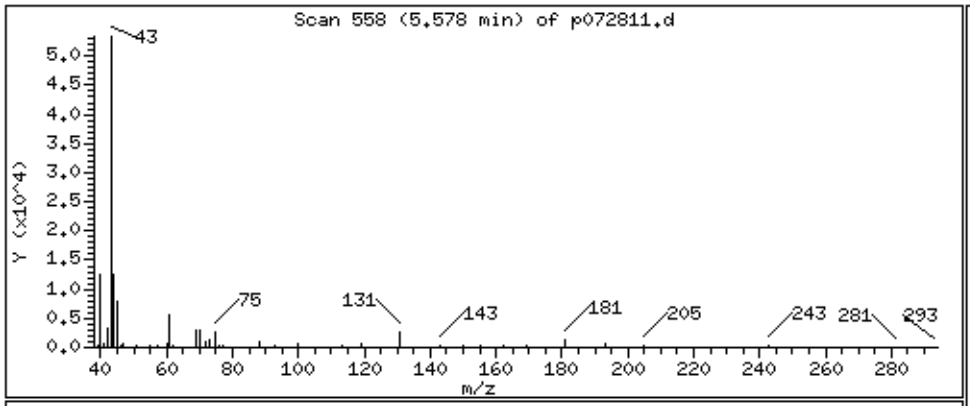
Operator: LD

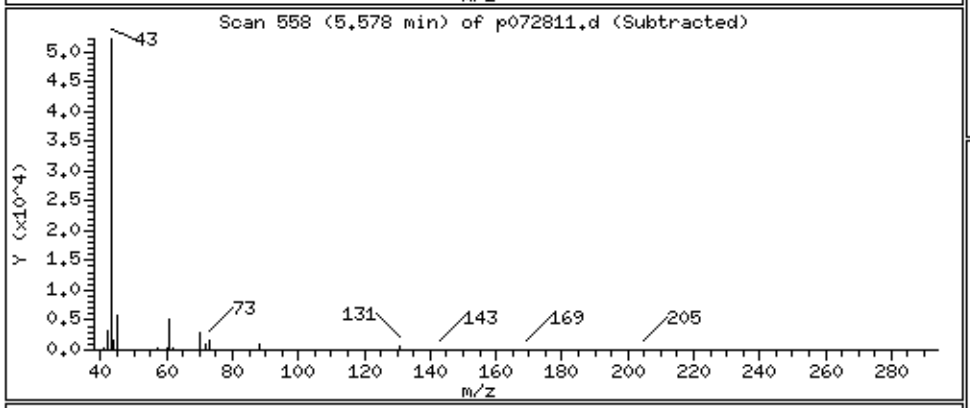
Column phase: RTX-624

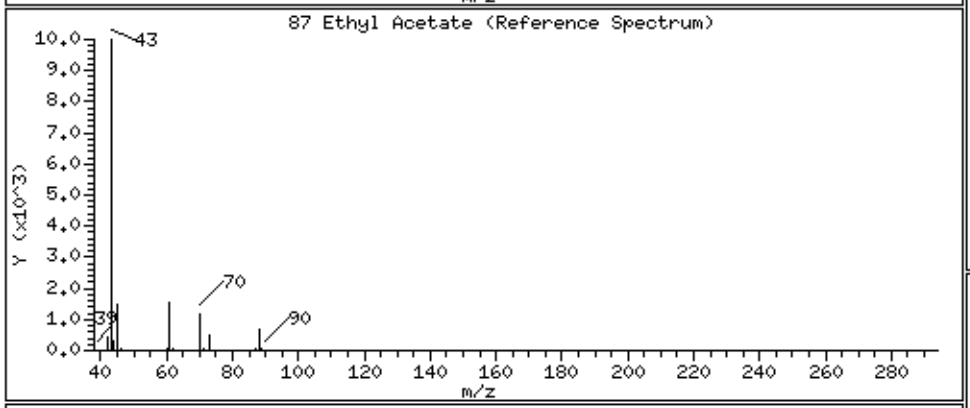
Column diameter: 0.25

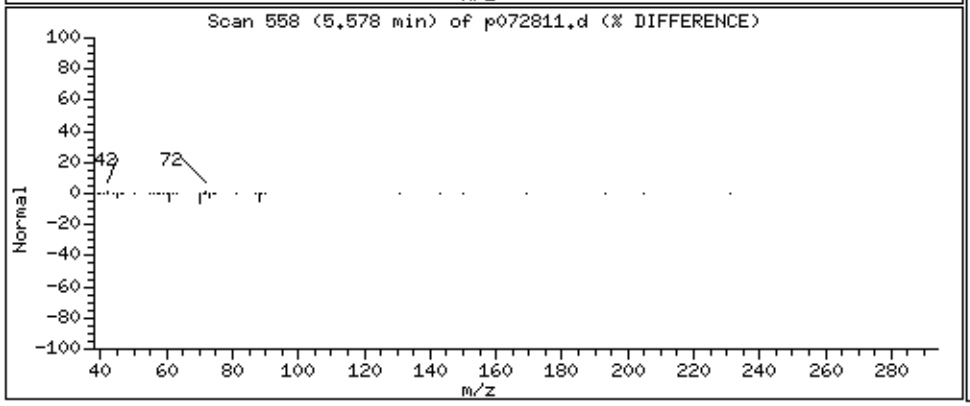
87 Ethyl Acetate

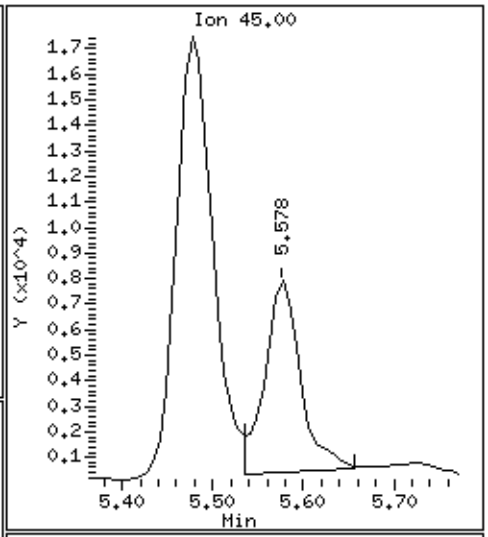
Concentration: 11.389 PPBV

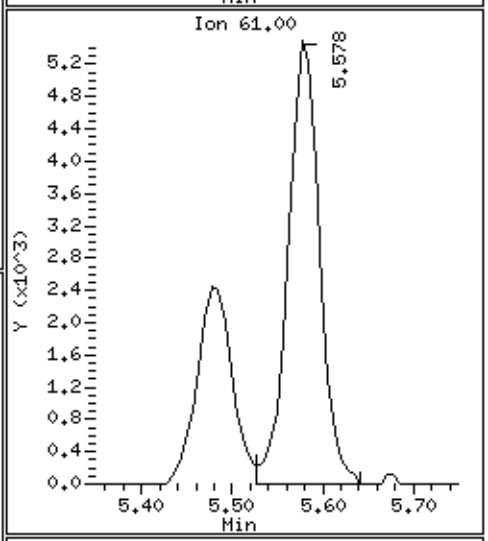


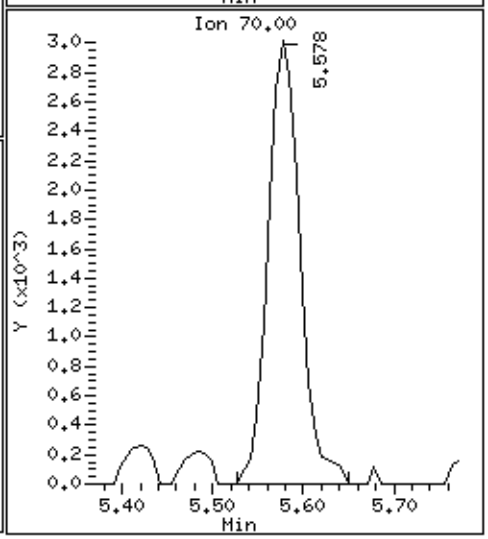












Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3013

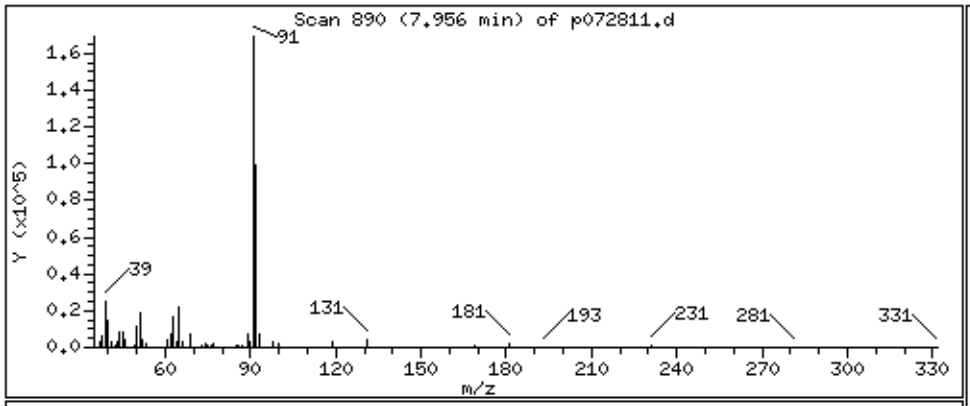
Operator: LD

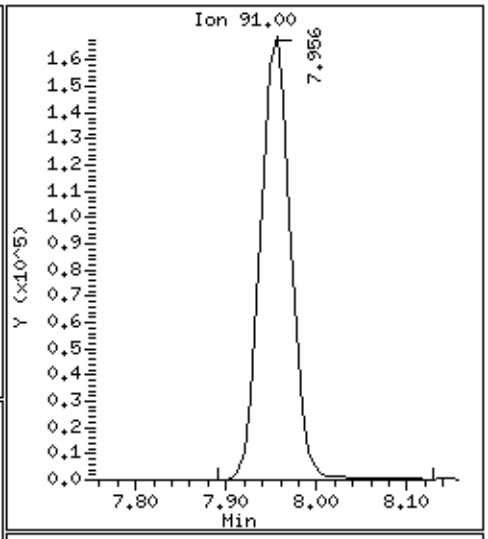
Column phase: RTX-624

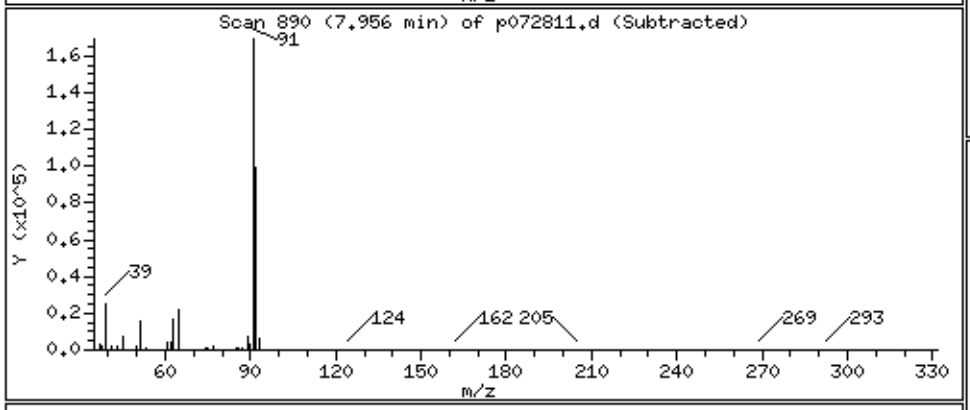
Column diameter: 0.25

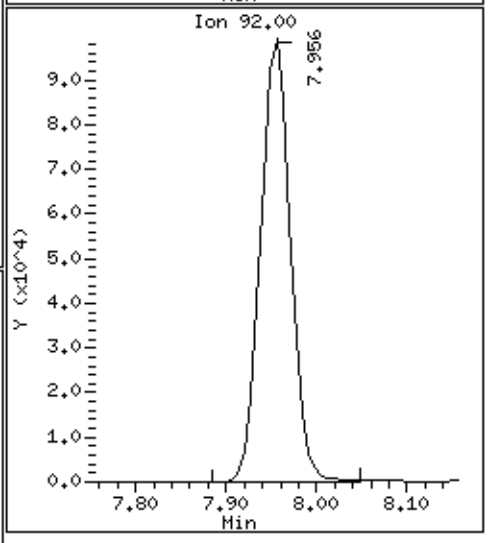
137 Toluene

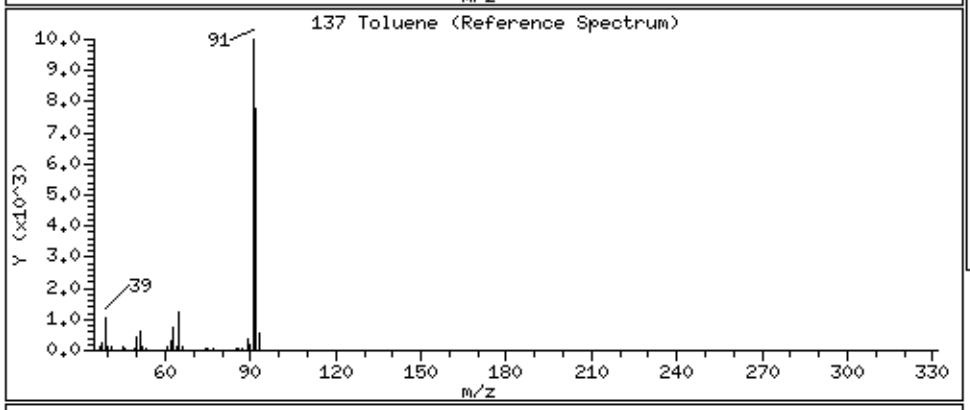
Concentration: 29.157 PPBV

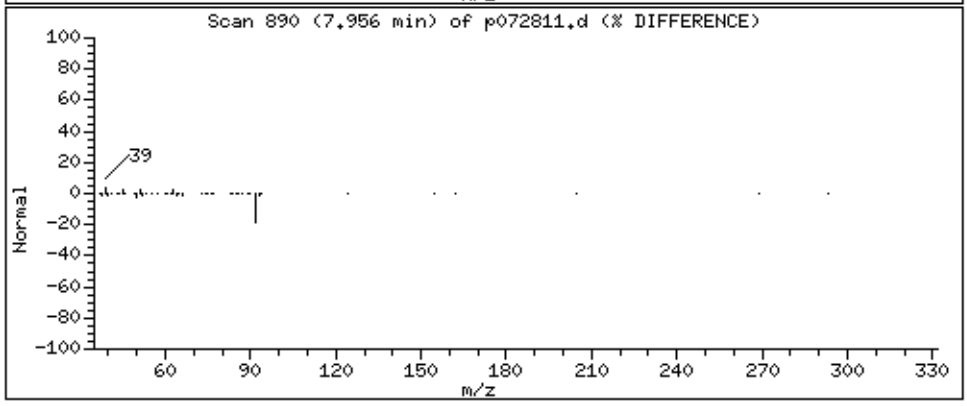












Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3013

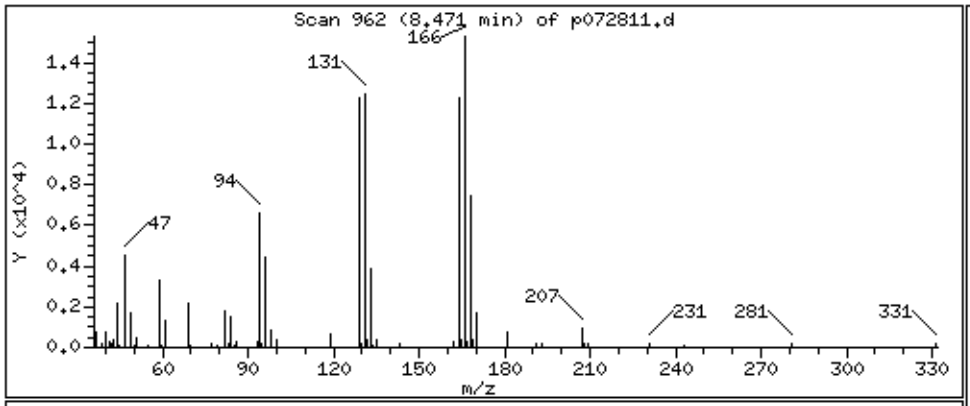
Operator: LD

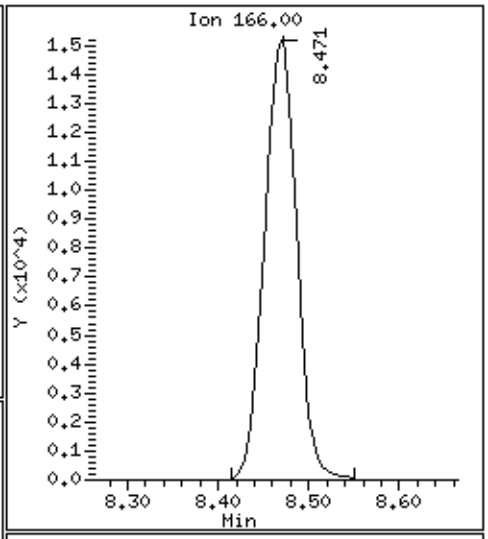
Column phase: RTX-624

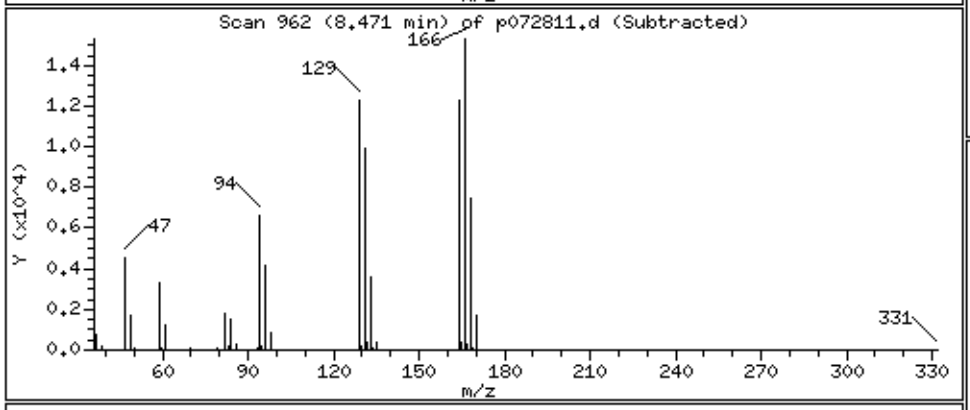
Column diameter: 0.25

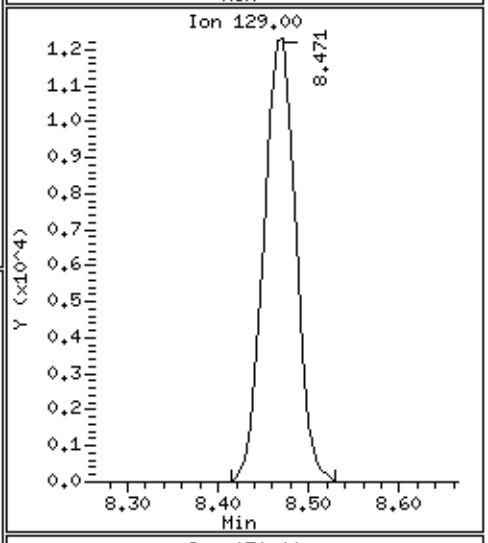
142 Tetrachloroethene

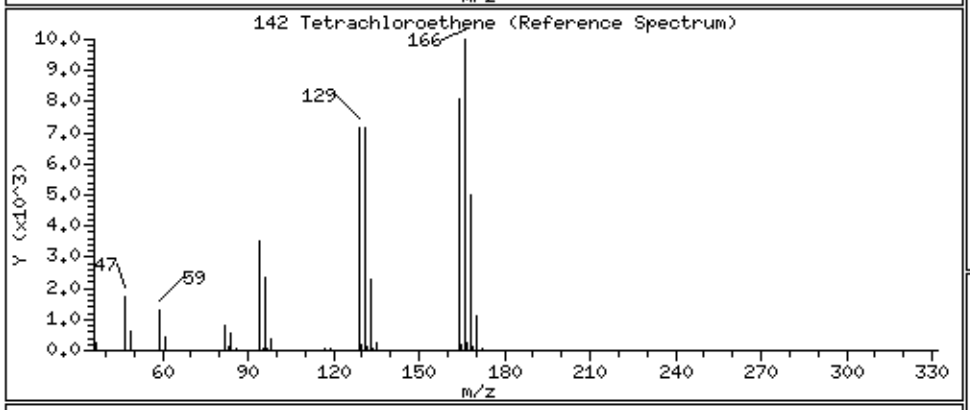
Concentration: 5.513 PPBV

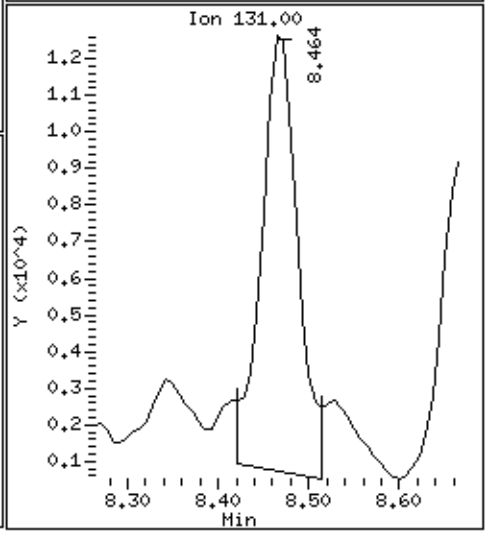


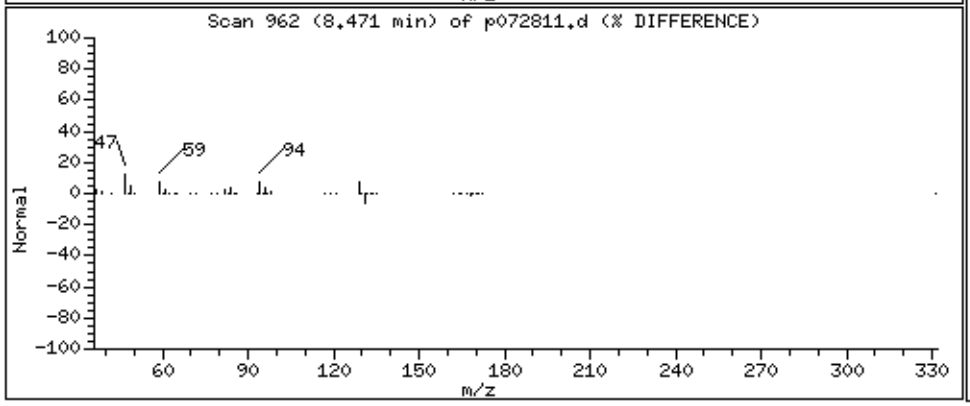












Data File: /chem/msdp.i/28JUL21.b/p072811.d

Date : 28-JUL-2021 16:53

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3013

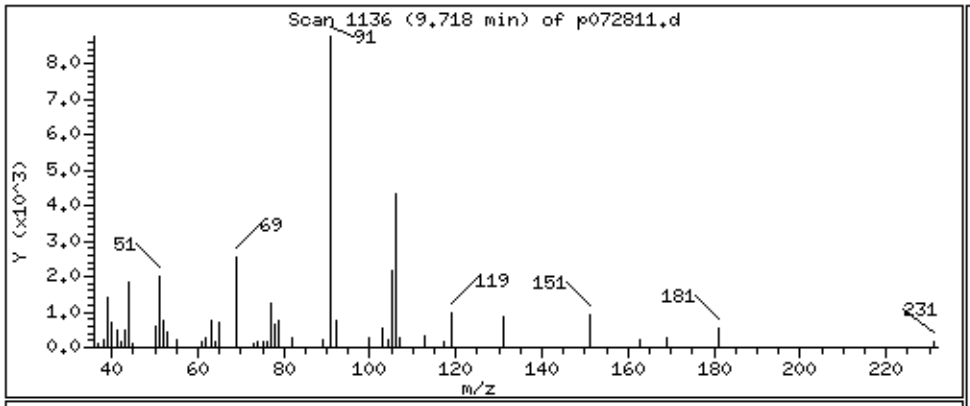
Operator: LD

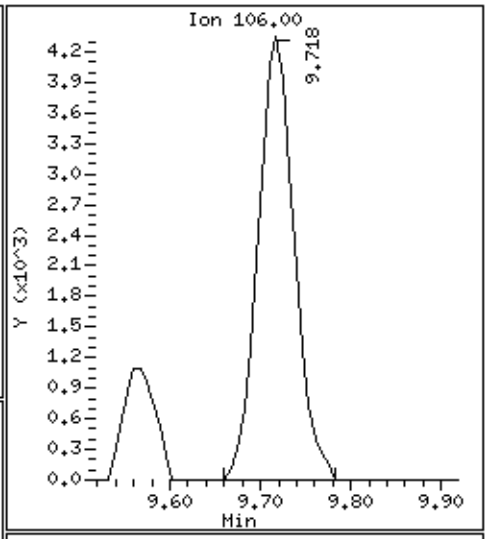
Column phase: RTX-624

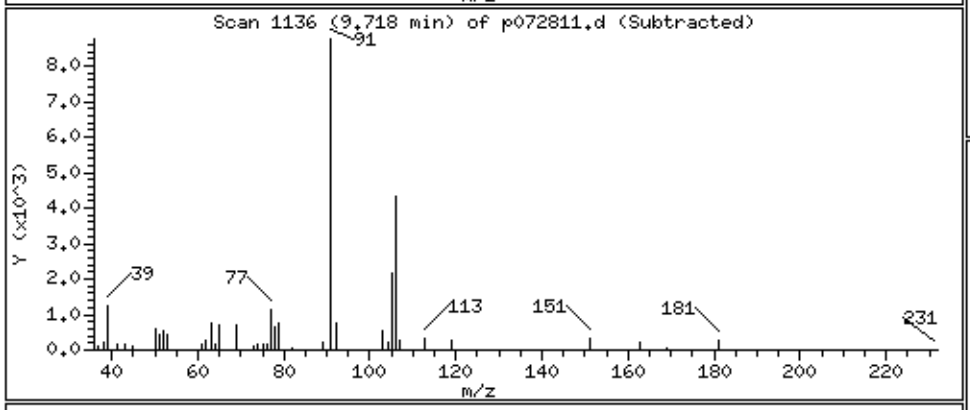
Column diameter: 0.25

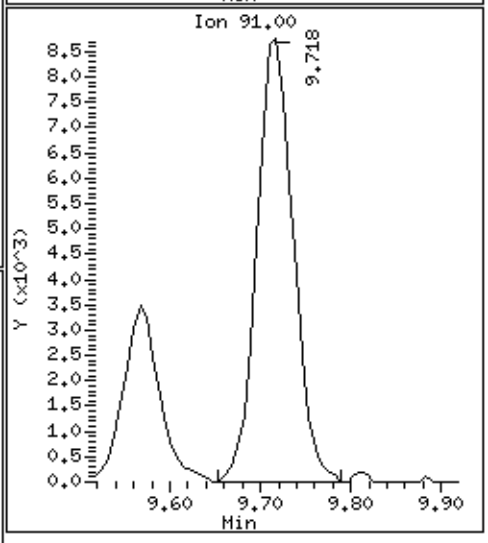
158 m,p-Xylene

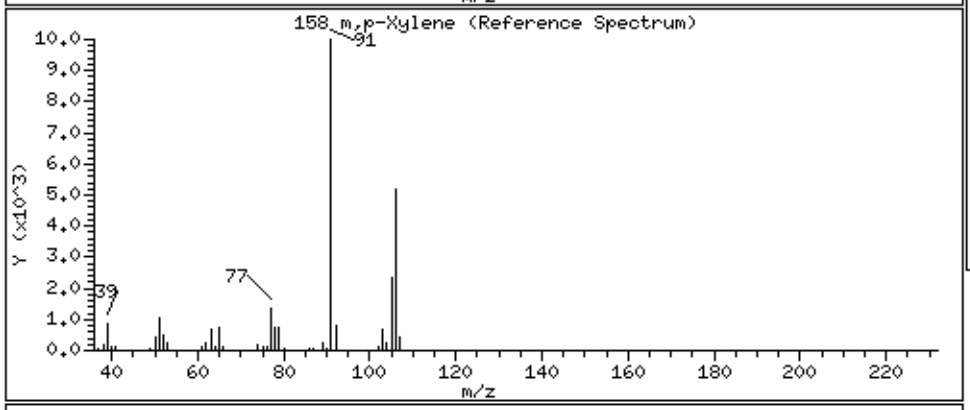
Concentration: 1.539 PPBV

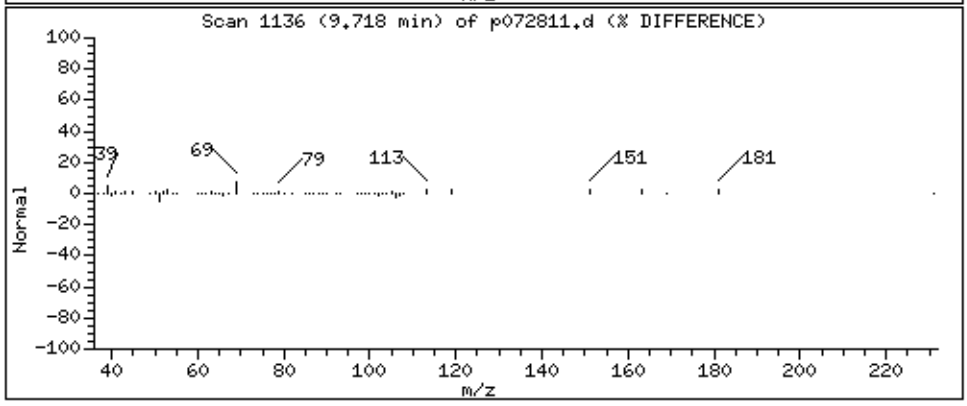












eurofins | Air Toxics

Client Sample ID: SG-VW16A-02

Lab ID#: 2107361-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072812**	**Date of Collection:**	**7/15/21 8:30:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 05:23 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	16	25	37
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	3.4	5.1	17
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-VW16A-02

Lab ID#: 2107361-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072812**	**Date of Collection: 7/15/21 8:30:00 AM**	
Dil. Factor:	**2.10**	**Date of Analysis: 7/28/21 05:23 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	5.2	7.1	35
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-VW16A-02

Lab ID#: 2107361-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072812**	**Date of Collection:**	**7/15/21 8:30:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 05:23 PM**

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072812.d
Lab Smp Id: 2107361-06A
Inj Date : 28-JUL-2021 17:23
Operator : LD Inst ID: msdp.i
Smp Info : 200ml B2245
Misc Info : 6.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 6
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	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	157446	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	120636				48.23- 108.23	76.62
5.785	5.778 (1.000)	49	323378				150.57- 210.57	205.39
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.659 (1.000)	114	578412	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	85908				0.00- 45.71	14.85
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	586654	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	305183				23.78- 83.78	52.02
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	219210	25.2284	25.228		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	107722				27.21- 87.21	49.14
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	637959	25.3996	25.400		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67062				0.00- 40.44	10.51

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	411599			34.95- 94.95	64.52
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	369105	24.5015	24.501	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	444707			95.92- 155.92	120.48
10.921	10.921 (1.154)	176	349484			66.89- 126.89	94.68
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	30932	7.49391	15.737	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	116500			302.95- 362.95	376.62
92 Chloroform					CAS #: 67-66-3		
5.843	5.835 (1.010)	83	22283	1.62661	3.416	80.00- 120.00	100.00
5.843	5.835 (1.010)	85	14235			34.70- 94.70	63.88
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	32817	2.45447	5.154	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	25251			47.84- 107.84	76.94
8.471	8.464 (0.895)	131	26031			45.29- 105.29	79.32

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072812.d
Lab Smp Id: 2107361-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	157446	-1.81
108 1,4-Difluorobenze	582857	349714	816000	578412	-0.76
153 Chlorobenzene-d5	560035	336021	784049	586654	4.75

		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	6.67	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.

Report Date: 29-Jul-2021 13:28

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-06A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.228	100.91	70-130
$ 134 Toluene-d8	25.000	25.400	101.60	70-130
$ 170 4-Bromofluorobenz	25.000	24.501	98.01	70-130

Data File: /chem/msdp.i/28JUL21.b/p072812.d

Date : 28-JUL-2021 17:23

Client ID:

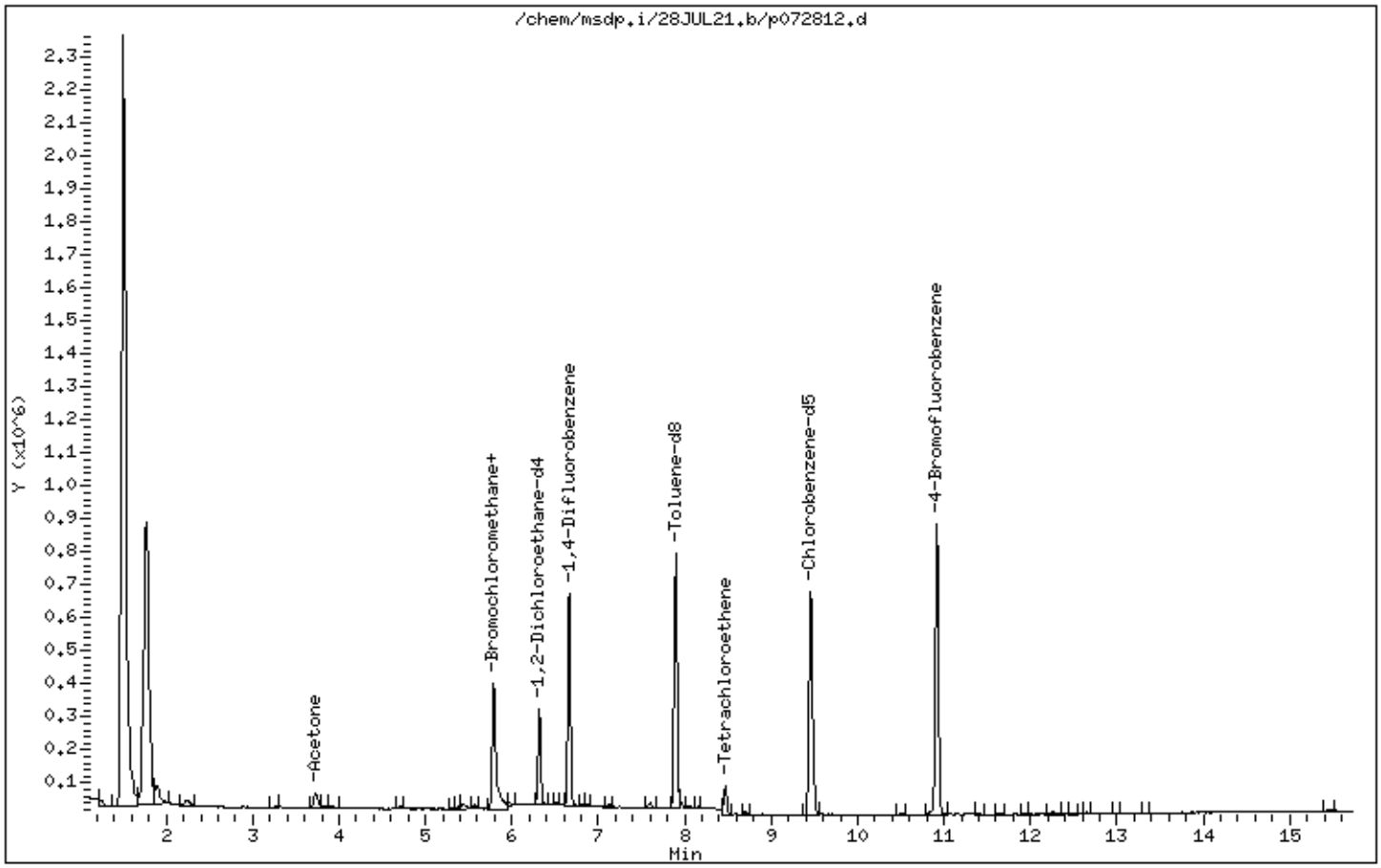
Instrument: msdp.i

Sample Info: 200ml B2245

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072812.d

Date : 28-JUL-2021 17:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2245

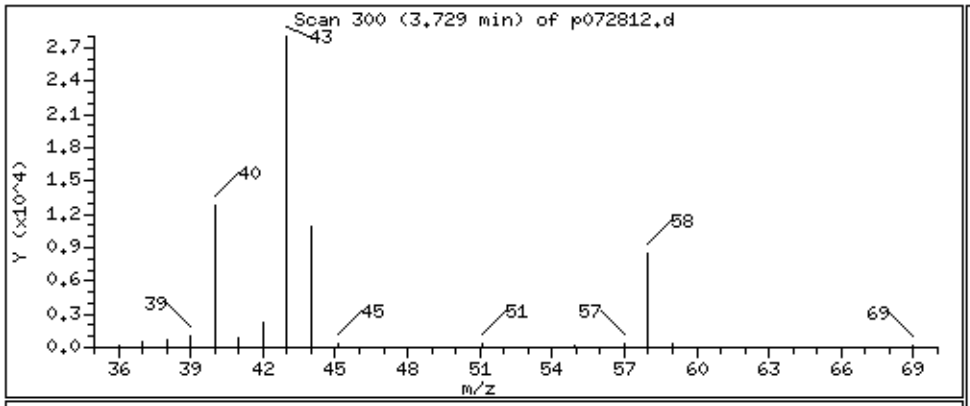
Operator: LD

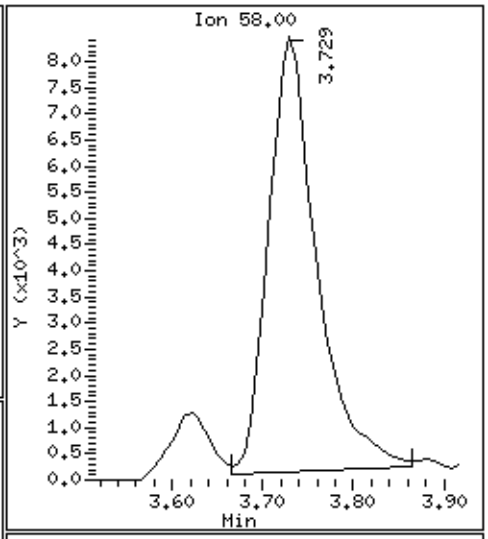
Column phase: RTX-624

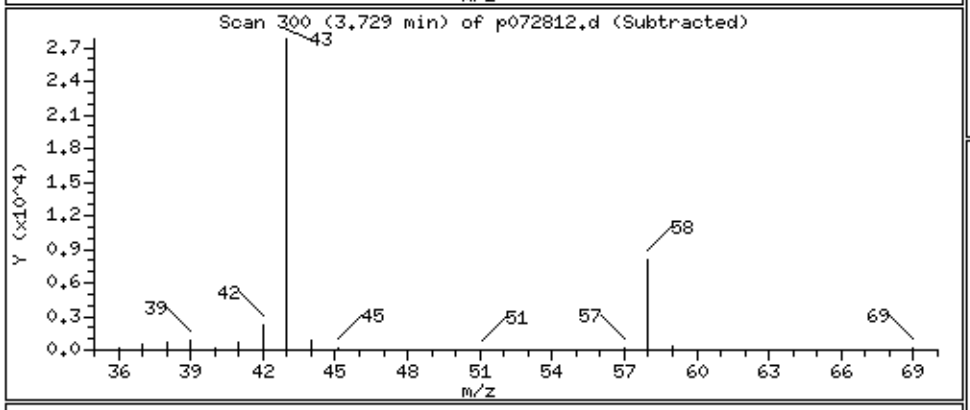
Column diameter: 0.25

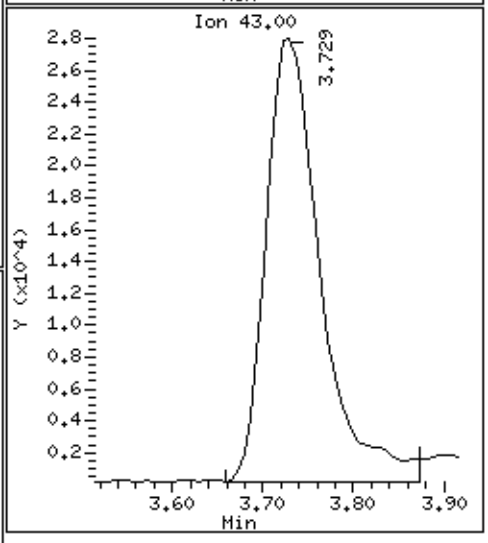
47 Acetone

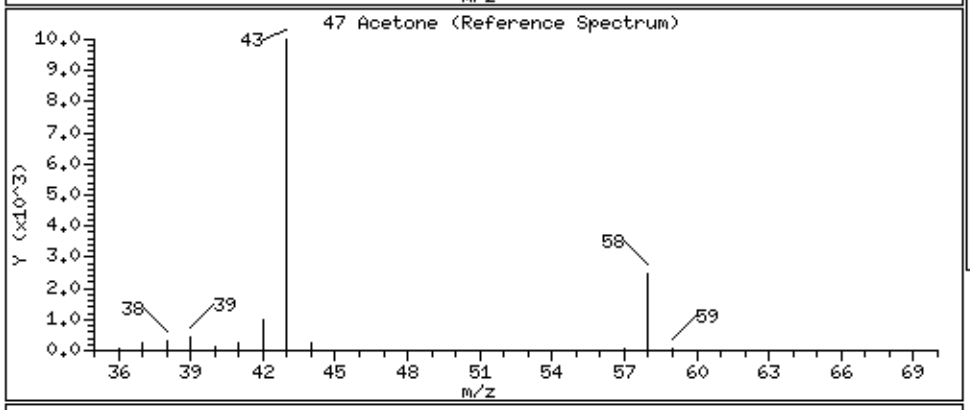
Concentration: 15.737 PPBV

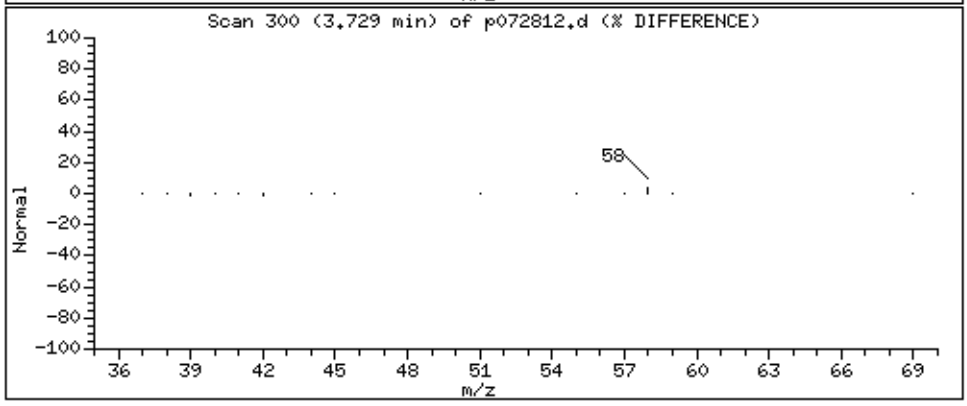












Data File: /chem/msdp.i/28JUL21.b/p072812.d

Date : 28-JUL-2021 17:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2245

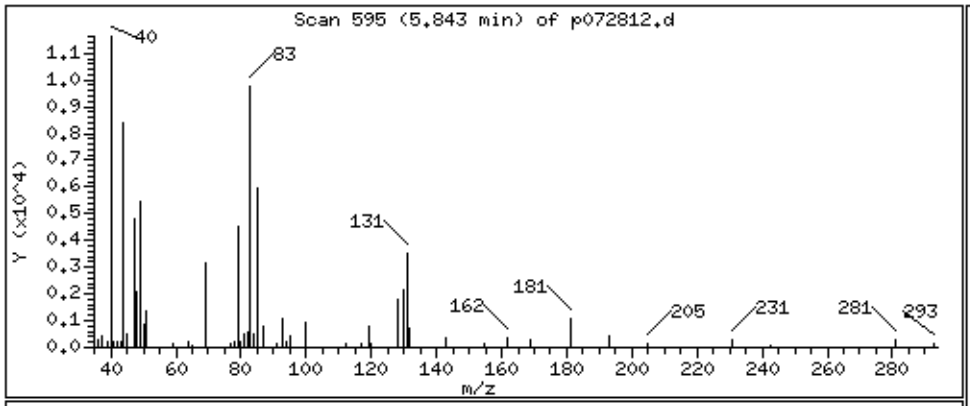
Operator: LD

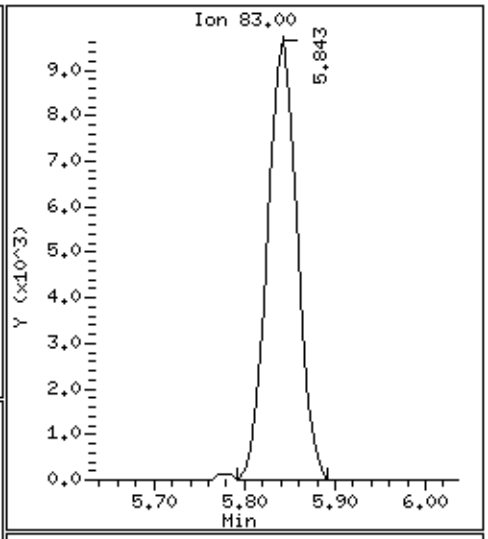
Column phase: RTX-624

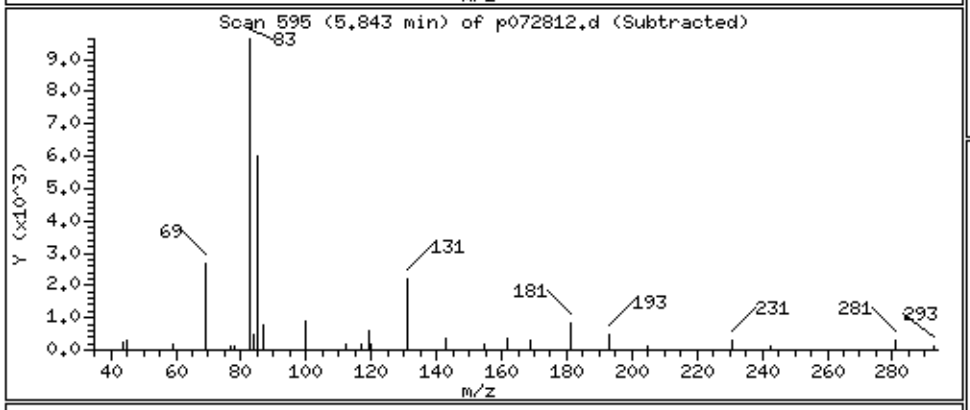
Column diameter: 0.25

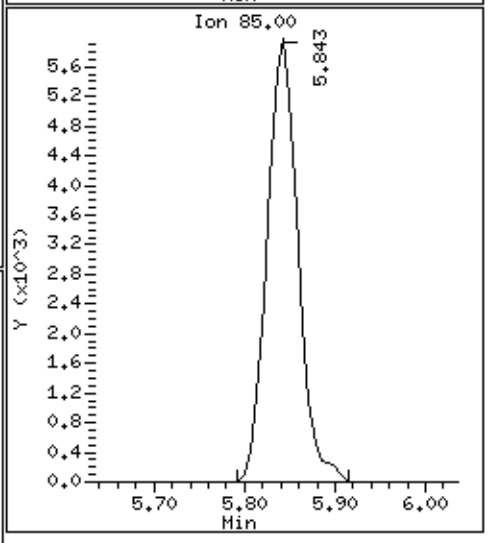
92 Chloroform

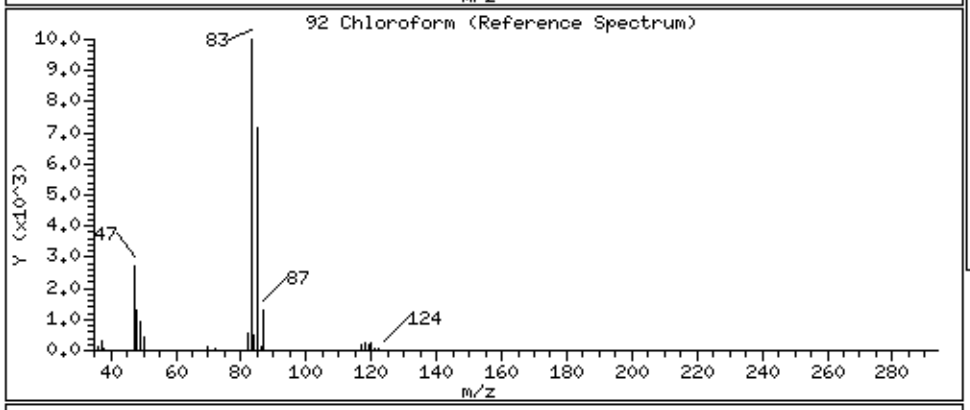
Concentration: 3.416 PPBV

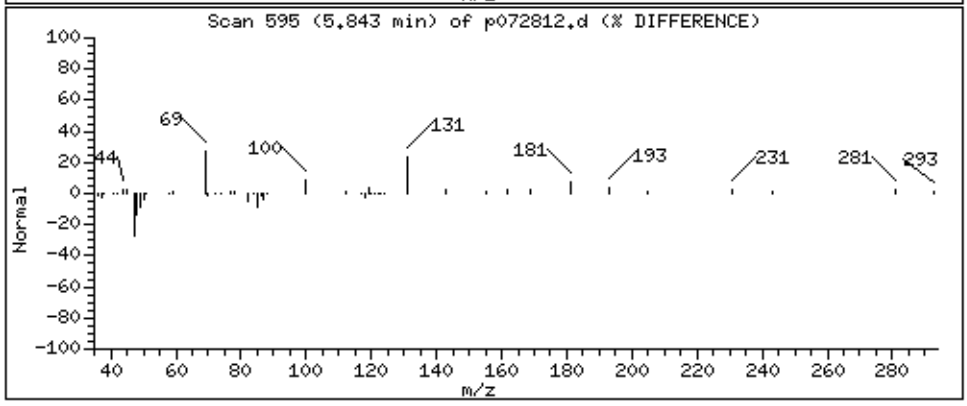












Data File: /chem/msdp.i/28JUL21.b/p072812.d

Date : 28-JUL-2021 17:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2245

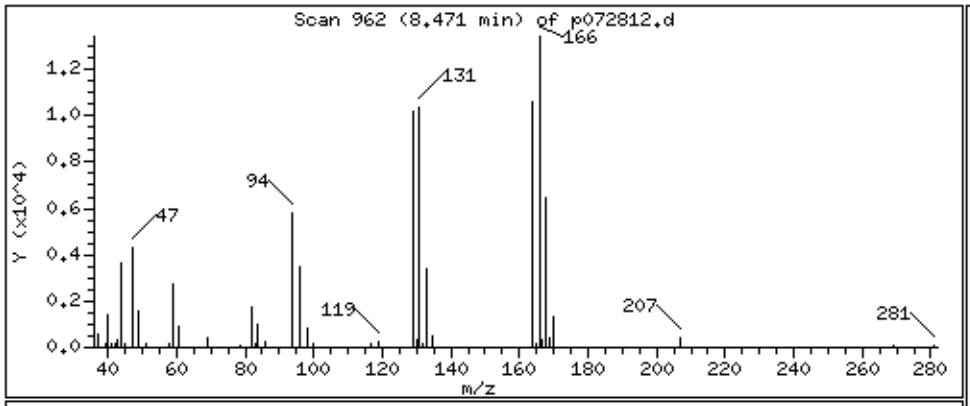
Operator: LD

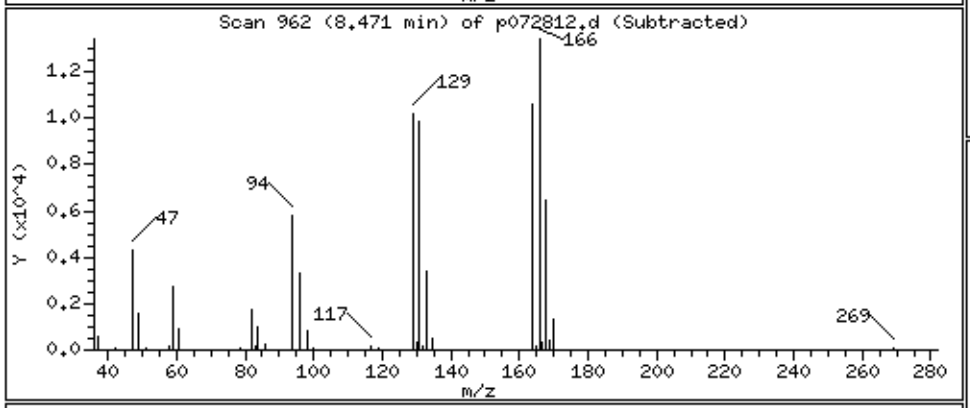
Column phase: RTX-624

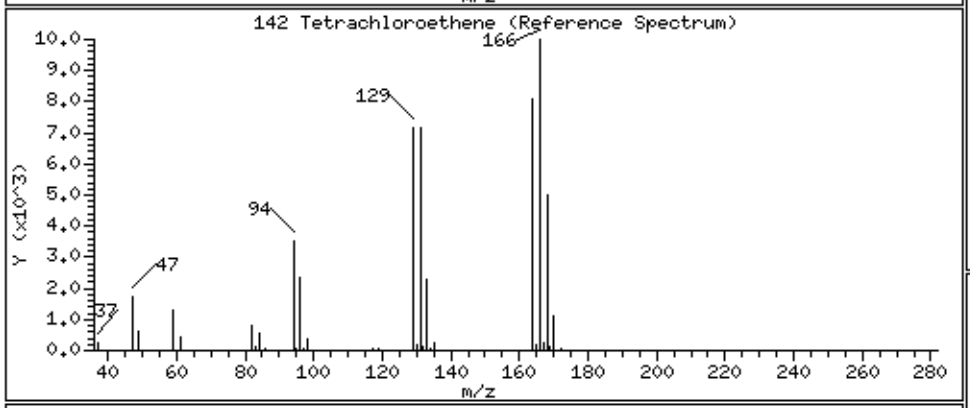
Column diameter: 0.25

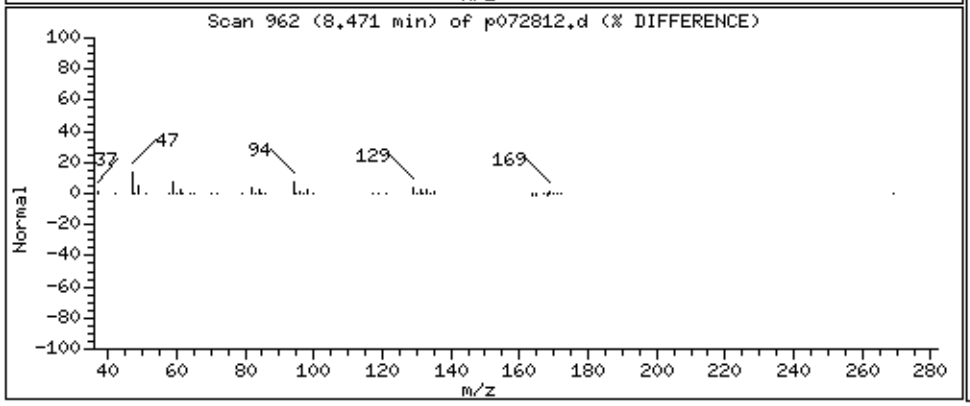
142 Tetrachloroethene

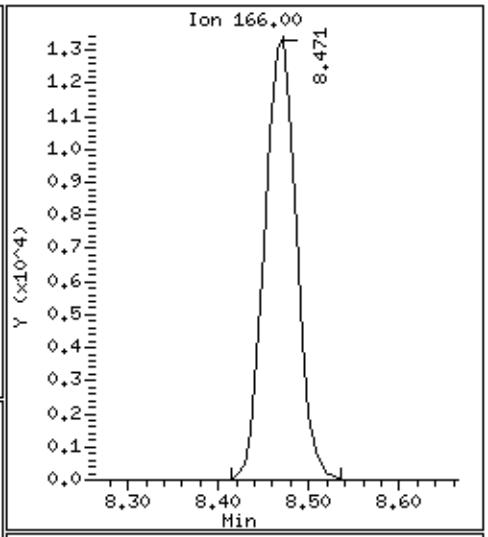
Concentration: 5.154 PPBV

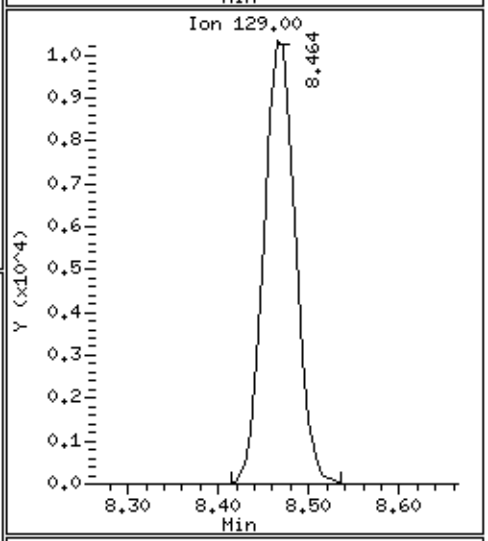


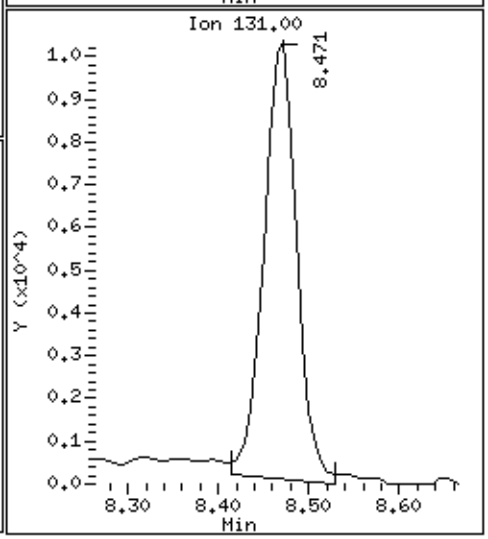












eurofins | Air Toxics

Client Sample ID: SG-VW18A-02

Lab ID#: 2107361-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072813**	**Date of Collection:**	**7/15/21 9:12:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 05:52 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	11	25	27
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-VW18A-02

Lab ID#: 2107361-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072813**	**Date of Collection:**	**7/15/21 9:12:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 05:52 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	12	20	22
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	73	7.1	490
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Toluene	1.0	1.3	4.0	4.8
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-VW18A-02

Lab ID#: 2107361-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072813**	**Date of Collection:**	**7/15/21 9:12:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 05:52 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072813.d
Lab Smp Id: 2107361-07A
Inj Date : 28-JUL-2021 17:52
Operator : LD Inst ID: msdp.i
Smp Info : 200ml O0711
Misc Info : 6.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 7
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	162253	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	124432				48.23- 108.23	76.69
5.785	5.778 (1.000)	49	325378				150.57- 210.57	200.54
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	589298	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	85378				0.00- 45.71	14.49
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	606967	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	315948				23.78- 83.78	52.05
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	221821	24.7726	24.772		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110125				27.21- 87.21	49.65
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	640768	25.0401	25.040		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66545				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	418064			34.95- 94.95	65.24
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	386091	24.7713	24.771	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	462021			95.92- 155.92	119.67
10.921	10.921 (1.154)	176	367803			66.89- 126.89	95.26
39 Ethanol					CAS #: 64-17-5		
3.264	3.242 (0.564)	46	9120	5.66793	11.903	80.00- 120.00	100.00
3.257	3.285 (0.563)	45	22109			511.19- 571.19	242.43
47 Acetone					CAS #: 67-64-1		
3.737	3.715 (0.646)	58	23064	5.42218	11.386	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	85034			302.95- 362.95	368.68
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	16258	0.60597	1.272	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	9483			28.38- 88.38	58.33
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	479443	34.6587	72.783	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	371541			47.84- 107.84	77.49
8.464	8.464 (0.895)	131	356381			45.29- 105.29	74.33

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072813.d
Lab Smp Id: 2107361-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	162253	1.19
108 1,4-Difluorobenze	582857	349714	816000	589298	1.11
153 Chlorobenzene-d5	560035	336021	784049	606967	8.38

		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	6.67	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.

Report Date: 29-Jul-2021 13:29

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-07A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.772	99.09	70-130
$ 134 Toluene-d8	25.000	25.040	100.16	70-130
$ 170 4-Bromofluorobenz	25.000	24.771	99.09	70-130

Data File: /chem/msdp.i/28JUL21.b/p072813.d

Date : 28-JUL-2021 17:52

Client ID:

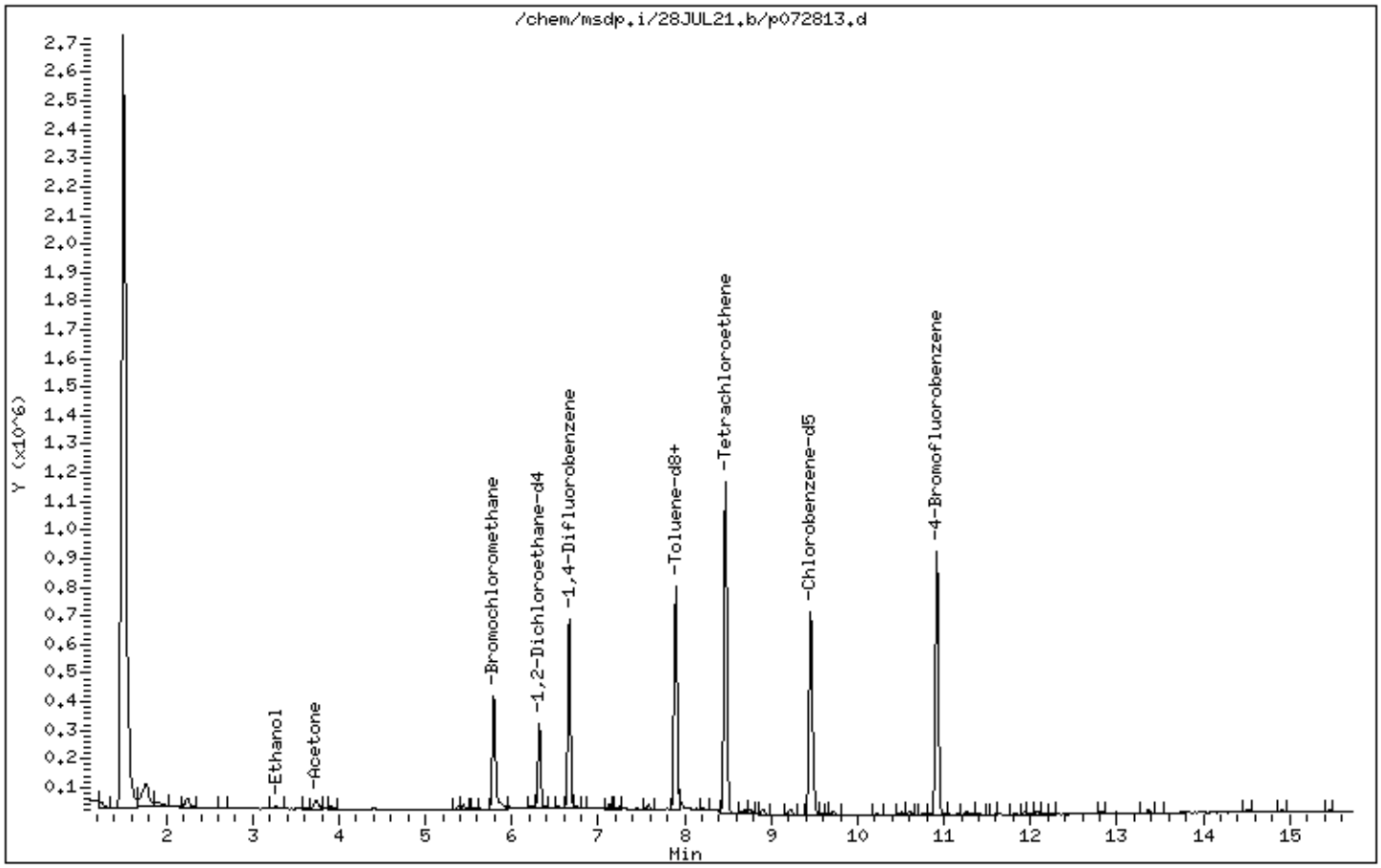
Instrument: msdp.i

Sample Info: 200ml 00711

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072813.d

Date : 28-JUL-2021 17:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00711

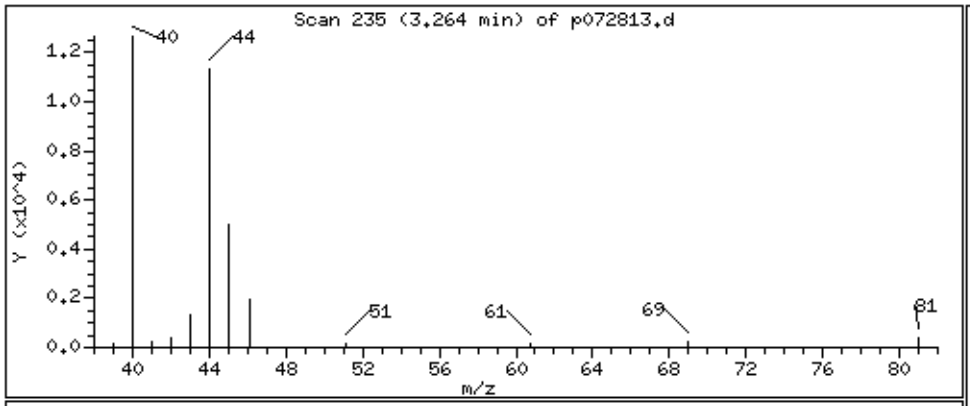
Operator: LD

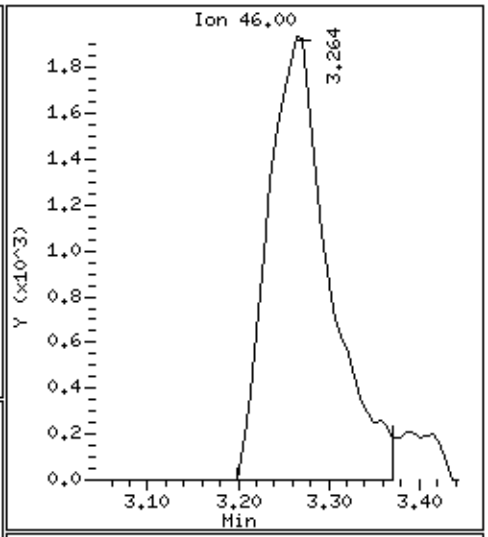
Column phase: RTX-624

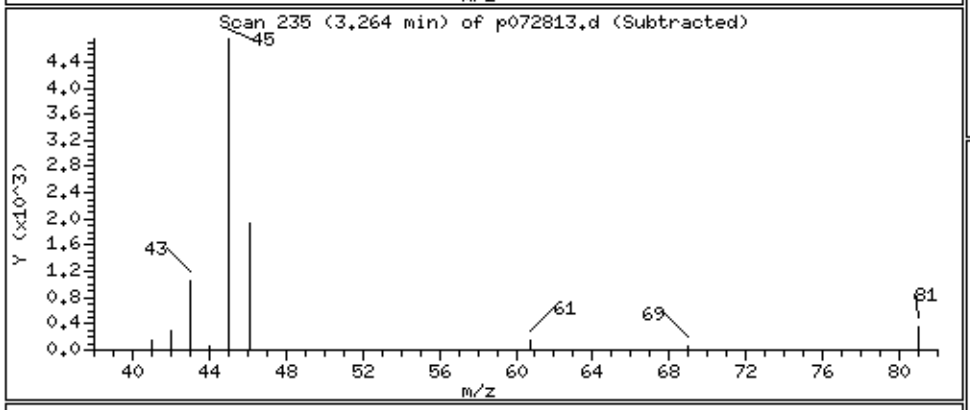
Column diameter: 0.25

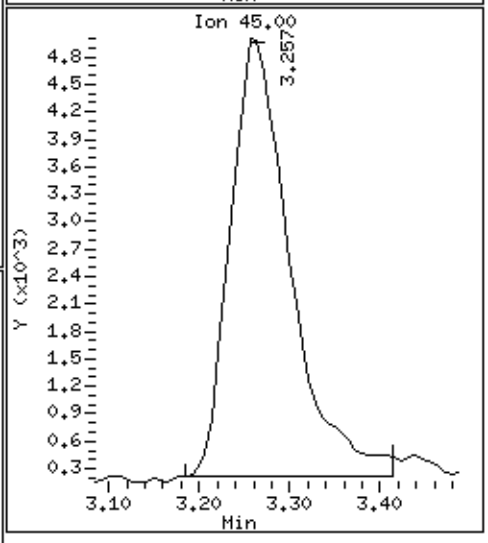
39 Ethanol

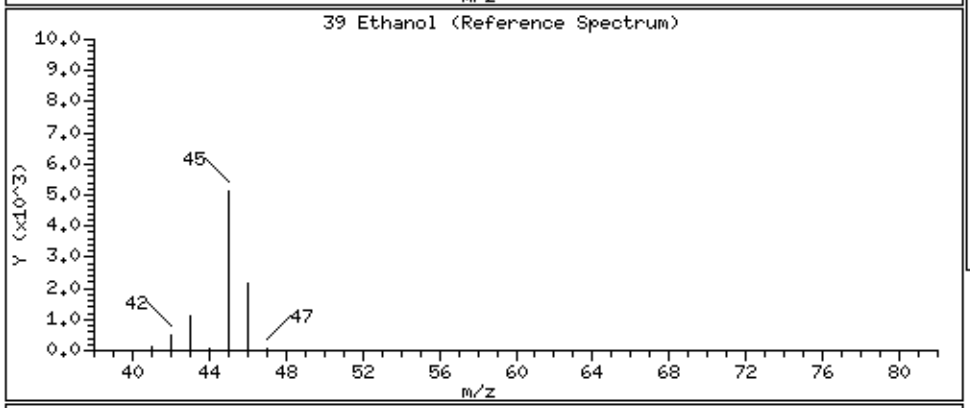
Concentration: 11.903 PPBV

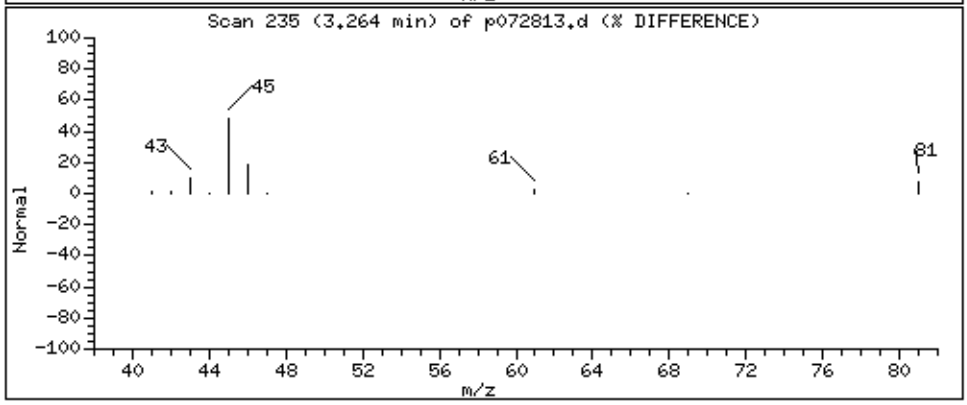












Data File: /chem/msdp.i/28JUL21.b/p072813.d

Date : 28-JUL-2021 17:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00711

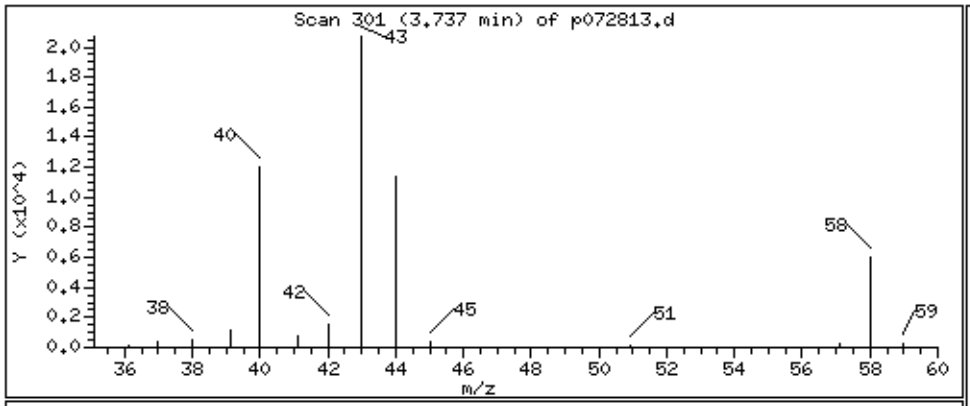
Operator: LD

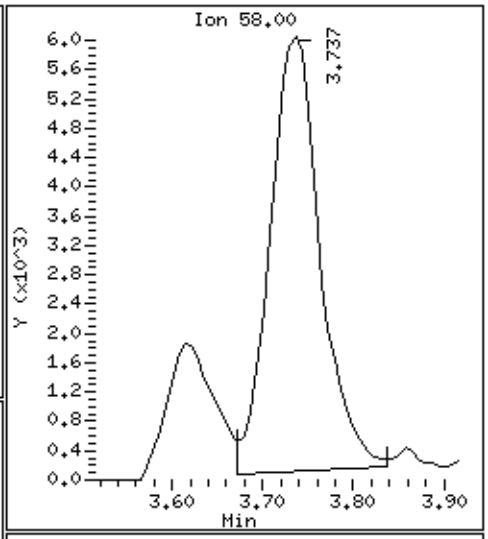
Column phase: RTX-624

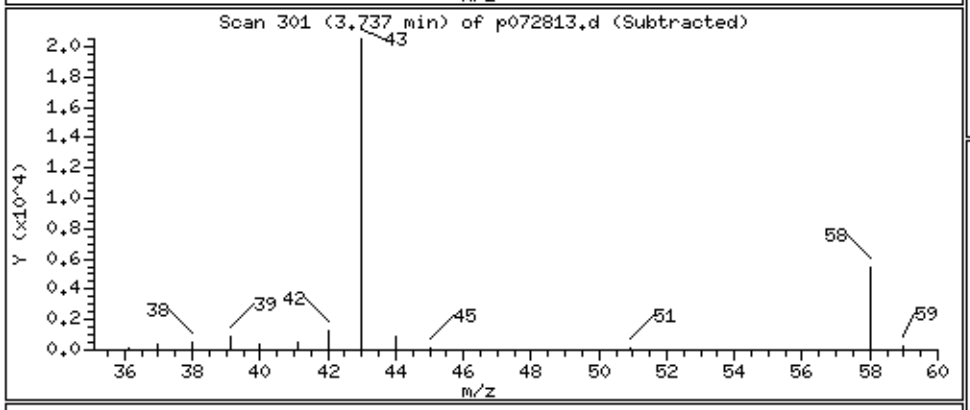
Column diameter: 0.25

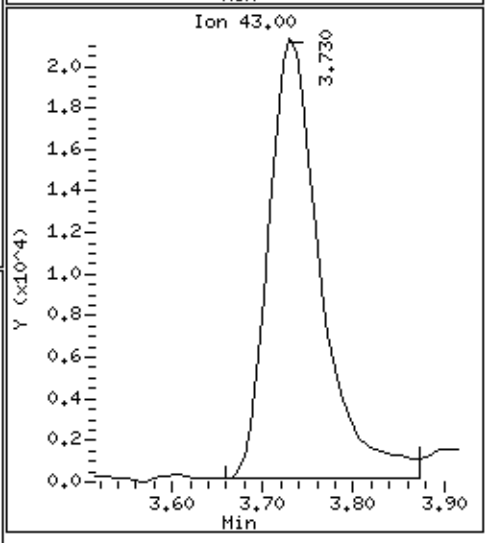
47 Acetone

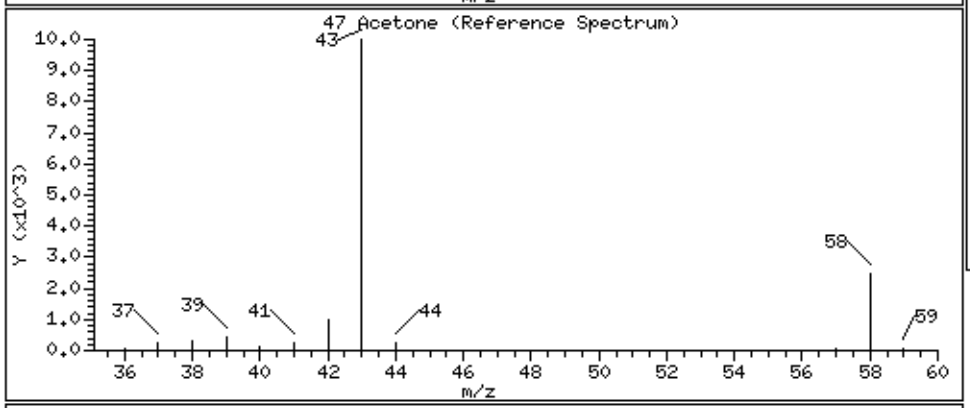
Concentration: 11.386 PPBV

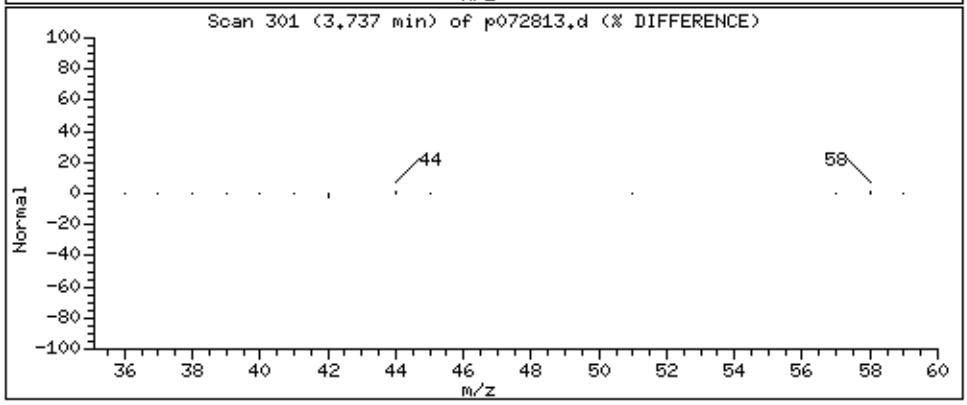












Data File: /chem/msdp.i/28JUL21.b/p072813.d

Date : 28-JUL-2021 17:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00711

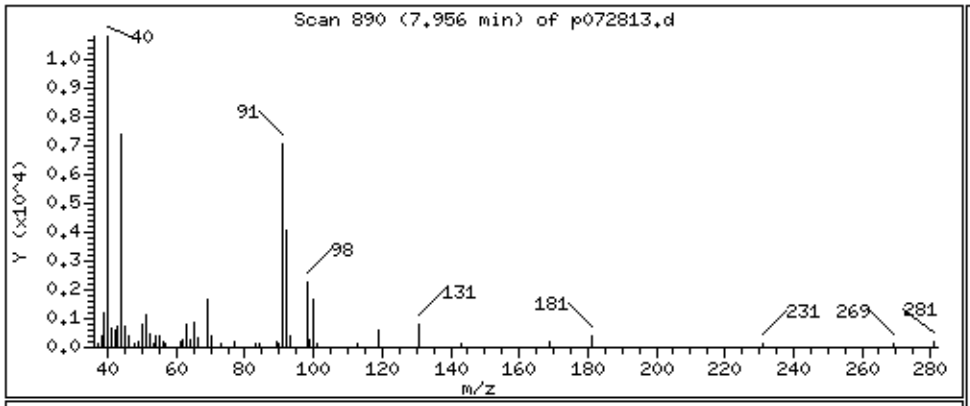
Operator: LD

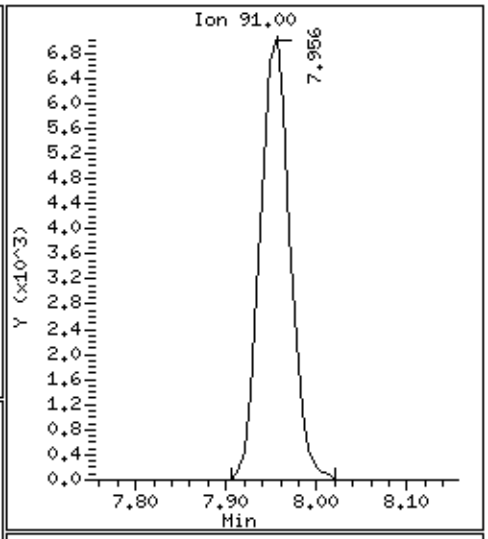
Column phase: RTX-624

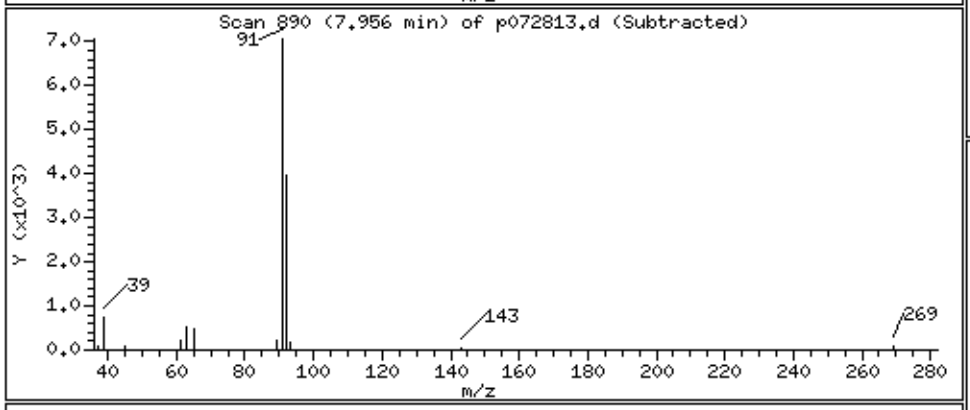
Column diameter: 0.25

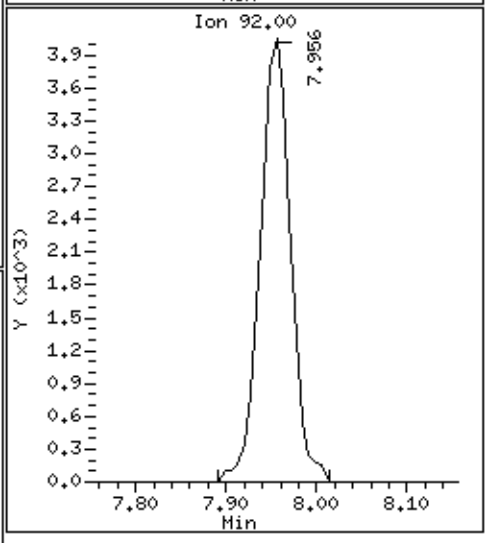
137 Toluene

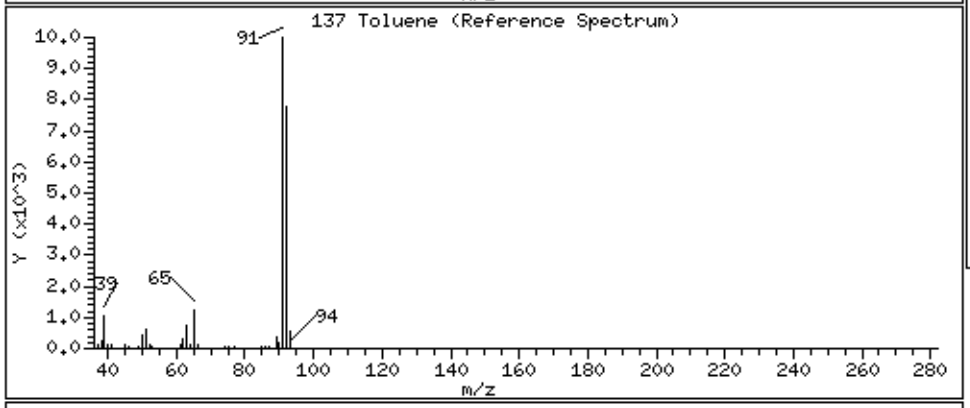
Concentration: 1.272 PPBV

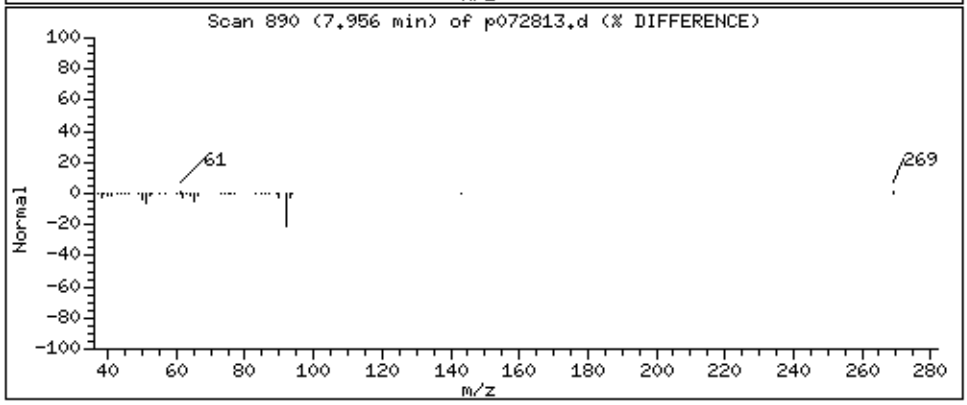












Data File: /chem/msdp.i/28JUL21.b/p072813.d

Page 5

Date : 28-JUL-2021 17:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00711

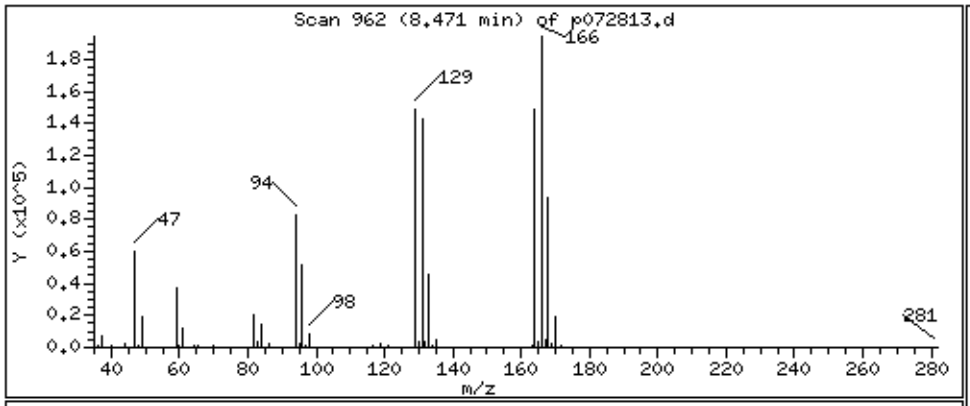
Operator: LD

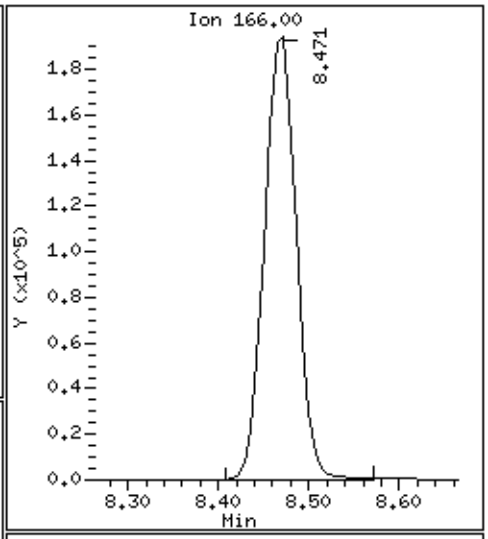
Column phase: RTX-624

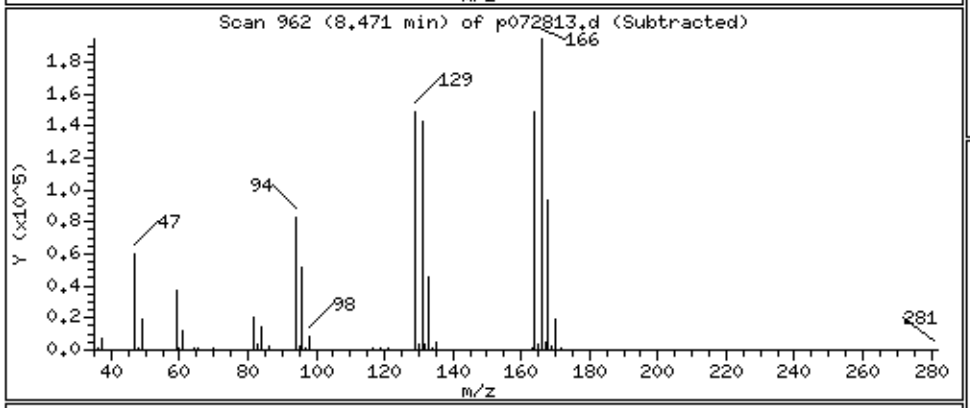
Column diameter: 0.25

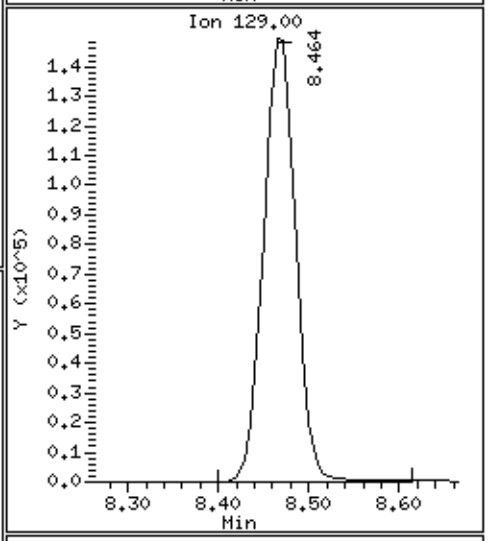
142 Tetrachloroethene

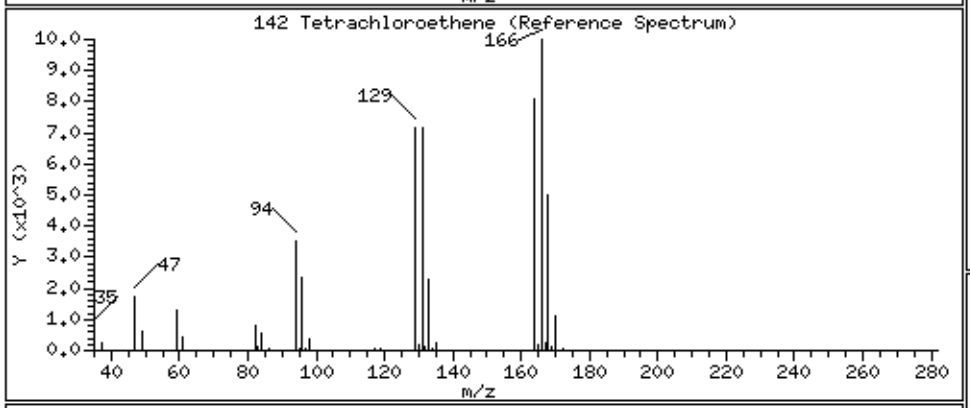
Concentration: 72.783 PPBV

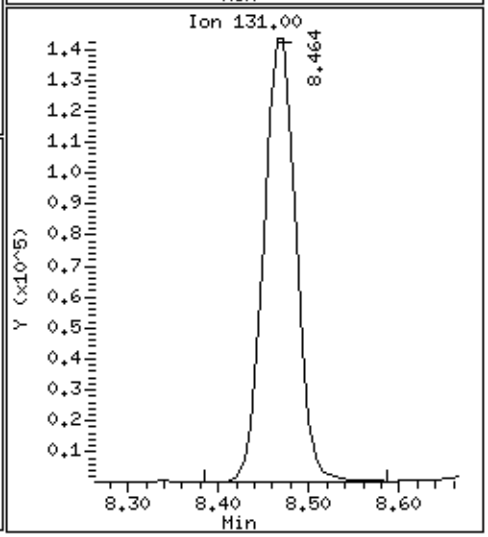


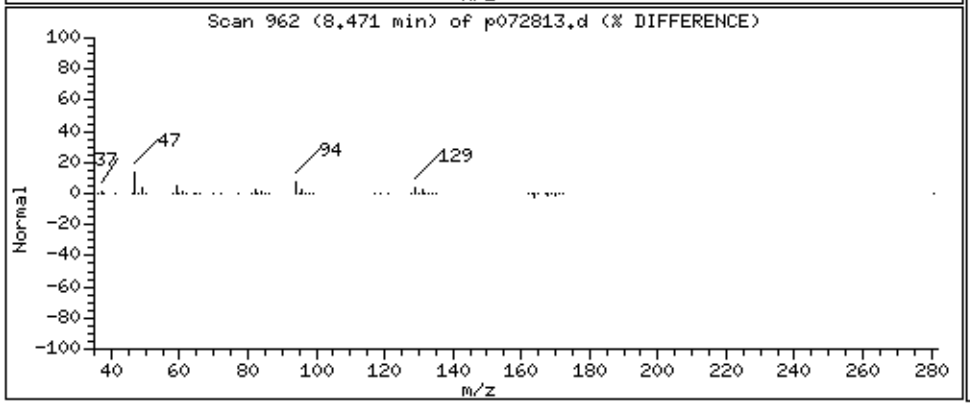












eurofins | Air Toxics

Client Sample ID: SG-VW20B-02

Lab ID#: 2107361-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072816**	**Date of Collection:**	**7/15/21 9:47:00 AM**
Dil. Factor:	**282**	**Date of Analysis:**	**7/28/21 07:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	560	Not Detected	3900	Not Detected
1,1,1-Trichloroethane	140	Not Detected	770	Not Detected
1,1,2,2-Tetrachloroethane	140	Not Detected	970	Not Detected
1,1,2-Trichloroethane	140	Not Detected	770	Not Detected
1,1-Dichloroethane	140	Not Detected	570	Not Detected
1,1-Dichloroethene	140	Not Detected	560	Not Detected
1,1-Difluoroethane	560	36000	1500	98000
1,2,3-Trichloropropane	560	Not Detected	3400	Not Detected
1,2,4-Trichlorobenzene	560	Not Detected	4200	Not Detected
1,2,4-Trimethylbenzene	140	Not Detected	690	Not Detected
1,2-Dibromo-3-chloropropane	560	Not Detected	5400	Not Detected
1,2-Dibromoethane (EDB)	140	Not Detected	1100	Not Detected
1,2-Dichlorobenzene	140	Not Detected	850	Not Detected
1,2-Dichloroethane	140	Not Detected	570	Not Detected
1,2-Dichloropropane	140	Not Detected	650	Not Detected
1,3,5-Trimethylbenzene	140	Not Detected	690	Not Detected
1,3-Butadiene	140	Not Detected	310	Not Detected
1,3-Dichlorobenzene	140	Not Detected	850	Not Detected
1,4-Dichlorobenzene	140	Not Detected	850	Not Detected
1,4-Dioxane	560	Not Detected	2000	Not Detected
2,2,4-Trimethylpentane	140	Not Detected	660	Not Detected
2-Butanone (Methyl Ethyl Ketone)	560	Not Detected	1700	Not Detected
2-Hexanone	560	Not Detected	2300	Not Detected
2-Propanol	560	Not Detected	1400	Not Detected
3-Chloropropene	560	Not Detected	1800	Not Detected
4-Ethyltoluene	140	Not Detected	690	Not Detected
4-Methyl-2-pentanone	140	190	580	790
Acetone	1400	Not Detected	3300	Not Detected
Acrolein	560	Not Detected	1300	Not Detected
Acrylonitrile	560	Not Detected	1200	Not Detected
alpha-Chlorotoluene	140	Not Detected	730	Not Detected
Benzene	140	Not Detected	450	Not Detected
Bromodichloromethane	140	Not Detected	940	Not Detected
Bromoform	140	Not Detected	1400	Not Detected
Bromomethane	1400	Not Detected	5500	Not Detected
Carbon Disulfide	560	Not Detected	1800	Not Detected
Carbon Tetrachloride	140	Not Detected	890	Not Detected
Chlorobenzene	140	Not Detected	650	Not Detected
Chloroethane	560	Not Detected	1500	Not Detected
Chloroform	140	Not Detected	690	Not Detected
Chloromethane	1400	Not Detected	2900	Not Detected
cis-1,2-Dichloroethene	140	Not Detected	560	Not Detected

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Client Sample ID: SG-VW20B-02

Lab ID#: 2107361-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072816**	**Date of Collection:**	**7/15/21 9:47:00 AM**
Dil. Factor:	**282**	**Date of Analysis:**	**7/28/21 07:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	140	Not Detected	640	Not Detected
Cumene	140	Not Detected	690	Not Detected
Cyclohexane	140	Not Detected	480	Not Detected
Dibromochloromethane	140	Not Detected	1200	Not Detected
Dibromomethane	560	Not Detected	4000	Not Detected
Ethanol	1400	Not Detected	2600	Not Detected
Ethyl Acetate	560	Not Detected	2000	Not Detected
Ethyl Benzene	140	Not Detected	610	Not Detected
Ethyl-tert-butyl ether	560	Not Detected	2400	Not Detected
Freon 11	140	Not Detected	790	Not Detected
Freon 12	140	Not Detected	700	Not Detected
Freon 113	140	Not Detected	1100	Not Detected
Freon 114	140	Not Detected	980	Not Detected
Freon 134a	560	Not Detected	2400	Not Detected
Heptane	140	Not Detected	580	Not Detected
Hexachlorobutadiene	560	Not Detected	6000	Not Detected
Hexachloroethane	560	Not Detected	5500	Not Detected
Hexane	140	Not Detected	500	Not Detected
Iodomethane	1400	Not Detected	8200	Not Detected
Isopropyl ether	560	Not Detected	2400	Not Detected
m,p-Xylene	140	Not Detected	610	Not Detected
Methyl tert-butyl ether	560	Not Detected	2000	Not Detected
Methylene Chloride	1400	Not Detected	4900	Not Detected
Naphthalene	280	Not Detected	1500	Not Detected
o-Xylene	140	Not Detected	610	Not Detected
Propylbenzene	140	Not Detected	690	Not Detected
Propylene	560	Not Detected	970	Not Detected
Styrene	140	Not Detected	600	Not Detected
tert-Amyl methyl ether	560	Not Detected	2400	Not Detected
tert-Butyl alcohol	560	Not Detected	1700	Not Detected
Tetrachloroethene	140	Not Detected	960	Not Detected
Tetrahydrofuran	140	Not Detected	420	Not Detected
Toluene	140	Not Detected	530	Not Detected
TPH ref. to Gasoline (MW=100)	14000	Not Detected	58000	Not Detected
trans-1,2-Dichloroethene	140	Not Detected	560	Not Detected
trans-1,3-Dichloropropene	140	Not Detected	640	Not Detected
Trichloroethene	140	Not Detected	760	Not Detected
Vinyl Acetate	560	Not Detected	2000	Not Detected
Vinyl Bromide	560	Not Detected	2500	Not Detected
Vinyl Chloride	140	Not Detected	360	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW20B-02

Lab ID#: 2107361-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072816**	**Date of Collection: 7/15/21 9:47:00 AM**	
Dil. Factor:	**282**	**Date of Analysis: 7/28/21 07:20 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072816.d
Lab Smp Id: 2107361-08A
Inj Date : 28-JUL-2021 19:20
Operator : LD Inst ID: msdp.i
Smp Info : 140mL O0864
Misc Info : 4.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 10
Dil Factor: 282.00000
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	156897	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123119				48.23- 108.23	78.47
5.785	5.778 (1.000)	49	332413				150.57- 210.57	211.87
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	569766	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	85309				0.00- 45.71	14.97
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	578799	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	304672				23.78- 83.78	52.64
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	215845	24.9280	24.928		80.00- 120.00	100.00(a)
6.315	6.308 (1.092)	67	107593				27.21- 87.21	49.85
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	625473	25.2803	25.280		80.00- 120.00	100.00(a)
7.891	7.891 (1.184)	70	65757				0.00- 40.44	10.51

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	406969			34.95- 94.95	65.07
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	369420	24.8552	24.855	80.00- 120.00	100.00(a)
10.921	10.914 (1.154)	95	445200			95.92- 155.92	120.51
10.921	10.921 (1.154)	176	350653			66.89- 126.89	94.92
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	455519	128.086	36120	80.00- 120.00	100.00
1.703	1.744 (0.294)	51	1368949			597.63- 657.63	300.52
1.703	1.703 (0.294)	47	238160			33.72- 93.72	52.28
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.891	7.798 (1.184)	58	6714	0.68590	193.42	80.00- 120.00	100.00
7.891	7.798 (1.184)	43	3842			242.35- 302.35	57.23
0.000	7.798 (0.000)	85	0			3.24- 63.24	0.00

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: p072816.d
Lab Smp Id: 2107361-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 4.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	156897	-2.15
108 1,4-Difluorobenze	582857	349714	816000	569766	-2.25
153 Chlorobenzene-d5	560035	336021	784049	578799	3.35

		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.

Report Date: 29-Jul-2021 13:32

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-08A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 4.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.928	99.71	70-130
$ 134 Toluene-d8	25.000	25.280	101.12	70-130
$ 170 4-Bromofluorobenz	25.000	24.855	99.42	70-130

Data File: /chem/msdp.i/28JUL21.b/p072816.d

Date : 28-JUL-2021 19:20

Client ID:

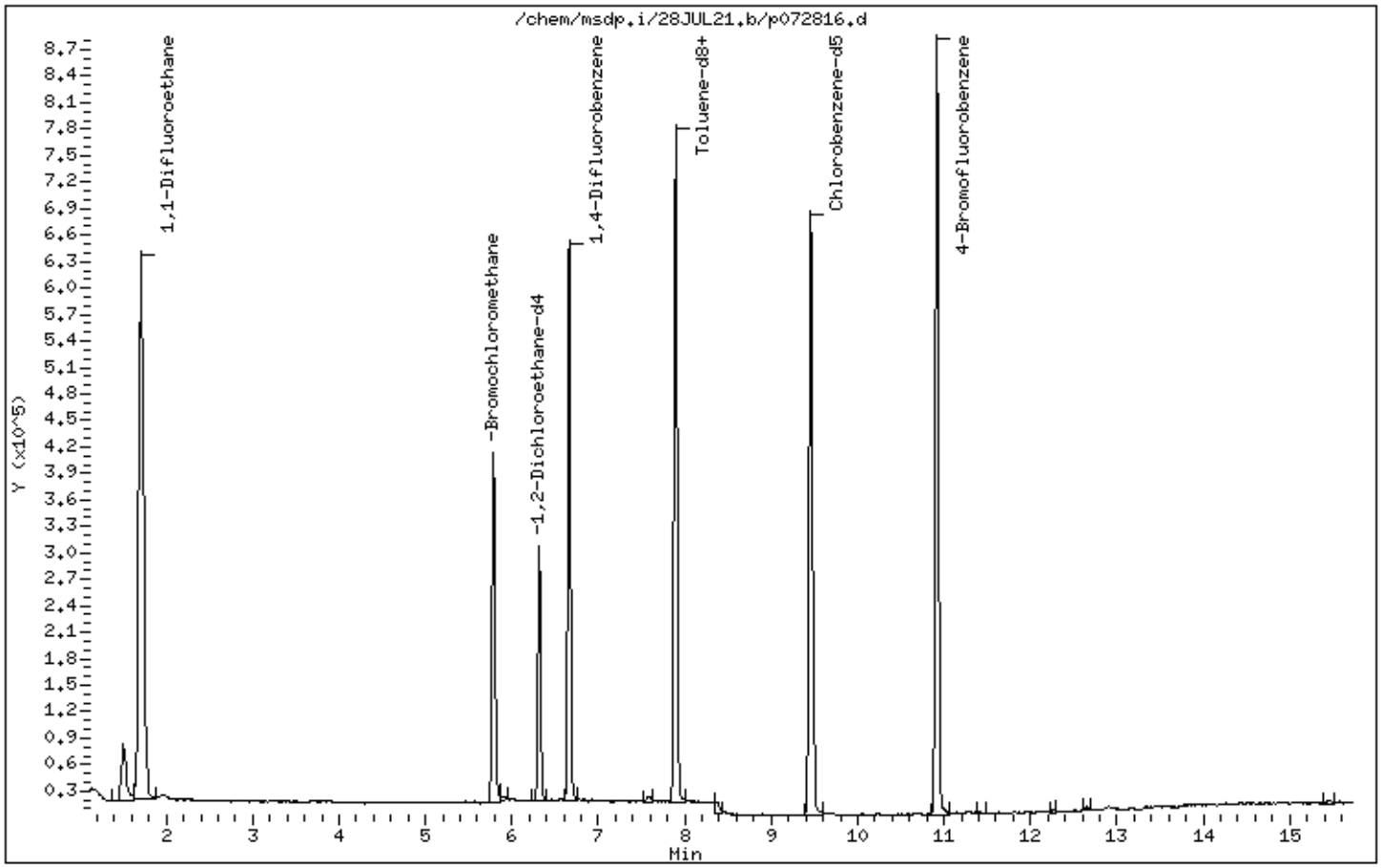
Instrument: msdp.i

Sample Info: 140mL 00864

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072816.d

Date : 28-JUL-2021 19:20

Client ID:

Instrument: msdp.i

Sample Info: 140mL 00864

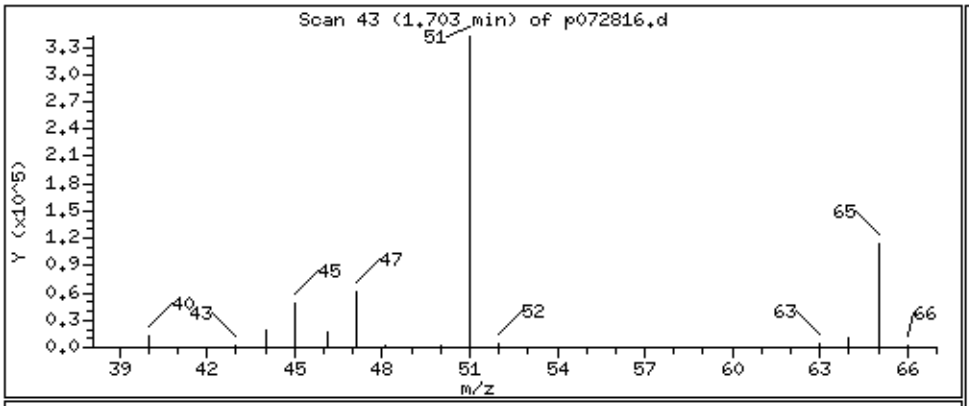
Operator: LD

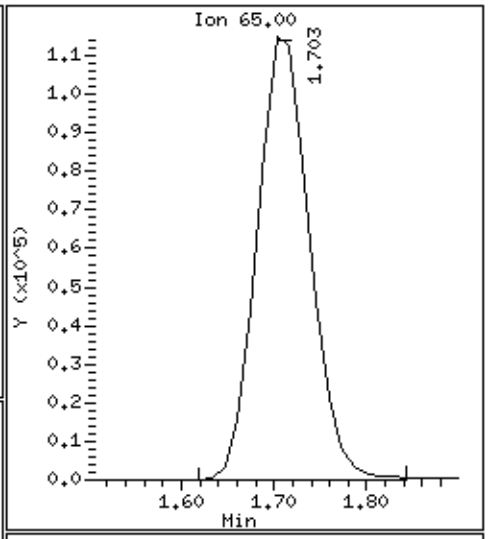
Column phase: RTX-624

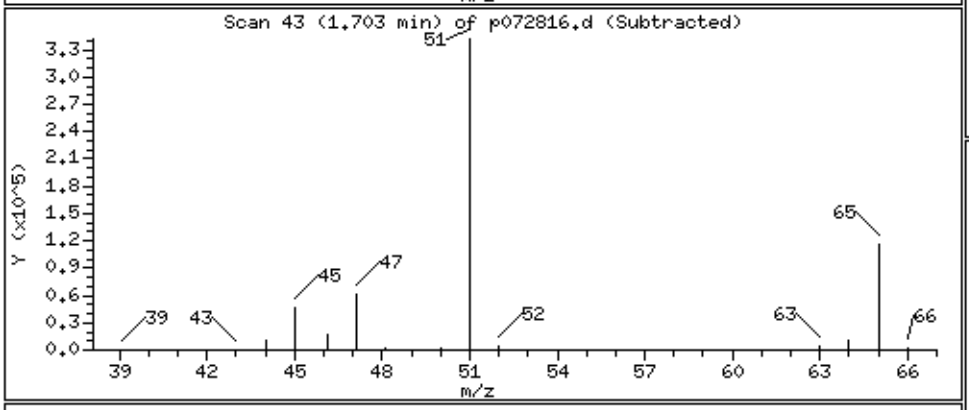
Column diameter: 0.25

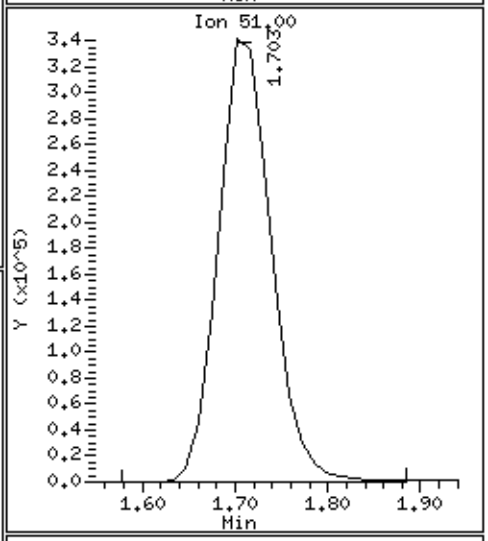
7 1,1-Difluoroethane

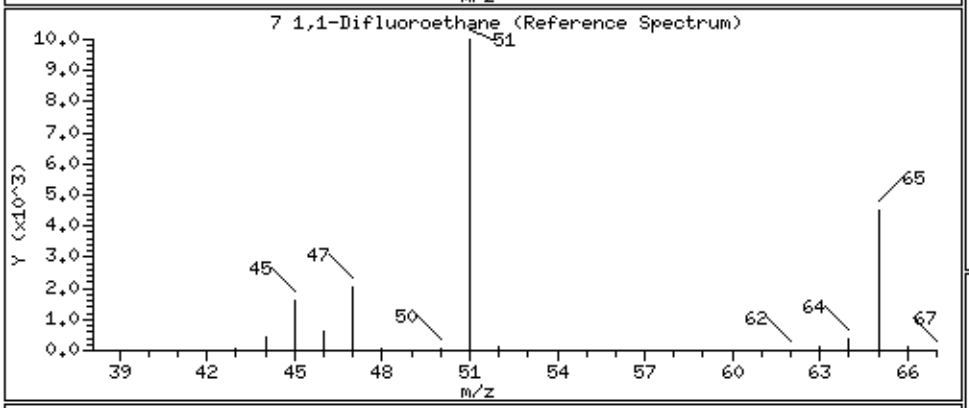
Concentration: 36120 PPBV

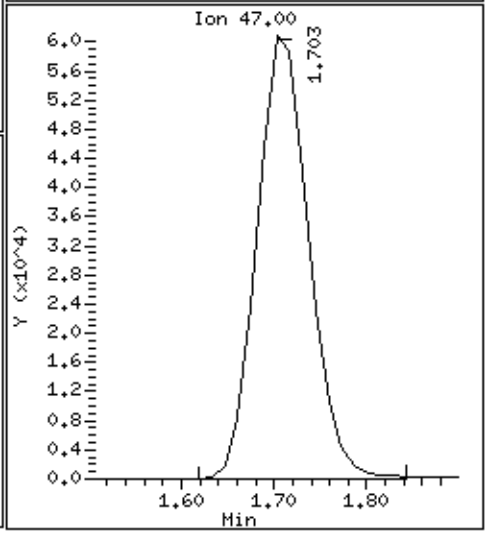


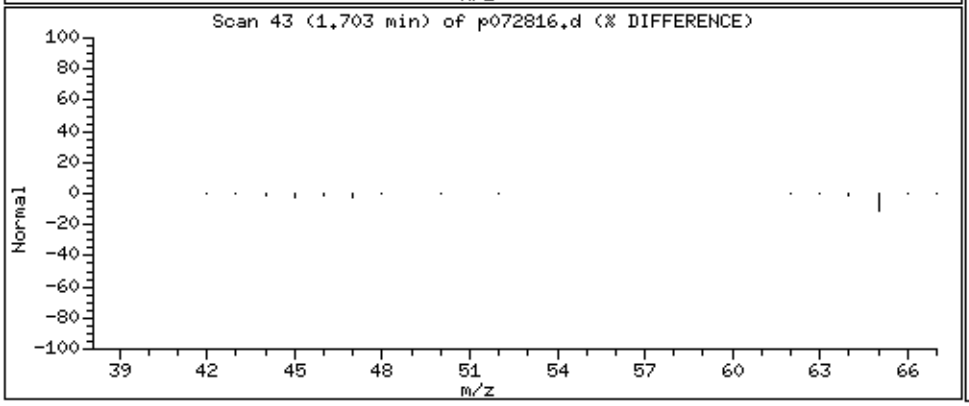












Data File: /chem/msdp.i/28JUL21.b/p072816.d

Date : 28-JUL-2021 19:20

Client ID:

Instrument: msdp.i

Sample Info: 140mL 00864

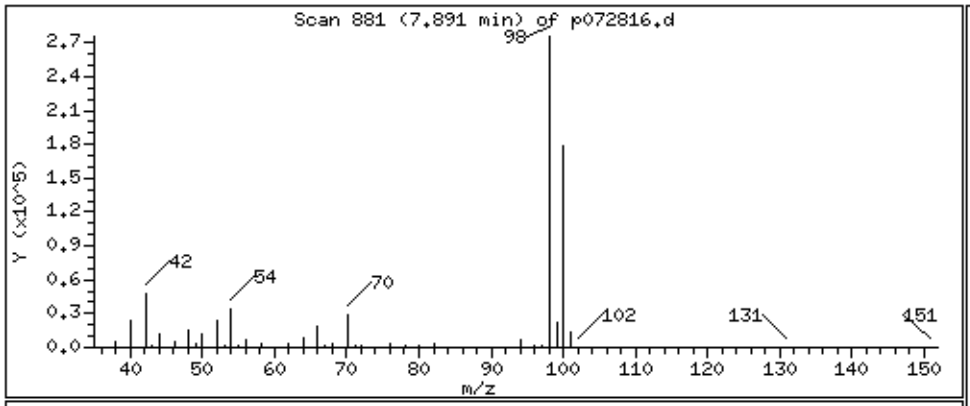
Operator: LD

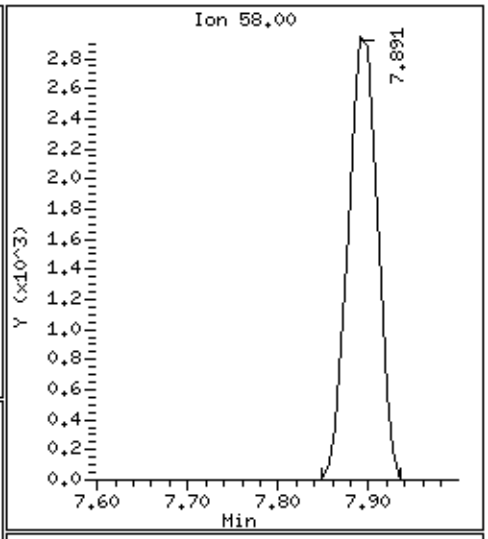
Column phase: RTX-624

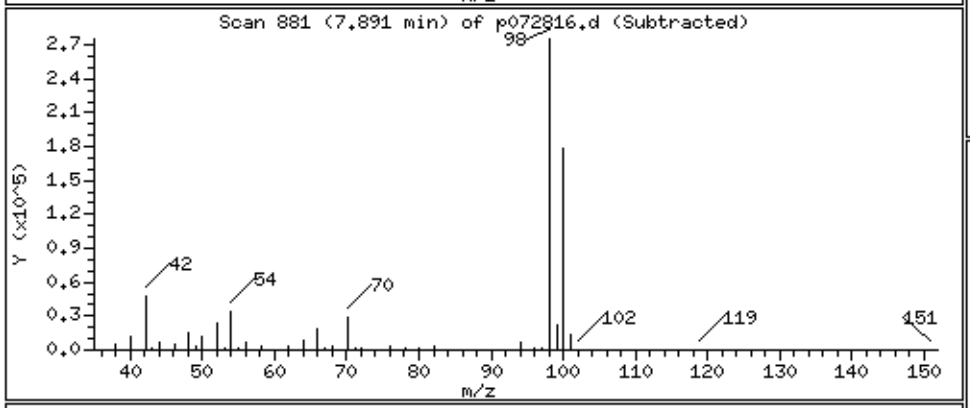
Column diameter: 0.25

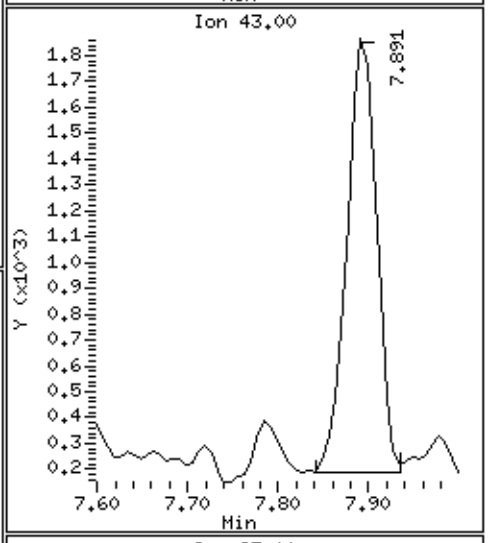
131 4-Methyl-2-pentanone

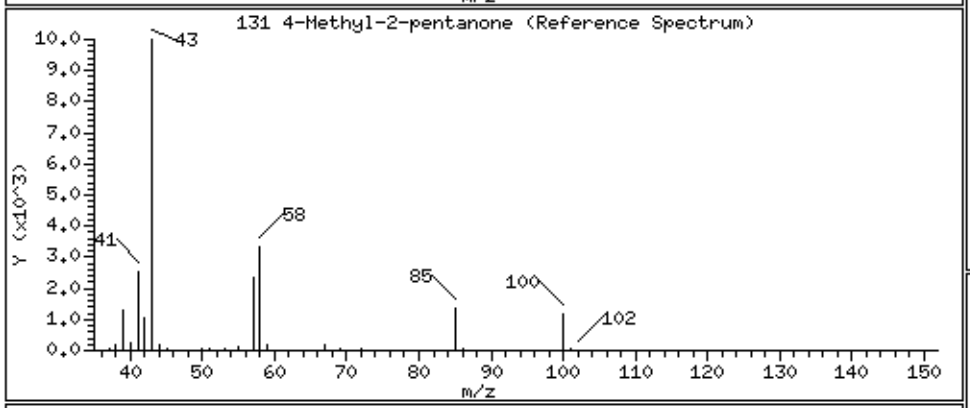
Concentration: 193.42 PPBV

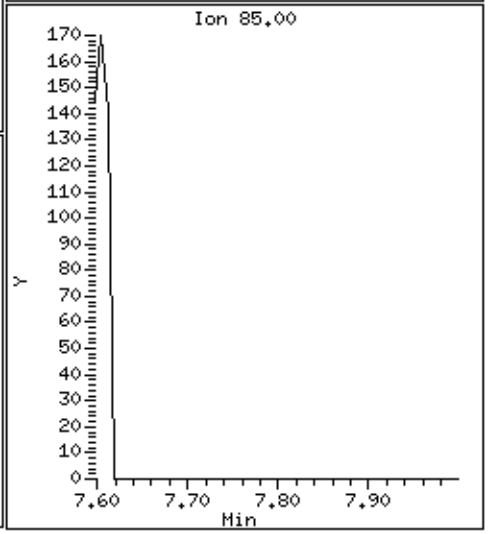


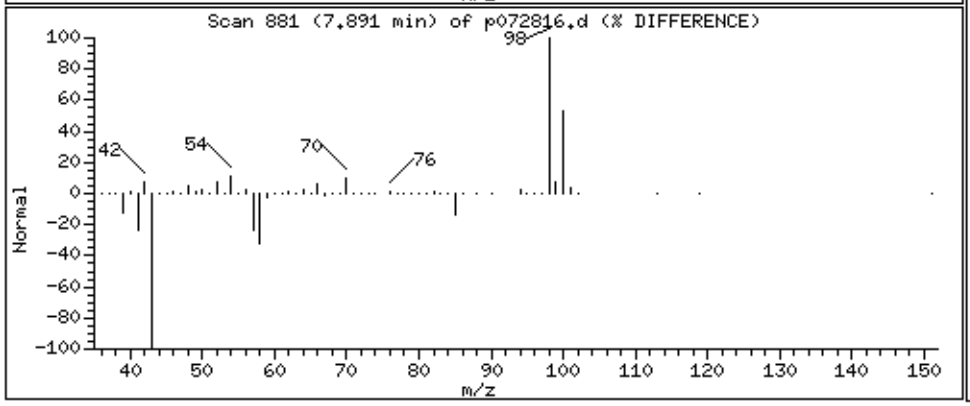












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Client Sample ID: SG-VW24A-04

Lab ID#: 2107361-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072814**	**Date of Collection:**	**7/15/21 11:47:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/28/21 06:21 PM**

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	9.3	11	25
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	4.4	12	13
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	79	24	190
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	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-VW24A-04

Lab ID#: 2107361-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072814**	**Date of Collection:**	**7/15/21 11:47:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/28/21 06:21 PM**

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	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	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	46	7.0	310
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-VW24A-04

Lab ID#: 2107361-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072814**	**Date of Collection:**	**7/15/21 11:47:00 AM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**7/28/21 06:21 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	101	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/28JUL21.b/p072814.d
Lab Smp Id: 2107361-09A
Inj Date : 28-JUL-2021 18:21
Operator : LD Inst ID: msdp.i
Smp Info : 200ml N3406
Misc Info : 5.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 8
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		
5.785	5.778 (1.000)	130	155981	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	126092				48.23- 108.23	80.84
5.785	5.778 (1.000)	49	330685				150.57- 210.57	212.00
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	589531	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	87190				0.00- 45.71	14.79
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	602641	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	310418				23.78- 83.78	51.51
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	222436	25.8401	25.840		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	111940				27.21- 87.21	50.32
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	647984	25.3121	25.312		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68720				0.00- 40.44	10.61

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	414050			34.95- 94.95	63.90
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	379079	24.4960	24.496	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	459642			95.92- 155.92	121.25
10.921	10.921 (1.154)	176	366153			66.89- 126.89	96.59
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.717	1.703 (0.297)	65	15976	4.51861	9.308	80.00- 120.00	100.00
1.717	1.744 (0.297)	51	59438			597.63- 657.63	372.03
1.717	1.703 (0.297)	47	9225			33.72- 93.72	57.74
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	156114	38.1770	78.645	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	552266			302.95- 362.95	353.76
86 2-Butanone					CAS #: 78-93-3		
5.563	5.556 (0.962)	72	7529	2.13554	4.399	80.00- 120.00	100.00
5.563	5.563 (0.962)	43	61229			1214.50-1274.50	813.19
5.563	5.556 (0.962)	57	3746			14.68- 74.68	49.75
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	309018	22.4991	46.348	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	237725			47.84- 107.84	76.93
8.464	8.464 (0.895)	131	229641			45.29- 105.29	74.31

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072814.d
Lab Smp Id: 2107361-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 5.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	155981	-2.72
108 1,4-Difluorobenze	582857	349714	816000	589531	1.15
153 Chlorobenzene-d5	560035	336021	784049	602641	7.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	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.

Report Date: 29-Jul-2021 13:30

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-09A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 5.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.840	103.36	70-130
$ 134 Toluene-d8	25.000	25.312	101.25	70-130
$ 170 4-Bromofluorobenz	25.000	24.496	97.98	70-130

Data File: /chem/msdp.i/28JUL21.b/p072814.d

Date : 28-JUL-2021 18:21

Client ID:

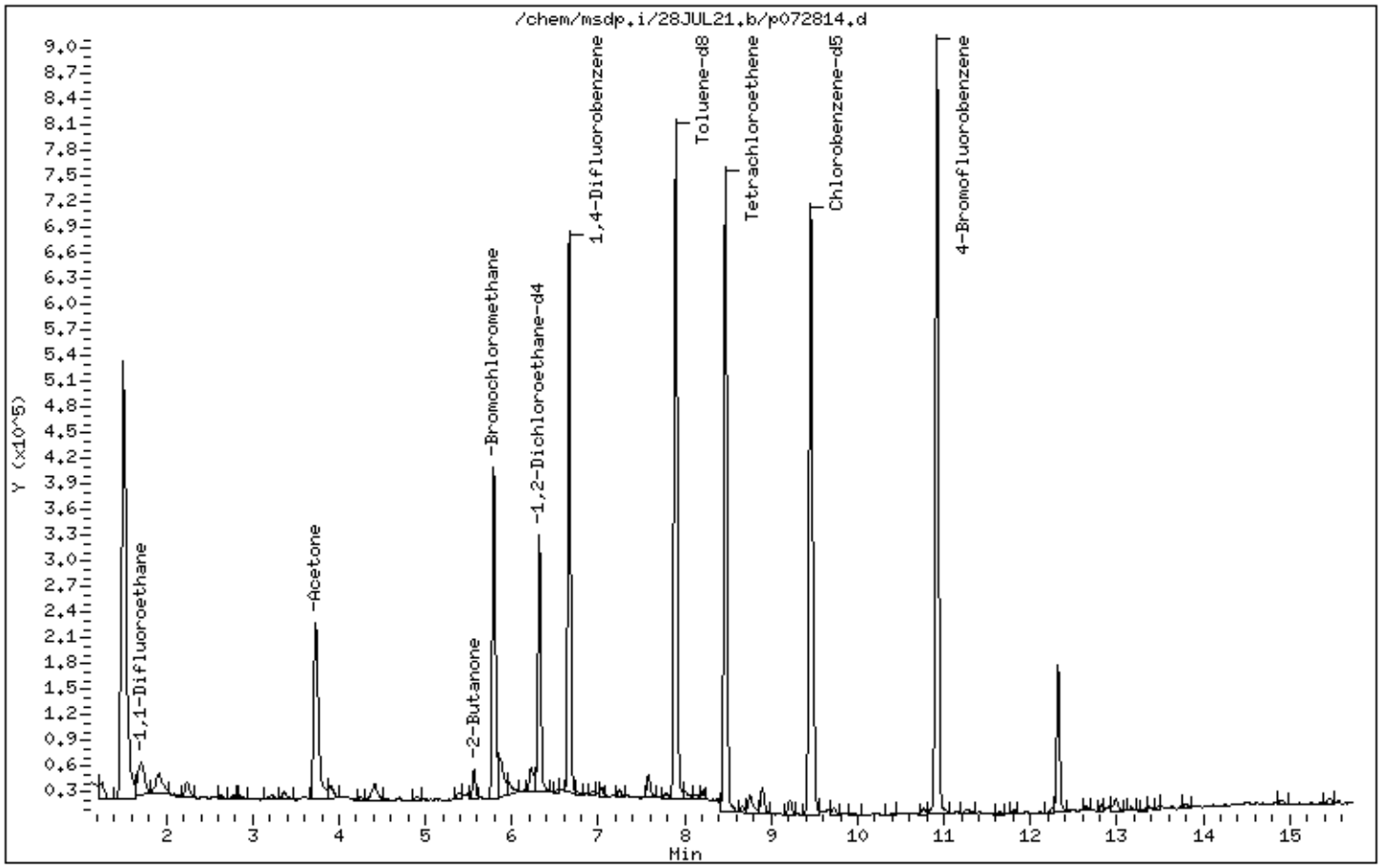
Instrument: msdp.i

Sample Info: 200ml N3406

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072814.d

Date : 28-JUL-2021 18:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3406

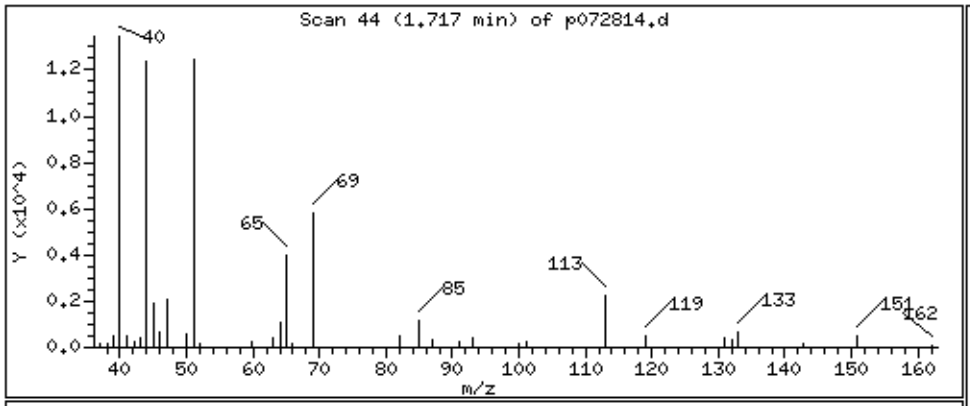
Operator: LD

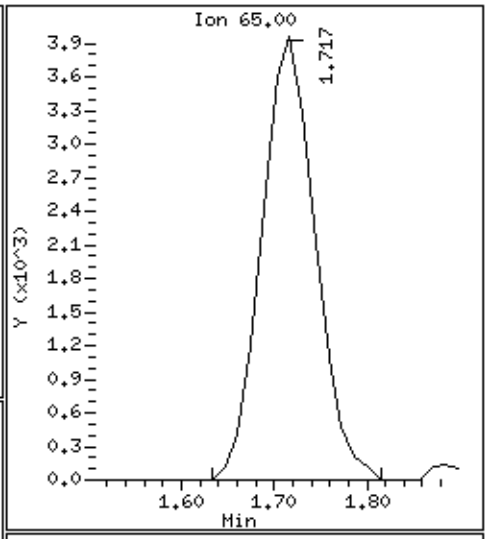
Column phase: RTX-624

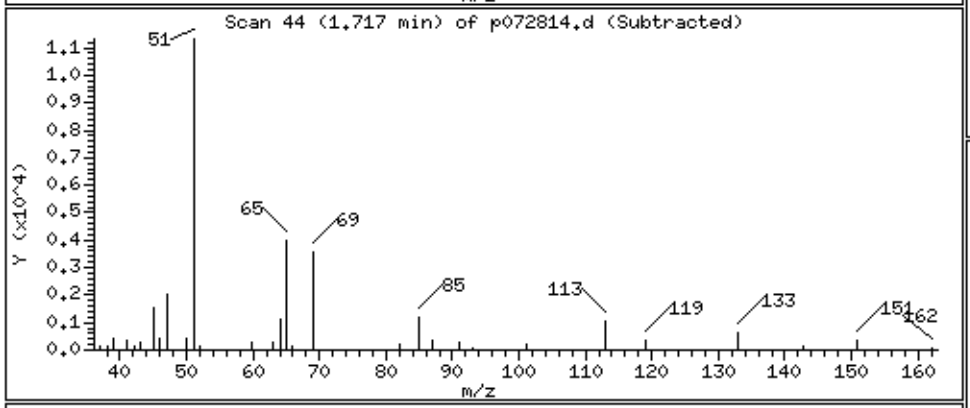
Column diameter: 0.25

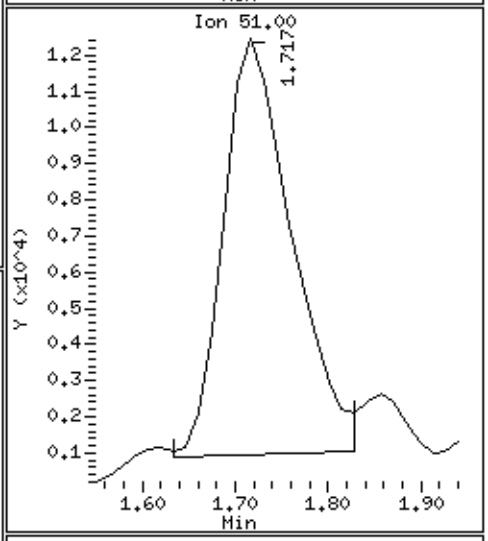
7 1,1-Difluoroethane

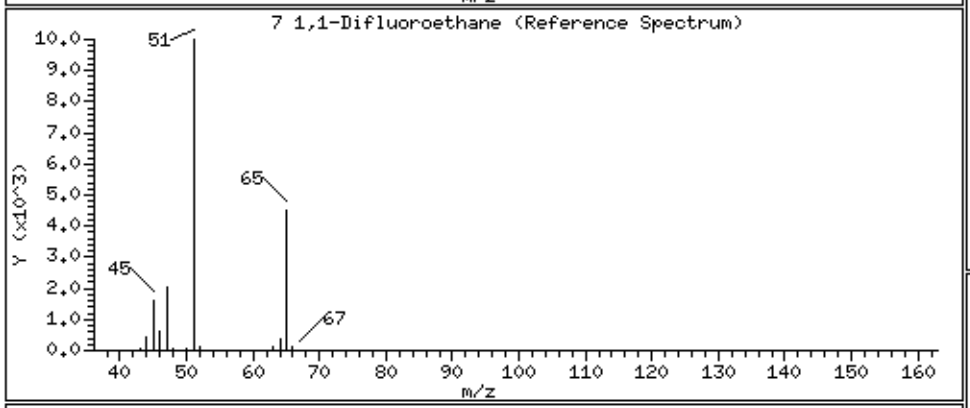
Concentration: 9.308 PPBV

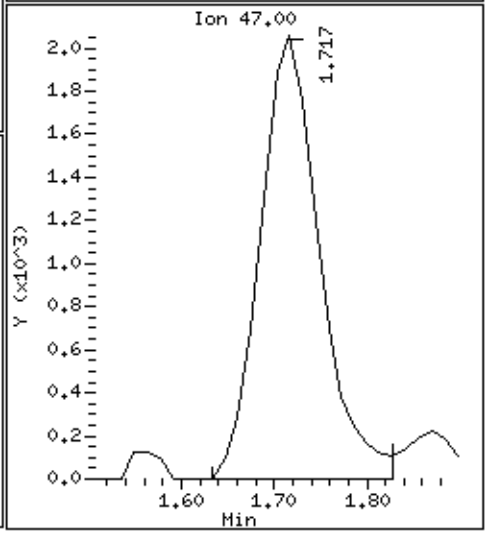


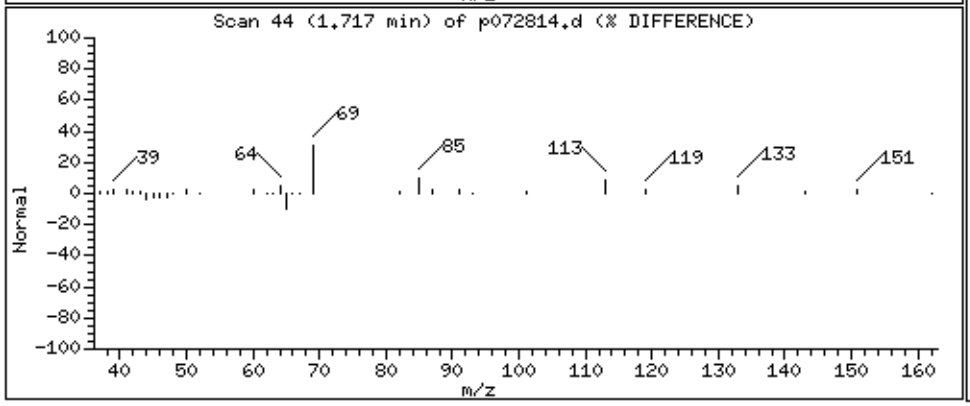












Data File: /chem/msdp.i/28JUL21.b/p072814.d

Date : 28-JUL-2021 18:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3406

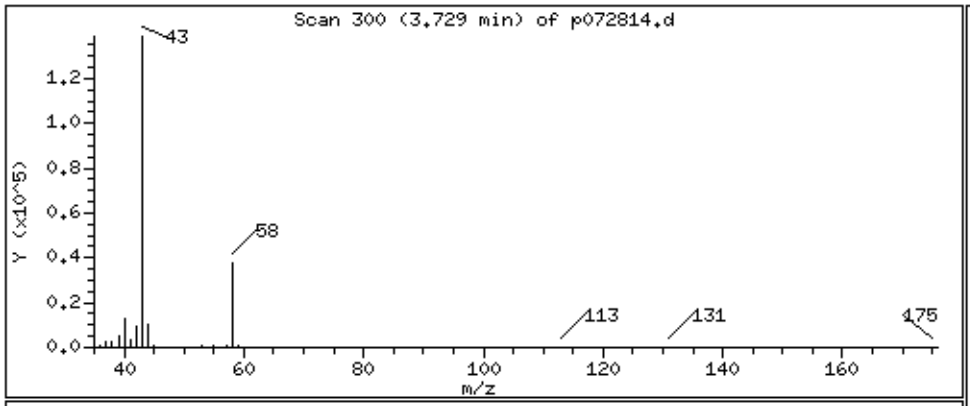
Operator: LD

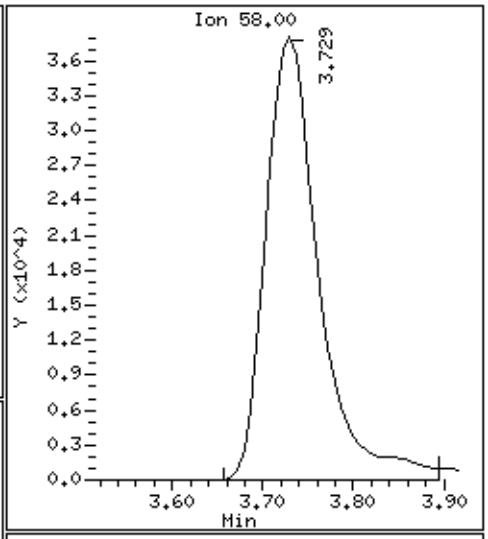
Column phase: RTX-624

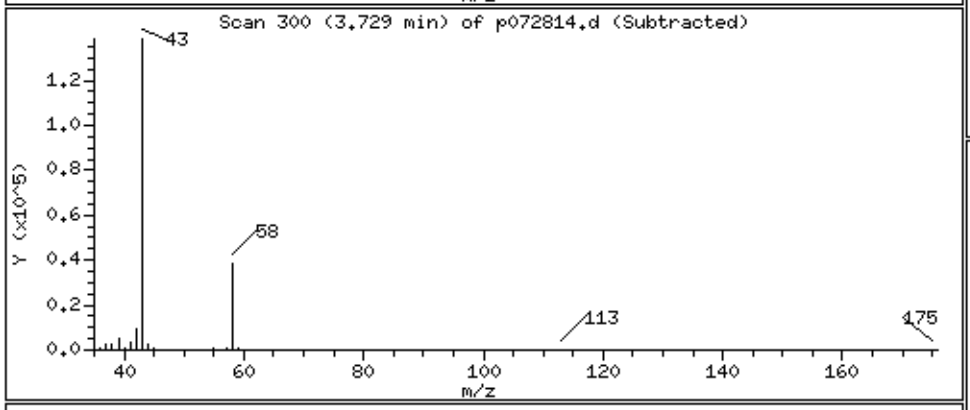
Column diameter: 0.25

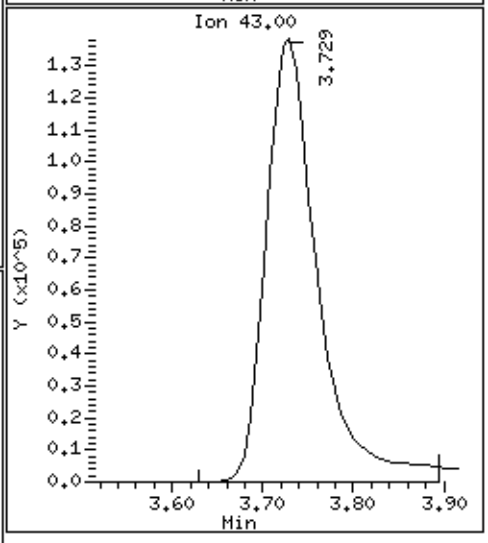
47 Acetone

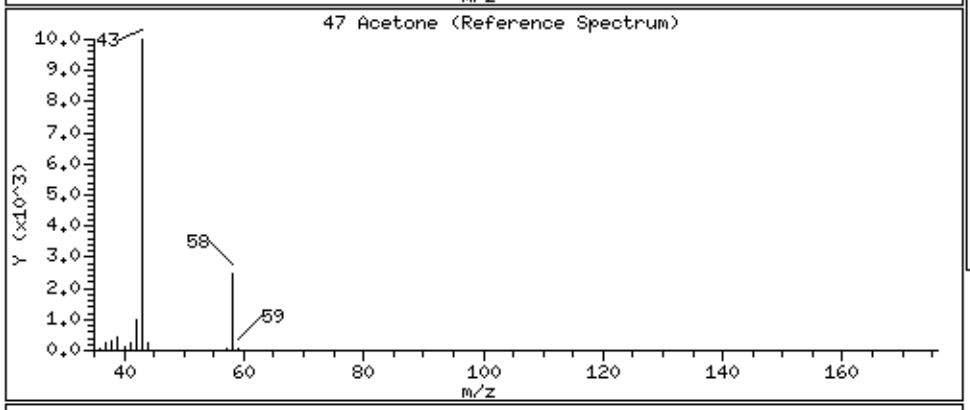
Concentration: 78.645 PPBV

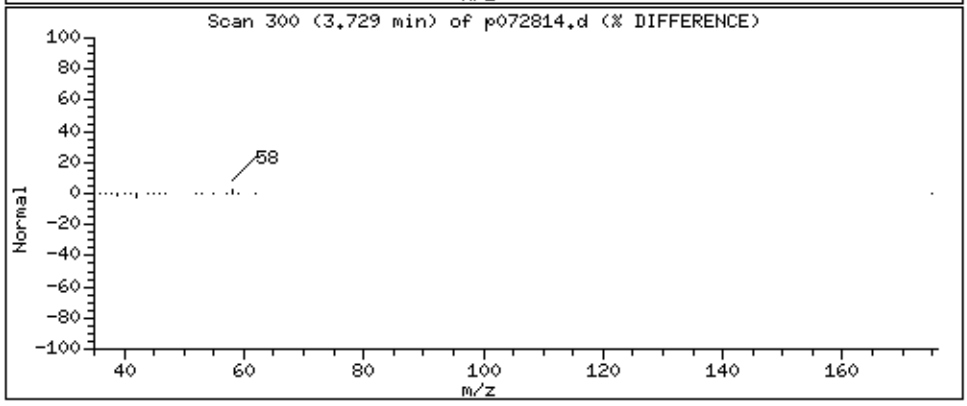












Data File: /chem/msdp.i/28JUL21.b/p072814.d

Date : 28-JUL-2021 18:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3406

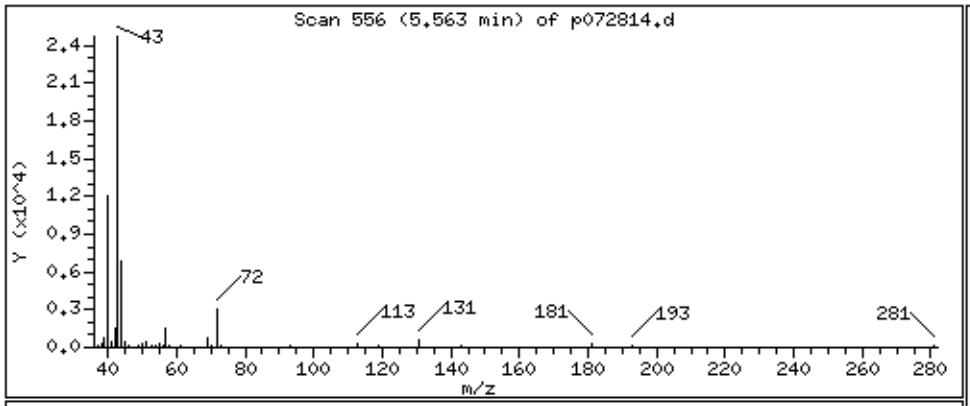
Operator: LD

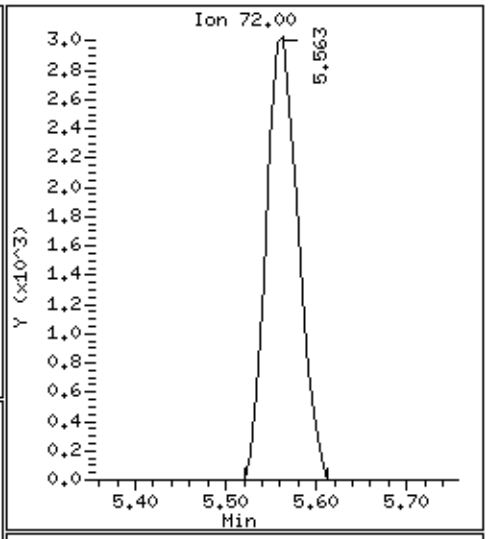
Column phase: RTX-624

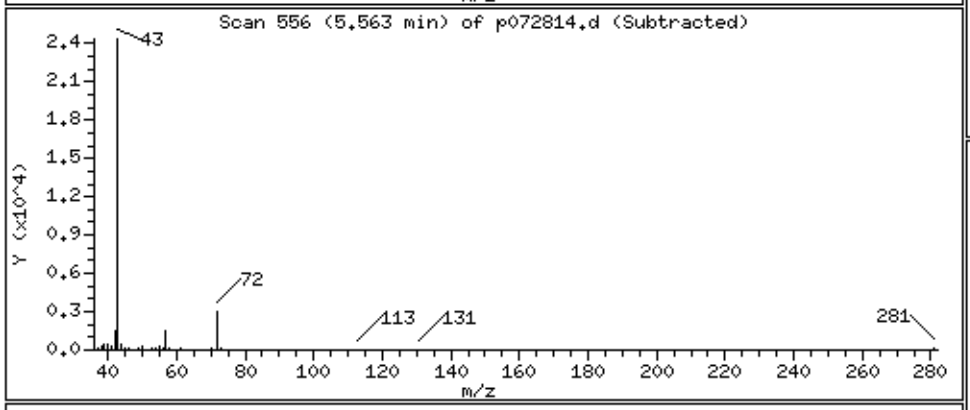
Column diameter: 0.25

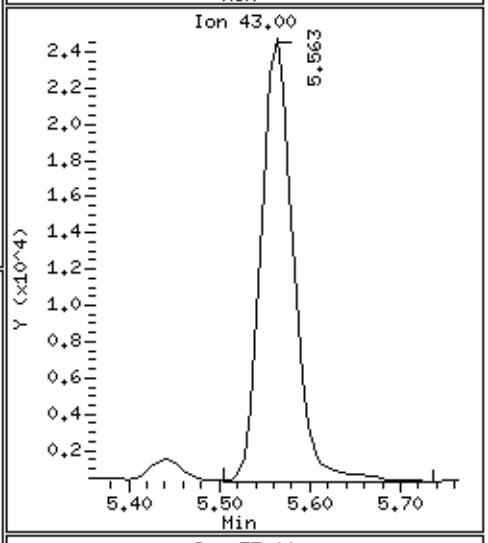
86 2-Butanone

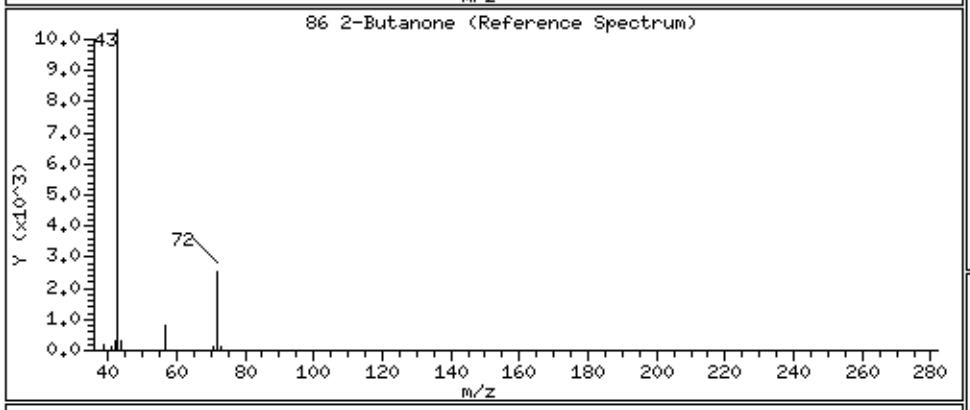
Concentration: 4.399 PPBV

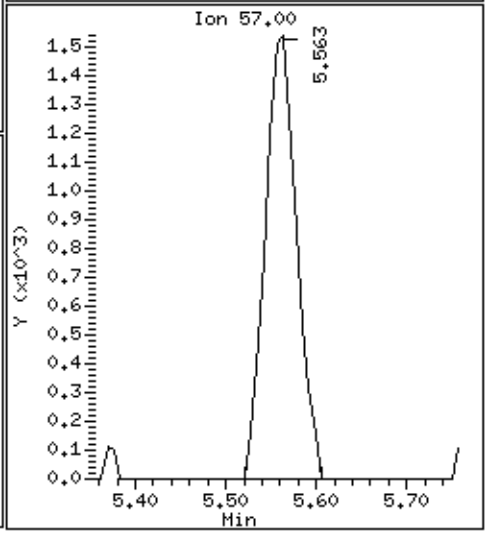


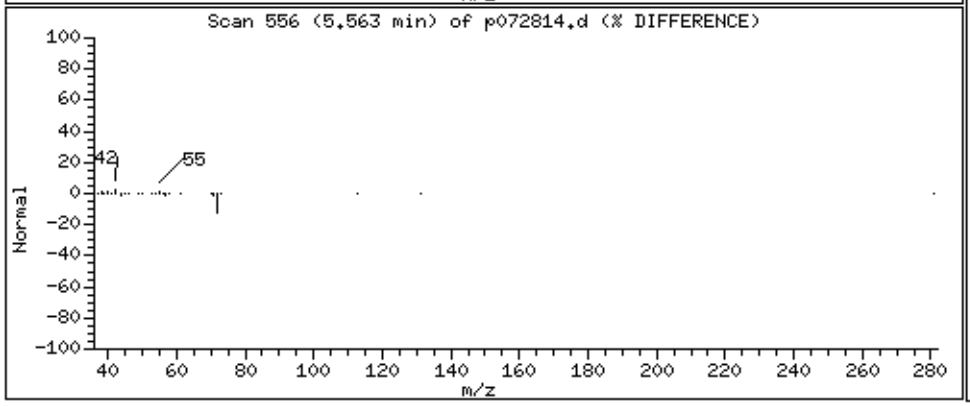












Data File: /chem/msdp.i/28JUL21.b/p072814.d

Page 5

Date : 28-JUL-2021 18:21

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3406

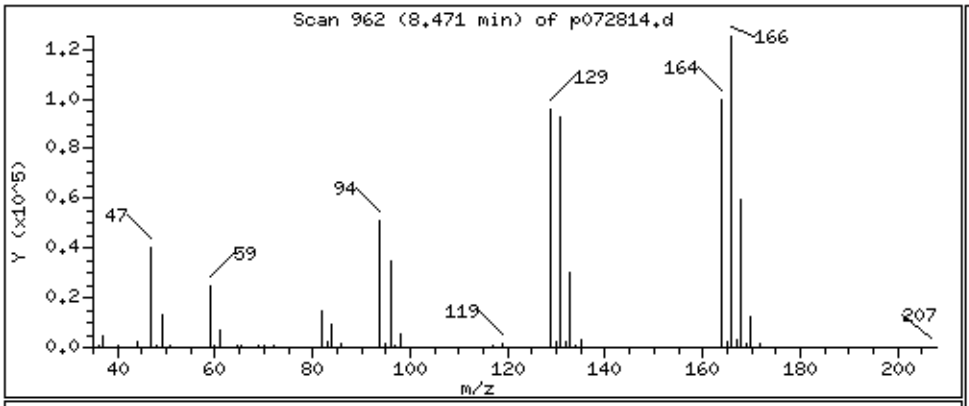
Operator: LD

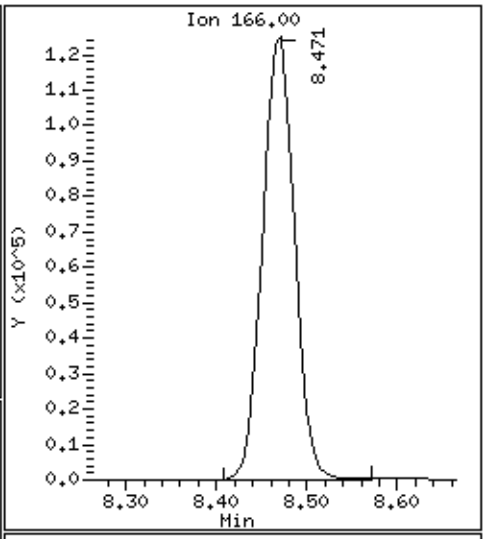
Column phase: RTX-624

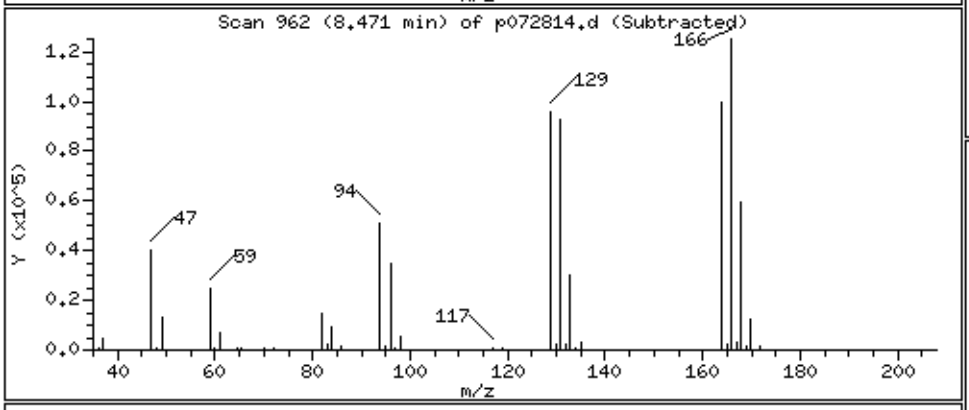
Column diameter: 0.25

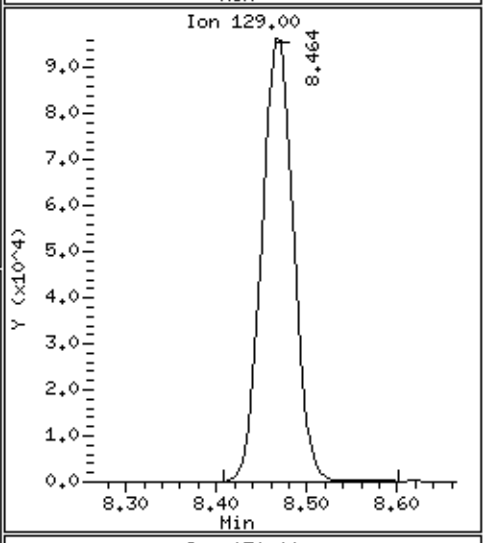
142 Tetrachloroethene

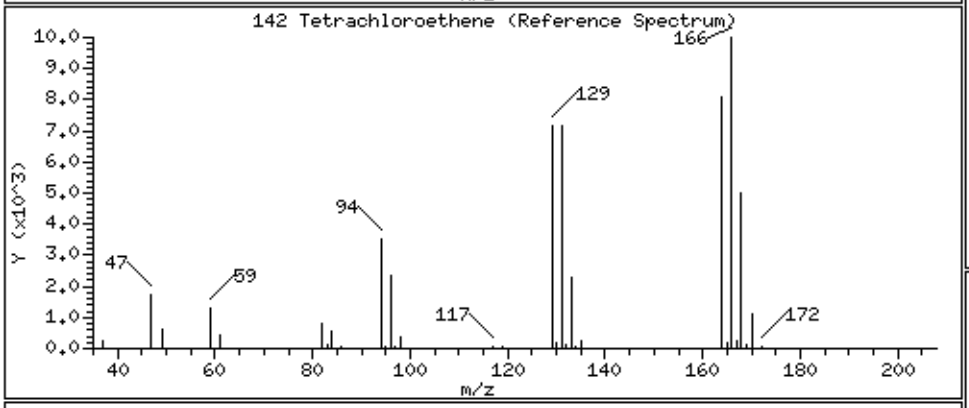
Concentration: 46.348 PPBV

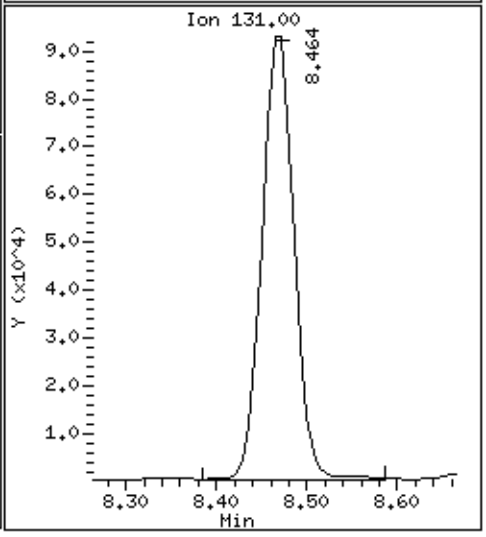


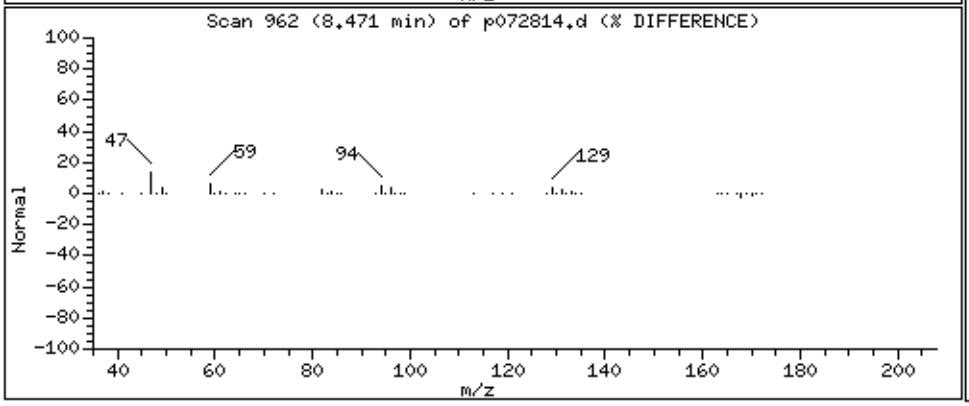












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Client Sample ID: SG-VW21A-03

Lab ID#: 2107361-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072815**	**Date of Collection:**	**7/15/21 2:29:00 PM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**7/28/21 06:51 PM**

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	160	12	450
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	5.3	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	13	Not Detected
2-Hexanone	4.3	Not Detected	18	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	5.3	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	9.3	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	7.2	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	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	1.5	5.2	7.2
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-VW21A-03

Lab ID#: 2107361-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072815**	**Date of Collection:**	**7/15/21 2:29:00 PM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**7/28/21 06:51 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	3.7	Not Detected
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
Ethanol	11	Not Detected	20	Not Detected
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	2.7	5.3	13
Freon 113	1.1	Not Detected	8.2	Not Detected
Freon 114	1.1	Not Detected	7.5	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	41	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
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	5.3	Not Detected
Propylene	4.3	Not Detected	7.4	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	16	7.2	110
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	8.5	4.0	32
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	3.3	5.8	18
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-VW21A-03

Lab ID#: 2107361-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072815**	**Date of Collection: 7/15/21 2:29:00 PM**	
Dil. Factor:	**2.14**	**Date of Analysis: 7/28/21 06:51 PM**	

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/28JUL21.b/p072815.d
Lab Smp Id: 2107361-10A
Inj Date : 28-JUL-2021 18:51
Operator : LD Inst ID: msdp.i
Smp Info : 200ml N5561
Misc Info : 6.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 9
Dil Factor: 2.14000
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	157355	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	124349				48.23- 108.23	79.02
5.785	5.778 (1.000)	49	329048				150.57- 210.57	209.11
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	587810	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	84493				0.00- 45.71	14.37
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	598213	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	306998				23.78- 83.78	51.32
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	220627	25.4062	25.406		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110735				27.21- 87.21	50.19
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	642054	25.1539	25.154		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68380				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 (1.184)	100	410383			34.95- 94.95	63.92
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	375228	24.4266	24.427	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	456148			95.92- 155.92	121.57
10.921	10.921 (1.154)	176	359841			66.89- 126.89	95.90
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.717	1.703 (0.297)	65	275622	77.2755	165.37	80.00- 120.00	100.00
1.759	1.744 (0.304)	51	2100900			597.63- 657.63	762.24
1.717	1.703 (0.297)	47	168051			33.72- 93.72	60.97
8 Freon 12					CAS #: 75-71-8		
1.759	1.717 (0.304)	85	17843	1.26429	2.706	80.00- 120.00	100.00
1.759	1.717 (0.304)	87	6424			2.37- 62.37	36.01
92 Chloroform					CAS #: 67-66-3		
5.843	5.835 (1.010)	83	9434	0.68906	1.474	80.00- 120.00	100.00
5.843	5.835 (1.010)	85	6106			34.70- 94.70	64.73
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	14701	1.56186	3.342	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	14437			76.29- 136.29	98.20
6.874	6.867 (1.031)	97	8201			33.63- 93.63	55.78
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	106575	3.98232	8.522	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	62187			28.38- 88.38	58.35
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	100580	7.37727	15.787	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	76241			47.84- 107.84	75.80
8.471	8.464 (0.895)	131	77716			45.29- 105.29	77.27

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072815.d
Lab Smp Id: 2107361-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	157355	-1.87
108 1,4-Difluorobenze	582857	349714	816000	587810	0.85
153 Chlorobenzene-d5	560035	336021	784049	598213	6.82

		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	6.67	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.

Report Date: 29-Jul-2021 13:32

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-10A
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/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.406	101.62	70-130
$ 134 Toluene-d8	25.000	25.154	100.62	70-130
$ 170 4-Bromofluorobenz	25.000	24.427	97.71	70-130

Data File: /chem/msdp.i/28JUL21.b/p072815.d

Date : 28-JUL-2021 18:51

Client ID:

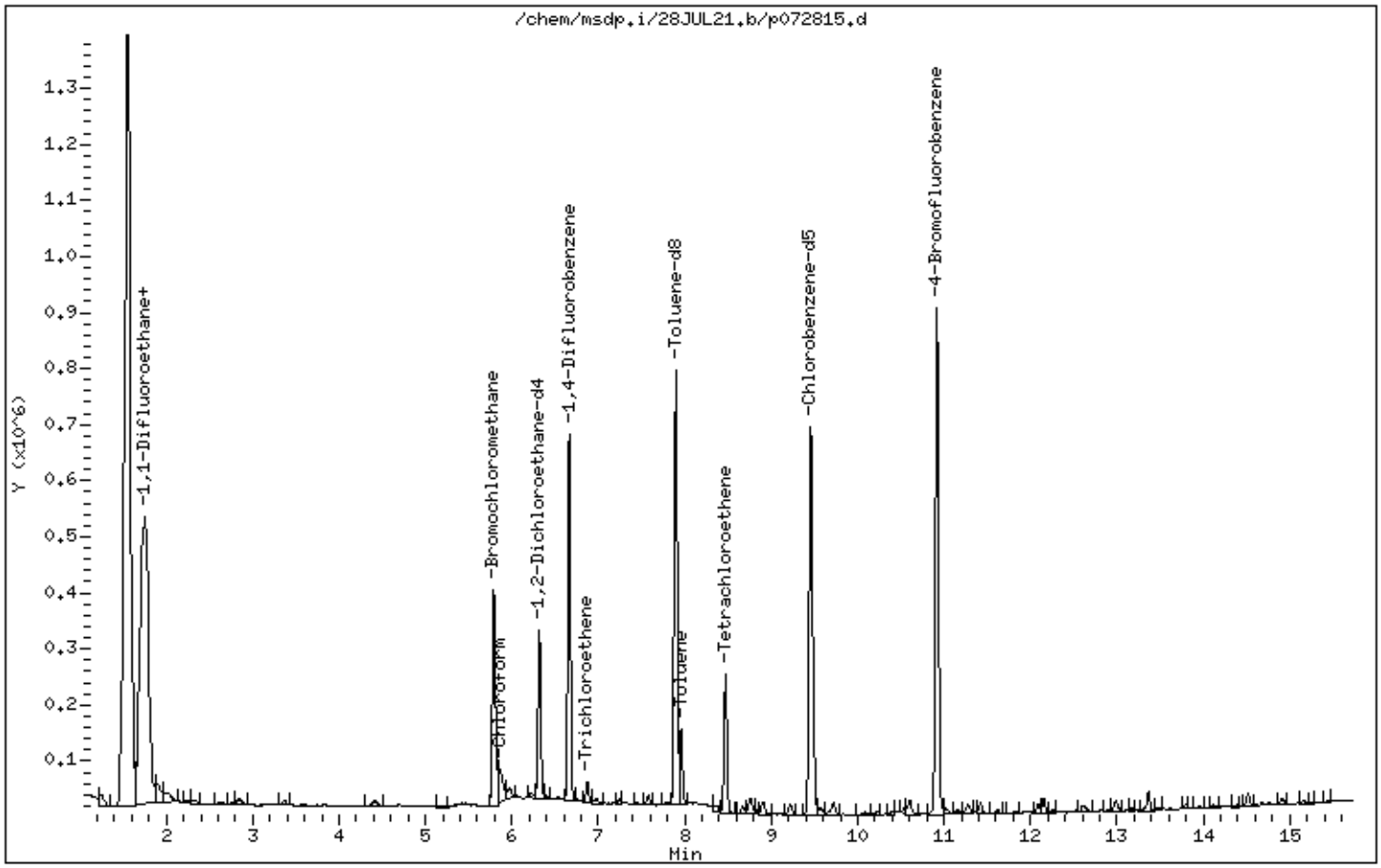
Instrument: msdp.i

Sample Info: 200ml N5561

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072815.d

Date : 28-JUL-2021 18:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5561

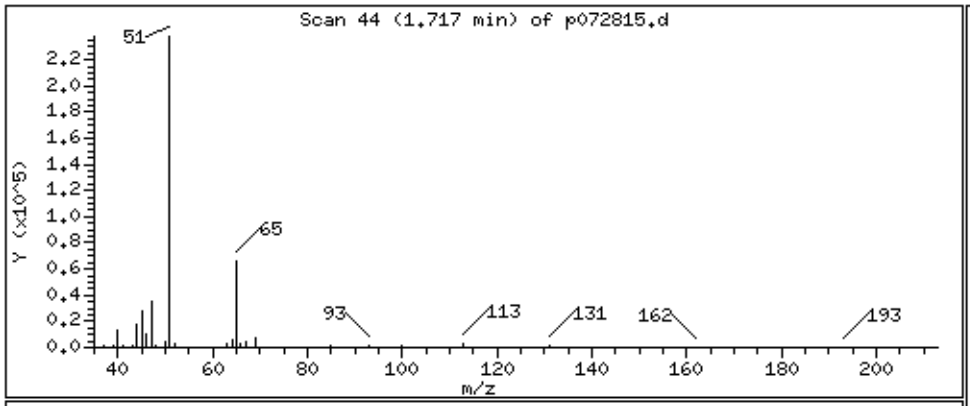
Operator: LD

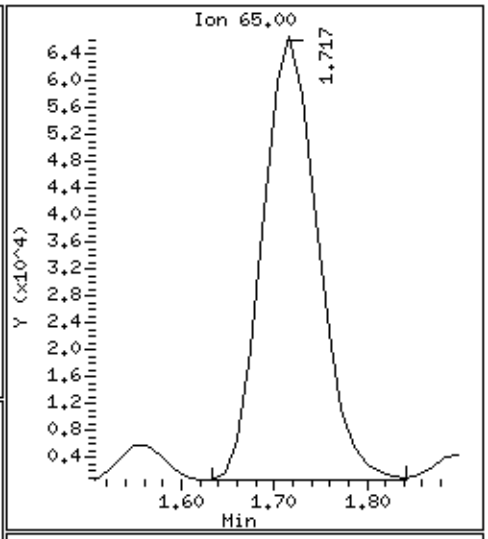
Column phase: RTX-624

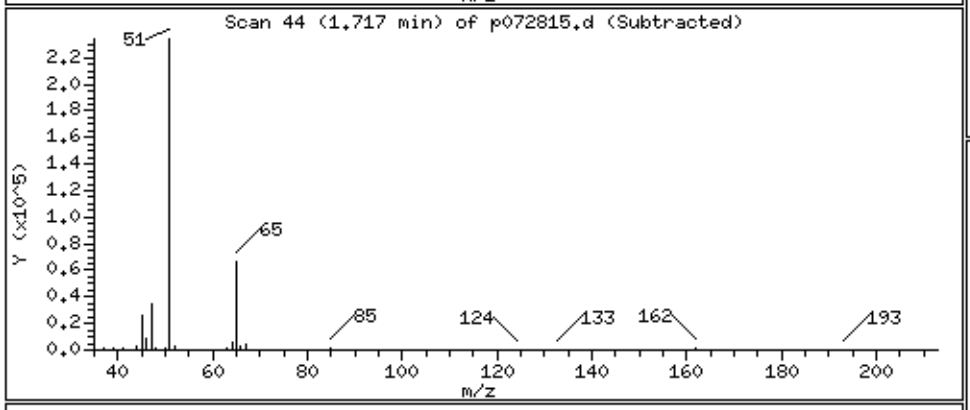
Column diameter: 0.25

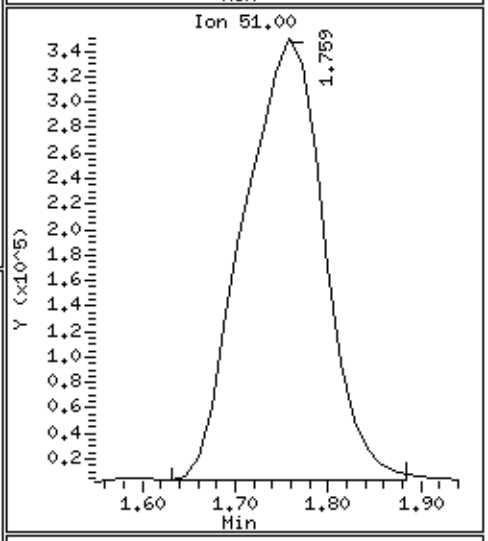
7 1,1-Difluoroethane

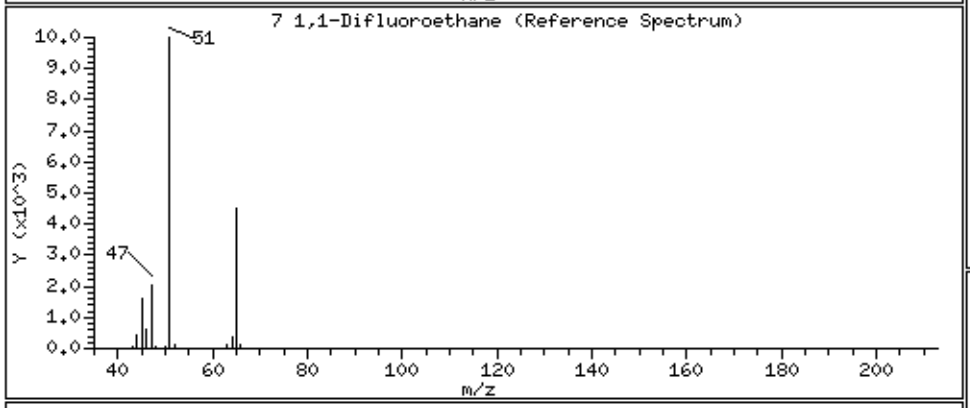
Concentration: 165.37 PPBV

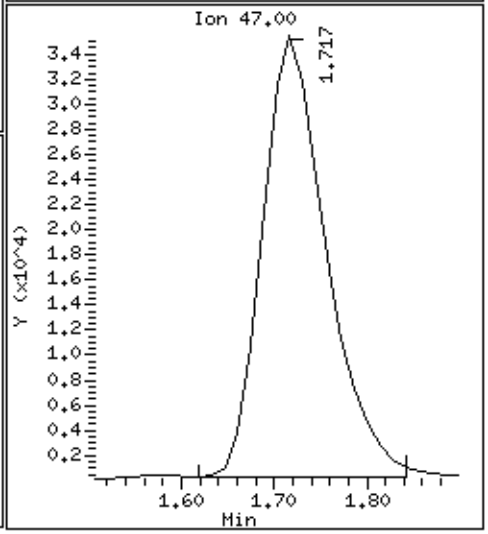


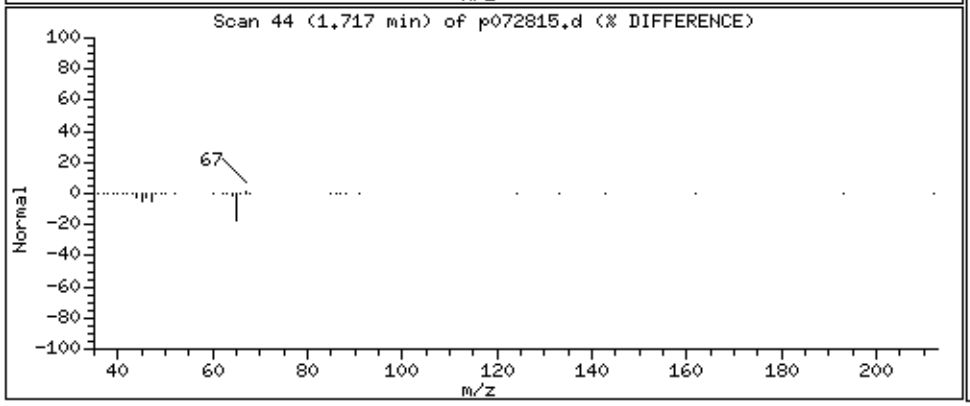












Data File: /chem/msdp.i/28JUL21.b/p072815.d

Date : 28-JUL-2021 18:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5561

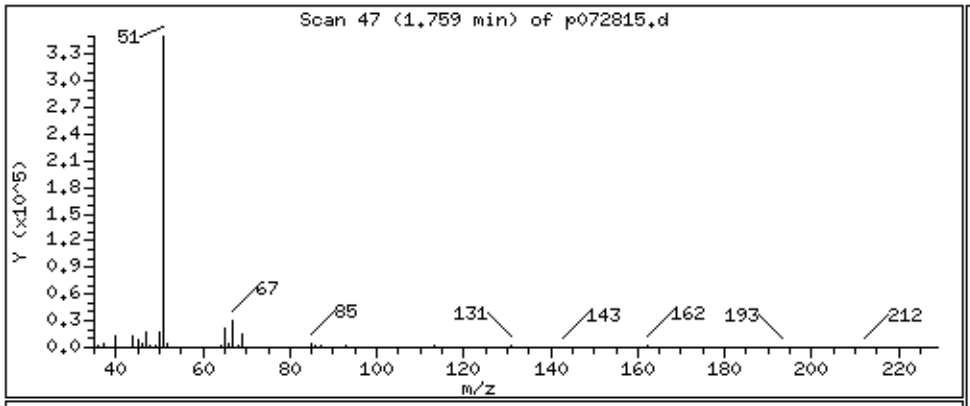
Operator: LD

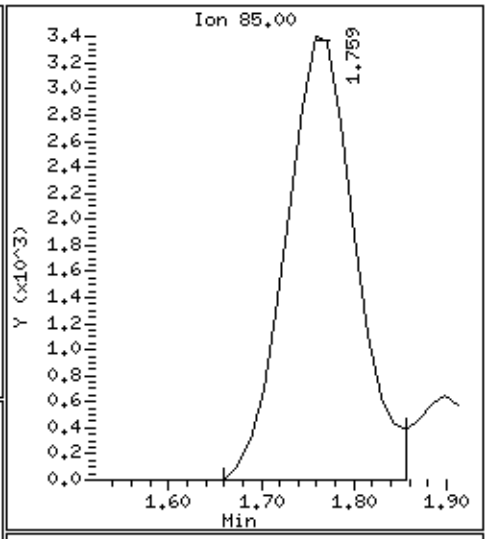
Column phase: RTX-624

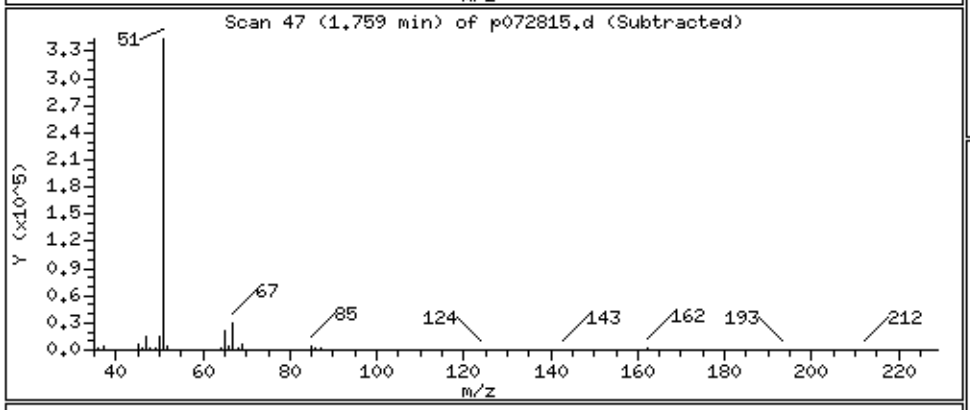
Column diameter: 0.25

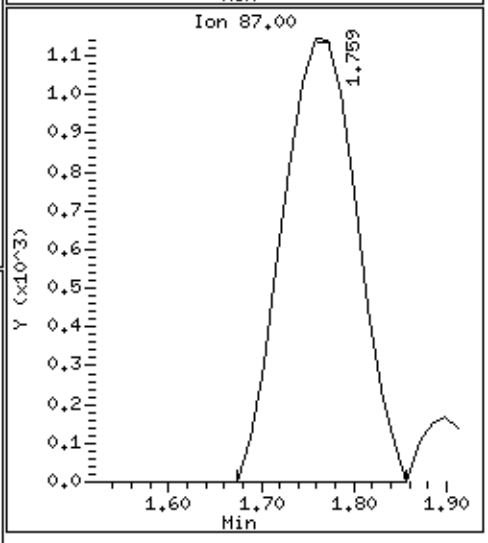
8 Freon 12

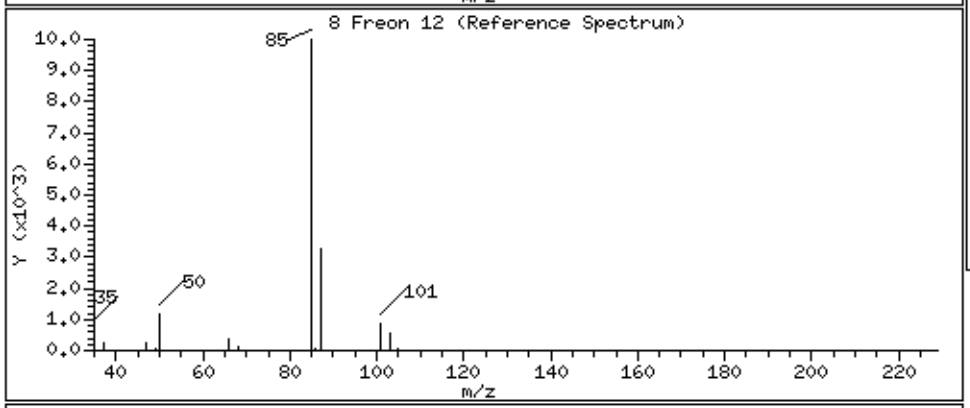
Concentration: 2.706 PPBV

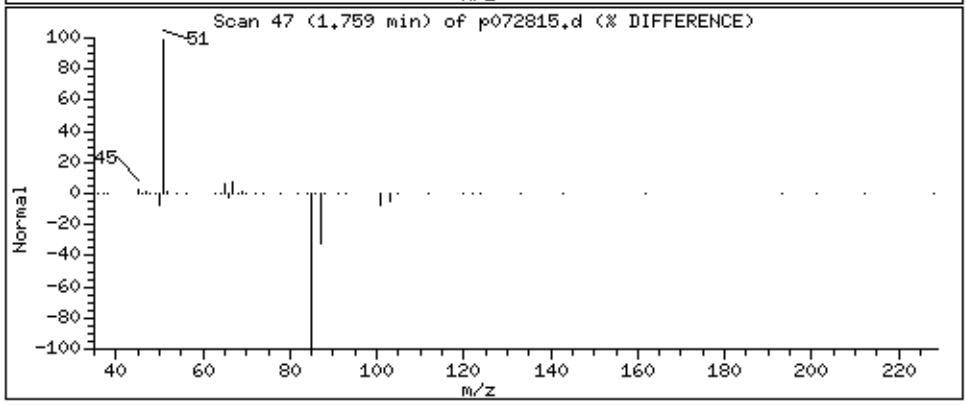












Data File: /chem/msdp.i/28JUL21.b/p072815.d

Date : 28-JUL-2021 18:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5561

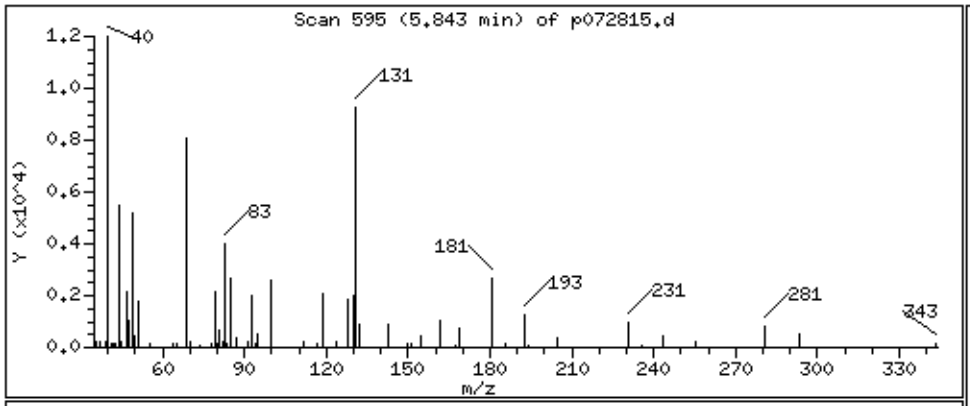
Operator: LD

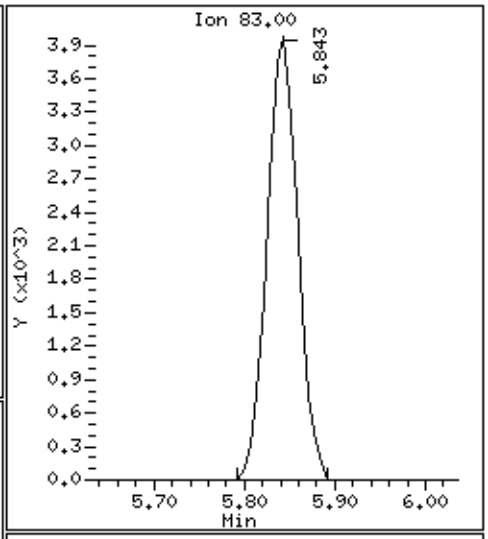
Column phase: RTX-624

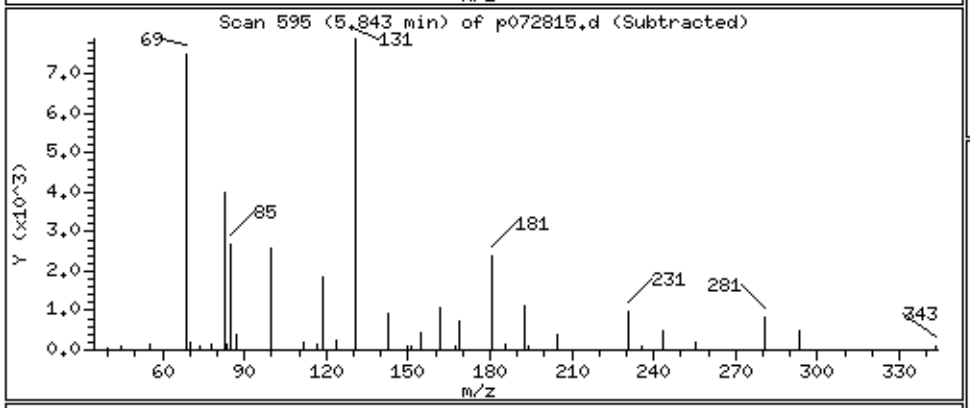
Column diameter: 0.25

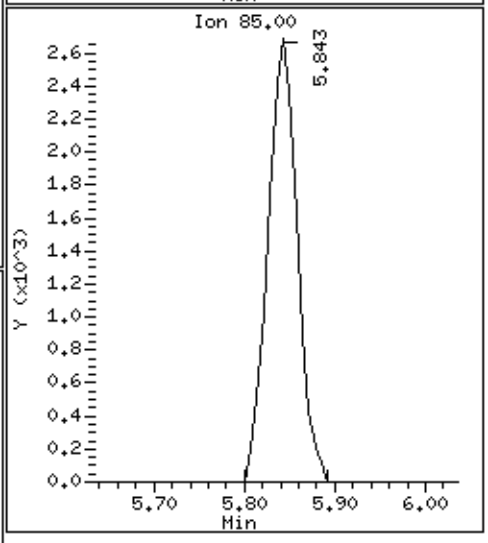
92 Chloroform

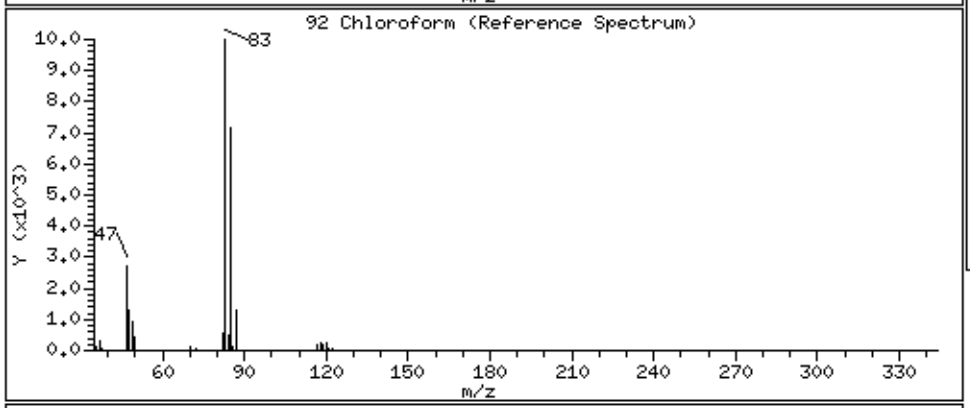
Concentration: 1.474 PPBV

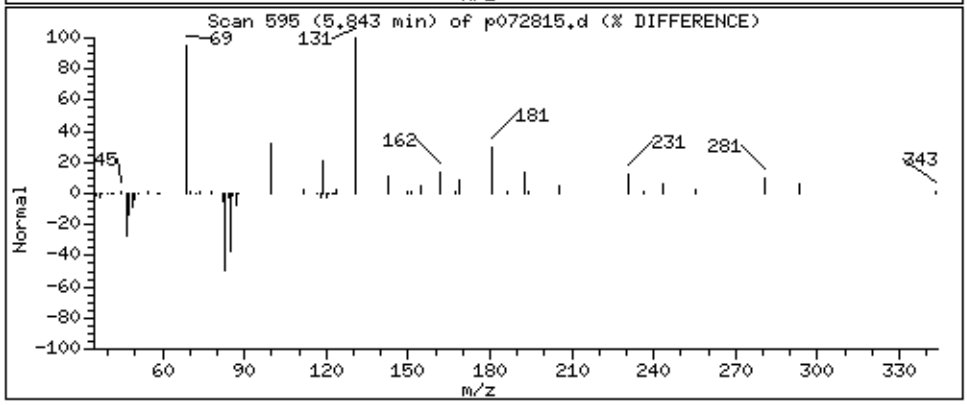












Data File: /chem/msdp.i/28JUL21.b/p072815.d

Date : 28-JUL-2021 18:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5561

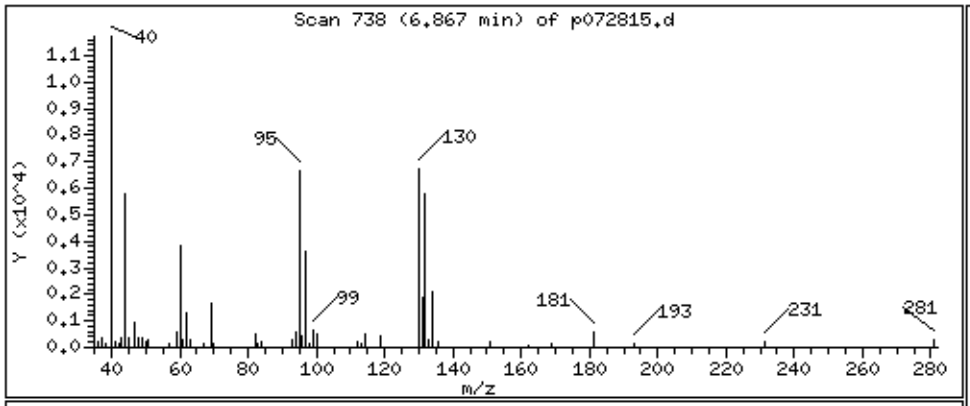
Operator: LD

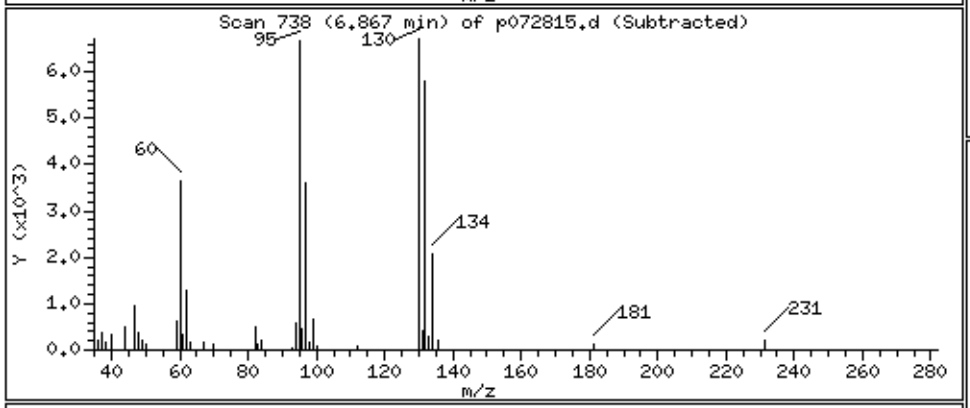
Column phase: RTX-624

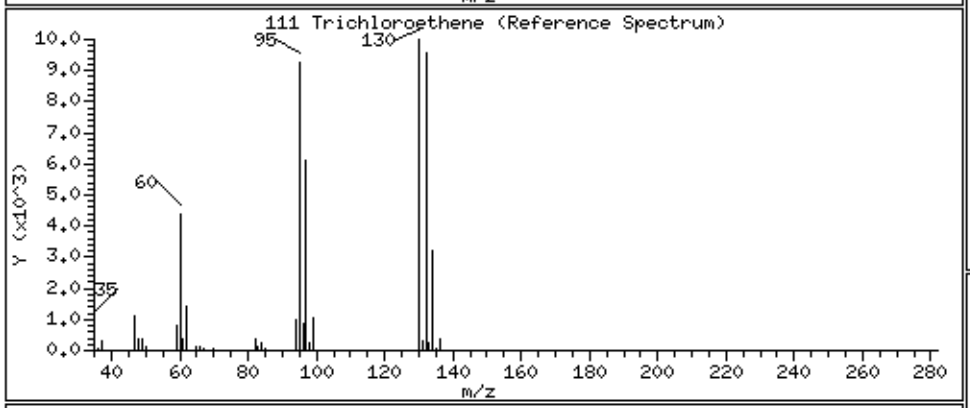
Column diameter: 0.25

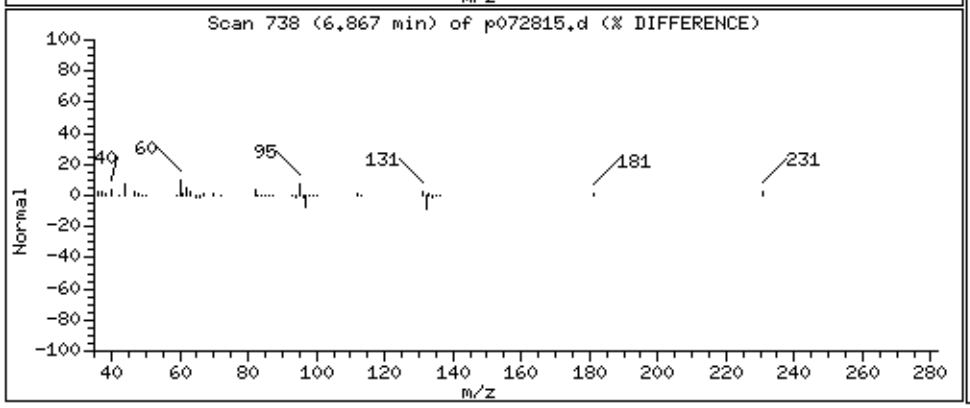
111 Trichloroethene

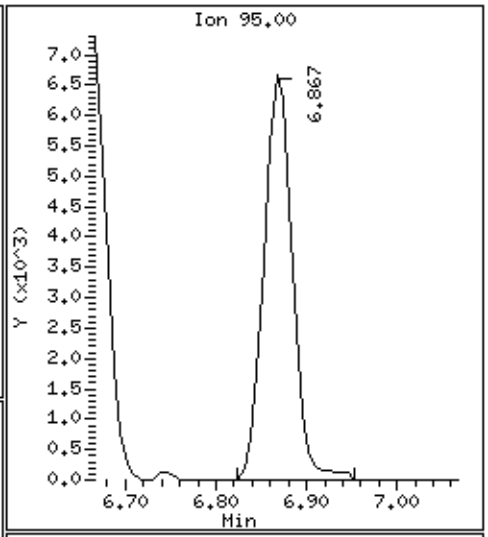
Concentration: 3.342 PPBV

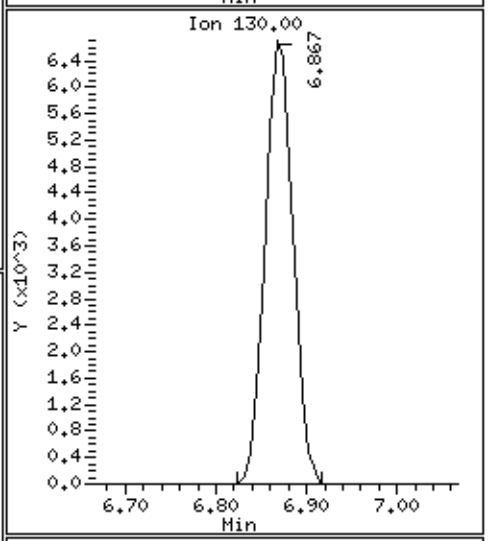


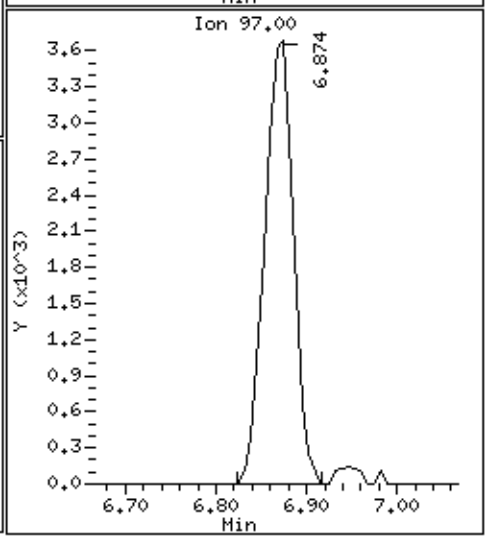












Data File: /chem/msdp.i/28JUL21.b/p072815.d

Page 6

Date : 28-JUL-2021 18:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5561

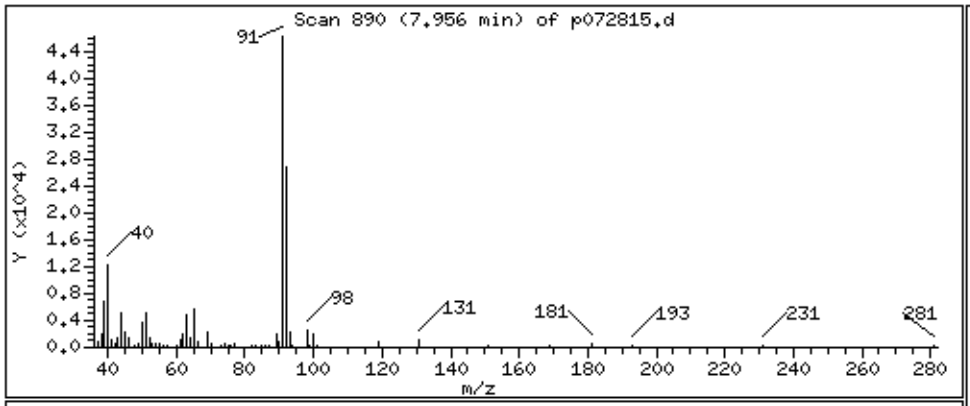
Operator: LD

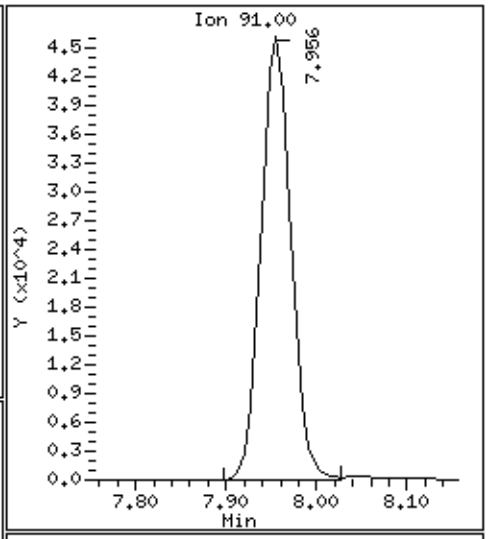
Column phase: RTX-624

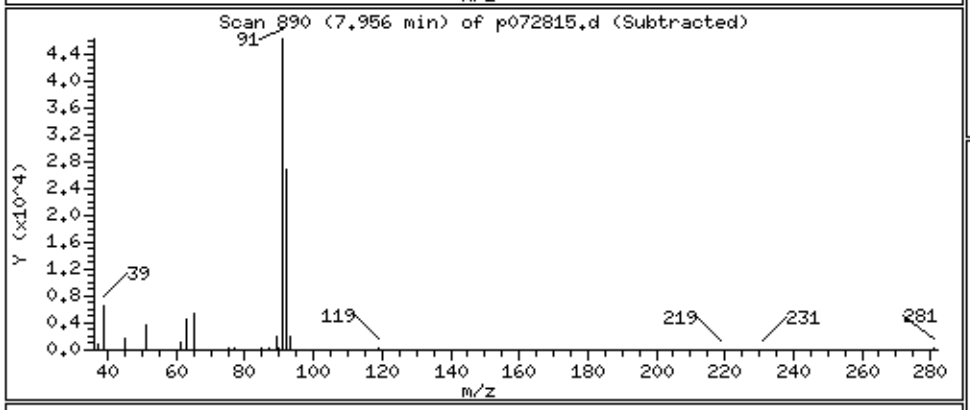
Column diameter: 0.25

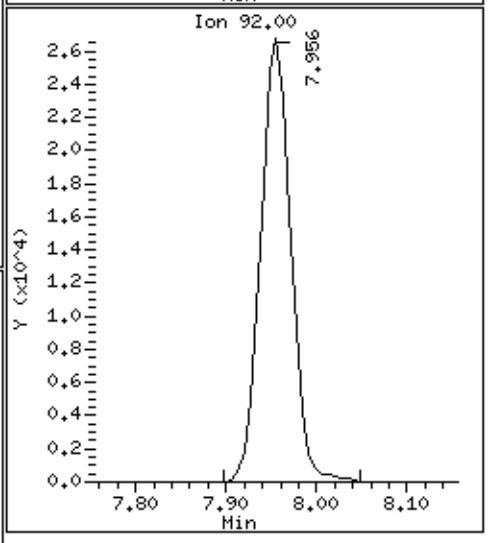
137 Toluene

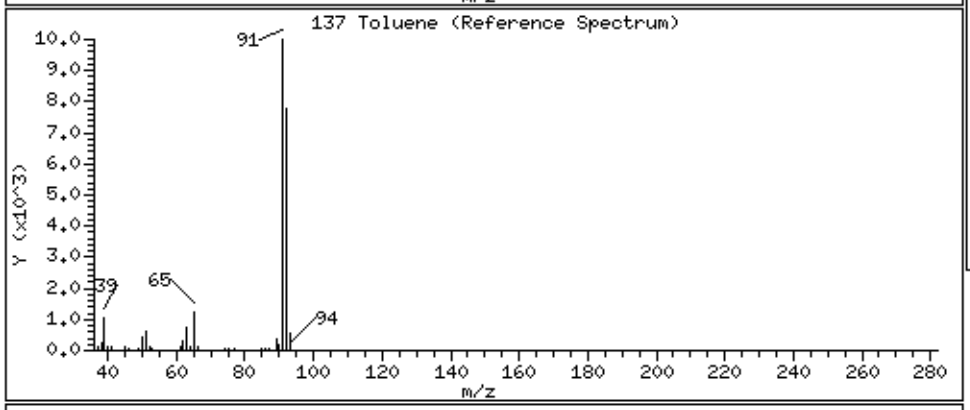
Concentration: 8.522 PPBV

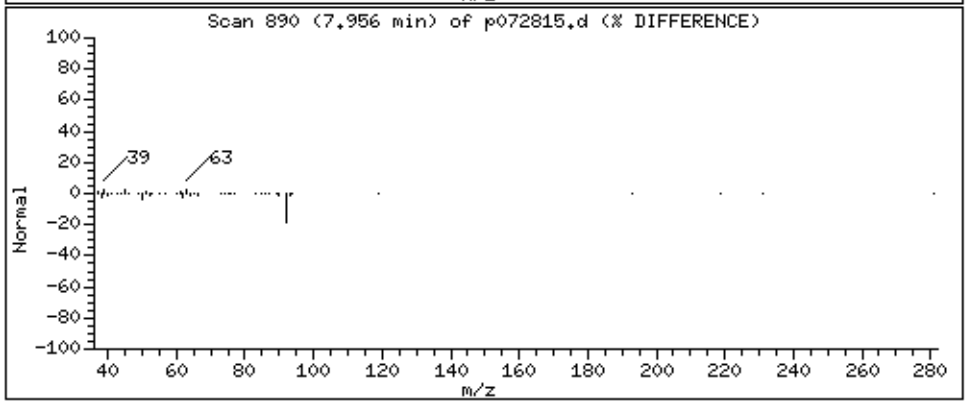












Data File: /chem/msdp.i/28JUL21.b/p072815.d

Page 7

Date : 28-JUL-2021 18:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5561

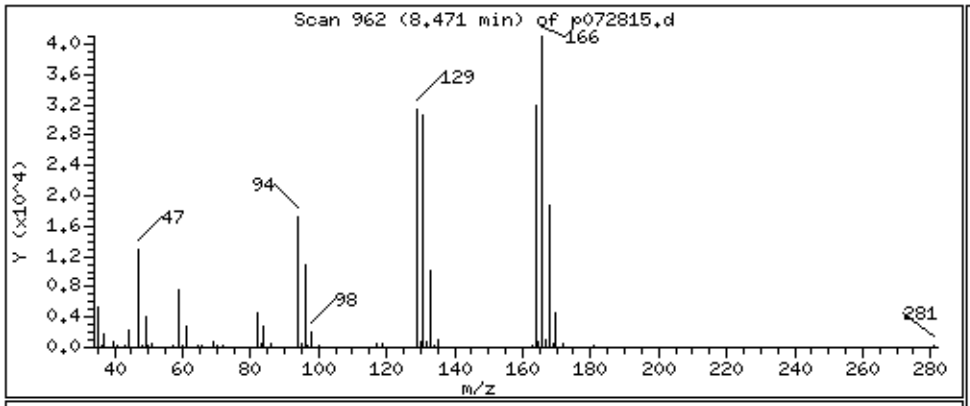
Operator: LD

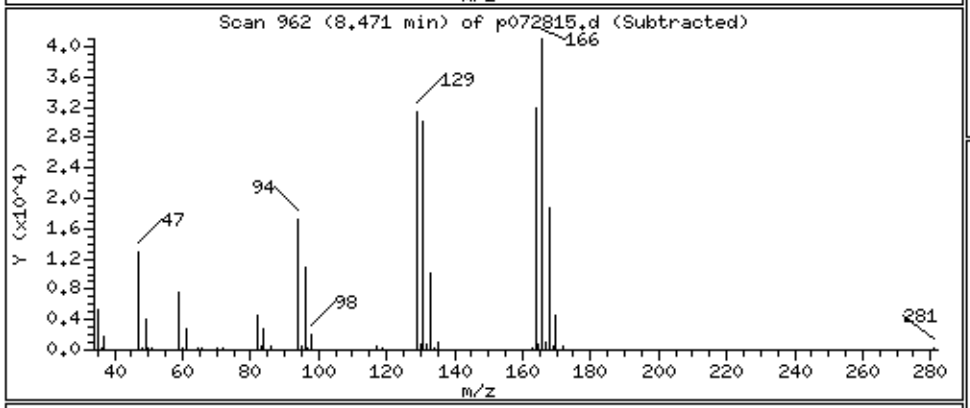
Column phase: RTX-624

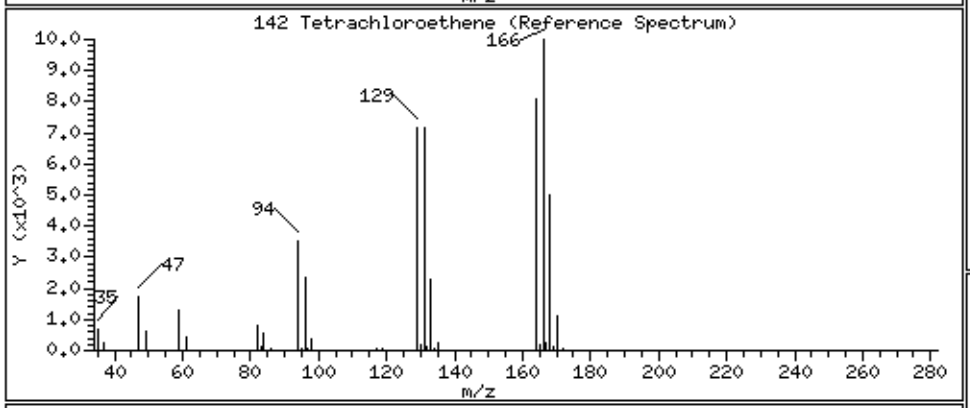
Column diameter: 0.25

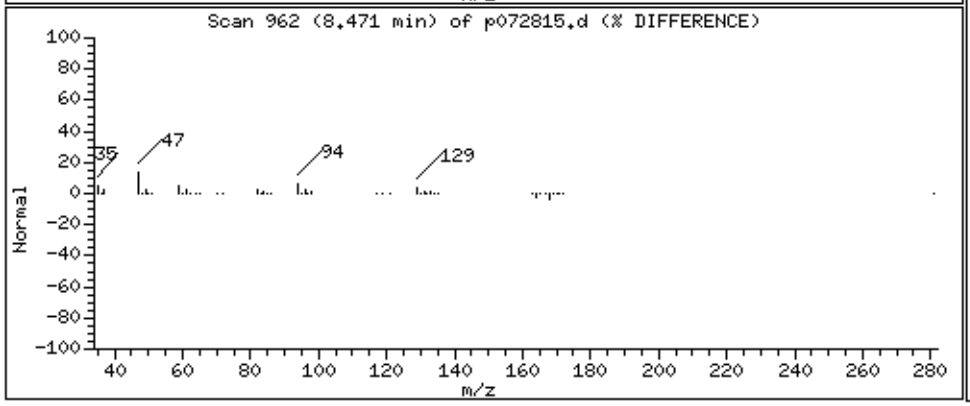
142 Tetrachloroethene

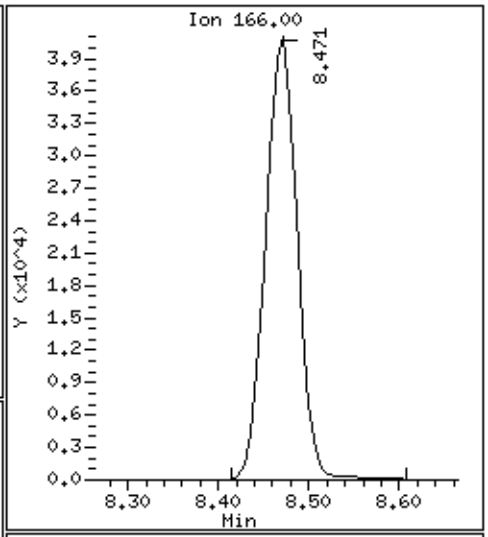
Concentration: 15.787 PPBV

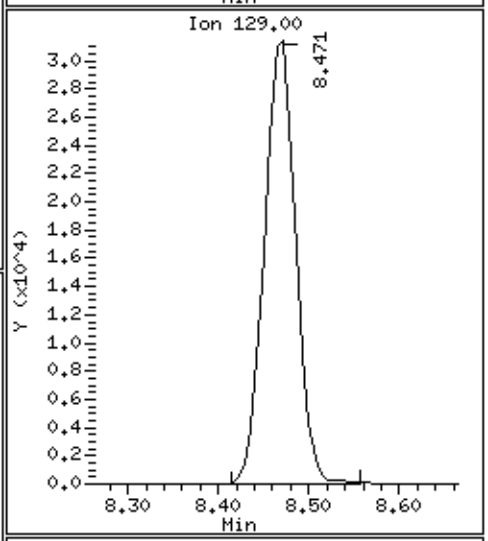


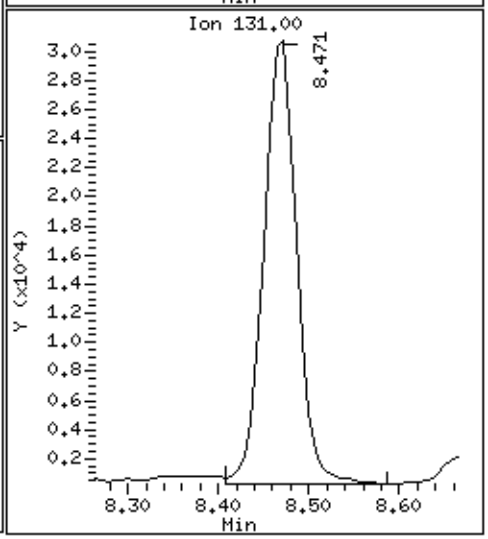












eurofins | Air Toxics

Client Sample ID: SG-VW21B-02

Lab ID#: 2107361-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072818**	**Date of Collection: 7/15/21 2:55:00 PM**	
Dil. Factor:	**2.14**	**Date of Analysis: 7/28/21 10:16 PM**	

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	5.3	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	13	Not Detected
2-Hexanone	4.3	Not Detected	18	Not Detected
2-Propanol	4.3	4.3	10	11
3-Chloropropene	4.3	Not Detected	13	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	14	25	34
Acrolein	4.3	Not Detected	9.8	Not Detected
Acrylonitrile	4.3	Not Detected	9.3	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	7.2	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	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	4.3	5.2	21
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-VW21B-02

Lab ID#: 2107361-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072818**	**Date of Collection:**	**7/15/21 2:55:00 PM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**7/28/21 10:16 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	3.7	Not Detected
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
Ethanol	11	Not Detected	20	Not Detected
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	7.5	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	41	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
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	5.3	Not Detected
Propylene	4.3	Not Detected	7.4	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	21	7.2	140
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Toluene	1.1	1.1	4.0	4.2
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	6.6	5.8	36
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-VW21B-02

Lab ID#: 2107361-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072818**	**Date of Collection: 7/15/21 2:55:00 PM**	
Dil. Factor:	**2.14**	**Date of Analysis: 7/28/21 10:16 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	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/28JUL21.b/p072818.d
Lab Smp Id: 2107361-11A
Inj Date : 28-JUL-2021 22:16
Operator : mb Inst ID: msdp.i
Smp Info : 200ml 1L1902
Misc Info : 6.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 11
Dil Factor: 2.14000
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	147918	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	116487				48.23- 108.23	78.75
5.785	5.778 (1.000)	49	315449				150.57- 210.57	213.26
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	548709	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	80535				0.00- 45.71	14.68
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	558621	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	293009				23.78- 83.78	52.45
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	211898	25.9577	25.958		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	101695				27.21- 87.21	47.99
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	604425	25.3671	25.367		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62976				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 (1.185)	100	392445			34.95- 94.95	64.93
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	344201	23.9949	23.995	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	417499			95.92- 155.92	121.29
10.921	10.921 (1.154)	176	326682			66.89- 126.89	94.91
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	25673	6.62045	14.168	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	100126			302.95- 362.95	389.99
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	31753	2.03169	4.348	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	8208			0.00- 47.19	25.85
92 Chloroform					CAS #: 67-66-3		
5.843	5.835 (1.010)	83	26075	2.02603	4.336	80.00- 120.00	100.00
5.835	5.835 (1.009)	85	16850			34.70- 94.70	64.62
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	27318	3.10914	6.654	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	29184			76.29- 136.29	106.83
6.867	6.867 (1.031)	97	17880			33.63- 93.63	65.45
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.195)	91	12968	0.51910	1.111	80.00- 120.00	100.00
7.956	7.956 (1.195)	92	7329			28.38- 88.38	56.51
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	127842	10.0414	21.489	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	99492			47.84- 107.84	77.82
8.464	8.464 (0.895)	131	97012			45.29- 105.29	75.88

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072818.d
Lab Smp Id: 2107361-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	147918	-7.75
108 1,4-Difluorobenze	582857	349714	816000	548709	-5.86
153 Chlorobenzene-d5	560035	336021	784049	558621	-0.25

		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.

Report Date: 29-Jul-2021 13:33

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-11A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.958	103.83	70-130
$ 134 Toluene-d8	25.000	25.367	101.47	70-130
$ 170 4-Bromofluorobenz	25.000	23.995	95.98	70-130

Data File: /chem/msdp.i/28JUL21.b/p072818.d

Date : 28-JUL-2021 22:16

Client ID:

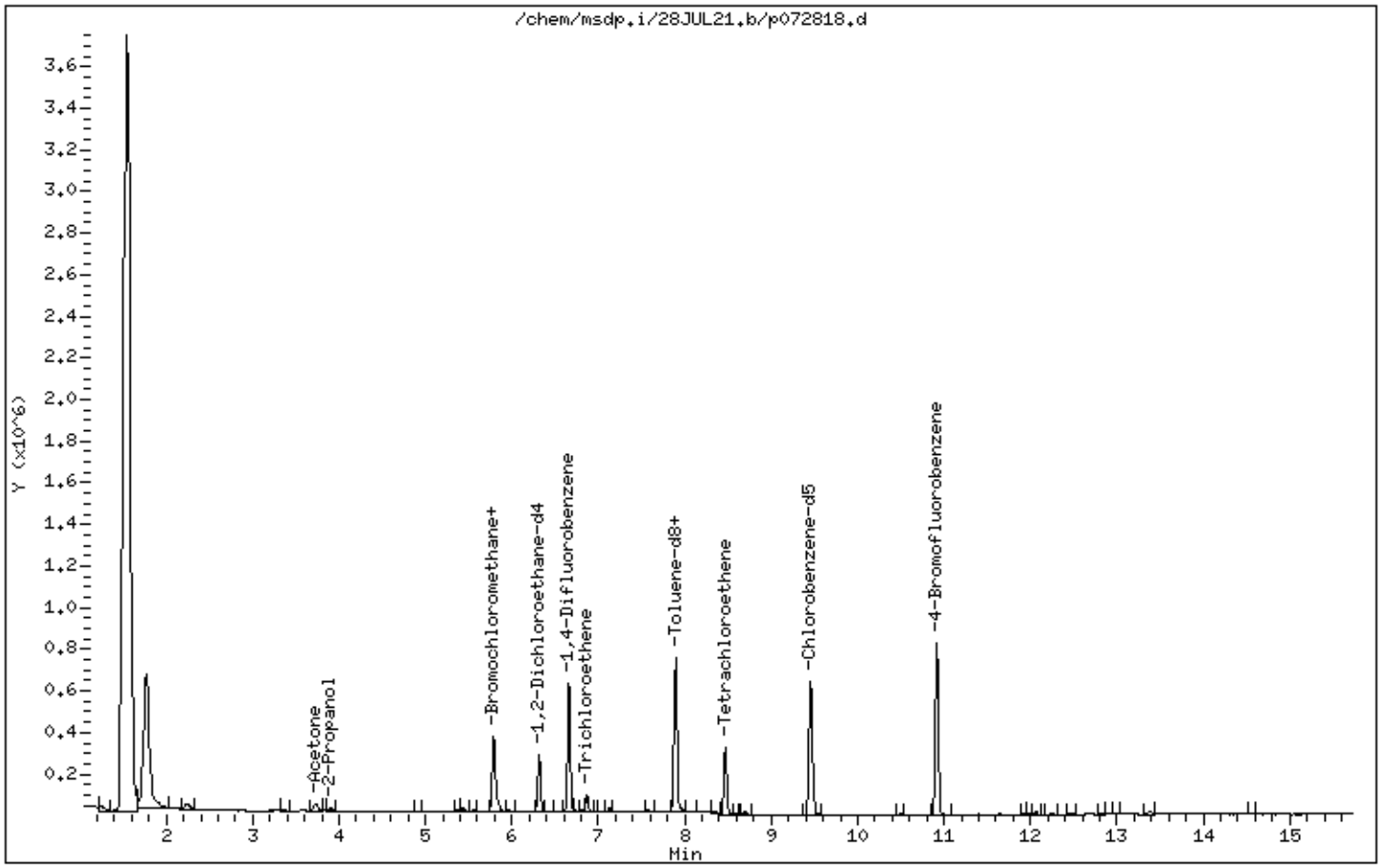
Instrument: msdp.i

Sample Info: 200ml 1L1902

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072818.d

Date : 28-JUL-2021 22:16

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1902

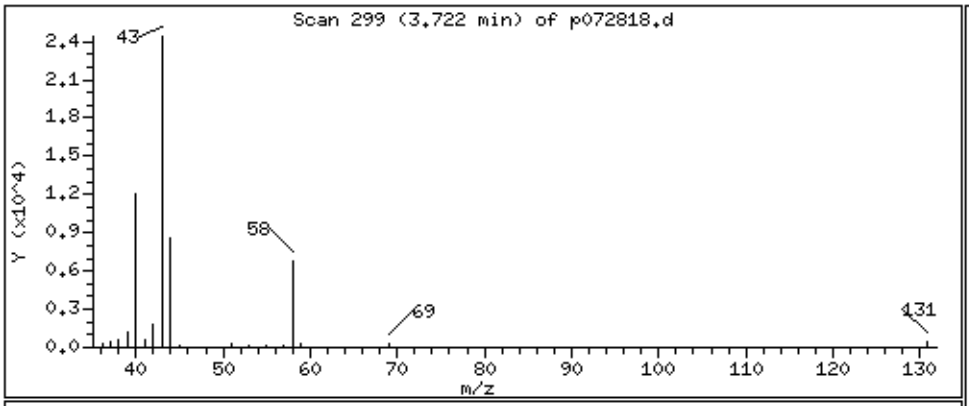
Operator: mb

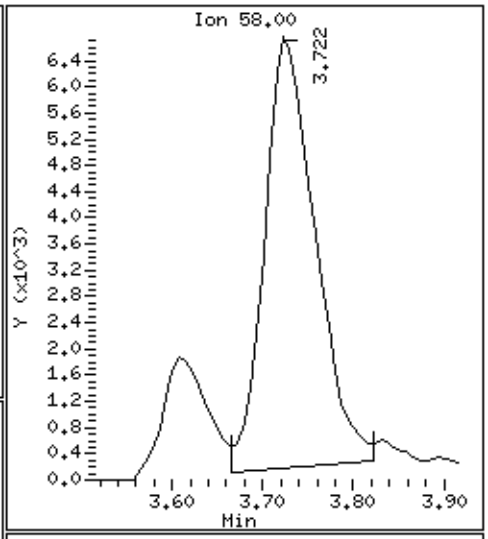
Column phase: RTX-624

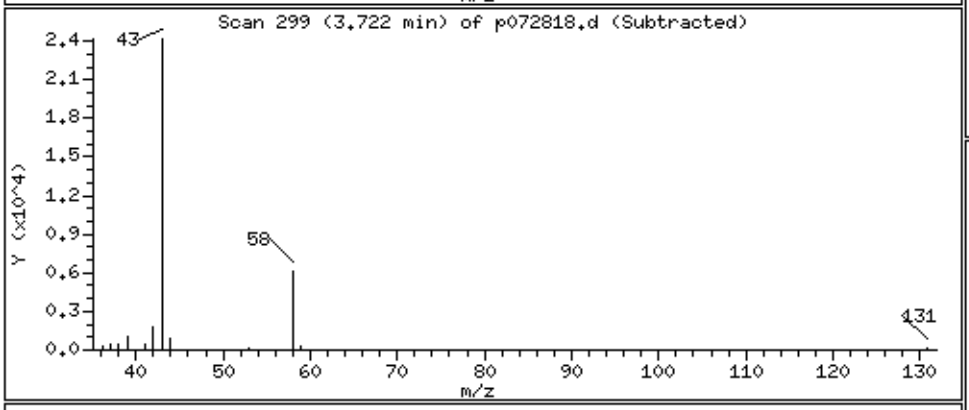
Column diameter: 0.25

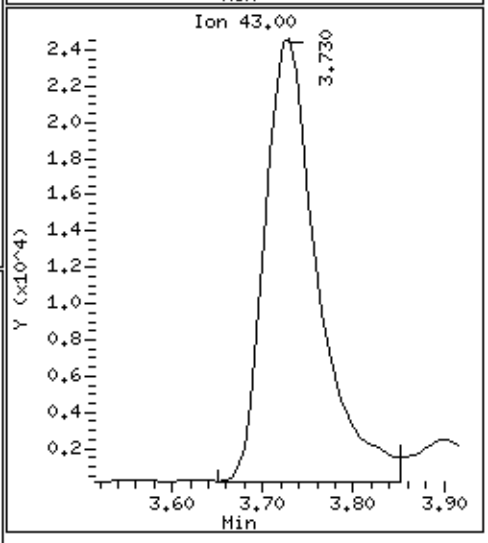
47 Acetone

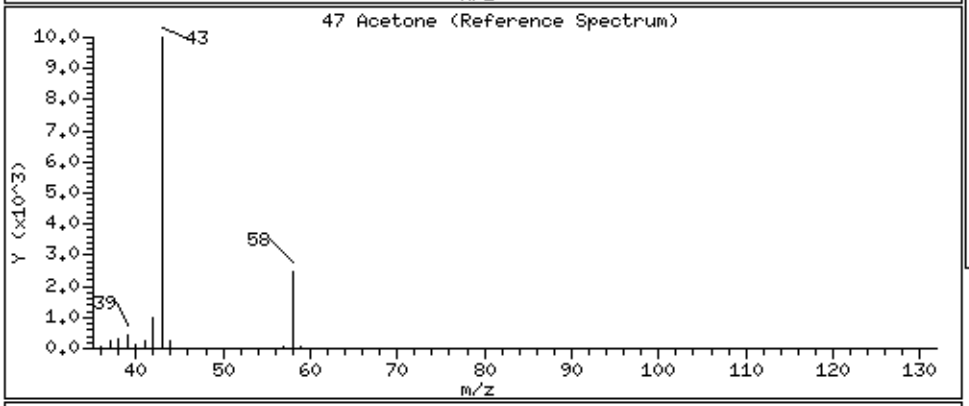
Concentration: 14.168 PPBV

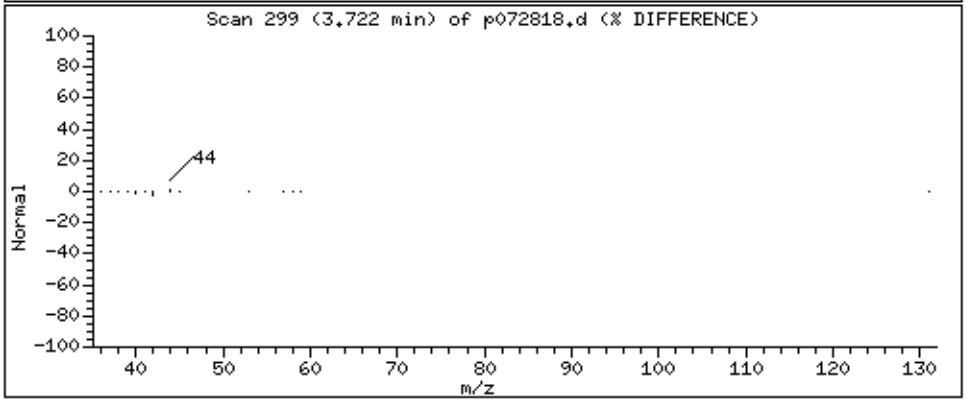












Data File: /chem/msdp.i/28JUL21.b/p072818.d

Date : 28-JUL-2021 22:16

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1902

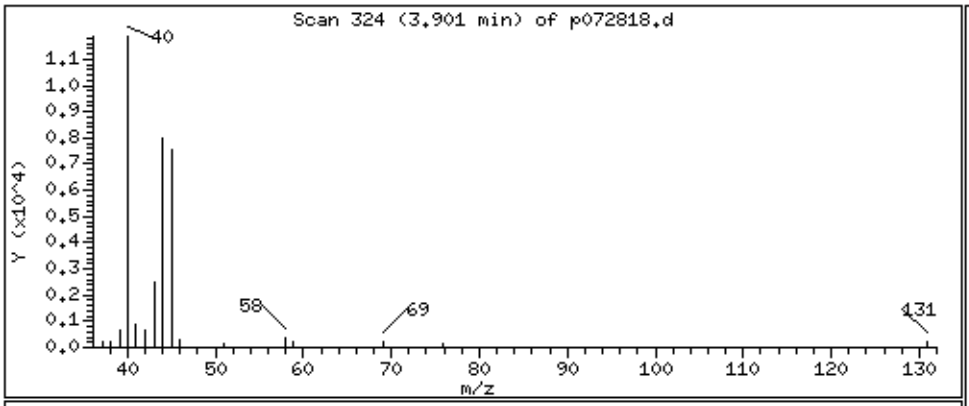
Operator: mb

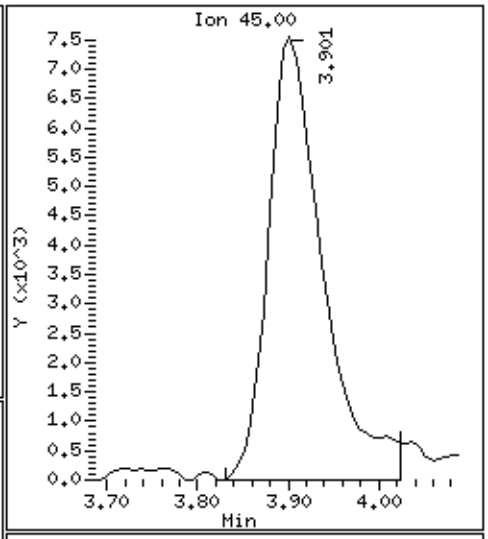
Column phase: RTX-624

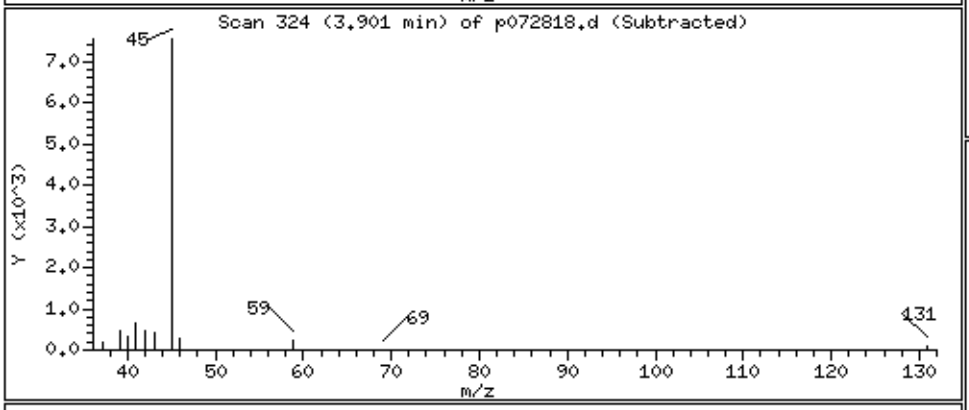
Column diameter: 0.25

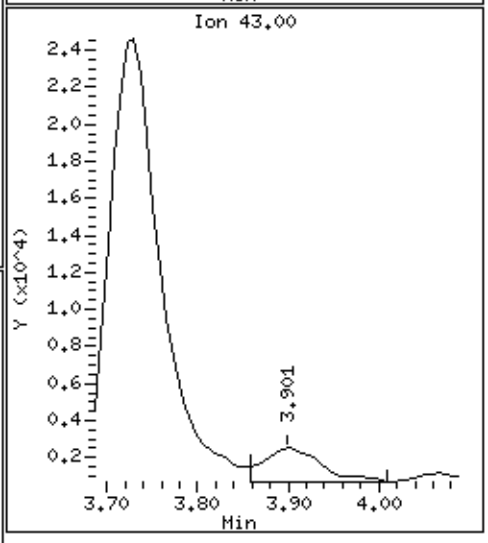
52 2-Propanol

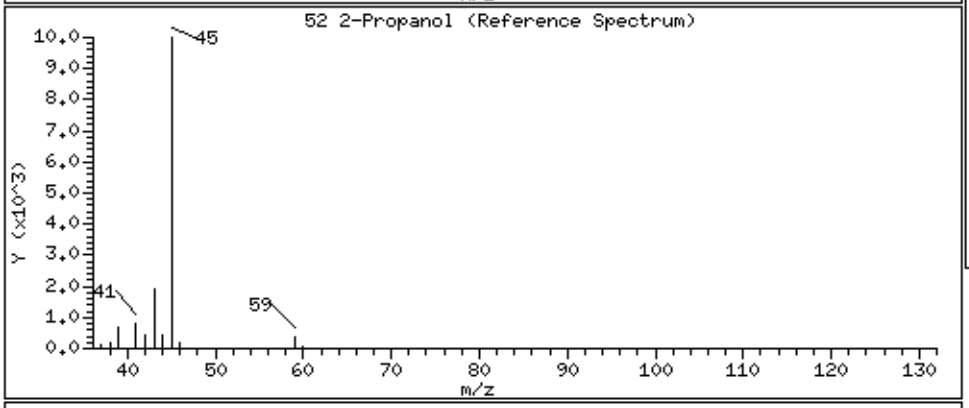
Concentration: 4.348 PPBV

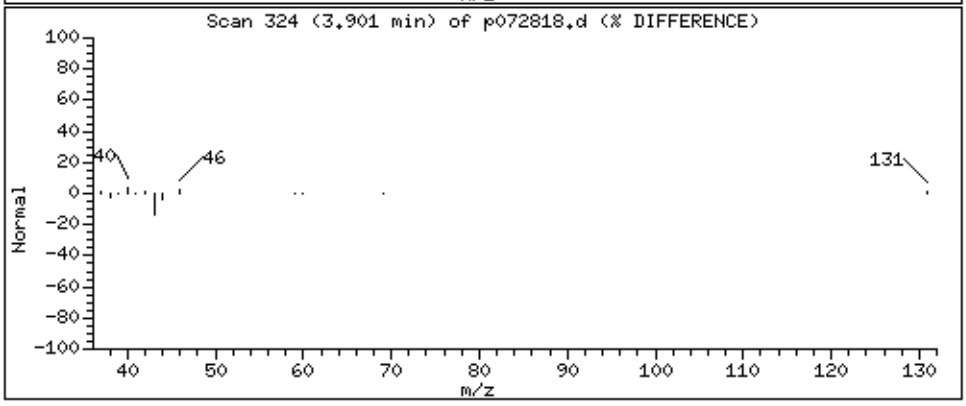












Data File: /chem/msdp.i/28JUL21.b/p072818.d

Date : 28-JUL-2021 22:16

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1902

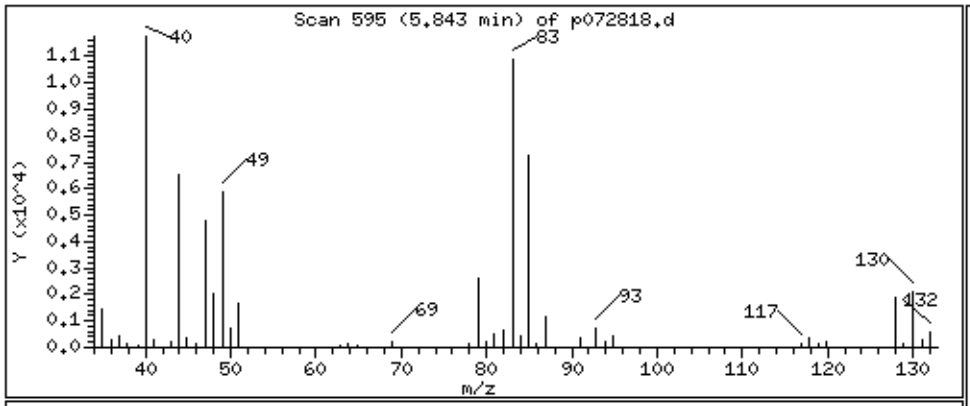
Operator: mb

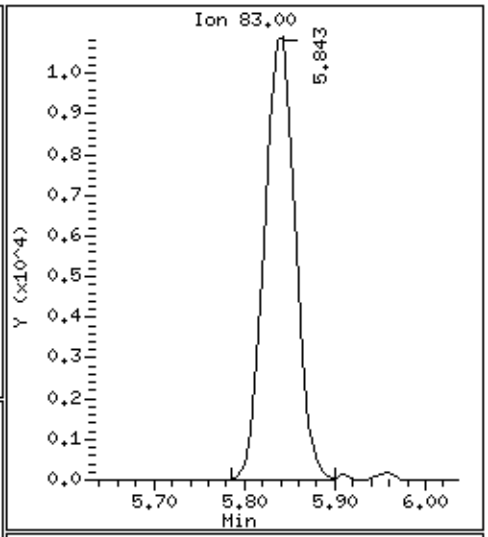
Column phase: RTX-624

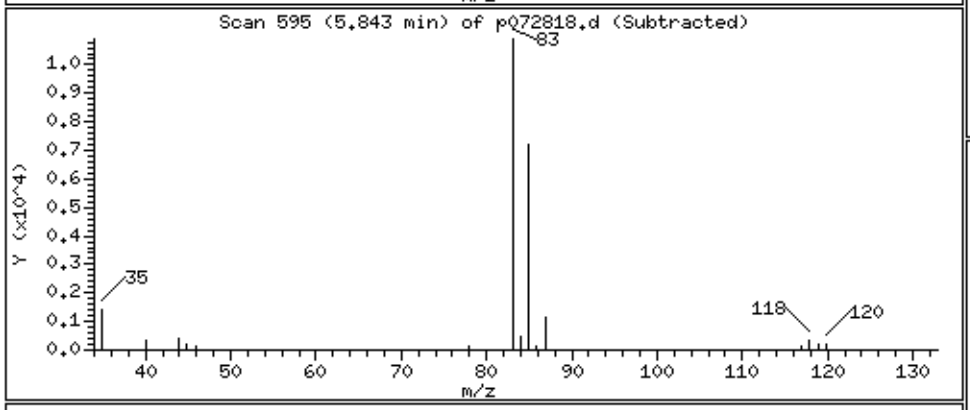
Column diameter: 0.25

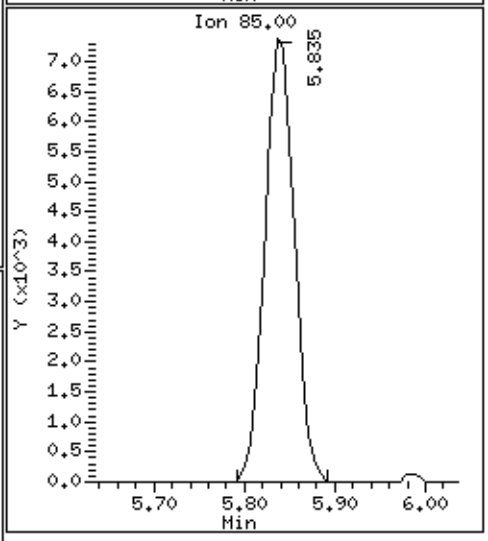
92 Chloroform

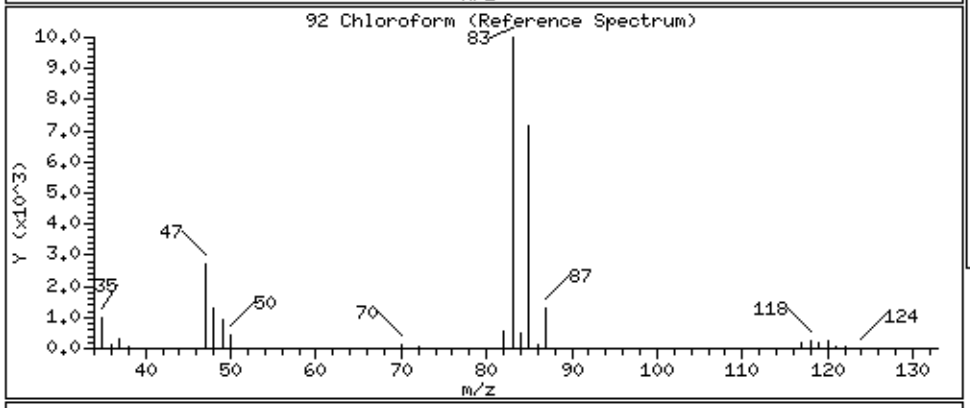
Concentration: 4.336 PPBV

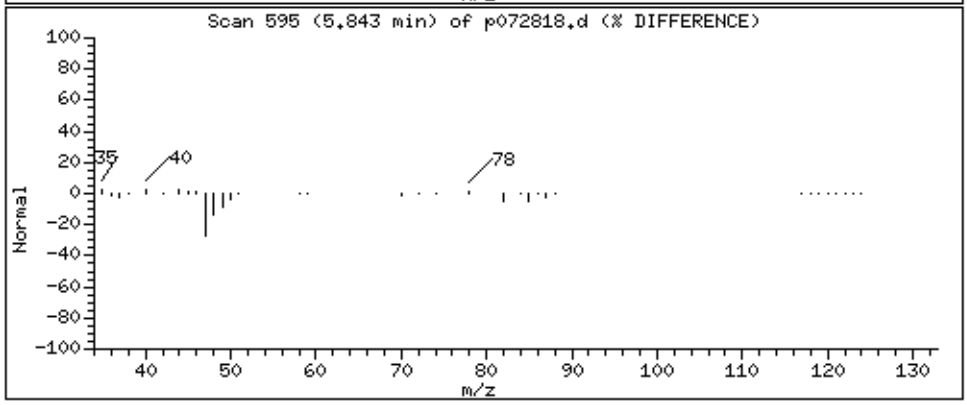












Data File: /chem/msdp.i/28JUL21.b/p072818.d

Date : 28-JUL-2021 22:16

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1902

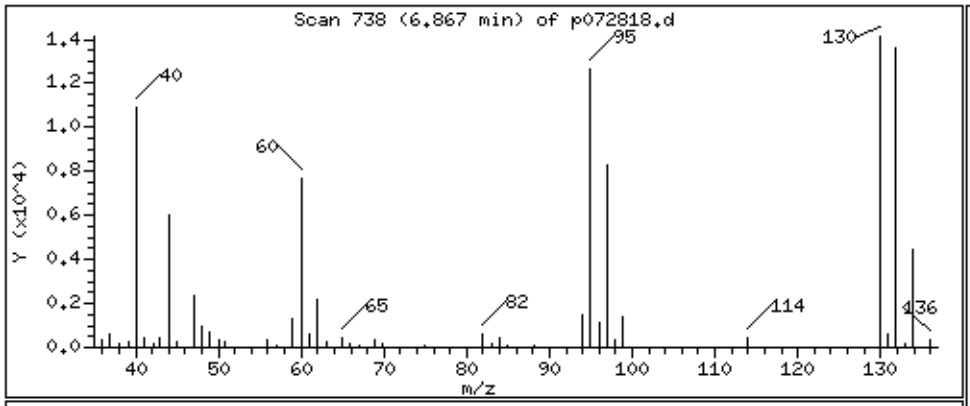
Operator: mb

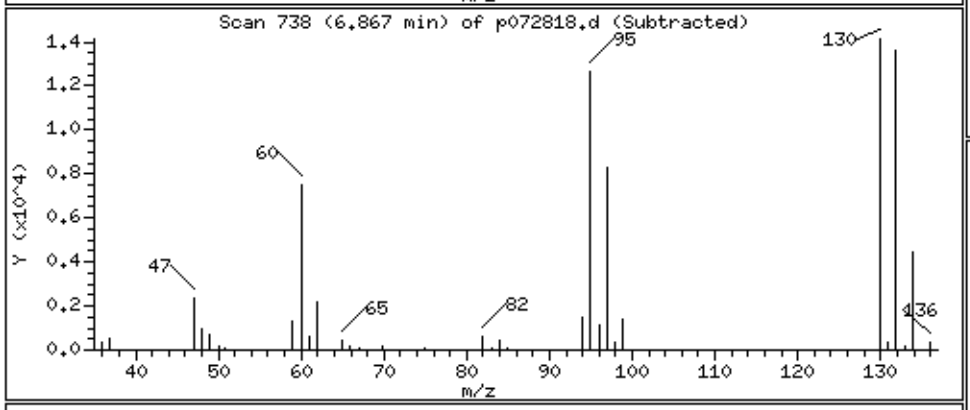
Column phase: RTX-624

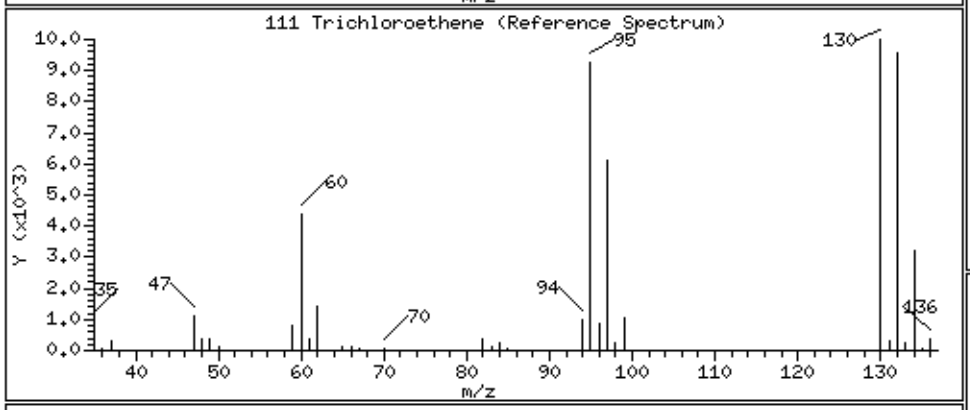
Column diameter: 0.25

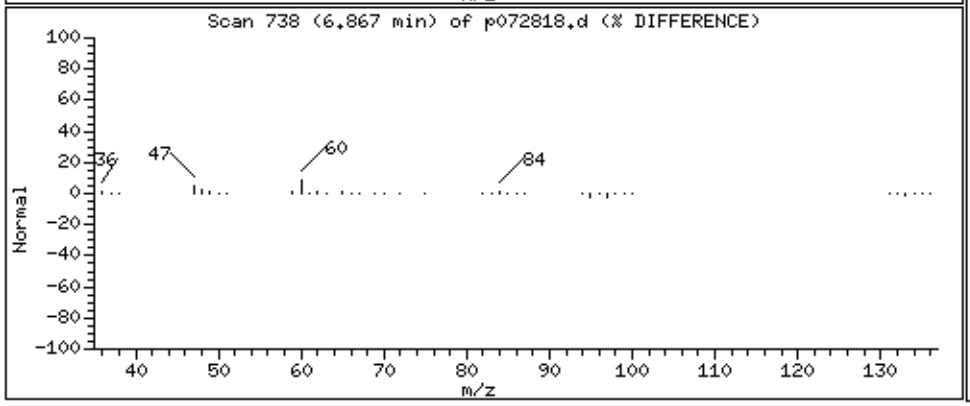
111 Trichloroethene

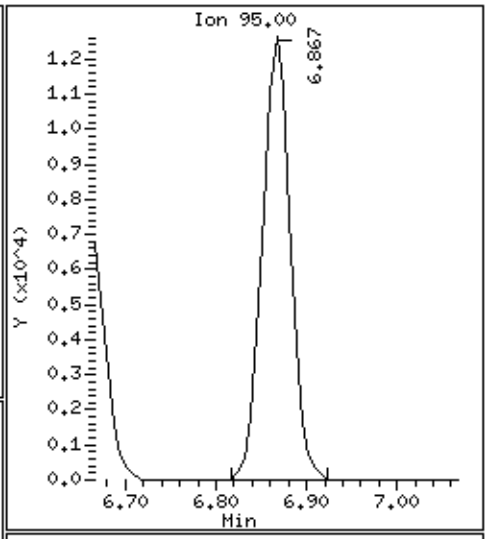
Concentration: 6.654 PPBV

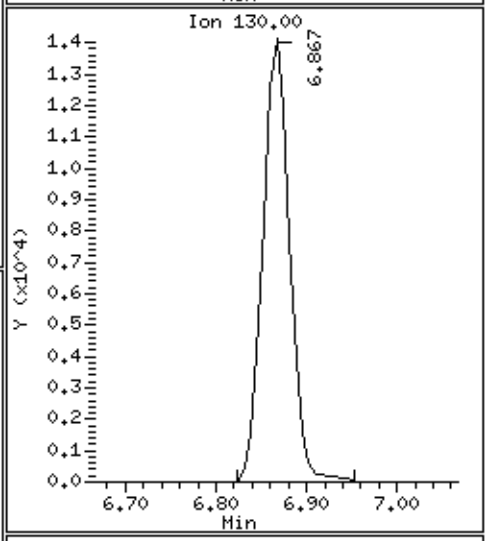


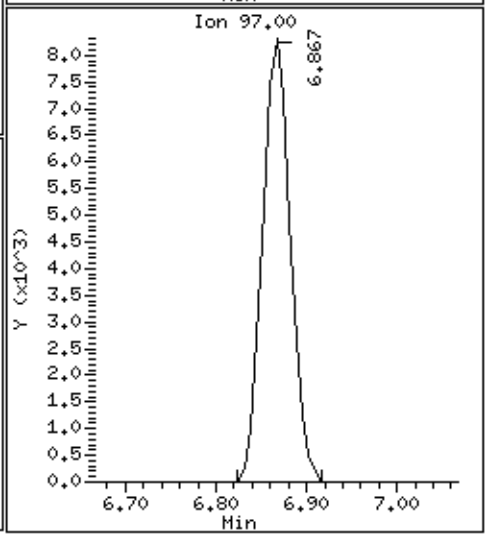












Data File: /chem/msdp.i/28JUL21.b/p072818.d

Date : 28-JUL-2021 22:16

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1902

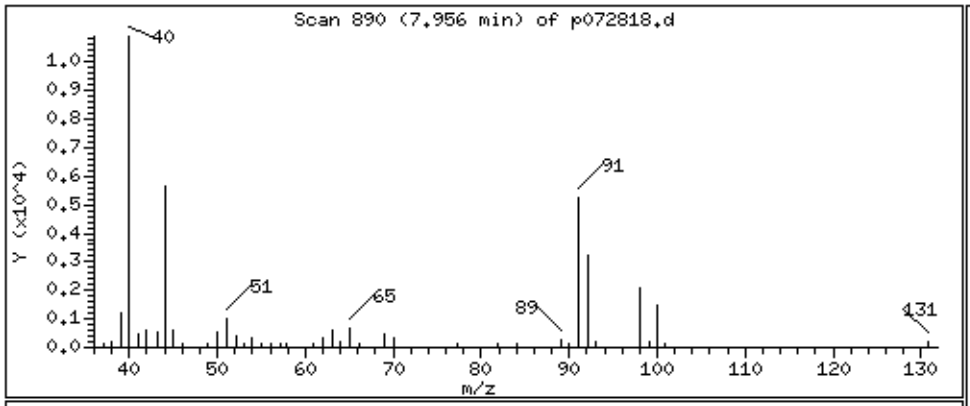
Operator: mb

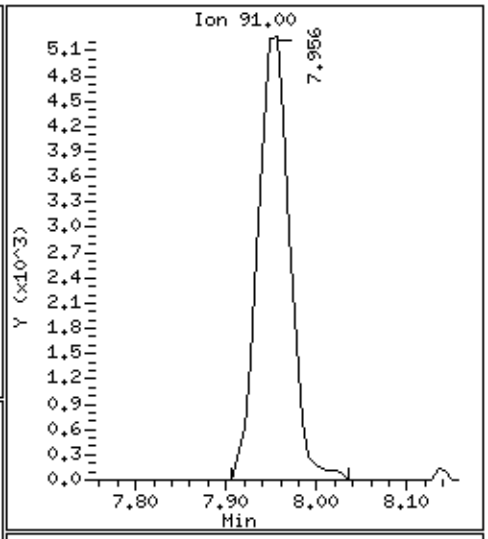
Column phase: RTX-624

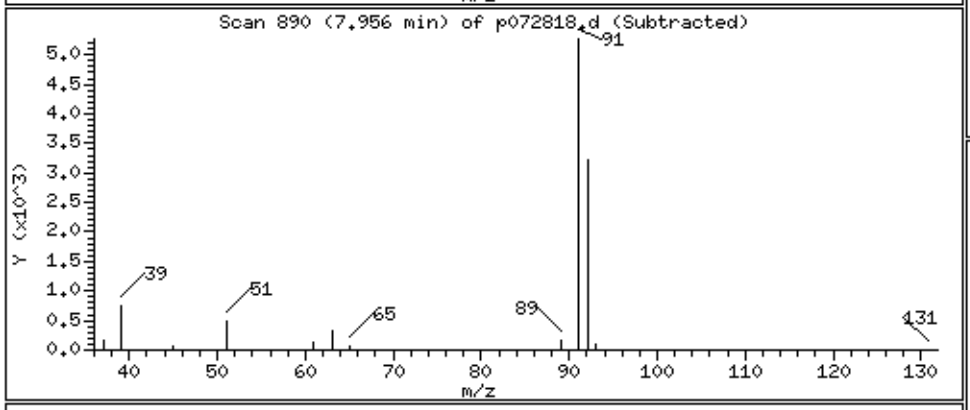
Column diameter: 0.25

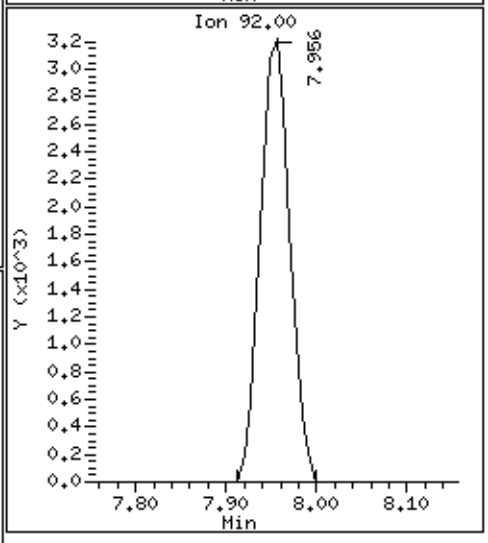
137 Toluene

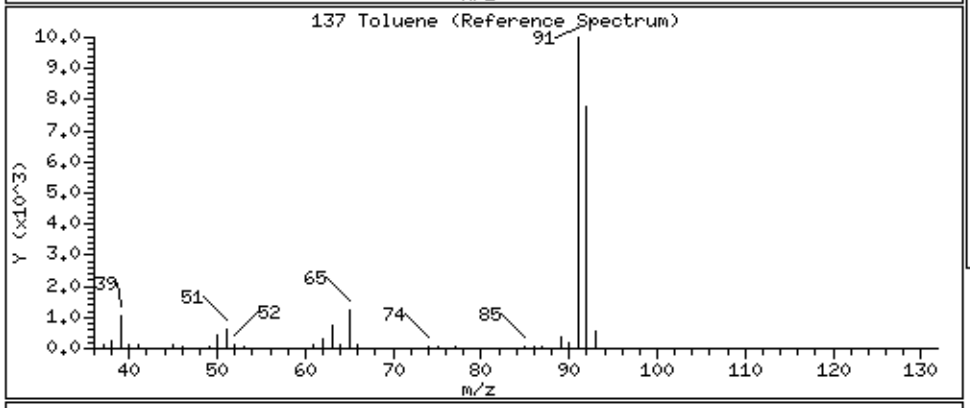
Concentration: 1.111 PPBV

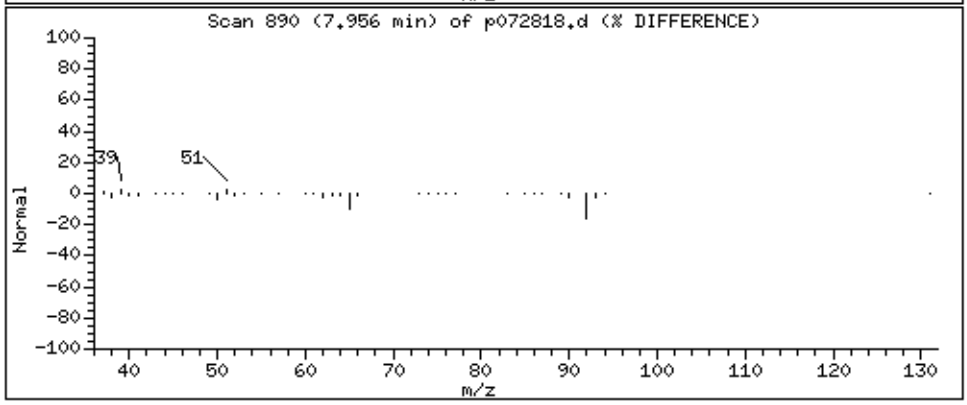












Data File: /chem/msdp.i/28JUL21.b/p072818.d

Date : 28-JUL-2021 22:16

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1902

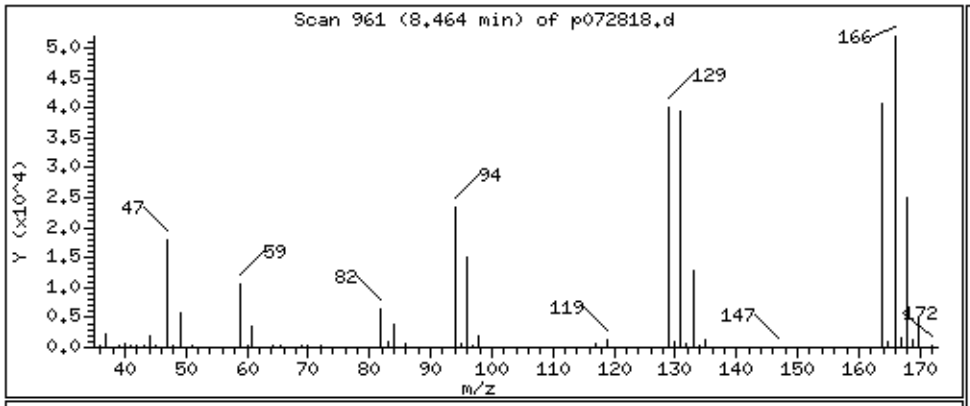
Operator: mb

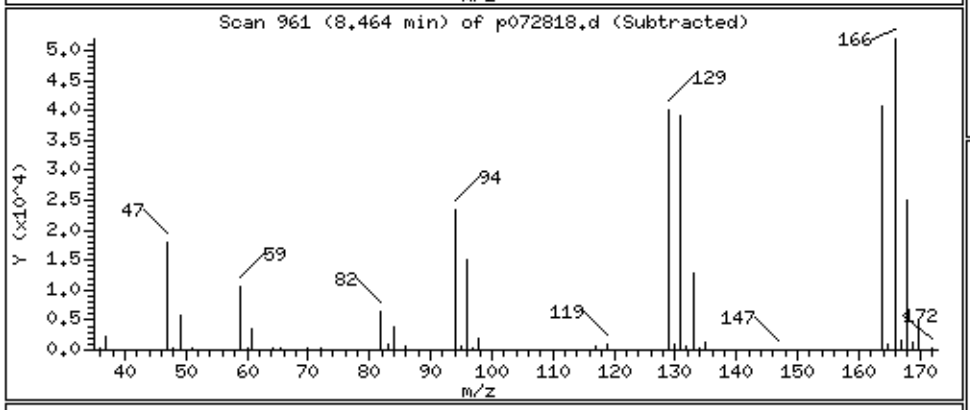
Column phase: RTX-624

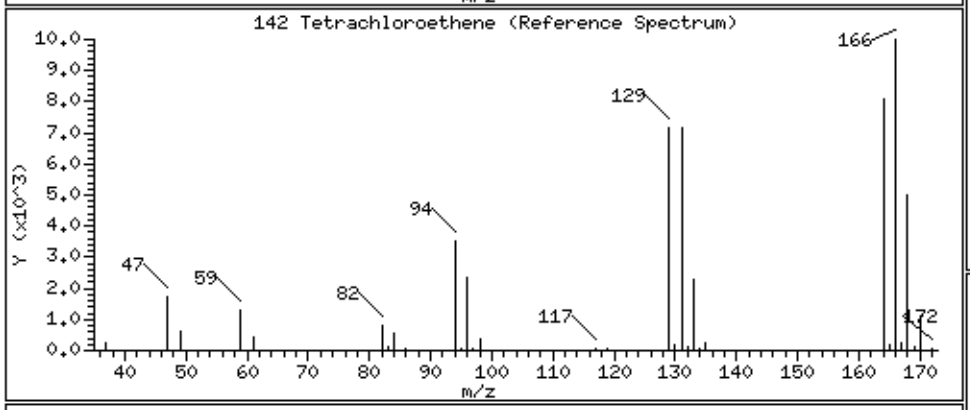
Column diameter: 0.25

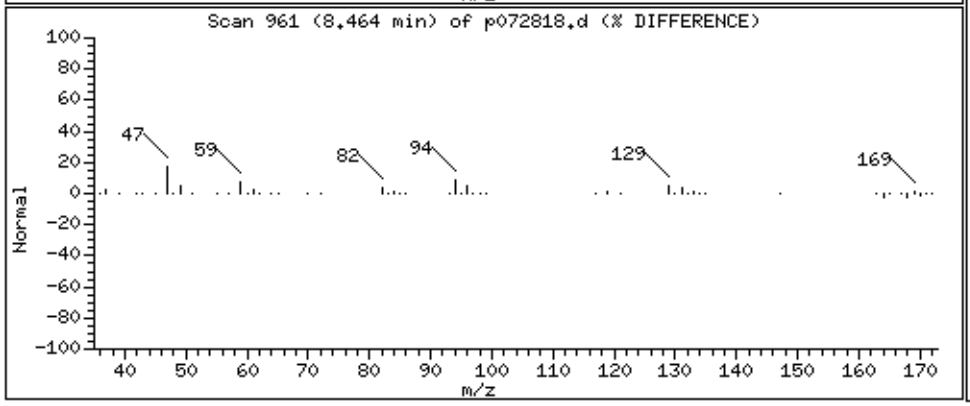
142 Tetrachloroethene

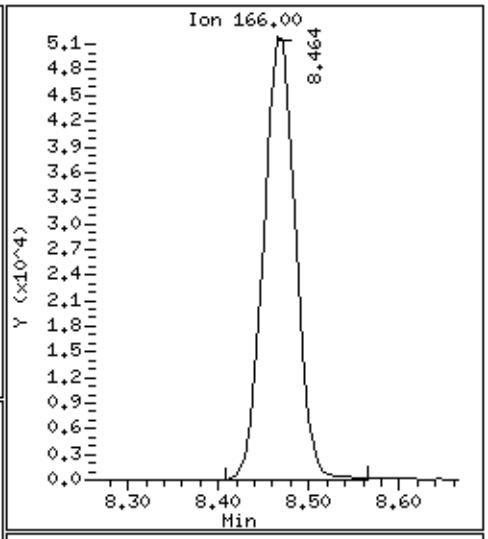
Concentration: 21.489 PPBV

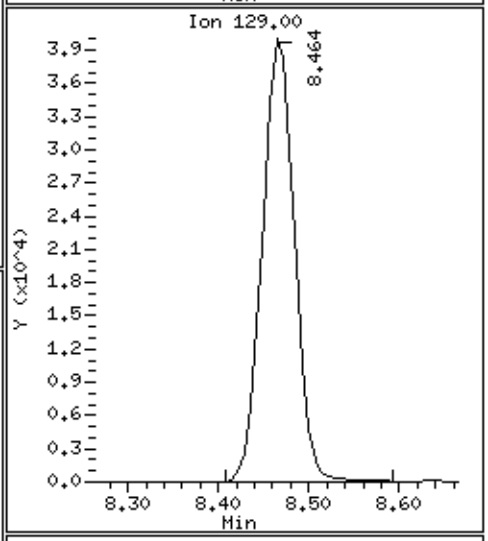


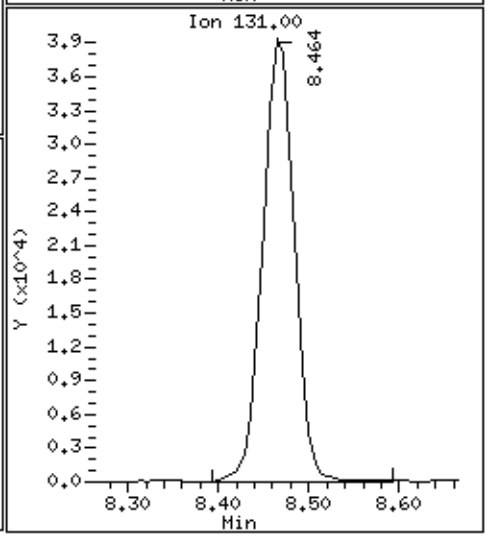












eurofins | Air Toxics

Client Sample ID: SG-VW28A-02

Lab ID#: 2107361-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072819**	**Date of Collection:**	**7/15/21 3:31:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/28/21 11:17 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	5.2	12	13
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	14	28	33
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-VW28A-02

Lab ID#: 2107361-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072819**	**Date of Collection:**	**7/15/21 3:31:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**7/28/21 11:17 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	1.3	4.1	4.7
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	Not Detected	7.9	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Toluene	1.2	2.2	4.4	8.2
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-VW28A-02

Lab ID#: 2107361-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072819**	**Date of Collection: 7/15/21 3:31:00 PM**	
Dil. Factor:	**2.34**	**Date of Analysis: 7/28/21 11:17 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072819.d
Lab Smp Id: 2107361-12A
Inj Date : 28-JUL-2021 23:17
Operator : mb Inst ID: msdp.i
Smp Info : 200ml N3434
Misc Info : 8.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
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		
5.785	5.778 (1.000)	130	150525	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	116243				48.23- 108.23	77.22
5.785	5.778 (1.000)	49	316287				150.57- 210.57	210.12
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	553468	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	82538				0.00- 45.71	14.91
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	561354	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	288515				23.78- 83.78	51.40
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	209534	25.2236	25.224		80.00- 120.00	100.00
6.308	6.308 (1.090)	67	105935				27.21- 87.21	50.56
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	602326	25.0617	25.062		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62626				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)							
7.891	7.891 (1.185)	100	394614			34.95- 94.95	65.52
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	341119	23.6643	23.664	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	418846			95.92- 155.92	122.79
10.921	10.921 (1.154)	176	334889			66.89- 126.89	98.17
47 Acetone					CAS #: 67-64-1		
3.730	3.715 (0.645)	58	23483	5.95082	13.925	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	87276			302.95- 362.95	371.65
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	35366	2.22367	5.203	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	9934			0.00- 47.19	28.09
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	8441	0.56924	1.332	80.00- 120.00	100.00
4.704	4.696 (0.813)	43	6825			37.52- 97.52	80.86
4.697	4.696 (0.812)	86	557			0.00- 41.48	6.60
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.195)	91	23486	0.93204	2.181	80.00- 120.00	100.00
7.956	7.956 (1.195)	92	14428			28.38- 88.38	61.43

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072819.d
Lab Smp Id: 2107361-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 8.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	150525	-6.13
108 1,4-Difluorobenze	582857	349714	816000	553468	-5.04
153 Chlorobenzene-d5	560035	336021	784049	561354	0.24

		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	6.66	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: 29-Jul-2021 13:34

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-12A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 8.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.224	100.89	70-130
$ 134 Toluene-d8	25.000	25.062	100.25	70-130
$ 170 4-Bromofluorobenz	25.000	23.664	94.66	70-130

Data File: /chem/msdp.i/28JUL21.b/p072819.d

Date : 28-JUL-2021 23:17

Client ID:

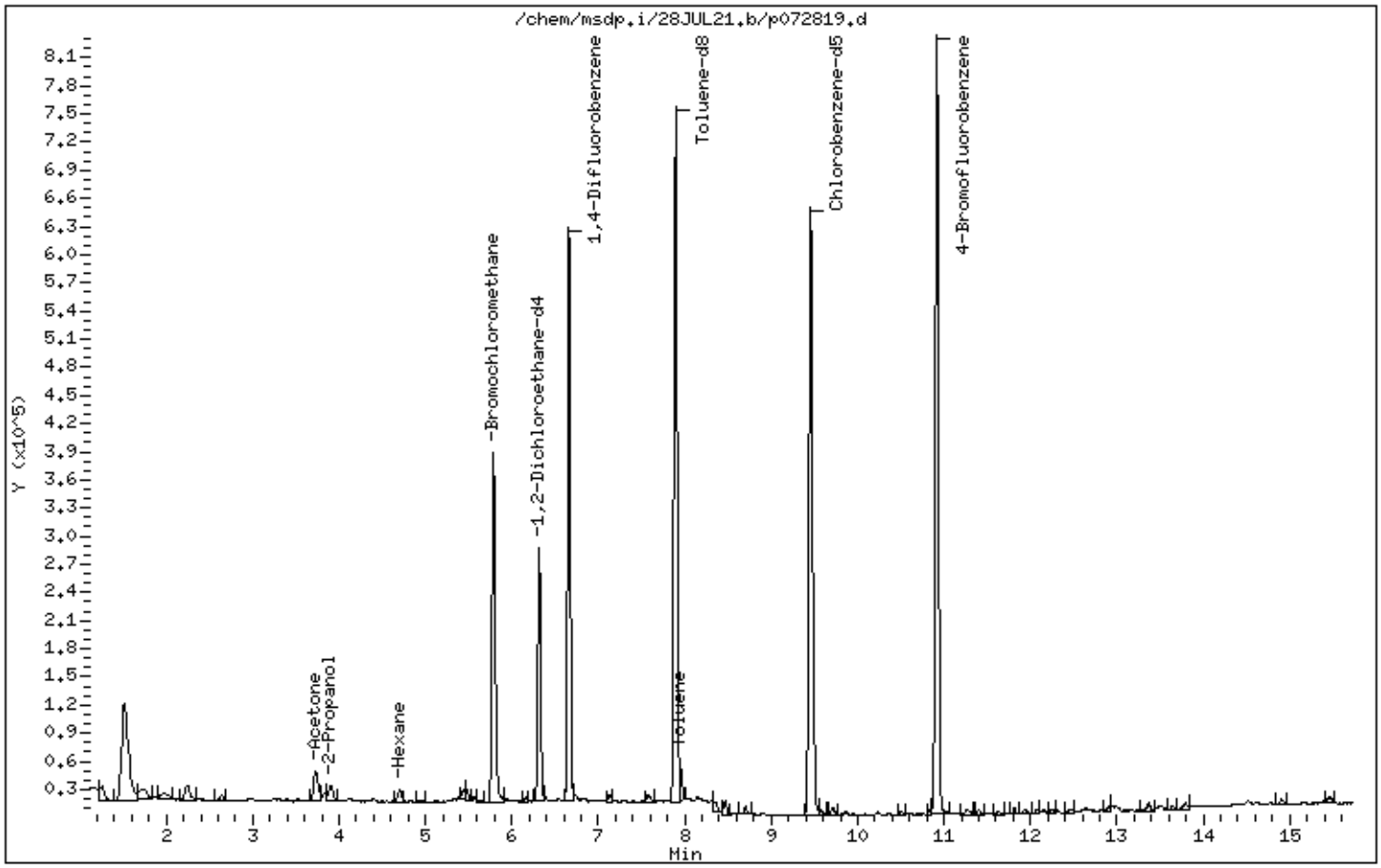
Instrument: msdp.i

Sample Info: 200ml N3434

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072819.d

Date : 28-JUL-2021 23:17

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3434

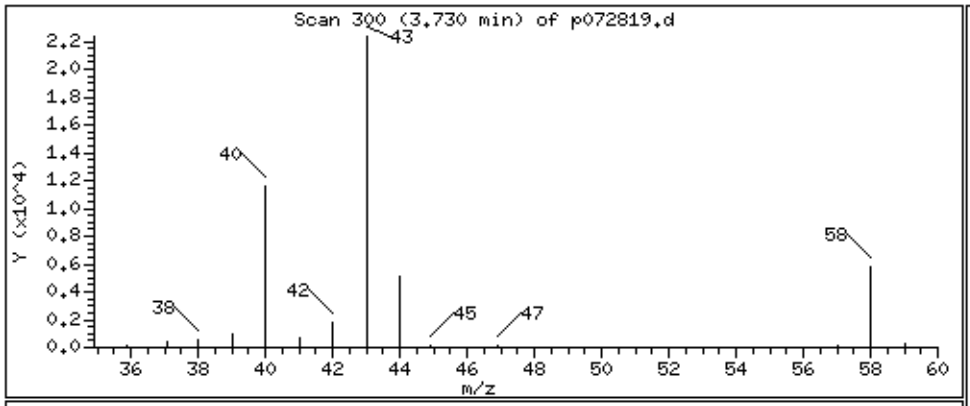
Operator: mb

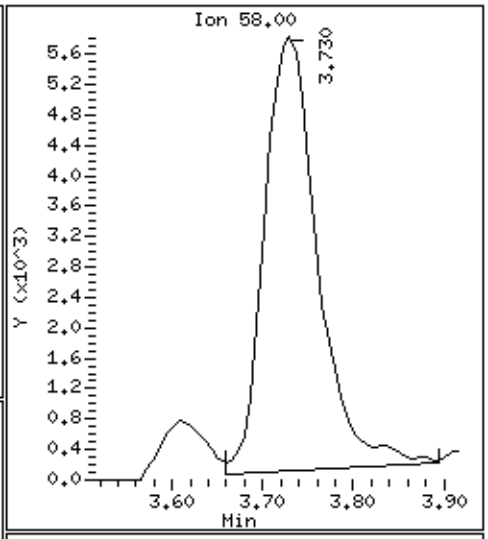
Column phase: RTX-624

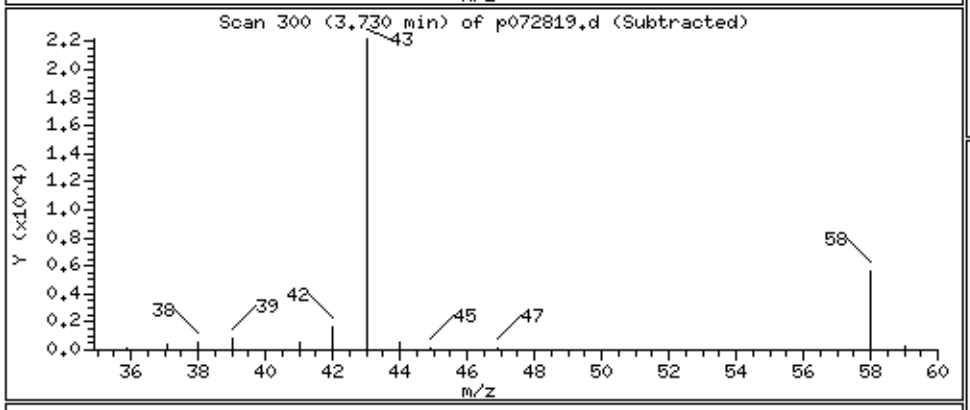
Column diameter: 0.25

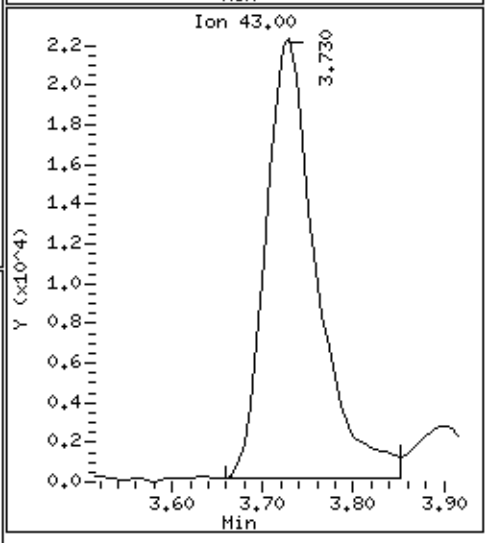
47 Acetone

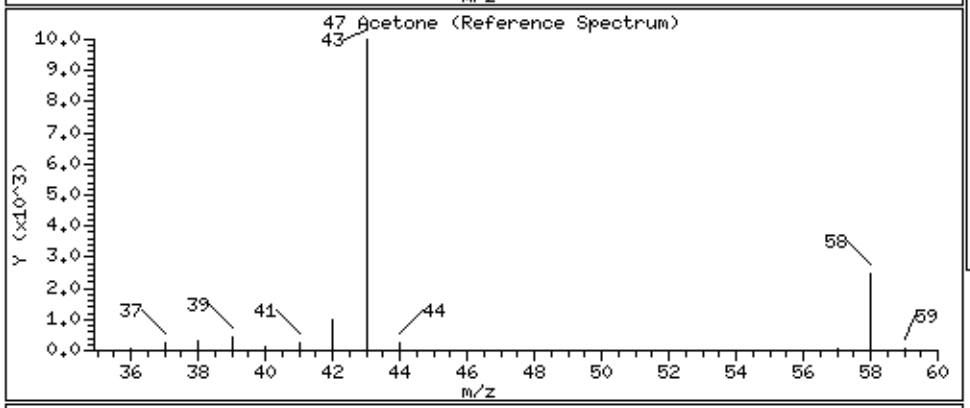
Concentration: 13.925 PPBV

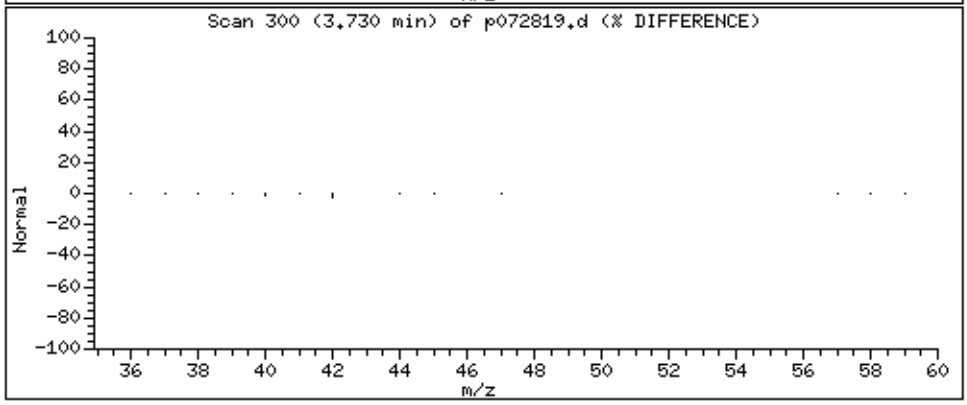












Data File: /chem/msdp.i/28JUL21.b/p072819.d

Date : 28-JUL-2021 23:17

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3434

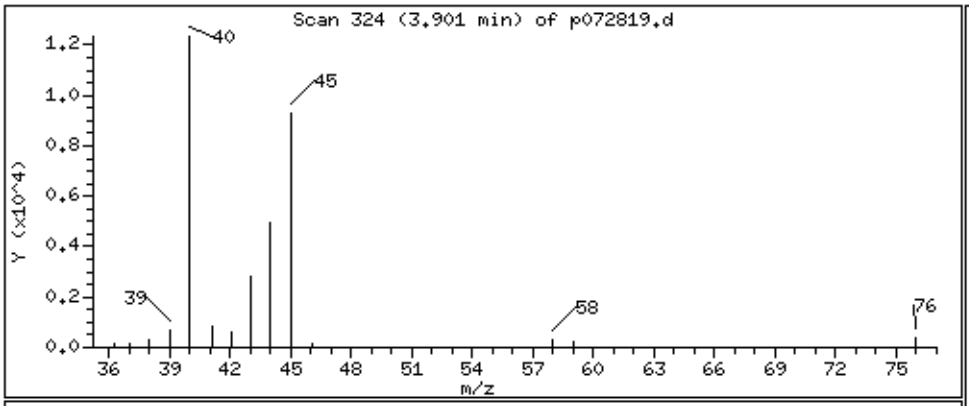
Operator: mb

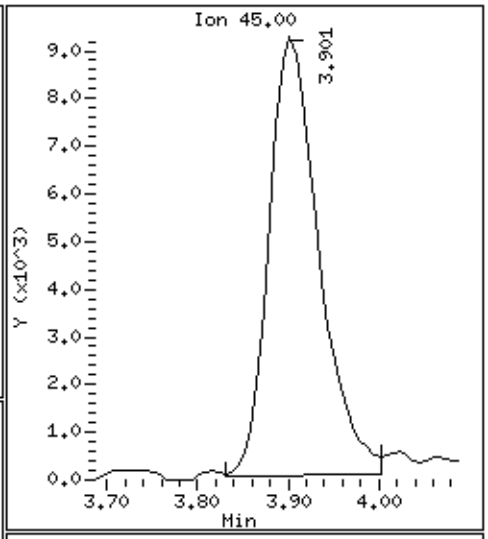
Column phase: RTX-624

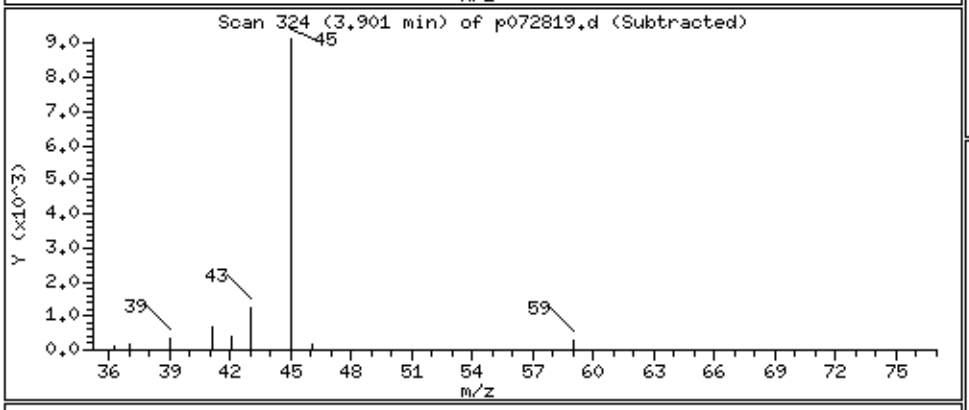
Column diameter: 0.25

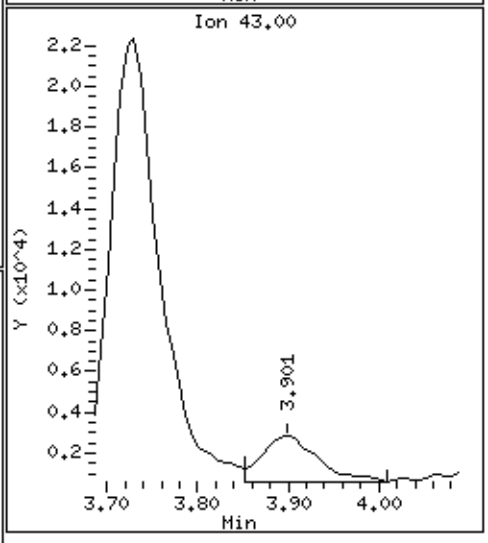
52 2-Propanol

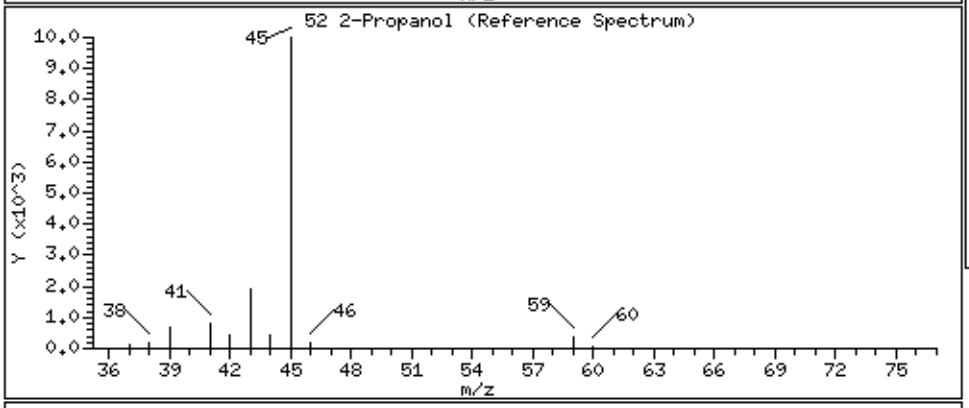
Concentration: 5.203 PPBV

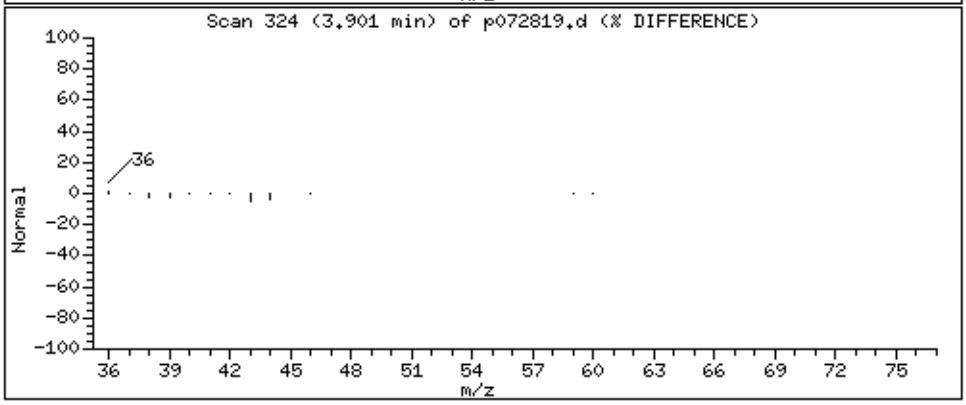












Data File: /chem/msdp.i/28JUL21.b/p072819.d

Date : 28-JUL-2021 23:17

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3434

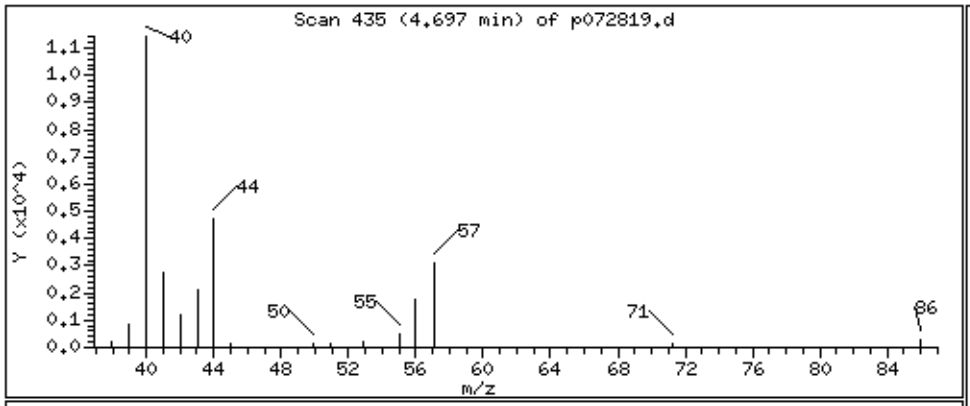
Operator: mb

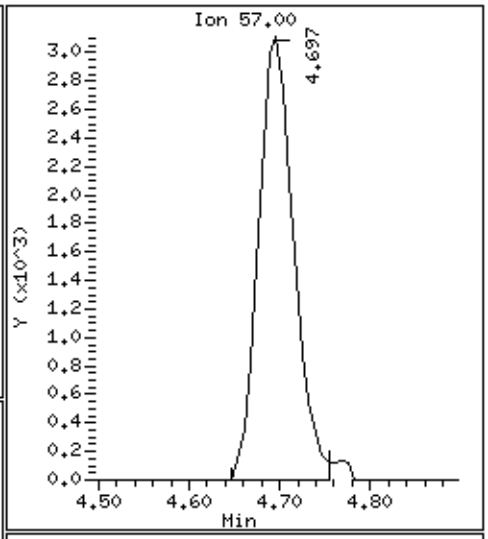
Column phase: RTX-624

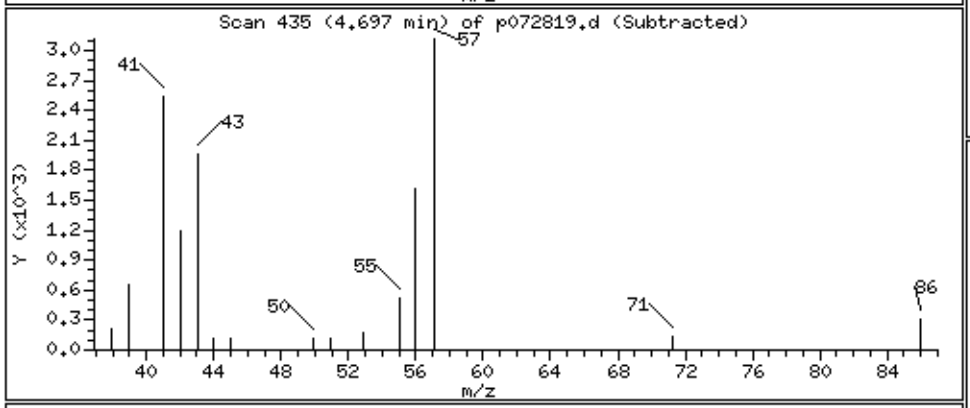
Column diameter: 0.25

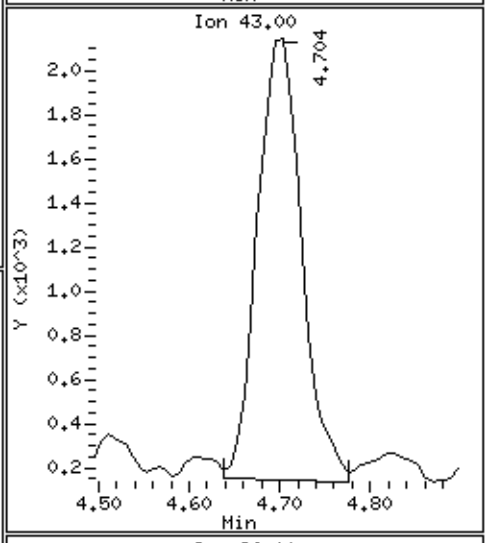
67 Hexane

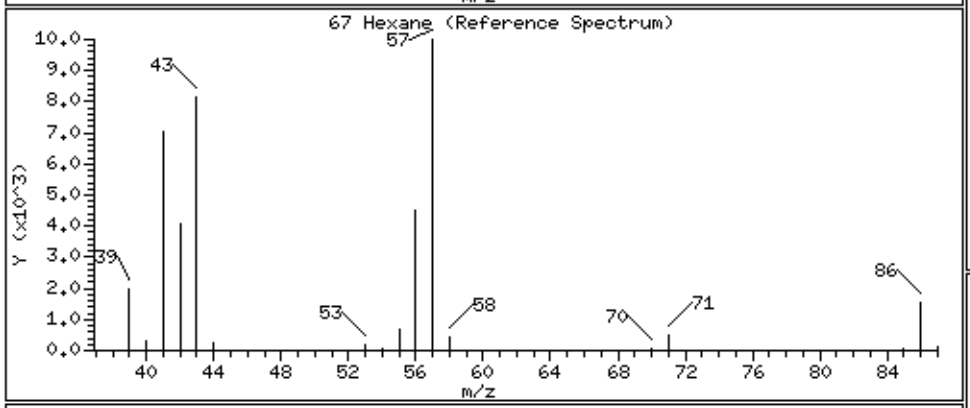
Concentration: 1.332 PPBV

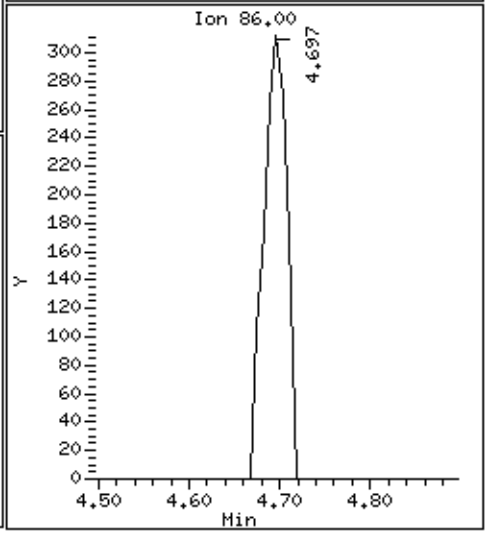


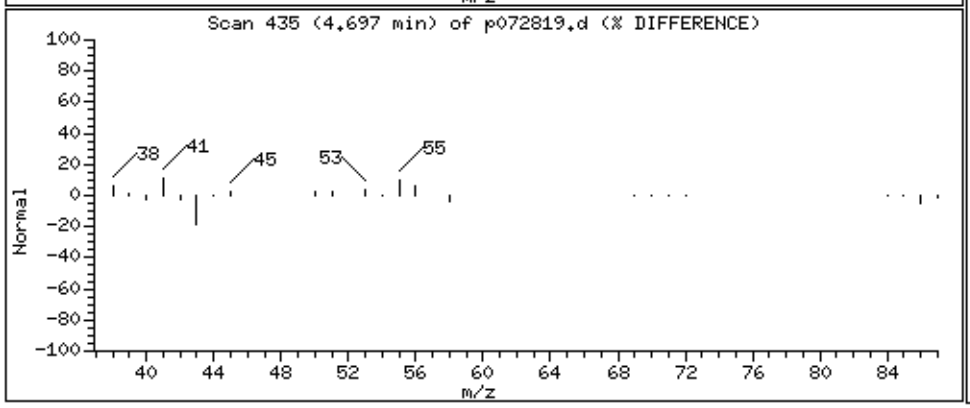












Data File: /chem/msdp.i/28JUL21.b/p072819.d

Date : 28-JUL-2021 23:17

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3434

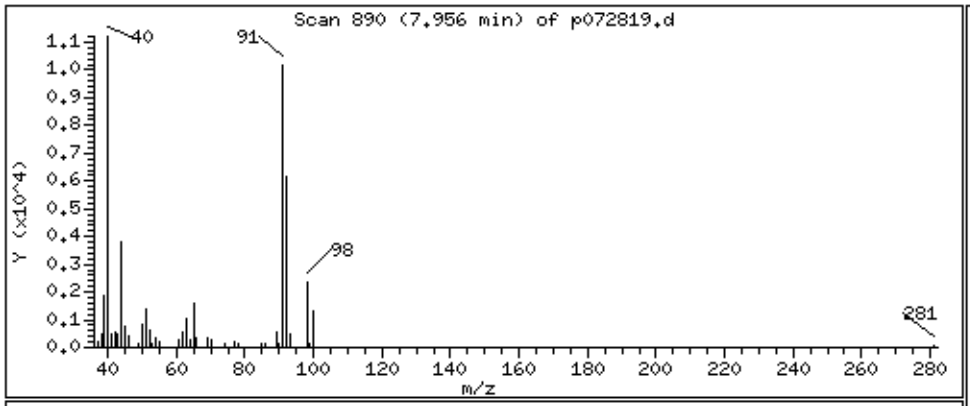
Operator: mb

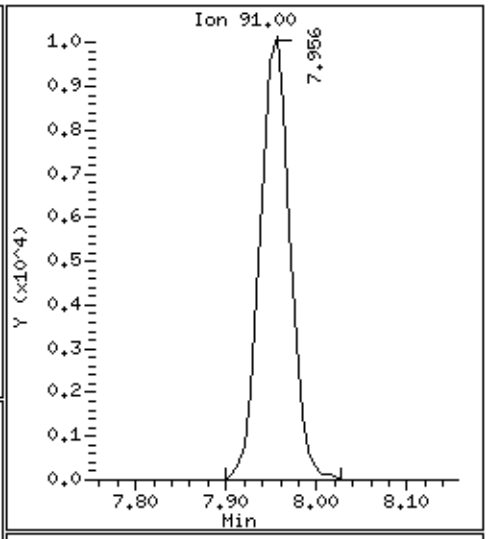
Column phase: RTX-624

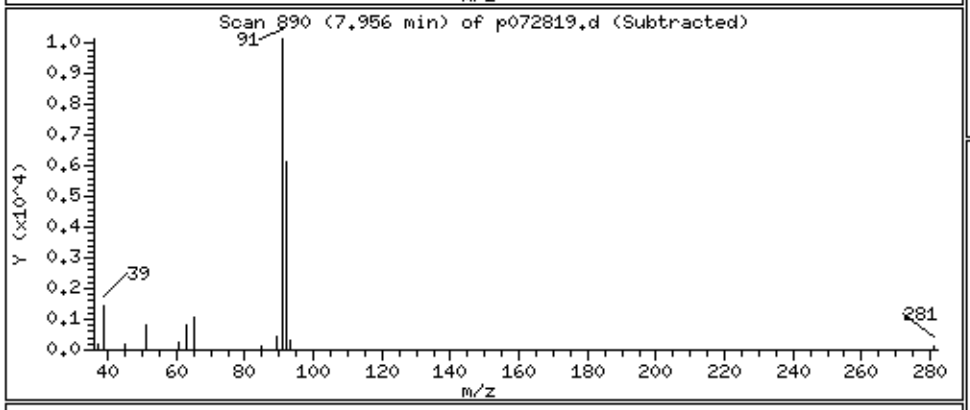
Column diameter: 0.25

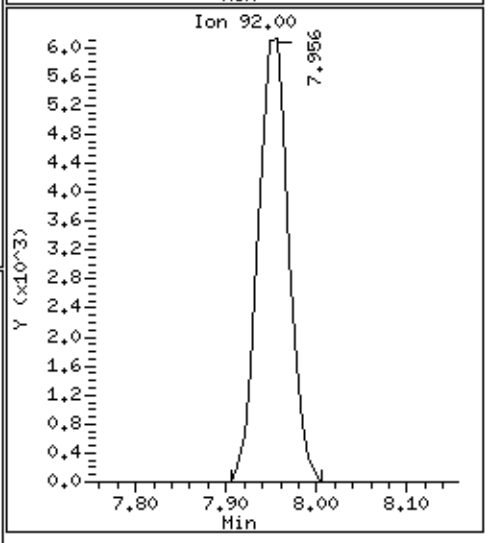
137 Toluene

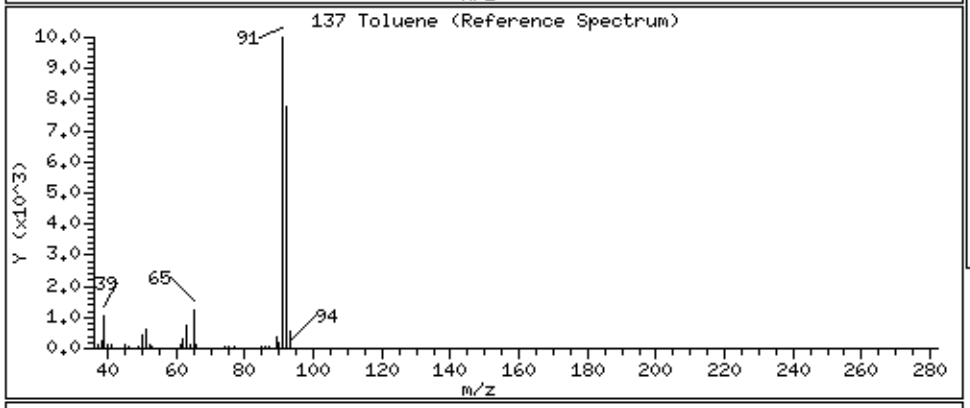
Concentration: 2.181 PPBV

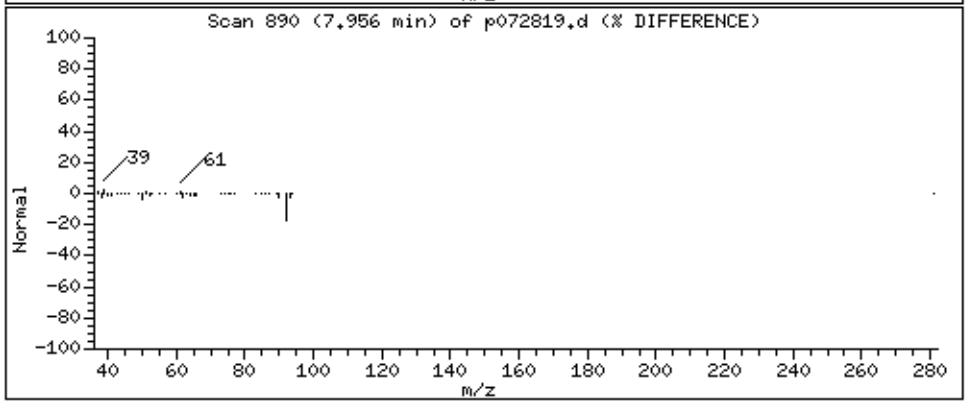












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Client Sample ID: SG-VW14-02

Lab ID#: 2107361-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072820**	**Date of Collection:**	**7/15/21 3:58:00 PM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**7/28/21 11:46 PM**

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	5.3	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	13	Not Detected
2-Hexanone	4.3	Not Detected	18	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	5.3	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	9.3	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	7.2	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Bromomethane	11	Not Detected	42	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	1.7	5.2	8.1
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-VW14-02

Lab ID#: 2107361-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072820**	**Date of Collection:**	**7/15/21 3:58:00 PM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**7/28/21 11:46 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	3.7	Not Detected
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
Dibromomethane	4.3	Not Detected	30	Not Detected
Ethanol	11	Not Detected	20	Not Detected
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	7.5	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	41	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
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	5.3	Not Detected
Propylene	4.3	Not Detected	7.4	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	55	7.2	370
Tetrahydrofuran	1.1	Not Detected	3.2	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	2.2	5.8	12
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-VW14-02

Lab ID#: 2107361-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072820**	**Date of Collection: 7/15/21 3:58:00 PM**	
Dil. Factor:	**2.14**	**Date of Analysis: 7/28/21 11:46 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072820.d
Lab Smp Id: 2107361-13A
Inj Date : 28-JUL-2021 23:46
Operator : mb Inst ID: msdp.i
Smp Info : 200ml N5152
Misc Info : 6.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 3
Dil Factor: 2.14000
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	151060	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	118583				48.23- 108.23	78.50
5.785	5.778 (1.000)	49	314033				150.57- 210.57	207.89
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.659 (1.000)	114	550307	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	80023				0.00- 45.71	14.54
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	551380	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	289379				23.78- 83.78	52.48
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.308	6.308 (1.090)	65	209501	25.1303	25.130		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	103955				27.21- 87.21	49.62
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	600137	25.1140	25.114		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62250				0.00- 40.44	10.37

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	385739			34.95- 94.95	64.28
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	342993	24.2247	24.225	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	417440			95.92- 155.92	121.71
10.921	10.921 (1.154)	176	335202			66.89- 126.89	97.73
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.009)	83	10223	0.77781	1.664	80.00- 120.00	100.00
5.842	5.835 (1.010)	85	6594			34.70- 94.70	64.51
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	9075	1.02985	2.204	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	9755			76.29- 136.29	107.49
6.867	6.867 (1.031)	97	5785			33.63- 93.63	63.75
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	323833	25.7698	55.147	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	251037			47.84- 107.84	77.52
8.464	8.464 (0.895)	131	239920			45.29- 105.29	74.09

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072820.d
Lab Smp Id: 2107361-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	151060	-5.79
108 1,4-Difluorobenze	582857	349714	816000	550307	-5.58
153 Chlorobenzene-d5	560035	336021	784049	551380	-1.55

		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.

Report Date: 29-Jul-2021 13:34

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-13A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.130	100.52	70-130
$ 134 Toluene-d8	25.000	25.114	100.46	70-130
$ 170 4-Bromofluorobenz	25.000	24.225	96.90	70-130

Data File: /chem/msdp.i/28JUL21.b/p072820.d

Date : 28-JUL-2021 23:46

Client ID:

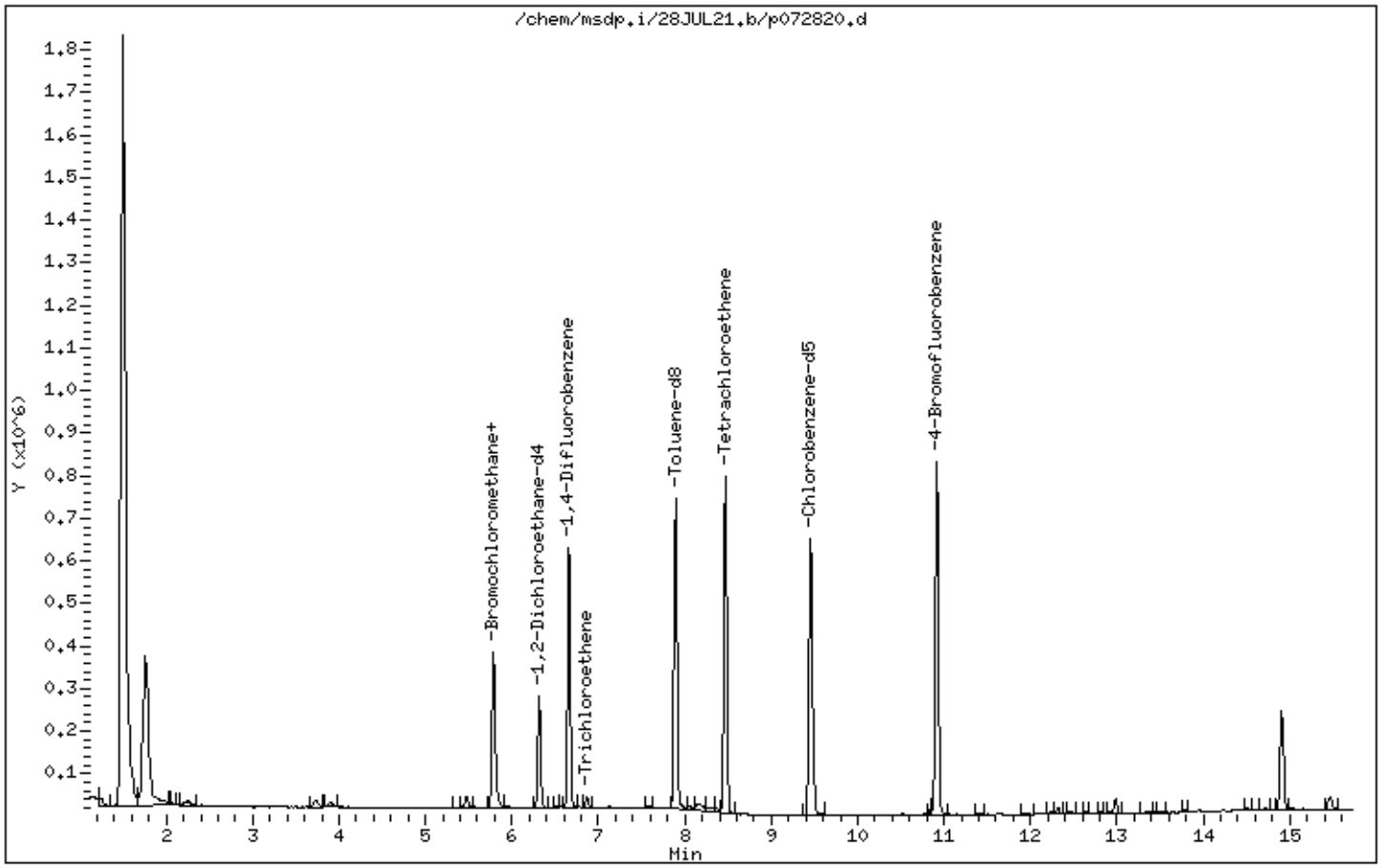
Instrument: msdp.i

Sample Info: 200ml N5152

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072820.d

Date : 28-JUL-2021 23:46

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5152

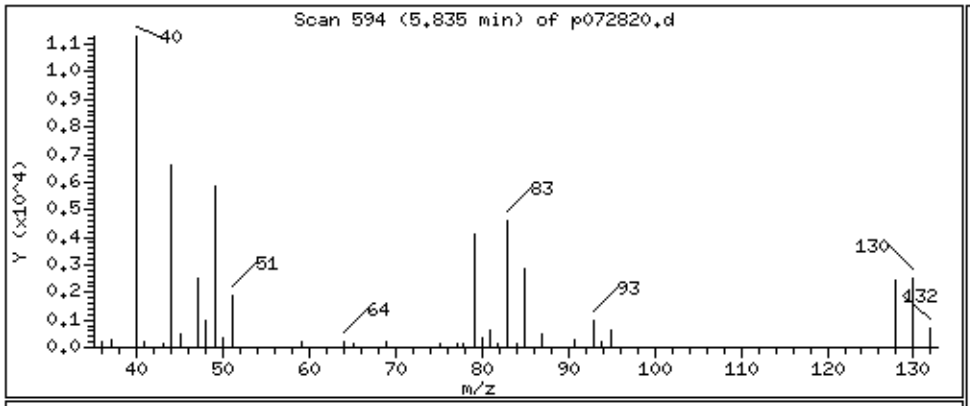
Operator: mb

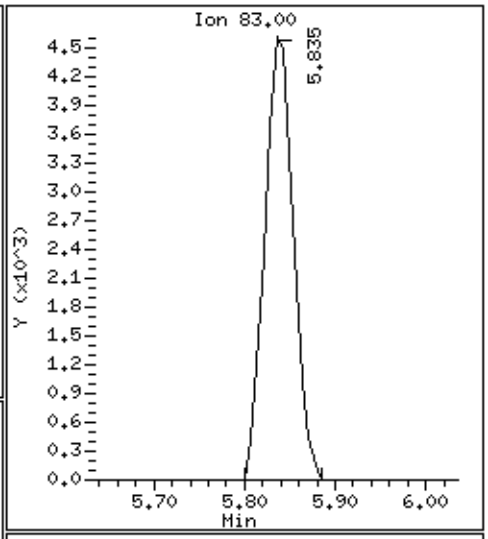
Column phase: RTX-624

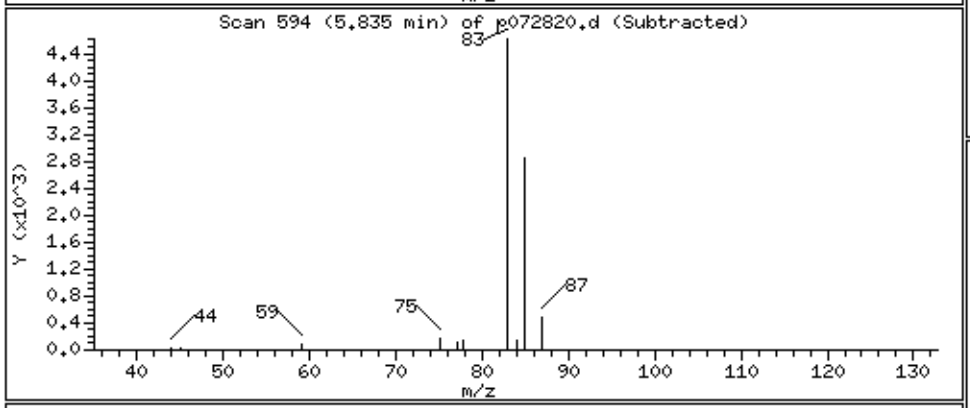
Column diameter: 0.25

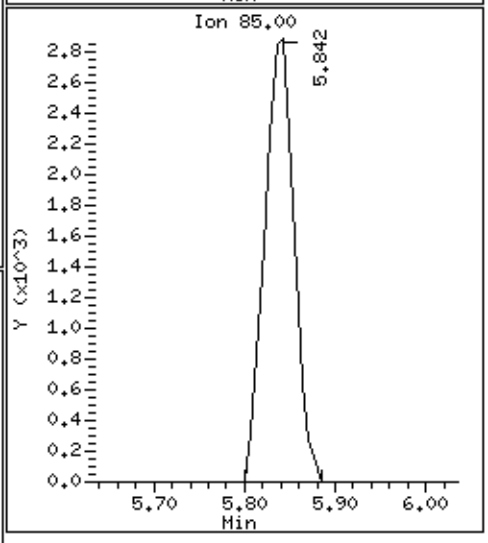
92 Chloroform

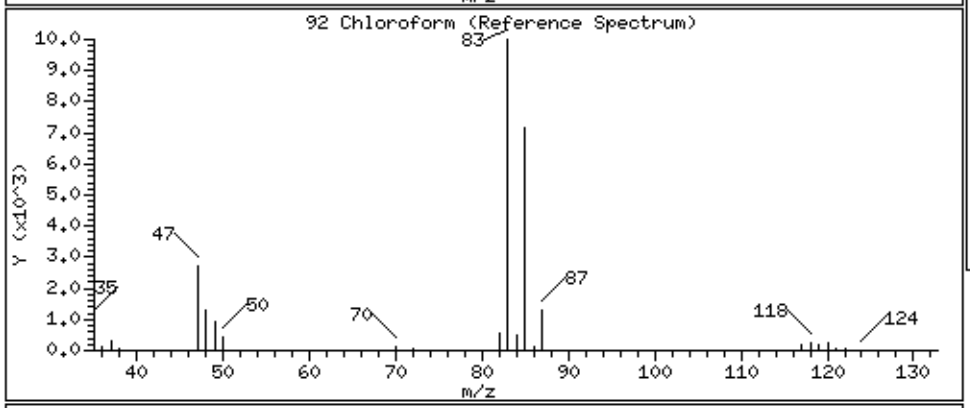
Concentration: 1.664 PPBV

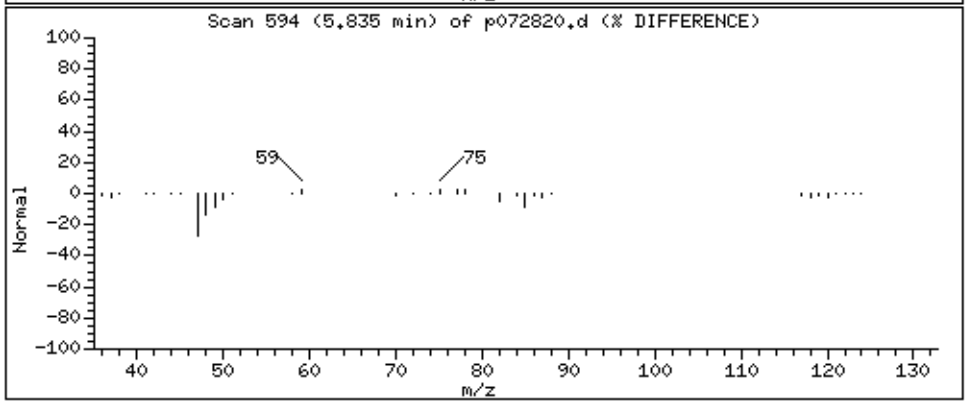












Data File: /chem/msdp.i/28JUL21.b/p072820.d

Date : 28-JUL-2021 23:46

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5152

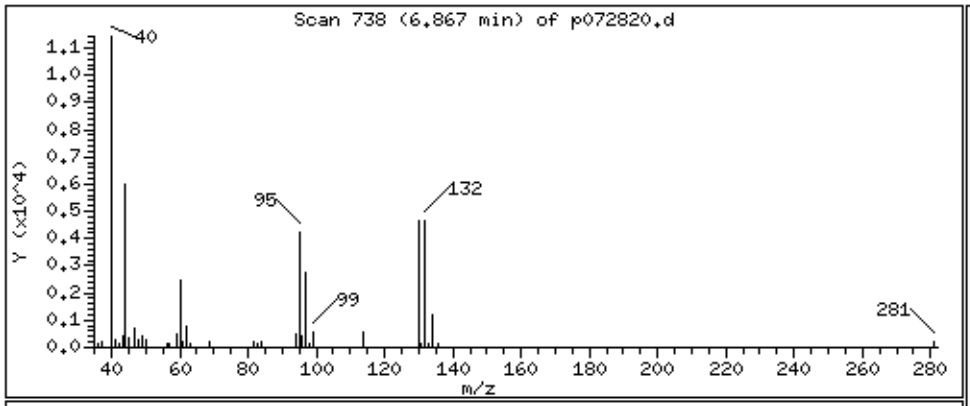
Operator: mb

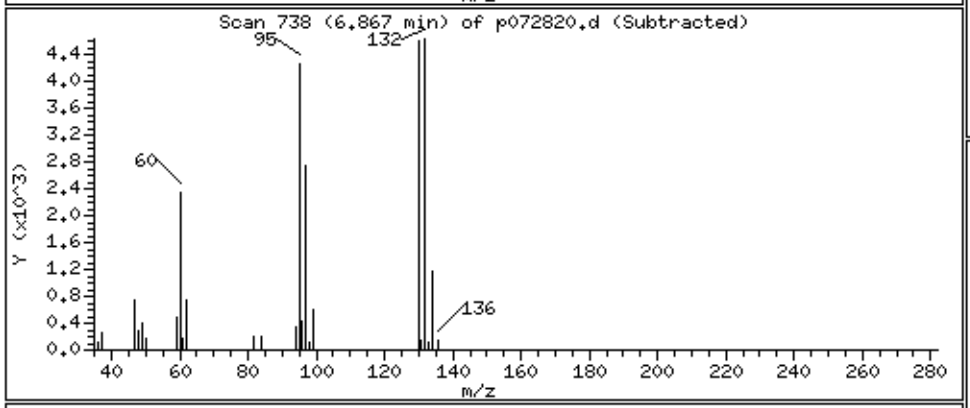
Column phase: RTX-624

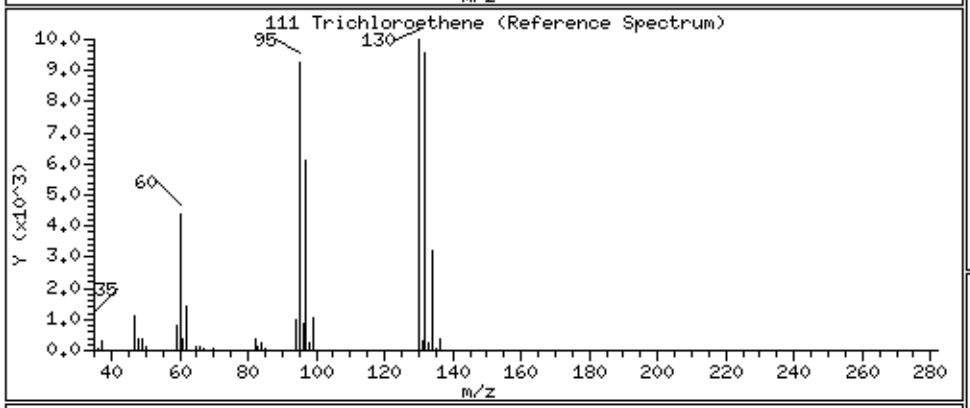
Column diameter: 0.25

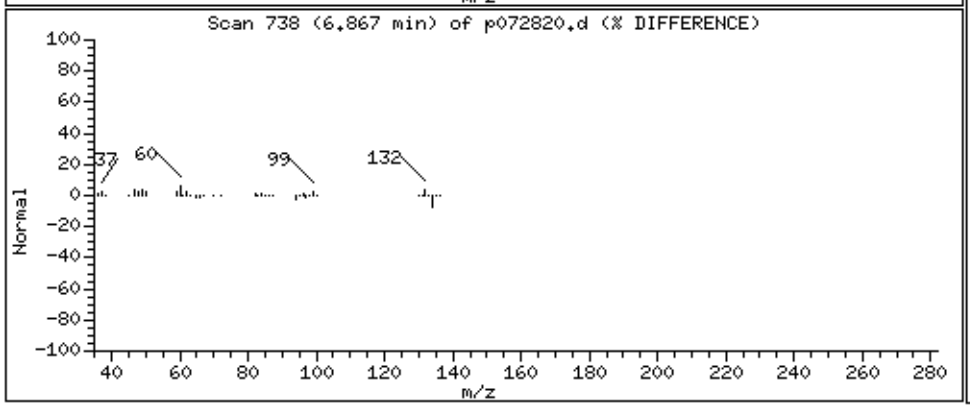
111 Trichloroethene

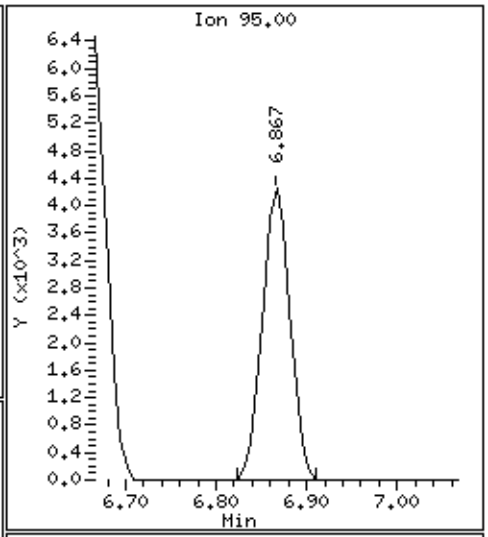
Concentration: 2.204 PPBV

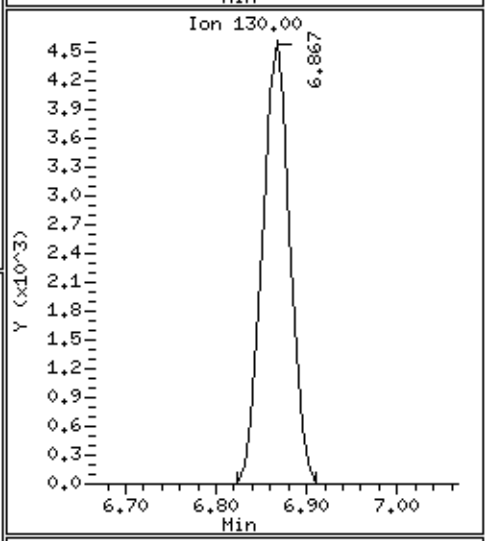


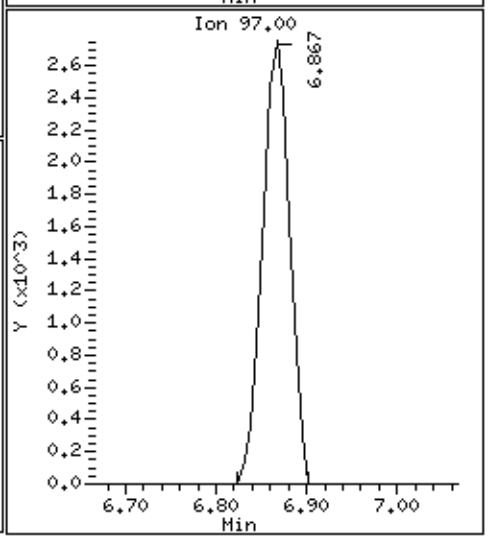












Data File: /chem/msdp.i/28JUL21.b/p072820.d

Date : 28-JUL-2021 23:46

Client ID:

Instrument: msdp.i

Sample Info: 200ml N5152

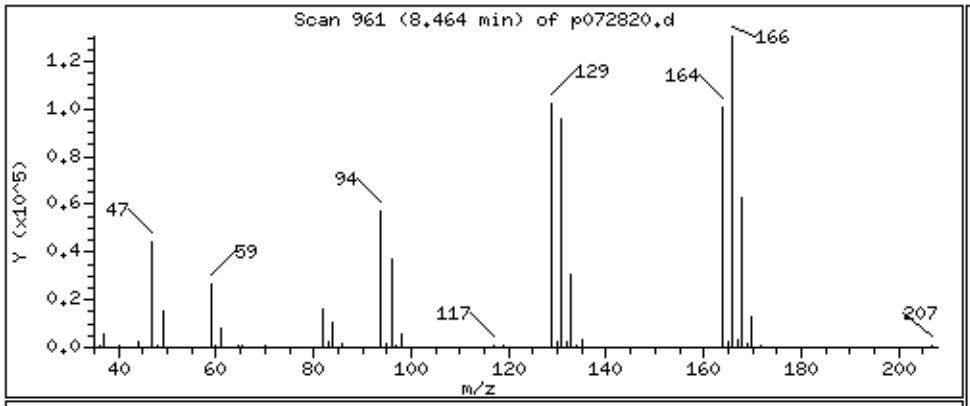
Operator: mb

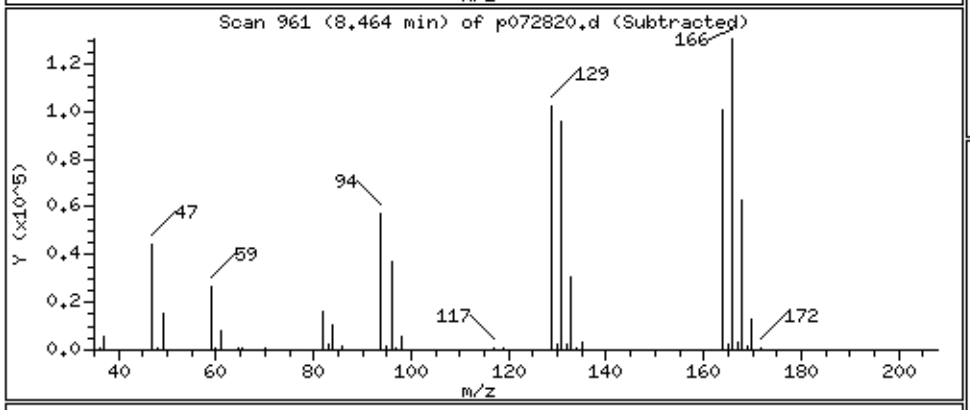
Column phase: RTX-624

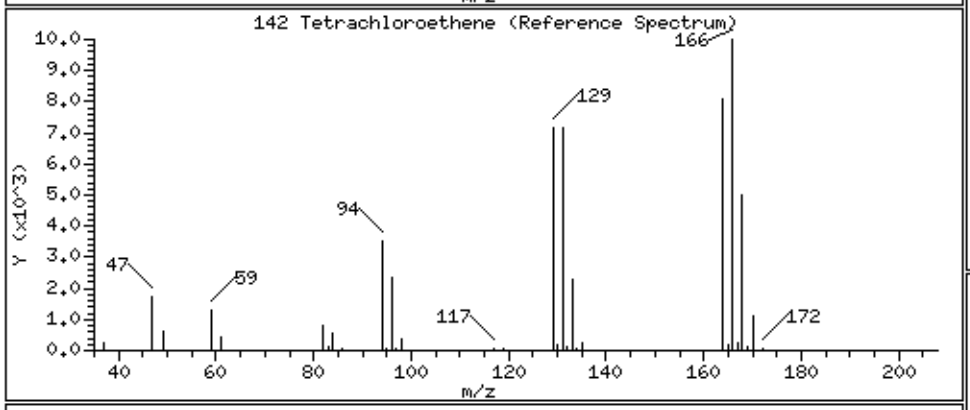
Column diameter: 0.25

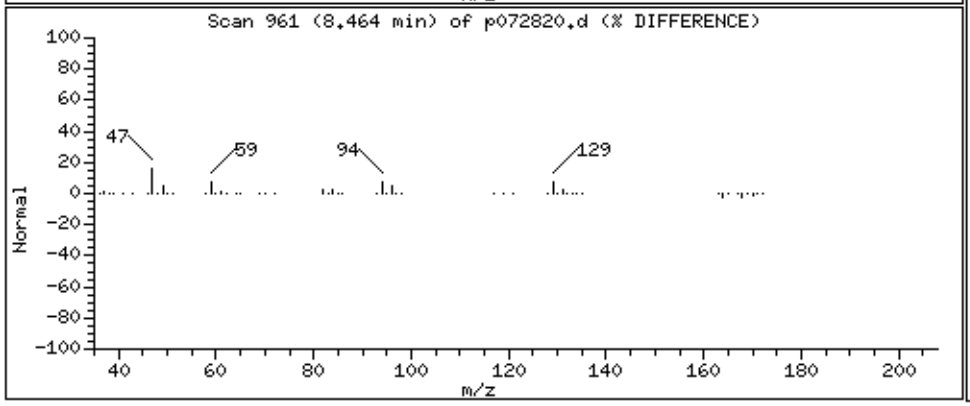
142 Tetrachloroethene

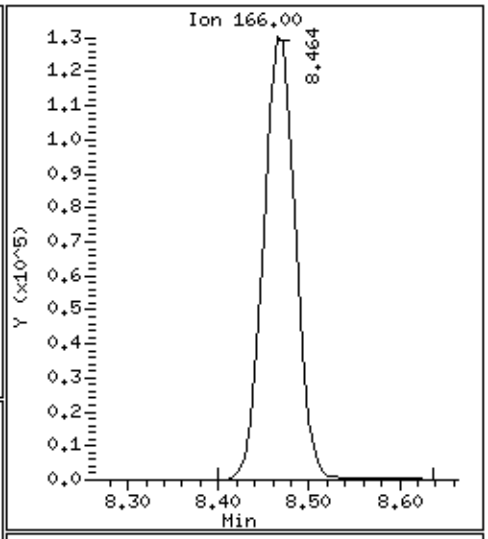
Concentration: 55.147 PPBV

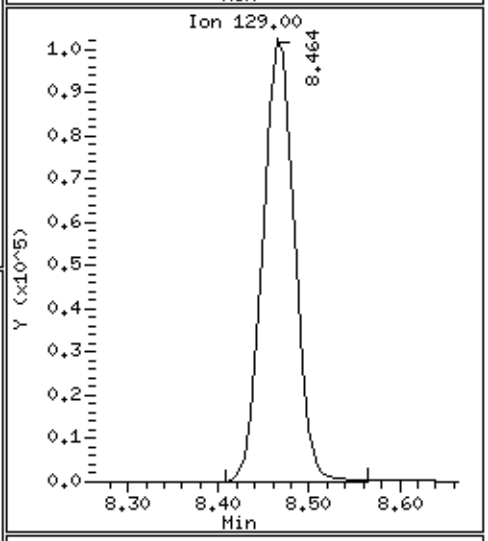


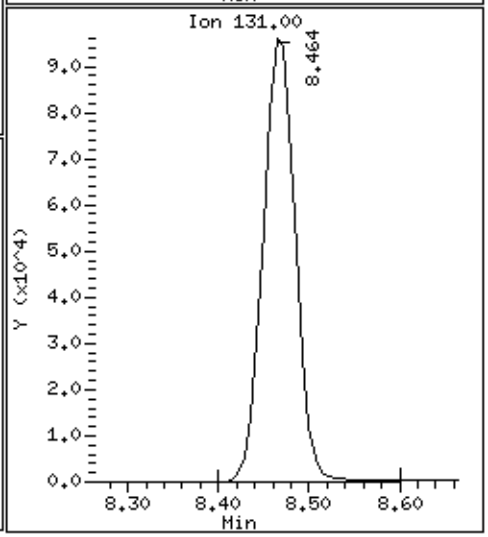












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Client Sample ID: SG-VW59B-01

Lab ID#: 2107361-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072821**	**Date of Collection:**	**7/15/21 4:42:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/29/21 12:15 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	1.0	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	89	11	240
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-VW59B-01

Lab ID#: 2107361-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072821**	**Date of Collection:**	**7/15/21 4:42:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/29/21 12:15 AM**

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	1.4	3.7	5.0
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	42	7.1	280
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-VW59B-01

Lab ID#: 2107361-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072821**	**Date of Collection: 7/15/21 4:42:00 PM**	
Dil. Factor:	**2.10**	**Date of Analysis: 7/29/21 12:15 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	102	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/28JUL21.b/p072821.d
Lab Smp Id: 2107361-14A
Inj Date : 29-JUL-2021 00:15
Operator : mb Inst ID: msdp.i
Smp Info : 200ml O0809
Misc Info : 6.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 4
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	147042	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	116638				48.23- 108.23	79.32
5.785	5.778 (1.000)	49	316007				150.57- 210.57	214.91
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	549196	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	79559				0.00- 45.71	14.49
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	558168	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	292818				23.78- 83.78	52.46
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	208726	25.7215	25.721		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	105092				27.21- 87.21	50.35
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	607989	25.4941	25.494		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	61091				0.00- 40.44	10.05

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	391320			34.95- 94.95	64.36
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	342317	23.8829	23.883	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	416797			95.92- 155.92	121.76
10.921	10.921 (1.154)	176	335967			66.89- 126.89	98.15
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.703 (0.297)	65	141980	42.5985	89.457	80.00- 120.00	100.00
1.716	1.744 (0.297)	51	611724			597.63- 657.63	430.85
1.716	1.703 (0.297)	47	80628			33.72- 93.72	56.79
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	9744	0.67268	1.413	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	9274			37.52- 97.52	95.18
4.703	4.696 (0.813)	86	729			0.00- 41.48	7.49
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	251913	19.8028	41.586	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	193653			47.84- 107.84	76.87
8.471	8.464 (0.895)	131	182976			45.29- 105.29	72.63

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072821.d
Lab Smp Id: 2107361-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	147042	-8.30
108 1,4-Difluorobenze	582857	349714	816000	549196	-5.78
153 Chlorobenzene-d5	560035	336021	784049	558168	-0.33

		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	6.67	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.

Report Date: 29-Jul-2021 13:35

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-14A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.721	102.89	70-130
$ 134 Toluene-d8	25.000	25.494	101.98	70-130
$ 170 4-Bromofluorobenz	25.000	23.883	95.53	70-130

Data File: /chem/msdp.i/28JUL21.b/p072821.d

Date : 29-JUL-2021 00:15

Client ID:

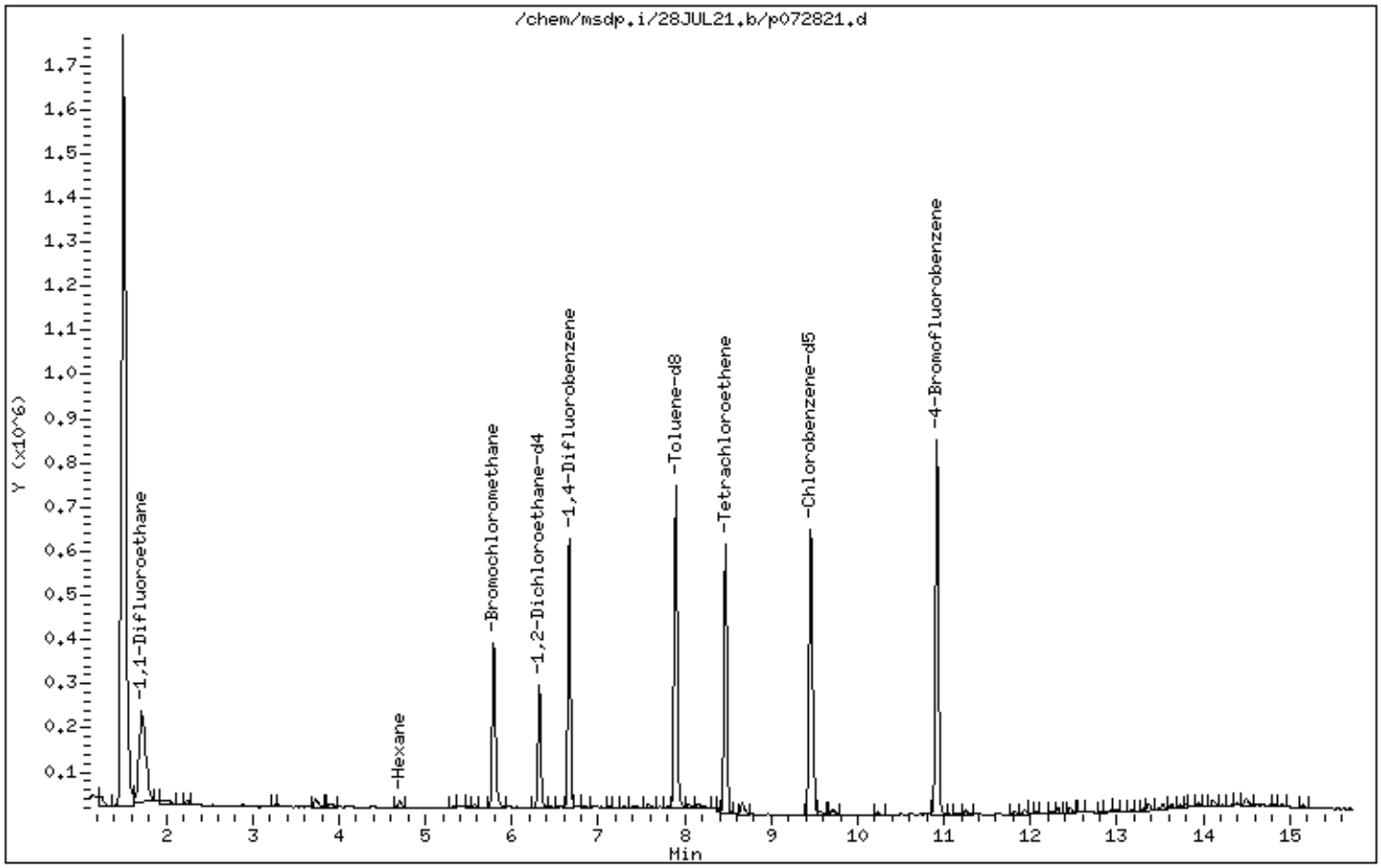
Instrument: msdp.i

Sample Info: 200ml 00809

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072821.d

Date : 29-JUL-2021 00:15

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00809

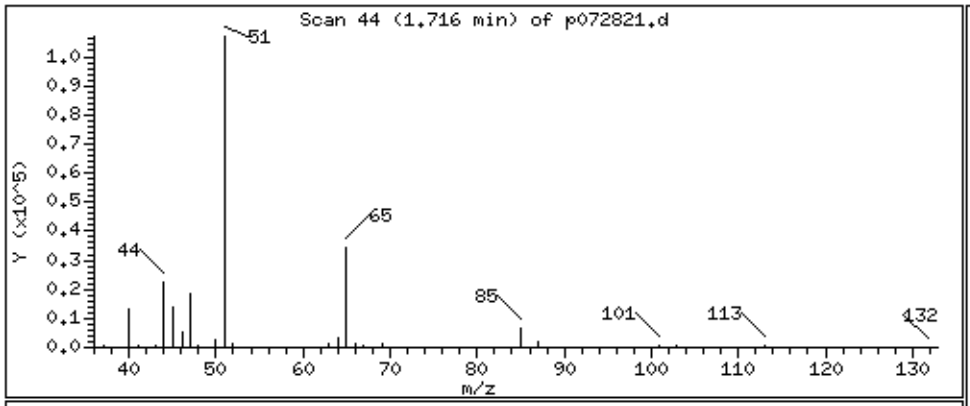
Operator: mb

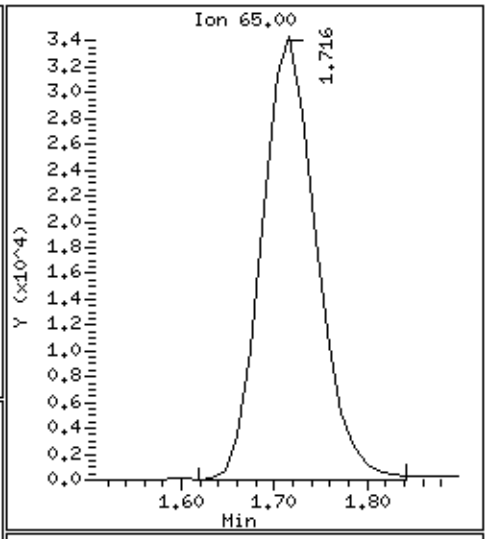
Column phase: RTX-624

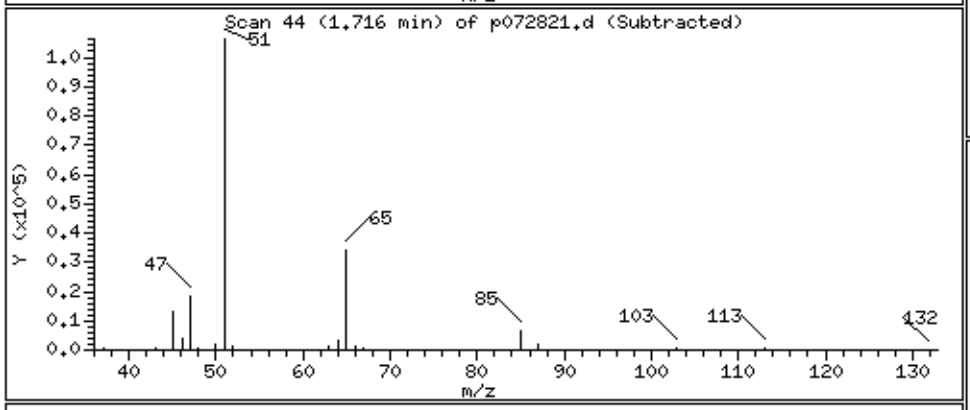
Column diameter: 0.25

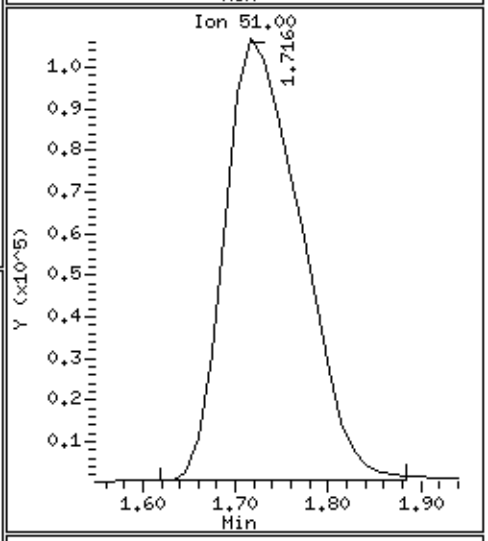
7 1,1-Difluoroethane

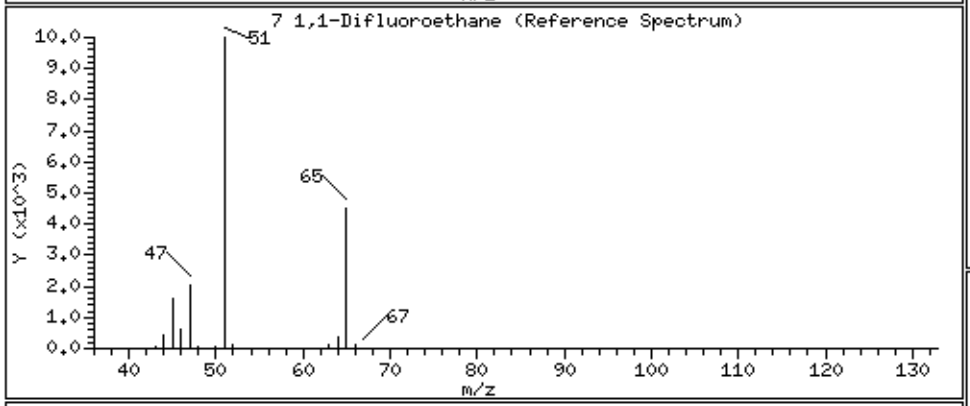
Concentration: 89.457 PPBV

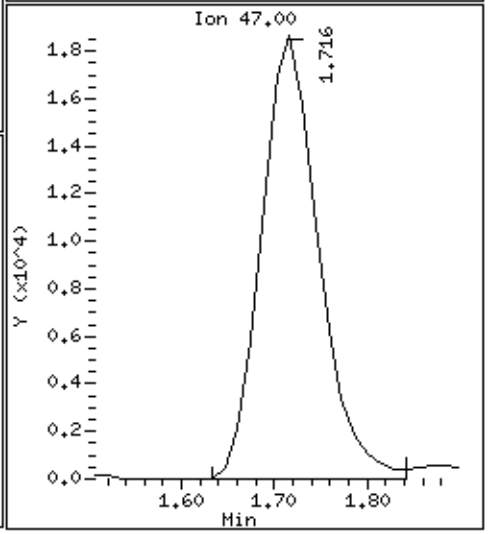


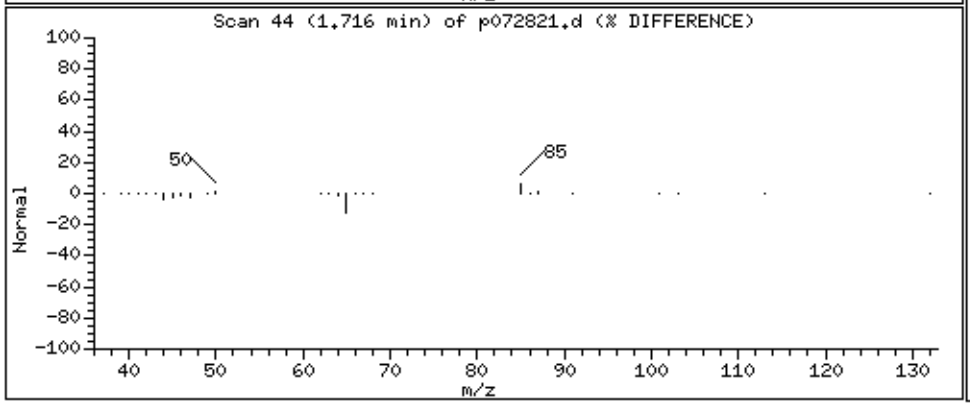












Data File: /chem/msdp.i/28JUL21.b/p072821.d

Date : 29-JUL-2021 00:15

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00809

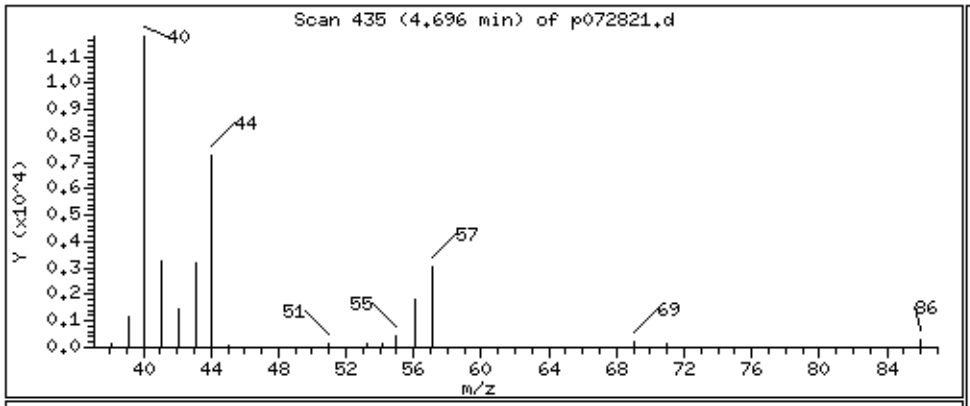
Operator: mb

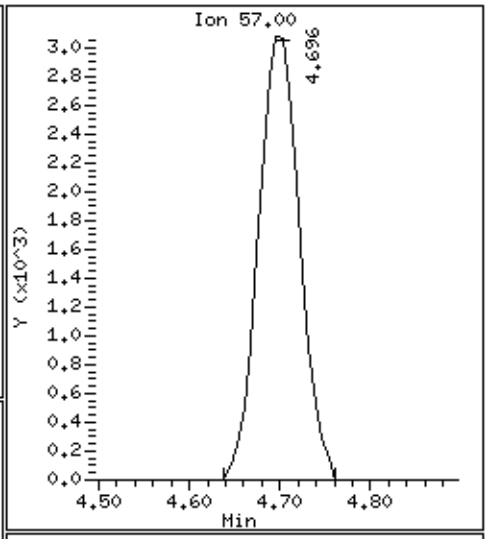
Column phase: RTX-624

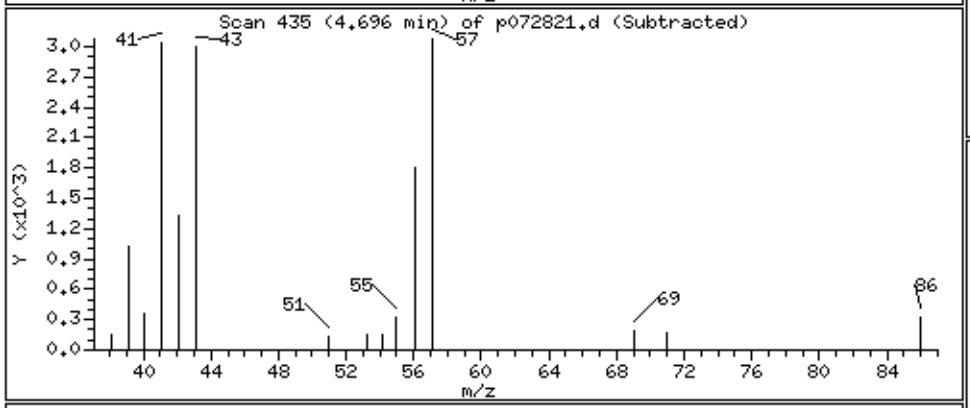
Column diameter: 0.25

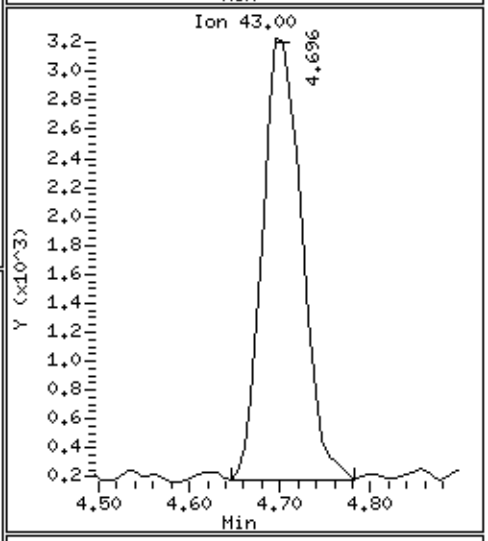
67 Hexane

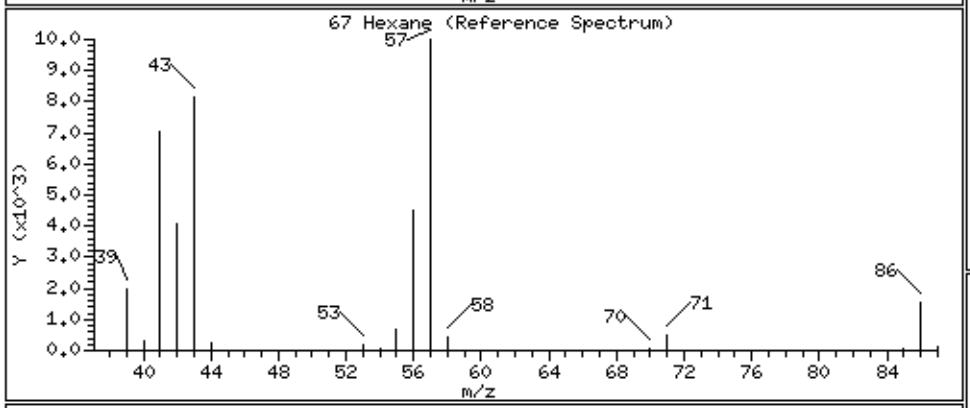
Concentration: 1.413 PPBV

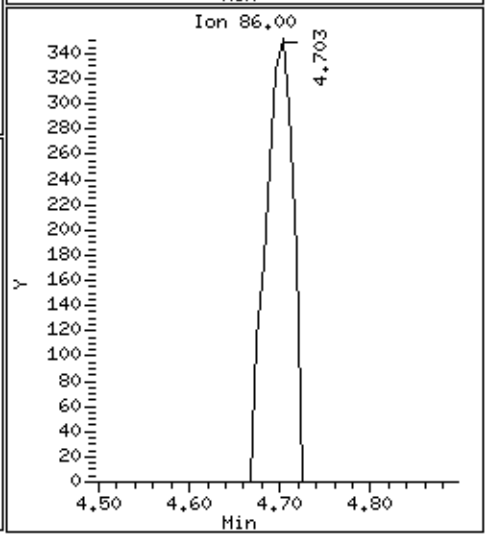


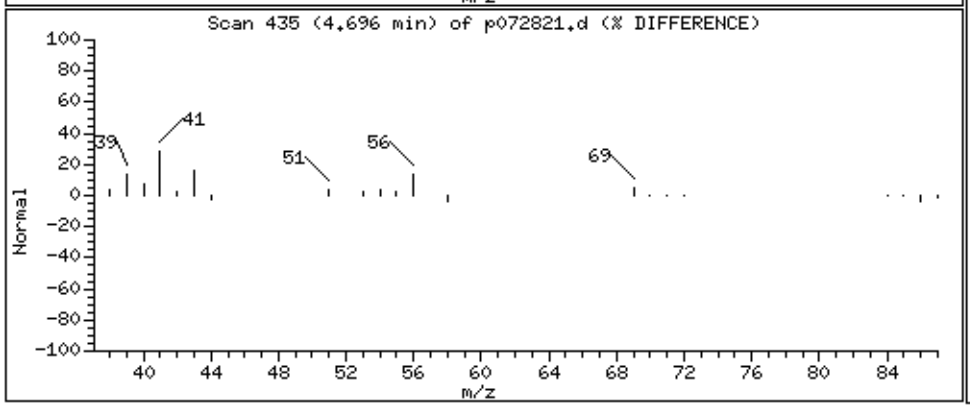












Data File: /chem/msdp.i/28JUL21.b/p072821.d

Date : 29-JUL-2021 00:15

Client ID:

Instrument: msdp.i

Sample Info: 200ml 00809

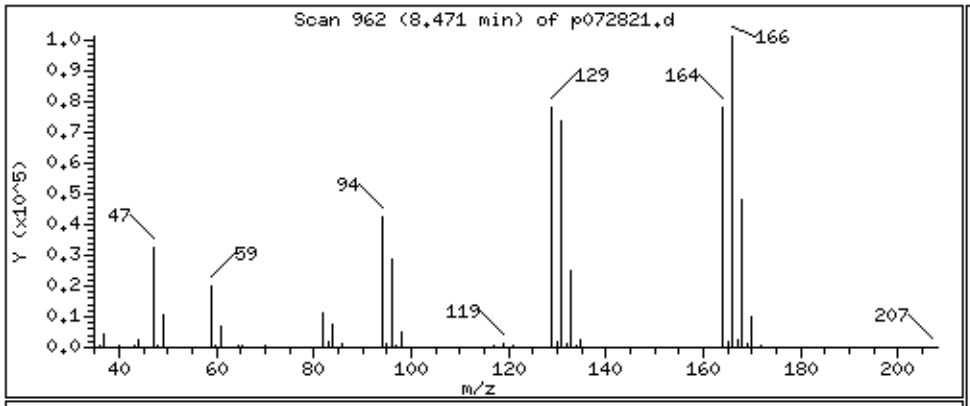
Operator: mb

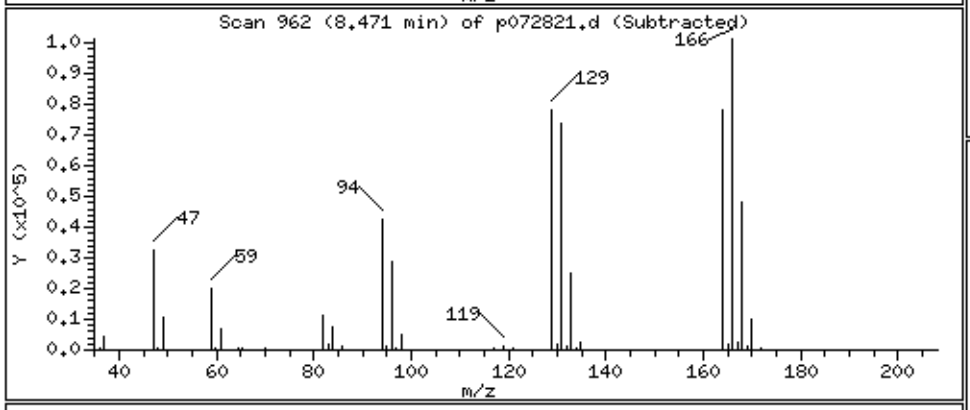
Column phase: RTX-624

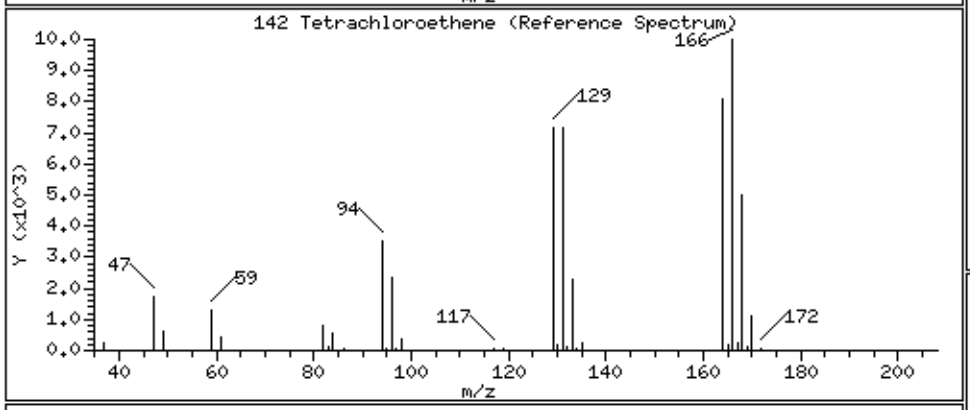
Column diameter: 0.25

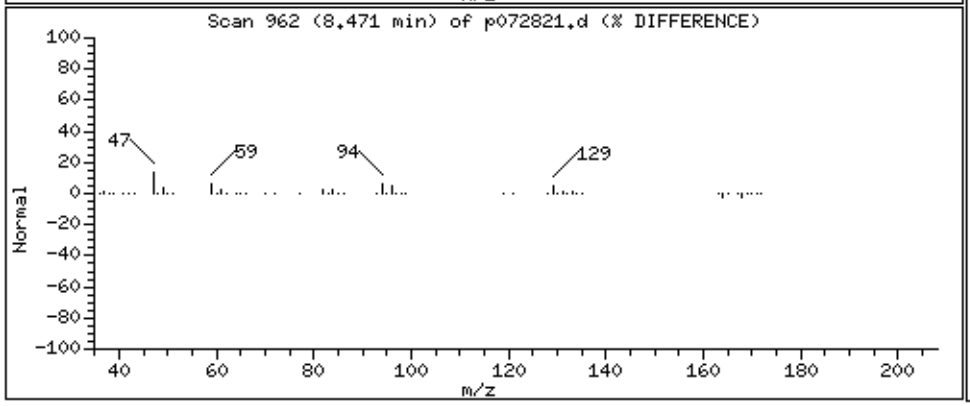
142 Tetrachloroethene

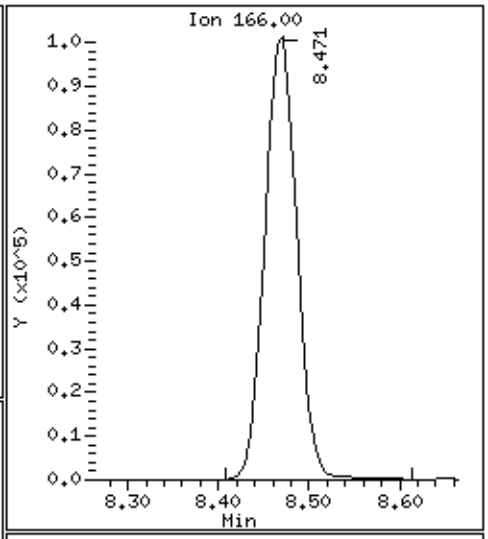
Concentration: 41.586 PPBV

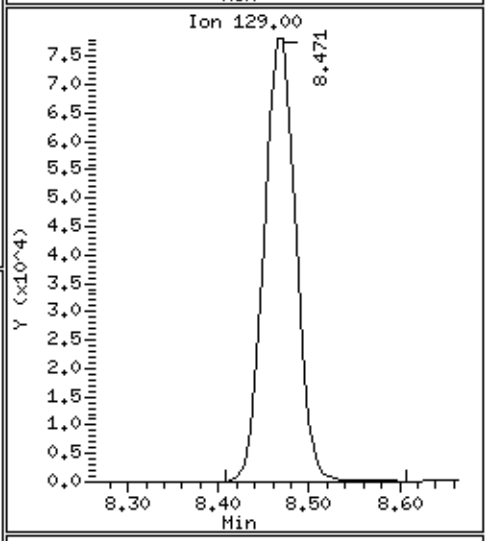


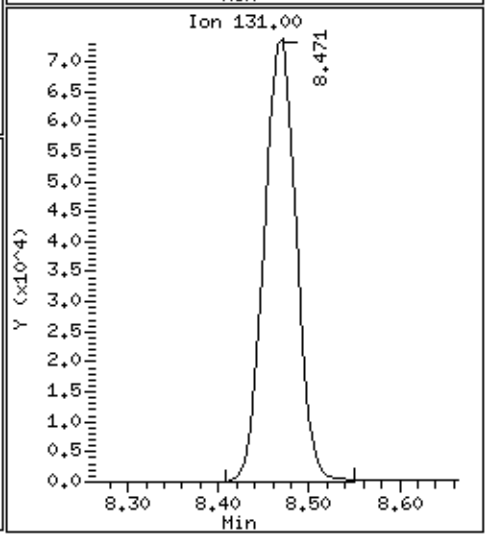












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Client Sample ID: SG-VW59A-01

Lab ID#: 2107361-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072822**	**Date of Collection:**	**7/15/21 5:16:00 PM**
Dil. Factor:	**42.0**	**Date of Analysis:**	**7/29/21 12:43 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	84	Not Detected	580	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	4700	230	13000
1,2,3-Trichloropropane	84	Not Detected	510	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	130	Not Detected
1,2-Dichloroethane	21	Not Detected	85	Not Detected
1,2-Dichloropropane	21	Not Detected	97	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	130	Not Detected
1,4-Dichlorobenzene	21	Not Detected	130	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	210	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	820	Not Detected
Carbon Disulfide	84	Not Detected	260	Not Detected
Carbon Tetrachloride	21	Not Detected	130	Not Detected
Chlorobenzene	21	Not Detected	97	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-VW59A-01

Lab ID#: 2107361-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072822**	**Date of Collection:**	**7/15/21 5:16:00 PM**
Dil. Factor:	**42.0**	**Date of Analysis:**	**7/29/21 12:43 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	600	Not Detected
Ethanol	210	Not Detected	400	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	900	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	8600	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	300	Not Detected
Vinyl Bromide	84	Not Detected	370	Not Detected
Vinyl Chloride	21	Not Detected	54	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW59A-01

Lab ID#: 2107361-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072822**	**Date of Collection:**	**7/15/21 5:16:00 PM**
Dil. Factor:	**42.0**	**Date of Analysis:**	**7/29/21 12:43 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072822.d
Lab Smp Id: 2107361-15A
Inj Date : 29-JUL-2021 00:43
Operator : mb Inst ID: msdp.i
Smp Info : 10ml 34628
Misc Info : 6.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 5
Dil Factor: 42.00000
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		
5.778	5.778 (1.000)	130	157278	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	123176				48.23- 108.23	78.32
5.778	5.778 (1.000)	49	332627				150.57- 210.57	211.49
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	531283	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	78980				0.00- 45.71	14.87
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	555425	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	286268				23.78- 83.78	51.54
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	216215	24.9103	24.910		80.00- 120.00	100.00(a)
6.308	6.308 (1.092)	67	104693				27.21- 87.21	48.42
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	589563	25.5550	25.555		80.00- 120.00	100.00(a)
7.891	7.891 (1.184)	70	62285				0.00- 40.44	10.56

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	384658			34.95- 94.95	65.24
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	339921	23.8329	23.833	80.00- 120.00	100.00(a)
10.921	10.914 (1.154)	95	415553			95.92- 155.92	122.25
10.921	10.921 (1.154)	176	320970			66.89- 126.89	94.42
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.689	1.703 (0.292)	65	398153	111.684	4690.7	80.00- 120.00	100.00
1.689	1.744 (0.292)	51	1189793			597.63- 657.63	298.83
1.689	1.703 (0.292)	47	212961			33.72- 93.72	53.49

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: p072822.d
Lab Smp Id: 2107361-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: mb
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	157278	-1.92
108 1,4-Difluorobenze	582857	349714	816000	531283	-8.85
153 Chlorobenzene-d5	560035	336021	784049	555425	-0.82

		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	6.67	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.

Report Date: 29-Jul-2021 13:36

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107361-15A
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/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.910	99.64	70-130
$ 134 Toluene-d8	25.000	25.555	102.22	70-130
$ 170 4-Bromofluorobenz	25.000	23.833	95.33	70-130

Data File: /chem/msdp.i/28JUL21.b/p072822.d

Date : 29-JUL-2021 00:43

Client ID:

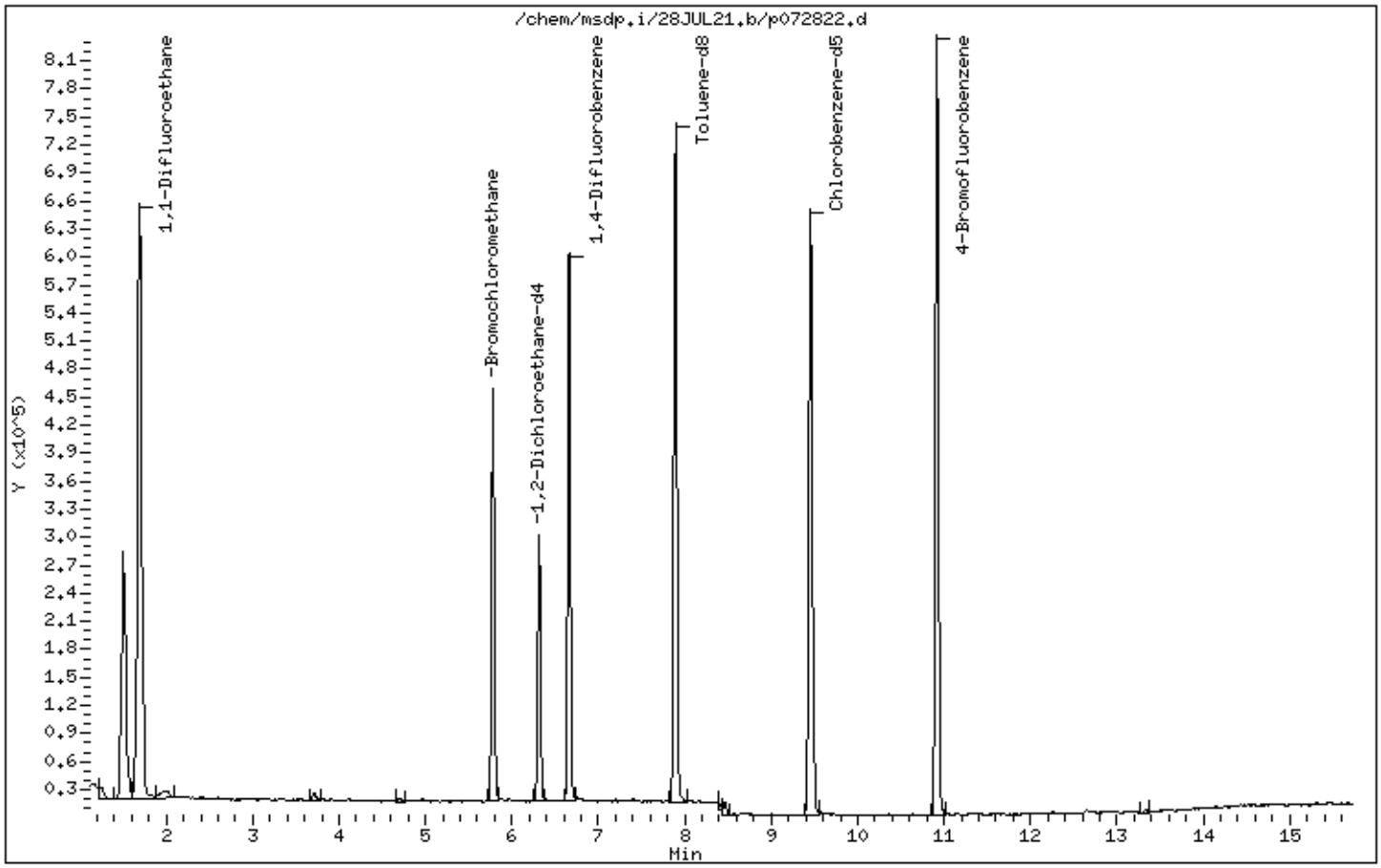
Instrument: msdp.i

Sample Info: 10ml 34628

Operator: mb

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/28JUL21.b/p072822.d

Date : 29-JUL-2021 00:43

Client ID:

Instrument: msdp.i

Sample Info: 10ml 34628

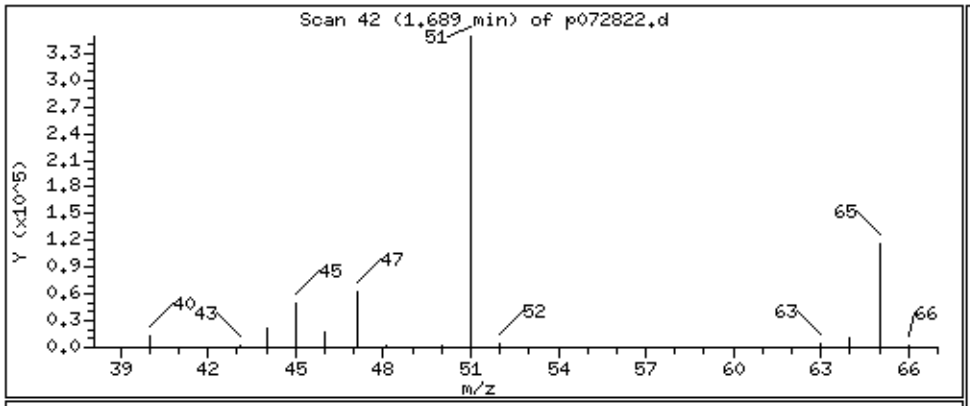
Operator: mb

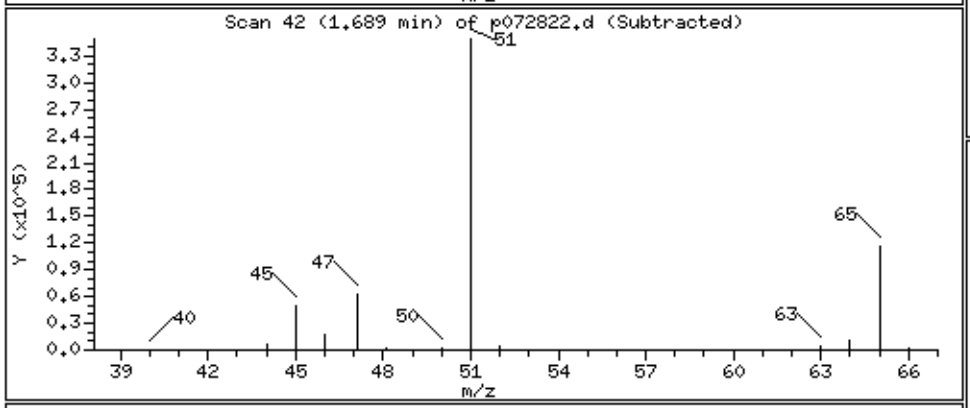
Column phase: RTX-624

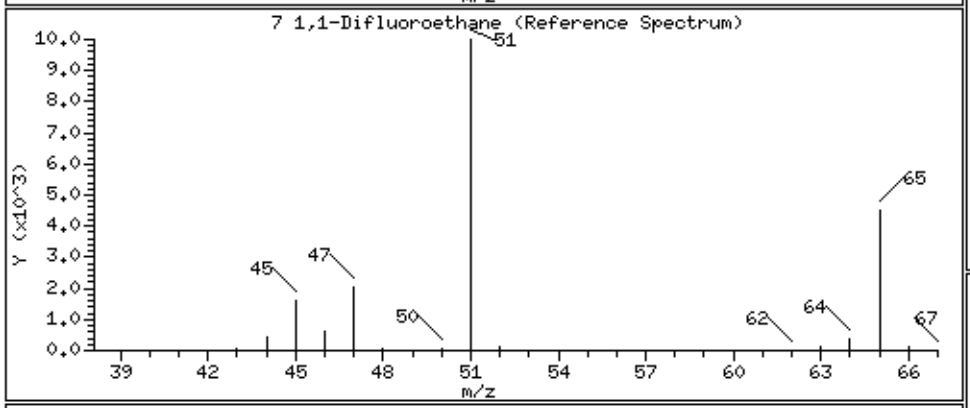
Column diameter: 0.25

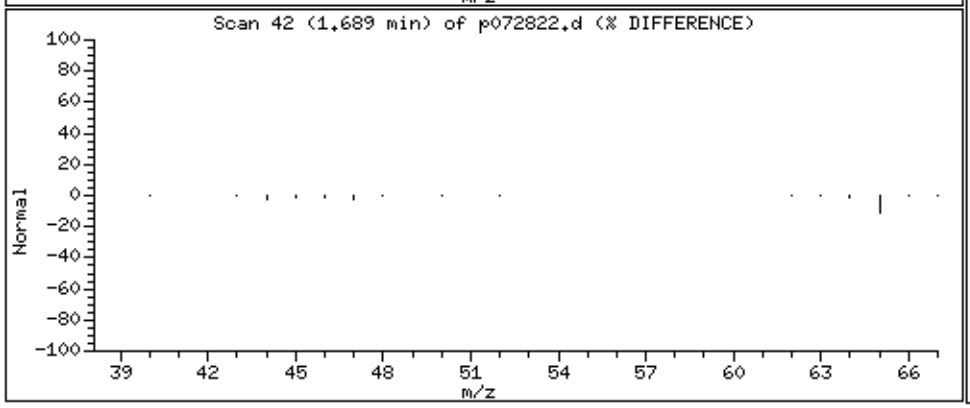
7 1,1-Difluoroethane

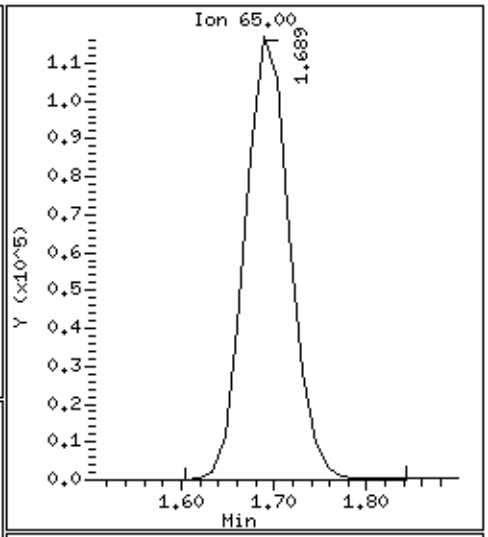
Concentration: 4690.7 PPBV

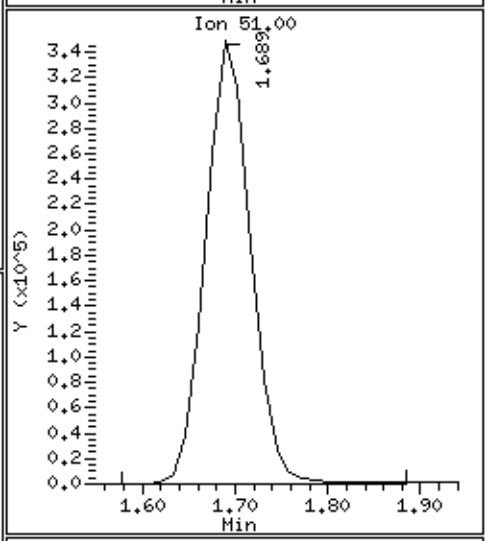


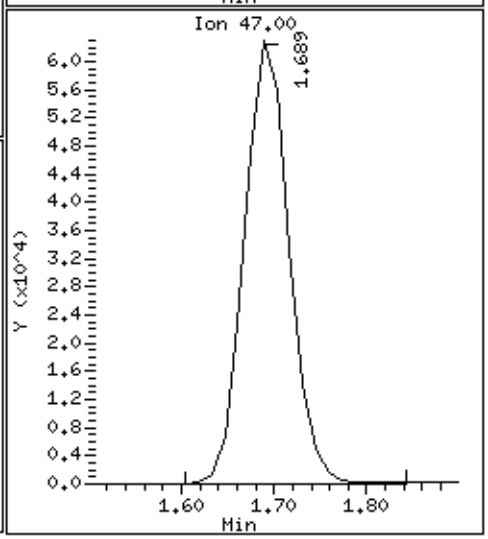












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 2107361-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072709a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 03:47 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#: 2107361-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072709a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 03:47 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#: 2107361-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072709a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 03:47 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	88	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072709a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 27-JUL-2021 15:47
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 34353
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 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	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	272067	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	210963				48.46- 108.46	77.54
5.284	5.270 (1.000)	49	372693				120.39- 180.39	136.99
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	957155	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	142293				0.00- 45.52	14.87
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	785290	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	412756				25.46- 85.46	52.56
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	383698	25.6275	25.627		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	183449				21.66- 81.66	47.81
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	867753	22.0110	22.011		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	96428				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 (1.195)	100	575958			36.47- 96.47	66.37
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	500278	24.0851	24.085	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	563393			93.06- 153.06	112.62
9.601	9.601 (1.115)	176	459967			62.87- 122.87	91.94

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072709a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: Humid

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	272067	13.84
108 1,4-Difluorobenze	785289	471173	1099405	957155	21.89
153 Chlorobenzene-d5	683596	410158	957034	785290	14.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	-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: 29-Jul-2021 13:24

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
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/27JUL21.b/321q0622a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.627	102.51	70-130
$ 134 Toluene-d8	25.000	22.011	88.04	70-130
$ 170 4-Bromofluorobenz	25.000	24.085	96.34	70-130

Data File: /chem/msd3.i/27JUL21.b/3072709a.d

Date : 27-JUL-2021 15:47

Client ID: Lab Blank

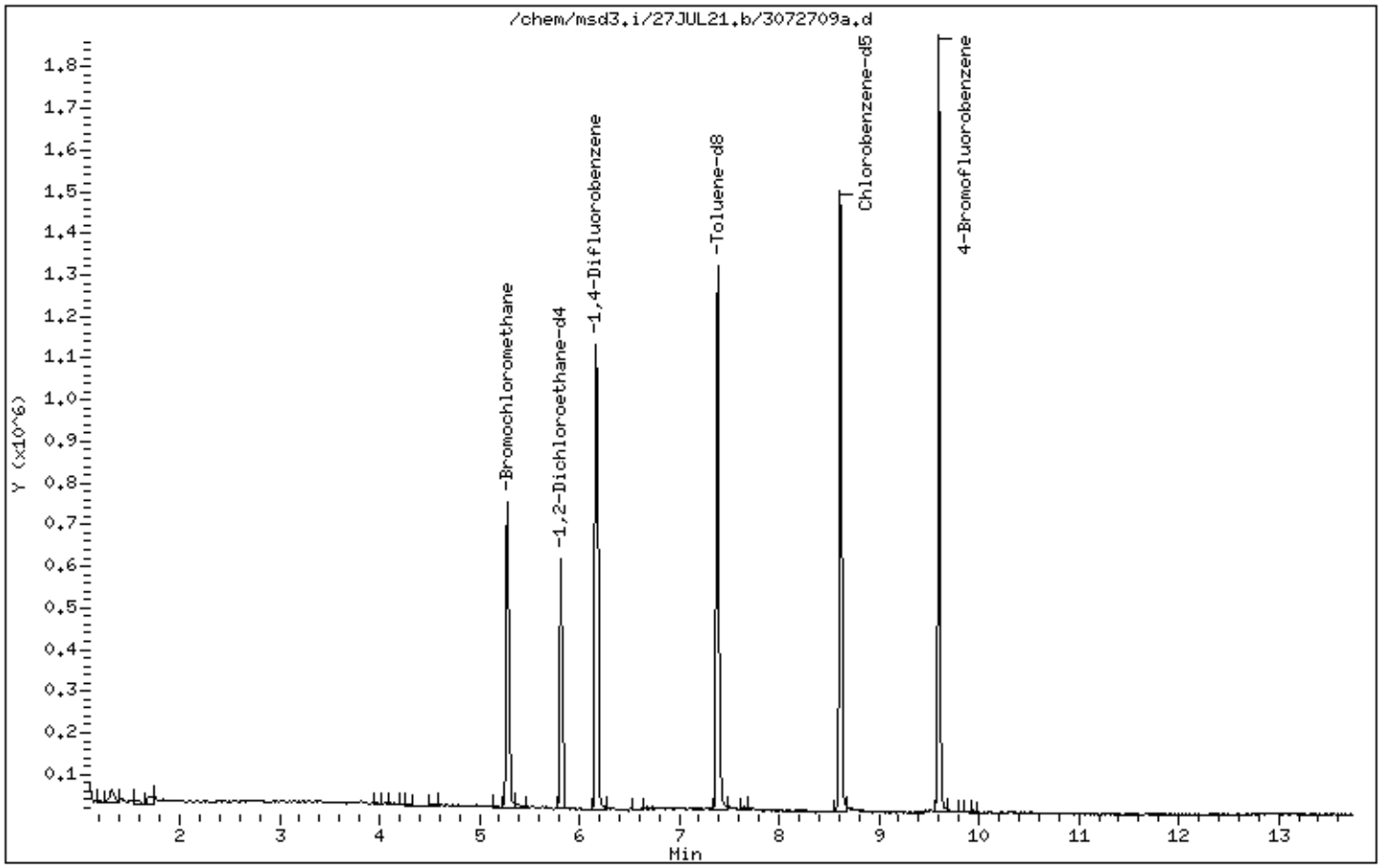
Instrument: msd3.i

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#: 2107361-16B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072807a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 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#: 2107361-16B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072807a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 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

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2107361-16B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072807a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 02:25 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072807a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 28-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/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 15:13 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
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	163575	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	128432				48.23- 108.23	78.52
5.785	5.778 (1.000)	49	324541				150.57- 210.57	198.40
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.659 (1.000)	114	606511	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	90970				0.00- 45.71	15.00
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	604403	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	311683				23.78- 83.78	51.57
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	221603	24.5482	24.548		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	110377				27.21- 87.21	49.81
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	663873	25.2068	25.207		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66714				0.00- 40.44	10.05

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	426035			34.95- 94.95	64.17
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	377030	24.2926	24.292	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	452653			95.92- 155.92	120.06
10.921	10.921 (1.154)	176	358901			66.89- 126.89	95.19

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072807a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: Humid

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	163575	2.01
108 1,4-Difluorobenze	582857	349714	816000	606511	4.06
153 Chlorobenzene-d5	560035	336021	784049	604403	7.92

		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	6.67	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.

Report Date: 29-Jul-2021 12:15

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
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/28JUL21.b/p21q0519a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.548	98.19	70-130
$ 134 Toluene-d8	25.000	25.207	100.83	70-130
$ 170 4-Bromofluorobenz	25.000	24.292	97.17	70-130

Data File: /chem/msdp.i/28JUL21.b/p072807a.d

Date : 28-JUL-2021 14:25

Client ID: Lab Blank

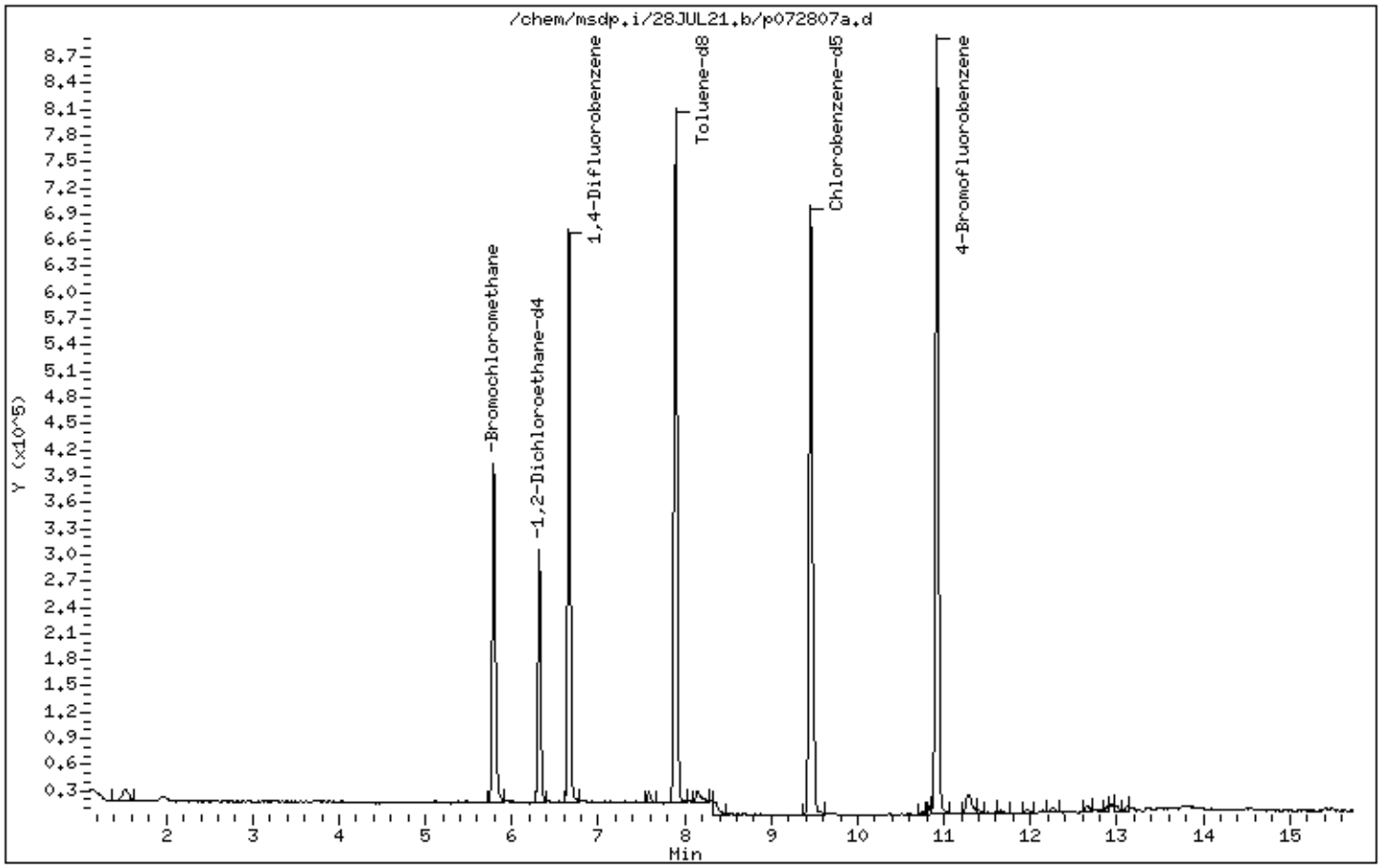
Instrument: msdp.i

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. :2107361

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY						
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#	TOTAL OUT
1	SG-VW55A-02	103		90		94		
2	SG-VW27A-02	99		100		97		
3	SG-VW27B-02	102		102		100		
4	SG-VW27B-03	102		101		98		
5	SG-VW26B-02	101		101		99		
6	SG-VW16A-02	101		102		98		
7	SG-VW18A-02	99		100		99		
8	SG-VW20B-02	100		101		99		
9	SG-VW24A-04	103		101		98		
10	SG-VW21A-03	102		101		98		
11	SG-VW21B-02	104		101		96		
12	SG-VW28A-02	101		100		95		
13	SG-VW14-02	100		100		97		
14	SG-VW59B-01	103		102		96		
15	SG-VW59A-01	100		102		95		
16	Lab Blank	102		88		96		
17	Lab Blank	98		101		97		
18	CCV	97		96		108		
19	CCV	100		100		100		
20	LCS	100		92		101		
21	LCSD	99		93		99		
22	LCS	104		101		101		
23	LCSD	100		100		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: 3072703.d Date : 2021-07-27 11:36:00 SDG No. : 2107361

		Bromochloromethane		RT		1,4-Difluorobenzene		RT		Chlorobenzene-d5		RT	
	24-HOUR CCV	238986		5.28		785289		6.18		683596		8.61	
	UPPER LIMIT	334580		5.61		1099404		6.51		957034		8.94	
	LOWER LIMIT	143391		4.95		471173		5.85		410157		8.28	
	CLIENT SAMPLE NO.												
1	SG-VW55A-02	239034		5.28		790403		6.18		674024		8.62	
2	Lab Blank	272067		5.28		957155		6.18		785290		8.61	
3	CCV	238986		5.28		785289		6.18		683596		8.61	
4	LCS	250619		5.28		851577		6.18		720138		8.62	
5	LCSD	243047		5.28		877445		6.18		719626		8.62	

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: p072802.d Date : 2021-07-28 11:14:00 SDG No. : 2107361

		Bromochloromethane		RT		1,4-Difluorobenzene		RT		Chlorobenzene-d5		RT	
	24-HOUR CCV	160349		5.78		582857		6.66		560035		9.46	
	UPPER LIMIT	224488		6.11		815999		6.99		784049		9.79	
	LOWER LIMIT	96209		5.45		349714		6.33		336021		9.13	
	CLIENT SAMPLE NO.												
1	SG-VW27A-02	162169		5.79		605971		6.67		596167		9.46	
2	SG-VW27B-02	158239		5.79		596765		6.67		599089		9.46	
3	SG-VW27B-03	158351		5.79		593881		6.67		591572		9.46	
4	SG-VW26B-02	159442		5.79		590093		6.67		597138		9.46	
5	SG-VW16A-02	157446		5.79		578412		6.67		586654		9.46	
6	SG-VW18A-02	162253		5.79		589298		6.67		606967		9.46	
7	SG-VW20B-02	156897		5.79		569766		6.67		578799		9.46	
8	SG-VW24A-04	155981		5.79		589531		6.67		602641		9.46	
9	SG-VW21A-03	157355		5.79		587810		6.67		598213		9.46	
10	SG-VW21B-02	147918		5.79		548709		6.66		558621		9.46	
11	SG-VW28A-02	150525		5.79		553468		6.66		561354		9.46	
12	SG-VW14-02	151060		5.79		550307		6.66		551380		9.46	
13	SG-VW59B-01	147042		5.79		549196		6.67		558168		9.46	
14	SG-VW59A-01	157278		5.78		531283		6.67		555425		9.46	
15	Lab Blank	163575		5.79		606511		6.67		604403		9.46	
16	CCV	160349		5.78		582857		6.66		560035		9.46	
17	LCS	156490		5.79		602525		6.67		582315		9.46	
18	LCSD	164647		5.79		617074		6.67		597192		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: 3072704.d & 3072705.d

Lab Sample ID: 18A & 18AA

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	90	0	
79-34-5	1,1,2,2-Tetrachloroethane	99	97	2.0	
79-00-5	1,1,2-Trichloroethane	97	96	1.0	
75-34-3	1,1-Dichloroethane	92	95	3.2	
75-35-4	1,1-Dichloroethene	93	97	4.2	
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	101	114	12	
95-63-6	1,2,4-Trimethylbenzene	104	98	5.9	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	100	101	1.00	
95-50-1	1,2-Dichlorobenzene	107	103	3.8	
107-06-2	1,2-Dichloroethane	101	96	5.1	
78-87-5	1,2-Dichloropropane	84	74	13	
108-67-8	1,3,5-Trimethylbenzene	100	97	3.0	
106-99-0	1,3-Butadiene	92	96	4.3	
541-73-1	1,3-Dichlorobenzene	107	104	2.8	
106-46-7	1,4-Dichlorobenzene	104	101	2.9	
123-91-1	1,4-Dioxane	90	94	4.3	
540-84-1	2,2,4-Trimethylpentane	93	89	4.4	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	94	97	3.1	
591-78-6	2-Hexanone	92	94	2.2	
67-63-0	2-Propanol	98	102	4.0	
107-05-1	3-Chloropropene	93	96	3.2	
622-96-8	4-Ethyltoluene	100	98	2.0	
108-10-1	4-Methyl-2-pentanone	78	81	3.8	
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	96	94	2.1	
71-43-2	Benzene	103	94	9.1	
75-27-4	Bromodichloromethane	88	89	1.1	
75-25-2	Bromoform	104	105	0.96	
74-83-9	Bromomethane	100	102	2.0	
75-15-0	Carbon Disulfide	103	105	1.9	

56-23-5	Carbon Tetrachloride	98	99	1.0	
108-90-7	Chlorobenzene	97	98	1.0	
75-00-3	Chloroethane	100	104	3.9	
67-66-3	Chloroform	94	94	0	
74-87-3	Chloromethane	113	116	2.6	
156-59-2	cis-1,2-Dichloroethene	89	91	2.2	
10061-01-5	cis-1,3-Dichloropropene	86	89	3.4	
98-82-8	Cumene	95	96	1.0	
110-82-7	Cyclohexane	86	87	1.2	
124-48-1	Dibromochloromethane	104	105	0.96	
74-95-3	Dibromomethane	ND	ND	0	
64-17-5	Ethanol	71	74	4.1	
141-78-6	Ethyl Acetate	ND	ND	0	
100-41-4	Ethyl Benzene	98	99	1.0	
637-92-3	Ethyl-tert-butyl ether	ND	ND	0	
75-69-4	Freon 11	106	109	2.8	
76-13-1	Freon 113	101	104	2.9	
76-14-2	Freon 114	105	108	2.8	
75-71-8	Freon 12	100	104	3.9	
811-97-2	Freon 134a	ND	ND	0	
142-82-5	Heptane	88	84	4.7	
87-68-3	Hexachlorobutadiene	105	117	11	
110-54-3	Hexane	91	95	4.3	
74-88-4	Iodomethane	ND	ND	0	
108-20-3	Isopropyl ether	ND	ND	0	
108-38-3	m,p-Xylene	98	98	0	
1634-04-4	Methyl tert-butyl ether	91	96	5.3	
75-09-2	Methylene Chloride	96	99	3.1	
91-20-3	Naphthalene	78	86	9.8	Y
95-47-6	o-Xylene	95	95	0	
103-65-1	Propylbenzene	102	98	4.0	
115-07-1	Propylene	ND	ND	0	
100-42-5	Styrene	95	95	0	
994-05-8	tert-Amyl methyl ether	ND	ND	0	
75-65-0	tert-Butyl alcohol	ND	ND	0	
127-18-4	Tetrachloroethene	102	104	1.9	
109-99-9	Tetrahydrofuran	88	87	1.1	
108-88-3	Toluene	89	90	1.1	
156-60-5	trans-1,2-Dichloroethene	88	92	4.4	
10061-02-6	trans-1,3-Dichloropropene	95	96	1.0	
79-01-6	Trichloroethene	92	98	6.3	
108-05-4	Vinyl Acetate	ND	ND	0	

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	104	107	2.8

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab File ID: p072803.d & p072804.d

Lab Sample ID: 18B & 18BB

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	104	100	3.9	
79-34-5	1,1,2,2-Tetrachloroethane	106	105	0.95	
79-00-5	1,1,2-Trichloroethane	107	107	0	
75-34-3	1,1-Dichloroethane	106	105	0.95	
75-35-4	1,1-Dichloroethene	99	96	3.1	
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	115	126	9.1	
95-63-6	1,2,4-Trimethylbenzene	103	103	0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	111	111	0	
95-50-1	1,2-Dichlorobenzene	104	106	1.9	
107-06-2	1,2-Dichloroethane	114	115	0.87	
78-87-5	1,2-Dichloropropane	105	104	0.96	
108-67-8	1,3,5-Trimethylbenzene	104	102	1.9	
106-99-0	1,3-Butadiene	116	114	1.7	
541-73-1	1,3-Dichlorobenzene	108	107	0.93	
106-46-7	1,4-Dichlorobenzene	108	108	0	
123-91-1	1,4-Dioxane	97	97	0	
540-84-1	2,2,4-Trimethylpentane	106	102	3.8	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	98	96	2.1	
591-78-6	2-Hexanone	103	102	0.98	
67-63-0	2-Propanol	111	106	4.6	
107-05-1	3-Chloropropene	93	93	0	
622-96-8	4-Ethyltoluene	103	101	2.0	
108-10-1	4-Methyl-2-pentanone	102	100	2.0	
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	100	100	0	
71-43-2	Benzene	103	103	0	
75-27-4	Bromodichloromethane	112	112	0	
75-25-2	Bromoform	112	112	0	
74-83-9	Bromomethane	92	88	4.4	
75-15-0	Carbon Disulfide	97	93	4.2	

56-23-5	Carbon Tetrachloride	113	109	3.6
108-90-7	Chlorobenzene	108	106	1.9
75-00-3	Chloroethane	98	94	4.2
67-66-3	Chloroform	108	104	3.8
74-87-3	Chloromethane	104	99	4.9
156-59-2	cis-1,2-Dichloroethene	104	102	1.9
10061-01-5	cis-1,3-Dichloropropene	106	104	1.9
98-82-8	Cumene	101	99	2.0
110-82-7	Cyclohexane	95	93	2.1
124-48-1	Dibromochloromethane	114	113	0.88
74-95-3	Dibromomethane	ND	ND	0
64-17-5	Ethanol	92	88	4.4
141-78-6	Ethyl Acetate	ND	ND	0
100-41-4	Ethyl Benzene	104	102	1.9
637-92-3	Ethyl-tert-butyl ether	ND	ND	0
75-69-4	Freon 11	109	107	1.9
76-13-1	Freon 113	102	98	4.0
76-14-2	Freon 114	105	101	3.9
75-71-8	Freon 12	111	107	3.7
811-97-2	Freon 134a	ND	ND	0
142-82-5	Heptane	100	99	1.0
87-68-3	Hexachlorobutadiene	121	131	7.9
110-54-3	Hexane	104	102	1.9
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	94	91	3.2
75-09-2	Methylene Chloride	117	113	3.5
91-20-3	Naphthalene	99	109	9.6
95-47-6	o-Xylene	101	101	0
103-65-1	Propylbenzene	105	103	1.9
115-07-1	Propylene	ND	ND	0
100-42-5	Styrene	98	97	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	109	110	0.91
109-99-9	Tetrahydrofuran	117	112	4.4
108-88-3	Toluene	102	102	0
156-60-5	trans-1,2-Dichloroethene	99	95	4.1
10061-02-6	trans-1,3-Dichloropropene	109	108	0.92
79-01-6	Trichloroethene	108	107	0.93
108-05-4	Vinyl Acetate	ND	ND	0

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	101	95	6.1

US32TAR1

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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

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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					
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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	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

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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
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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	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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	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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	50.000 Level 9	100.000 Level 10	200.000 Level 11					
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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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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	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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	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

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					
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

US32TAR1

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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						
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	

US32TAR1

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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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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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					
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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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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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					
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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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					
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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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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

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					
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

US32TAR1

INITIAL CALIBRATION DATA

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					
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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

INITIAL CALIBRATION DATA

Start Cal Date : 22-JUN-2021 15:51
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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					
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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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					
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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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

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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

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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					
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 : 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					
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

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

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

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	___ 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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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Start Cal Date : 19-MAY-2021 14:02
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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					
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

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					
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

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
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

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					
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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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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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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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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

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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					
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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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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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	100.000 Level 8	200.000 Level 9	0.50000 Level 10	___ RRF	% RSD
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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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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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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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					
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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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					
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

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					
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

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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					
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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	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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	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

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	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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	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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	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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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

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					
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

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	Canister#	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:

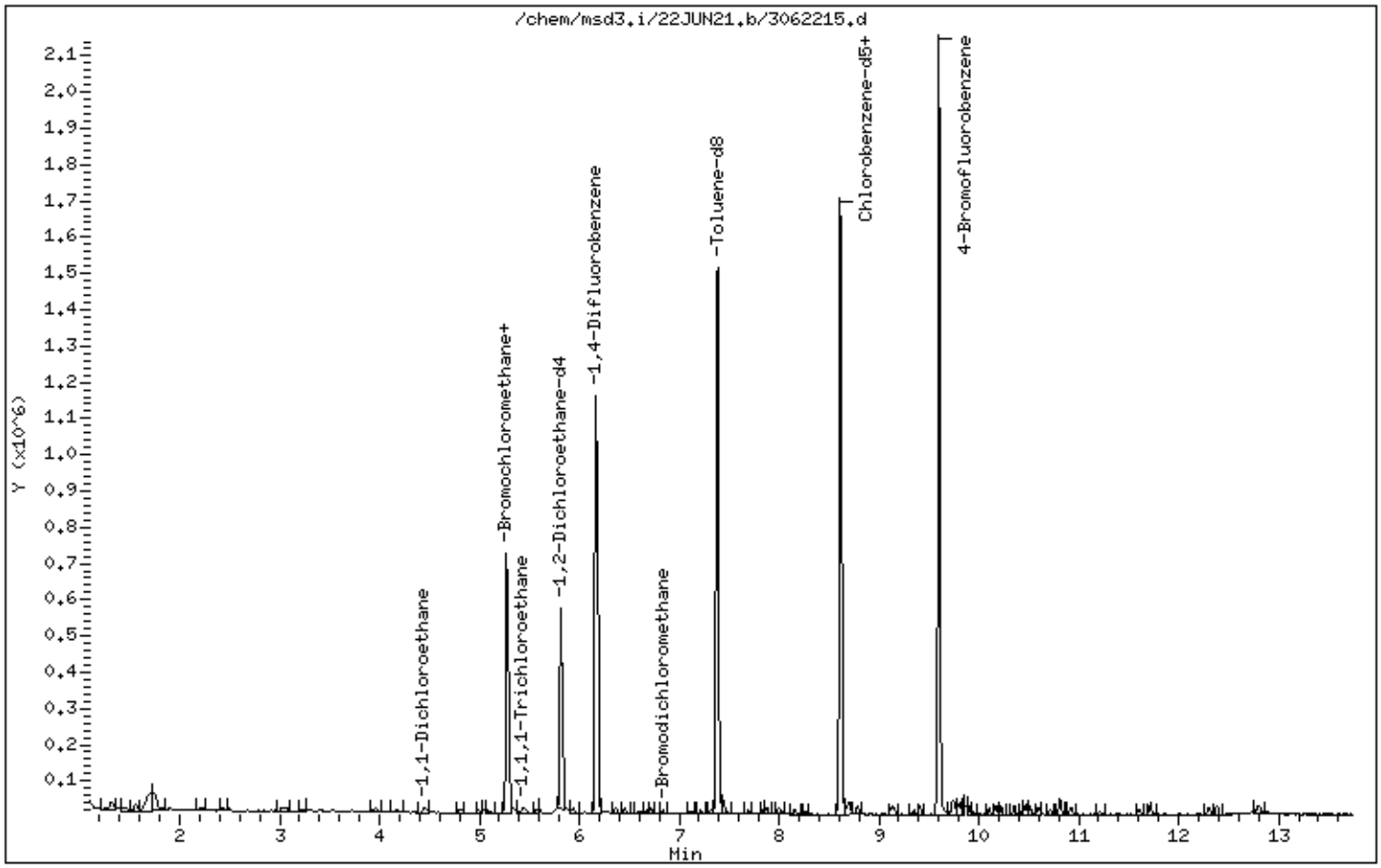
Instrument: msd3.i

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)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (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:

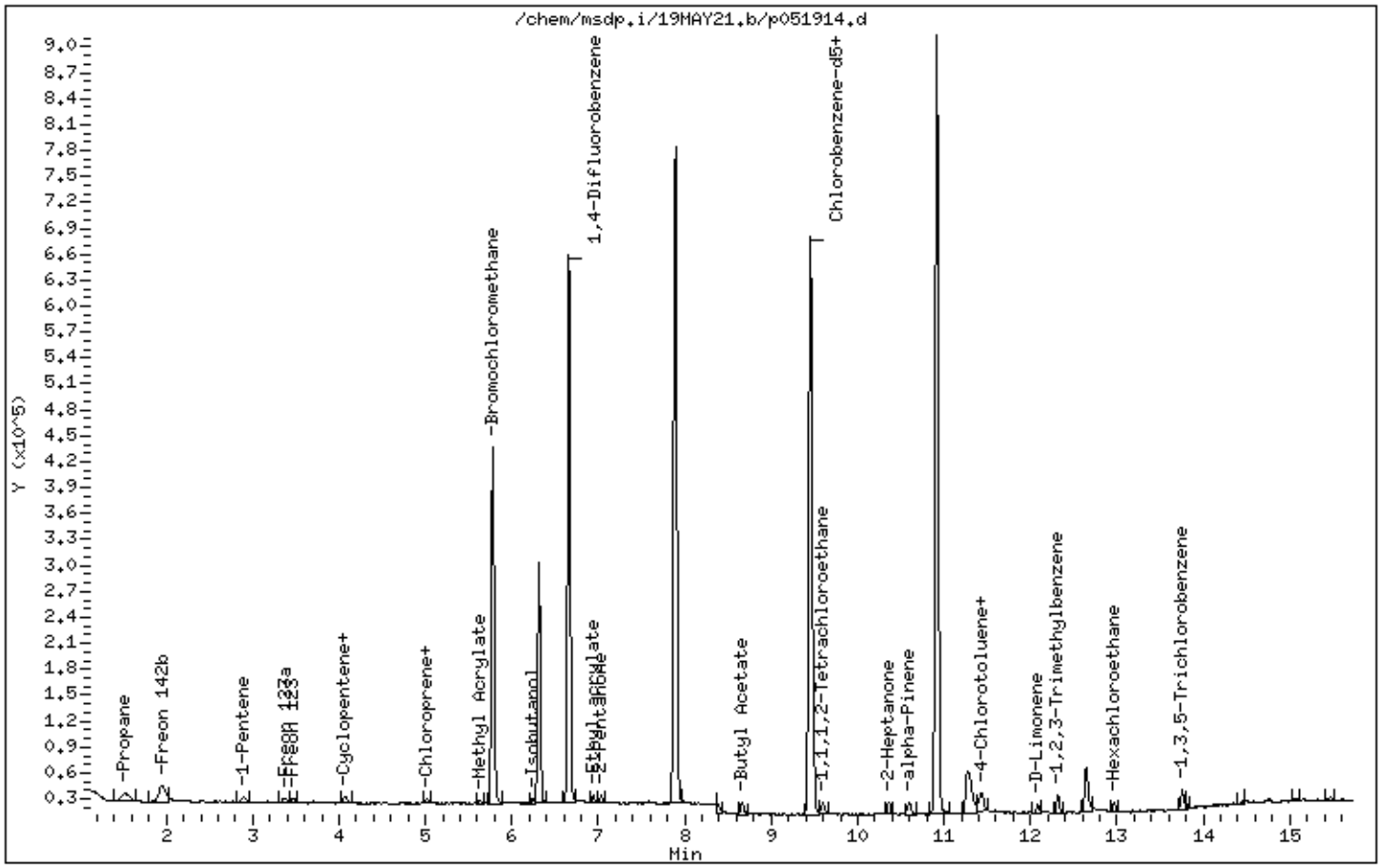
Instrument: msdp.i

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:

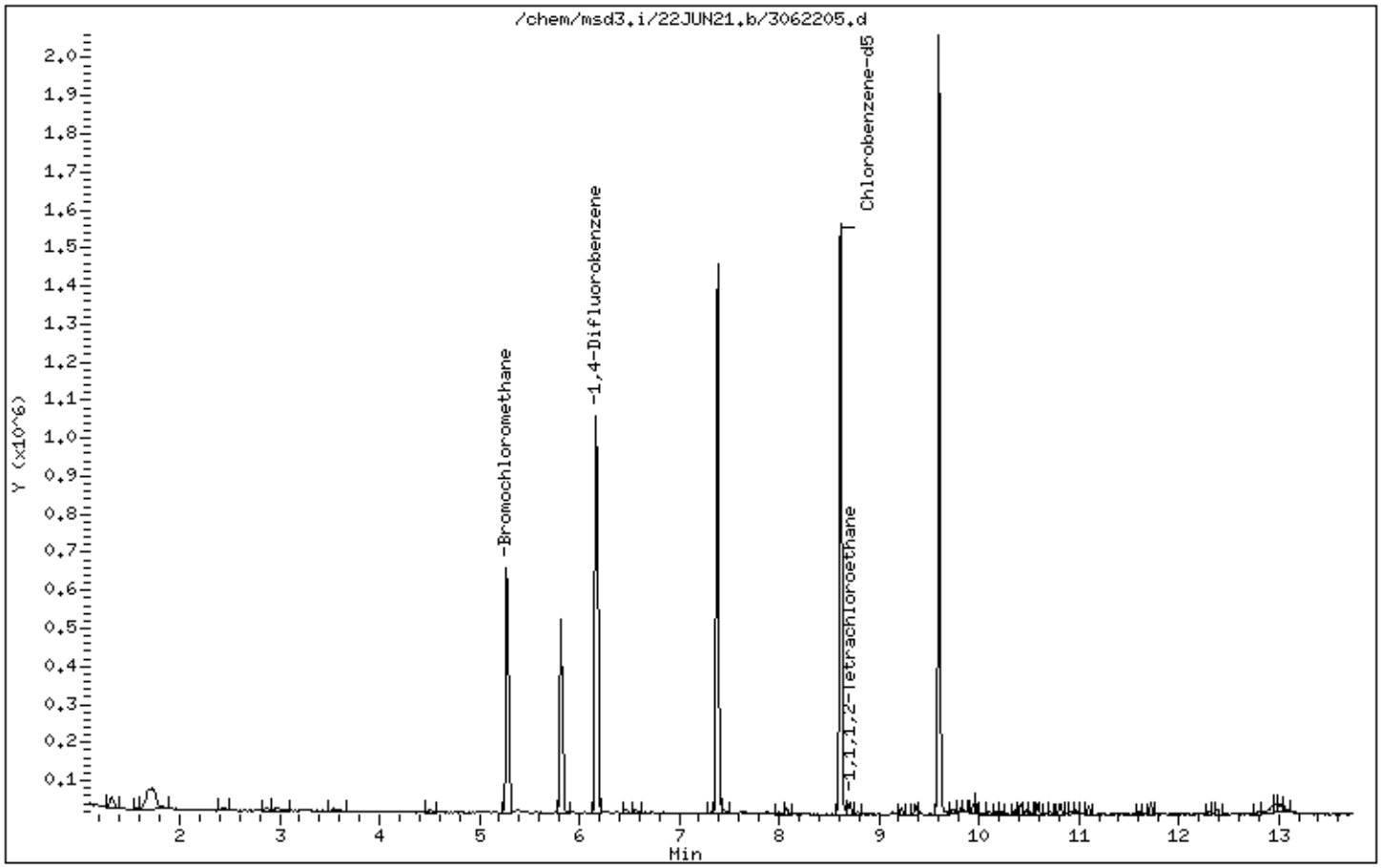
Instrument: msd3.i

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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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:

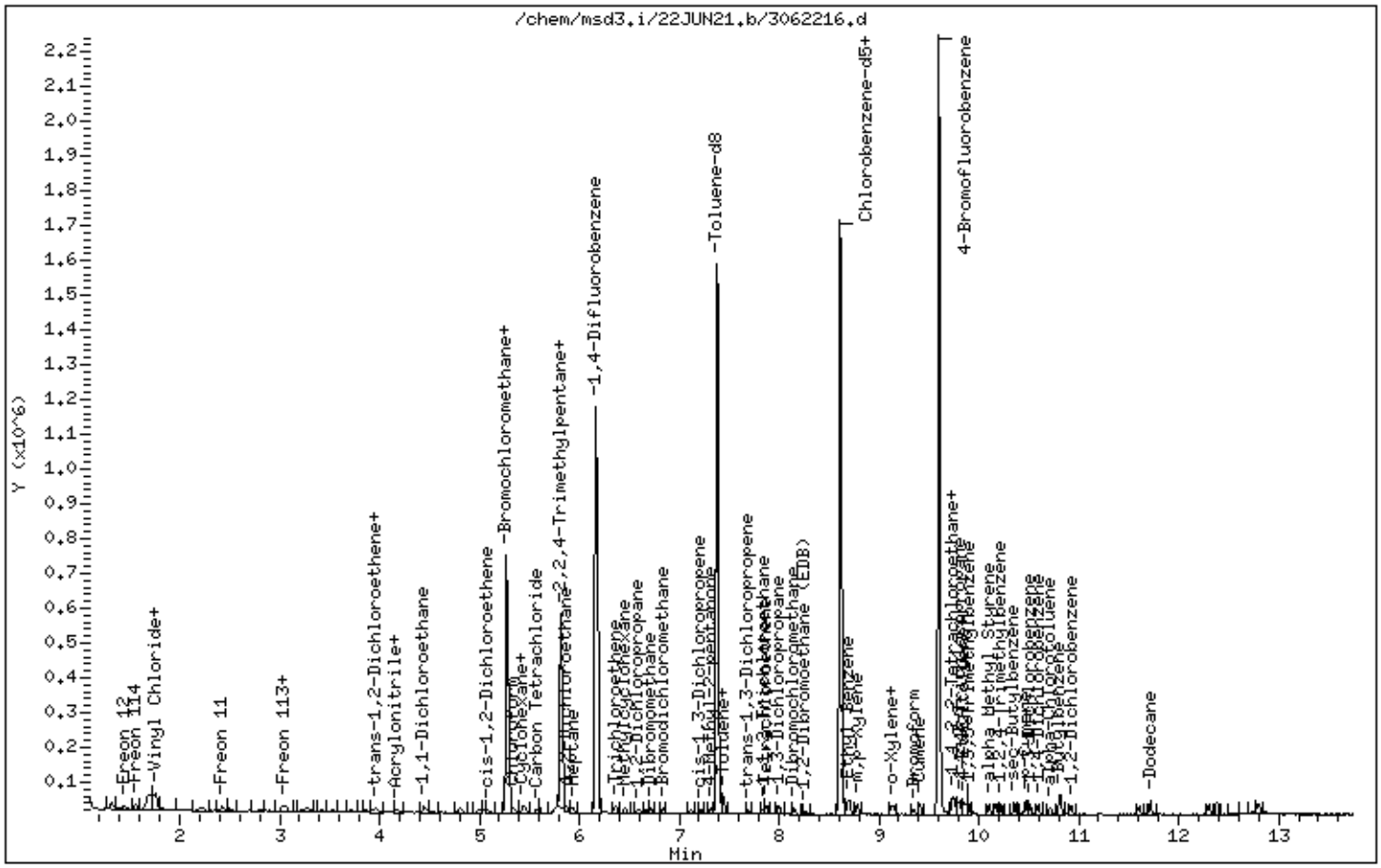
Instrument: msd3.i

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

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

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(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

Date : 19-MAY-2021 14:02

Client ID:

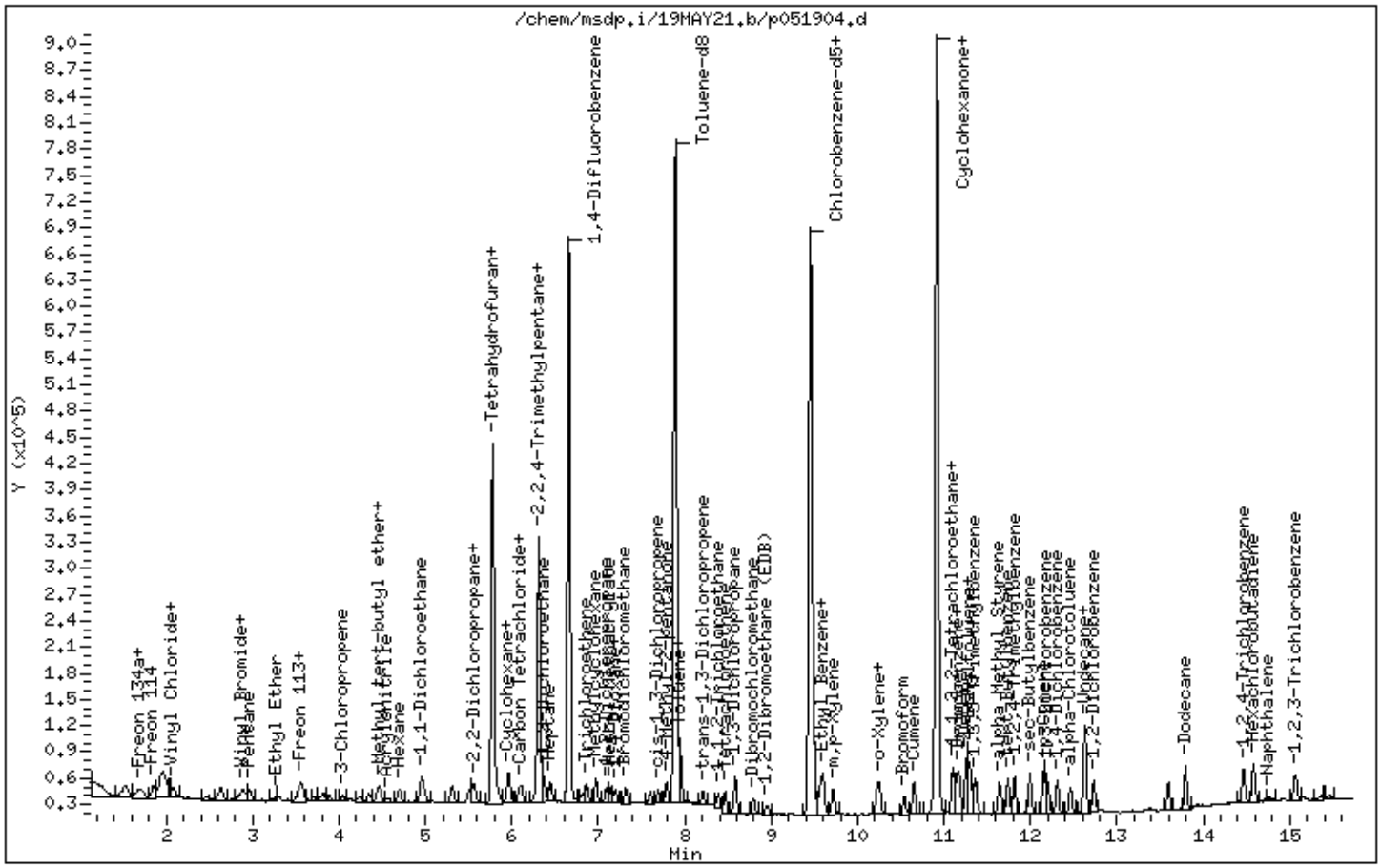
Instrument: msdp.i

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:

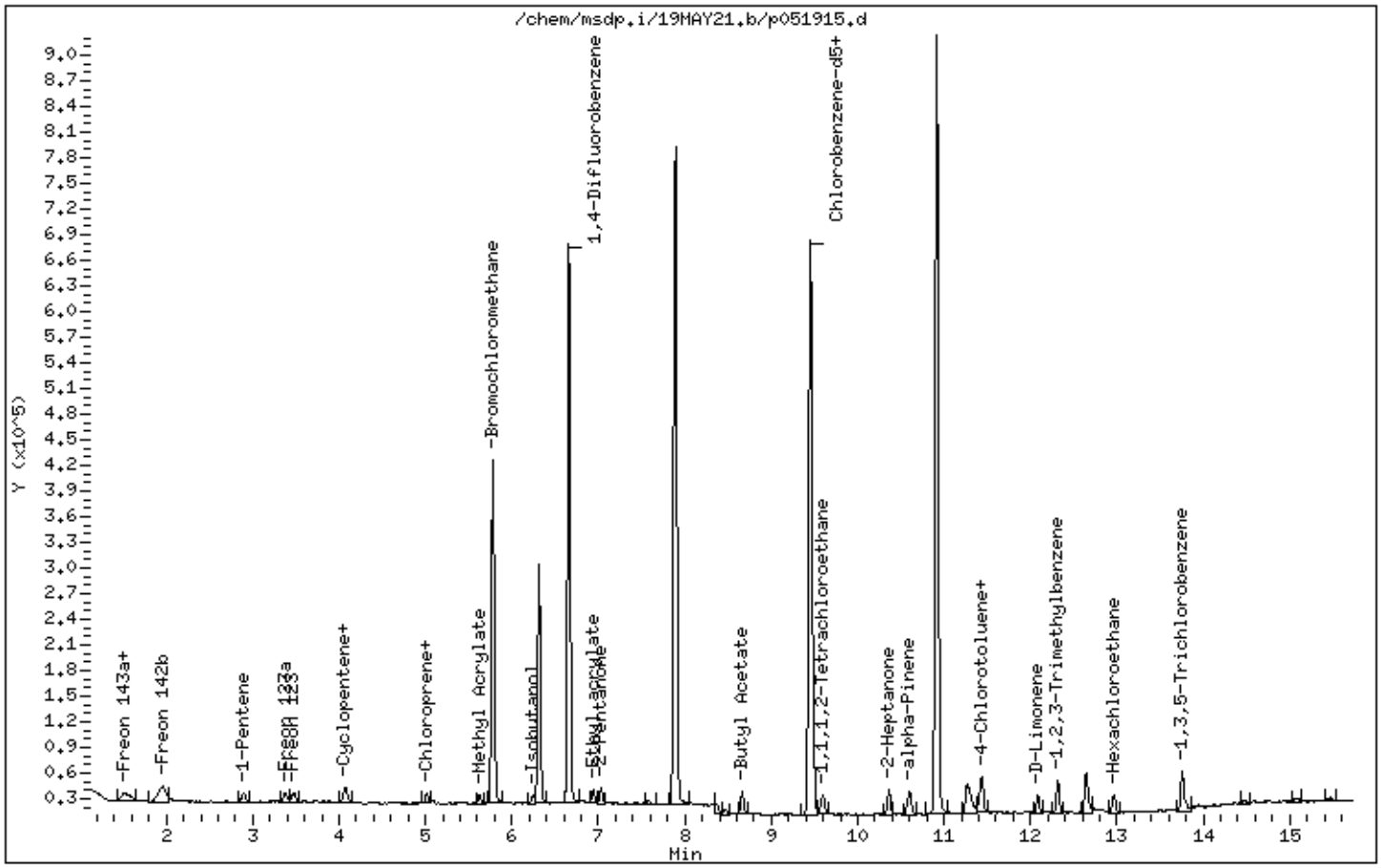
Instrument: msdp.i

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

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	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
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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

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:

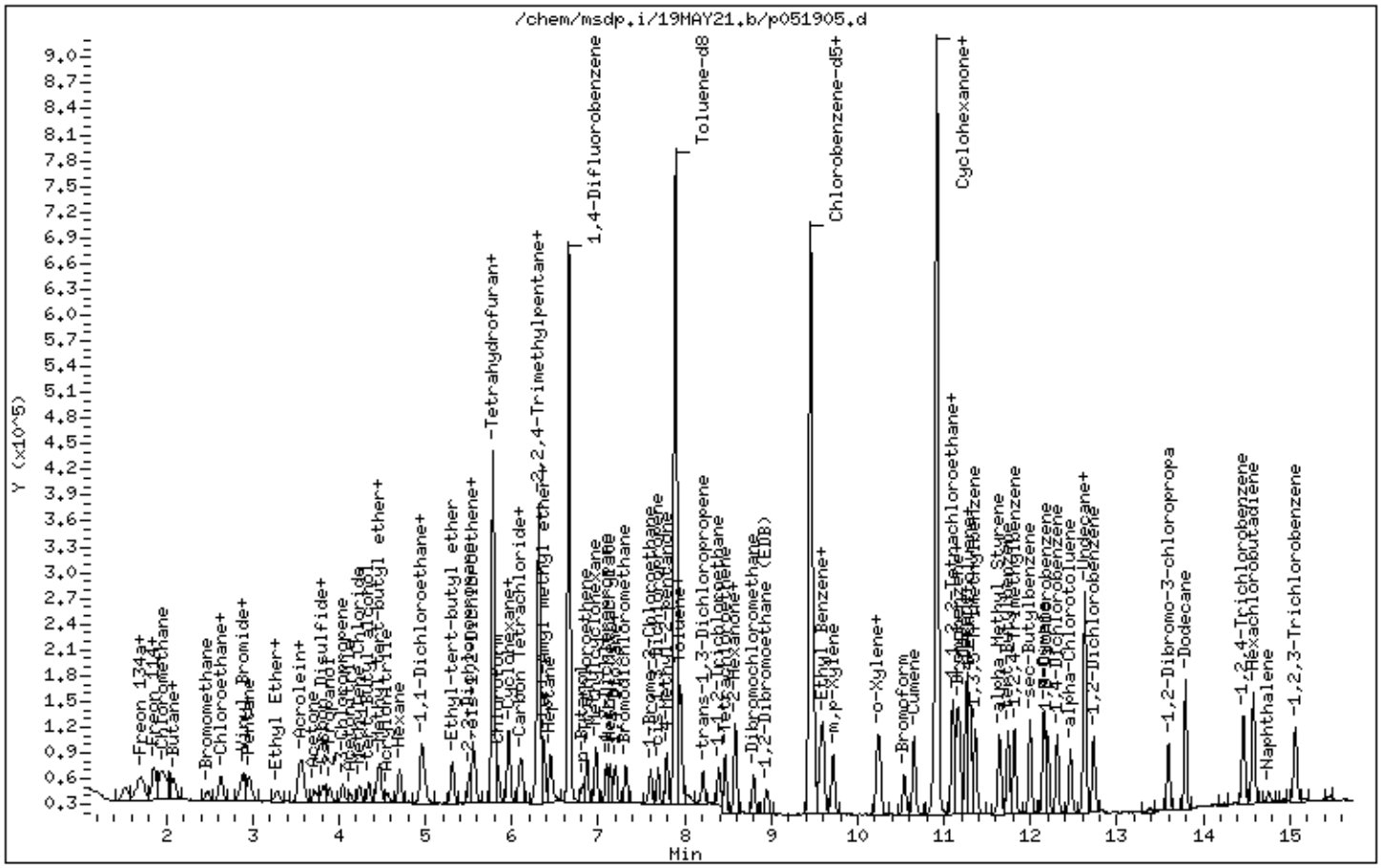
Instrument: msdp.i

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:

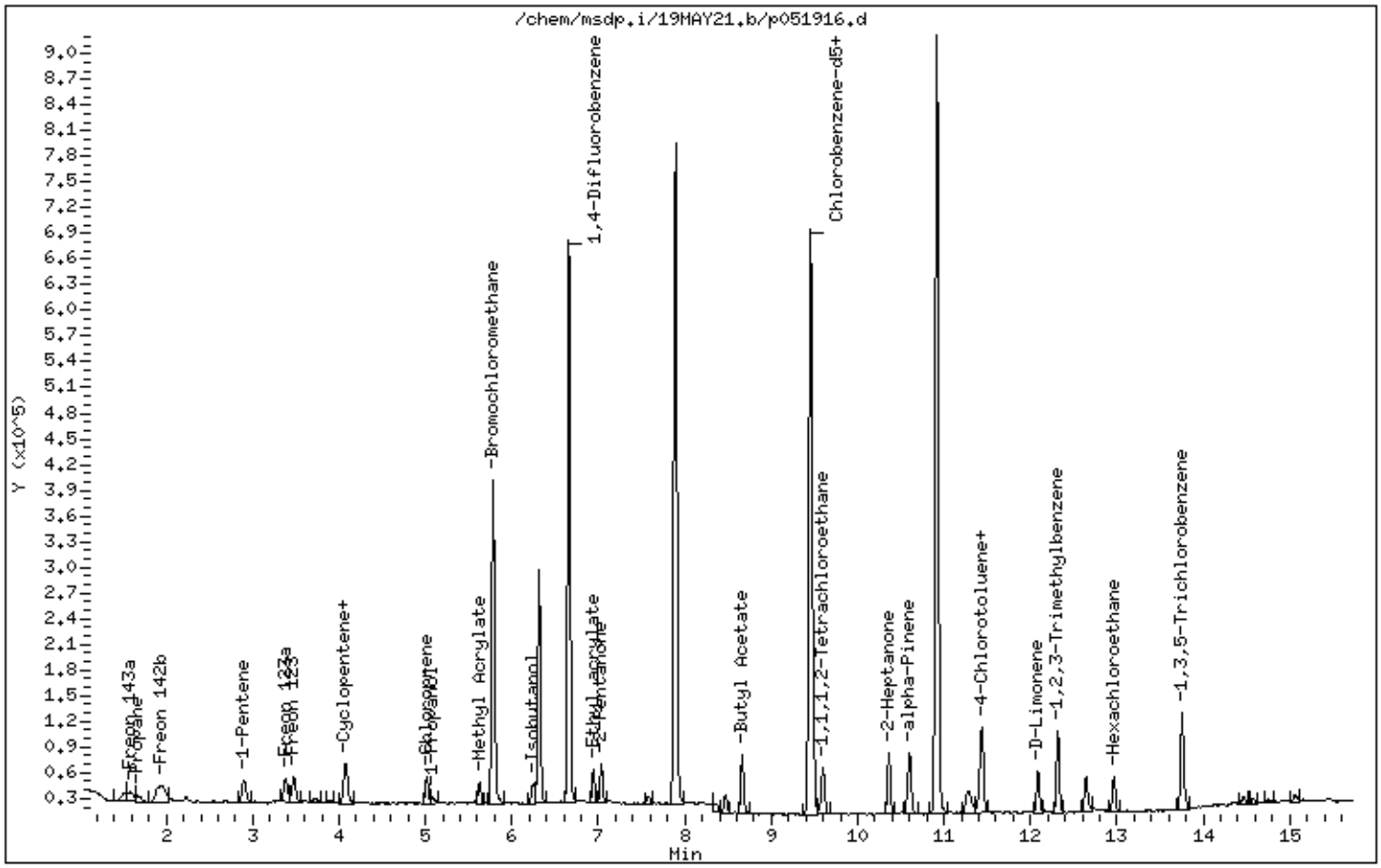
Instrument: msdp.i

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:

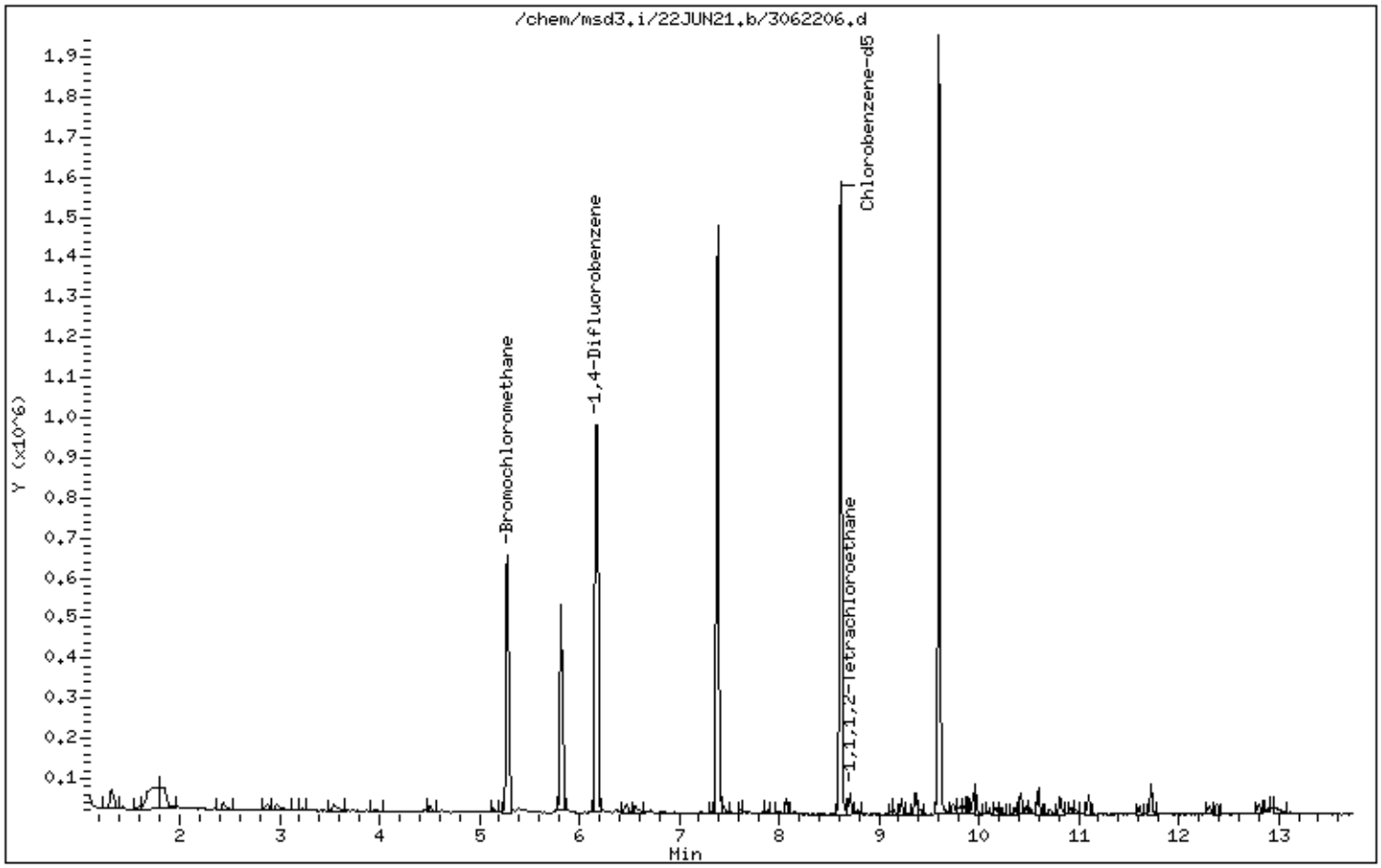
Instrument: msd3.i

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
==	====== ========	====	========	=======	=======	==========	=====
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
==	====== ========	====	========	=======	=======	==========	=====
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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (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

Date : 22-JUN-2021 21:22

Client ID:

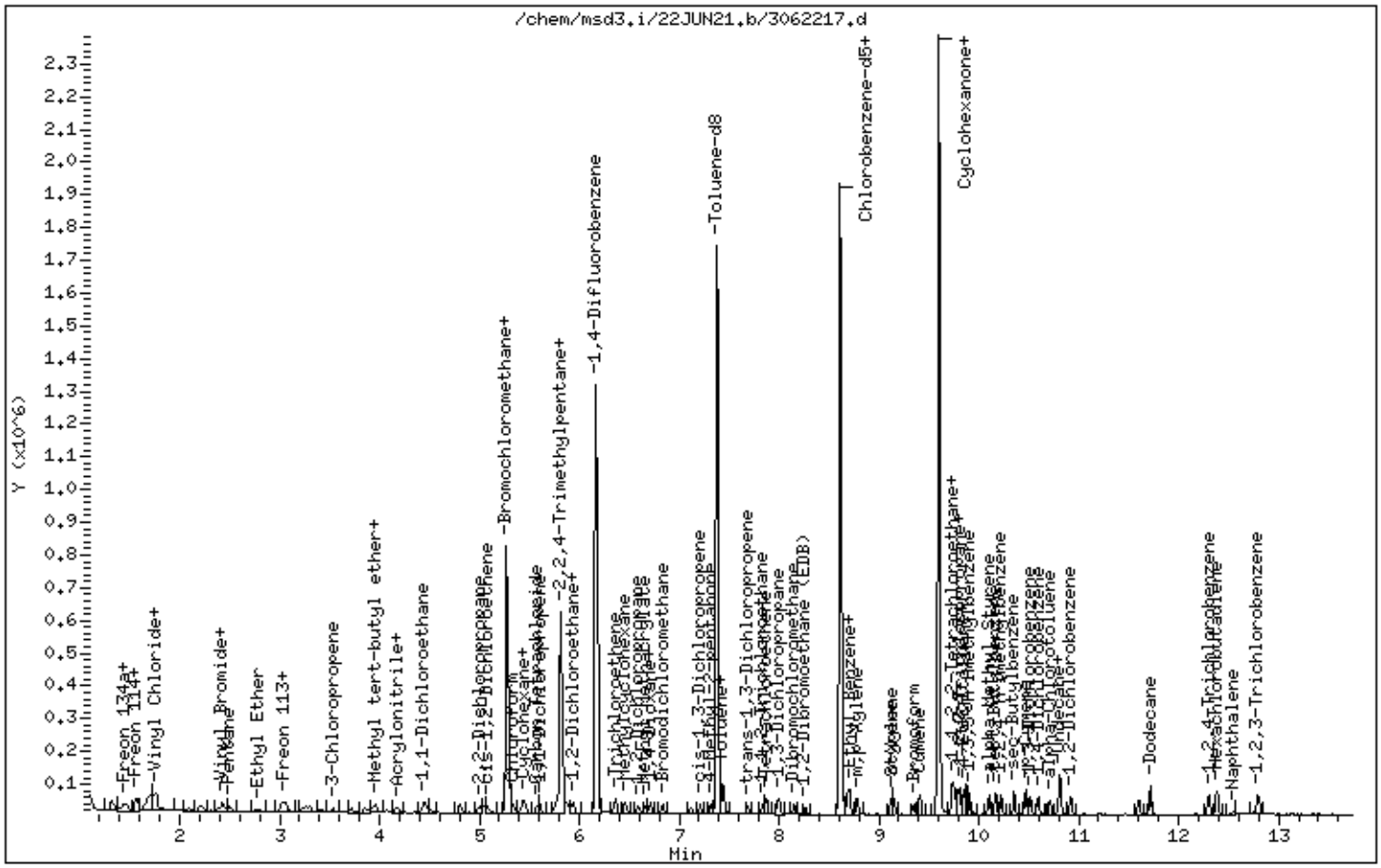
Instrument: msd3.i

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

				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	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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
127 Methylcyclohexane (continued)							
6.974	6.974 (1.046)	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

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	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:

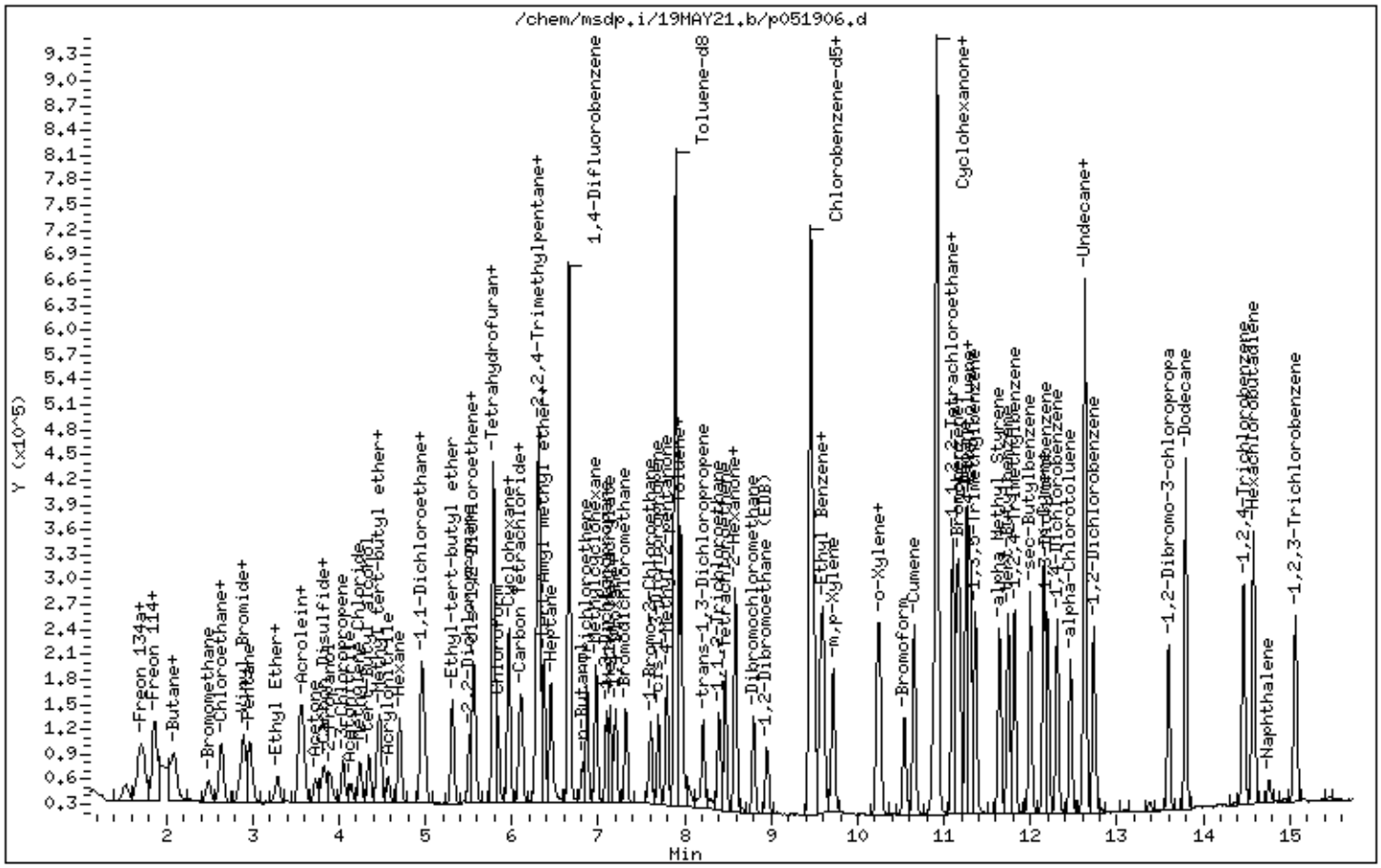
Instrument: msdp.i

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	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:

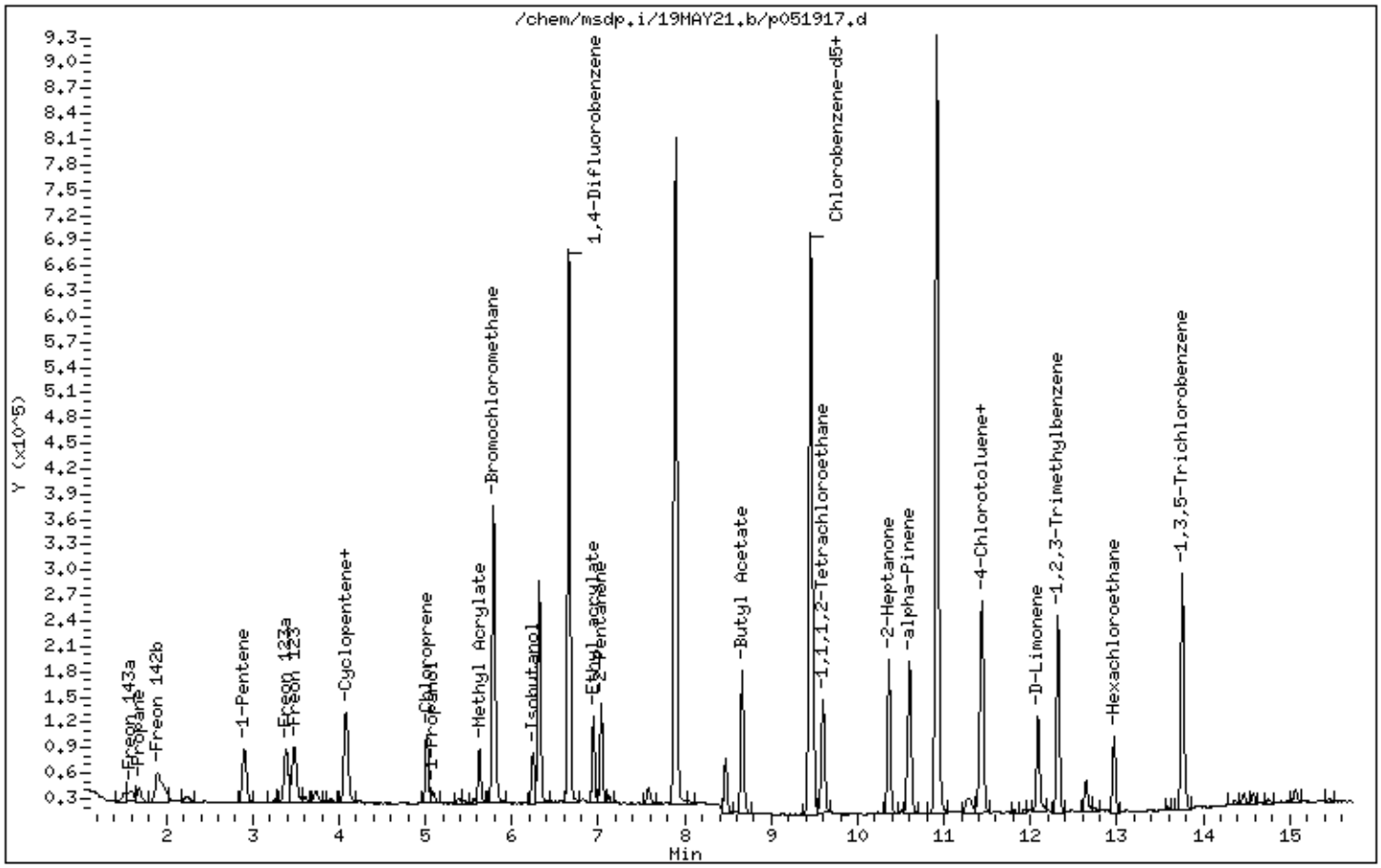
Instrument: msdp.i

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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.423	1.422 (0.270)	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)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
103 Isobutanol (continued)							
5.788	5.774 (1.098)	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

Date : 22-JUN-2021 16:44

Client ID:

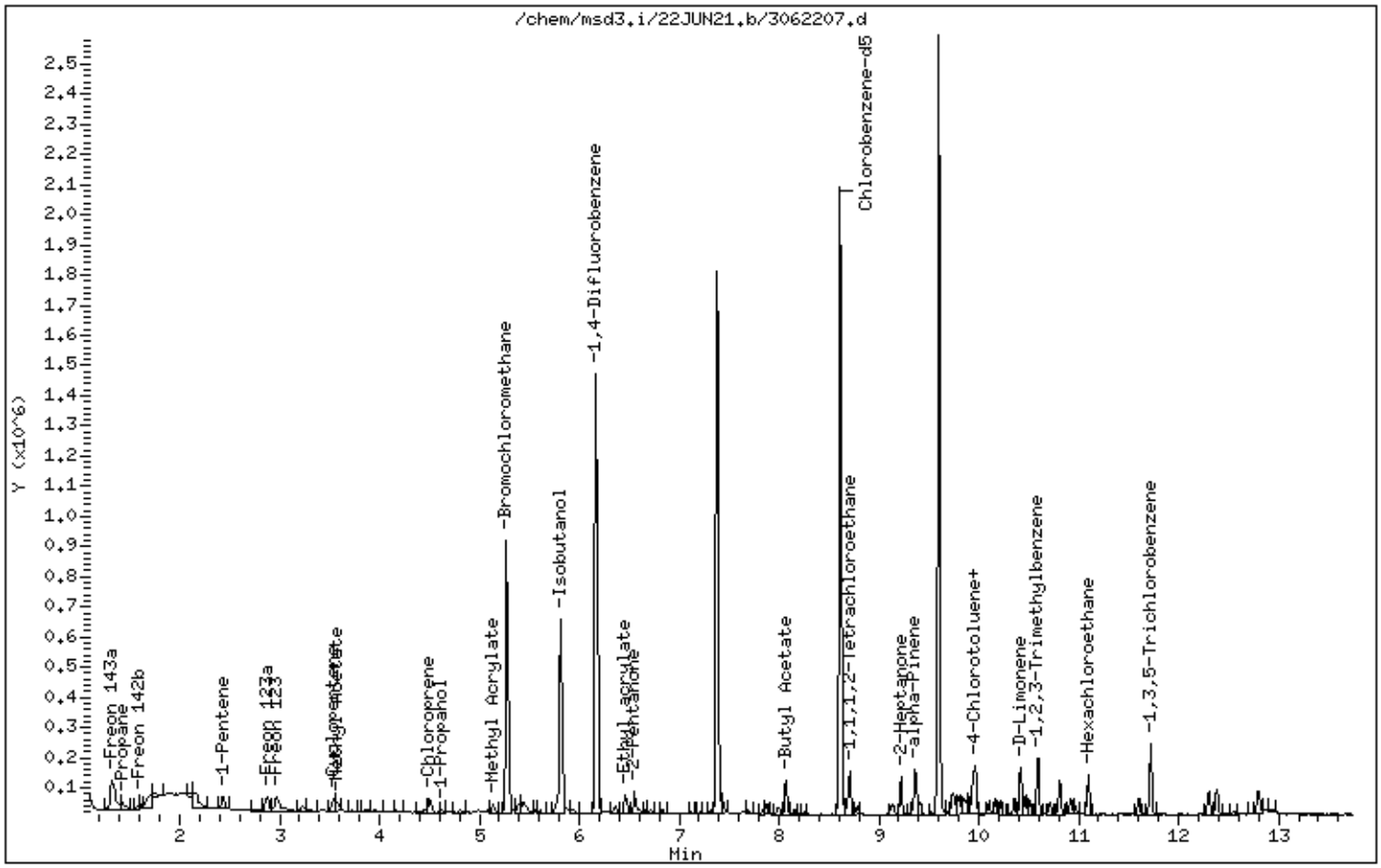
Instrument: msd3.i

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

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	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
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* 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

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	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
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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
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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
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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:

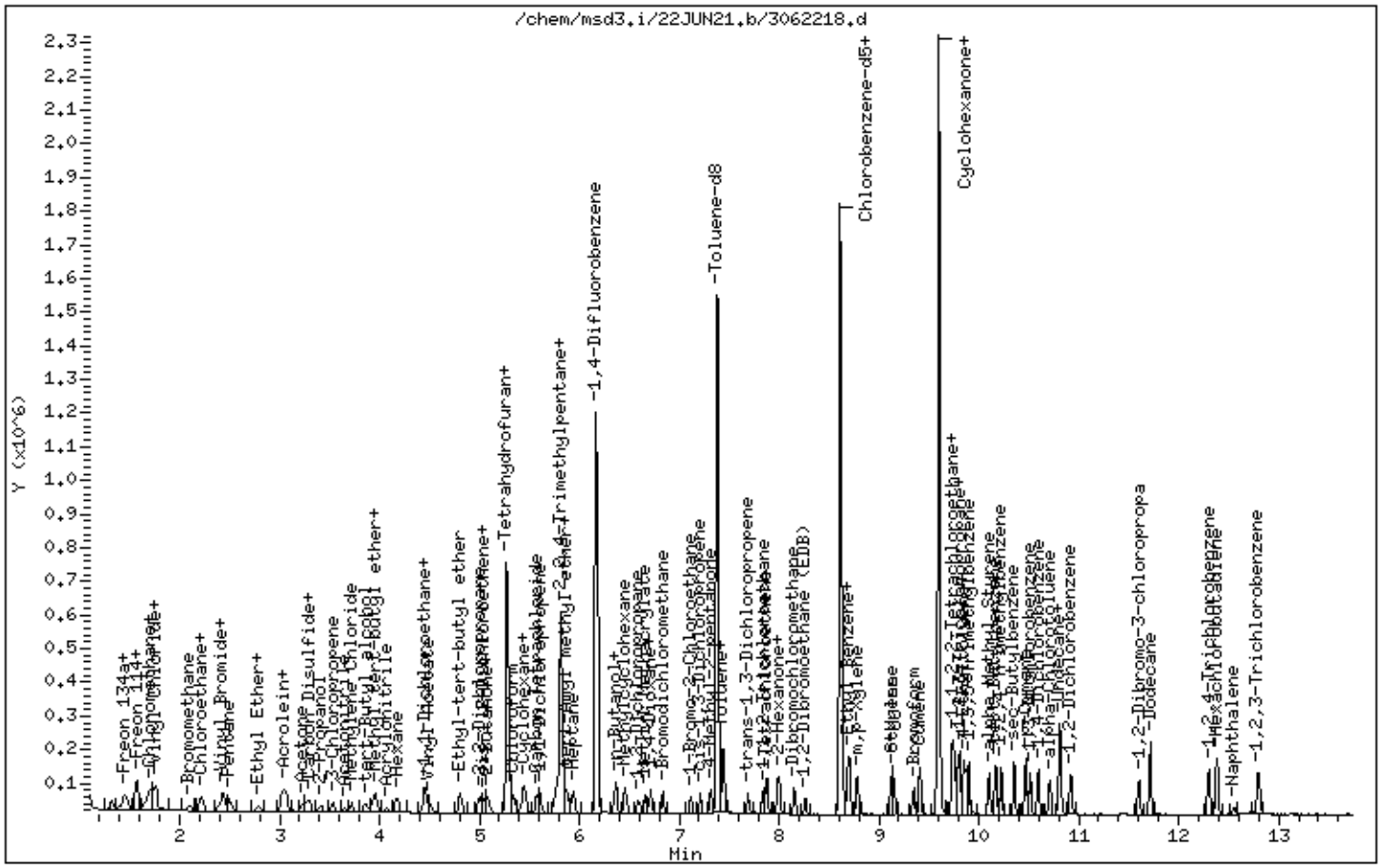
Instrument: msd3.i

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

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	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

				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

				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

Date : 19-MAY-2021 15:27

Client ID:

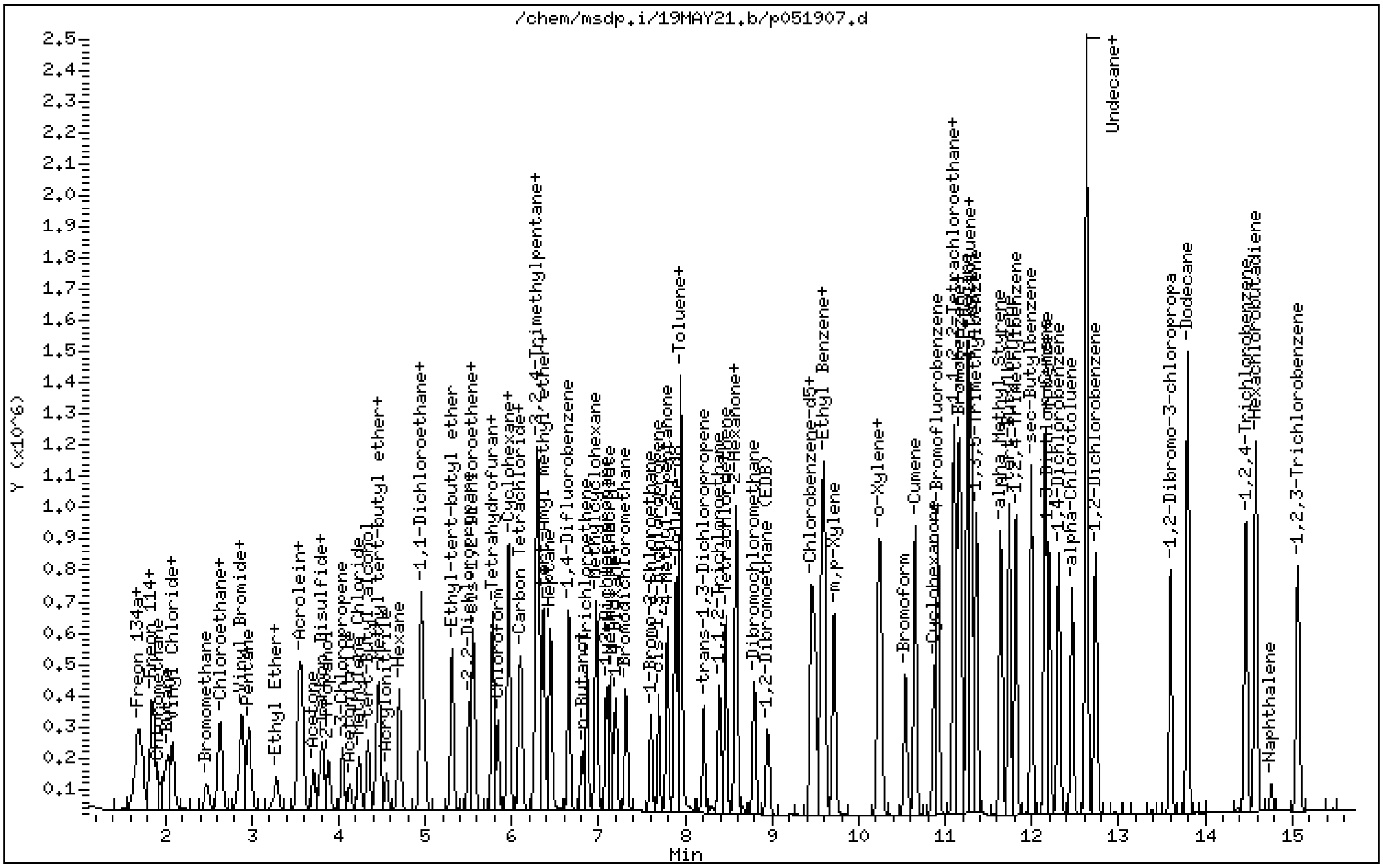
Instrument: msdp.i

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:

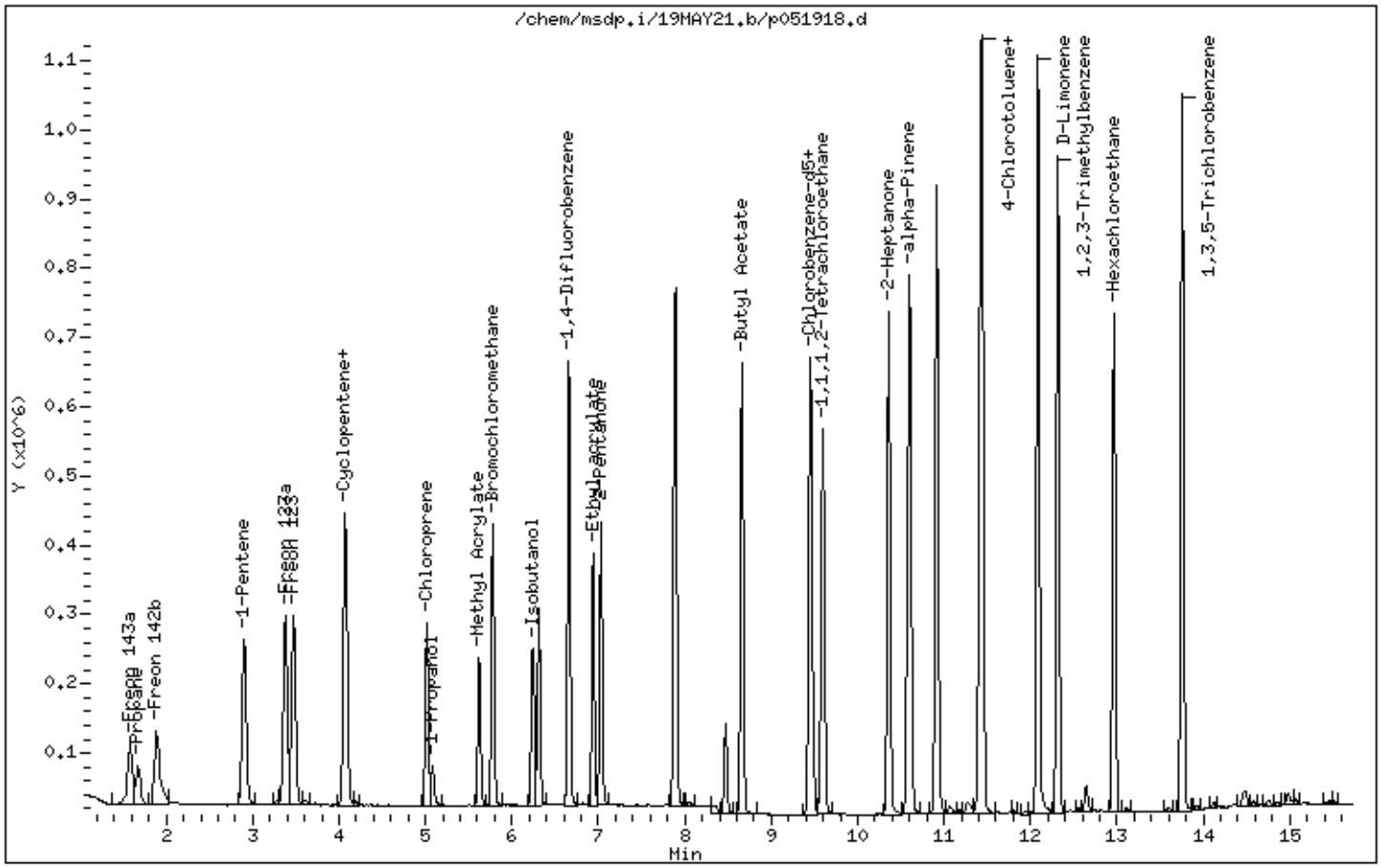
Instrument: msdp.i

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

				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:

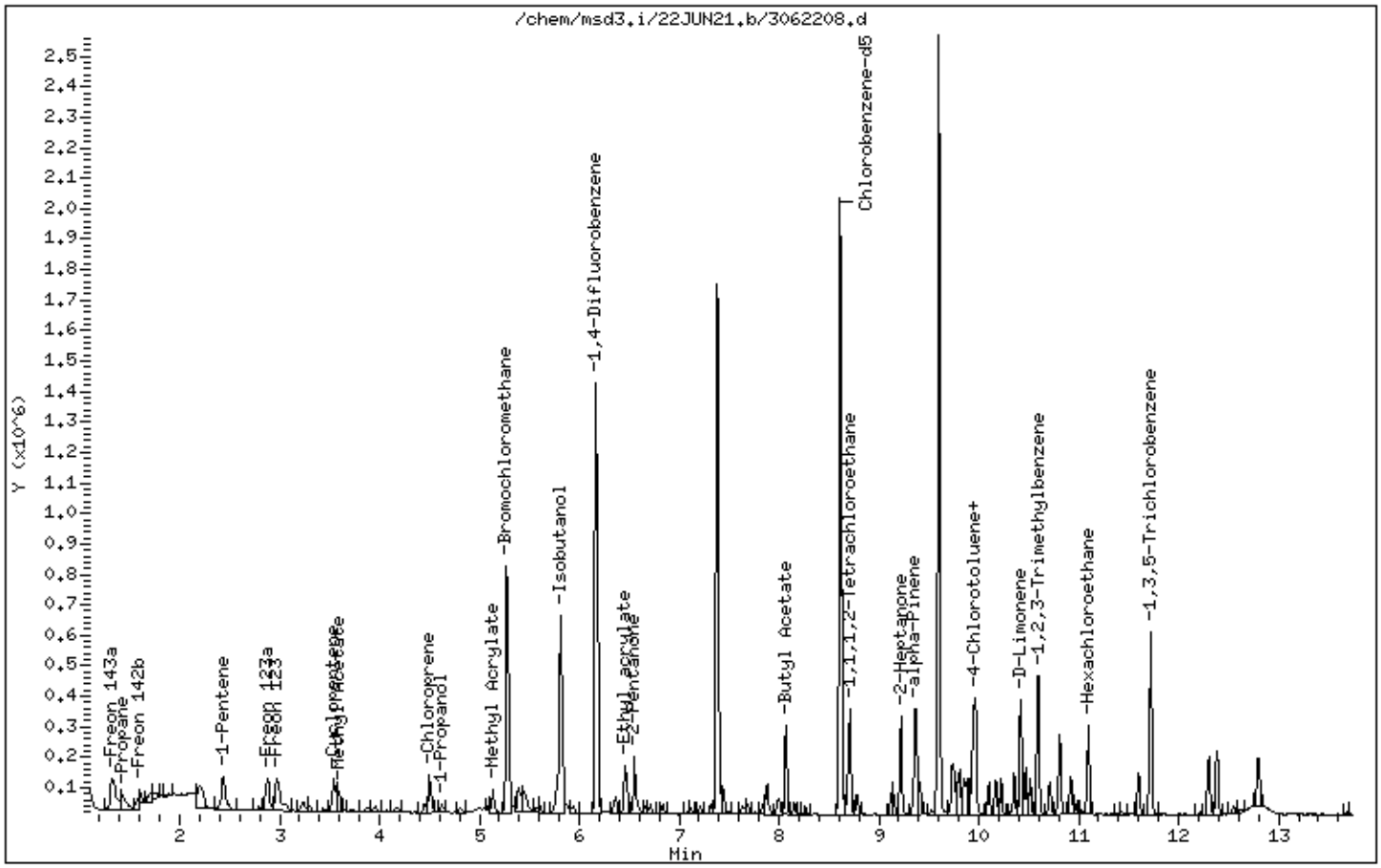
Instrument: msd3.i

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

				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	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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (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

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	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

				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

				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	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
==	====== ========	====	========	=======	=======	==========	=====
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
==	====== ========	====	========	=======	=======	==========	=====
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:

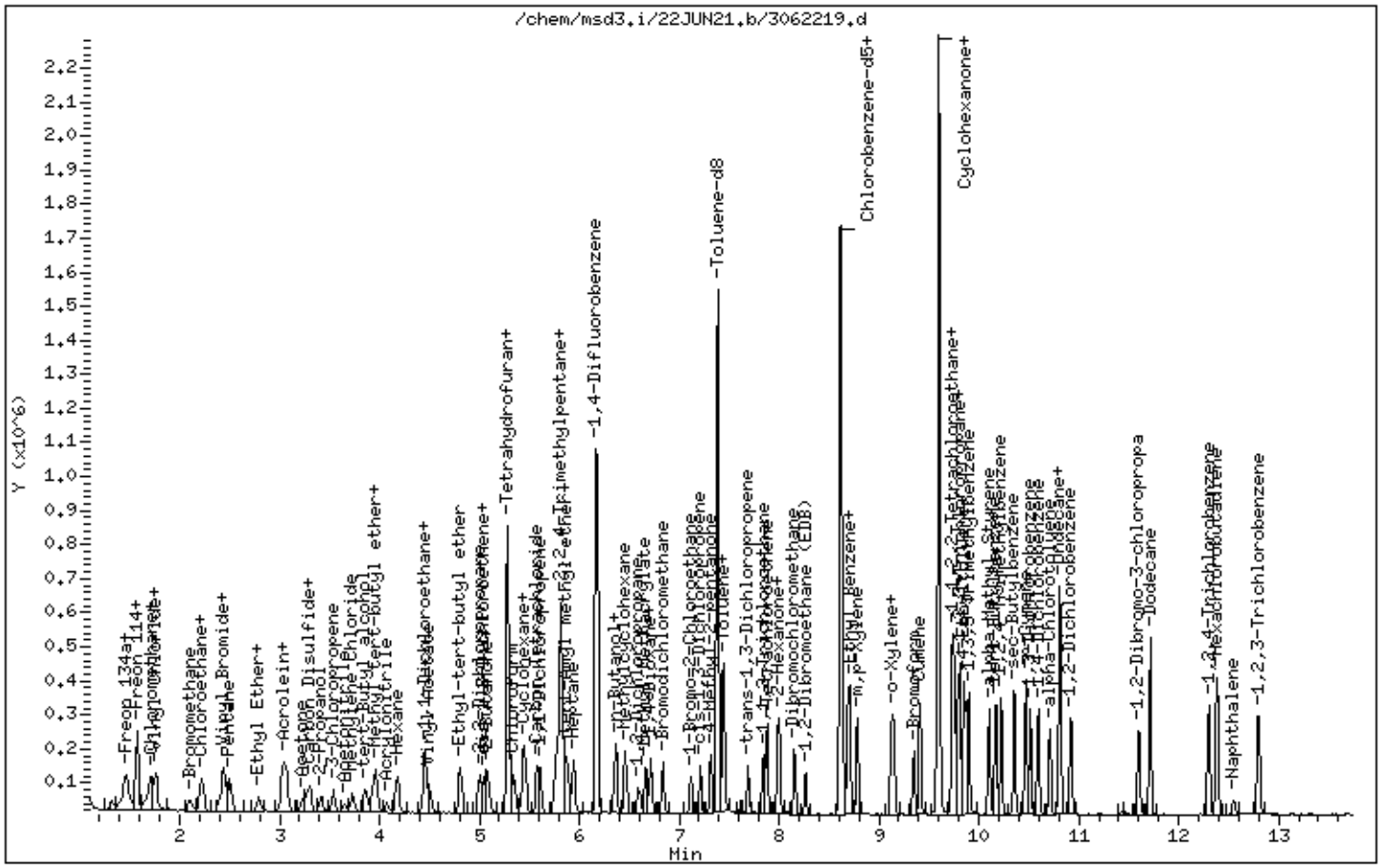
Instrument: msd3.i

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

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 (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
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

				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	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

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

Date : 19-MAY-2021 15:55

Client ID:

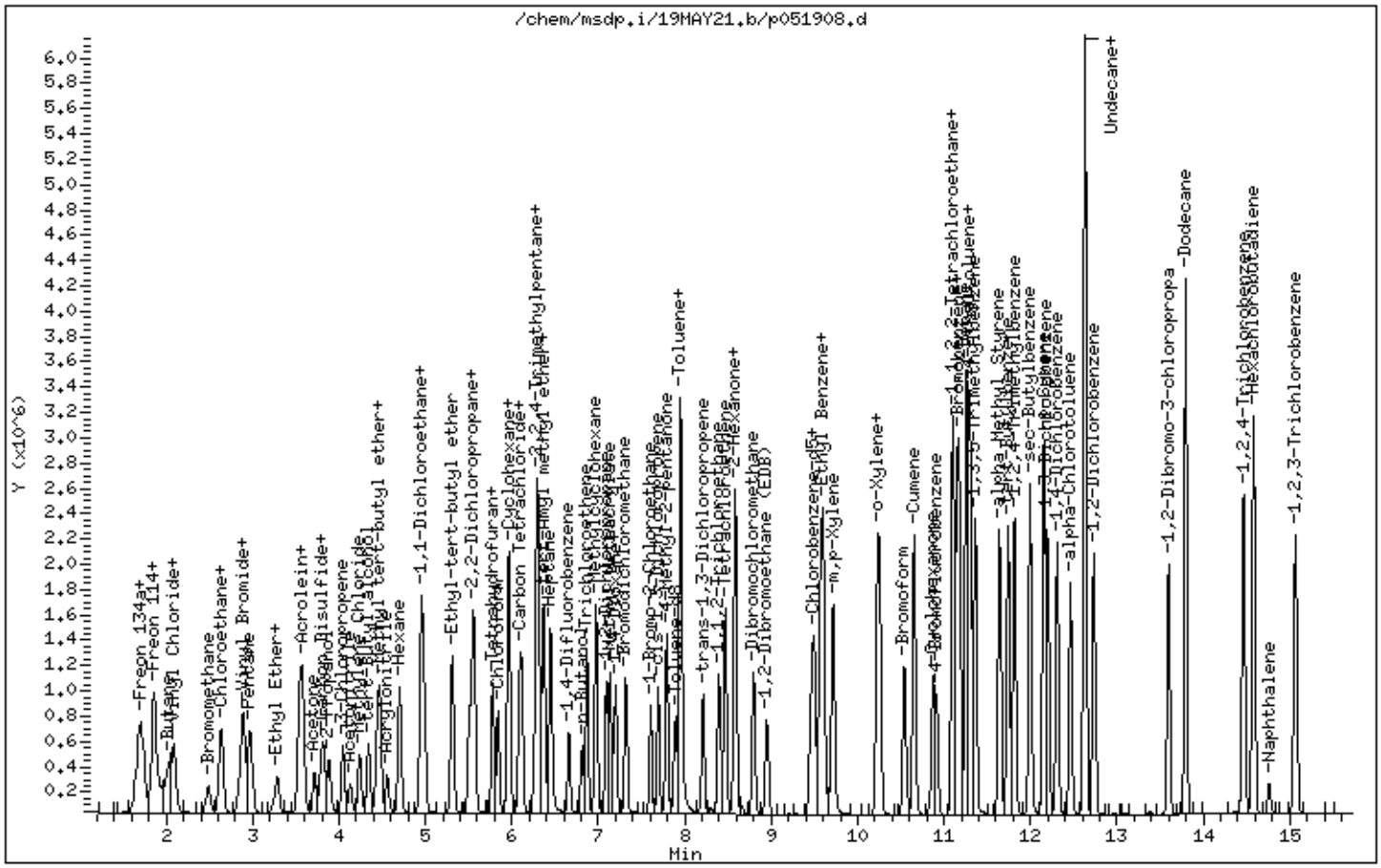
Instrument: msdp.i

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:

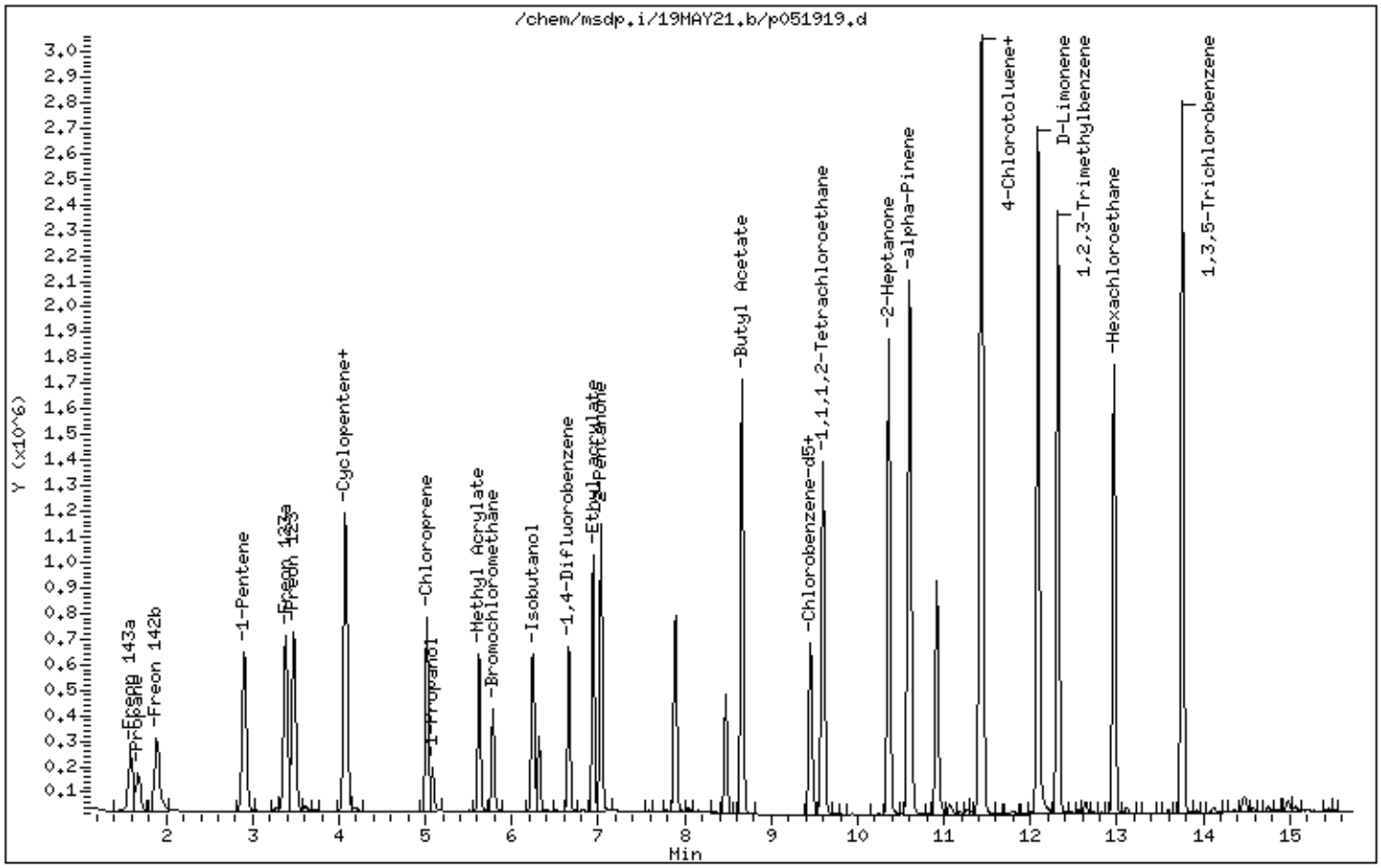
Instrument: msdp.i

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

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

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

				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	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:

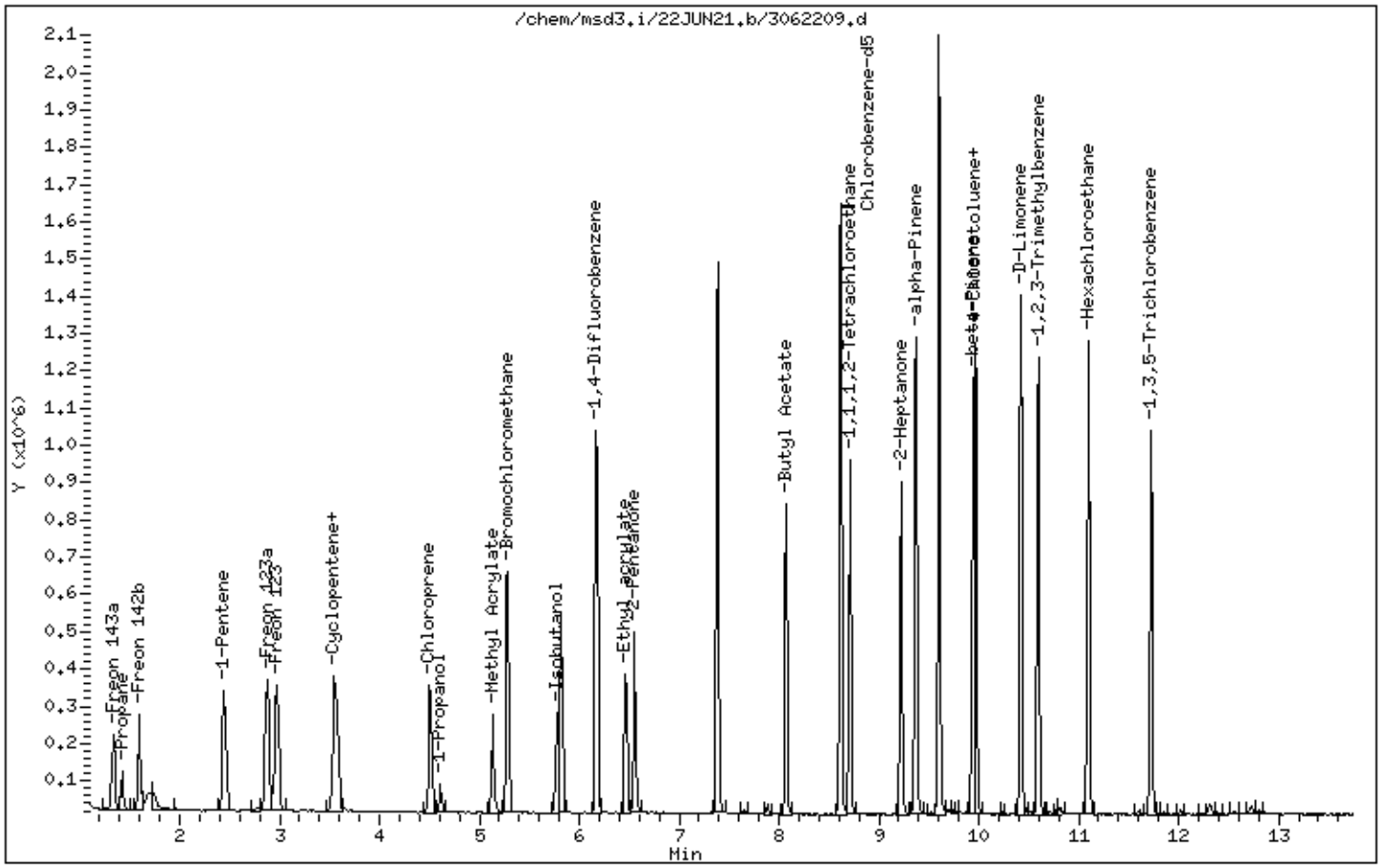
Instrument: msd3.i

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

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

				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 (0.644)	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
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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
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* 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
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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

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	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

Date : 22-JUN-2021 22:44

Client ID:

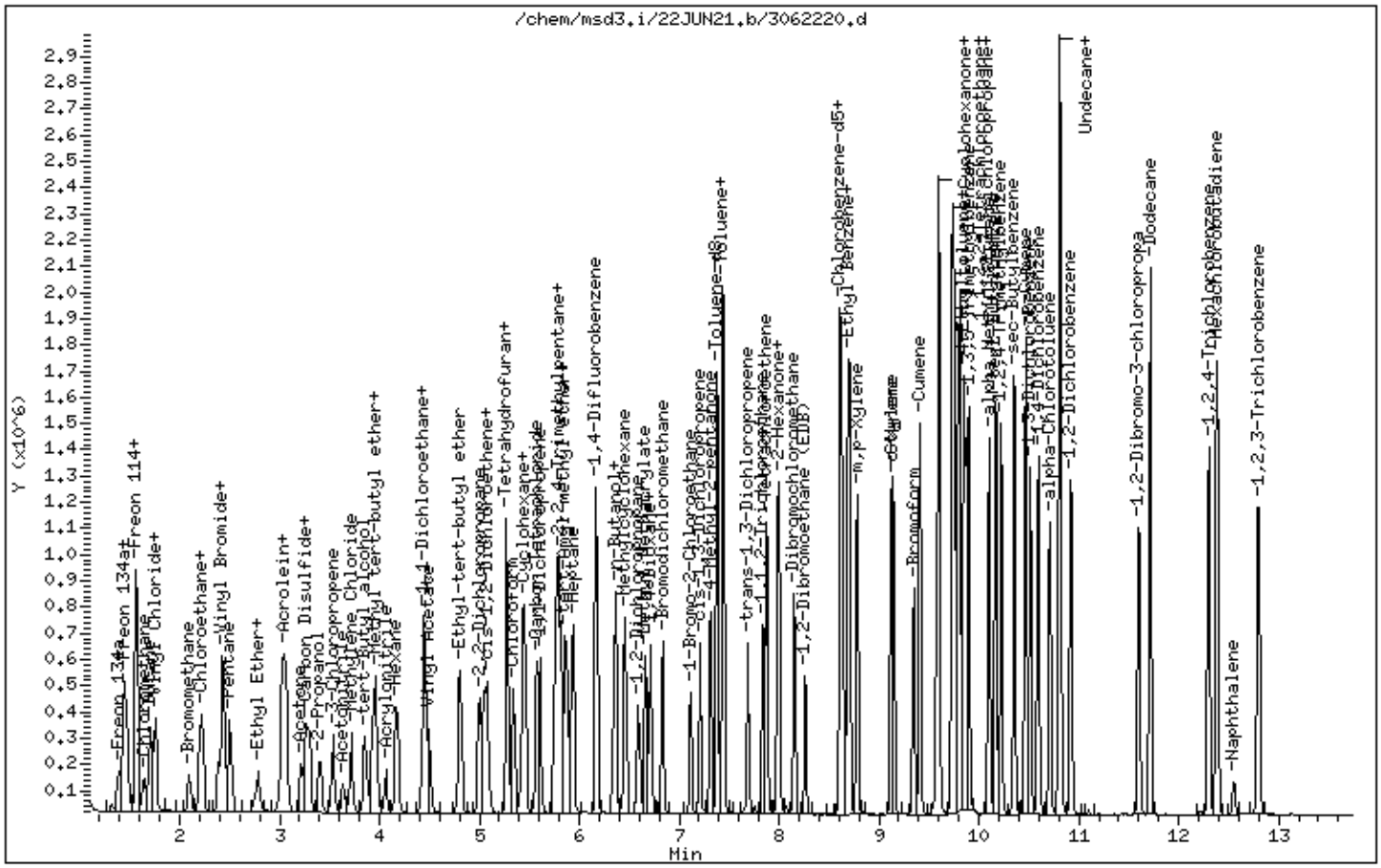
Instrument: msd3.i

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

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

				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
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* 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
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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
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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:

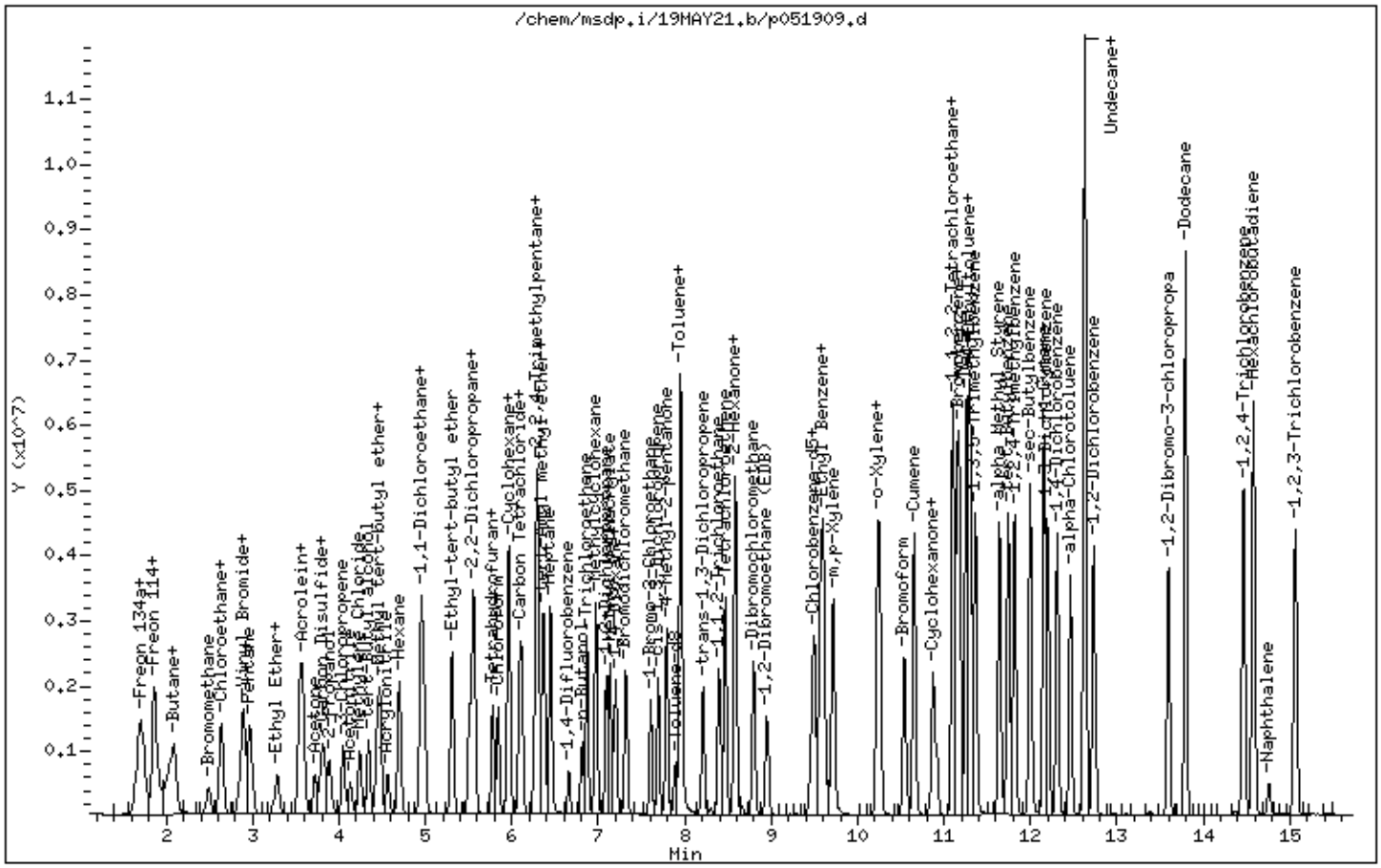
Instrument: msdp.i

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

				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	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:

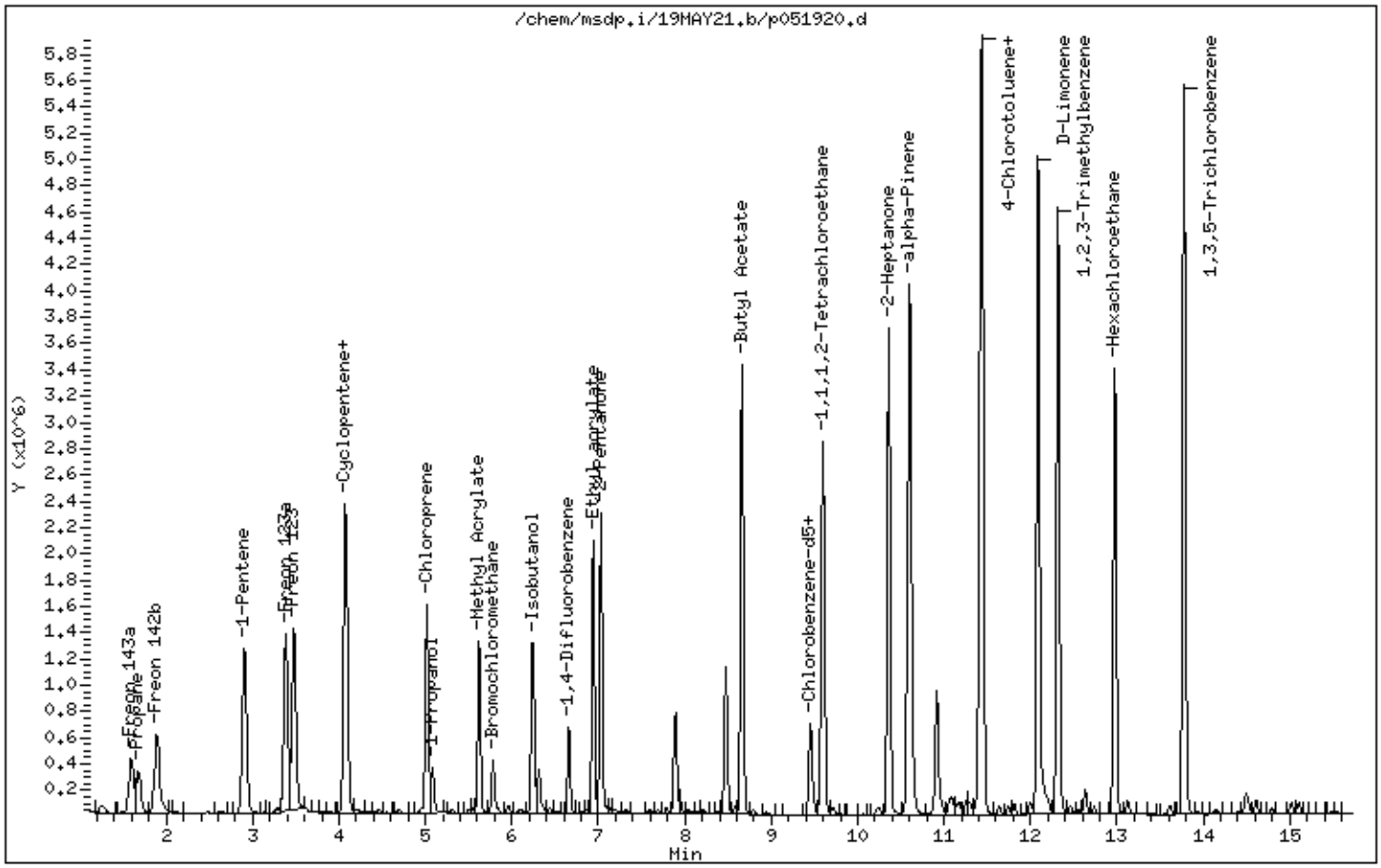
Instrument: msdp.i

Sample Info: 100mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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:

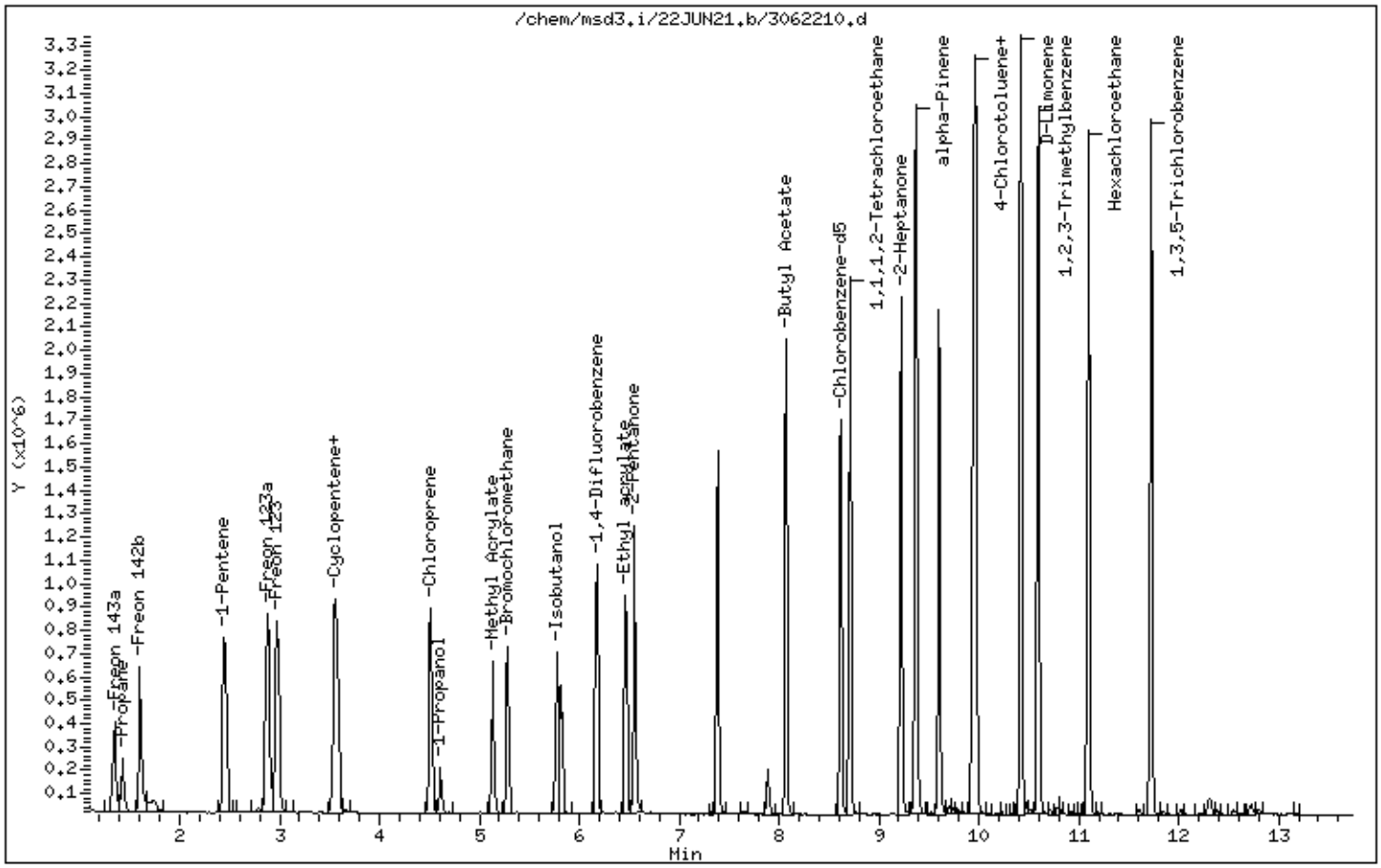
Instrument: msd3.i

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

				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
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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
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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:

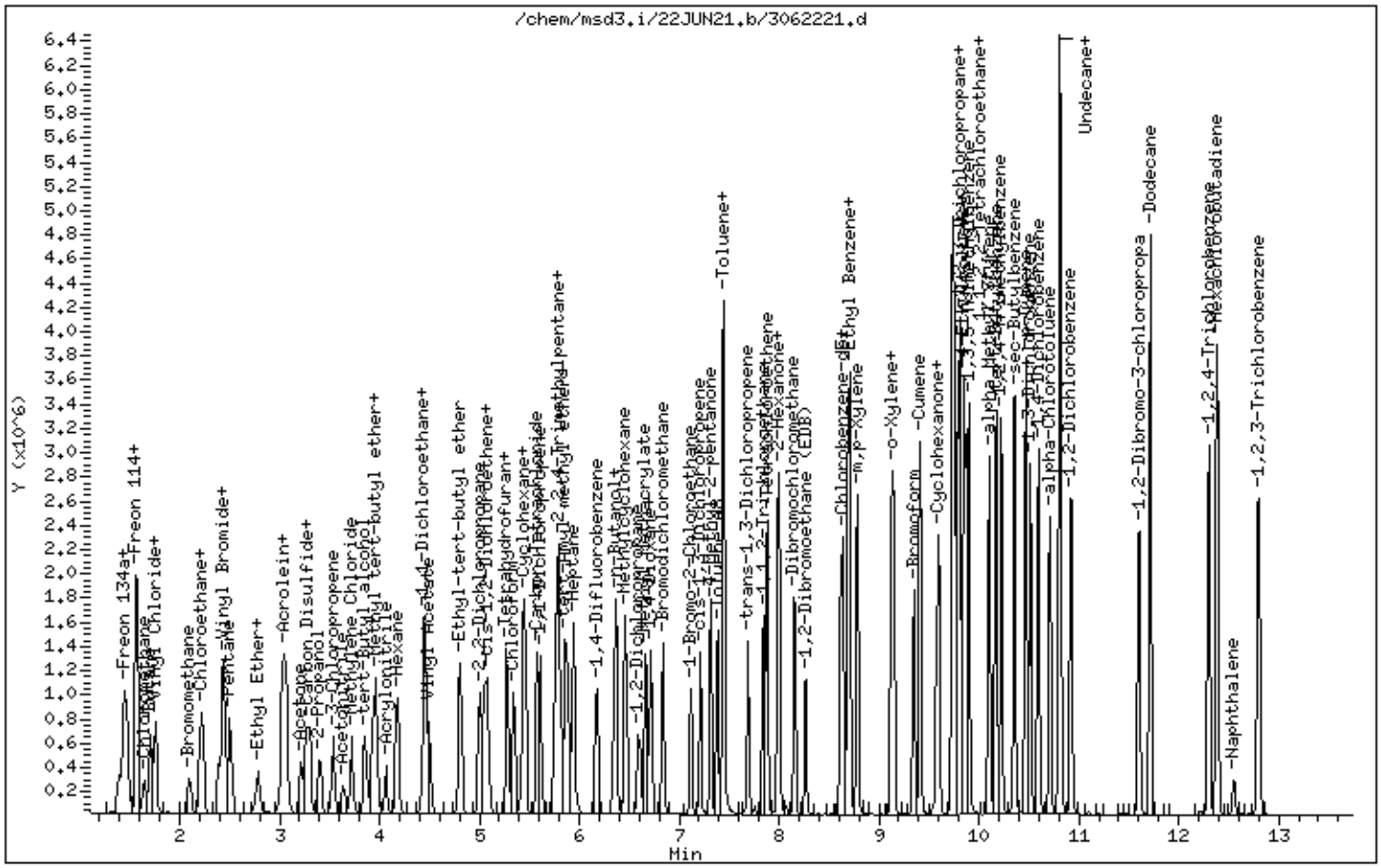
Instrument: msd3.i

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
* 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)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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

				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	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:

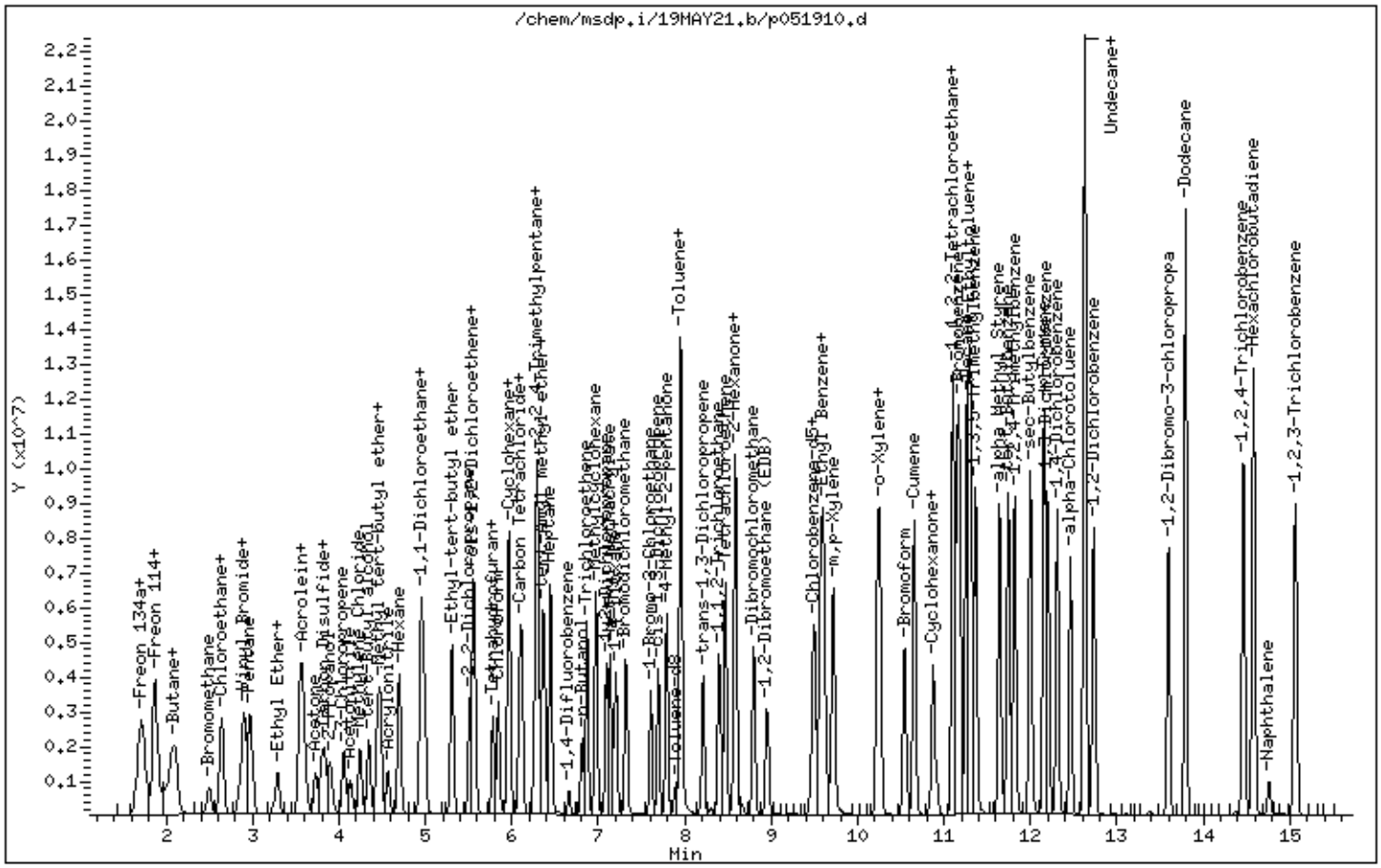
Instrument: msdp.i

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

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	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:

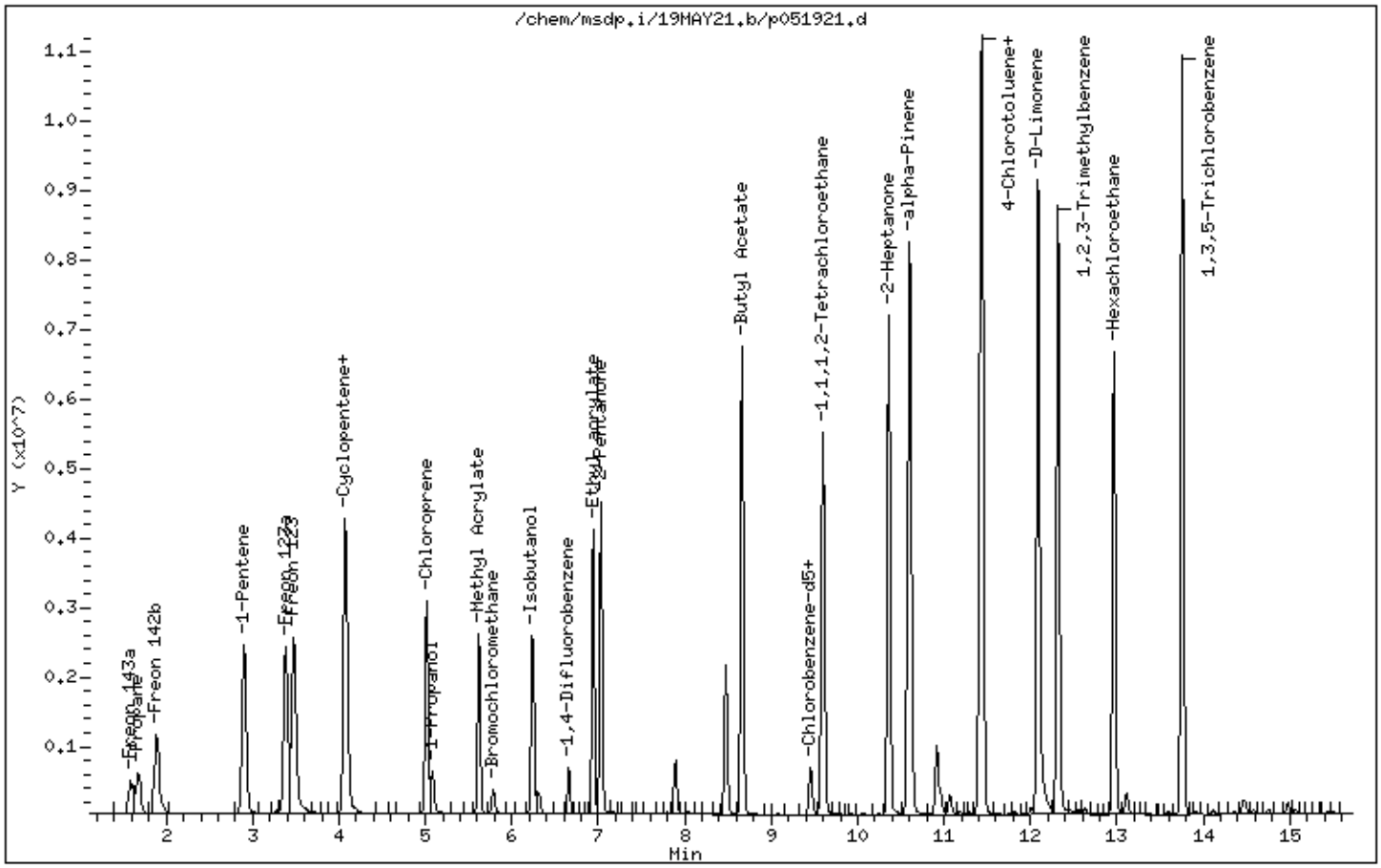
Instrument: msdp.i

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:

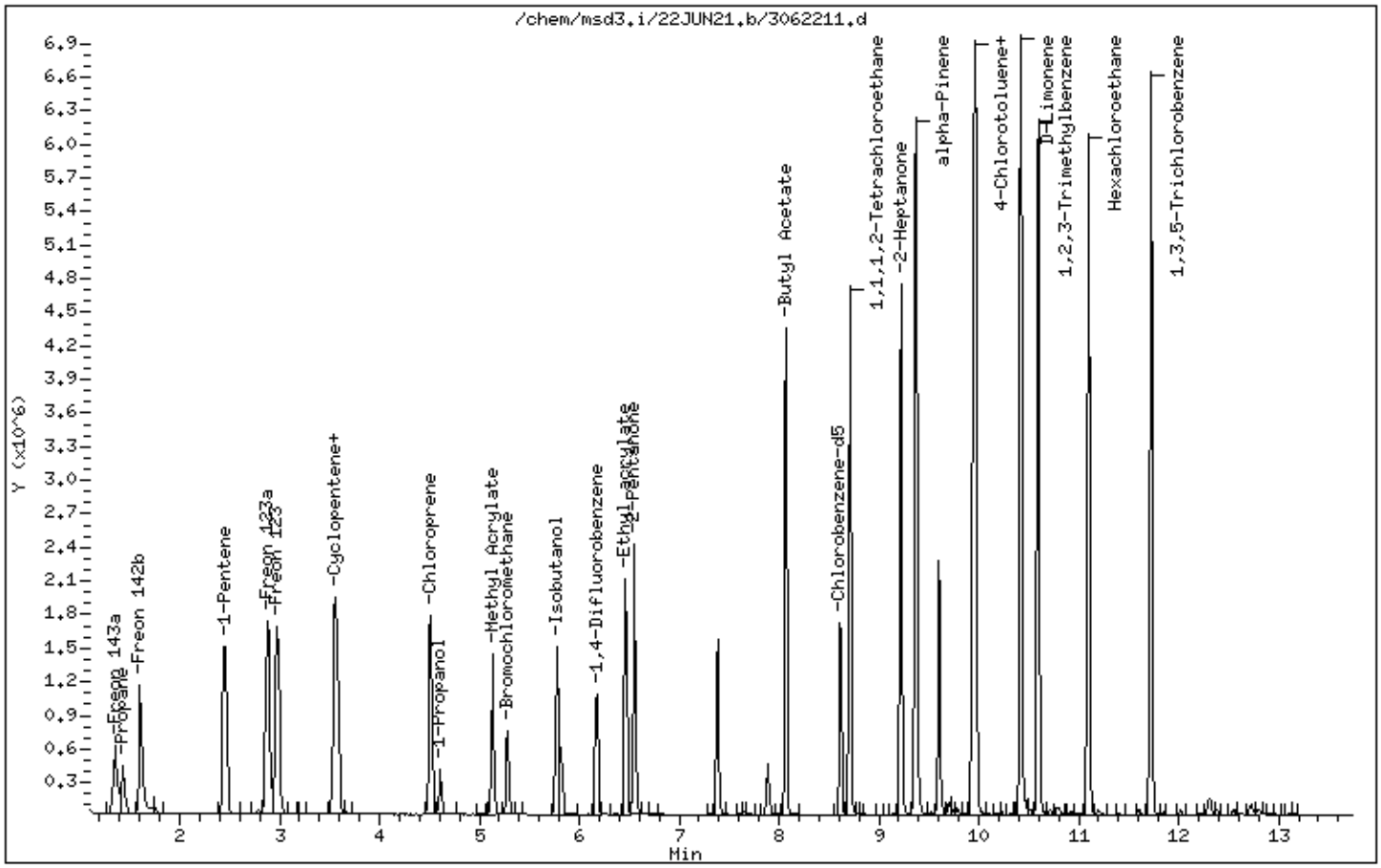
Instrument: msd3.i

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

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 (0.264)	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
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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
==	====== ========	====	========	=======	=======	==========	=====
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

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:

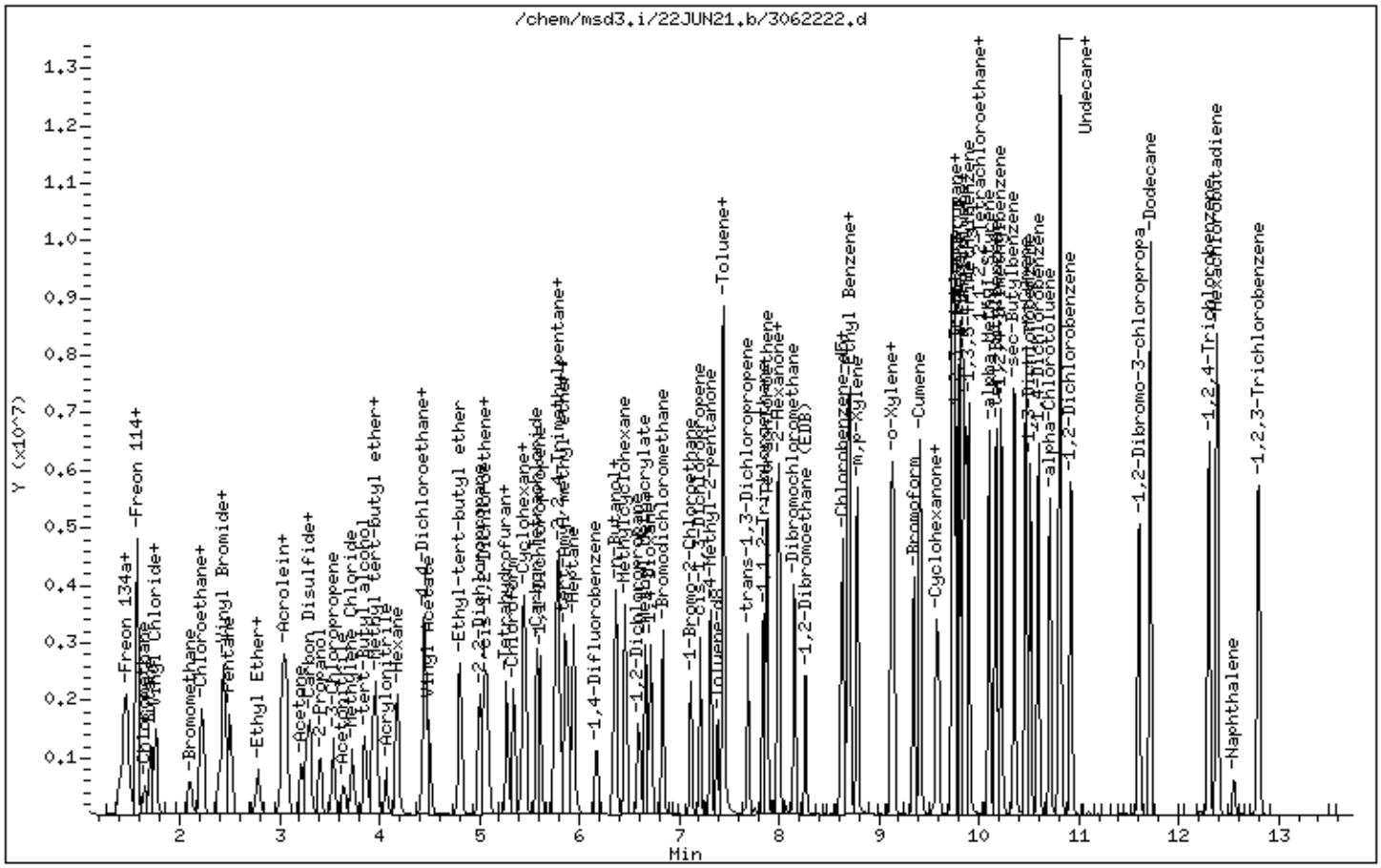
Instrument: msd3.i

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)	ON-COL (PPBV)	TARGET RANGE	RATIO
7.891	7.891 (1.185)	100	419509			34.95- 94.95	64.75
$ 134 Toluene-d8 (continued)							
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
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
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
8 Freon 12					CAS #: 75-71-8		
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
10 Freon 114					CAS #: 76-14-2		
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
19 Vinyl Chloride					CAS #: 75-01-4		
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
20 1,3-Butadiene					CAS #: 106-99-0		
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
33 Freon 11					CAS #: 75-69-4		
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
43 Freon 113					CAS #: 76-13-1		
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
44 1,1-Dichloroethene					CAS #: 75-35-4		
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
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
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
66 Acrylonitrile					CAS #: 107-13-1		

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

Date : 20-MAY-2021 00:05

Client ID:

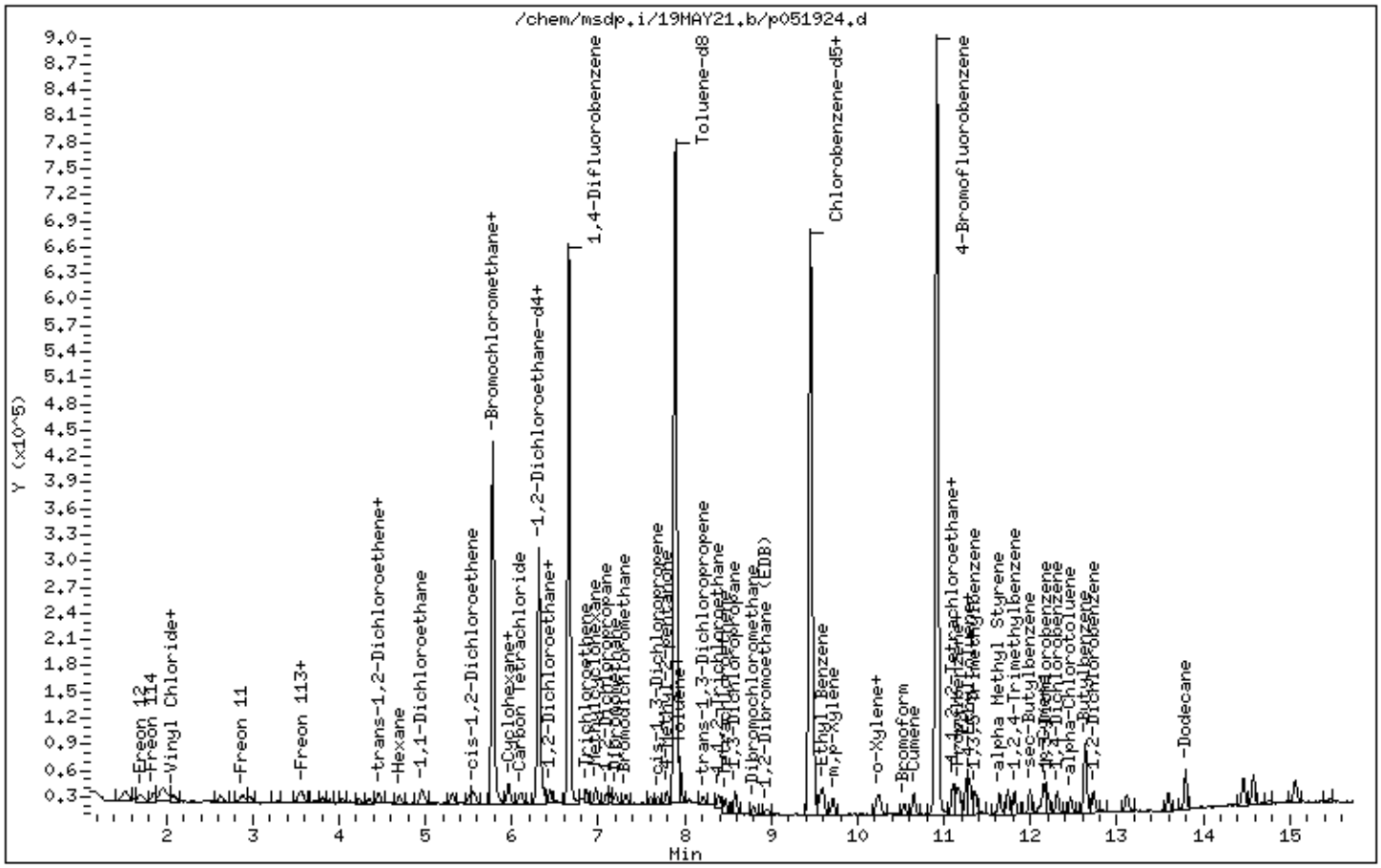
Instrument: msdp.i

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:

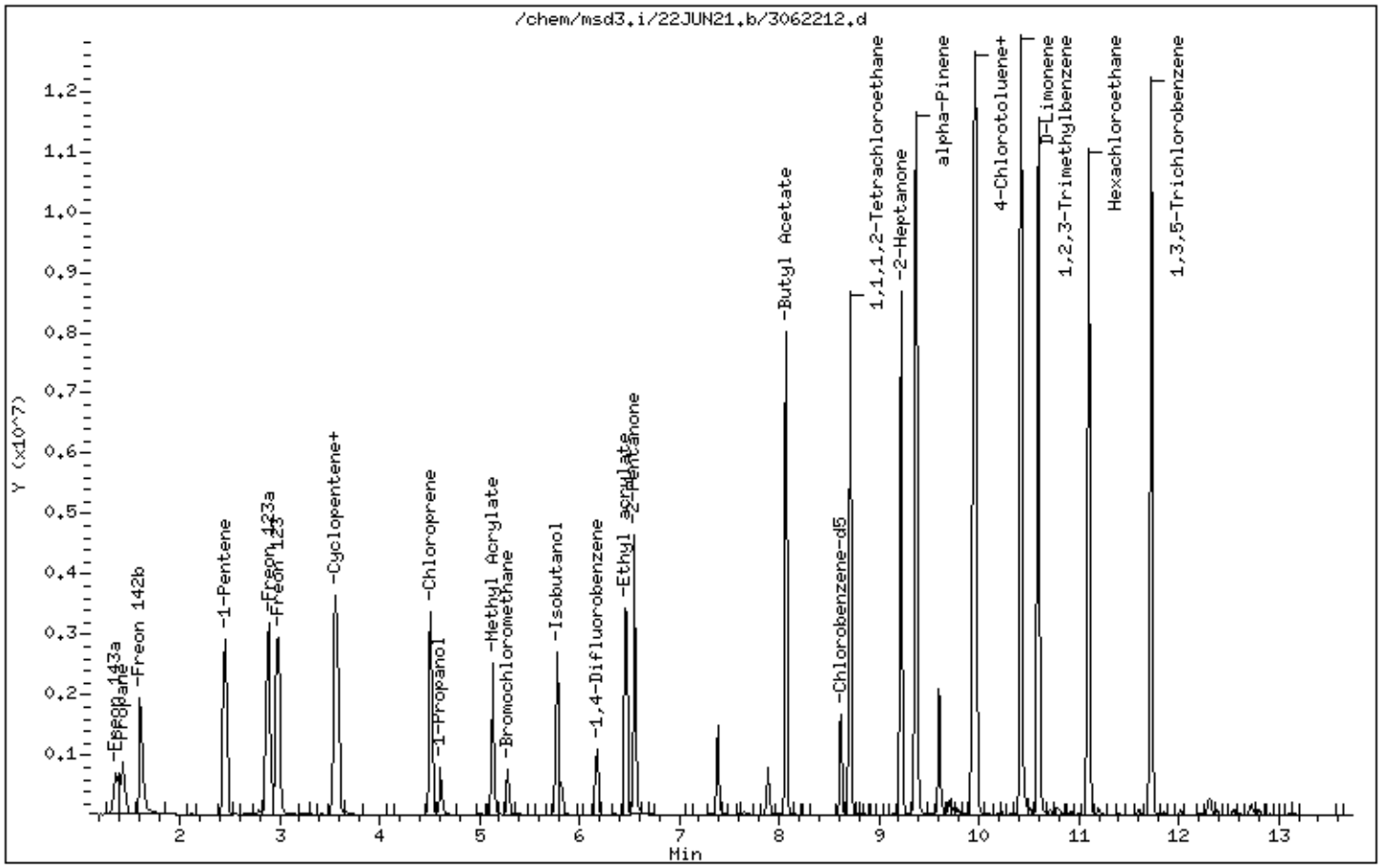
Instrument: msd3.i

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

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	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
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* 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

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	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
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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:

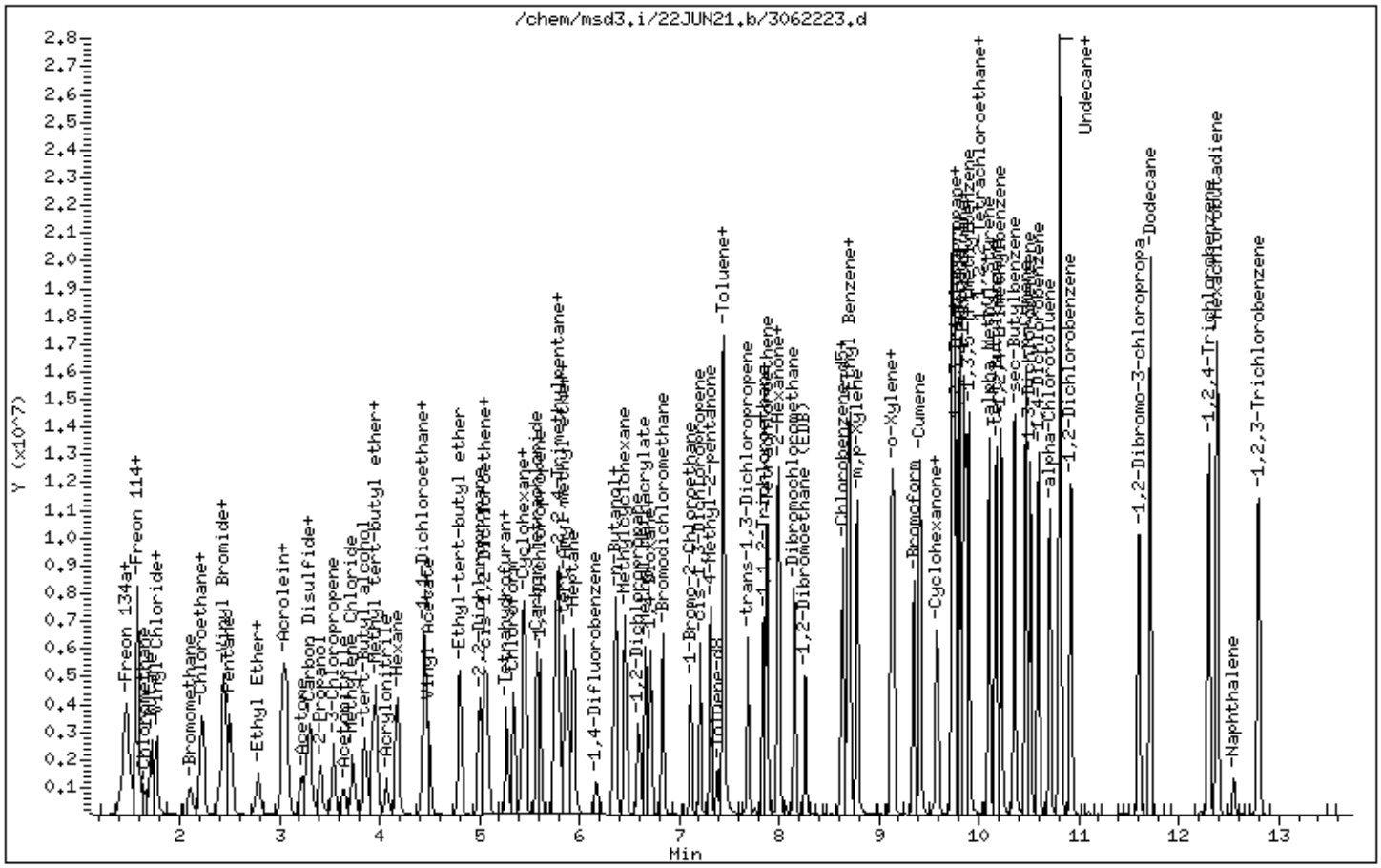
Instrument: msd3.i

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

					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	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.

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

Page 1

Date : 23-JUN-2021 09:45

Client ID: ICV

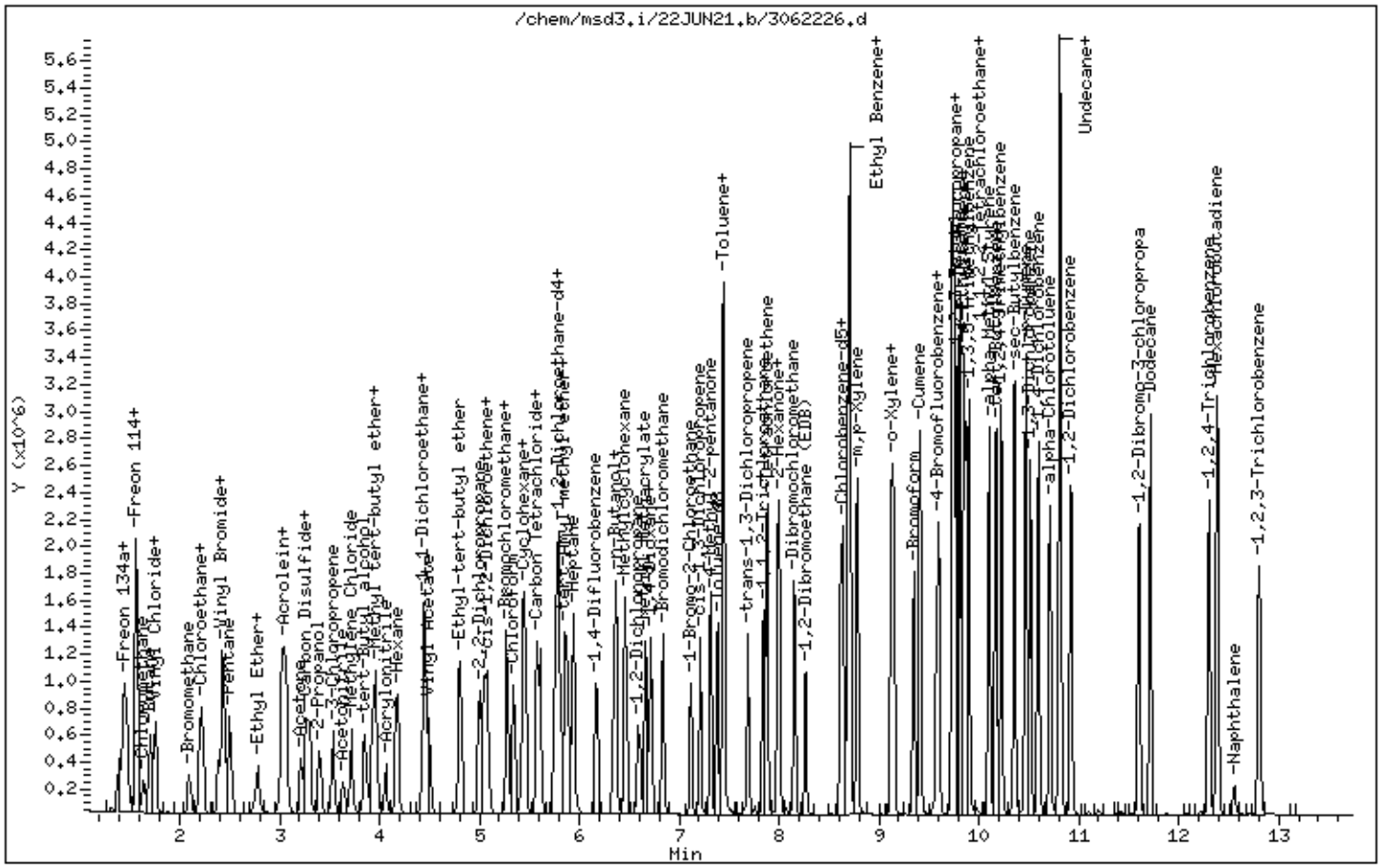
Instrument: msd3.i

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

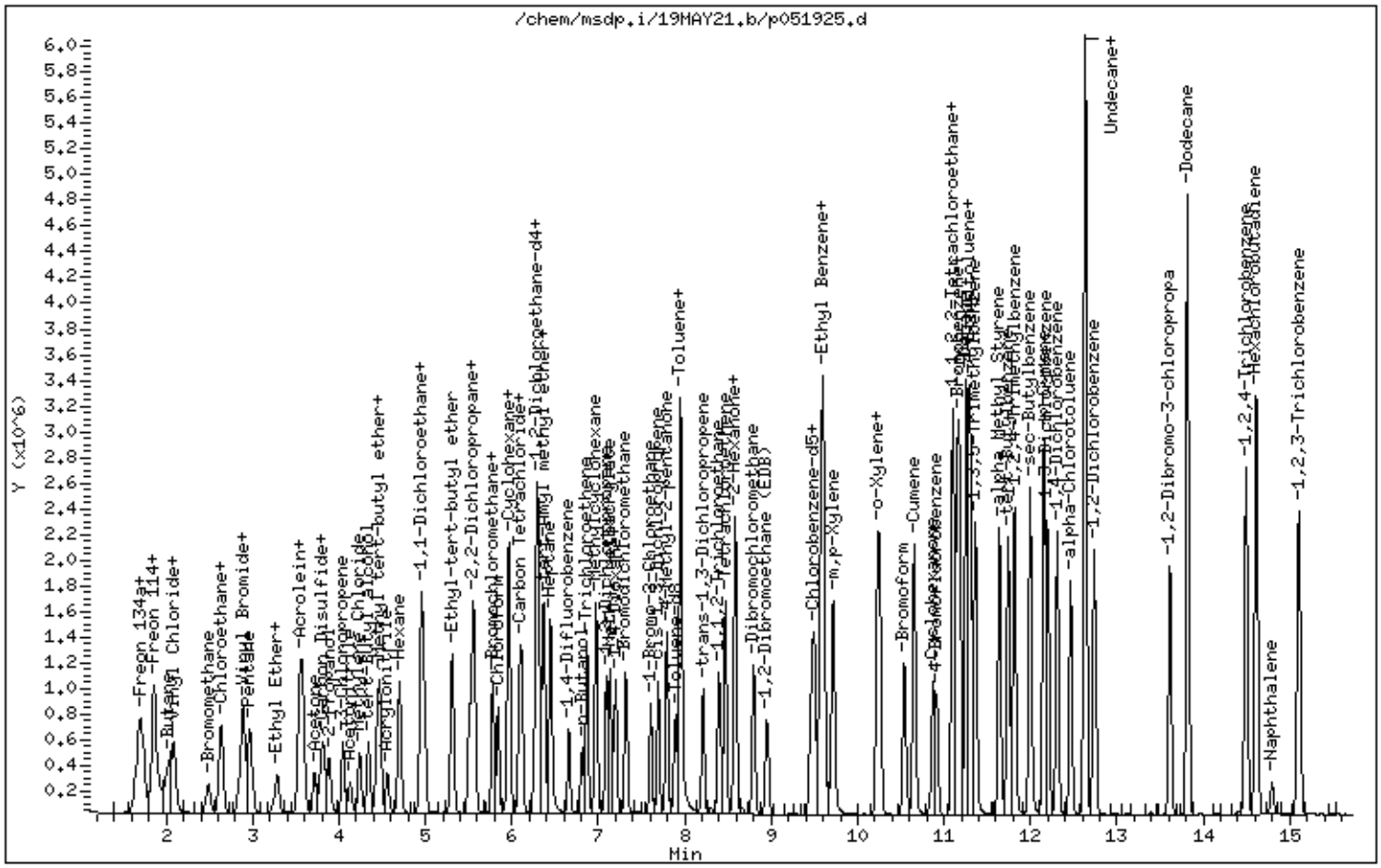
Instrument: msdp.i

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

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

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
12 mL 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)
10 mL 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 (500 / 300)
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 (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	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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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	PPTV 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

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		
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

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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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

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
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

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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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	98.67	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.~~ UG

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	PQTV	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

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	2000	2000	
43 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
44 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			
45 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			359.44
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	5000	5000	~~478.69~~
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	2000	2000	
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	2000	2000	469.09
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	2000	2000	112.66
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	2000	2000	
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	5000	5000	
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	2000	2000	
63 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			

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

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	
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-msd.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	Ratio 1
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

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
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/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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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
	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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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
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

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
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
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

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			

US32TAR1
METHOD DETECTION LIMIT SUMMARY REPORT

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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

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	11/11/20 GH

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~~ MO 11/02/20 800	— MO 11/02/20

* 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
52 2000 800 137.2
54 2000 800 —
57 2000 800 —
62 2000 800 —
63 2000 800 —

MS 11/03/20

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

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	RT	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

ppbv

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	MDL09	AVG CONC	STD DEV	MDL	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 RL 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	sc ↓
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	0.400	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#: 2107361-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072703**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 11:36 AM**

Compound	%Recovery
1,1,1,2-Tetrachloroethane	104
1,1,1-Trichloroethane	89
1,1,2,2-Tetrachloroethane	106
1,1,2-Trichloroethane	98
1,1-Dichloroethane	96
1,1-Dichloroethene	91
1,1-Difluoroethane	101
1,2,3-Trichloropropane	109
1,2,4-Trichlorobenzene	85
1,2,4-Trimethylbenzene	102
1,2-Dibromo-3-chloropropane	100
1,2-Dibromoethane (EDB)	101
1,2-Dichlorobenzene	102
1,2-Dichloroethane	101
1,2-Dichloropropane	74
1,3,5-Trimethylbenzene	106
1,3-Butadiene	92
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	102
1,4-Dioxane	94
2,2,4-Trimethylpentane	85
2-Butanone (Methyl Ethyl Ketone)	96
2-Hexanone	95
2-Propanol	94
3-Chloropropene	89
4-Ethyltoluene	108
4-Methyl-2-pentanone	82
Acetone	96
Acrolein	94
Acrylonitrile	81
alpha-Chlorotoluene	92
Benzene	98
Bromodichloromethane	91
Bromoform	109
Bromomethane	100
Carbon Disulfide	100
Carbon Tetrachloride	98
Chlorobenzene	98
Chloroethane	97
Chloroform	93
Chloromethane	118
cis-1,2-Dichloroethene	92

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Client Sample ID: CCV

Lab ID#: 2107361-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072703**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 11:36 AM**

Compound	%Recovery
cis-1,3-Dichloropropene	90
Cumene	101
Cyclohexane	86
Dibromochloromethane	105
Dibromomethane	108
Ethanol	83
Ethyl Acetate	96
Ethyl Benzene	98
Ethyl-tert-butyl ether	90
Freon 11	105
Freon 12	100
Freon 113	99
Freon 114	103
Freon 134a	104
Heptane	86
Hexachlorobutadiene	86
Hexachloroethane	112
Hexane	89
Iodomethane	107
Isopropyl ether	92
m,p-Xylene	101
Methyl tert-butyl ether	89
Methylene Chloride	96
Naphthalene	63
o-Xylene	99
Propylbenzene	109
Propylene	95
Styrene	102
tert-Amyl methyl ether	93
tert-Butyl alcohol	88
Tetrachloroethene	104
Tetrahydrofuran	87
Toluene	93
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	87
trans-1,3-Dichloropropene	96
Trichloroethene	96
Vinyl Acetate	92
Vinyl Bromide	97
Vinyl Chloride	105

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107361-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 11:36 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	108	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072703.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 27-JUL-2021 11:36
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2071A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 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	238986	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	187500			48.46- 108.46	78.46
5.270	5.270 (1.000)	49	338226			120.39- 180.39	141.53
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	785289	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	114138			0.00- 45.52	14.53
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	683596	25.0000		80.00- 120.00	100.00
8.612	8.612 (1.000)	82	366865			25.46- 85.46	53.67
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	318581	25.0000	24.224	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	162161			21.66- 81.66	50.90
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	774218	25.0000	23.936	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	82736			0.00- 41.47	10.69

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
$ 134 Toluene-d8 (continued)							
7.387	7.387 (1.195)	100	511317			36.47- 96.47	66.04
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	490326	25.0000	27.118	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	562729			93.06- 153.06	114.77
9.601	9.601 (1.115)	176	454164			62.87- 122.87	92.62
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	297232	50.0000	52.269	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	236527			51.82- 111.82	79.58
1.479	1.479 (0.280)	51	727436			194.91- 254.91	244.74
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	275154	50.0000	47.665	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	183011			35.61- 95.61	66.51
1.423	1.423 (0.269)	39	207006			42.66- 102.66	75.23
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	189731	50.0000	50.421	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	727436			321.86- 381.86	383.40
1.451	1.451 (0.275)	47	145666			45.34- 105.34	76.78
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	834632	50.0000	50.134	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	271246			2.63- 62.63	32.50
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	94331	50.0000	51.556	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	727436			719.76- 779.76	771.15
10 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.296)	135	634091	50.0000	51.403	80.00- 120.00	100.00
1.563	1.563 (0.296)	137	204445			2.12- 62.12	32.24
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	629387	50.0000	48.509	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	207244			2.44- 62.44	32.93
1.577	1.577 (0.298)	58	21931			0.00- 33.26	3.48
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	408963	50.0000	59.103	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	132499			2.41- 62.41	32.40
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	85670	50.0000	52.427	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	652469			727.41- 787.41	761.60
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	387463	50.0000	52.328	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	116032			1.28- 61.28	29.95
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	313233	50.0000	46.159	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	304174			69.23- 129.23	97.11
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	293237	50.0000	50.074	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	274864			62.78- 122.78	93.73
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	169108	50.0000	48.653	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	50039			1.44- 61.44	29.59
2.206	2.206 (0.417)	49	57560			4.12- 64.12	34.04
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	412969	50.0000	46.462	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	295006			38.82- 98.82	71.44
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	308689	50.0000	48.482	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	295127			63.14- 123.14	95.61
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	927720	50.0000	52.668	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	601548			35.12- 95.12	64.84
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	737811	50.0000	52.397	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	224965			0.74- 60.74	30.49
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	668749	50.0000	47.225	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	109674			0.00- 45.97	16.40
2.500	2.500 (0.473)	72	55876			0.00- 38.10	8.36
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	144920	50.0000	45.645	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	254129			147.68- 207.68	175.36
2.780	2.780 (0.526)	45	336274			206.40- 266.40	232.04

				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	59181	50.0000	41.531	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	335667			523.01- 583.01	567.18
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	111458	50.0000	47.134	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	161637			110.33- 170.33	145.02
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	597400	50.0000	49.612	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	383583			33.72- 93.72	64.21
3.032	3.032 (0.574)	101	725031			89.67- 149.67	121.36
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	330534	50.0000	45.573	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	206586			33.39- 93.39	62.50
3.074	3.074 (0.582)	61	655237			163.82- 223.82	198.24
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	192956	50.0000	48.151	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	645474			299.66- 359.66	334.52
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	906165	50.0000	50.216	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	831755	50.0000	53.304	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	385841			14.58- 74.58	46.39
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	674523	50.0000	46.804	80.00- 120.00	100.00
3.395	3.395 (0.643)	43	140813			0.00- 48.61	20.88
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	138248	50.0000	44.499	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	483332			338.06- 398.06	349.61
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	304244	50.0000	48.214	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	153674			21.81- 81.81	50.51
3.633	3.633 (0.688)	38	35542			0.00- 41.86	11.68
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	462560	50.0000	48.231	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	278242			30.77- 90.77	60.15
3.717	3.717 (0.703)	51	142007			1.39- 61.39	30.70

				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	798528	50.0000	44.144	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	190448			0.00- 51.05	23.85
3.857	3.857 (0.730)	57	85814			0.00- 41.68	10.75
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	873227	50.0000	44.725	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	262612			0.00- 58.86	30.07
3.941	3.941 (0.746)	41	254934			0.00- 57.27	29.19
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	211590	50.0000	43.351	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	569856			244.59- 304.59	269.32
3.969	3.969 (0.751)	96	332803			129.84- 189.84	157.29
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	238041	50.0000	40.637	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	273286			88.50- 148.50	114.81
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	591878	50.0000	44.723	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	364332			32.99- 92.99	61.56
4.179	4.179 (0.791)	86	73183			0.00- 42.56	12.36
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	657093	50.0000	48.279	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	196947			0.76- 60.76	29.97
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1278897	50.0000	45.790	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	280799			0.00- 51.37	21.96
4.445	4.445 (0.841)	59	149703			0.00- 41.09	11.71
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	76999	50.0000	46.017	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1100470			1391.63-1451.63	1429.19
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1207137	50.0000	44.769	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	401818			3.22- 63.22	33.29
4.809	4.809 (0.910)	41	241786			0.00- 48.12	20.03
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	604837	50.0000	47.703	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	197596			2.00- 62.00	32.67
5.005	5.005 (0.947)	97	140567			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	222984	50.0000	46.086	80.00- 120.00	100.00
5.046	5.046 (0.955)	96	343187			127.22- 187.22	153.91
5.046	5.046 (0.955)	61	723962			283.85- 343.85	324.67
86 2-Butanone					CAS #: 78-93-3		
5.074	5.074 (0.960)	72	161700	50.0000	47.847	80.00- 120.00	100.00
5.074	5.074 (0.960)	43	1729666			1055.75-1115.75	1069.67
5.074	5.074 (0.960)	57	67340			10.59- 70.59	41.64
87 Ethyl Acetate					CAS #: 141-78-6		
5.088	5.088 (0.963)	45	134561	50.0000	48.298	80.00- 120.00	100.00
5.046	5.046 (0.955)	61	723962			450.31- 510.31	538.02
5.088	5.088 (0.963)	70	80201			30.42- 90.42	59.60
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	415892	50.0000	43.641	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	138664			2.92- 62.92	33.34
5.270	5.270 (0.997)	72	143107			3.54- 63.54	34.41
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	700237	50.0000	46.733	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	455445			34.71- 94.71	65.04
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	405831	50.0000	42.850	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	610004			120.40- 180.40	150.31
5.438	5.438 (1.029)	41	340033			54.20- 114.20	83.79
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	753632	50.0000	44.747	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	476946			33.76- 93.76	63.29
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	761651	50.0000	49.101	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	785502			73.68- 133.68	103.13
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	177408	50.0000	49.642	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	462822			231.09- 291.09	260.88
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1768312	50.0000	42.727	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	578102			1.12- 61.12	32.69
5.774	5.774 (1.093)	41	488487			0.00- 57.49	27.62

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 (0.937)	78	881998	50.0000	49.218	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	213588			0.00- 53.80	24.22
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	222888	50.0000	46.647	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	876961			365.20- 425.20	393.45
5.858	5.858 (0.948)	55	303311			91.31- 151.31	136.08
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	519966	50.0000	50.398	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	163436			1.20- 61.20	31.43
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	304904	50.0000	43.198	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	614601			179.02- 239.02	201.57
5.942	5.942 (0.962)	57	373088			84.85- 144.85	122.36
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	269453	50.0000	46.911	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	180146			40.21- 100.21	66.86
6.348	6.348 (1.027)	43	142726			25.00- 85.00	52.97
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	429619	50.0000	47.788	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	457013			74.96- 134.96	106.38
6.362	6.362 (1.029)	97	273648			34.80- 94.80	63.70
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	153945	50.0000	37.061	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	135945			52.03- 112.03	88.31
6.586	6.586 (1.066)	41	154131			79.97- 139.97	100.12
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	313820	50.0000	47.701	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	481505			134.02- 194.02	153.43
6.664	6.664 (0.774)	100	122752			9.54- 69.54	39.12
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.084)	88	213388	50.0000	47.007	80.00- 120.00	100.00
6.700	6.700 (1.084)	58	176834			55.80- 115.80	82.87
6.700	6.700 (1.084)	57	65421			8.68- 68.68	30.66
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	396878	50.0000	54.168	80.00- 120.00	100.00
6.714	6.714 (0.780)	93	385416			67.27- 127.27	97.11

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	318875			50.92- 110.92	80.35
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	687162	50.0000	45.626	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	444173			34.31- 94.31	64.64
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	505501	50.0000	45.158	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	160396			1.42- 61.42	31.73
7.208	7.208 (1.166)	39	340190			38.56- 98.56	67.30
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	522573	50.0000	43.469	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	242516			15.60- 75.60	46.41
6.460	6.460 (1.045)	55	555370			78.53- 138.53	106.28
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	311803	50.0000	40.965	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	798684			231.30- 291.30	256.15
7.316	7.316 (1.184)	85	118302			8.94- 68.94	37.94
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1116802	50.0000	46.446	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	638244			28.30- 88.30	57.15
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	345691	50.0000	43.212	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	338333			67.11- 127.11	97.87
7.444	7.444 (1.205)	43	782458			214.21- 274.21	226.35
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	484199	50.0000	48.092	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	153043			2.15- 62.15	31.61
7.688	7.688 (0.893)	39	312182			36.09- 96.09	64.47
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	377713	50.0000	48.781	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	236082			31.62- 91.62	62.50
7.846	7.846 (0.911)	83	330363			56.35- 116.35	87.46
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.915)	166	556140	50.0000	51.930	80.00- 120.00	100.00
7.881	7.881 (0.915)	129	429650			48.71- 108.71	77.26
7.874	7.874 (0.914)	131	412771			46.55- 106.55	74.22

				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	424130	50.0000	47.687	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	775872			157.91- 217.91	182.93
8.003	8.003 (0.929)	100	77149			0.00- 47.86	18.19
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	512805	50.0000	44.700	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	544359			82.96- 142.96	106.15
7.989	7.989 (1.293)	78	167277			2.55- 62.55	32.62
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.947)	129	774405	50.0000	52.718	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	603279			47.77- 107.77	77.90
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.261	8.261 (0.959)	107	607847	50.0000	50.550	80.00- 120.00	100.00
8.261	8.261 (0.959)	109	571076			64.60- 124.60	93.95
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	679997	50.0000	46.786	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	209990			0.95- 60.95	30.88
7.122	7.122 (1.152)	144	74752			0.00- 40.45	10.99
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	913652	50.0000	48.902	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	294174			2.13- 62.13	32.20
8.641	8.641 (1.003)	77	491665			26.35- 86.35	53.81
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	459018	50.0000	49.132	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	1439882			282.48- 342.48	313.69
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	825944	50.0000	45.612	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	758137			59.52- 119.52	91.79
8.705	8.705 (1.011)	85	260803			0.00- 59.76	31.58
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	585551	50.0000	50.380	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	1162462			171.36- 231.36	198.52
164 o-Xylene					CAS #: 95-47-6		
9.121	9.121 (1.059)	106	545303	50.0000	49.420	80.00- 120.00	100.00
9.121	9.121 (1.059)	91	1155970			179.99- 239.99	211.99
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.062)	104	975960	50.0000	51.053	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)							
9.142	9.142 (1.062)	78	460193			19.09- 79.09	47.15
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	761363	50.0000	54.660	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	392743			21.45- 81.45	51.58
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.093)	105	1768268	50.0000	50.688	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	479459			0.00- 56.99	27.11
9.407	9.407 (1.092)	51	204153			0.00- 41.77	11.55
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	532657	50.0000	48.519	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	206505			9.22- 69.22	38.77
9.579	9.579 (1.112)	42	372034			42.60- 102.60	69.84
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	921272	50.0000	53.265	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	593860			34.35- 94.35	64.46
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.730 (1.130)	156	604980	50.0000	55.786	80.00- 120.00	100.00
9.737	9.737 (1.131)	158	590566			67.29- 127.29	97.62
9.730	9.730 (1.130)	77	930896			132.41- 192.41	153.87
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	2219191	50.0000	54.519	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	525592			0.00- 53.77	23.68
9.758	9.758 (1.133)	105	85289			0.00- 33.81	3.84
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	284906	50.0000	54.683	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	857877			285.00- 345.00	301.11
9.787	9.787 (1.136)	61	237150			54.06- 114.06	83.24
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	211869	50.0000	51.390	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	102773			21.19- 81.19	48.51
9.787	9.787 (1.136)	75	857877			372.45- 432.45	404.91
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	1061558	50.0000	50.437	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	360588			4.13- 64.13	33.97
9.808	9.808 (1.139)	142	51084			0.00- 34.73	4.81

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 (1.144)	120	567762	50.0000	53.812	80.00- 120.00	100.00
9.851	9.851 (1.144)	105	1841978			296.79- 356.79	324.43
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	472225	50.0000	55.083	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	1661050			336.29- 396.29	351.75
9.873	9.873 (1.146)	65	238533			38.83- 98.83	50.51
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.150)	120	786677	50.0000	53.084	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	1594417			176.40- 236.40	202.68
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	754867	50.0000	49.736	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	425217			26.64- 86.64	56.33
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.181)	119	1399786	50.0000	51.337	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	352018			0.00- 54.82	25.15
10.174	10.174 (1.181)	91	906931			36.92- 96.92	64.79
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	1483125	50.0000	50.754	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	698580			16.58- 76.58	47.10
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.203)	134	451515	50.0000	51.267	80.00- 120.00	100.00
10.353	10.353 (1.202)	105	2163387			451.53- 511.53	479.14
10.353	10.353 (1.202)	91	338394			46.48- 106.48	74.95
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	1843828	50.0000	49.992	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	492389			0.00- 56.79	26.70
10.467	10.467 (1.215)	91	426652			0.00- 54.04	23.14
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.221)	146	1038447	50.0000	52.306	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	656123			33.53- 93.53	63.18
10.517	10.517 (1.221)	111	409606			11.05- 71.05	39.44
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	1044420	50.0000	51.073	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	656127			33.47- 93.47	62.82
10.596	10.596 (1.230)	111	390504			9.65- 69.65	37.39

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	1300080	50.0000	46.239	80.00- 120.00	100.00
10.711	10.711 (1.244)	126	291725			0.00- 52.04	22.44
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	1077012	50.0000	43.424	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	915697			55.86- 115.86	85.02
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	484536	50.0000	50.668	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	1741696			331.99- 391.99	359.46
10.818	10.818 (1.256)	92	901366			161.01- 221.01	186.03
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	980296	50.0000	51.097	80.00- 120.00	100.00
10.926	10.926 (1.269)	148	620331			33.23- 93.23	63.28
10.919	10.919 (1.268)	111	396843			12.36- 72.36	40.48
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	557249	50.0000	50.094	80.00- 120.00	100.00
11.599	11.599 (1.347)	75	457438			58.96- 118.96	82.09
11.606	11.606 (1.348)	155	428351			47.82- 107.82	76.87
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	829398	61.8000	39.547	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	665605			50.85- 110.85	80.25
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	726264	62.9500	53.298	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	697634			65.40- 125.40	96.06
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	572552	64.3500	55.624	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	362494			33.70- 93.70	63.31
216 Naphthalene					CAS #: 91-20-3		
12.559	12.559 (1.458)	128	165849	6.35000	3.986	80.00- 120.00	100.00
12.559	12.559 (1.458)	127	21965			0.00- 43.10	13.24
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.810	12.810 (1.487)	180	629667	66.5500	50.497	80.00- 120.00	100.00
12.810	12.810 (1.487)	182	599674			65.67- 125.67	95.24
12.802	12.802 (1.487)	145	221171			6.02- 66.02	35.13

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37578	1.33305	0.010	3.10557	30.00000	Averaged
$ 134 Toluene-d8	1.02971	0.98590	0.010	4.25419	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.66126	0.71727	0.010	-8.47061	30.00000	Averaged
4 Freon 134a	0.59487	0.62186	0.010	-4.53813	30.00000	Averaged
5 Propylene	0.60387	0.57567	0.010	4.66933	30.00000	Averaged
7 1,1-Difluoroethane	0.39363	0.39695	0.010	-0.84252	30.00000	Averaged
8 Freon 12	1.74153	1.74619	0.010	-0.26744	30.00000	Averaged
9 Chlorodifluoromethane	0.19140	0.19736	0.010	-3.11100	30.00000	Averaged
10 Freon 114	1.29040	1.32663	0.010	-2.80694	30.00000	Averaged
12 Isobutane	1.35725	1.31678	0.010	2.98113	30.00000	Averaged
15 Chloromethane	0.72383	0.85562	0.010	-18.20663	30.00000	Averaged
18 Butane	0.17094	0.17924	0.010	-4.85348	30.00000	Averaged
19 Vinyl Chloride	0.77458	0.81064	0.010	-4.65588	30.00000	Averaged
20 1,3-Butadiene	0.70987	0.65534	0.010	7.68207	30.00000	Averaged
24 Bromomethane	0.61260	0.61350	0.010	-0.14794	30.00000	Averaged
30 Chloroethane	0.36360	0.35380	0.010	2.69410	30.00000	Averaged
31 Isopentane	0.92980	0.86400	0.010	7.07636	30.00000	Averaged
32 Vinyl Bromide	0.66605	0.64583	0.010	3.03523	30.00000	Averaged
33 Freon 11	1.84264	1.94095	0.010	-5.33520	30.00000	Averaged
34 Dichlorofluoromethane	1.47301	1.54363	0.010	-4.79430	30.00000	Averaged
35 Pentane	1.48134	1.39914	0.010	5.54945	30.00000	Averaged
38 Ethyl Ether	0.33213	0.30320	0.010	8.71070	30.00000	Averaged
39 Ethanol	0.14907	0.12382	0.010	16.93734	30.00000	Averaged
42 Acrolein	0.24737	0.23319	0.010	5.73210	30.00000	Averaged
43 Freon 113	1.25964	1.24986	0.010	0.77612	30.00000	Averaged
44 1,1-Dichloroethene	0.75871	0.69153	0.010	8.85400	30.00000	Averaged
47 Acetone	0.41920	0.40370	0.010	3.69752	30.00000	Averaged
48 Carbon Disulfide	1.88768	1.89585	0.010	-0.43310	30.00000	Averaged
49 Iodomethane	1.63230	1.74017	0.010	-6.60839	30.00000	Averaged
52 2-Propanol	1.50759	1.41122	0.010	6.39245	30.00000	Averaged
54 3-Chloropropene	0.32499	0.28924	0.010	11.00109	30.00000	Averaged
57 Acetonitrile	0.66010	0.63653	0.010	3.57082	30.00000	Averaged
59 Methylene Chloride	1.00325	0.96775	0.010	3.53792	30.00000	Averaged
62 tert-Butyl alcohol	1.89229	1.67066	0.010	11.71242	30.00000	Averaged
63 Methyl tert-butyl ether	2.04241	1.82694	0.010	10.54999	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.51058	0.44268	0.010	13.29796	30.00000	Averaged
66 Acrylonitrile	0.61277	0.49802	0.010	18.72571	30.00000	Averaged
67 Hexane	1.38442	1.23831	0.010	10.55372	30.00000	Averaged
71 1,1-Dichloroethane	1.42374	1.37475	0.010	3.44110	30.00000	Averaged
72 Isopropyl ether	2.92166	2.67567	0.010	8.41960	30.00000	Averaged
73 Vinyl Acetate	0.17504	0.16110	0.010	7.96673	30.00000	Averaged
79 Ethyl-tert-butyl ether	2.82061	2.52553	0.010	10.46149	30.00000	Averaged
84 2,2-Dichloropropane	1.32635	1.26542	0.010	4.59356	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.50614	0.46652	0.010	7.82695	30.00000	Averaged
86 2-Butanone	0.35353	0.33831	0.010	4.30589	30.00000	Averaged
87 Ethyl Acetate	0.29145	0.28153	0.010	3.40426	30.00000	Averaged
89 Tetrahydrofuran	0.99690	0.87012	0.010	12.71819	30.00000	Averaged
92 Chloroform	1.56743	1.46501	0.010	6.53424	30.00000	Averaged
94 Cyclohexane	0.99074	0.84907	0.010	14.29982	30.00000	Averaged
96 1,1,1-Trichloroethane	1.76184	1.57673	0.010	10.50670	30.00000	Averaged
97 Carbon Tetrachloride	1.62268	1.59350	0.010	1.79784	30.00000	Averaged
99 1,1-Dichloropropene	0.11377	0.11296	0.010	0.71612	30.00000	Averaged
101 2,2,4-Trimethylpentane	4.32938	3.69961	0.010	14.54644	30.00000	Averaged
102 Benzene	0.57049	0.56158	0.010	1.56337	30.00000	Averaged
105 tert-Amyl methyl ether	0.15212	0.14191	0.010	6.70559	30.00000	Averaged
106 1,2-Dichloroethane	0.32845	0.33107	0.010	-0.79695	30.00000	Averaged
107 Heptane	0.22471	0.19413	0.010	13.60480	30.00000	Averaged
110 n-Butanol	0.18286	0.17156	0.010	6.17726	30.00000	Averaged
111 Trichloroethene	0.28620	0.27354	0.010	4.42395	30.00000	Averaged
114 1,2-Dichloropropane	0.13224	0.09802	0.010	25.87856	30.00000	Averaged
116 Methyl Methacrylate	0.24060	0.22954	0.010	4.59770	30.00000	Averaged
117 1,4-Dioxane	0.14452	0.13587	0.010	5.98577	30.00000	Averaged
118 Dibromomethane	0.26795	0.29029	0.010	-8.33606	30.00000	Averaged
122 Bromodichloromethane	0.47947	0.43752	0.010	8.74855	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.35637	0.32186	0.010	9.68441	30.00000	Averaged
127 Methylcyclohexane	0.38272	0.33273	0.010	13.06221	30.00000	Averaged
131 4-Methyl-2-pentanone	0.24232	0.19853	0.010	18.07048	30.00000	Averaged
137 Toluene	0.76548	0.71108	0.010	7.10752	30.00000	Averaged
136 Octane	0.25468	0.22010	0.010	13.57674	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.36821	0.35416	0.010	3.81660	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.28317	0.27627	0.010	2.43865	30.00000	Averaged
142 Tetrachloroethene	0.39165	0.40678	0.010	-3.86105	30.00000	Averaged
143 2-Hexanone	0.32527	0.31022	0.010	4.62596	30.00000	Averaged
144 1,3-Dichloropropane	0.36522	0.32651	0.010	10.60026	30.00000	Averaged
146 Dibromochloromethane	0.53722	0.56642	0.010	-5.43611	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.43975	0.44460	0.010	-1.10085	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.46270	0.43296	0.010	6.42763	30.00000	Averaged
154 Chlorobenzene	0.68328	0.66827	0.010	2.19635	30.00000	Averaged
155 Ethyl Benzene	0.34167	0.33574	0.010	1.73489	30.00000	Averaged
156 Nonane	0.66223	0.60412	0.010	8.77579	30.00000	Averaged
158 m,p-Xylene	0.42506	0.42829	0.010	-0.75931	30.00000	Averaged
164 o-Xylene	0.40353	0.39885	0.010	1.15887	30.00000	Averaged
165 Styrene	0.69912	0.71384	0.010	-2.10563	30.00000	Averaged
167 Bromoform	0.50940	0.55688	0.010	-9.32104	30.00000	Averaged
168 Cumene	1.27581	1.29336	0.010	-1.37574	30.00000	Averaged
169 Cyclohexanone	0.40149	0.38960	0.010	2.96206	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.63254	0.67384	0.010	-6.52930	30.00000	Averaged
177 Bromobenzene	0.39660	0.44250	0.010	-11.57164	30.00000	Averaged
178 Propylbenzene	1.48863	1.62317	0.010	-9.03848	30.00000	Averaged
179 1,2,3-Trichloropropane	0.19054	0.20839	0.010	-9.36589	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.15077	0.15497	0.010	-2.78020	30.00000	Averaged
182 Decane	0.76973	0.77645	0.010	-0.87382	30.00000	Averaged
183 4-Ethyltoluene	0.38586	0.41528	0.010	-7.62316	30.00000	Averaged
184 2-Chlorotoluene	0.31353	0.34540	0.010	-10.16545	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.54196	0.57540	0.010	-6.16901	30.00000	Averaged
188 alpha Methyl Styrene	0.55506	0.55213	0.010	0.52770	30.00000	Averaged
189 tert-Butylbenzene	0.99718	1.02384	0.010	-2.67402	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.06868	1.08480	0.010	-1.50784	30.00000	Averaged
192 sec-Butylbenzene	0.32209	0.33025	0.010	-2.53484	30.00000	Averaged
194 p-Cymene	1.34882	1.34862	0.010	0.01488	30.00000	Averaged
195 1,3-Dichlorobenzene	0.72606	0.75955	0.010	-4.61229	30.00000	Averaged
196 1,4-Dichlorobenzene	0.74787	0.76392	0.010	-2.14568	30.00000	Averaged
199 alpha-Chlorotoluene	1.02827	0.95091	0.010	7.52272	30.00000	Averaged
201 Undecane	0.90704	0.78776	0.010	13.15089	30.00000	Averaged
202 Butylbenzene	0.34973	0.35440	0.010	-1.33616	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
204 1,2-Dichlorobenzene	0.70162	0.71701	0.010	-2.19455	30.00000	Averaged	
206 1,2-Dibromo-3-chloropropane	0.40682	0.40759	0.010	-0.18742	30.00000	Averaged	
207 Dodecane	0.76699	0.49081	0.010	36.00783	30.00000	Averaged	<-
213 1,2,4-Trichlorobenzene	0.49834	0.42193	0.010	15.33324	30.00000	Averaged	
215 Hexachlorobutadiene	0.37644	0.32539	0.010	13.56030	30.00000	Averaged	
216 Naphthalene	1.52174	0.95517	0.010	37.23167	30.00000	Averaged	<-
222 1,2,3-Trichlorobenzene	0.45602	0.34602	0.010	24.12104	30.00000	Averaged	

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072703.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 27-JUL-2021
Calibration Time: 13:07
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	270618	162371	378865	238986	-11.69
108 1,4-Difluorobenze	961738	577043	1346433	785289	-18.35
153 Chlorobenzene-d5	790057	474034	1106080	683596	-13.48

		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	8.61	-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/27JUL21.b/3072703.d

Page 1

Date : 27-JUL-2021 11:36

Client ID: CCV

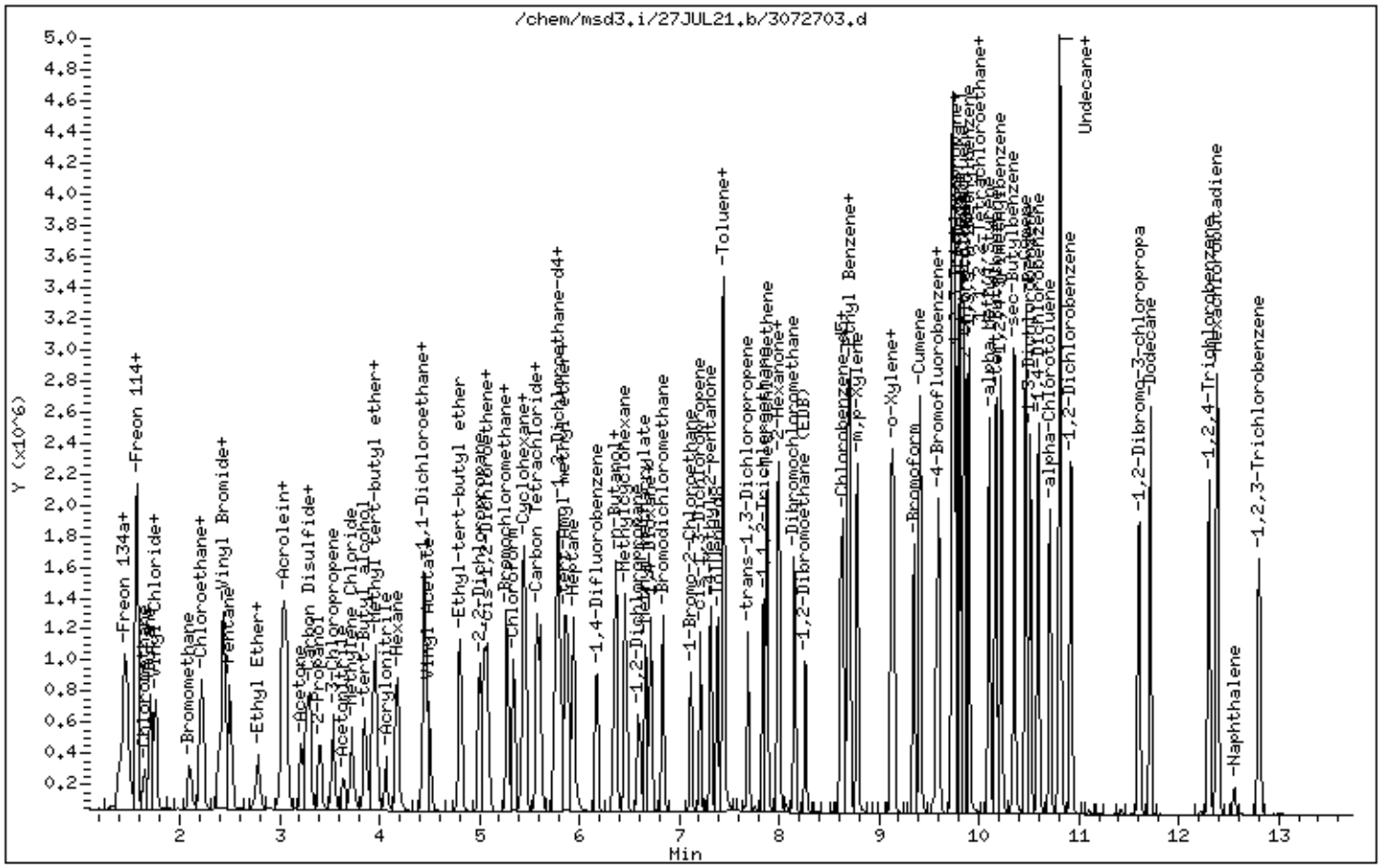
Instrument: msd3.i

Sample Info: 100mL 3018-2071A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: CCV

Lab ID#: 2107361-17B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072802**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 11:14 AM**

Compound	%Recovery
1,1,1,2-Tetrachloroethane	107
1,1,1-Trichloroethane	101
1,1,2,2-Tetrachloroethane	110
1,1,2-Trichloroethane	111
1,1-Dichloroethane	103
1,1-Dichloroethene	90
1,1-Difluoroethane	98
1,2,3-Trichloropropane	108
1,2,4-Trichlorobenzene	103
1,2,4-Trimethylbenzene	105
1,2-Dibromo-3-chloropropane	110
1,2-Dibromoethane (EDB)	114
1,2-Dichlorobenzene	109
1,2-Dichloroethane	116
1,2-Dichloropropane	108
1,3,5-Trimethylbenzene	109
1,3-Butadiene	112
1,3-Dichlorobenzene	110
1,4-Dichlorobenzene	110
1,4-Dioxane	105
2,2,4-Trimethylpentane	103
2-Butanone (Methyl Ethyl Ketone)	94
2-Hexanone	118
2-Propanol	106
3-Chloropropene	89
4-Ethyltoluene	106
4-Methyl-2-pentanone	108
Acetone	100
Acrolein	103
Acrylonitrile	108
alpha-Chlorotoluene	103
Benzene	105
Bromodichloromethane	114
Bromoform	113
Bromomethane	90
Carbon Disulfide	92
Carbon Tetrachloride	108
Chlorobenzene	110
Chloroethane	93
Chloroform	106
Chloromethane	109
cis-1,2-Dichloroethene	101

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Client Sample ID: CCV

Lab ID#: 2107361-17B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 11:14 AM**	

Compound	%Recovery
cis-1,3-Dichloropropene	108
Cumene	106
Cyclohexane	93
Dibromochloromethane	116
Dibromomethane	118
Ethanol	98
Ethyl Acetate	115
Ethyl Benzene	107
Ethyl-tert-butyl ether	97
Freon 11	105
Freon 12	107
Freon 113	97
Freon 114	103
Freon 134a	108
Heptane	102
Hexachlorobutadiene	106
Hexachloroethane	122
Hexane	101
Iodomethane	116
Isopropyl ether	109
m,p-Xylene	105
Methyl tert-butyl ether	90
Methylene Chloride	116
Naphthalene	93
o-Xylene	105
Propylbenzene	109
Propylene	104
Styrene	103
tert-Amyl methyl ether	98
tert-Butyl alcohol	95
Tetrachloroethene	113
Tetrahydrofuran	113
Toluene	105
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	94
trans-1,3-Dichloropropene	112
Trichloroethene	111
Vinyl Acetate	100
Vinyl Bromide	94
Vinyl Chloride	91

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107361-17B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 11:14 AM**	

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072802.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 28-JUL-2021 11:14
Operator : LD Inst ID: msdp.i
Smp Info : 50mL 3018-2125
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 29-Jul-2021 14:58 ums9 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	160349	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	121126			48.23- 108.23	75.54
5.778	5.778 (1.000)	49	320318			150.57- 210.57	199.76
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	582857	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	85543			0.00- 45.71	14.68
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	560035	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	295065			23.78- 83.78	52.69
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	221561	25.0000	25.037	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	125934			27.21- 87.21	56.84
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	635006	25.0000	25.089	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	62669			0.00- 40.44	9.87

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
$ 134 Toluene-d8 (continued)							
7.891	7.891 (1.185)	100	410198			34.95- 94.95	64.60
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	358227	25.0000	24.910	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	441709			95.92- 155.92	123.30
10.921	10.921 (1.154)	176	347421			66.89- 126.89	96.98
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	273970	50.0000	53.983	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	224766			59.44- 119.44	82.04
1.744	1.744 (0.302)	51	1307544			419.06- 479.06	477.26
5 Propylene					CAS #: 115-07-1		
1.675	1.675 (0.290)	41	382483	50.0000	52.126	80.00- 120.00	100.00
1.675	1.675 (0.290)	42	259265			35.28- 95.28	67.78
1.675	1.675 (0.290)	39	267175			38.35- 98.35	69.85
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.295)	65	177499	50.0000	48.836	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1307544			597.63- 657.63	736.65
1.703	1.703 (0.295)	47	137797			33.72- 93.72	77.63
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	770066	50.0000	53.545	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	250150			2.37- 62.37	32.48
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.758 (0.304)	67	79368	50.0000	55.869	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1307544			1501.01-1561.01	1647.44
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	730482	50.0000	51.744	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	236655			2.30- 62.30	32.40
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	842664	50.0000	51.872	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	277709			2.44- 62.44	32.96
1.870	1.870 (0.324)	58	24571			0.00- 33.36	2.92
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	453346	50.0000	54.336	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	111637			0.00- 56.26	24.63
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.352)	58	89510	50.0000	46.313	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	803553			823.29- 883.29	897.72
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	457227	50.0000	45.553	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	135479			0.00- 59.69	29.63
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	454325	50.0000	56.278	80.00- 120.00	100.00
2.096	2.096 (0.363)	39	402972			52.37- 112.37	88.70
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	289644	50.0000	44.878	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	272338			64.07- 124.07	94.03
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	167212	50.0000	46.328	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	49687			0.04- 60.04	29.71
2.612	2.612 (0.452)	49	66084			4.54- 64.54	39.52
31 Isopentane					CAS #: 78-78-4		
2.634	2.634 (0.456)	43	579110	50.0000	52.730	80.00- 120.00	100.00
2.634	2.634 (0.456)	57	344084			34.12- 94.12	59.42
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.493)	106	280079	50.0000	46.950	80.00- 120.00	100.00
2.848	2.848 (0.493)	108	278824			69.27- 129.27	99.55
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	805198	50.0000	52.686	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	526568			34.72- 94.72	65.40
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.503)	67	634285	50.0000	48.153	80.00- 120.00	100.00
2.906	2.906 (0.503)	69	195815			0.84- 60.84	30.87
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	949306	50.0000	53.178	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	124354			0.00- 44.98	13.10
2.970	2.970 (0.514)	72	55881			0.00- 37.39	5.89
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	135682	50.0000	45.052	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	282422			163.46- 223.46	208.15
3.285	3.285 (0.569)	45	457771			250.40- 310.40	337.39

				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	78262	50.0000	49.216	80.00- 120.00	100.00
3.285	3.285 (0.569)	45	457008			511.19- 571.19	583.95
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	142548	50.0000	51.661	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	192268			111.10- 171.10	134.88
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	550760	50.0000	48.505	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	352768			33.56- 93.56	64.05
3.550	3.550 (0.614)	101	671041			89.21- 149.21	121.84
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	304891	50.0000	44.948	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	196257			34.02- 94.02	64.37
3.579	3.579 (0.619)	61	653518			168.77- 228.77	214.34
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	211179	50.0000	50.236	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	759597			302.95- 362.95	359.69
48 Carbon Disulfide					CAS #: 75-15-0		
3.823	3.823 (0.662)	76	822589	50.0000	46.030	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	687654	50.0000	57.885	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	319027			12.22- 72.22	46.39
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	894326	50.0000	52.786	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	170630			0.00- 47.19	19.08
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.701)	76	133540	50.0000	44.730	80.00- 120.00	100.00
4.045	4.045 (0.700)	41	648300			396.19- 456.19	485.47
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	437233	50.0000	55.370	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	227922			20.95- 80.95	52.13
4.123	4.123 (0.714)	38	50192			0.00- 41.17	11.48
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	631436	50.0000	57.830	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	271898			22.03- 82.03	43.06
4.238	4.238 (0.733)	51	187240			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	936570	50.0000	47.403	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	224281			0.00- 51.11	23.95
4.338	4.338 (0.751)	57	99819			0.00- 40.49	10.66
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	889925	50.0000	45.192	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	319870			3.10- 63.10	35.94
4.446	4.446 (0.769)	41	331111			1.28- 61.28	37.21
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.776)	98	214144	50.0000	47.248	80.00- 120.00	100.00
4.474	4.474 (0.774)	61	637611			255.84- 315.84	297.75
4.482	4.482 (0.776)	96	341830			127.59- 187.59	159.63
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	342575	50.0000	54.297	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	401141			88.05- 148.05	117.10
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.813)	57	801053	50.0000	50.712	80.00- 120.00	100.00
4.696	4.696 (0.813)	43	577782			37.52- 97.52	72.13
4.696	4.696 (0.813)	86	84800			0.00- 41.48	10.59
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.962	4.962 (0.859)	63	697085	50.0000	51.333	80.00- 120.00	100.00
4.962	4.962 (0.859)	65	201779			0.00- 59.70	28.95
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.856)	45	2004787	50.0000	54.570	80.00- 120.00	100.00
4.947	4.947 (0.856)	87	303993			0.00- 48.18	15.16
4.947	4.947 (0.856)	59	185178			0.00- 40.15	9.24
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.865)	86	86855	50.0000	49.767	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	1727278			2432.48-2492.48	1988.69
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1538992	50.0000	48.394	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	452427			1.00- 61.00	29.40
5.305	5.305 (0.918)	41	327841			0.00- 48.73	21.30
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	606919	50.0000	50.330	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	193757			2.28- 62.28	31.92
5.513	5.513 (0.954)	97	144287			0.00- 53.93	23.77

				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	236675	50.0000	50.319	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	373766			125.75- 185.75	157.92
5.549	5.549 (0.960)	61	882918			332.40- 392.40	373.05
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	170139	50.0000	46.944	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2583521			1214.50-1274.50	1518.48
5.556	5.556 (0.962)	57	83116			14.68- 74.68	48.85
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	207806	50.0000	57.644	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	882918			452.04- 512.04	424.88
5.570	5.570 (0.964)	70	86701			22.77- 82.77	41.72
89 Tetrahydrofuran					CAS #: 109-99-9		
5.771	5.771 (0.999)	42	683564	50.0000	56.710	80.00- 120.00	100.00
5.778	5.778 (1.000)	71	148330			0.00- 55.82	21.70
5.771	5.771 (0.999)	72	156115			0.00- 57.59	22.84
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	738723	50.0000	52.949	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	482877			34.70- 94.70	65.37
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	471455	50.0000	46.741	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	884966			142.57- 202.57	187.71
5.957	5.957 (1.031)	41	501364			62.09- 122.09	106.34
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.971 (1.033)	97	794536	50.0000	50.411	80.00- 120.00	100.00
5.971	5.971 (1.033)	99	507507			34.02- 94.02	63.87
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	802530	50.0000	54.290	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	806770			70.64- 130.64	100.53
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	210276	50.0000	53.000	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	522382			226.85- 286.85	248.43
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.087)	57	2826260	50.0000	51.477	80.00- 120.00	100.00
6.280	6.280 (1.087)	56	939966			2.24- 62.24	33.26
6.280	6.280 (1.087)	41	755693			0.00- 54.39	26.74

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 (0.946)	78	1010793	50.0000	52.552	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	233920			0.00- 52.90	23.14
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	266529	50.0000	49.144	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1081930			372.79- 432.79	405.93
6.358	6.358 (0.955)	55	420716			112.09- 172.09	157.85
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	580060	50.0000	57.958	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	178890			0.79- 60.79	30.84
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	387350	50.0000	50.835	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1146636			226.53- 286.53	296.02
6.444	6.444 (0.968)	57	552183			100.85- 160.85	142.55
110 n-Butanol					CAS #: 71-36-3		
6.810	6.810 (1.023)	56	398272	50.0000	56.954	80.00- 120.00	100.00
6.810	6.810 (1.023)	41	308041			40.99- 100.99	77.34
6.810	6.810 (1.023)	43	246124			27.38- 87.38	61.80
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	517294	50.0000	55.425	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	559325			76.29- 136.29	108.13
6.867	6.867 (1.031)	97	331152			33.63- 93.63	64.02
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.066)	63	532818	50.0000	54.034	80.00- 120.00	100.00
7.096	7.096 (1.066)	62	378504			41.07- 101.07	71.04
7.096	7.096 (1.066)	41	296998			22.53- 82.53	55.74
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	413510	50.0000	53.737	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	969562			179.84- 239.84	234.47
7.139	7.139 (0.755)	100	155255			9.59- 69.59	37.55
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	275579	50.0000	52.587	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	288002			68.28- 128.28	104.51
7.175	7.175 (1.077)	57	97245			2.68- 62.68	35.29
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	488581	50.0000	58.791	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	449506			60.09- 120.09	92.00

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	389121			48.38- 108.38	79.64
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	827480	50.0000	57.182	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	531956			35.24- 95.24	64.29
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.156)	75	661313	50.0000	54.092	80.00- 120.00	100.00
7.698	7.698 (1.156)	77	209281			2.42- 62.42	31.65
7.691	7.691 (1.155)	39	474946			37.16- 97.16	71.82
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	687767	50.0000	50.924	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	324984			15.78- 75.78	47.25
6.974	6.974 (1.047)	55	847298			84.64- 144.64	123.20
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.171)	58	541058	50.0000	54.033	80.00- 120.00	100.00
7.798	7.798 (1.171)	43	1601286			242.35- 302.35	295.95
7.798	7.798 (1.171)	85	166669			3.24- 63.24	30.80
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.195)	91	1397598	50.0000	52.667	80.00- 120.00	100.00
7.956	7.956 (1.195)	92	809555			28.38- 88.38	57.92
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.194)	57	614407	50.0000	54.301	80.00- 120.00	100.00
7.949	7.949 (1.194)	85	473926			56.00- 116.00	77.14
7.949	7.949 (1.194)	43	1720271			228.66- 288.66	279.99
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	617183	50.0000	56.001	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	194970			1.24- 61.24	31.59
8.214	8.214 (0.868)	39	430670			34.11- 94.11	69.78
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	506532	50.0000	55.606	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	318623			31.96- 91.96	62.90
8.400	8.400 (0.888)	83	431738			52.93- 112.93	85.23
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	723327	50.0000	56.671	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	556143			47.84- 107.84	76.89
8.464	8.464 (0.895)	131	539662			45.29- 105.29	74.61

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	765194	50.0000	58.795	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1594148			162.87- 222.87	208.33
8.586	8.586 (0.908)	100	109877			0.00- 45.94	14.36
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	696094	50.0000	55.238	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	959570			94.99- 154.99	137.85
8.579	8.579 (1.288)	78	223236			2.05- 62.05	32.07
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	990660	50.0000	58.205	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	770407			47.45- 107.45	77.77
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	833900	50.0000	57.077	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	789135			64.21- 124.21	94.63
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	1012573	50.0000	55.966	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	292410			0.00- 59.64	28.88
7.612	7.612 (1.143)	144	95597			0.00- 39.63	9.44
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1225569	50.0000	55.111	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	386815			1.74- 61.74	31.56
9.496	9.496 (1.004)	77	640669			25.04- 85.04	52.28
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	620886	50.0000	53.394	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1858190			273.74- 333.74	299.28
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1763644	50.0000	58.948	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1366999			54.16- 114.16	77.51
9.603	9.603 (1.015)	85	358934			0.00- 53.90	20.35
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	765350	50.0000	52.552	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1463661			163.73- 223.73	191.24
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	731932	50.0000	52.454	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1473930			177.45- 237.45	201.38
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1228972	50.0000	51.500	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	569447			17.88- 77.88	46.34
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	951857	50.0000	56.737	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	489965			21.25- 81.25	51.47
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2322269	50.0000	52.979	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	663116			0.00- 58.52	28.55
10.649	10.649 (1.126)	51	344044			0.00- 43.00	14.81
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	928195	50.0000	59.211	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	272826			1.94- 61.94	29.39
10.871	10.871 (1.149)	42	638933			37.89- 97.89	68.84
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1175571	50.0000	54.947	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	757025			35.20- 95.20	64.40
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	747606	50.0000	56.078	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	727004			67.21- 127.21	97.24
11.179	11.179 (1.182)	77	411595			29.02- 89.02	55.06
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	707915	50.0000	54.467	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2722026			366.49- 426.49	384.51
11.150	11.150 (1.179)	105	103818			0.00- 44.85	14.67
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	367109	50.0000	53.837	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1032967			280.55- 340.55	281.38
11.107	11.107 (1.174)	61	171069			15.49- 75.49	46.60
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	187495	50.0000	41.943	80.00- 120.00	100.00
11.172	11.172 (1.181)	89	151563			49.11- 109.11	80.84
11.179	11.179 (1.182)	75	1032967			426.44- 486.44	550.93
182 Decane					CAS #: 124-18-5		
11.258	11.258 (1.190)	57	1722348	50.0000	50.515	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	451165			0.00- 57.66	26.19
11.258	11.258 (1.190)	142	65100			0.00- 34.09	3.78

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	751789	50.0000	53.189	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2303129			284.55- 344.55	306.35
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	606465	50.0000	54.801	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1998139			315.17- 375.17	329.47
11.301	11.301 (1.195)	65	301422			21.55- 81.55	49.70
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1057701	50.0000	54.352	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	2004679			164.93- 224.93	189.53
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	999922	50.0000	51.723	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	553830			25.30- 85.30	55.39
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	2037107	50.0000	55.968	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	493968			0.00- 54.25	24.25
11.738	11.738 (1.241)	91	1191222			31.27- 91.27	58.48
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1927439	50.0000	52.474	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	972427			19.05- 79.05	50.45
192 sec-Butylbenzene					CAS #: 135-98-8		
12.003	12.003 (1.269)	134	627516	50.0000	55.470	80.00- 120.00	100.00
12.003	12.003 (1.269)	105	2865524			437.55- 497.55	456.65
11.996	11.996 (1.268)	91	429844			40.76- 100.76	68.50
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2665355	50.0000	53.306	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	694613			0.00- 55.54	26.06
12.160	12.160 (1.285)	91	553323			0.00- 51.48	20.76
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1387264	50.0000	55.178	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	884375			33.21- 93.21	63.75
12.203	12.203 (1.290)	111	550748			11.31- 71.31	39.70
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1397810	50.0000	55.018	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	884636			33.90- 93.90	63.29
12.311	12.311 (1.301)	111	525878			9.45- 69.45	37.62

				AMOUNTS				
					CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========		=======	=======	==========	=====
199 alpha-Chlorotoluene						CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1797827	50.0000	51.531	80.00- 120.00		100.00
12.468	12.468 (1.318)	126	423251			0.00- 53.26		23.54
201 Undecane						CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2148983	50.0000	54.565	80.00- 120.00		100.00
12.640	12.640 (1.336)	43	2057878			58.12- 118.12		95.76
202 Butylbenzene						CAS #: 104-51-8		
12.626	12.626 (1.335)	134	668619	50.0000	52.650	80.00- 120.00		100.00
12.626	12.626 (1.335)	91	2314906			314.79- 374.79		346.22
12.626	12.626 (1.335)	92	1217808			154.29- 214.29		182.14
204 1,2-Dichlorobenzene						CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1342805	50.0000	54.470	80.00- 120.00		100.00
12.741	12.741 (1.347)	148	844388			33.84- 93.84		62.88
12.733	12.733 (1.346)	111	550096			12.73- 72.73		40.97
206 1,2-Dibromo-3-chloropropane						CAS #: 96-12-8		
13.600	13.600 (1.438)	157	822151	50.0000	55.063	80.00- 120.00		100.00
13.600	13.600 (1.438)	75	659363			52.48- 112.48		80.20
13.600	13.600 (1.438)	155	636345			47.41- 107.41		77.40
207 Dodecane						CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2004914	61.8000	64.226	80.00- 120.00		100.00
13.801	13.801 (1.459)	43	1784780			52.87- 112.87		89.02
213 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1179513	63.0000	64.759	80.00- 120.00		100.00
14.467	14.467 (1.529)	182	1134940			65.33- 125.33		96.22
215 Hexachlorobutadiene						CAS #: 87-68-3		
14.581	14.581 (1.541)	225	872254	64.4000	68.047	80.00- 120.00		100.00
14.581	14.581 (1.541)	223	556116			33.17- 93.17		63.76
216 Naphthalene						CAS #: 91-20-3		
14.768	14.768 (1.561)	128	274801	6.35000	5.903	80.00- 120.00		100.00
14.768	14.768 (1.561)	127	34241			0.00- 42.88		12.46
222 1,2,3-Trichlorobenzene						CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1088891	66.6000	67.627	80.00- 120.00		100.00
15.069	15.069 (1.593)	182	1033956			65.75- 125.75		94.95
15.069	15.069 (1.593)	145	364650			5.23- 65.23		33.49

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 28-JUL-2021 11:14
Lab File ID: p072802.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/28JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.38174	0.010	-0.14929	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.08947	0.010	-0.35676	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.63965	0.010	0.36145	30.00000	Averaged
4 Freon 134a	0.79126	0.85429	0.010	-7.96644	30.00000	Averaged
5 Propylene	1.14402	1.19266	0.010	-4.25160	30.00000	Averaged
7 1,1-Difluoroethane	0.56667	0.55348	0.010	2.32843	30.00000	Averaged
8 Freon 12	2.24223	2.40122	0.010	-7.09065	30.00000	Averaged
9 Chlorodifluoromethane	0.22149	0.24749	0.010	-11.73805	30.00000	Averaged
10 Freon 114	2.20100	2.27779	0.010	-3.48856	30.00000	Averaged
12 Isobutane	2.53275	2.62759	0.010	-3.74469	30.00000	Averaged
15 Chloromethane	1.30082	1.41362	0.010	-8.67162	30.00000	Averaged
18 Butane	0.30133	0.27911	0.010	7.37438	30.00000	Averaged
19 Vinyl Chloride	1.56492	1.42572	0.010	8.89459	30.00000	Averaged
20 1,3-Butadiene	1.25865	1.41668	0.010	-12.55539	30.00000	Averaged
24 Bromomethane	1.00624	0.90317	0.010	10.24324	30.00000	Averaged
30 Chloroethane	0.56273	0.52140	0.010	7.34444	30.00000	Averaged
31 Isopentane	1.71230	1.80578	0.010	-5.45962	30.00000	Averaged
32 Vinyl Bromide	0.93008	0.87334	0.010	6.10048	30.00000	Averaged
33 Freon 11	2.38274	2.51077	0.010	-5.37300	30.00000	Averaged
34 Dichlorofluoromethane	2.05367	1.97783	0.010	3.69309	30.00000	Averaged
35 Pentane	2.78321	2.96012	0.010	-6.35645	30.00000	Averaged
38 Ethyl Ether	0.46955	0.42308	0.010	9.89673	30.00000	Averaged
39 Ethanol	0.24792	0.24404	0.010	1.56786	30.00000	Averaged
42 Acrolein	0.43020	0.44449	0.010	-3.32212	30.00000	Averaged
43 Freon 113	1.77031	1.71738	0.010	2.98967	30.00000	Averaged
44 1,1-Dichloroethene	1.05757	0.95071	0.010	10.10392	30.00000	Averaged
47 Acetone	0.65540	0.65850	0.010	-0.47231	30.00000	Averaged
48 Carbon Disulfide	2.78620	2.56500	0.010	7.93937	30.00000	Averaged
49 Iodomethane	1.85215	2.14424	0.010	-15.77025	30.00000	Averaged
52 2-Propanol	2.64148	2.78869	0.010	-5.57303	30.00000	Averaged
54 3-Chloropropene	0.46546	0.41640	0.010	10.53972	30.00000	Averaged
57 Acetonitrile	1.23114	1.36338	0.010	-10.74118	30.00000	Averaged
59 Methylene Chloride	1.70236	1.96894	0.010	-15.65950	30.00000	Averaged
62 tert-Butyl alcohol	3.08038	2.92041	0.010	5.19305	30.00000	Averaged
63 Methyl tert-butyl ether	3.07018	2.77496	0.010	9.61570	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 28-JUL-2021 11:14
Lab File ID: p072802.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/28JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.70664	0.66774	0.010	5.50455	30.00000	Averaged
66 Acrylonitrile	0.98368	1.06822	0.010	-8.59341	30.00000	Averaged
67 Hexane	2.46279	2.49784	0.010	-1.42333	30.00000	Averaged
71 1,1-Dichloroethane	2.11721	2.17365	0.010	-2.66577	30.00000	Averaged
72 Isopropyl ether	5.72778	6.25132	0.010	-9.14038	30.00000	Averaged
73 Vinyl Acetate	0.27210	0.27083	0.010	0.46523	30.00000	Averaged
79 Ethyl-tert-butyl ether	4.95812	4.79888	0.010	3.21168	30.00000	Averaged
84 2,2-Dichloropropane	1.88008	1.89249	0.010	-0.66004	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.73332	0.73800	0.010	-0.63775	30.00000	Averaged
86 2-Butanone	0.56506	0.53053	0.010	6.11218	30.00000	Averaged
87 Ethyl Acetate	0.56205	0.64798	0.010	-15.28860	30.00000	Averaged
89 Tetrahydrofuran	1.87928	2.13149	0.010	-13.42039	30.00000	Averaged
92 Chloroform	2.17519	2.30348	0.010	-5.89788	30.00000	Averaged
94 Cyclohexane	1.57260	1.47009	0.010	6.51838	30.00000	Averaged
96 1,1,1-Trichloroethane	2.45732	2.47752	0.010	-0.82216	30.00000	Averaged
97 Carbon Tetrachloride	2.30469	2.50245	0.010	-8.58062	30.00000	Averaged
99 1,1-Dichloropropene	0.17017	0.18038	0.010	-6.00009	30.00000	Averaged
101 2,2,4-Trimethylpentane	8.56002	8.81284	0.010	-2.95347	30.00000	Averaged
102 Benzene	0.82499	0.86710	0.010	-5.10469	30.00000	Averaged
105 tert-Amyl methyl ether	0.23262	0.22864	0.010	1.71294	30.00000	Averaged
106 1,2-Dichloroethane	0.42928	0.49760	0.010	-15.91651	30.00000	Averaged
107 Heptane	0.32683	0.33229	0.010	-1.67054	30.00000	Averaged
110 n-Butanol	0.29994	0.34165	0.010	-13.90754	30.00000	Averaged
111 Trichloroethene	0.40032	0.44376	0.010	-10.85084	30.00000	Averaged
114 1,2-Dichloropropane	0.42295	0.45707	0.010	-8.06871	30.00000	Averaged
116 Methyl Methacrylate	0.34351	0.36918	0.010	-7.47482	30.00000	Averaged
117 1,4-Dioxane	0.22478	0.23640	0.010	-5.17333	30.00000	Averaged
118 Dibromomethane	0.37098	0.43621	0.010	-17.58131	30.00000	Averaged
122 Bromodichloromethane	0.62070	0.70985	0.010	-14.36312	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.52438	0.56730	0.010	-8.18466	30.00000	Averaged
127 Methylcyclohexane	0.57930	0.59000	0.010	-1.84715	30.00000	Averaged
131 4-Methyl-2-pentanone	0.42950	0.46414	0.010	-8.06522	30.00000	Averaged
137 Toluene	1.13821	1.19892	0.010	-5.33395	30.00000	Averaged
136 Octane	0.48532	0.52706	0.010	-8.60230	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.49197	0.55102	0.010	-12.00237	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 28-JUL-2021 11:14
Lab File ID: p072802.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/28JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.40664	0.45223	0.010	-11.21177	30.00000	Averaged
142 Tetrachloroethene	0.56977	0.64579	0.010	-13.34167	30.00000	Averaged
143 2-Hexanone	0.58097	0.68317	0.010	-17.59032	30.00000	Averaged
144 1,3-Dichloropropane	0.54052	0.59714	0.010	-10.47547	30.00000	Averaged
146 Dibromochloromethane	0.75978	0.88446	0.010	-16.41028	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.65220	0.74451	0.010	-14.15389	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.77603	0.86863	0.010	-11.93224	30.00000	Averaged
154 Chlorobenzene	0.99271	1.09419	0.010	-10.22271	30.00000	Averaged
155 Ethyl Benzene	0.51909	0.55433	0.010	-6.78849	30.00000	Averaged
156 Nonane	1.33556	1.57458	0.010	-17.89711	30.00000	Averaged
158 m,p-Xylene	0.65013	0.68331	0.010	-5.10304	30.00000	Averaged
164 o-Xylene	0.62290	0.65347	0.010	-4.90803	30.00000	Averaged
165 Styrene	1.06528	1.09723	0.010	-2.99945	30.00000	Averaged
167 Bromoform	0.74891	0.84982	0.010	-13.47433	30.00000	Averaged
168 Cumene	1.95673	2.07332	0.010	-5.95862	30.00000	Averaged
169 Cyclohexanone	0.69978	0.82869	0.010	-18.42182	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.95505	1.04955	0.010	-9.89492	30.00000	Averaged
177 Bromobenzene	0.59512	0.66746	0.010	-12.15622	30.00000	Averaged
178 Propylbenzene	0.58019	0.63203	0.010	-8.93408	30.00000	Averaged
179 1,2,3-Trichloropropane	0.30440	0.32776	0.010	-7.67358	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.19955	0.16740	0.010	16.11352	30.00000	Averaged
182 Decane	1.52203	1.53771	0.010	-1.03024	30.00000	Averaged
183 4-Ethyltoluene	0.63096	0.67120	0.010	-6.37726	30.00000	Averaged
184 2-Chlorotoluene	0.49401	0.54145	0.010	-9.60261	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.86871	0.94432	0.010	-8.70364	30.00000	Averaged
188 alpha Methyl Styrene	0.86300	0.89273	0.010	-3.44568	30.00000	Averaged
189 tert-Butylbenzene	1.62480	1.81873	0.010	-11.93559	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.63968	1.72082	0.010	-4.94842	30.00000	Averaged
192 sec-Butylbenzene	0.50500	0.56025	0.010	-10.94065	30.00000	Averaged
194 p-Cymene	2.23203	2.37963	0.010	-6.61285	30.00000	Averaged
195 1,3-Dichlorobenzene	1.12231	1.23855	0.010	-10.35710	30.00000	Averaged
196 1,4-Dichlorobenzene	1.13414	1.24797	0.010	-10.03614	30.00000	Averaged
199 alpha-Chlorotoluene	1.55742	1.60510	0.010	-3.06168	30.00000	Averaged
201 Undecane	1.75810	1.91861	0.010	-9.13026	30.00000	Averaged
202 Butylbenzene	0.56690	0.59694	0.010	-5.30061	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 28-JUL-2021 11:14
Lab File ID: p072802.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/28JUL21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
204 1,2-Dichlorobenzene	1.10047	1.19886	0.010	-8.94015	30.00000	Averaged
206 1,2-Dibromo-3-chloropropane	0.66653	0.73402	0.010	-10.12580	30.00000	Averaged
207 Dodecane	1.39351	1.44821	0.010	-3.92519	30.00000	Averaged
213 1,2,4-Trichlorobenzene	0.81307	0.83577	0.010	-2.79163	30.00000	Averaged
215 Hexachlorobutadiene	0.57222	0.60462	0.010	-5.66255	30.00000	Averaged
216 Naphthalene	2.07796	1.93183	0.010	7.03237	30.00000	Averaged
222 1,2,3-Trichlorobenzene	0.71877	0.72985	0.010	-1.54166	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072802.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 28-JUL-2021
Calibration Time: 12:39
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	169928	101957	237899	160349	-5.64
108 1,4-Difluorobenze	617884	370730	865038	582857	-5.67
153 Chlorobenzene-d5	599010	359406	838614	560035	-6.51

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.78	0.00
108 1,4-Difluorobenze	6.67	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.

Data File: /chem/msdp.i/28JUL21.b/p072802.d

Date : 28-JUL-2021 11:14

Client ID: CCV

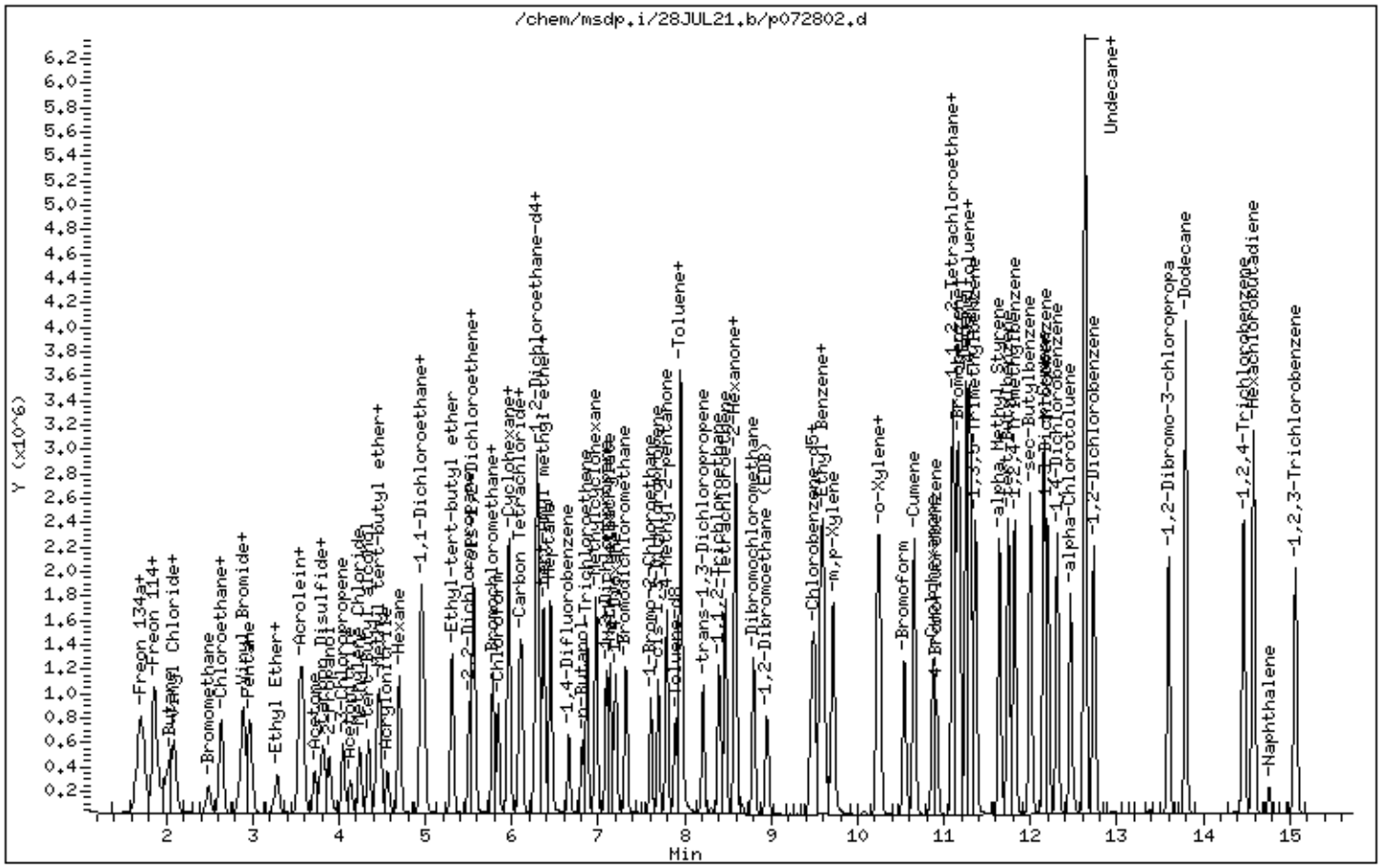
Instrument: msdp.i

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#: 2107361-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:13 PM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	90	70-130
1,1,2,2-Tetrachloroethane	99	70-130
1,1,2-Trichloroethane	97	70-130
1,1-Dichloroethane	92	70-130
1,1-Dichloroethene	93	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	101	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	100	70-130
1,2-Dichlorobenzene	107	70-130
1,2-Dichloroethane	101	70-130
1,2-Dichloropropane	84	70-130
1,3,5-Trimethylbenzene	100	70-130
1,3-Butadiene	92	70-130
1,3-Dichlorobenzene	107	70-130
1,4-Dichlorobenzene	104	70-130
1,4-Dioxane	90	70-130
2,2,4-Trimethylpentane	93	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
2-Hexanone	92	70-130
2-Propanol	98	70-130
3-Chloropropene	93	70-130
4-Ethyltoluene	100	70-130
4-Methyl-2-pentanone	78	70-130
Acetone	96	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	96	70-130
Benzene	103	70-130
Bromodichloromethane	88	70-130
Bromoform	104	70-130
Bromomethane	100	70-130
Carbon Disulfide	103	70-130
Carbon Tetrachloride	98	70-130
Chlorobenzene	97	70-130
Chloroethane	100	70-130
Chloroform	94	70-130
Chloromethane	113	70-130
cis-1,2-Dichloroethene	89	70-130

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Client Sample ID: LCS

Lab ID#: 2107361-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:13 PM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	86	70-130
Cumene	95	70-130
Cyclohexane	86	70-130
Dibromochloromethane	104	70-130
Dibromomethane	Not Spiked	
Ethanol	71	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	98	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	106	70-130
Freon 12	100	70-130
Freon 113	101	70-130
Freon 114	105	70-130
Freon 134a	Not Spiked	
Heptane	88	70-130
Hexachlorobutadiene	105	70-130
Hexachloroethane	Not Spiked	
Hexane	91	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	98	70-130
Methyl tert-butyl ether	91	70-130
Methylene Chloride	96	70-130
Naphthalene	78	60-140
o-Xylene	95	70-130
Propylbenzene	102	70-130
Propylene	Not Spiked	
Styrene	95	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	102	70-130
Tetrahydrofuran	88	70-130
Toluene	89	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	88	70-130
trans-1,3-Dichloropropene	95	70-130
Trichloroethene	92	70-130
Vinyl Acetate	Not Spiked	
Vinyl Bromide	Not Spiked	
Vinyl Chloride	104	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2107361-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:13 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072704.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 27-JUL-2021 12:13
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 14:03 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	250619	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	195621				48.46- 108.46	78.06
5.270	5.270 (1.000)	49	359605				120.39- 180.39	143.49
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	851577	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	126178				0.00- 45.52	14.82
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	720138	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	379169				25.46- 85.46	52.65
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	345267	25.0342	25.034		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	181038				21.66- 81.66	52.43
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	809153	23.0692	23.069		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	87521				0.00- 41.47	10.82

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	528003			36.47- 96.47	65.25
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	479657	25.1815	25.182	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	546665			93.06- 153.06	113.97
9.601	9.601 (1.114)	176	445781			62.87- 122.87	92.94
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	333763	55.9687	55.969	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	271190			51.82- 111.82	81.25
1.493	1.479 (0.282)	51	761789			194.91- 254.91	228.24
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	284461	46.9903	46.990	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	195283			35.61- 95.61	68.65
1.423	1.423 (0.269)	39	217182			42.66- 102.66	76.35
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	202290	51.2635	51.264	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	761789			321.86- 381.86	376.58
1.451	1.451 (0.275)	47	151587			45.34- 105.34	74.94
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	877175	50.2435	50.243	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	283337			2.63- 62.63	32.30
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	94454	49.2267	49.227	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	761789			719.76- 779.76	806.51
10 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.296)	135	679372	52.5178	52.518	80.00- 120.00	100.00
1.563	1.563 (0.296)	137	217509			2.12- 62.12	32.02
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	669710	49.2213	49.221	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	219671			2.44- 62.44	32.80
1.577	1.577 (0.298)	58	24026			0.00- 33.26	3.59
15 Chloromethane					CAS #: 74-87-3		
1.647	1.646 (0.312)	50	411656	56.7311	56.731	80.00- 120.00	100.00
1.647	1.646 (0.312)	52	133938			2.41- 62.41	32.54
18 Butane					CAS #: 106-97-8		
1.703	1.702 (0.322)	58	87919	51.3051	51.305	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)							
1.703	1.702 (0.322)	43	655806			727.41- 787.41	745.92
19 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.744 (0.330)	62	402342	51.8152	51.815	80.00- 120.00	100.00
1.745	1.744 (0.330)	64	121604			1.28- 61.28	30.22
20 1,3-Butadiene					CAS #: 106-99-0		
1.759	1.758 (0.333)	54	327848	46.0700	46.070	80.00- 120.00	100.00
1.759	1.758 (0.333)	39	319383			69.23- 129.23	97.42
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	308116	50.1726	50.172	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	287377			62.78- 122.78	93.27
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	182631	50.1045	50.104	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	55616			1.44- 61.44	30.45
2.206	2.206 (0.417)	49	59314			4.12- 64.12	32.48
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	444476	47.6854	47.685	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	313955			38.82- 98.82	70.63
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	323129	48.3948	48.395	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	296620			63.14- 123.14	91.80
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	981862	53.1539	53.154	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	637774			35.12- 95.12	64.96
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	770674	52.1905	52.190	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	234886			0.74- 60.74	30.48
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	679095	45.7298	45.730	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	109100			0.00- 45.97	16.07
2.500	2.500 (0.473)	72	57191			0.00- 38.10	8.42
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	158257	47.5315	47.532	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	282183			147.68- 207.68	178.31
2.780	2.780 (0.526)	45	359126			206.40- 266.40	226.93

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	61594	41.2183	41.218	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	358264			523.01- 583.01	581.65
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	127869	51.5638	51.564	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	179602			110.33- 170.33	140.46
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	636654	50.4177	50.418	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	404040			33.72- 93.72	63.46
3.032	3.032 (0.574)	101	761755			89.67- 149.67	119.65
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	355249	46.7070	46.707	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	225794			33.39- 93.39	63.56
3.074	3.074 (0.582)	61	699044			163.82- 223.82	196.78
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	201139	47.8634	47.863	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	666128			299.66- 359.66	331.18
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	971801	51.3541	51.354	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	900572	55.0355	55.035	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	416889			14.58- 74.58	46.29
52 2-Propanol					CAS #: 67-63-0		
3.410	3.409 (0.645)	45	741924	49.0911	49.091	80.00- 120.00	100.00
3.396	3.395 (0.643)	43	152240			0.00- 48.61	20.52
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	152036	46.6658	46.666	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	516943			338.06- 398.06	340.01
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	316568	47.8390	47.839	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	160241			21.81- 81.81	50.62
3.633	3.633 (0.688)	38	36853			0.00- 41.86	11.64
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	482345	47.9595	47.959	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	293223			30.77- 90.77	60.79
3.717	3.717 (0.703)	51	146890			1.39- 61.39	30.45

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	856451	45.1482	45.148	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	194429			0.00- 51.05	22.70
3.857	3.857 (0.730)	57	92509			0.00- 41.68	10.80
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	932312	45.5347	45.535	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	277959			0.00- 58.86	29.81
3.941	3.941 (0.746)	41	266499			0.00- 57.27	28.58
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	224553	43.8712	43.871	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	601545			244.59- 304.59	267.89
3.969	3.969 (0.751)	96	353711			129.84- 189.84	157.52
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	249191	40.5659	40.566	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	297250			88.50- 148.50	119.29
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	634798	45.7397	45.740	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	389866			32.99- 92.99	61.42
4.179	4.179 (0.791)	86	75828			0.00- 42.56	11.95
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	655962	45.9592	45.959	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	200640			0.76- 60.76	30.59
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1277983	43.6335	43.634	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	285465			0.00- 51.37	22.34
4.445	4.445 (0.841)	59	146667			0.00- 41.09	11.48
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	81653	46.5331	46.533	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1137687			1391.63-1451.63	1393.30
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1228192	43.4358	43.436	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	408232			3.22- 63.22	33.24
4.809	4.809 (0.910)	41	238920			0.00- 48.12	19.45
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	615125	46.2627	46.263	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	194943			2.00- 62.00	31.69
5.005	5.005 (0.947)	97	142011			0.00- 53.36	23.09

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	225832	44.5086	44.508	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	349618			127.22- 187.22	154.81
5.047	5.046 (0.955)	61	691469			283.85- 343.85	306.19
86 2-Butanone					CAS #: 78-93-3		
5.075	5.074 (0.960)	72	165849	46.7968	46.797	80.00- 120.00	100.00
5.075	5.074 (0.960)	43	1714508			1055.75-1115.75	1033.77
5.075	5.074 (0.960)	57	67073			10.59- 70.59	40.44
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.088 (0.963)	45	136666	46.7764	46.776	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	691469			450.31- 510.31	505.95
5.089	5.088 (0.963)	70	80925			30.42- 90.42	59.21
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	442649	44.2926	44.292	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	145630			2.92- 62.92	32.90
5.270	5.270 (0.997)	72	152957			3.54- 63.54	34.55
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	737613	46.9423	46.942	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	476370			34.71- 94.71	64.58
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	424816	42.7727	42.773	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	629667			120.40- 180.40	148.22
5.438	5.438 (1.029)	41	349279			54.20- 114.20	82.22
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	791199	44.7966	44.797	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	508314			33.76- 93.76	64.25
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	796723	48.9779	48.978	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	834228			73.68- 133.68	104.71
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	195976	50.5689	50.569	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	508703			231.09- 291.09	259.57
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2021866	46.5856	46.586	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	662324			1.12- 61.12	32.76
5.774	5.774 (1.093)	41	541320			0.00- 57.49	26.77

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	1000888	51.5051	51.505	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	239377			0.00- 53.80	23.92
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	246912	47.6525	47.652	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	977723			365.20- 425.20	395.98
5.858	5.858 (0.948)	55	326363			91.31- 151.31	132.18
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	566127	50.6013	50.601	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	174233			1.20- 61.20	30.78
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	338476	44.2211	44.221	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	687022			179.02- 239.02	202.98
5.942	5.942 (0.962)	57	410936			84.85- 144.85	121.41
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	279722	44.9084	44.908	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	194040			40.21- 100.21	69.37
6.348	6.348 (1.027)	43	151463			25.00- 85.00	54.15
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	450162	46.1753	46.175	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	485023			74.96- 134.96	107.74
6.362	6.362 (1.029)	97	295455			34.80- 94.80	65.63
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	190051	42.1915	42.192	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	119178			52.03- 112.03	62.71
6.586	6.586 (1.066)	41	164632			79.97- 139.97	86.63
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	325857	47.0175	47.017	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	507113			134.02- 194.02	155.62
6.664	6.664 (0.773)	100	128238			9.54- 69.54	39.35
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.084)	88	222565	45.2122	45.212	80.00- 120.00	100.00
6.700	6.700 (1.084)	58	181412			55.80- 115.80	81.51
6.700	6.700 (1.084)	57	69378			8.68- 68.68	31.17
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	411033	53.2533	53.253	80.00- 120.00	100.00
6.714	6.714 (0.779)	93	405609			67.27- 127.27	98.68

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	334803			50.92- 110.92	81.45
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	720792	44.1333	44.133	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	459566			34.31- 94.31	63.76
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	525230	43.2679	43.268	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	167532			1.42- 61.42	31.90
7.208	7.208 (1.166)	39	360572			38.56- 98.56	68.65
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	555319	42.5971	42.597	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	255085			15.60- 75.60	45.93
6.460	6.460 (1.045)	55	603738			78.53- 138.53	108.72
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	321989	39.0101	39.010	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	834614			231.30- 291.30	259.21
7.316	7.316 (1.184)	85	125337			8.94- 68.94	38.93
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1161791	44.5562	44.556	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	668781			28.30- 88.30	57.56
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.205)	57	346723	39.9670	39.967	80.00- 120.00	100.00
7.445	7.444 (1.205)	85	348914			67.11- 127.11	100.63
7.445	7.444 (1.205)	43	807438			214.21- 274.21	232.88
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	505722	47.6806	47.681	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	162540			2.15- 62.15	32.14
7.688	7.688 (0.892)	39	327248			36.09- 96.09	64.71
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	394652	48.3821	48.382	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	242609			31.62- 91.62	61.47
7.846	7.846 (0.910)	83	339110			56.35- 116.35	85.93
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.914)	166	575229	50.9874	50.987	80.00- 120.00	100.00
7.882	7.881 (0.914)	129	449621			48.71- 108.71	78.16
7.882	7.874 (0.914)	131	429966			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	431319	46.0345	46.034	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	793827			157.91- 217.91	184.05
8.003	8.003 (0.929)	100	79836			0.00- 47.86	18.51
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	519760	41.7794	41.779	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	544787			82.96- 142.96	104.82
7.989	7.989 (1.293)	78	168402			2.55- 62.55	32.40
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.946)	129	804899	52.0136	52.014	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	627520			47.77- 107.77	77.96
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.261 (0.959)	107	633264	49.9918	49.992	80.00- 120.00	100.00
8.268	8.261 (0.959)	109	595945			64.60- 124.60	94.11
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	699623	44.3895	44.389	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	209271			0.95- 60.95	29.91
7.122	7.122 (1.152)	144	77308			0.00- 40.45	11.05
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	953549	48.4474	48.447	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	307504			2.13- 62.13	32.25
8.641	8.641 (1.002)	77	517993			26.35- 86.35	54.32
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	483736	49.1509	49.151	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1495211			282.48- 342.48	309.10
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	825960	43.2984	43.298	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	764338			59.52- 119.52	92.54
8.705	8.705 (1.010)	85	265463			0.00- 59.76	32.14
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	485415	44.8125	44.812	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	324937			38.22- 98.22	66.94
8.712	8.712 (1.011)	95	181367			7.54- 67.54	37.36
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	598342	48.8679	48.868	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1189548			171.36- 231.36	198.81

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 (1.058)	106	552716	47.5506	47.551	80.00- 120.00	100.00
9.121	9.121 (1.058)	91	1152650			179.99- 239.99	208.54
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	957151	47.5282	47.528	80.00- 120.00	100.00
9.142	9.142 (1.061)	78	451784			19.09- 79.09	47.20
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	765859	52.1932	52.193	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	396505			21.45- 81.45	51.77
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	1746256	47.5168	47.517	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	472939			0.00- 56.99	27.08
9.407	9.407 (1.091)	51	197131			0.00- 41.77	11.29
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	486376	42.0551	42.055	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	193828			9.22- 69.22	39.85
9.579	9.579 (1.111)	42	340309			42.60- 102.60	69.97
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	905399	49.6906	49.691	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	589355			34.35- 94.35	65.09
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.730 (1.129)	156	600045	52.5231	52.523	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	584368			67.29- 127.29	97.39
9.730	9.730 (1.129)	77	921497			132.41- 192.41	153.57
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2176651	50.7607	50.761	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	519859			0.00- 53.77	23.88
9.758	9.758 (1.132)	105	81006			0.00- 33.81	3.72
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	279553	50.9329	50.933	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	935004			285.00- 345.00	334.46
9.787	9.787 (1.135)	61	238650			54.06- 114.06	85.37
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	291463	67.1088	67.109	80.00- 120.00	100.00(R)
9.787	9.787 (1.135)	89	149224			21.19- 81.19	51.20
9.787	9.787 (1.135)	75	935004			372.45- 432.45	320.80

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	1015228	45.7880	45.788	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	350411			4.13- 64.13	34.52
9.808	9.808 (1.138)	142	50583			0.00- 34.73	4.98
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	559056	50.2977	50.298	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1814024			296.79- 356.79	324.48
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	467902	51.8090	51.809	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1645842			336.29- 396.29	351.75
9.873	9.873 (1.145)	65	307454			38.83- 98.83	65.71
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.902	9.901 (1.149)	120	781289	50.0457	50.046	80.00- 120.00	100.00
9.902	9.901 (1.149)	105	1584548			176.40- 236.40	202.81
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	733138	45.8533	45.853	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	412922			26.64- 86.64	56.32
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1409650	49.0754	49.075	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	360368			0.00- 54.82	25.56
10.174	10.174 (1.180)	91	910061			36.92- 96.92	64.56
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1602255	52.0483	52.048	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	755361			16.58- 76.58	47.14
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	468284	50.4734	50.473	80.00- 120.00	100.00
10.360	10.353 (1.202)	105	2267313			451.53- 511.53	484.17
10.360	10.353 (1.202)	91	355423			46.48- 106.48	75.90
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	1978394	50.9192	50.919	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	536288			0.00- 56.79	27.11
10.467	10.467 (1.214)	91	456663			0.00- 54.04	23.08
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.220)	146	1116042	53.3620	53.362	80.00- 120.00	100.00
10.518	10.517 (1.220)	148	704699			33.53- 93.53	63.14
10.518	10.517 (1.220)	111	440917			11.05- 71.05	39.51

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 (1.229)	146	1118514	51.9206	51.920	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	711562			33.47- 93.47	63.62
10.596	10.596 (1.229)	111	433013			9.65- 69.65	38.71
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1419574	47.9266	47.927	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	317903			0.00- 52.04	22.39
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1193121	45.6649	45.665	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1011813			55.86- 115.86	84.80
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	521333	51.7496	51.750	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	1866078			331.99- 391.99	357.94
10.818	10.818 (1.255)	92	961144			161.01- 221.01	184.36
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.919	10.926 (1.267)	146	1081781	53.5259	53.526	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	680448			33.23- 93.23	62.90
10.919	10.919 (1.267)	111	446007			12.36- 72.36	41.23
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	575609	49.1185	49.118	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	464055			58.96- 118.96	80.62
11.606	11.606 (1.347)	155	446041			47.82- 107.82	77.49
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	976305	44.1897	44.190	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	769957			50.85- 110.85	78.86
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	843023	58.7269	58.727	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	812988			65.40- 125.40	96.44
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	658779	60.7533	60.753	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	419101			33.70- 93.70	63.62
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.456)	128	197443	4.50430	4.504	80.00- 120.00	100.00
12.552	12.559 (1.456)	127	27369			0.00- 43.10	13.86
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.810 (1.485)	180	778947	59.2993	59.299	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 (1.485)	182	737572			65.67- 125.67	94.69
12.803	12.802 (1.485)	145	267620			6.02- 66.02	34.36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072704.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	250619	4.87
108 1,4-Difluorobenze	785289	471173	1099405	851577	8.44
153 Chlorobenzene-d5	683596	410158	957034	720138	5.35

		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	8.61	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: 27JUL21
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/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	55.969	111.94	70-130
5 Propylene	50.000	46.990	93.98	70-130
7 1,1-Difluoroethan	50.000	51.264	102.53	70-130
8 Freon 12	50.000	50.243	100.49	70-130
9 Chlorodifluoromet	50.000	49.227	98.45	70-130
10 Freon 114	50.000	52.518	105.04	70-130
12 Isobutane	50.000	49.221	98.44	70-130
15 Chloromethane	50.000	56.731	113.46	70-130
18 Butane	50.000	51.305	102.61	70-130
19 Vinyl Chloride	50.000	51.815	103.63	70-130
20 1,3-Butadiene	50.000	46.070	92.14	70-130
24 Bromomethane	50.000	50.172	100.35	70-130
30 Chloroethane	50.000	50.104	100.21	70-130
31 Isopentane	50.000	47.685	95.37	70-130
32 Vinyl Bromide	50.000	48.395	96.79	70-130
33 Freon 11	50.000	53.154	106.31	70-130
34 Dichlorofluoromet	50.000	52.190	104.38	70-130
35 Pentane	50.000	45.730	91.46	70-130
38 Ethyl Ether	50.000	47.532	95.06	70-130
39 Ethanol	58.000	41.218	71.07	70-130
42 Acrolein	58.000	51.564	88.90	70-130
43 Freon 113	50.000	50.418	100.84	70-130
44 1,1-Dichloroethen	50.000	46.707	93.41	70-130
47 Acetone	50.000	47.863	95.73	70-130
48 Carbon Disulfide	50.000	51.354	102.71	70-130
49 Iodomethane	50.000	55.035	110.07	70-130
52 2-Propanol	50.000	49.091	98.18	70-130
54 3-Chloropropene	50.000	46.666	93.33	70-130
57 Acetonitrile	50.000	47.839	95.68	70-130
59 Methylene Chlorid	50.000	47.959	95.92	70-130
62 tert-Butyl alcoho	50.000	45.148	90.30	70-130
63 Methyl tert-butyl	50.000	45.535	91.07	70-130
64 trans-1,2-Dichlor	50.000	43.871	87.74	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	40.566	81.13	70-130
67	Hexane	50.000	45.740	91.48	70-130
71	1,1-Dichloroethan	50.000	45.959	91.92	70-130
72	Isopropyl ether	50.000	43.634	87.27	70-130
73	Vinyl Acetate	50.000	46.533	93.07	70-130
79	Ethyl-tert-butyl	50.000	43.436	86.87	70-130
84	2,2-Dichloropropa	50.000	46.263	92.53	70-130
85	cis-1,2-Dichloroe	50.000	44.508	89.02	70-130
86	2-Butanone	50.000	46.797	93.59	70-130
87	Ethyl Acetate	50.000	46.776	93.55	70-130
89	Tetrahydrofuran	50.000	44.292	88.59	70-130
92	Chloroform	50.000	46.942	93.88	70-130
94	Cyclohexane	50.000	42.773	85.55	70-130
96	1,1,1-Trichloroet	50.000	44.797	89.59	70-130
99	1,1-Dichloroprope	50.000	50.569	101.14	70-130
97	Carbon Tetrachlor	50.000	48.978	97.96	70-130
101	2,2,4-Trimethylpe	50.000	46.586	93.17	70-130
102	Benzene	50.000	51.505	103.01	70-130
105	tert-Amyl methyl	50.000	47.652	95.30	70-130
106	1,2-Dichloroethan	50.000	50.601	101.20	70-130
107	Heptane	50.000	44.221	88.44	70-130
110	n-Butanol	50.000	44.908	89.82	70-130
111	Trichloroethene	50.000	46.175	92.35	70-130
118	Dibromomethane	50.000	53.253	106.51	70-130
127	Methylcyclohexane	50.000	42.597	85.19	70-130
114	1,2-Dichloropropa	50.000	42.192	84.38	70-130
116	Methyl Methacryla	50.000	47.017	94.03	70-130
117	1,4-Dioxane	50.000	45.212	90.42	70-130
122	Bromodichlorometh	50.000	44.133	88.27	70-130
126	cis-1,3-Dichlorop	50.000	43.268	86.54	70-130
131	4-Methyl-2-pentan	50.000	39.010	78.02	70-130
136	Octane	50.000	39.967	79.93	70-130
137	Toluene	50.000	44.556	89.11	70-130
139	trans-1,3-Dichlor	50.000	47.681	95.36	70-130
141	1,1,2-Trichloroet	50.000	48.382	96.76	70-130
142	Tetrachloroethene	50.000	50.987	101.97	70-130
143	2-Hexanone	50.000	46.034	92.07	70-130
144	1,3-Dichloropropa	50.000	41.779	83.56	70-130
146	Dibromochlorometh	50.000	52.014	104.03	70-130
148	1,2-Dibromoethane	50.000	49.992	99.98	70-130
151	1-Bromo-2-Chloroe	50.000	44.389	88.78	70-130
154	Chlorobenzene	50.000	48.447	96.89	70-130
155	Ethyl Benzene	50.000	49.151	98.30	70-130
156	Nonane	50.000	43.298	86.60	70-130
157	1,1,1,2-Tetrachlo	50.000	44.812	89.62	70-130
158	m,p-Xylene	50.000	48.868	97.74	70-130
164	o-Xylene	50.000	47.551	95.10	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	47.528	95.06	70-130
167 Bromoform	50.000	52.193	104.39	70-130
168 Cumene	50.000	47.517	95.03	70-130
169 Cyclohexanone	50.000	42.055	84.11	70-130
175 1,1,2,2-Tetrachlo	50.000	49.691	99.38	70-130
177 Bromobenzene	50.000	52.523	105.05	70-130
178 Propylbenzene	50.000	50.761	101.52	70-130
179 1,2,3-Trichloropr	50.000	50.933	101.87	70-130
181 trans-1,4-Dichlor	50.000	67.109	134.22*	70-130
182 Decane	50.000	45.788	91.58	70-130
183 4-Ethyltoluene	50.000	50.298	100.60	70-130
184 2-Chlorotoluene	50.000	51.809	103.62	70-130
185 1,3,5-Trimethylbe	50.000	50.046	100.09	70-130
188 alpha Methyl Styr	50.000	45.853	91.71	70-130
189 tert-Butylbenzene	50.000	49.075	98.15	70-130
190 1,2,4-Trimethylbe	50.000	52.048	104.10	70-130
192 sec-Butylbenzene	50.000	50.473	100.95	70-130
194 p-Cymene	50.000	50.919	101.84	70-130
195 1,3-Dichlorobenze	50.000	53.362	106.72	70-130
196 1,4-Dichlorobenze	50.000	51.920	103.84	70-130
199 alpha-Chlorotolue	50.000	47.927	95.85	70-130
201 Undecane	50.000	45.665	91.33	70-130
202 Butylbenzene	50.000	51.750	103.50	70-130
204 1,2-Dichlorobenze	50.000	53.526	107.05	70-130
206 1,2-Dibromo-3-chl	50.000	49.118	98.24	70-130
207 Dodecane	50.000	44.190	88.38	70-130
213 1,2,4-Trichlorobe	58.000	58.727	101.25	70-130
215 Hexachlorobutadie	58.000	60.753	104.75	70-130
216 Naphthalene	5.800	4.504	77.66	60-140
222 1,2,3-Trichlorobe	58.000	59.299	102.24	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.034	100.14	70-130
$ 134 Toluene-d8	25.000	23.069	92.28	70-130
$ 170 4-Bromofluorobenz	25.000	25.182	100.73	70-130

Data File: /chem/msd3.i/27JUL21.b/3072704.d

Page 1

Date : 27-JUL-2021 12:13

Client ID: LCS

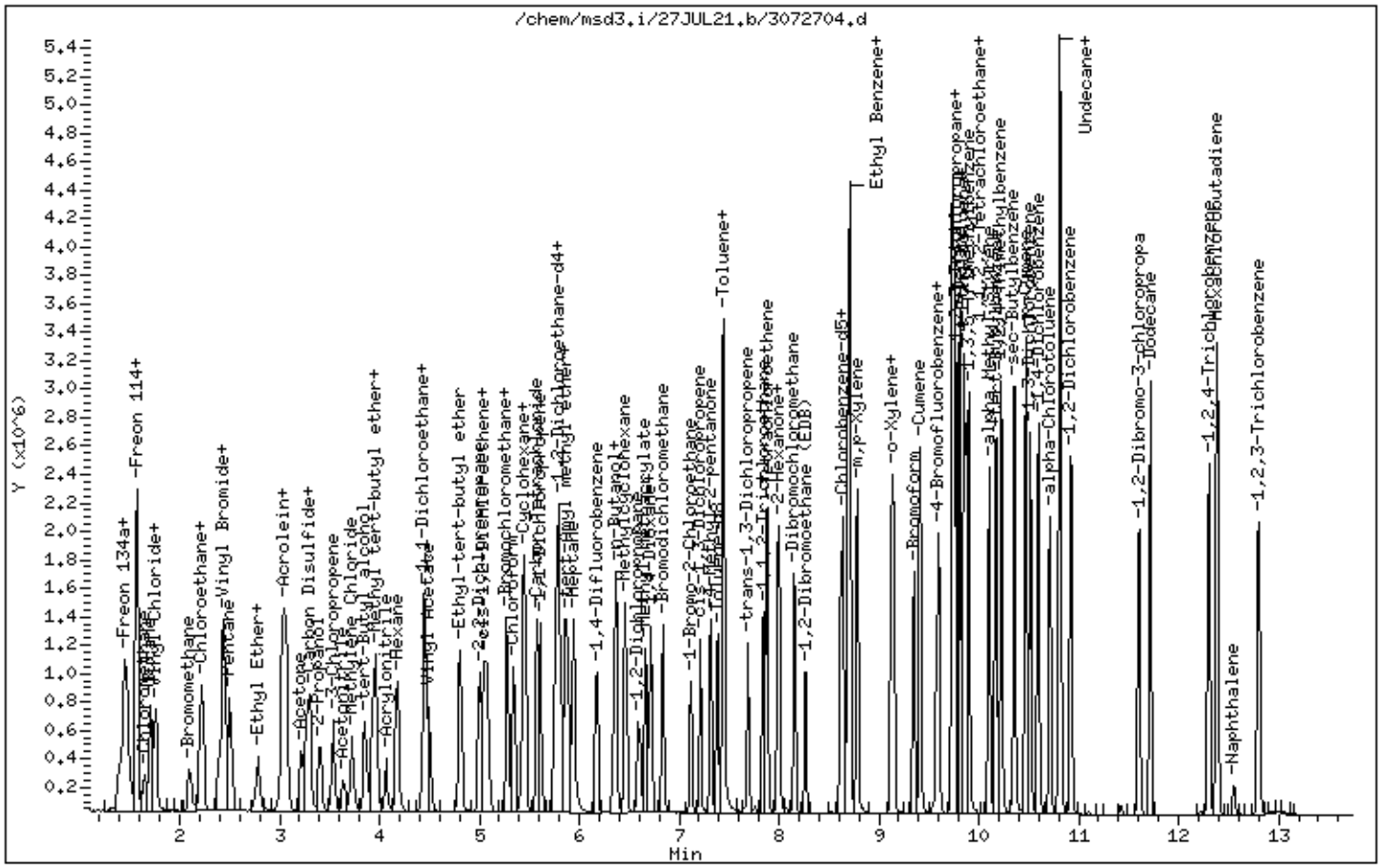
Instrument: msd3.i

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#: 2107361-18AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:40 PM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	90	70-130
1,1,2,2-Tetrachloroethane	97	70-130
1,1,2-Trichloroethane	96	70-130
1,1-Dichloroethane	95	70-130
1,1-Dichloroethene	97	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	114	70-130
1,2,4-Trimethylbenzene	98	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	70-130
1,2-Dibromoethane (EDB)	101	70-130
1,2-Dichlorobenzene	103	70-130
1,2-Dichloroethane	96	70-130
1,2-Dichloropropane	74	70-130
1,3,5-Trimethylbenzene	97	70-130
1,3-Butadiene	96	70-130
1,3-Dichlorobenzene	104	70-130
1,4-Dichlorobenzene	101	70-130
1,4-Dioxane	94	70-130
2,2,4-Trimethylpentane	89	70-130
2-Butanone (Methyl Ethyl Ketone)	97	70-130
2-Hexanone	94	70-130
2-Propanol	102	70-130
3-Chloropropene	96	70-130
4-Ethyltoluene	98	70-130
4-Methyl-2-pentanone	81	70-130
Acetone	100	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	94	70-130
Benzene	94	70-130
Bromodichloromethane	89	70-130
Bromoform	105	70-130
Bromomethane	102	70-130
Carbon Disulfide	105	70-130
Carbon Tetrachloride	99	70-130
Chlorobenzene	98	70-130
Chloroethane	104	70-130
Chloroform	94	70-130
Chloromethane	116	70-130
cis-1,2-Dichloroethene	91	70-130

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Client Sample ID: LCSD

Lab ID#: 2107361-18AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:40 PM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	89	70-130
Cumene	96	70-130
Cyclohexane	87	70-130
Dibromochloromethane	105	70-130
Dibromomethane	Not Spiked	
Ethanol	74	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	99	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	109	70-130
Freon 12	104	70-130
Freon 113	104	70-130
Freon 114	108	70-130
Freon 134a	Not Spiked	
Heptane	84	70-130
Hexachlorobutadiene	117	70-130
Hexachloroethane	Not Spiked	
Hexane	95	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	98	70-130
Methyl tert-butyl ether	96	70-130
Methylene Chloride	99	70-130
Naphthalene	86	60-140
o-Xylene	95	70-130
Propylbenzene	98	70-130
Propylene	Not Spiked	
Styrene	95	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	104	70-130
Tetrahydrofuran	87	70-130
Toluene	90	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	92	70-130
trans-1,3-Dichloropropene	96	70-130
Trichloroethene	98	70-130
Vinyl Acetate	Not Spiked	
Vinyl Bromide	Not Spiked	
Vinyl Chloride	107	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2107361-18AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:40 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	93	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/27JUL21.b/3072705.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 27-JUL-2021 12:40
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 14:03 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	243047	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	189928				48.46- 108.46	78.14
5.284	5.270 (1.000)	49	338027				120.39- 180.39	139.08
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	877445	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	129432				0.00- 45.52	14.75
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	719626	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	385622				25.46- 85.46	53.59
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	332394	24.8516		24.852	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173528				21.66- 81.66	52.21
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	837339	23.1690		23.169	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	91942				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 (1.195)	100	553973			36.47- 96.47	66.16
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	472828	24.8407	24.841	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	538908			93.06- 153.06	113.98
9.601	9.601 (1.114)	176	438110			62.87- 122.87	92.66
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	332500	57.4940	57.494	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	269063			51.82- 111.82	80.92
1.493	1.479 (0.282)	51	769087			194.91- 254.91	231.30
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	292192	49.7710	49.771	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	197311			35.61- 95.61	67.53
1.423	1.423 (0.269)	39	216909			42.66- 102.66	74.24
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	197655	51.6495	51.650	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	769087			321.86- 381.86	389.10
1.451	1.451 (0.275)	47	154211			45.34- 105.34	78.02
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	883553	52.1855	52.186	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	292822			2.63- 62.63	33.14
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	99099	53.2568	53.257	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	769087			719.76- 779.76	776.07
10 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.296)	135	674909	53.7983	53.798	80.00- 120.00	100.00
1.563	1.563 (0.296)	137	215383			2.12- 62.12	31.91
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	668806	50.6864	50.686	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	214869			2.44- 62.44	32.13
1.577	1.577 (0.298)	58	24794			0.00- 33.26	3.71
15 Chloromethane					CAS #: 74-87-3		
1.647	1.646 (0.312)	50	408064	57.9881	57.988	80.00- 120.00	100.00
1.647	1.646 (0.312)	52	133352			2.41- 62.41	32.68
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	89189	53.6679	53.668	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	655719			727.41- 787.41	735.20
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	404277	53.6864	53.686	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	121176			1.28- 61.28	29.97
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	333078	48.2633	48.263	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	315738			69.23- 129.23	94.79
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	305482	51.2935	51.293	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	288033			62.78- 122.78	94.29
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	183146	51.8113	51.811	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	55828			1.44- 61.44	30.48
2.206	2.206 (0.417)	49	59246			4.12- 64.12	32.35
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	442460	48.9480	48.948	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	316744			38.82- 98.82	71.59
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	327273	50.5424	50.542	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	302525			63.14- 123.14	92.44
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	980329	54.7244	54.724	80.00- 120.00	100.00
2.444	2.430 (0.463)	103	643045			35.12- 95.12	65.59
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	770452	53.8011	53.801	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	235734			0.74- 60.74	30.60
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	678892	47.1405	47.140	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	112196			0.00- 45.97	16.53
2.500	2.500 (0.473)	72	57328			0.00- 38.10	8.44
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	160226	49.6223	49.622	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	282989			147.68- 207.68	176.62
2.780	2.780 (0.526)	45	363562			206.40- 266.40	226.90

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	62412	43.0673	43.067	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	362071			523.01- 583.01	580.12
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	129199	53.7233	53.723	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	178279			110.33- 170.33	137.99
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	637959	52.0951	52.095	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	407364			33.72- 93.72	63.85
3.032	3.032 (0.574)	101	774340			89.67- 149.67	121.38
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	359541	48.7442	48.744	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	230520			33.39- 93.39	64.12
3.074	3.074 (0.582)	61	706879			163.82- 223.82	196.61
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	203055	49.8249	49.825	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	674244			299.66- 359.66	332.05
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	965474	52.6093	52.609	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	919579	57.9479	57.948	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	427407			14.58- 74.58	46.48
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	748810	51.0903	51.090	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	153434			0.00- 48.61	20.49
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	151228	47.8640	47.864	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	518662			338.06- 398.06	342.97
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	298477	46.5104	46.510	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	165439			21.81- 81.81	55.43
3.633	3.633 (0.688)	38	36271			0.00- 41.86	12.15
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	484218	49.6457	49.646	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	294045			30.77- 90.77	60.73
3.717	3.717 (0.703)	51	147945			1.39- 61.39	30.55

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	862080	46.8608	46.861	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	196834			0.00- 51.05	22.83
3.857	3.857 (0.730)	57	93898			0.00- 41.68	10.89
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	952644	47.9774	47.977	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	280946			0.00- 58.86	29.49
3.941	3.941 (0.746)	41	267333			0.00- 57.27	28.06
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	228110	45.9547	45.955	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	606867			244.59- 304.59	266.04
3.969	3.969 (0.751)	96	360026			129.84- 189.84	157.83
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	252748	42.4269	42.427	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	298572			88.50- 148.50	118.13
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	639618	47.5229	47.523	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	393822			32.99- 92.99	61.57
4.179	4.179 (0.791)	86	82046			0.00- 42.56	12.83
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	657313	47.4887	47.489	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	202113			0.76- 60.76	30.75
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1291178	45.4575	45.458	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	291872			0.00- 51.37	22.61
4.445	4.445 (0.841)	59	147939			0.00- 41.09	11.46
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	81281	47.7641	47.764	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1149311			1391.63-1451.63	1413.99
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1236835	45.1043	45.104	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	417187			3.22- 63.22	33.73
4.809	4.809 (0.910)	41	238976			0.00- 48.12	19.32
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	593355	46.0157	46.016	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	190376			2.00- 62.00	32.08
5.005	5.005 (0.947)	97	139027			0.00- 53.36	23.43

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	223025	45.3249	45.325	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	344352			127.22- 187.22	154.40
5.047	5.046 (0.955)	61	670853			283.85- 343.85	300.80
86 2-Butanone					CAS #: 78-93-3		
5.075	5.074 (0.960)	72	166077	48.3211	48.321	80.00- 120.00	100.00
5.075	5.074 (0.960)	43	1669843			1055.75-1115.75	1005.46
5.075	5.074 (0.960)	57	65345			10.59- 70.59	39.35
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.088 (0.963)	45	132907	46.9072	46.907	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	670722			450.31- 510.31	504.65
5.089	5.088 (0.963)	70	79981			30.42- 90.42	60.18
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	420429	43.3799	43.380	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	140129			2.92- 62.92	33.33
5.270	5.270 (0.997)	72	148745			3.54- 63.54	35.38
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	713906	46.8491	46.849	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	462280			34.71- 94.71	64.75
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	417782	43.3749	43.375	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	614589			120.40- 180.40	147.11
5.438	5.438 (1.029)	41	340291			54.20- 114.20	81.45
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	771052	45.0160	45.016	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	494729			33.76- 93.76	64.16
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	784256	49.7136	49.714	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	819986			73.68- 133.68	104.56
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.620	5.606 (0.909)	110	186609	46.7321	46.732	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	476360			231.09- 291.09	255.27
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1872661	44.4921	44.492	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	577627			1.12- 61.12	30.85
5.774	5.774 (1.093)	41	513022			0.00- 57.49	27.40

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	941107	47.0011	47.001	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	222815			0.00- 53.80	23.68
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	239431	44.8465	44.846	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	939520			365.20- 425.20	392.40
5.858	5.858 (0.948)	55	305804			91.31- 151.31	127.72
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	554290	48.0827	48.083	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	171495			1.20- 61.20	30.94
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	329899	41.8300	41.830	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	650971			179.02- 239.02	197.32
5.942	5.942 (0.962)	57	389374			84.85- 144.85	118.03
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	302937	47.2017	47.202	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	201509			40.21- 100.21	66.52
6.348	6.348 (1.027)	43	163424			25.00- 85.00	53.95
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	491685	48.9477	48.948	80.00- 120.00	100.00
6.376	6.362 (1.032)	130	519849			74.96- 134.96	105.73
6.376	6.362 (1.032)	97	314369			34.80- 94.80	63.94
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	171037	36.8509	36.851	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	129148			52.03- 112.03	75.51
6.586	6.586 (1.066)	41	171194			79.97- 139.97	100.09
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	347624	50.1939	50.194	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	550212			134.02- 194.02	158.28
6.664	6.664 (0.773)	100	139260			9.54- 69.54	40.06
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.084)	88	237725	46.8681	46.868	80.00- 120.00	100.00
6.700	6.700 (1.084)	58	233076			55.80- 115.80	98.04
6.700	6.700 (1.084)	57	88815			8.68- 68.68	37.36
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	436660	56.6138	56.614	80.00- 120.00	100.00
6.721	6.714 (0.780)	93	426214			67.27- 127.27	97.61

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
6.721	6.721 (0.780)	95	355021			50.92- 110.92	81.30
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	748581	44.4835	44.484	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	482558			34.31- 94.31	64.46
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	558857	44.6808	44.681	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	178131			1.42- 61.42	31.87
7.208	7.208 (1.166)	39	376274			38.56- 98.56	67.33
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	588823	43.8355	43.836	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	273498			15.60- 75.60	46.45
6.460	6.460 (1.045)	55	592527			78.53- 138.53	100.63
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	346326	40.7216	40.722	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	885034			231.30- 291.30	255.55
7.316	7.316 (1.184)	85	133956			8.94- 68.94	38.68
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1216479	45.2782	45.278	80.00- 120.00	100.00
7.445	7.437 (1.205)	92	698293			28.30- 88.30	57.40
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.205)	57	367969	41.1656	41.166	80.00- 120.00	100.00
7.445	7.444 (1.205)	85	365301			67.11- 127.11	99.27
7.445	7.444 (1.205)	43	847745			214.21- 274.21	230.38
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	511898	48.2973	48.297	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	163426			2.15- 62.15	31.93
7.688	7.688 (0.892)	39	334027			36.09- 96.09	65.25
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	393681	48.2974	48.297	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	245912			31.62- 91.62	62.46
7.846	7.846 (0.910)	83	342339			56.35- 116.35	86.96
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	583842	51.7877	51.788	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	448400			48.71- 108.71	76.80
7.881	7.874 (0.914)	131	433649			46.55- 106.55	74.28

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	441646	47.1702	47.170	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	800916			157.91- 217.91	181.35
8.003	8.003 (0.929)	100	83430			0.00- 47.86	18.89
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	521974	40.7205	40.720	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	548267			82.96- 142.96	105.04
7.989	7.989 (1.293)	78	170187			2.55- 62.55	32.60
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.946)	129	813244	52.5902	52.590	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	630984			47.77- 107.77	77.59
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.261 (0.959)	107	637605	50.3703	50.370	80.00- 120.00	100.00
8.268	8.261 (0.959)	109	602701			64.60- 124.60	94.53
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	745772	45.9226	45.922	80.00- 120.00	100.00
7.122	7.115 (1.152)	65	232876			0.95- 60.95	31.23
7.122	7.122 (1.152)	144	80852			0.00- 40.45	10.84
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	964821	49.0550	49.055	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	310196			2.13- 62.13	32.15
8.641	8.641 (1.002)	77	512157			26.35- 86.35	53.08
155 Ethyl Benzene					CAS #: 100-41-4		
8.691	8.684 (1.008)	106	487590	49.5777	49.578	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1509744			282.48- 342.48	309.63
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	824864	43.2718	43.272	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	785976			59.52- 119.52	95.29
8.705	8.705 (1.010)	85	269379			0.00- 59.76	32.66
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	489317	45.2049	45.205	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	333273			38.22- 98.22	68.11
8.712	8.712 (1.011)	95	181504			7.54- 67.54	37.09
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	596573	48.7581	48.758	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1193910			171.36- 231.36	200.13

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	9.121 (1.059)	106	552333	47.5514	47.551	80.00- 120.00	100.00
9.121	9.121 (1.058)	91	1168785			179.99- 239.99	211.61
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	959229	47.6653	47.665	80.00- 120.00	100.00
9.149	9.142 (1.061)	78	456053			19.09- 79.09	47.54
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	767077	52.3135	52.313	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	396410			21.45- 81.45	51.68
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	1762729	47.9992	47.999	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	483117			0.00- 56.99	27.41
9.407	9.407 (1.091)	51	199495			0.00- 41.77	11.32
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	482447	41.7452	41.745	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	193707			9.22- 69.22	40.15
9.579	9.579 (1.111)	42	335390			42.60- 102.60	69.52
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	879560	48.3069	48.307	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	575212			34.35- 94.35	65.40
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.730 (1.130)	156	584952	51.2384	51.238	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	567706			67.29- 127.29	97.05
9.730	9.730 (1.129)	77	890773			132.41- 192.41	152.28
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2108947	49.2168	49.217	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	504184			0.00- 53.77	23.91
9.758	9.758 (1.132)	105	77910			0.00- 33.81	3.69
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	270389	49.2983	49.298	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	905727			285.00- 345.00	334.97
9.787	9.787 (1.135)	61	231047			54.06- 114.06	85.45
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	282527	65.0975	65.098	80.00- 120.00	100.00(R)
9.787	9.787 (1.135)	89	146003			21.19- 81.19	51.68
9.787	9.787 (1.135)	75	905727			372.45- 432.45	320.58

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	990780	44.7172	44.717	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	348342			4.13- 64.13	35.16
9.816	9.808 (1.139)	142	49590			0.00- 34.73	5.01
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	546566	49.2090	49.209	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1779863			296.79- 356.79	325.64
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	453886	50.2929	50.293	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1599401			336.29- 396.29	352.38
9.873	9.873 (1.145)	65	295847			38.83- 98.83	65.18
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	757607	48.5633	48.563	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1526556			176.40- 236.40	201.50
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	725874	45.4313	45.431	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	407059			26.64- 86.64	56.08
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1364736	47.5456	47.546	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	351786			0.00- 54.82	25.78
10.174	10.174 (1.180)	91	885899			36.92- 96.92	64.91
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1514245	49.2244	49.224	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	720286			16.58- 76.58	47.57
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	456416	49.2292	49.229	80.00- 120.00	100.00
10.360	10.353 (1.202)	105	2189121			451.53- 511.53	479.63
10.360	10.353 (1.202)	91	342617			46.48- 106.48	75.07
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	1948184	50.1773	50.177	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	520411			0.00- 56.79	26.71
10.467	10.467 (1.214)	91	450003			0.00- 54.04	23.10
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.220)	146	1082245	51.7829	51.783	80.00- 120.00	100.00
10.518	10.517 (1.220)	148	690215			33.53- 93.53	63.78
10.518	10.517 (1.220)	111	426236			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 (1.229)	146	1086417	50.4666	50.466	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	694528			33.47- 93.47	63.93
10.596	10.596 (1.229)	111	416148			9.65- 69.65	38.30
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1396522	47.1819	47.182	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	315762			0.00- 52.04	22.61
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1188679	45.5273	45.527	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	999871			55.86- 115.86	84.12
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	511967	50.8561	50.856	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	1825523			331.99- 391.99	356.57
10.818	10.818 (1.255)	92	938161			161.01- 221.01	183.25
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1043847	51.6857	51.686	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	662012			33.23- 93.23	63.42
10.919	10.919 (1.267)	111	421427			12.36- 72.36	40.37
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	622835	53.1862	53.186	80.00- 120.00	100.00
11.606	11.599 (1.347)	75	515889			58.96- 118.96	82.83
11.606	11.606 (1.347)	155	482139			47.82- 107.82	77.41
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1279263	57.9435	57.943	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	1015447			50.85- 110.85	79.38
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	949246	66.1737	66.174	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	905084			65.40- 125.40	95.35
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	734886	67.8202	67.820	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	463511			33.70- 93.70	63.07
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.456)	128	218647	4.99157	4.992	80.00- 120.00	100.00
12.552	12.559 (1.456)	127	28980			0.00- 43.10	13.25
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.810 (1.485)	180	895119	68.1917	68.192	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 (1.485)	182	853575			65.67- 125.67	95.36
12.803	12.802 (1.485)	145	311081			6.02- 66.02	34.75

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 27-Jul-2021 14:03

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072705.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	243047	1.70
108 1,4-Difluorobenze	785289	471173	1099405	877445	11.74
153 Chlorobenzene-d5	683596	410158	957034	719626	5.27

		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	8.61	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: 27JUL21
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/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	57.494	114.99	70-130
5 Propylene	50.000	49.771	99.54	70-130
7 1,1-Difluoroethan	50.000	51.650	103.30	70-130
8 Freon 12	50.000	52.186	104.37	70-130
9 Chlorodifluoromet	50.000	53.257	106.51	70-130
10 Freon 114	50.000	53.798	107.60	70-130
12 Isobutane	50.000	50.686	101.37	70-130
15 Chloromethane	50.000	57.988	115.98	70-130
18 Butane	50.000	53.668	107.34	70-130
19 Vinyl Chloride	50.000	53.686	107.37	70-130
20 1,3-Butadiene	50.000	48.263	96.53	70-130
24 Bromomethane	50.000	51.293	102.59	70-130
30 Chloroethane	50.000	51.811	103.62	70-130
31 Isopentane	50.000	48.948	97.90	70-130
32 Vinyl Bromide	50.000	50.542	101.08	70-130
33 Freon 11	50.000	54.724	109.45	70-130
34 Dichlorofluoromet	50.000	53.801	107.60	70-130
35 Pentane	50.000	47.140	94.28	70-130
38 Ethyl Ether	50.000	49.622	99.24	70-130
39 Ethanol	58.000	43.067	74.25	70-130
42 Acrolein	58.000	53.723	92.63	70-130
43 Freon 113	50.000	52.095	104.19	70-130
44 1,1-Dichloroethen	50.000	48.744	97.49	70-130
47 Acetone	50.000	49.825	99.65	70-130
48 Carbon Disulfide	50.000	52.609	105.22	70-130
49 Iodomethane	50.000	57.948	115.90	70-130
52 2-Propanol	50.000	51.090	102.18	70-130
54 3-Chloropropene	50.000	47.864	95.73	70-130
57 Acetonitrile	50.000	46.510	93.02	70-130
59 Methylene Chlorid	50.000	49.646	99.29	70-130
62 tert-Butyl alcoho	50.000	46.861	93.72	70-130
63 Methyl tert-butyl	50.000	47.977	95.95	70-130
64 trans-1,2-Dichlor	50.000	45.955	91.91	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	42.427	84.85	70-130
67	Hexane	50.000	47.523	95.05	70-130
71	1,1-Dichloroethan	50.000	47.489	94.98	70-130
72	Isopropyl ether	50.000	45.458	90.92	70-130
73	Vinyl Acetate	50.000	47.764	95.53	70-130
79	Ethyl-tert-butyl	50.000	45.104	90.21	70-130
84	2,2-Dichloropropa	50.000	46.016	92.03	70-130
85	cis-1,2-Dichloroe	50.000	45.325	90.65	70-130
86	2-Butanone	50.000	48.321	96.64	70-130
87	Ethyl Acetate	50.000	46.907	93.81	70-130
89	Tetrahydrofuran	50.000	43.380	86.76	70-130
92	Chloroform	50.000	46.849	93.70	70-130
94	Cyclohexane	50.000	43.375	86.75	70-130
96	1,1,1-Trichloroet	50.000	45.016	90.03	70-130
99	1,1-Dichloroprope	50.000	46.732	93.46	70-130
97	Carbon Tetrachlor	50.000	49.714	99.43	70-130
101	2,2,4-Trimethylpe	50.000	44.492	88.98	70-130
102	Benzene	50.000	47.001	94.00	70-130
105	tert-Amyl methyl	50.000	44.846	89.69	70-130
106	1,2-Dichloroethan	50.000	48.083	96.17	70-130
107	Heptane	50.000	41.830	83.66	70-130
110	n-Butanol	50.000	47.202	94.40	70-130
111	Trichloroethene	50.000	48.948	97.90	70-130
118	Dibromomethane	50.000	56.614	113.23	70-130
127	Methylcyclohexane	50.000	43.836	87.67	70-130
114	1,2-Dichloropropa	50.000	36.851	73.70	70-130
116	Methyl Methacryla	50.000	50.194	100.39	70-130
117	1,4-Dioxane	50.000	46.868	93.74	70-130
122	Bromodichlorometh	50.000	44.484	88.97	70-130
126	cis-1,3-Dichlorop	50.000	44.681	89.36	70-130
131	4-Methyl-2-pentan	50.000	40.722	81.44	70-130
136	Octane	50.000	41.166	82.33	70-130
137	Toluene	50.000	45.278	90.56	70-130
139	trans-1,3-Dichlor	50.000	48.297	96.59	70-130
141	1,1,2-Trichloroet	50.000	48.297	96.59	70-130
142	Tetrachloroethene	50.000	51.788	103.58	70-130
143	2-Hexanone	50.000	47.170	94.34	70-130
144	1,3-Dichloropropa	50.000	40.720	81.44	70-130
146	Dibromochlorometh	50.000	52.590	105.18	70-130
148	1,2-Dibromoethane	50.000	50.370	100.74	70-130
151	1-Bromo-2-Chloroe	50.000	45.922	91.85	70-130
154	Chlorobenzene	50.000	49.055	98.11	70-130
155	Ethyl Benzene	50.000	49.578	99.16	70-130
156	Nonane	50.000	43.272	86.54	70-130
157	1,1,1,2-Tetrachlo	50.000	45.205	90.41	70-130
158	m,p-Xylene	50.000	48.758	97.52	70-130
164	o-Xylene	50.000	47.551	95.10	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	47.665	95.33	70-130
167 Bromoform	50.000	52.313	104.63	70-130
168 Cumene	50.000	47.999	96.00	70-130
169 Cyclohexanone	50.000	41.745	83.49	70-130
175 1,1,2,2-Tetrachlo	50.000	48.307	96.61	70-130
177 Bromobenzene	50.000	51.238	102.48	70-130
178 Propylbenzene	50.000	49.217	98.43	70-130
179 1,2,3-Trichloropr	50.000	49.298	98.60	70-130
181 trans-1,4-Dichlor	50.000	65.098	130.20*	70-130
182 Decane	50.000	44.717	89.43	70-130
183 4-Ethyltoluene	50.000	49.209	98.42	70-130
184 2-Chlorotoluene	50.000	50.293	100.59	70-130
185 1,3,5-Trimethylbe	50.000	48.563	97.13	70-130
188 alpha Methyl Styr	50.000	45.431	90.86	70-130
189 tert-Butylbenzene	50.000	47.546	95.09	70-130
190 1,2,4-Trimethylbe	50.000	49.224	98.45	70-130
192 sec-Butylbenzene	50.000	49.229	98.46	70-130
194 p-Cymene	50.000	50.177	100.35	70-130
195 1,3-Dichlorobenze	50.000	51.783	103.57	70-130
196 1,4-Dichlorobenze	50.000	50.466	100.93	70-130
199 alpha-Chlorotolue	50.000	47.182	94.36	70-130
201 Undecane	50.000	45.527	91.05	70-130
202 Butylbenzene	50.000	50.856	101.71	70-130
204 1,2-Dichlorobenze	50.000	51.686	103.37	70-130
206 1,2-Dibromo-3-chl	50.000	53.186	106.37	70-130
207 Dodecane	50.000	57.943	115.89	70-130
213 1,2,4-Trichlorobe	58.000	66.174	114.09	70-130
215 Hexachlorobutadie	58.000	67.820	116.93	70-130
216 Naphthalene	5.800	4.992	86.06	60-140
222 1,2,3-Trichlorobe	58.000	68.192	117.57	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.852	99.41	70-130
$ 134 Toluene-d8	25.000	23.169	92.68	70-130
$ 170 4-Bromofluorobenz	25.000	24.841	99.36	70-130

Data File: /chem/msd3.i/27JUL21.b/3072705.d

Date : 27-JUL-2021 12:40

Client ID: LCSD

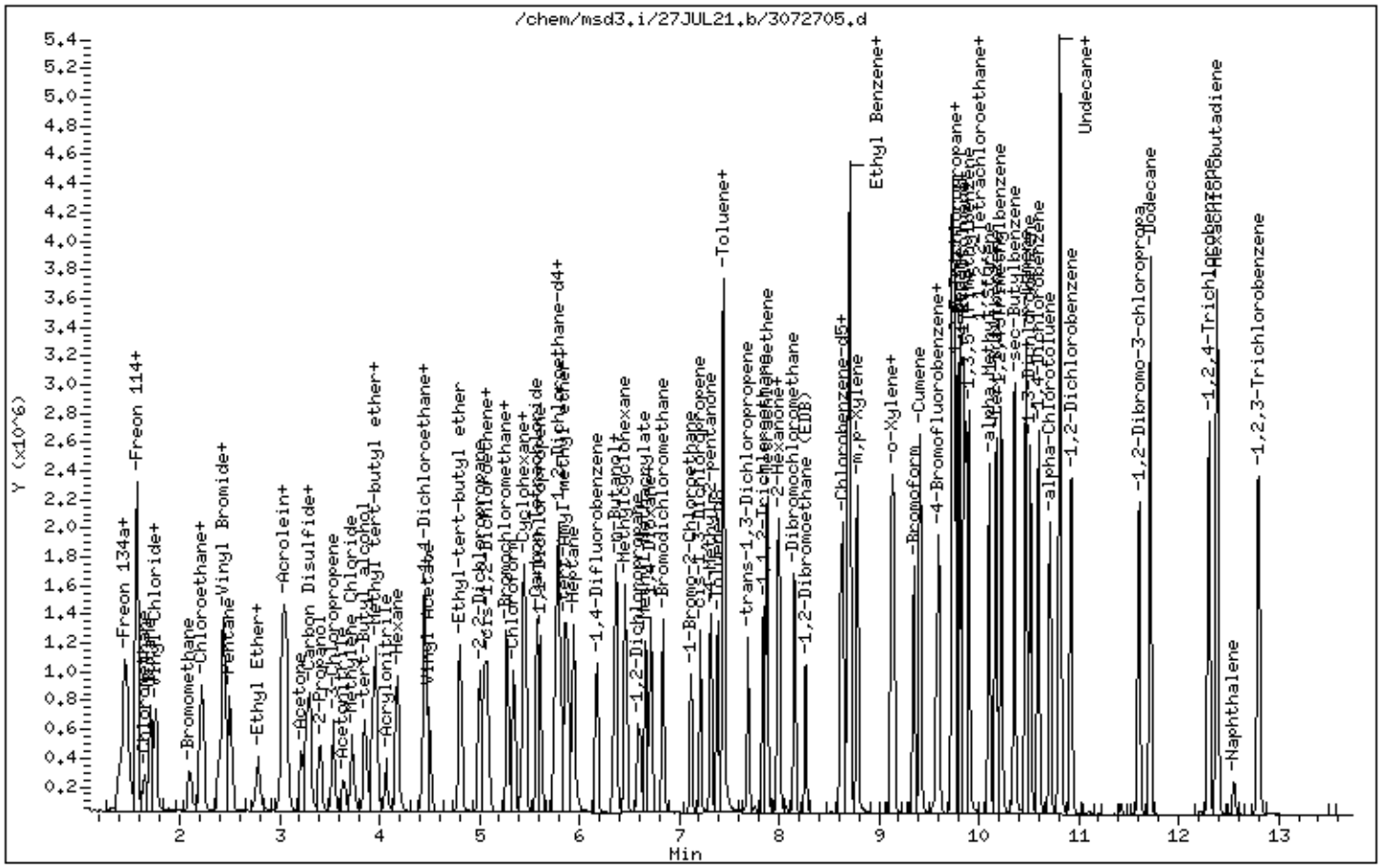
Instrument: msd3.i

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#: 2107361-18B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 11:43 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	104	70-130
1,1,2,2-Tetrachloroethane	106	70-130
1,1,2-Trichloroethane	107	70-130
1,1-Dichloroethane	106	70-130
1,1-Dichloroethene	99	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	115	70-130
1,2,4-Trimethylbenzene	103	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	111	70-130
1,2-Dichlorobenzene	104	70-130
1,2-Dichloroethane	114	70-130
1,2-Dichloropropane	105	70-130
1,3,5-Trimethylbenzene	104	70-130
1,3-Butadiene	116	70-130
1,3-Dichlorobenzene	108	70-130
1,4-Dichlorobenzene	108	70-130
1,4-Dioxane	97	70-130
2,2,4-Trimethylpentane	106	70-130
2-Butanone (Methyl Ethyl Ketone)	98	70-130
2-Hexanone	103	70-130
2-Propanol	111	70-130
3-Chloropropene	93	70-130
4-Ethyltoluene	103	70-130
4-Methyl-2-pentanone	102	70-130
Acetone	106	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	100	70-130
Benzene	103	70-130
Bromodichloromethane	112	70-130
Bromoform	112	70-130
Bromomethane	92	70-130
Carbon Disulfide	97	70-130
Carbon Tetrachloride	113	70-130
Chlorobenzene	108	70-130
Chloroethane	98	70-130
Chloroform	108	70-130
Chloromethane	104	70-130
cis-1,2-Dichloroethene	104	70-130

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Client Sample ID: LCS

Lab ID#: 2107361-18B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 11:43 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	106	70-130
Cumene	101	70-130
Cyclohexane	95	70-130
Dibromochloromethane	114	70-130
Dibromomethane	Not Spiked	
Ethanol	92	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	104	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	109	70-130
Freon 12	111	70-130
Freon 113	102	70-130
Freon 114	105	70-130
Freon 134a	Not Spiked	
Heptane	100	70-130
Hexachlorobutadiene	121	70-130
Hexachloroethane	Not Spiked	
Hexane	104	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	103	70-130
Methyl tert-butyl ether	94	70-130
Methylene Chloride	117	70-130
Naphthalene	99	60-140
o-Xylene	101	70-130
Propylbenzene	105	70-130
Propylene	Not Spiked	
Styrene	98	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	109	70-130
Tetrahydrofuran	117	70-130
Toluene	102	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	99	70-130
trans-1,3-Dichloropropene	109	70-130
Trichloroethene	108	70-130
Vinyl Acetate	Not Spiked	
Vinyl Bromide	Not Spiked	
Vinyl Chloride	101	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2107361-18B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 11:43 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072803.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 28-JUL-2021 11:43
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 13:01 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	156490	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123758				48.23- 108.23	79.08
5.778	5.778 (1.000)	49	331846				150.57- 210.57	212.06
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.659 (1.000)	114	602525	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	89864				0.00- 45.71	14.91
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	582315	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	301348				23.78- 83.78	51.75
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	224226	25.9633	25.963		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	129709				27.21- 87.21	57.85
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	658800	25.1796	25.180		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	71145				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)							
7.891	7.891 (1.184)	100	423945			34.95- 94.95	64.35
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	376248	25.1617	25.162	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	458299			95.92- 155.92	121.81
10.921	10.921 (1.154)	176	360787			66.89- 126.89	95.89
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	296113	59.7849	59.785	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	238433			59.44- 119.44	80.52
1.745	1.744 (0.302)	51	1321972			419.06- 479.06	446.44
5 Propylene					CAS #: 115-07-1		
1.689	1.675 (0.292)	41	396280	55.3377	55.338	80.00- 120.00	100.00
1.689	1.675 (0.292)	42	263346			35.28- 95.28	66.45
1.689	1.675 (0.292)	39	268154			38.35- 98.35	67.67
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	182887	51.5590	51.559	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1321972			597.63- 657.63	722.83
1.703	1.703 (0.294)	47	136775			33.72- 93.72	74.79
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	780550	55.6125	55.612	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	252953			2.37- 62.37	32.41
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.758 (0.304)	67	76794	55.3901	55.390	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1321972			1501.01-1561.01	1721.45
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	720817	52.3186	52.319	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	227050			2.30- 62.30	31.50
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	866139	54.6321	54.632	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	281393			2.44- 62.44	32.49
1.870	1.870 (0.323)	58	26203			0.00- 33.36	3.03
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	424345	52.1139	52.114	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	103655			0.00- 56.26	24.43
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.351)	58	93275	49.4509	49.451	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	841413			823.29- 883.29	902.08
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	495581	50.5913	50.591	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	146127			0.00- 59.69	29.49
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	458942	58.2514	58.251	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	408068			52.37- 112.37	88.92
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	288450	45.7954	45.795	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	273275			64.07- 124.07	94.74
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	173549	49.2691	49.269	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	47868			0.04- 60.04	27.58
2.612	2.612 (0.452)	49	67877			4.54- 64.54	39.11
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	582451	54.3417	54.342	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	344301			34.12- 94.12	59.11
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.848 (0.492)	106	280481	48.1765	48.176	80.00- 120.00	100.00
2.848	2.848 (0.492)	108	281660			69.27- 129.27	100.42
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	812787	54.4944	54.494	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	535940			34.72- 94.72	65.94
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	649863	50.5526	50.553	80.00- 120.00	100.00
2.906	2.906 (0.502)	69	203329			0.84- 60.84	31.29
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	909807	52.2222	52.222	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	121382			0.00- 44.98	13.34
2.970	2.970 (0.513)	72	55099			0.00- 37.39	6.06
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.568)	74	143160	48.7067	48.707	80.00- 120.00	100.00
3.285	3.285 (0.568)	59	293231			163.46- 223.46	204.83
3.285	3.285 (0.568)	45	472240			250.40- 310.40	329.87

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	82788	53.3464	53.346	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	472240			511.19- 571.19	570.42
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.611)	55	147074	54.6157	54.616	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	203537			111.10- 171.10	138.39
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	566057	51.0816	51.082	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	361157			33.56- 93.56	63.80
3.550	3.550 (0.614)	101	675945			89.21- 149.21	119.41
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	327063	49.4056	49.406	80.00- 120.00	100.00
3.586	3.579 (0.620)	98	208085			34.02- 94.02	63.62
3.586	3.579 (0.620)	61	693403			168.77- 228.77	212.01
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	216473	52.7652	52.765	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	780668			302.95- 362.95	360.63
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	847744	48.6076	48.608	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	737528	63.6141	63.614	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	332317			12.22- 72.22	45.06
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	915824	55.3882	55.388	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	167269			0.00- 47.19	18.26
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	135676	46.5662	46.566	80.00- 120.00	100.00
4.052	4.045 (0.700)	41	667256			396.19- 456.19	491.80
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.713)	41	423142	54.9074	54.907	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	226580			20.95- 80.95	53.55
4.131	4.123 (0.714)	38	48133			0.00- 41.17	11.38
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	622816	58.4467	58.447	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	276943			22.03- 82.03	44.47
4.238	4.238 (0.733)	51	184033			0.18- 60.18	29.55

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 (0.750)	59	926056	48.0270	48.027	80.00- 120.00	100.00
4.346	4.338 (0.751)	41	219207			0.00- 51.11	23.67
4.338	4.338 (0.750)	57	100428			0.00- 40.49	10.84
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	908899	47.2937	47.294	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	321582			3.10- 63.10	35.38
4.446	4.446 (0.768)	41	328753			1.28- 61.28	36.17
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	218727	49.4490	49.449	80.00- 120.00	100.00
4.482	4.474 (0.775)	61	644556			255.84- 315.84	294.68
4.482	4.482 (0.775)	96	339955			127.59- 187.59	155.42
66 Acrylonitrile					CAS #: 107-13-1		
4.568	4.560 (0.789)	52	346205	56.2250	56.225	80.00- 120.00	100.00
4.568	4.560 (0.789)	53	407007			88.05- 148.05	117.56
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	801378	51.9831	51.983	80.00- 120.00	100.00
4.697	4.696 (0.812)	43	589463			37.52- 97.52	73.56
4.697	4.696 (0.812)	86	88224			0.00- 41.48	11.01
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	703132	53.0549	53.055	80.00- 120.00	100.00
4.969	4.962 (0.859)	65	209641			0.00- 59.70	29.82
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.855)	45	1984133	55.3396	55.340	80.00- 120.00	100.00
4.954	4.947 (0.856)	87	304896			0.00- 48.18	15.37
4.954	4.947 (0.856)	59	184309			0.00- 40.15	9.29
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	85472	50.1828	50.183	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1774395			2432.48-2492.48	2075.98
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1531236	49.3375	49.337	80.00- 120.00	100.00
5.305	5.305 (0.917)	87	453190			1.00- 61.00	29.60
5.305	5.305 (0.917)	41	322288			0.00- 48.73	21.05
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.953)	77	597430	50.7647	50.765	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	194257			2.28- 62.28	32.52
5.513	5.513 (0.953)	97	144748			0.00- 53.93	24.23

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	239616	52.2004	52.200	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	375991			125.75- 185.75	156.91
5.549	5.549 (0.959)	61	892333			332.40- 392.40	372.40
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	174228	49.2575	49.257	80.00- 120.00	100.00
5.563	5.563 (0.962)	43	2570603			1214.50-1274.50	1475.42
5.556	5.556 (0.960)	57	87814			14.68- 74.68	50.40
87 Ethyl Acetate					CAS #: 141-78-6		
5.578	5.570 (0.964)	45	207137	58.8755	58.876	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	892333			452.04- 512.04	430.79
5.578	5.570 (0.964)	70	86750			22.77- 82.77	41.88
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (0.999)	42	691057	58.7454	58.745	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	152102			0.00- 55.82	22.01
5.778	5.771 (0.999)	72	163461			0.00- 57.59	23.65
92 Chloroform					CAS #: 67-66-3		
5.843	5.835 (1.010)	83	734484	53.9431	53.943	80.00- 120.00	100.00
5.843	5.835 (1.010)	85	480185			34.70- 94.70	65.38
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	468927	47.6365	47.636	80.00- 120.00	100.00
5.957	5.957 (1.030)	56	884770			142.57- 202.57	188.68
5.957	5.957 (1.030)	41	502399			62.09- 122.09	107.14
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.971 (1.032)	97	796304	51.7690	51.769	80.00- 120.00	100.00
5.972	5.971 (1.032)	99	507977			34.02- 94.02	63.79
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.053)	119	816149	56.5730	56.573	80.00- 120.00	100.00
6.093	6.086 (1.053)	117	812795			70.64- 130.64	99.59
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.918)	110	210828	51.4045	51.404	80.00- 120.00	100.00
6.122	6.115 (0.918)	75	527314			226.85- 286.85	250.12
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.280	6.280 (1.085)	57	2837916	52.9635	52.963	80.00- 120.00	100.00
6.280	6.280 (1.085)	56	941094			2.24- 62.24	33.16
6.280	6.280 (1.085)	41	740792			0.00- 54.39	26.10

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	1028343	51.7195	51.720	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	239508			0.00- 52.90	23.29
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	268061	47.8127	47.813	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1086188			372.79- 432.79	405.20
6.358	6.358 (0.954)	55	421622			112.09- 172.09	157.29
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	592522	57.2709	57.271	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	184187			0.79- 60.79	31.09
107 Heptane					CAS #: 142-82-5		
6.451	6.444 (0.968)	71	392927	49.8839	49.884	80.00- 120.00	100.00
6.444	6.444 (0.967)	43	1164223			226.53- 286.53	296.29
6.444	6.444 (0.967)	57	560082			100.85- 160.85	142.54
110 n-Butanol					CAS #: 71-36-3		
6.817	6.810 (1.023)	56	351225	48.5865	48.586	80.00- 120.00	100.00
6.817	6.810 (1.023)	41	259886			40.99- 100.99	73.99
6.817	6.810 (1.023)	43	209228			27.38- 87.38	59.57
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	521963	54.1001	54.100	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	567990			76.29- 136.29	108.82
6.867	6.867 (1.030)	97	334441			33.63- 93.63	64.07
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	533466	52.3341	52.334	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	382457			41.07- 101.07	71.69
7.096	7.096 (1.064)	41	343172			22.53- 82.53	64.33
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	401565	50.1885	50.188	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	907438			179.84- 239.84	225.98
7.139	7.139 (0.755)	100	160854			9.59- 69.59	40.06
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.076)	88	261891	48.3434	48.343	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	277375			68.28- 128.28	105.91
7.175	7.175 (1.076)	57	97773			2.68- 62.68	37.33
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	496190	57.4219	57.422	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	454842			60.09- 120.09	91.67

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	395559			48.38- 108.38	79.72
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	834282	55.7697	55.770	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	533158			35.24- 95.24	63.91
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	673152	53.2634	53.263	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	212638			2.42- 62.42	31.59
7.691	7.691 (1.154)	39	477745			37.16- 97.16	70.97
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	678789	48.6182	48.618	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	324389			15.78- 75.78	47.79
6.974	6.974 (1.046)	55	831959			84.64- 144.64	122.57
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	525993	50.8135	50.813	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1537638			242.35- 302.35	292.33
7.798	7.798 (1.170)	85	155553			3.24- 63.24	29.57
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1397154	50.9316	50.932	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	806696			28.38- 88.38	57.74
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.192)	57	606300	51.8355	51.835	80.00- 120.00	100.00
7.949	7.949 (1.192)	85	479185			56.00- 116.00	79.03
7.949	7.949 (1.192)	43	1686482			228.66- 288.66	278.16
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	622780	54.3470	54.347	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	196120			1.24- 61.24	31.49
8.214	8.214 (0.868)	39	430379			34.11- 94.11	69.11
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	506675	53.4934	53.493	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	313910			31.96- 91.96	61.95
8.400	8.400 (0.888)	83	425405			52.93- 112.93	83.96
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	725699	54.6813	54.681	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	562006			47.84- 107.84	77.44
8.464	8.464 (0.895)	131	549043			45.29- 105.29	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		
8.586	8.586 (0.908)	58	697348	51.5320	51.532	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1438099			162.87- 222.87	206.22
8.586	8.586 (0.908)	100	100811			0.00- 45.94	14.46
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	683820	52.4925	52.492	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	914496			94.99- 154.99	133.73
8.579	8.579 (1.287)	78	222092			2.05- 62.05	32.48
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	1007952	56.9553	56.955	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	771292			47.45- 107.45	76.52
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	845961	55.6870	55.687	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	801790			64.21- 124.21	94.78
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	1006235	53.8003	53.800	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	290199			0.00- 59.64	28.84
7.612	7.612 (1.142)	144	97584			0.00- 39.63	9.70
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1243180	53.7643	53.764	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	397329			1.74- 61.74	31.96
9.496	9.496 (1.004)	77	650626			25.04- 85.04	52.34
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	626191	51.7900	51.790	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1876735			273.74- 333.74	299.71
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1776591	57.1093	57.109	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1372793			54.16- 114.16	77.27
9.603	9.603 (1.015)	85	365152			0.00- 53.90	20.55
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	594998	45.9597	45.960	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	582315			57.42- 117.42	97.87
9.596	9.596 (1.014)	95	208412			5.70- 65.70	35.03
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	776924	51.3052	51.305	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1496348			163.73- 223.73	192.60

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	732626	50.4949	50.495	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1479521			177.45- 237.45	201.95
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1217803	49.0791	49.079	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	564294			17.88- 77.88	46.34
167 Bromoform					CAS #: 75-25-2		
10.549	10.542 (1.115)	173	977632	56.0439	56.044	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	500824			21.25- 81.25	51.23
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2306255	50.6009	50.601	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	663777			0.00- 58.52	28.78
10.649	10.649 (1.126)	51	337175			0.00- 43.00	14.62
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	708157	43.4460	43.446	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	204970			1.94- 61.94	28.94
10.871	10.871 (1.149)	42	481751			37.89- 97.89	68.03
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.107 (1.173)	83	1182123	53.1396	53.140	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	762073			35.20- 95.20	64.47
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	755971	54.5359	54.536	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	734899			67.21- 127.21	97.21
11.179	11.179 (1.182)	77	450335			29.02- 89.02	59.57
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	709398	52.4928	52.493	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2737487			366.49- 426.49	385.89
11.150	11.150 (1.179)	105	103266			0.00- 44.85	14.56
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	368844	52.0217	52.022	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1169634			280.55- 340.55	317.11
11.100	11.107 (1.173)	61	177098			15.49- 75.49	48.01
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	333159	71.6773	71.677	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	224148			49.11- 109.11	67.28
11.179	11.179 (1.182)	75	1169634			426.44- 486.44	351.07

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	1810671	51.0737	51.074	80.00- 120.00	100.00
11.251	11.258 (1.189)	71	461436			0.00- 57.66	25.48
11.258	11.258 (1.190)	142	69143			0.00- 34.09	3.82
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.286 (1.193)	120	756457	51.4712	51.471	80.00- 120.00	100.00
11.287	11.286 (1.193)	105	2332988			284.55- 344.55	308.41
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	604164	52.5046	52.505	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2016393			315.17- 375.17	333.75
11.301	11.301 (1.195)	65	291184			21.55- 81.55	48.20
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1048201	51.8028	51.803	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1994667			164.93- 224.93	190.29
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	895165	44.5325	44.532	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	498118			25.30- 85.30	55.65
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.745 (1.241)	119	1972447	52.1179	52.118	80.00- 120.00	100.00
11.738	11.745 (1.241)	134	484471			0.00- 54.25	24.56
11.738	11.738 (1.241)	91	1155363			31.27- 91.27	58.58
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	1969250	51.5612	51.561	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	990341			19.05- 79.05	50.29
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	12.003 (1.268)	134	620225	52.7281	52.728	80.00- 120.00	100.00
11.996	12.003 (1.268)	105	2883402			437.55- 497.55	464.90
11.996	11.996 (1.268)	91	427007			40.76- 100.76	68.85
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2674584	51.4443	51.444	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	695140			0.00- 55.54	25.99
12.160	12.160 (1.285)	91	556187			0.00- 51.48	20.80
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.203 (1.289)	146	1409045	53.9005	53.900	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	900224			33.21- 93.21	63.89
12.196	12.203 (1.289)	111	560385			11.31- 71.31	39.77

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	1429441	54.1104	54.110	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	909046			33.90- 93.90	63.59
12.311	12.311 (1.301)	111	545149			9.45- 69.45	38.14
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1817022	50.0883	50.088	80.00- 120.00	100.00
12.461	12.468 (1.317)	126	428575			0.00- 53.26	23.59
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2164474	52.8557	52.856	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2078893			58.12- 118.12	96.05
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	671086	50.8227	50.823	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2299291			314.79- 374.79	342.62
12.626	12.626 (1.335)	92	1220523			154.29- 214.29	181.87
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1339728	52.2659	52.266	80.00- 120.00	100.00
12.741	12.741 (1.347)	148	854597			33.84- 93.84	63.79
12.741	12.733 (1.347)	111	548209			12.73- 72.73	40.92
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	820126	52.8257	52.826	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	664802			52.48- 112.48	81.06
13.600	13.600 (1.438)	155	632531			47.41- 107.41	77.13
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	1967458	60.6144	60.614	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1744340			52.87- 112.87	88.66
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1263195	66.6996	66.700	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1191017			65.33- 125.33	94.29
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.582	14.581 (1.541)	225	937750	70.3571	70.357	80.00- 120.00	100.00
14.582	14.581 (1.541)	223	589086			33.17- 93.17	62.82
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	279248	5.76945	5.769	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	36016			0.00- 42.88	12.90
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1142397	68.2352	68.235	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	1083605			65.75- 125.75	94.85
15.069	15.069 (1.593)	145	383990			5.23- 65.23	33.61

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072803.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	156490	-2.41
108 1,4-Difluorobenze	582857	349714	816000	602525	3.37
153 Chlorobenzene-d5	560035	336021	784049	582315	3.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	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.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
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/28JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	59.785	119.57	70-130
5 Propylene	50.000	55.338	110.68	70-130
7 1,1-Difluoroethan	50.000	51.559	103.12	70-130
8 Freon 12	50.000	55.612	111.23	70-130
9 Chlorodifluoromet	50.000	55.390	110.78	70-130
10 Freon 114	50.000	52.319	104.64	70-130
12 Isobutane	50.000	54.632	109.26	70-130
15 Chloromethane	50.000	52.114	104.23	70-130
18 Butane	50.000	49.451	98.90	70-130
19 Vinyl Chloride	50.000	50.591	101.18	70-130
20 1,3-Butadiene	50.000	58.251	116.50	70-130
24 Bromomethane	50.000	45.795	91.59	70-130
30 Chloroethane	50.000	49.269	98.54	70-130
31 Isopentane	50.000	54.342	108.68	70-130
32 Vinyl Bromide	50.000	48.176	96.35	70-130
33 Freon 11	50.000	54.494	108.99	70-130
34 Dichlorofluoromet	50.000	50.553	101.11	70-130
35 Pentane	50.000	52.222	104.44	70-130
38 Ethyl Ether	50.000	48.707	97.41	70-130
39 Ethanol	58.000	53.346	91.98	70-130
42 Acrolein	58.000	54.616	94.16	70-130
43 Freon 113	50.000	51.082	102.16	70-130
44 1,1-Dichloroethen	50.000	49.406	98.81	70-130
47 Acetone	50.000	52.765	105.53	70-130
48 Carbon Disulfide	50.000	48.608	97.22	70-130
49 Iodomethane	50.000	63.614	127.23	70-130
52 2-Propanol	50.000	55.388	110.78	70-130
54 3-Chloropropene	50.000	46.566	93.13	70-130
57 Acetonitrile	50.000	54.907	109.81	70-130
59 Methylene Chlorid	50.000	58.447	116.89	70-130
62 tert-Butyl alcoho	50.000	48.027	96.05	70-130
63 Methyl tert-butyl	50.000	47.294	94.59	70-130
64 trans-1,2-Dichlor	50.000	49.449	98.90	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	56.225	112.45	70-130
67	Hexane	50.000	51.983	103.97	70-130
71	1,1-Dichloroethan	50.000	53.055	106.11	70-130
72	Isopropyl ether	50.000	55.340	110.68	70-130
73	Vinyl Acetate	50.000	50.183	100.37	70-130
79	Ethyl-tert-butyl	50.000	49.337	98.67	70-130
84	2,2-Dichloropropa	50.000	50.765	101.53	70-130
85	cis-1,2-Dichloroe	50.000	52.200	104.40	70-130
86	2-Butanone	50.000	49.257	98.51	70-130
87	Ethyl Acetate	50.000	58.876	117.75	70-130
89	Tetrahydrofuran	50.000	58.745	117.49	70-130
92	Chloroform	50.000	53.943	107.89	70-130
94	Cyclohexane	50.000	47.636	95.27	70-130
96	1,1,1-Trichloroet	50.000	51.769	103.54	70-130
99	1,1-Dichloroprope	50.000	51.404	102.81	70-130
97	Carbon Tetrachlor	50.000	56.573	113.15	70-130
101	2,2,4-Trimethylpe	50.000	52.963	105.93	70-130
102	Benzene	50.000	51.720	103.44	70-130
105	tert-Amyl methyl	50.000	47.813	95.63	70-130
106	1,2-Dichloroethan	50.000	57.271	114.54	70-130
107	Heptane	50.000	49.884	99.77	70-130
110	n-Butanol	50.000	48.586	97.17	70-130
111	Trichloroethene	50.000	54.100	108.20	70-130
118	Dibromomethane	50.000	57.422	114.84	70-130
127	Methylcyclohexane	50.000	48.618	97.24	70-130
114	1,2-Dichloropropa	50.000	52.334	104.67	70-130
116	Methyl Methacryla	50.000	50.188	100.38	70-130
117	1,4-Dioxane	50.000	48.343	96.69	70-130
122	Bromodichlorometh	50.000	55.770	111.54	70-130
126	cis-1,3-Dichlorop	50.000	53.263	106.53	70-130
131	4-Methyl-2-pentan	50.000	50.813	101.63	70-130
136	Octane	50.000	51.835	103.67	70-130
137	Toluene	50.000	50.932	101.86	70-130
139	trans-1,3-Dichlor	50.000	54.347	108.69	70-130
141	1,1,2-Trichloroet	50.000	53.493	106.99	70-130
142	Tetrachloroethene	50.000	54.681	109.36	70-130
143	2-Hexanone	50.000	51.532	103.06	70-130
144	1,3-Dichloropropa	50.000	52.492	104.98	70-130
146	Dibromochlorometh	50.000	56.955	113.91	70-130
148	1,2-Dibromoethane	50.000	55.687	111.37	70-130
151	1-Bromo-2-Chloroe	50.000	53.800	107.60	70-130
154	Chlorobenzene	50.000	53.764	107.53	70-130
155	Ethyl Benzene	50.000	51.790	103.58	70-130
156	Nonane	50.000	57.109	114.22	70-130
157	1,1,1,2-Tetrachlo	50.000	45.960	91.92	70-130
158	m,p-Xylene	50.000	51.305	102.61	70-130
164	o-Xylene	50.000	50.495	100.99	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	49.079	98.16	70-130
167 Bromoform	50.000	56.044	112.09	70-130
168 Cumene	50.000	50.601	101.20	70-130
169 Cyclohexanone	50.000	43.446	86.89	70-130
175 1,1,2,2-Tetrachlo	50.000	53.140	106.28	70-130
177 Bromobenzene	50.000	54.536	109.07	70-130
178 Propylbenzene	50.000	52.493	104.99	70-130
179 1,2,3-Trichloropr	50.000	52.022	104.04	70-130
181 trans-1,4-Dichlor	50.000	71.677	143.35*	70-130
182 Decane	50.000	51.074	102.15	70-130
183 4-Ethyltoluene	50.000	51.471	102.94	70-130
184 2-Chlorotoluene	50.000	52.505	105.01	70-130
185 1,3,5-Trimethylbe	50.000	51.803	103.61	70-130
188 alpha Methyl Styr	50.000	44.532	89.06	70-130
189 tert-Butylbenzene	50.000	52.118	104.24	70-130
190 1,2,4-Trimethylbe	50.000	51.561	103.12	70-130
192 sec-Butylbenzene	50.000	52.728	105.46	70-130
194 p-Cymene	50.000	51.444	102.89	70-130
195 1,3-Dichlorobenze	50.000	53.900	107.80	70-130
196 1,4-Dichlorobenze	50.000	54.110	108.22	70-130
199 alpha-Chlorotolue	50.000	50.088	100.18	70-130
201 Undecane	50.000	52.856	105.71	70-130
202 Butylbenzene	50.000	50.823	101.65	70-130
204 1,2-Dichlorobenze	50.000	52.266	104.53	70-130
206 1,2-Dibromo-3-chl	50.000	52.826	105.65	70-130
207 Dodecane	50.000	60.614	121.23	70-130
213 1,2,4-Trichlorobe	58.000	66.700	115.00	70-130
215 Hexachlorobutadie	58.000	70.357	121.31	70-130
216 Naphthalene	5.800	5.769	99.47	60-140
222 1,2,3-Trichlorobe	58.000	68.235	117.65	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.963	103.85	70-130
$ 134 Toluene-d8	25.000	25.180	100.72	70-130
$ 170 4-Bromofluorobenz	25.000	25.162	100.65	70-130

Data File: /chem/msdp.i/28JUL21.b/p072803.d

Page 1

Date : 28-JUL-2021 11:43

Client ID: LCS

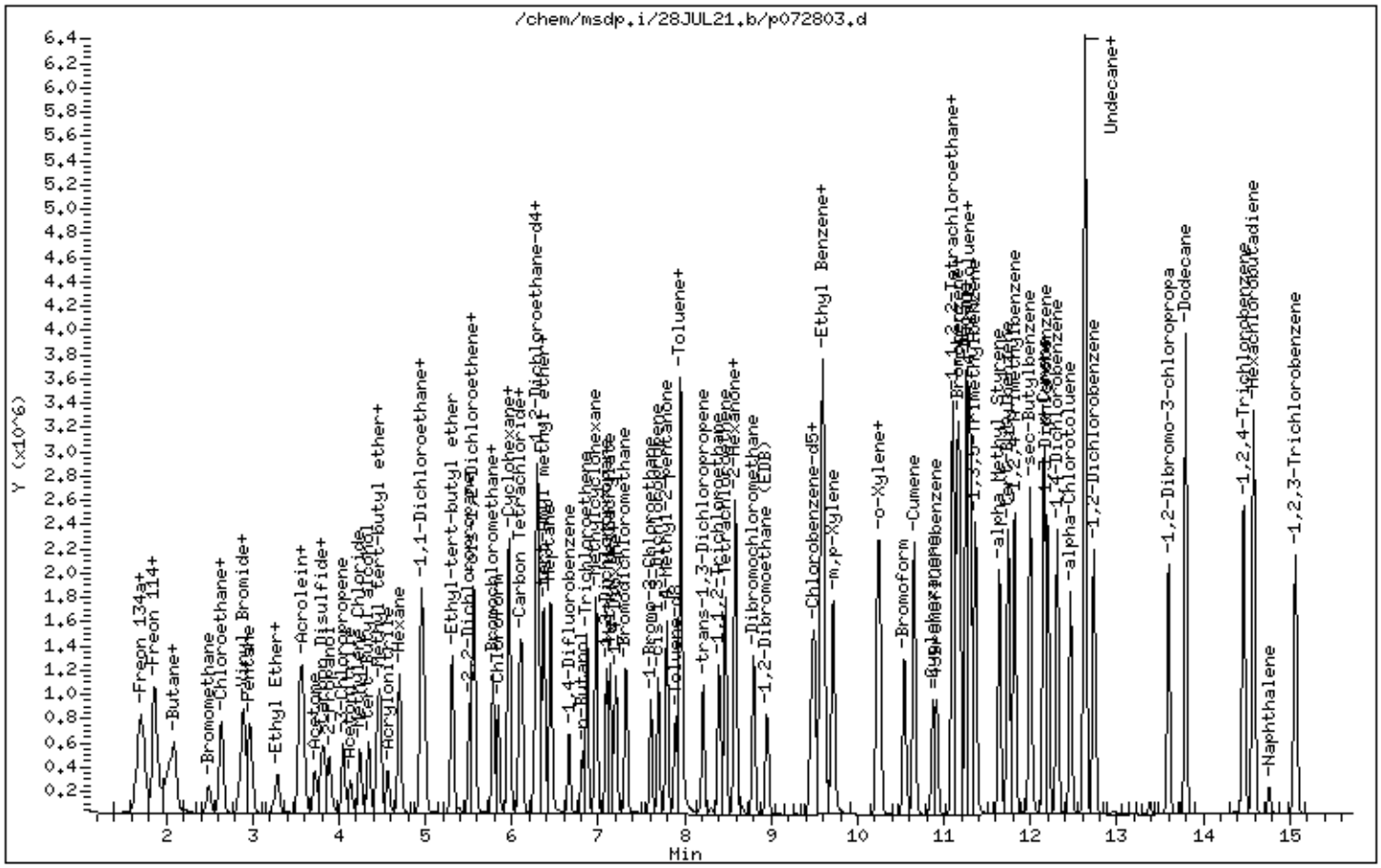
Instrument: msdp.i

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#: 2107361-18BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 12:11 PM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	100	70-130
1,1,2,2-Tetrachloroethane	105	70-130
1,1,2-Trichloroethane	107	70-130
1,1-Dichloroethane	105	70-130
1,1-Dichloroethene	96	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	126	70-130
1,2,4-Trimethylbenzene	103	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	111	70-130
1,2-Dichlorobenzene	106	70-130
1,2-Dichloroethane	115	70-130
1,2-Dichloropropane	104	70-130
1,3,5-Trimethylbenzene	102	70-130
1,3-Butadiene	114	70-130
1,3-Dichlorobenzene	107	70-130
1,4-Dichlorobenzene	108	70-130
1,4-Dioxane	97	70-130
2,2,4-Trimethylpentane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
2-Hexanone	102	70-130
2-Propanol	106	70-130
3-Chloropropene	93	70-130
4-Ethyltoluene	101	70-130
4-Methyl-2-pentanone	100	70-130
Acetone	102	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	100	70-130
Benzene	103	70-130
Bromodichloromethane	112	70-130
Bromoform	112	70-130
Bromomethane	88	70-130
Carbon Disulfide	93	70-130
Carbon Tetrachloride	109	70-130
Chlorobenzene	106	70-130
Chloroethane	94	70-130
Chloroform	104	70-130
Chloromethane	99	70-130
cis-1,2-Dichloroethene	102	70-130

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Client Sample ID: LCSD

Lab ID#: 2107361-18BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 12:11 PM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	104	70-130
Cumene	99	70-130
Cyclohexane	93	70-130
Dibromochloromethane	113	70-130
Dibromomethane	Not Spiked	
Ethanol	88	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	102	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	107	70-130
Freon 12	107	70-130
Freon 113	98	70-130
Freon 114	101	70-130
Freon 134a	Not Spiked	
Heptane	99	70-130
Hexachlorobutadiene	131 Q	70-130
Hexachloroethane	Not Spiked	
Hexane	102	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	103	70-130
Methyl tert-butyl ether	91	70-130
Methylene Chloride	113	70-130
Naphthalene	109	60-140
o-Xylene	101	70-130
Propylbenzene	103	70-130
Propylene	Not Spiked	
Styrene	97	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	110	70-130
Tetrahydrofuran	112	70-130
Toluene	102	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	95	70-130
trans-1,3-Dichloropropene	108	70-130
Trichloroethene	107	70-130
Vinyl Acetate	Not Spiked	
Vinyl Bromide	Not Spiked	
Vinyl Chloride	95	70-130

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Client Sample ID: LCSD

Lab ID#: 2107361-18BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p072804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/28/21 12:11 PM**	

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/28JUL21.b/p072804.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 28-JUL-2021 12:11
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/28JUL21.b/p21q0519a.m
Meth Date : 28-Jul-2021 13:01 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	164647	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	127518				48.23- 108.23	77.45
5.778	5.778 (1.000)	49	335873				150.57- 210.57	204.00
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.666	6.659 (1.000)	114	617074	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	90224				0.00- 45.71	14.62
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	597192	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	302098				23.78- 83.78	50.59
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.315	6.308 (1.092)	65	227491	25.0364	25.036		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	130187				27.21- 87.21	57.23
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.184)	98	669872	24.9991	24.999		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	71615				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	435410			34.95- 94.95	65.00
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	381759	24.8943	24.894	80.00- 120.00	100.00
10.921	10.914 (1.154)	95	462359			95.92- 155.92	121.11
10.921	10.921 (1.154)	176	366357			66.89- 126.89	95.97
4 Freon 134a					CAS #: 811-97-2		
1.647	1.647 (0.285)	83	299356	57.4454	57.445	80.00- 120.00	100.00
1.647	1.647 (0.285)	69	244464			59.44- 119.44	81.66
1.745	1.744 (0.302)	51	1332286			419.06- 479.06	445.05
5 Propylene					CAS #: 115-07-1		
1.689	1.675 (0.292)	41	398709	52.9186	52.918	80.00- 120.00	100.00
1.689	1.675 (0.292)	42	263855			35.28- 95.28	66.18
1.689	1.675 (0.292)	39	269761			38.35- 98.35	67.66
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.703 (0.294)	65	184784	49.5130	49.513	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1332286			597.63- 657.63	720.99
1.703	1.703 (0.294)	47	136419			33.72- 93.72	73.83
8 Freon 12					CAS #: 75-71-8		
1.717	1.717 (0.297)	85	790780	53.5501	53.550	80.00- 120.00	100.00
1.717	1.717 (0.297)	87	254563			2.37- 62.37	32.19
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.759	1.758 (0.304)	67	80185	54.9710	54.971	80.00- 120.00	100.00
1.745	1.744 (0.302)	51	1332286			1501.01-1561.01	1661.50
10 Freon 114					CAS #: 76-14-2		
1.857	1.856 (0.321)	135	730801	50.4154	50.415	80.00- 120.00	100.00
1.857	1.856 (0.321)	137	231872			2.30- 62.30	31.73
12 Isobutane					CAS #: 75-28-5		
1.871	1.870 (0.323)	43	868698	52.0789	52.079	80.00- 120.00	100.00
1.871	1.870 (0.323)	42	282432			2.44- 62.44	32.51
1.871	1.870 (0.323)	58	27439			0.00- 33.36	3.16
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	424520	49.5526	49.552	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	105961			0.00- 56.26	24.96
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.352)	58	96474	48.6130	48.613	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	838419			823.29- 883.29	869.06
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.075 (0.359)	62	488312	47.3795	47.380	80.00- 120.00	100.00
2.075	2.075 (0.359)	64	151470			0.00- 59.69	31.02
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	474847	57.2842	57.284	80.00- 120.00	100.00
2.096	2.096 (0.362)	39	414673			52.37- 112.37	87.33
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.429)	94	291464	43.9814	43.981	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	272823			64.07- 124.07	93.60
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	173421	46.7938	46.794	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	50193			0.04- 60.04	28.94
2.612	2.612 (0.452)	49	69918			4.54- 64.54	40.32
31 Isopentane					CAS #: 78-78-4		
2.641	2.634 (0.456)	43	590594	52.3716	52.372	80.00- 120.00	100.00
2.641	2.634 (0.456)	57	351905			34.12- 94.12	59.58
32 Vinyl Bromide					CAS #: 593-60-2		
2.849	2.848 (0.492)	106	286683	46.8022	46.802	80.00- 120.00	100.00
2.849	2.848 (0.492)	108	289858			69.27- 129.27	101.11
33 Freon 11					CAS #: 75-69-4		
2.891	2.891 (0.500)	101	838154	53.4111	53.411	80.00- 120.00	100.00
2.891	2.891 (0.500)	103	546609			34.72- 94.72	65.22
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.906 (0.502)	67	661415	48.9022	48.902	80.00- 120.00	100.00
2.906	2.906 (0.502)	69	205398			0.84- 60.84	31.05
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	920498	50.2183	50.218	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	127216			0.00- 44.98	13.82
2.977	2.970 (0.515)	72	56130			0.00- 37.39	6.10
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.568)	74	144306	46.6643	46.664	80.00- 120.00	100.00
3.285	3.285 (0.568)	59	302814			163.46- 223.46	209.84
3.285	3.285 (0.568)	45	472698			250.40- 310.40	327.57

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	83286	51.0083	51.008	80.00- 120.00	100.00
3.285	3.285 (0.568)	45	470115			511.19- 571.19	564.46
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.611)	55	151349	53.4186	53.419	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	206604			111.10- 171.10	136.51
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	571415	49.0104	49.010	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	369722			33.56- 93.56	64.70
3.550	3.550 (0.614)	101	687139			89.21- 149.21	120.25
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	335832	48.2170	48.217	80.00- 120.00	100.00
3.586	3.579 (0.620)	98	210087			34.02- 94.02	62.56
3.586	3.579 (0.620)	61	716716			168.77- 228.77	213.41
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	220001	50.9685	50.968	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	782729			302.95- 362.95	355.78
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.823 (0.662)	76	856191	46.6598	46.660	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	764744	62.6938	62.694	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	349876			12.22- 72.22	45.75
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	926155	53.2380	53.238	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	170829			0.00- 47.19	18.45
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.052 (0.700)	76	142473	46.4766	46.477	80.00- 120.00	100.00
4.052	4.045 (0.700)	41	680743			396.19- 456.19	477.80
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	420257	51.8314	51.831	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	227561			20.95- 80.95	54.15
4.131	4.123 (0.714)	38	45741			0.00- 41.17	10.88
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.238 (0.733)	49	633270	56.4836	56.484	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	281540			22.03- 82.03	44.46
4.238	4.238 (0.733)	51	192064			0.18- 60.18	30.33

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 (0.750)	59	952611	46.9566	46.957	80.00- 120.00	100.00
4.338	4.338 (0.750)	41	221463			0.00- 51.11	23.25
4.338	4.338 (0.750)	57	102522			0.00- 40.49	10.76
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	919400	45.4700	45.470	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	329162			3.10- 63.10	35.80
4.446	4.446 (0.768)	41	327791			1.28- 61.28	35.65
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.482 (0.775)	98	221550	47.6057	47.606	80.00- 120.00	100.00
4.482	4.474 (0.775)	61	647997			255.84- 315.84	292.48
4.482	4.482 (0.775)	96	357676			127.59- 187.59	161.44
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.788)	52	347031	53.5670	53.567	80.00- 120.00	100.00
4.568	4.560 (0.790)	53	413036			88.05- 148.05	119.02
67 Hexane					CAS #: 110-54-3		
4.697	4.696 (0.812)	57	826235	50.9403	50.940	80.00- 120.00	100.00
4.697	4.696 (0.812)	43	591875			37.52- 97.52	71.64
4.697	4.696 (0.812)	86	87646			0.00- 41.48	10.61
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.962 (0.859)	63	730735	52.4060	52.406	80.00- 120.00	100.00
4.969	4.962 (0.859)	65	207798			0.00- 59.70	28.44
72 Isopropyl ether					CAS #: 108-20-3		
4.954	4.947 (0.856)	45	2019010	53.5226	53.522	80.00- 120.00	100.00
4.954	4.947 (0.856)	87	315567			0.00- 48.18	15.63
4.954	4.947 (0.856)	59	189163			0.00- 40.15	9.37
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.997 (0.864)	86	83854	46.7939	46.794	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	2404654			2432.48-2492.48	2867.64
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1560334	47.7843	47.784	80.00- 120.00	100.00
5.305	5.305 (0.917)	87	468649			1.00- 61.00	30.04
5.305	5.305 (0.917)	41	325953			0.00- 48.73	20.89
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.953)	77	615464	49.7061	49.706	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	196117			2.28- 62.28	31.87
5.513	5.513 (0.953)	97	148346			0.00- 53.93	24.10

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	247534	51.2537	51.254	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	385590			125.75- 185.75	155.77
5.549	5.549 (0.959)	61	912247			332.40- 392.40	368.53
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	178075	47.8508	47.851	80.00- 120.00	100.00
5.563	5.563 (0.962)	43	2603755			1214.50-1274.50	1462.17
5.556	5.556 (0.960)	57	89902			14.68- 74.68	50.49
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.963)	45	207903	56.1657	56.166	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	912247			452.04- 512.04	438.78
5.578	5.570 (0.964)	70	89390			22.77- 82.77	43.00
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (0.999)	42	696640	56.2862	56.286	80.00- 120.00	100.00
5.778	5.778 (0.999)	71	152497			0.00- 55.82	21.89
5.778	5.771 (0.999)	72	167397			0.00- 57.59	24.03
92 Chloroform					CAS #: 67-66-3		
5.843	5.835 (1.010)	83	748901	52.2771	52.277	80.00- 120.00	100.00
5.843	5.835 (1.010)	85	496777			34.70- 94.70	66.33
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	479841	46.3302	46.330	80.00- 120.00	100.00
5.957	5.957 (1.030)	56	908771			142.57- 202.57	189.39
5.957	5.957 (1.030)	41	510086			62.09- 122.09	106.30
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.972	5.971 (1.032)	97	813225	50.2498	50.250	80.00- 120.00	100.00
5.972	5.971 (1.032)	99	524161			34.02- 94.02	64.45
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.053)	119	828265	54.5684	54.568	80.00- 120.00	100.00
6.093	6.086 (1.053)	117	824038			70.64- 130.64	99.49
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.918)	110	214461	51.0576	51.058	80.00- 120.00	100.00
6.122	6.115 (0.918)	75	536649			226.85- 286.85	250.23
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.287	6.280 (1.087)	57	2890737	51.2765	51.276	80.00- 120.00	100.00
6.287	6.280 (1.087)	56	958559			2.24- 62.24	33.16
6.280	6.280 (1.085)	41	731260			0.00- 54.39	25.30

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	1049476	51.5379	51.538	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	245330			0.00- 52.90	23.38
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	272930	47.5333	47.533	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1116818			372.79- 432.79	409.20
6.358	6.358 (0.954)	55	433229			112.09- 172.09	158.73
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	609731	57.5447	57.545	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	183302			0.79- 60.79	30.06
107 Heptane					CAS #: 142-82-5		
6.452	6.444 (0.968)	71	398158	49.3562	49.356	80.00- 120.00	100.00
6.452	6.444 (0.968)	43	1181009			226.53- 286.53	296.62
6.452	6.444 (0.968)	57	584200			100.85- 160.85	146.73
110 n-Butanol					CAS #: 71-36-3		
6.817	6.810 (1.023)	56	352496	47.6125	47.612	80.00- 120.00	100.00
6.810	6.810 (1.021)	41	260569			40.99- 100.99	73.92
6.810	6.810 (1.021)	43	213116			27.38- 87.38	60.46
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	531063	53.7455	53.745	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	583242			76.29- 136.29	109.83
6.867	6.867 (1.030)	97	340935			33.63- 93.63	64.20
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.096 (1.064)	63	543712	52.0816	52.082	80.00- 120.00	100.00
7.096	7.096 (1.064)	62	389592			41.07- 101.07	71.65
7.096	7.096 (1.064)	41	348721			22.53- 82.53	64.14
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	413348	50.3743	50.374	80.00- 120.00	100.00
7.139	7.139 (0.755)	41	921553			179.84- 239.84	222.95
7.139	7.139 (0.755)	100	160255			9.59- 69.59	38.77
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.076)	88	269581	48.5896	48.590	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	283051			68.28- 128.28	105.00
7.175	7.175 (1.076)	57	101571			2.68- 62.68	37.68
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.211 (0.762)	174	508371	57.3659	57.366	80.00- 120.00	100.00
7.204	7.204 (0.761)	93	462024			60.09- 120.09	90.88

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	403420			48.38- 108.38	79.36
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	855560	55.8436	55.844	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	548693			35.24- 95.24	64.13
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.698 (1.155)	75	676894	52.2966	52.296	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	215218			2.42- 62.42	31.79
7.698	7.691 (1.155)	39	484847			37.16- 97.16	71.63
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	697328	48.7685	48.768	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	329125			15.78- 75.78	47.20
6.974	6.974 (1.046)	55	859403			84.64- 144.64	123.24
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	530622	50.0521	50.052	80.00- 120.00	100.00
7.798	7.798 (1.170)	43	1558585			242.35- 302.35	293.73
7.798	7.798 (1.170)	85	160940			3.24- 63.24	30.33
137 Toluene					CAS #: 108-88-3		
7.956	7.956 (1.193)	91	1430415	50.9146	50.915	80.00- 120.00	100.00
7.956	7.956 (1.193)	92	821576			28.38- 88.38	57.44
136 Octane					CAS #: 111-65-9		
7.949	7.949 (1.192)	57	628677	52.4814	52.481	80.00- 120.00	100.00
7.949	7.949 (1.192)	85	485591			56.00- 116.00	77.24
7.949	7.949 (1.192)	43	1707573			228.66- 288.66	271.61
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.214	8.214 (0.868)	75	634748	54.0115	54.012	80.00- 120.00	100.00
8.214	8.214 (0.868)	77	199264			1.24- 61.24	31.39
8.214	8.214 (0.868)	39	435911			34.11- 94.11	68.67
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	520001	53.5328	53.533	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	318402			31.96- 91.96	61.23
8.400	8.400 (0.888)	83	430448			52.93- 112.93	82.78
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	745626	54.7832	54.783	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	577340			47.84- 107.84	77.43
8.464	8.464 (0.895)	131	561102			45.29- 105.29	75.25

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	707053	50.9476	50.948	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1458941			162.87- 222.87	206.34
8.586	8.586 (0.908)	100	100972			0.00- 45.94	14.28
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	693376	51.9710	51.971	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	935666			94.99- 154.99	134.94
8.579	8.579 (1.287)	78	225349			2.05- 62.05	32.50
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	1025404	56.4980	56.498	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	795230			47.45- 107.45	77.55
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	863084	55.3989	55.399	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	819578			64.21- 124.21	94.96
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	1022504	53.3812	53.381	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	299236			0.00- 59.64	29.27
7.612	7.612 (1.142)	144	98828			0.00- 39.63	9.67
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1261753	53.2082	53.208	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	405187			1.74- 61.74	32.11
9.496	9.496 (1.004)	77	654227			25.04- 85.04	51.85
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	633885	51.1204	51.120	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1924634			273.74- 333.74	303.63
156 Nonane					CAS #: 111-84-2		
9.603	9.603 (1.015)	43	1777285	55.7084	55.708	80.00- 120.00	100.00
9.603	9.603 (1.015)	57	1376773			54.16- 114.16	77.46
9.603	9.603 (1.015)	85	365195			0.00- 53.90	20.55
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	602592	45.3868	45.387	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	597192			57.42- 117.42	99.10
9.596	9.596 (1.014)	95	214246			5.70- 65.70	35.55
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	798203	51.3973	51.397	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1535864			163.73- 223.73	192.42

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	749027	50.3392	50.339	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1522384			177.45- 237.45	203.25
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1237796	48.6422	48.642	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	574256			17.88- 77.88	46.39
167 Bromoform					CAS #: 75-25-2		
10.542	10.542 (1.114)	173	998414	55.8094	55.809	80.00- 120.00	100.00
10.542	10.542 (1.114)	171	511646			21.25- 81.25	51.25
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2321153	49.6591	49.659	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	679166			0.00- 58.52	29.26
10.649	10.649 (1.126)	51	337380			0.00- 43.00	14.54
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	721184	43.1430	43.143	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	207939			1.94- 61.94	28.83
10.871	10.871 (1.149)	42	476951			37.89- 97.89	66.13
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1200077	52.6029	52.603	80.00- 120.00	100.00
11.107	11.107 (1.174)	85	771819			35.20- 95.20	64.31
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	770876	54.2259	54.226	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	751079			67.21- 127.21	97.43
11.179	11.179 (1.182)	77	461931			29.02- 89.02	59.92
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	713635	51.4909	51.491	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2796595			366.49- 426.49	391.88
11.150	11.150 (1.179)	105	105841			0.00- 44.85	14.83
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	378019	51.9875	51.988	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1190995			280.55- 340.55	315.06
11.100	11.107 (1.173)	61	175562			15.49- 75.49	46.44
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	338747	71.0640	71.064	80.00- 120.00	100.00(R)
11.179	11.172 (1.182)	89	230584			49.11- 109.11	68.07
11.179	11.179 (1.182)	75	1190995			426.44- 486.44	351.59

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
11.251	11.258 (1.189)	57	1840999	50.6355	50.636	80.00- 120.00	100.00
11.258	11.258 (1.190)	71	473573			0.00- 57.66	25.72
11.258	11.258 (1.190)	142	70119			0.00- 34.09	3.81
183 4-Ethyltoluene					CAS #: 622-96-8		
11.287	11.286 (1.193)	120	758641	50.3339	50.334	80.00- 120.00	100.00
11.287	11.286 (1.193)	105	2366180			284.55- 344.55	311.90
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	621813	52.6923	52.692	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2062858			315.17- 375.17	331.75
11.301	11.301 (1.195)	65	303581			21.55- 81.55	48.82
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1063608	51.2548	51.255	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	2040546			164.93- 224.93	191.85
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	920331	44.6439	44.644	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	504918			25.30- 85.30	54.86
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	2019718	52.0375	52.037	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	493963			0.00- 54.25	24.46
11.738	11.738 (1.241)	91	1166569			31.27- 91.27	57.76
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.817 (1.249)	105	2014169	51.4236	51.424	80.00- 120.00	100.00
11.817	11.817 (1.249)	120	1030883			19.05- 79.05	51.18
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	12.003 (1.268)	134	635976	52.7204	52.720	80.00- 120.00	100.00
11.996	12.003 (1.268)	105	2921293			437.55- 497.55	459.34
11.996	11.996 (1.268)	91	442472			40.76- 100.76	69.57
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2740220	51.3938	51.394	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	719389			0.00- 55.54	26.25
12.160	12.160 (1.285)	91	564151			0.00- 51.48	20.59
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1437782	53.6297	53.630	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	920854			33.21- 93.21	64.05
12.203	12.203 (1.290)	111	574733			11.31- 71.31	39.97

					CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
196 1,4-Dichlorobenzene						CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1461841	53.9584	53.958	80.00- 120.00		100.00
12.311	12.311 (1.301)	148	943115			33.90- 93.90		64.52
12.311	12.311 (1.301)	111	558853			9.45- 69.45		38.23
199 alpha-Chlorotoluene						CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1868021	50.2114	50.211	80.00- 120.00		100.00
12.461	12.468 (1.317)	126	444636			0.00- 53.26		23.80
201 Undecane						CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2274603	54.1613	54.161	80.00- 120.00		100.00
12.640	12.640 (1.336)	43	2158381			58.12- 118.12		94.89
202 Butylbenzene						CAS #: 104-51-8		
12.626	12.626 (1.335)	134	694939	51.3181	51.318	80.00- 120.00		100.00
12.626	12.626 (1.335)	91	2372148			314.79- 374.79		341.35
12.626	12.626 (1.335)	92	1245674			154.29- 214.29		179.25
204 1,2-Dichlorobenzene						CAS #: 95-50-1		
12.741	12.741 (1.347)	146	1390818	52.9074	52.907	80.00- 120.00		100.00
12.741	12.741 (1.347)	148	875765			33.84- 93.84		62.97
12.733	12.733 (1.346)	111	566809			12.73- 72.73		40.75
206 1,2-Dibromo-3-chloropropane						CAS #: 96-12-8		
13.600	13.600 (1.438)	157	865573	54.3642	54.364	80.00- 120.00		100.00
13.600	13.600 (1.438)	75	688665			52.48- 112.48		79.56
13.600	13.600 (1.438)	155	669174			47.41- 107.41		77.31
207 Dodecane						CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2376626	71.3963	71.396	80.00- 120.00		100.00(R)
13.801	13.801 (1.459)	43	2090813			52.87- 112.87		87.97
213 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1416149	72.9131	72.913	80.00- 120.00		100.00
14.467	14.467 (1.529)	182	1349055			65.33- 125.33		95.26
215 Hexachlorobutadiene						CAS #: 87-68-3		
14.582	14.581 (1.541)	225	1041218	76.1741	76.174	80.00- 120.00		100.00(R)
14.582	14.581 (1.541)	223	652314			33.17- 93.17		62.65
216 Naphthalene						CAS #: 91-20-3		
14.768	14.768 (1.561)	128	313547	6.31673	6.317	80.00- 120.00		100.00
14.768	14.768 (1.561)	127	40585			0.00- 42.88		12.94
222 1,2,3-Trichlorobenzene						CAS #: 87-61-6		
15.069	15.069 (1.593)	180	1346654	78.4317	78.432	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	1284028			65.75- 125.75	95.35
15.069	15.069 (1.593)	145	453650			5.23- 65.23	33.69

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p072804.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/28JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 28-JUL-2021
Calibration Time: 11:14
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	160349	96209	224489	164647	2.68
108 1,4-Difluorobenze	582857	349714	816000	617074	5.87
153 Chlorobenzene-d5	560035	336021	784049	597192	6.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.13
108 1,4-Difluorobenze	6.66	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.

Report Date: 28-Jul-2021 13:02

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 28JUL21
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/28JUL21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	57.445	114.89	70-130
5 Propylene	50.000	52.918	105.84	70-130
7 1,1-Difluoroethan	50.000	49.513	99.03	70-130
8 Freon 12	50.000	53.550	107.10	70-130
9 Chlorodifluoromet	50.000	54.971	109.94	70-130
10 Freon 114	50.000	50.415	100.83	70-130
12 Isobutane	50.000	52.079	104.16	70-130
15 Chloromethane	50.000	49.552	99.11	70-130
18 Butane	50.000	48.613	97.23	70-130
19 Vinyl Chloride	50.000	47.380	94.76	70-130
20 1,3-Butadiene	50.000	57.284	114.57	70-130
24 Bromomethane	50.000	43.981	87.96	70-130
30 Chloroethane	50.000	46.794	93.59	70-130
31 Isopentane	50.000	52.372	104.74	70-130
32 Vinyl Bromide	50.000	46.802	93.60	70-130
33 Freon 11	50.000	53.411	106.82	70-130
34 Dichlorofluoromet	50.000	48.902	97.80	70-130
35 Pentane	50.000	50.218	100.44	70-130
38 Ethyl Ether	50.000	46.664	93.33	70-130
39 Ethanol	58.000	51.008	87.95	70-130
42 Acrolein	58.000	53.419	92.10	70-130
43 Freon 113	50.000	49.010	98.02	70-130
44 1,1-Dichloroethen	50.000	48.217	96.43	70-130
47 Acetone	50.000	50.968	101.94	70-130
48 Carbon Disulfide	50.000	46.660	93.32	70-130
49 Iodomethane	50.000	62.694	125.39	70-130
52 2-Propanol	50.000	53.238	106.48	70-130
54 3-Chloropropene	50.000	46.477	92.95	70-130
57 Acetonitrile	50.000	51.831	103.66	70-130
59 Methylene Chlorid	50.000	56.484	112.97	70-130
62 tert-Butyl alcoho	50.000	46.957	93.91	70-130
63 Methyl tert-butyl	50.000	45.470	90.94	70-130
64 trans-1,2-Dichlor	50.000	47.606	95.21	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	53.567	107.13	70-130
67	Hexane	50.000	50.940	101.88	70-130
71	1,1-Dichloroethan	50.000	52.406	104.81	70-130
72	Isopropyl ether	50.000	53.522	107.05	70-130
73	Vinyl Acetate	50.000	46.794	93.59	70-130
79	Ethyl-tert-butyl	50.000	47.784	95.57	70-130
84	2,2-Dichloropropa	50.000	49.706	99.41	70-130
85	cis-1,2-Dichloroe	50.000	51.254	102.51	70-130
86	2-Butanone	50.000	47.851	95.70	70-130
87	Ethyl Acetate	50.000	56.166	112.33	70-130
89	Tetrahydrofuran	50.000	56.286	112.57	70-130
92	Chloroform	50.000	52.277	104.55	70-130
94	Cyclohexane	50.000	46.330	92.66	70-130
96	1,1,1-Trichloroet	50.000	50.250	100.50	70-130
99	1,1-Dichloroprope	50.000	51.058	102.12	70-130
97	Carbon Tetrachlor	50.000	54.568	109.14	70-130
101	2,2,4-Trimethylpe	50.000	51.276	102.55	70-130
102	Benzene	50.000	51.538	103.08	70-130
105	tert-Amyl methyl	50.000	47.533	95.07	70-130
106	1,2-Dichloroethan	50.000	57.545	115.09	70-130
107	Heptane	50.000	49.356	98.71	70-130
110	n-Butanol	50.000	47.612	95.23	70-130
111	Trichloroethene	50.000	53.745	107.49	70-130
118	Dibromomethane	50.000	57.366	114.73	70-130
127	Methylcyclohexane	50.000	48.768	97.54	70-130
114	1,2-Dichloropropa	50.000	52.082	104.16	70-130
116	Methyl Methacryla	50.000	50.374	100.75	70-130
117	1,4-Dioxane	50.000	48.590	97.18	70-130
122	Bromodichlorometh	50.000	55.844	111.69	70-130
126	cis-1,3-Dichlorop	50.000	52.296	104.59	70-130
131	4-Methyl-2-pentan	50.000	50.052	100.10	70-130
136	Octane	50.000	52.481	104.96	70-130
137	Toluene	50.000	50.915	101.83	70-130
139	trans-1,3-Dichlor	50.000	54.012	108.02	70-130
141	1,1,2-Trichloroet	50.000	53.533	107.07	70-130
142	Tetrachloroethene	50.000	54.783	109.57	70-130
143	2-Hexanone	50.000	50.948	101.90	70-130
144	1,3-Dichloropropa	50.000	51.971	103.94	70-130
146	Dibromochlorometh	50.000	56.498	113.00	70-130
148	1,2-Dibromoethane	50.000	55.399	110.80	70-130
151	1-Bromo-2-Chloroe	50.000	53.381	106.76	70-130
154	Chlorobenzene	50.000	53.208	106.42	70-130
155	Ethyl Benzene	50.000	51.120	102.24	70-130
156	Nonane	50.000	55.708	111.42	70-130
157	1,1,1,2-Tetrachlo	50.000	45.387	90.77	70-130
158	m,p-Xylene	50.000	51.397	102.79	70-130
164	o-Xylene	50.000	50.339	100.68	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	48.642	97.28	70-130
167 Bromoform	50.000	55.809	111.62	70-130
168 Cumene	50.000	49.659	99.32	70-130
169 Cyclohexanone	50.000	43.143	86.29	70-130
175 1,1,2,2-Tetrachlo	50.000	52.603	105.21	70-130
177 Bromobenzene	50.000	54.226	108.45	70-130
178 Propylbenzene	50.000	51.491	102.98	70-130
179 1,2,3-Trichloropr	50.000	51.988	103.98	70-130
181 trans-1,4-Dichlor	50.000	71.064	142.13*	70-130
182 Decane	50.000	50.636	101.27	70-130
183 4-Ethyltoluene	50.000	50.334	100.67	70-130
184 2-Chlorotoluene	50.000	52.692	105.38	70-130
185 1,3,5-Trimethylbe	50.000	51.255	102.51	70-130
188 alpha Methyl Styr	50.000	44.644	89.29	70-130
189 tert-Butylbenzene	50.000	52.037	104.07	70-130
190 1,2,4-Trimethylbe	50.000	51.424	102.85	70-130
192 sec-Butylbenzene	50.000	52.720	105.44	70-130
194 p-Cymene	50.000	51.394	102.79	70-130
195 1,3-Dichlorobenze	50.000	53.630	107.26	70-130
196 1,4-Dichlorobenze	50.000	53.958	107.92	70-130
199 alpha-Chlorotolue	50.000	50.211	100.42	70-130
201 Undecane	50.000	54.161	108.32	70-130
202 Butylbenzene	50.000	51.318	102.64	70-130
204 1,2-Dichlorobenze	50.000	52.907	105.81	70-130
206 1,2-Dibromo-3-chl	50.000	54.364	108.73	70-130
207 Dodecane	50.000	71.396	142.79*	70-130
213 1,2,4-Trichlorobe	58.000	72.913	125.71	70-130
215 Hexachlorobutadie	58.000	76.174	131.33*	70-130
216 Naphthalene	5.800	6.317	108.91	60-140
222 1,2,3-Trichlorobe	58.000	78.432	135.23*	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.036	100.15	70-130
$ 134 Toluene-d8	25.000	24.999	100.00	70-130
$ 170 4-Bromofluorobenz	25.000	24.894	99.58	70-130

Data File: /chem/msdp.i/28JUL21.b/p072804.d

Page 1

Date : 28-JUL-2021 12:11

Client ID: LCSD

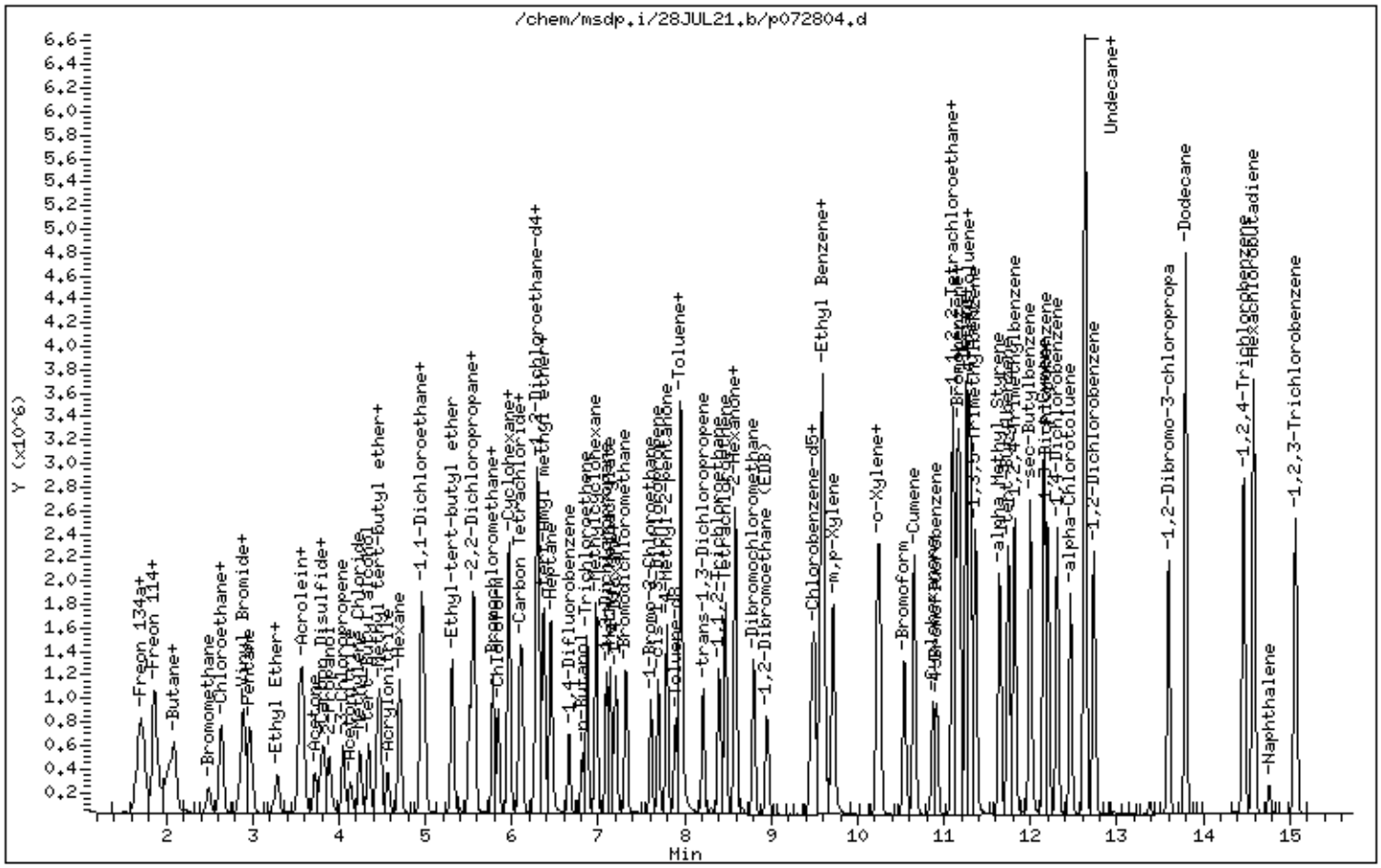
Instrument: msdp.i

Sample Info: 100mL 3018-2122A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



MSD3

							Method TO-15/TO-14					
BFB Tune Verification: (204544/218304) * 100 =93.70%							SOP# 6					
	3234-42	Exp. Date:	9/22/2021			Vacuum:	NA					
BCM	238986			Surrogate # 3234-42		Exp Date:	9/22/2021			Exp Date		
1,4-DFB	785289			CCV	3018-2071A	Exp Date:	9/2/2021	LCS	3018-2121A	Exp Date	9/22/2021	
CB-d5	683596			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
√	3072702	BFB Tune Check	3234-42	8	36ng	200mL	1.00	LD	LD	07/27/21	1102	LD	Exp. 9/22/21;
√	3072703	CCV	3018-2071A	13	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/27/21	1136	LD	Exp. 9/2/21; 1 out AT-20. Naph @ 37%
√	3072704	LCS	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/27/21	1213	LD	Exp. 9/22/21; 1 out AT-20
√	3072705	LCSD	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/27/21	1240	LD	Exp. 9/22/21; 1 out AT-20 RPD
√	3072706	CCVsp	3018-2013	12	50ppbv (200ppbv)	50mL	1.00	LD	LD	07/27/21	1307	LD	Exp. 8/04/21; 0 out
X	3072707	System Blank	34353	12	Humid	200mL	1.00	LD	LD	07/27/21	1433	LD	Chemstation froze after loading TPHg Calib, double IS
√	3072708	TPHg Calib	3234-26A	11	500ppbv (625ppbv)	160mL	1.00	LD	LD	07/27/21	1501	LD	Exp. 9/3/21
√	3072709	Lab Blank	34353	11	Humid	200mL	1.00	LD	LD	07/27/21	1547	LD	
√	3072710	2107284-21A	O0853	1	7.1 Hg->10 psi	200mL	2.20	kk	LD	07/27/21	1701	kk	
√	3072711	2107284-22A	O0775	2	7.3 Hg->9.9 psi	200mL	2.21	kk	LD	07/27/21	1730	kk	E" 1,1-DFA >400ppbv
√	3072712	2107284-23A	34001086cl	3	6.3 Hg->10 psi	200mL	2.13	kk	LD	07/27/21	1800	kk	confirmation needed
√	3072713	2107284-24A	N2619	4	6.9 Hg->10 psi	200mL	2.18	kk	LD	07/27/21	1829	kk	
√	3072714	2107284-25A	O0732	5	6.7 Hg->9.9 psi	200mL	2.15	kk	LD	07/27/21	1858	kk	
√	3072715	2107284-26A	S1120	6	6.5 Hg->10.1 psi	200mL	2.15	kk	LD	07/27/21	1927	kk	
√	3072716	2107362-04A	1028	7	6.5 Hg->10.1 psi	140mL	3.08	kk	LD	07/27/21	1955	kk	dil tc
√	3072717	2107362-03A	S0605	8	6.5 Hg->10.1 psi	100mL	8620	kk	LD	07/27/21	2022	kk	Can dil #AT9302 2000X, DF=8620, dil tc. "E"1,1-DFA <400ppbv
√	3072718	2107470-01A	O0887	10	5.5 Hg->10 psi	200mL	2.06	kk	LD	07/27/21	2052	kk	high matrix
X	3072719	System Blank	34353	2	Humid	200mL	1.00	kk	kk	07/27/21	2138	kk	leg validation.Matrix Carryover. 1,1-DFA ND
√	3072720	System Blank	34353	1	Humid	200mL	1.00	kk	kk	07/27/21	2236	kk	
C	3072721	2107284-23AX	34001086cl	3	6.3 Hg->10 psi	200mL	2.13	LD	kk	07/27/21	2347	LD	confirmation
√	3072722	2107361-01A	O0252	1	5.0 Hg->10 psi	200mL	2.02	LD	kk	07/28/21	0016	LD	Green dot, Pi: 7.3 psi-> Pf: 3.9 psi

MB 7/29/21

MSDP

								Method TO-15/TO-14					
	BFB Verification of 176/174 ratio: (123704/128968) * 100 = 95.92%							SOP# 6					
		3234-10	Exp. Date:		8/17/21			Vacuum:	NA				
	BCM	160,349				Please check all standards							
	1,4-DFB	582,857				Surr.# 3234-10	Exp. Date:	8/17/21	Surrogate# NA		Exp. Date:	NA	
	CB-d5	560,035				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
√	P072801	BFB Tune Check	3234-10	11	36ng	200ml	1.00	LD	LD	7/28/2021	1032	LD	Exp. 8/17/21. leg validation
√	P072802	CCV	3018-2125	13	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/28/2021	1114	LD	Exp. 9/28/21; 0 out
√	P072803	LCS	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/28/2021	1143	LD	Exp. 9/23/21. 1 out AT-20
√	P072804	LCSD	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	7/28/2021	1211	LD	Exp. 9/23/21; RPD ok
√	P072805	CCVsp	3018-2013	12	50ppbv (200ppbv)	50mL	1.00	LD	LD	7/28/2021	1239	LD	Exp. 8/04/21; 1 out
√	P072806	TPHg Calib	3234-26A	2	500ppbv(625ppbv)	160mL	1.00	LD	LD	7/28/2021	1319	LD	Exp. 9/3/21
√	P072807	Lab Blank	34353	2	Humid	200ml	1.00	LD	LD	7/28/2021	1425	LD	leg validation
√	P072808	2107361-02A	N2719	2	6.5 Hg->10 psi	200ml	2.14	mb	LD	7/28/2021	1525	mb	
√	P072809	2107361-03A	O0712	3	5.5 Hg->10 psi	200ml	2.06	mb	LD	7/28/2021	1555	mb	
√	P072810	2107361-04A	O0232	4	5.5 Hg->10 psi	200ml	2.06	mb	LD	7/28/2021	1624	mb	
√	P072811	2107361-05A	3013	5	4.5 Hg->10 psi	200ml	1.98	mb	LD	7/28/2021	1653	mb	
√	P072812	2107361-06A	B2245	6	6.0 Hg->10 psi	200ml	2.10	mb	LD	7/28/2021	1723	mb	
√	P072813	2107361-07A	O0711	7	6.0 Hg->10 psi	200ml	2.10	mb	LD	7/28/2021	1752	mb	
√	P072814	2107361-09A	N3406	8	5.5 Hg->10 psi	200ml	2.06	mb	LD	7/28/2021	1821	mb	
√	P072815	2107361-10A	N5561	9	6.5 Hg->10 psi	200ml	2.14	mb	LD	7/28/2021	1851	mb	
√	P072816	2107361-08A	O0864	10	4.5 Hg->10 psi	140mL	282	mb	LD	7/28/2021	1920	mb	Can dilution 100X, DF=282, dil TC
X	P072817	2107361-11A	1L1902	11	6.5 Hg->10 psi	10ml	42.9	mb	LD	7/28/2021	1948	mb	overdilute rr @ 200ml
√	P072818	2107361-11A	1L1902	11	6.5 Hg->10 psi	200ml	2.14	mb	mb	7/28/2021	2216	mb	
√	P072819	2107361-12A	N3434	2	8.5 Hg->10 psi	200ml	2.34	LD	mb	7/28/2021	2317	LD	
√	P072820	2107361-13A	N5152	3	6.5 Hg->10 psi	200ml	2.14	LD	mb	7/28/2021	2346	LD	
√	P072821	2107361-14A	O0809	4	6.0 Hg->10 psi	200ml	2.10	LD	mb	7/29/2021	0015	LD	
√	P072822	2107361-15A	34628	5	6.0 Hg->10 psi	10ml	42.0	LD	mb	7/29/2021	0043	LD	dil TC
√	P072823	System blank	35157	12	humid	200ml	1.00	LD	mb	7/29/2021	0112	LD	
√	P072824	2107516-01A	N2525	6	8 Hg->1.9 psi	200ml	1.54	LD	mb	7/29/2021	0142	LD	
√	P072825	2107516-02A	2200	7	8.2 Hg->1.7 psi	200ml	1.54	LD	mb	7/29/2021	0211	LD	

MB 7/29/21

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

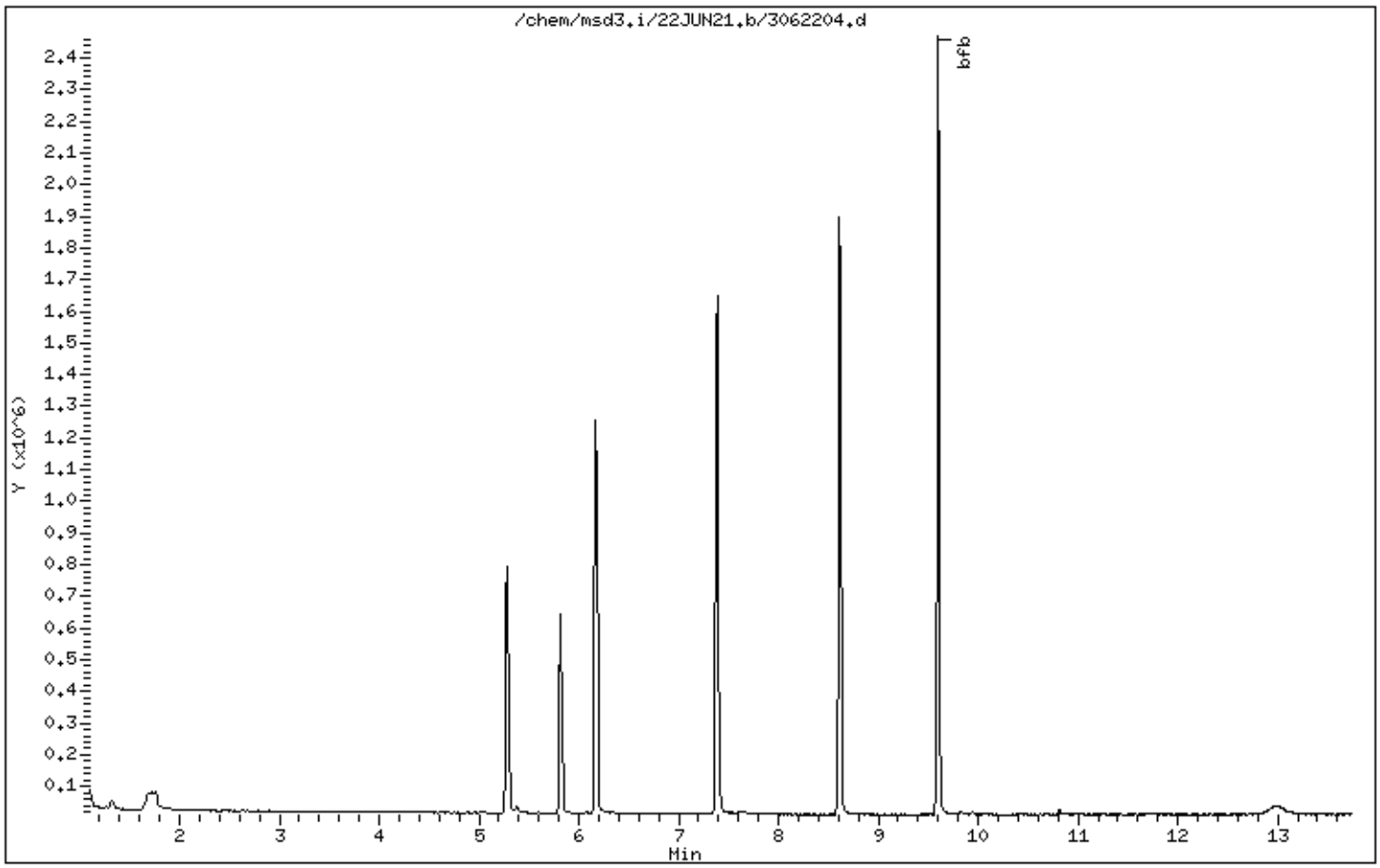
Sample Info: 200mL #3234-42;BFB;BFB

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

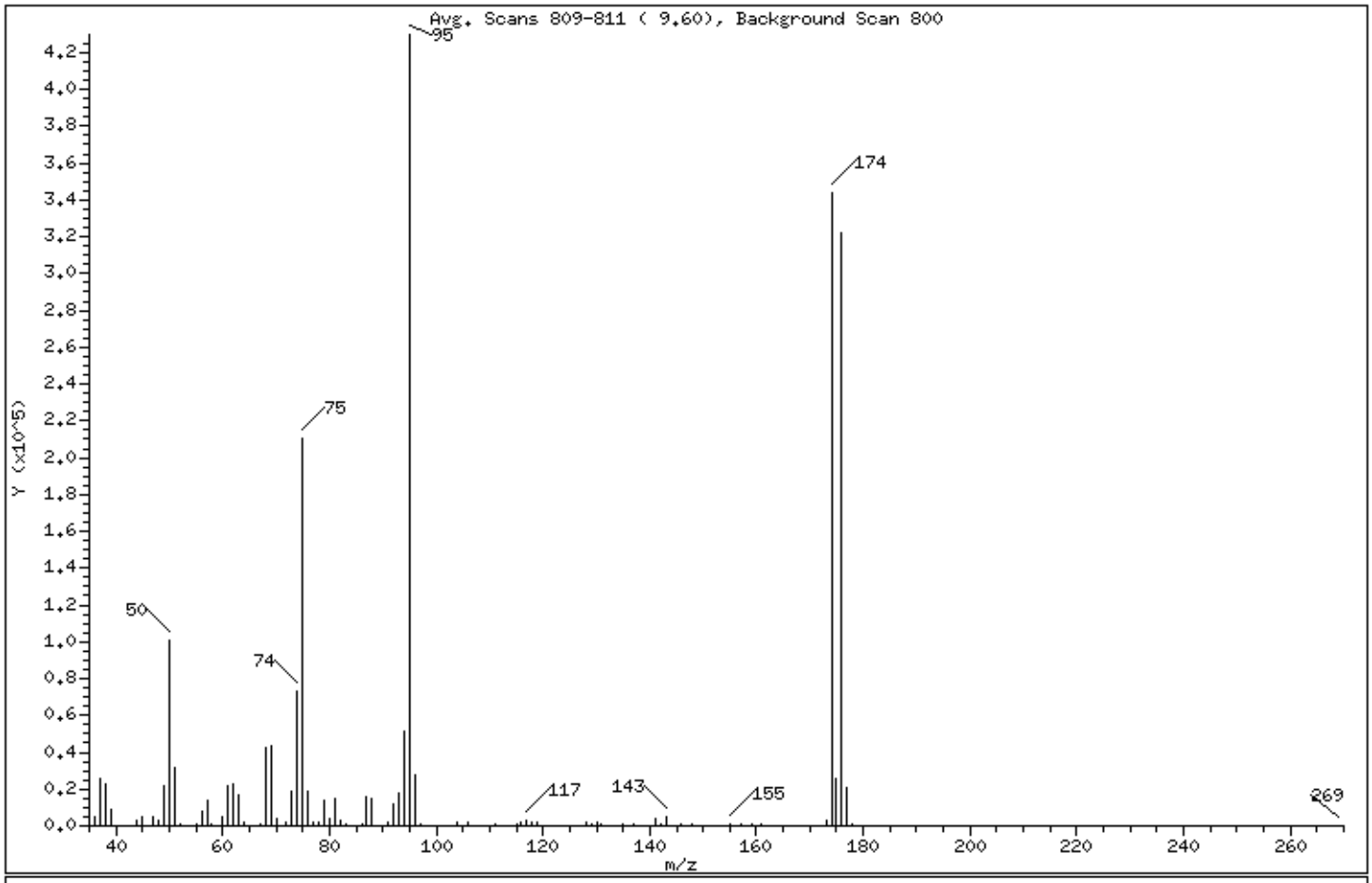
Volume Injected (uL): 1.0

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/27JUL21.b/3072702.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 27-JUL-2021 11:02
Operator : LD Inst ID: msd3.i
Smp Info : 200mL #3234-42;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msd3.i/27JUL21.b/bfb30.m
Meth Date : 03-Sep-2019 11:54 u7js Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 8 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	251099			100.00- 100.00	100.00
9.600	9.729	-0.129	50	63072			8.00- 40.00	25.12
9.600	9.729	-0.129	75	130070			30.00- 66.00	51.80
9.600	9.729	-0.129	96	16687			5.00- 9.00	6.65
9.600	9.729	-0.129	173	3007			0.00- 1.99	1.38
9.600	9.729	-0.129	174	218304			50.01- 120.00	86.94
9.600	9.729	-0.129	175	15960			4.00- 9.00	7.31
9.600	9.729	-0.129	176	204565			93.00- 101.00	93.71
9.600	9.729	-0.129	177	12914			5.00- 9.00	6.31

Data File: /chem/msd3.i/27JUL21.b/3072702.d

Date : 27-JUL-2021 11:02

Client ID: BFB

Instrument: msd3.i

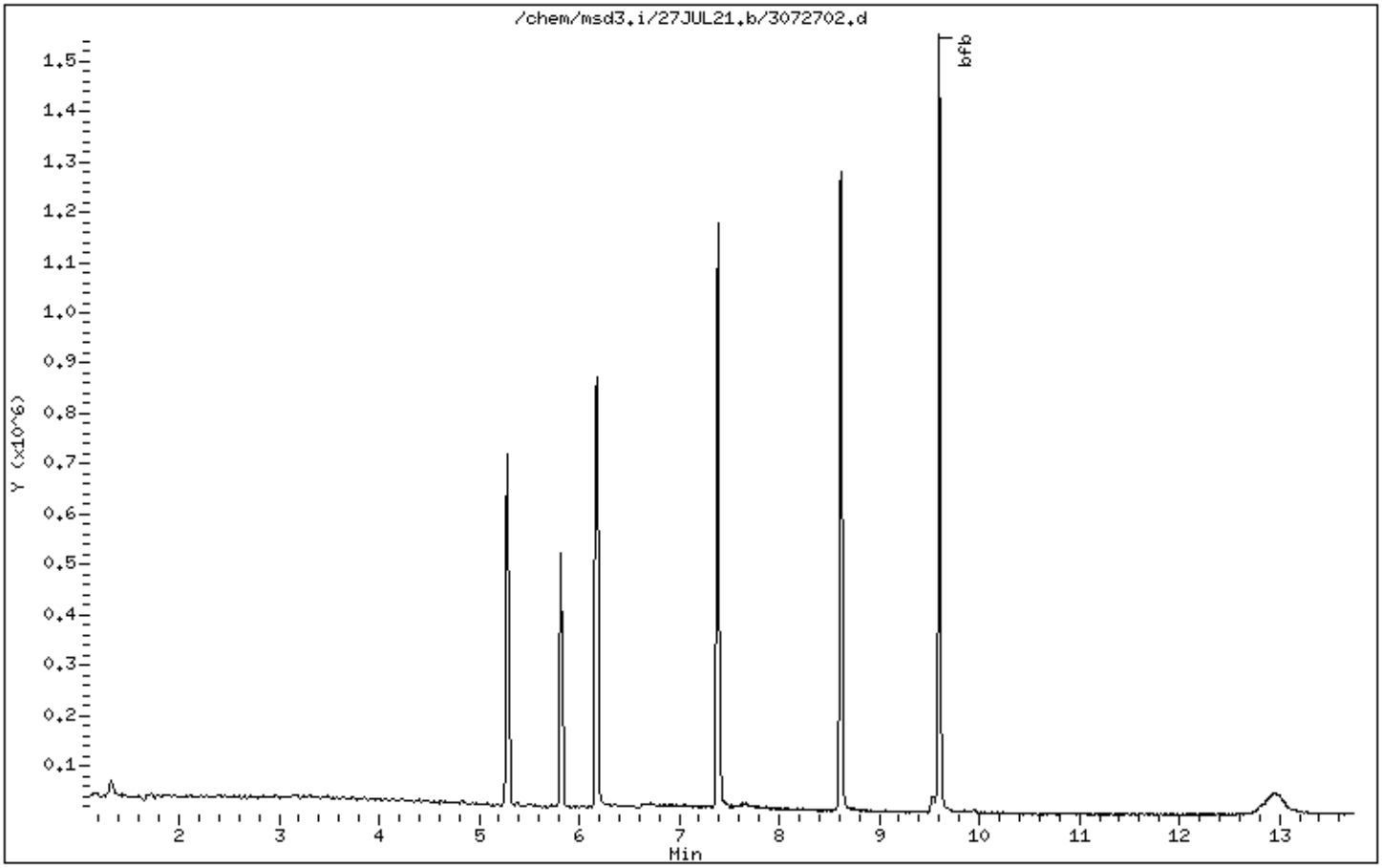
Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msd3.i/27JUL21.b/3072702.d

Date : 27-JUL-2021 11:02

Client ID: BFB

Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

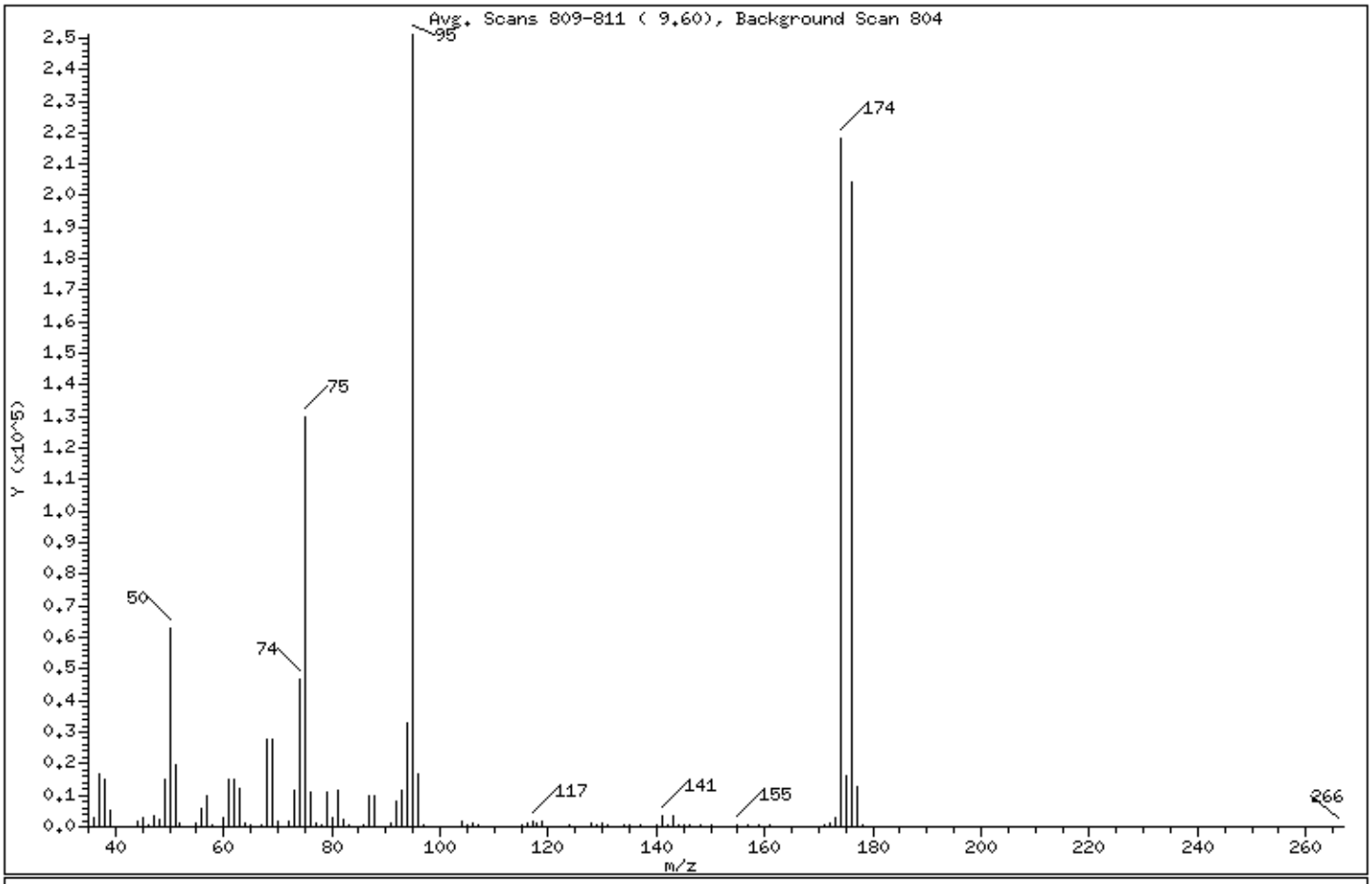
Volume Injected (uL): 1.0

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	25.12
75	30.00 - 66.00% of mass 95	51.80
96	5.00 - 9.00% of mass 95	6.65
173	Less than 1.99% of mass 174	1.20 (1.38)
174	50.01 - 120.00% of mass 95	86.94
175	4.00 - 9.00% of mass 174	6.36 (7.31)
176	93.00 - 101.00% of mass 174	81.47 (93.71)
177	5.00 - 9.00% of mass 176	5.14 (6.31)

Date : 27-JUL-2021 11:02

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: 3072702.d
Spectrum: Avg. Scans 809-811 (9.60), Background Scan 804
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2599	70.00	1941	106.00	1407	145.00	460
37.00	16864	71.00	199	107.00	382	146.00	465
38.00	14977	72.00	1521	110.00	34	148.00	653
39.00	5406	73.00	11540	112.00	145	149.00	259
42.00	49	74.00	46712	113.00	171	150.00	349
44.00	1866	75.00	130064	115.00	497	152.00	265
45.00	2988	76.00	10901	116.00	1171	153.00	179
46.00	476	77.00	1314	117.00	1933	154.00	265
47.00	3379	78.00	823	118.00	1426	155.00	818
48.00	2284	79.00	11168	119.00	1783	156.00	79
49.00	15224	80.00	3109	120.00	187	157.00	515
50.00	63072	81.00	11364	123.00	86	158.00	93
51.00	19656	82.00	2176	124.00	353	159.00	460
52.00	943	83.00	511	126.00	177	161.00	427
53.00	109	85.00	69	128.00	1013	165.00	76
55.00	1192	86.00	337	129.00	609	167.00	73
56.00	5724	87.00	9922	130.00	1185	169.00	141
57.00	9801	88.00	9842	131.00	488	170.00	213
58.00	556	90.00	78	134.00	337	171.00	314
60.00	3004	91.00	1164	135.00	378	172.00	1109
61.00	15198	92.00	8131	136.00	262	173.00	3007
62.00	15221	93.00	11360	137.00	675	174.00	218304
63.00	12305	94.00	32960	139.00	188	175.00	15960
64.00	1337	95.00	251072	140.00	414	176.00	204544
65.00	408	96.00	16680	141.00	3454	177.00	12914
67.00	861	97.00	554	142.00	464	178.00	537
68.00	27744	104.00	1509	143.00	3373	266.00	76
69.00	27896	105.00	472	144.00	337		

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

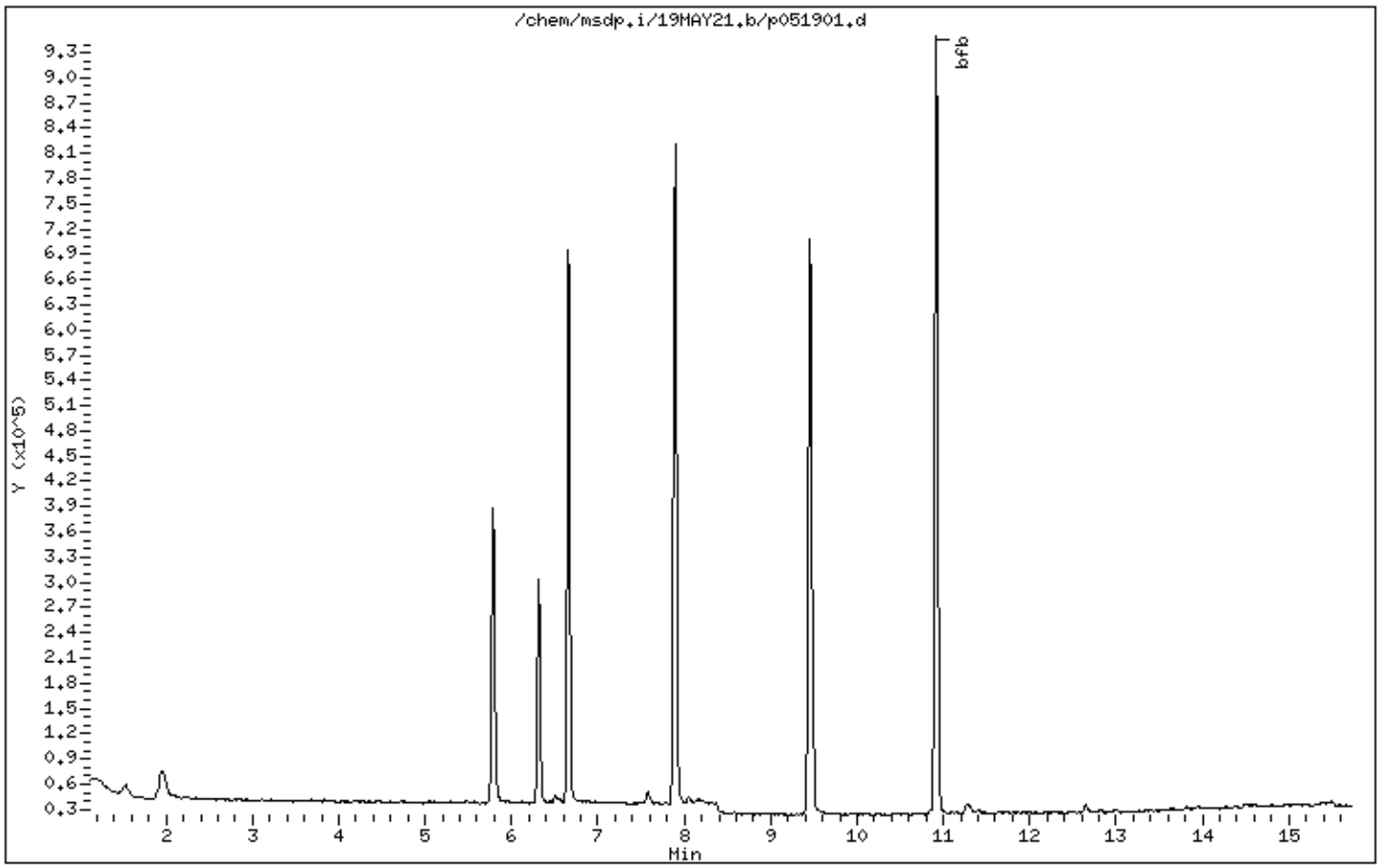
Sample Info: 200ml #3234-10;BFB;BFB

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

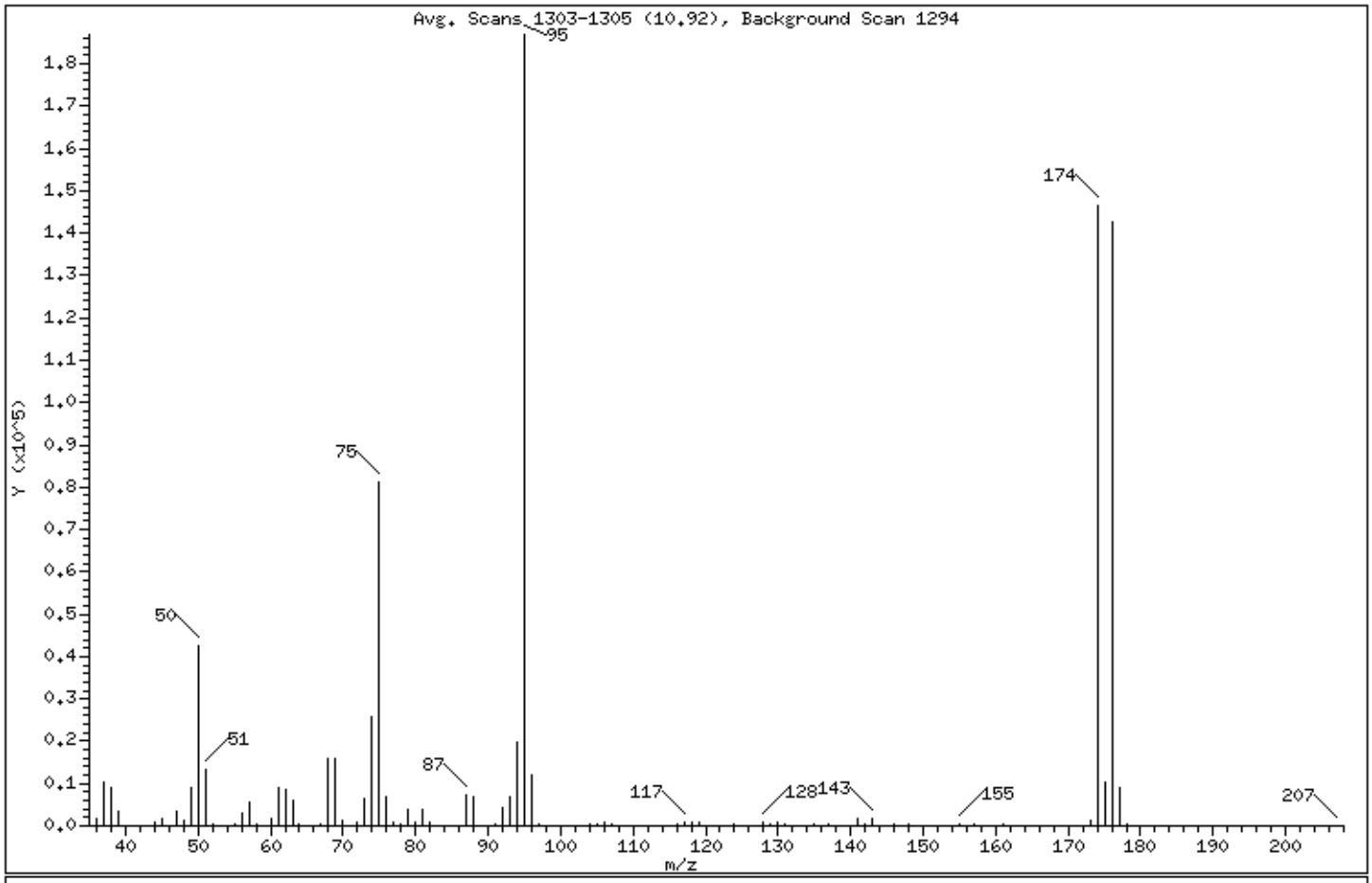
Volume Injected (uL): 1.0

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/28JUL21.b/p072801.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 28-JUL-2021 10:32
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/28JUL21.b/bfb30.m
Meth Date : 18-Nov-2019 14:14 ushn Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 11 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	154496			100.00- 100.00	100.00
10.921	10.993	-0.072	50	40621			8.00- 40.00	26.29
10.921	10.993	-0.072	75	71104			30.00- 66.00	46.02
10.921	10.993	-0.072	96	10507			5.00- 9.00	6.80
10.921	10.993	-0.072	173	1081			0.00- 1.99	0.84
10.921	10.993	-0.072	174	128970			50.01- 120.00	83.48
10.921	10.993	-0.072	175	9201			4.00- 9.00	7.13
10.921	10.993	-0.072	176	123706			93.00- 101.00	95.92
10.921	10.993	-0.072	177	7645			5.00- 9.00	6.18

Data File: /chem/msdp.i/28JUL21.b/p072801.d

Date : 28-JUL-2021 10:32

Client ID: BFB

Instrument: msdp.i

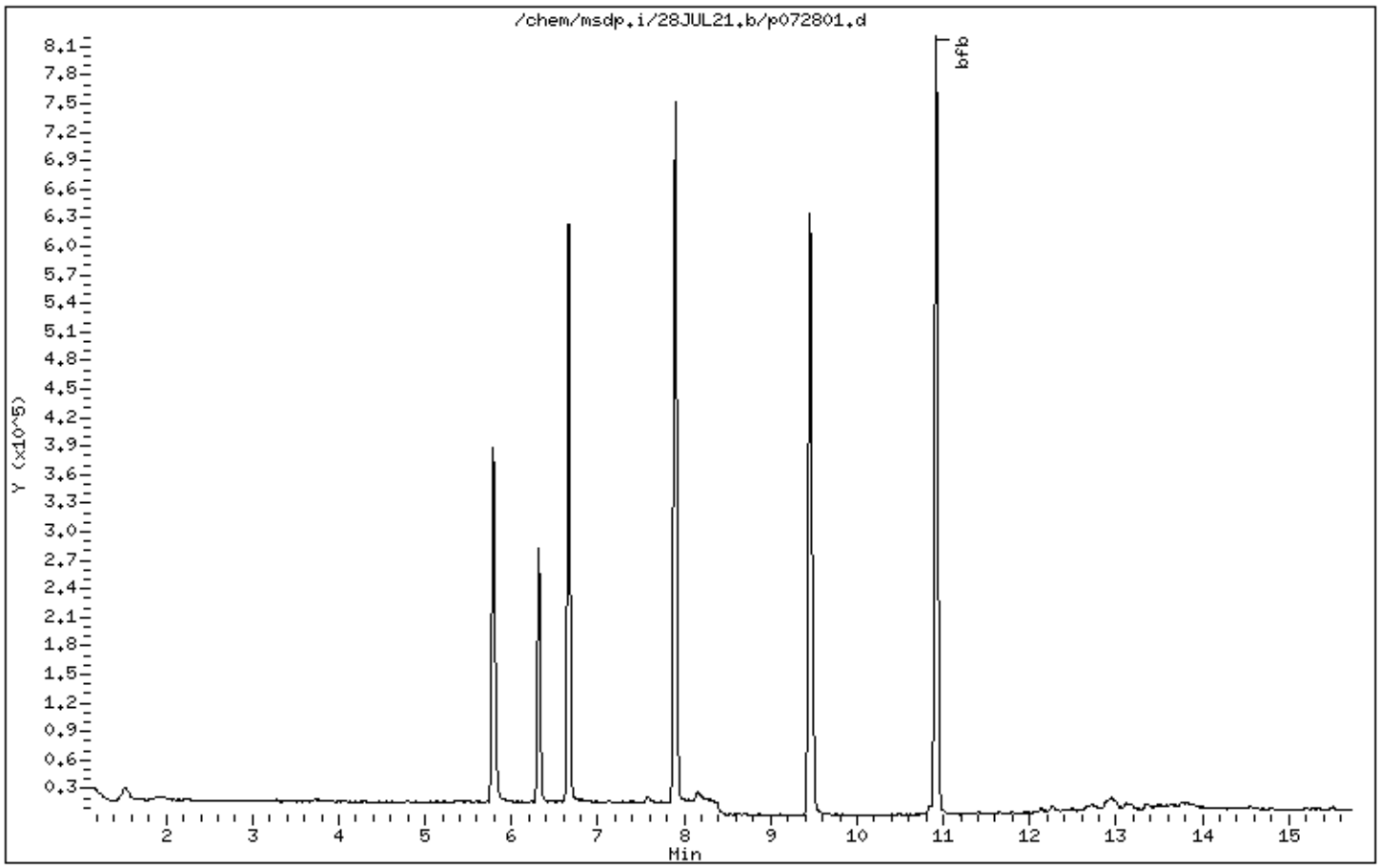
Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/28JUL21.b/p072801.d

Date : 28-JUL-2021 10:32

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

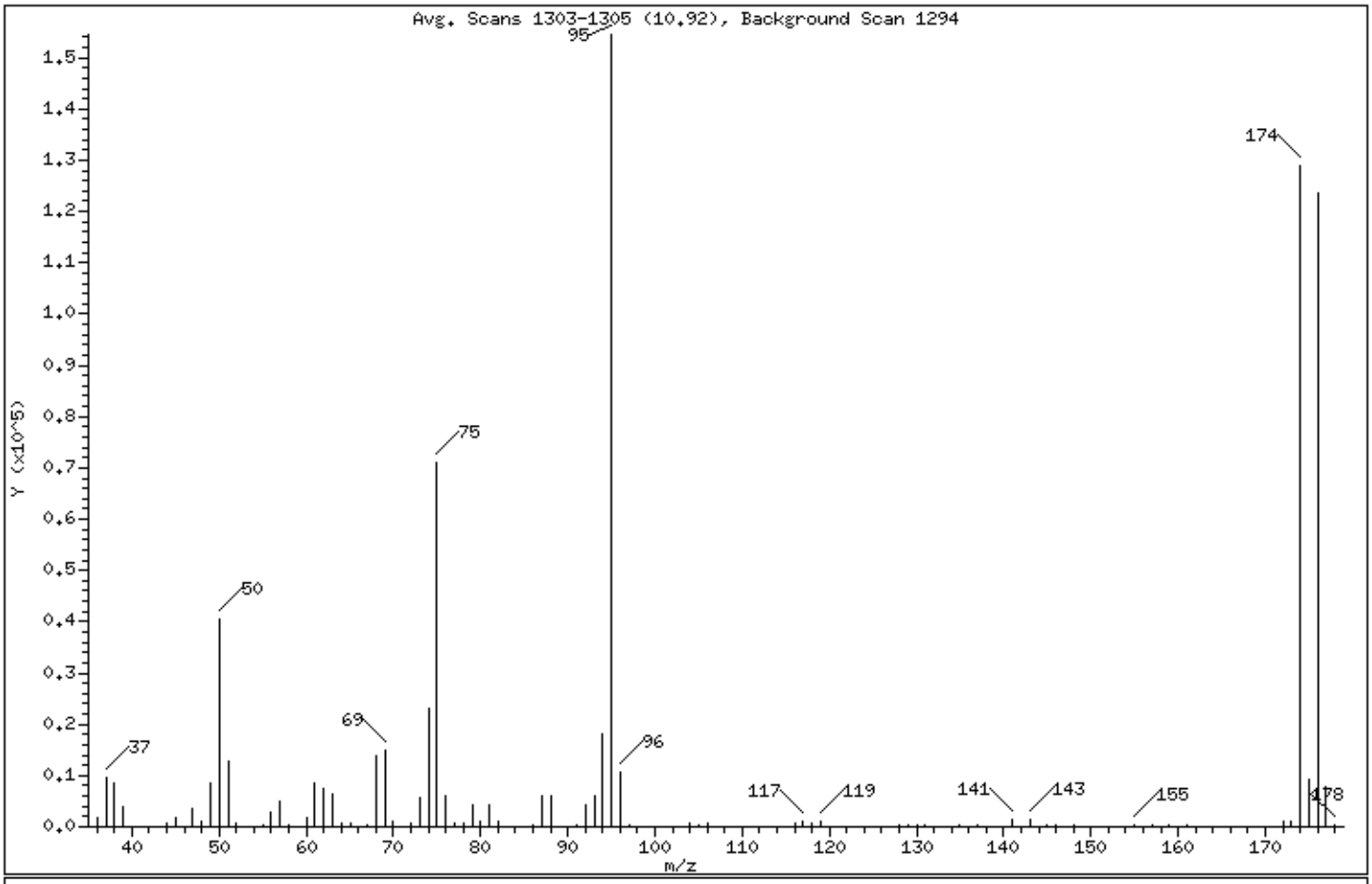
Volume Injected (uL): 1.0

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	26.29
75	30.00 - 66.00% of mass 95	46.02
96	5.00 - 9.00% of mass 95	6.80
173	Less than 1.99% of mass 174	0.70 (0.84)
174	50.01 - 120.00% of mass 95	83.48
175	4.00 - 9.00% of mass 174	5.96 (7.13)
176	93.00 - 101.00% of mass 174	80.07 (95.92)
177	5.00 - 9.00% of mass 176	4.95 (6.18)

Data File: /chem/msdp.i/28JUL21.b/p072801.d

Date : 28-JUL-2021 10:32

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: p072801.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	1792	63.00	6414	91.00	523	137.00	371
37.00	9694	64.00	602	92.00	4342	140.00	72
38.00	8518	65.00	807	93.00	5972	141.00	1429
39.00	3925	66.00	77	94.00	18112	142.00	174
40.00	111	67.00	299	95.00	154496	143.00	1514
42.00	43	68.00	13781	96.00	10507	145.00	387
43.00	21	69.00	14803	97.00	278	146.00	212
44.00	823	70.00	1150	104.00	795	147.00	36
45.00	1831	71.00	35	105.00	247	148.00	251
46.00	148	72.00	753	106.00	623	150.00	140
47.00	3502	73.00	5668	107.00	145	154.00	80
48.00	1219	74.00	23112	111.00	120	155.00	450
49.00	8499	75.00	71104	113.00	124	157.00	316
50.00	40616	76.00	5905	115.00	159	159.00	251
51.00	12706	77.00	780	116.00	588	161.00	221
52.00	598	78.00	563	117.00	1172	172.00	1218
53.00	176	79.00	4398	118.00	576	173.00	1081
55.00	307	80.00	1167	119.00	1091	174.00	128968
56.00	2697	81.00	4344	122.00	34	175.00	9201
57.00	4845	82.00	1052	128.00	447	176.00	123704
58.00	360	83.00	164	129.00	270	177.00	7645
60.00	1642	86.00	285	130.00	506	178.00	247
61.00	8546	87.00	5941	131.00	213		
62.00	7500	88.00	5863	135.00	287		

Canister Dilution Form

Workorder #: 2107361

Date Prepared: 7/28/21 **Expiration Date:** 8/14/21 **Initials:** LD

Pressurized By: 7-28-21 **1L pressurized to 15psi = 2000mL**

Sample ID	Sample Can #	Transfer Can #	Volume Sample Added (mL)	Final Volume	Final Dilution Factor	*Syringe ID	Time dilution was made (military)
08A	O0864	N5157	20	2000	100X	150301	1228

**All syringes used must be labeled with IDs generated by QA.*

*Manifold Certification (required every 24 hours and prior to sample pressurization):

Manifold Cert ID	Initials	Canister #	Cert. File #	Certified for : (Check one)			
M006-07721-0710	MW	0072606	8600	SIM pptv 060	SIM ✓ H1/40	Low Level ✓	QUAD ✓

*Or indicate logbook page # with cert. information applicable to samples below: NA. Gauge ID: A7-067

Temperature Check → Temp: 22.0°C Date: 7.28.21 Time: 1128 Initials: CD

Required per 20 samples

**Manifold must be purged for ≥ 2 minutes between each sample.

Date	Time**	Initials	Sample/Standard ID	Method Name	Canister #	Initial Pressure	Final Pressure (psi)
7.28.21	1133	CD	2107598-01A	TO-15 SIM	N0487	6.5" Hg	2psi
	1139		2107558-02A	TO-15 H1/40	N2762	7.5" Hg	2psi
	1148		-03A		N5368	6.0" Hg	2psi
	1153		-04A		00503	8.5" Hg	2psi
	1159		-05A		N9415	7.5" Hg	2psi
	1204		-06A		N1630	8.0" Hg ~~8.0" Hg~~ on 7.28.21	2psi
	1209		-07A		N1618	7.0" Hg	2psi
	1214		-08A		N4625	7.0" Hg	2psi
	1219		-09A		N0601	8.0" Hg	2psi
	1225		-10A		N5072	8.0" Hg	2psi
	1232		-11A	✓	N2843	8.8" Hg	2psi
	1237		2107600-02A	TO-15	N2027	4.0" Hg	10psi
✓	1242	✓	Dilution 2107361-08A	TO-15 Dilution	N5157	28.5" Hg	15psi

MB 7/29/21

Reviewed: MB Date: 7/29/21

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 #: 2107361

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

page--of ---

Client: AECOM
Project Name: SMUD 59th ST.
Project Manager: Robert Kohlhardt Project # 60632793.6
Sampler: T. Dooley
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			
01A	SG-VW55A-02	1L2765	22491	7/14/21	1542	7/14/21	1549	-25	-5			X			
02A	SG-VW27A-02	1L2999	30994	7/15/21	0552	7/15/21	0603	-27	-5			X			
03A	SG-VW27B-02	1L2345	21416	7/15/21	0628	7/15/21	0644	-25	-5			X			
04A	SG-VW27B-03	1L2791	21410	7/15/21	0628	7/15/21	0644	-25	-5			X			
05A	SG-VW26B-02	3013	30795	7/15/21	0705	7/15/21	0748	-28	-5			X			
06A	SG-VW16A-02	1L2199	20917	7/15/21	0824	7/15/21	0830	-26	-5			X			
07A	SG-VW18A-02	1L2344	25491	7/15/21	0906	7/15/21	0912	-27	-5			X			
08A	SG-VW20B-02	1L2478	25436	7/15/21	0941	7/15/21	0947	-27	-5			X			
09A	SG-VW24A-04	1L3180	30610	7/15/21	1121	7/15/21	1147	-28	-5			X			
10A	SG-VW21A-03	1L1887	25459	7/15/21	1409	7/15/21	1429	-29	-5			X			
11A	SG-VW21B-02	1L1902	100213	7/15/21	1446	7/15/21	1455	-28	-5			X			
12A	SG-VW28A-02	1L3110	22578	7/16/21	1508	7/15/21	1531	-29	-5			X			
13A	SG-VW14-02	1L3302	25337	7/15/21	1552	7/15/21	1558	-26	-5			X			
14A	SG-VW59B-01	1L2296	20594	7/15/21	1634	7/15/21	1642	-25	-5			X			
15A	SG-VW59A-01	2710	100303	7/15/21	1707	7/15/21	1716	-26	-5			X			

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
CET	7/15/21	1815	EAR	7/15/21	1815
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: AD | Custody Seals Intact? | Yes | No | None | GWP

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 2107361

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: 07/29/21
Date Completed:
Date Received: 7/15/21
PO#:
Project#: 60632793.6 SMUD 59th ST.

Total $: $ 2,960.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Amount$
01A	SG-VW55A-02	TO-15	7/14/2021	$150.00
02A	SG-VW27A-02	TO-15	7/15/2021	$150.00
03A	SG-VW27B-02	TO-15	7/15/2021	$150.00
04A	SG-VW27B-03	TO-15	7/15/2021	$150.00
05A	SG-VW26B-02	TO-15	7/15/2021	$150.00
06A	SG-VW16A-02	TO-15	7/15/2021	$150.00
07A	SG-VW18A-02	TO-15	7/15/2021	$150.00
08A	SG-VW20B-02	TO-15	7/15/2021	$150.00
09A	SG-VW24A-04	TO-15	7/15/2021	$150.00
10A	SG-VW21A-03	TO-15	7/15/2021	$150.00
11A	SG-VW21B-02	TO-15	7/15/2021	$150.00
12A	SG-VW28A-02	TO-15	7/15/2021	$150.00
13A	SG-VW14-02	TO-15	7/15/2021	$150.00
14A	SG-VW59B-01	TO-15	7/15/2021	$150.00
15A	SG-VW59A-01	TO-15	7/15/2021	$150.00

Misc. Charges	1 Liter Summa Canister (12) @ $20.00 each., Shipment 139981	$240.00
	1 Liter Summa Canister (3) @ $20.00 each., Shipment 140023	$60.00
	Soil Gas Manifold (6) @ $15.00 each., Shipment 139981	$90.00
	Soil Gas Manifold (9) @ $15.00 each., Shipment 140023	$135.00

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
3072708.d

Compound	Ave. RF	% RSD
TPH	57499	0.00014

UD 7/27/14

Air Toxics Ltd.

File Response Factors

Data File: 3072708.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	57498.919087980	

Air Toxics Ltd.

List of Selected Compounds

Data File: 3072708.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 1.3247	0.31	1.325	127628	
☑	Unknown Peak 1.5766	0.08	1.577	32671	
☑	Butane	0.89	1.717	368957	
☑	Unknown Peak 1.7725	0.12	1.773	51676	
☑	Unknown Peak 1.8984	0.08	1.898	35001	
☑	Unknown Peak 2.0943	0.04	2.094	18238	
☑	Isopentane	3.53	2.220	1463793	
☑	Unknown Peak 2.5001	1.21	2.500	501013	
☑	Unknown Peak 2.668	0.24	2.668	99456	
☑	Ethanol	1.44	2.766	595766	
☑	Unknown Peak 2.8778	0.41	2.878	170322	
☑	Unknown Peak 3.0177	0.11	3.018	46768	
☑	Unknown Peak 3.2276	0.06	3.228	24594	
☑	Unknown Peak 3.5494	1.57	3.549	652423	
☑	Unknown Peak 3.5914	1.13	3.591	467709	
☑	Unknown Peak 3.8713	0.72	3.871	297754	
☑	Unknown Peak 4.0951	0.13	4.095	52892	
☑	Hexane	0.81	4.179	337001	
☑	Unknown Peak 4.361	0.13	4.361	54946	
☑	Unknown Peak 4.4029	0.12	4.403	50038	
☑	Unknown Peak 4.4869	0.09	4.487	37579	
☑	Unknown Peak 4.5569	0.09	4.557	35378	
☑	Unknown Peak 4.7108	1.25	4.711	516200	
☑	Unknown Peak 4.7947	0.59	4.795	244966	
☑	Unknown Peak 4.8647	0.12	4.865	51341	
☑	Bromochloromethane	4.03	5.284	1671004	
☑	Tetrahydrofuran	0.57	5.382	238134	
☑	Cyclohexane	1.41	5.438	583467	
☑	Unknown Peak 5.5503	0.69	5.550	285727	
☑	2,2,4-Trimethylpentane	12.16	5.760	5041726	
☐	Benzene	0.10	5.788	39815	
☑	1,2-Dichloroethane-d4	5.78	5.816	2397489	
☑	Heptane	0.86	5.942	355898	
☑	Unknown Peak 6.082	0.22	6.082	92310	
☑	1,4-Difluorobenzene	6.16	6.166	2554203	
☑	Unknown Peak 6.3058	0.14	6.306	58101	
☑	Methylcyclohexane	1.88	6.460	781223	
☑	Unknown Peak 6.5437	0.76	6.544	315544	
☑	Unknown Peak 6.6208	0.16	6.621	66293	
☑	Unknown Peak 6.671	0.04	6.671	14910	
☑	Unknown Peak 6.7999	3.61	6.800	1496635	
☑	Unknown Peak 6.9073	5.75	6.907	2381812	
☑	Unknown Peak 7.0792	0.51	7.079	212406	
☑	Unknown Peak 7.2153	1.20	7.215	496977	
☑	Unknown Peak 7.2870	0.20	7.287	82672	
☑	Toluene-d8	6.44	7.380	2669096	
☐	4-Methyl-2-pentanone	0.02	7.380	8992	
☑	Toluene	4.03	7.437	1669426	
☑	Unknown Peak 7.5162	0.05	7.516	20501	
☑	Unknown Peak 7.6451	0.05	7.645	21336	
☑	Unknown Peak 7.6953	0.17	7.695	72091	
☑	Unknown Peak 7.8314	0.03	7.831	12035	

Air Toxics Ltd.

List of Selected Compounds

Data File: 3072708.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 7.9245	0.11	7.925	43707	
☑	Unknown Peak 8.0821	0.09	8.082	36169	
☑	Unknown Peak 8.2182	0.05	8.218	21528	
☑	Unknown Peak 8.2826	0.14	8.283	57121	
☑	Unknown Peak 8.3829	0.07	8.383	30029	
☑	Unknown Peak 8.4617	0.06	8.462	26096	
☑	Unknown Peak 8.5477	0.07	8.548	30513	
☑	Chlorobenzene-d5	6.78	8.612	2809510	
☑	Ethyl Benzene	0.87	8.684	361921	
☑	m,p-Xylene	2.56	8.784	1061671	
☑	Unknown Peak 8.9345	0.03	8.935	12971	
☑	Unknown Peak 8.9989	0.03	8.999	11746	
☑	o-Xylene	0.93	9.121	385902	
☑	Unknown Peak 9.3213	0.03	9.321	13426	
☑	Cumene	0.24	9.407	99352	
☑	Unknown Peak 9.4502	0.34	9.450	139960	
☑	Unknown Peak 9.5218	0.16	9.522	65133	
☑	4-Bromofluorobenzene	8.34	9.601	3456495	
☑	Propylbenzene	0.20	9.751	81994	
☑	4-Ethyltoluene	1.12	9.830	465238	
☑	1,3,5-Trimethylbenzene	0.35	9.902	143482	
☑	Unknown Peak 10.080	0.54	10.081	222701	
☑	1,2,4-Trimethylbenzene	1.09	10.224	451628	
☑	Unknown Peak 10.302	0.50	10.303	207092	
☑	Unknown Peak 10.424	0.16	10.424	65882	
☑	Unknown Peak 10.510	0.57	10.510	237396	
☑	Unknown Peak 10.596	0.26	10.596	108146	
☑	Unknown Peak 10.689	0.25	10.689	103462	
☑	Unknown Peak 10.746	0.15	10.747	63465	
☑	Unknown Peak 10.782	0.44	10.783	182433	
☑	Unknown Peak 10.897	0.08	10.897	31112	
☑	Unknown Peak 10.968	0.05	10.969	21242	
☑	Unknown Peak 11.040	0.21	11.040	86898	
☑	Unknown Peak 11.119	0.11	11.119	46207	
☑	Unknown Peak 11.248	0.10	11.248	41145	
☑	Unknown Peak 11.391	0.04	11.391	17032	
☑	Unknown Peak 11.470	0.15	11.470	60633	
☑	Unknown Peak 11.513	0.07	11.513	26942	
☑	Unknown Peak 11.763	0.06	11.764	23220	
☑	Unknown Peak 11.828	0.03	11.828	13538	
☑	Unknown Peak 11.914	0.10	11.914	41880	
☑	Unknown Peak 12.186	0.03	12.187	10547	
☑	Unknown Peak 12.229	0.03	12.230	11884	
☑	Unknown Peak 12.315	0.06	12.315	25880	
☑	Unknown Peak 12.559	0.05	12.559	19751	

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Curve Response Factors
p072806.d

Compound	Ave. RF	% RSD
TPH	67484	0.00012

LD 7/28/4

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File Response Factors

Data File: p072806.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	67483.9203014	0

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List of Selected Compounds

Data File: p072806.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 1.5346	0.20	1.535	90786	
✓	Unknown Peak 1.8704	0.07	1.870	30524	
✓	Butane	0.67	2.032	310457	
✓	Unknown Peak 2.2396	0.09	2.240	39673	
✓	Isopentane	3.18	2.641	1464039	
✓	Unknown Peak 2.9702	1.11	2.970	512422	
✓	Unknown Peak 3.1708	0.17	3.171	78728	
✓	Ethanol	1.38	3.242	634184	
✓	Unknown Peak 3.3856	0.37	3.386	172461	
✓	Unknown Peak 3.5361	0.14	3.536	66298	
✓	Unknown Peak 4.0805	2.59	4.080	1190527	
✓	Unknown Peak 4.1879	0.17	4.188	76671	
✓	Unknown Peak 4.3956	0.67	4.396	310014	
✓	Unknown Peak 4.6105	0.09	4.611	42456	
✓	Hexane	0.72	4.697	332527	
✓	Unknown Peak 4.8182	0.05	4.818	24687	
✓	Unknown Peak 4.8827	0.09	4.883	40061	
✓	Unknown Peak 4.9185	0.09	4.919	42237	
✓	Unknown Peak 5.0117	0.05	5.012	22994	
✓	Unknown Peak 5.0833	0.05	5.083	21998	
✓	Unknown Peak 5.2265	1.39	5.227	639123	
✓	Unknown Peak 5.3268	0.56	5.327	259154	
✓	Unknown Peak 5.3841	0.12	5.384	54764	
✓	Bromochloromethane	2.46	5.785	1132292	
✓	Tetrahydrofuran	0.68	5.893	313291	
✓	Cyclohexane	1.56	5.957	716920	
✓	Unknown Peak 6.0575	0.74	6.058	340628	
	2,2,4-Trimethylpentane	6.74	6.280	3100847	
	Benzene	0.08	6.301	36502	
✓	1,2-Dichloroethane-d4	16.35	6.315	7528625	
✓	Heptane	0.80	6.451	368771	
✓	Unknown Peak 6.5947	0.28	6.595	127119	
✓	1,4-Difluorobenzene	3.51	6.666	1613798	
✓	Unknown Peak 6.7881	0.12	6.788	57357	
✓	Unknown Peak 6.8167	0.11	6.817	52526	
✓	Unknown Peak 6.9385	1.35	6.939	620303	
✓	Methylcyclohexane	2.25	6.974	1035729	
✓	Unknown Peak 7.0531	0.92	7.053	425558	
✓	Unknown Peak 7.1247	0.22	7.125	101947	
✓	Unknown Peak 7.1749	0.12	7.175	56131	
✓	Unknown Peak 7.3038	4.67	7.304	2151316	
✓	Unknown Peak 7.4113	7.06	7.411	3250215	
✓	Unknown Peak 7.5760	0.89	7.576	407919	
✓	Unknown Peak 7.7121	1.94	7.712	892067	
✓	Unknown Peak 7.7981	0.30	7.798	137103	
✓	Toluene-d8	4.42	7.891	2033010	
	4-Methyl-2-pentanone	0.02	7.891	7771	
✓	Toluene	4.30	7.956	1977437	
✓	Unknown Peak 8.1491	0.31	8.149	141811	
✓	Unknown Peak 8.2422	0.71	8.242	324985	
✓	Unknown Peak 8.3783	0.13	8.378	58038	
✓	Unknown Peak 8.5144	0.13	8.514	58962	

List of Selected Compounds

Data File: p072806.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 8.7149	0.08	8.715	36175	
✓	Unknown Peak 8.7722	0.03	8.772	12492	
✓	Unknown Peak 8.9012	0.05	8.901	21298	
✓	Unknown Peak 8.9728	0.15	8.973	68092	
✓	Unknown Peak 9.1232	0.07	9.123	33640	
✓	Unknown Peak 9.2307	0.06	9.231	26868	
✓	Unknown Peak 9.3739	0.09	9.374	40708	
✓	Chlorobenzene-d5	4.24	9.460	1952884	
✓	Ethyl Benzene	0.78	9.567	360827	
✓	m,p-Xylene	2.76	9.718	1271902	
✓	Unknown Peak 9.9541	0.05	9.954	23235	
✓	Unknown Peak 10.054	0.07	10.054	30432	
✓	o-Xylene	0.97	10.226	448006	
✓	Unknown Peak 10.505	0.05	10.506	24594	
✓	Cumene	0.27	10.649	122517	
✓	Unknown Peak 10.734	0.22	10.735	102009	
✓	4-Bromofluorobenzene	5.21	10.921	2397240	
✓	Propylbenzene	0.18	11.150	82851	
✓	4-Ethyltoluene	1.39	11.258	640010	
✓	1,3,5-Trimethylbenzene	0.44	11.365	202528	
✓	Unknown Peak 11.623	0.53	11.623	242055	
✓	1,2,4-Trimethylbenzene	1.07	11.817	490484	
✓	Unknown Peak 11.952	0.45	11.953	206215	
✓	Unknown Peak 12.117	0.38	12.117	174555	
✓	Unknown Peak 12.239	0.46	12.239	211500	
✓	Unknown Peak 12.318	0.28	12.318	130976	
✓	Unknown Peak 12.482	0.18	12.483	83565	
✓	Unknown Peak 12.554	0.21	12.554	97176	
✓	Unknown Peak 12.597	0.20	12.597	94150	
✓	Unknown Peak 12.647	0.18	12.648	83187	
✓	Unknown Peak 12.740	0.08	12.741	35470	
✓	Unknown Peak 12.819	0.04	12.819	17025	
✓	Unknown Peak 12.926	0.15	12.927	68408	
✓	Unknown Peak 12.955	0.17	12.956	78776	
✓	Unknown Peak 13.034	0.13	13.034	60850	
✓	Unknown Peak 13.127	0.08	13.127	38935	
✓	Unknown Peak 13.177	0.12	13.178	54887	
✓	Unknown Peak 13.378	0.13	13.378	57553	
✓	Unknown Peak 13.528	0.26	13.529	118844	
✓	Unknown Peak 13.693	0.03	13.693	11861	
✓	Unknown Peak 13.772	0.05	13.772	22902	
✓	Unknown Peak 13.829	0.10	13.829	45672	
✓	Unknown Peak 14.015	0.07	14.016	32255	
✓	Unknown Peak 14.072	0.05	14.073	23510	
✓	Unknown Peak 14.366	0.02	14.367	11444	
✓	Unknown Peak 14.538	0.09	14.539	39686	
✓	Unknown Peak 14.645	0.03	14.646	13451	
✓	Unknown Peak 14.803	0.04	14.804	17708	
✓	Unknown Peak 14.953	0.03	14.954	12301	
✓	Unknown Peak 15.204	0.03	15.205	13012	
✓	Unknown Peak 15.484	0.05	15.484	24182	

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File Results

Data File: File Information: 3072722.d
Sample #: 2107361-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	58	(14288786.8879358 - 12649746.8507207 / 5749

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List of Selected Compounds

Data File: File Information: 3072722.d
Sample #: 2107361-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
	Unknown Peak 1.3247	1.325	6913251	
	1,1-Difluoroethane	1.451	332595	
	Unknown Peak 1.5206	1.521	351060	
✓	Unknown Peak 1.6326	1.633	94422	
✓	Unknown Peak 1.7025	1.703	52292	
✓	Unknown Peak 1.8984	1.898	181600	
✓	Unknown Peak 2.2342	2.234	30821	
✓	Unknown Peak 2.4021	2.402	196670	
✓	Unknown Peak 2.6400	2.640	25533	
✓	Unknown Peak 2.8499	2.850	28214	
	Acetone	3.228	125450	
✓	2-Propanol	3.410	171137	
✓	Unknown Peak 3.8853	3.885	32682	
✓	Unknown Peak 3.9272	3.927	43462	
✓	Hexane	4.179	101461	
✓	Unknown Peak 4.6968	4.697	25226	
✓	Unknown Peak 4.9067	4.907	19590	
✓	Unknown Peak 4.9626	4.963	30348	
✓	Unknown Peak 5.0046	5.005	18740	
✓	Unknown Peak 5.0886	5.089	18009	
✓	Bromochloromethane	5.284	1318973	
✓	Unknown Peak 5.3824	5.382	120678	
✓	1,2-Dichloroethane-d4	5.816	934344	
✓	1,4-Difluorobenzene	6.180	1860387	
✓	Unknown Peak 6.6566	6.657	20311	
✓	Toluene-d8	7.387	1985600	
✓	Toluene	7.445	161651	
✓	Unknown Peak 7.5950	7.595	19792	
✓	Unknown Peak 7.6523	7.652	49425	
✓	Unknown Peak 7.7383	7.738	12235	
✓	Unknown Peak 7.8815	7.882	16692	
✓	Unknown Peak 8.0892	8.089	24825	
✓	Unknown Peak 8.2110	8.211	10806	
✓	Chlorobenzene-d5	8.619	3033166	
✓	Chlorobenzene	8.641	260544	
✓	Unknown Peak 8.7841	8.784	41874	
✓	Unknown Peak 9.1207	9.121	19752	
✓	Unknown Peak 9.3141	9.314	16282	
✓	Unknown Peak 9.3786	9.379	16343	
✓	Unknown Peak 9.4717	9.472	25380	
✓	Unknown Peak 9.5290	9.529	59302	
✓	4-Bromofluorobenzene	9.601	2554320	
✓	Unknown Peak 9.8299	9.830	24828	
✓	Unknown Peak 9.9445	9.945	12499	
✓	Unknown Peak 10.087	10.088	22777	
✓	Unknown Peak 10.223	10.224	26030	
✓	Unknown Peak 10.309	10.310	20074	
✓	Unknown Peak 10.324	10.324	31331	
✓	Unknown Peak 10.410	10.410	46829	
✓	Unknown Peak 10.467	10.467	51583	
✓	Unknown Peak 10.524	10.525	93563	
✓	Unknown Peak 10.596	10.596	38872	

List of Selected Compounds

Data File: File Information: 3072722.d
Sample #: 2107361-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
✓	Unknown Peak 10.689	10.689	34015	
✓	Unknown Peak 10.753	10.754	120579	
✓	Unknown Peak 10.875	10.876	11200	
✓	Unknown Peak 10.968	10.969	14214	
✓	Unknown Peak 11.047	11.048	49595	
✓	Unknown Peak 11.384	11.384	25159	
✓	Unknown Peak 11.477	11.477	32752	

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File Results

Data File: File Information: p072808.d
Sample #: 2107361-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	38	(10338676.8828233 - 9149588.5785201 / 67484)

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List of Selected Compounds

Data File: File Information: p072808.d
Sample #: 2107361-02A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2548	1.255	76582	
	Unknown Peak 1.5066	1.507	1363619	
✓	Unknown Peak 1.7585	1.759	96081	
✓	Unknown Peak 2.2467	2.247	26973	
✓	Unknown Peak 2.6335	2.634	22865	
✓	Unknown Peak 3.7295	3.730	38138	
✓	Unknown Peak 3.9014	3.901	14056	
✓	Unknown Peak 4.3956	4.396	14325	
✓	Hexane	4.697	75938	
✓	Unknown Peak 5.3268	5.327	17944	
✓	Bromochloromethane	5.785	1023781	
✓	Unknown Peak 5.9572	5.957	15964	
✓	1,2-Dichloroethane-d4	6.315	670855	
✓	1,4-Difluorobenzene	6.666	1447981	
✓	Unknown Peak 7.1248	7.125	12226	
✓	Unknown Peak 7.3038	7.304	12225	
✓	Unknown Peak 7.5832	7.583	30196	
✓	Toluene-d8	7.891	1784388	
✓	Toluene	7.956	72696	
✓	Unknown Peak 8.0559	8.056	15412	
✓	Unknown Peak 8.1562	8.156	92763	
✓	Unknown Peak 8.364	8.364	30081	
✓	Tetrachloroethene	8.471	136159	
✓	Chlorobenzene-d5	9.460	1914564	
✓	Unknown Peak 9.5745	9.575	33936	
✓	Unknown Peak 9.7178	9.718	48874	
✓	Unknown Peak 10.226	10.226	17132	
✓	Unknown Peak 10.383	10.384	13395	
✓	Unknown Peak 10.505	10.506	12673	
✓	Unknown Peak 10.606	10.606	23219	
✓	Unknown Peak 10.849	10.850	15656	
✓	4-Bromofluorobenzene	10.921	2238295	
✓	Unknown Peak 11.150	11.150	15492	
✓	Unknown Peak 11.272	11.272	105678	
✓	Unknown Peak 11.401	11.401	17295	
✓	Unknown Peak 11.616	11.616	23905	
✓	Unknown Peak 11.816	11.817	29910	
✓	Unknown Peak 12.095	12.096	15054	
✓	Unknown Peak 12.160	12.160	21338	
✓	Unknown Peak 12.260	12.261	13208	
✓	Unknown Peak 12.325	12.325	14230	
✓	Unknown Peak 12.640	12.640	36589	
✓	Unknown Peak 12.984	12.984	15407	
✓	Unknown Peak 13.098	13.099	12787	
✓	Unknown Peak 13.163	13.163	12919	
✓	Unknown Peak 13.327	13.328	13307	
✓	Unknown Peak 14.517	14.517	22768	

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File Results

Data File: File Information: p072809.d
Sample #: 2107361-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	220	(16438022.9741922 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072809.d
Sample #: 2107361-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2408	1.241	67735	
	Unknown Peak 1.5066	1.507	8602811	
✓	Unknown Peak 1.7725	1.773	674662	
✓	Unknown Peak 2.2467	2.247	28518	
✓	Unknown Peak 2.6407	2.641	75963	
✓	Unknown Peak 2.9702	2.970	50436	
✓	Ethanol	3.250	93478	
✓	Unknown Peak 3.5361	3.536	10469	
	Unknown Peak 3.7295	3.729	51660	
	Carbon Disulfide	3.837	67909	
✓	2-Propanol	3.901	96360	
✓	Unknown Peak 4.1234	4.123	207507	
✓	Unknown Peak 4.2022	4.202	15219	
✓	Unknown Peak 4.3956	4.396	254203	
✓	Hexane	4.697	1545301	
✓	Unknown Peak 4.9257	4.926	15675	
✓	Unknown Peak 5.2265	5.227	15746	
✓	Unknown Peak 5.3268	5.327	422569	
	Unknown Peak 5.4772	5.477	45299	
✓	Unknown Peak 5.5632	5.563	12393	
✓	Bromochloromethane	5.785	1050264	
✓	Unknown Peak 5.8927	5.893	72658	
✓	Cyclohexane	5.957	102325	
✓	Unknown Peak 6.0646	6.065	56688	
✓	2,2,4-Trimethylpentane	6.287	33263	
✓	Benzene	6.301	11704	
✓	1,2-Dichloroethane-d4	6.315	803434	
✓	Unknown Peak 6.3798	6.380	19032	
✓	Heptane	6.451	44333	
✓	1,4-Difluorobenzene	6.666	1430017	
✓	Unknown Peak 6.9743	6.974	99414	
✓	Unknown Peak 7.0459	7.046	11362	
✓	Unknown Peak 7.1319	7.132	25029	
✓	Unknown Peak 7.3038	7.304	48524	
✓	Unknown Peak 7.4113	7.411	70693	
✓	Unknown Peak 7.4471	7.447	63312	
	Unknown Peak 7.5832	7.583	100647	
✓	Unknown Peak 7.7121	7.712	60019	
✓	Unknown Peak 7.7981	7.798	51762	
✓	Toluene-d8	7.891	1879931	
✓	Toluene	7.956	436251	
	Unknown Peak 8.0488	8.049	64249	
	Unknown Peak 8.1562	8.156	854656	
	Tetrachloroethene	8.464	360976	
	Unknown Peak 8.6648	8.665	165617	
✓	Unknown Peak 8.98	8.980	23127	
✓	Unknown Peak 9.1161	9.116	15080	
✓	Chlorobenzene-d5	9.460	1917499	
✓	Ethyl Benzene	9.567	202775	
✓	m,p-Xylene	9.718	608361	
	Unknown Peak 9.8610	9.861	18803	
✓	o-Xylene	10.234	180586	

List of Selected Compounds

Data File: File Information: p072809.d
Sample #: 2107361-03A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

	Compounds	RT	Peak Area	10
✓	Unknown Peak 10.362	10.362	12290	
✓	Unknown Peak 10.505	10.506	12186	
	Unknown Peak 10.849	10.850	1987622	
✓	4-Bromofluorobenzene	10.921	2789758	
✓	Unknown Peak 11.150	11.150	30060	
✓	4-Ethyltoluene	11.258	202617	
✓	Unknown Peak 11.358	11.358	62770	
✓	Unknown Peak 11.616	11.616	58909	
✓	1,2,4-Trimethylbenzene	11.817	130903	
✓	Unknown Peak 11.938	11.938	33108	
✓	Unknown Peak 12.067	12.067	14059	
✓	Unknown Peak 12.246	12.246	26250	
✓	Unknown Peak 12.317	12.318	28891	
✓	Unknown Peak 12.489	12.490	14062	
✓	Unknown Peak 12.640	12.640	22936	
✓	Unknown Peak 12.819	12.819	13847	
✓	Unknown Peak 12.905	12.905	15553	
	Unknown Peak 12.984	12.984	47518	
✓	Unknown Peak 13.170	13.170	11749	
✓	Unknown Peak 13.370	13.371	48835	
✓	Unknown Peak 13.743	13.743	12575	
✓	Unknown Peak 13.800	13.801	21085	
✓	Unknown Peak 14.502	14.503	18040	
✓	Unknown Peak 14.918	14.918	11546	
✓	Unknown Peak 15.154	15.155	10052	

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File Results

Data File: File Information: p072810.d
Sample #: 2107361-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	180	(15134240.761774 - 9149588.5785201 / 67484) *

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List of Selected Compounds

Data File: File Information: p072810.d
Sample #: 2107361-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2407	1.241	94004	
	Unknown Peak 1.5065	1.507	9088209	
	Unknown Peak 1.7724	1.772	551373	
	Unknown Peak 2.2466	2.247	23760	
✓	Unknown Peak 2.6406	2.641	67812	
✓	Unknown Peak 2.9629	2.963	52421	
✓	Ethanol	3.257	77410	
	Unknown Peak 3.7365	3.737	24511	
✓	Unknown Peak 4.1233	4.123	199514	
✓	Unknown Peak 4.3955	4.396	247259	
✓	Hexane	4.696	1540187	
✓	Unknown Peak 4.9256	4.926	12944	
✓	Unknown Peak 5.2264	5.226	16807	
✓	Unknown Peak 5.3267	5.327	424436	
✓	Bromochloromethane	5.785	1005220	
✓	Unknown Peak 5.8926	5.893	65128	
✓	Cyclohexane	5.964	102019	
✓	Unknown Peak 6.0573	6.057	65258	
✓	2,2,4-Trimethylpentane	6.279	33200	
✓	Benzene	6.301	12009	
✓	1,2-Dichloroethane-d4	6.315	822263	
✓	Heptane	6.444	50487	
✓	1,4-Difluorobenzene	6.666	1433282	
✓	Unknown Peak 6.9742	6.974	90494	
	Unknown Peak 7.1246	7.125	31799	
✓	Unknown Peak 7.1819	7.182	11947	
✓	Unknown Peak 7.3037	7.304	45042	
✓	Unknown Peak 7.4112	7.411	59463	
✓	Unknown Peak 7.4470	7.447	40863	
✓	Unknown Peak 7.5759	7.576	73824	
✓	Unknown Peak 7.7048	7.705	26261	
✓	Unknown Peak 7.798	7.798	18204	
✓	Toluene-d8	7.891	1806101	
✓	Toluene	7.956	373295	
✓	Unknown Peak 8.0558	8.056	13179	
✓	Unknown Peak 8.149	8.149	16915	
✓	Unknown Peak 8.2421	8.242	17676	
✓	Unknown Peak 8.3925	8.393	17221	
	Tetrachloroethene	8.464	347199	
✓	Unknown Peak 8.6647	8.665	164538	
✓	Unknown Peak 8.9727	8.973	23100	
✓	Unknown Peak 9.116	9.116	16165	
✓	Chlorobenzene-d5	9.460	1896903	
✓	Ethyl Benzene	9.567	202544	
✓	m,p-Xylene	9.718	616423	
✓	o-Xylene	10.226	180749	
✓	Unknown Peak 10.648	10.649	25847	
✓	4-Bromofluorobenzene	10.921	2319100	
✓	Unknown Peak 11.150	11.150	35516	
✓	4-Ethyltoluene	11.258	186875	
✓	Unknown Peak 11.365	11.365	56303	
✓	Unknown Peak 11.615	11.616	48263	

List of Selected Compounds

Data File: File Information: p072810.d
Sample #: 2107361-04A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

	Compounds	RT	Peak Area	10
✓	1,2,4-Trimethylbenzene	11.816	134804	
✓	Unknown Peak 11.945	11.945	25569	
	Unknown Peak 11.974	11.974	13341	
	Unknown Peak 12.067	12.067	13268	
✓	Unknown Peak 12.239	12.239	27255	
✓	Unknown Peak 12.317	12.318	44767	
✓	Unknown Peak 12.461	12.461	35658	
✓	Unknown Peak 12.640	12.640	23795	
✓	Unknown Peak 12.819	12.819	15707	
✓	Unknown Peak 12.941	12.941	56840	
✓	Unknown Peak 12.976	12.977	31983	
✓	Unknown Peak 13.163	13.163	10477	
✓	Unknown Peak 13.363	13.364	53783	
✓	Unknown Peak 13.521	13.521	14554	
✓	Unknown Peak 13.643	13.643	16652	
✓	Unknown Peak 13.800	13.801	10784	
✓	Unknown Peak 15.469	15.470	21151	

Air Toxics Ltd.

File Results

Data File: File Information: p072811.d
Sample #: 2107361-05A
Client ID:
Spike Level: 0
Dilution Factor: 1.98

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	120	(13234982.6536706 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072811.d
Sample #: 2107361-05A
Client ID:
Spike Level: 0
Dilution Factor: 1.98

	Compounds	RT	Peak Area	10
	Unknown Peak 1.5067	1.507	22284743	
	Unknown Peak 1.7585	1.759	475118	
	Unknown Peak 1.8985	1.899	315633	
	Unknown Peak 2.2611	2.261	477465	
✓	Unknown Peak 2.6336	2.634	27972	
✓	Unknown Peak 2.7840	2.784	23868	
	Unknown Peak 2.8413	2.841	57892	
✓	Unknown Peak 2.9774	2.977	13174	
✓	Ethanol	3.257	41376	
	Unknown Peak 3.3714	3.371	89043	
	Unknown Peak 3.6292	3.629	13770	
	Acetone	3.722	174574	
✓	Unknown Peak 3.9086	3.909	32592	
✓	Unknown Peak 4.1092	4.109	81046	
✓	Unknown Peak 4.4028	4.403	173342	
✓	Hexane	4.697	401607	
✓	Unknown Peak 4.9257	4.926	18002	
✓	Unknown Peak 5.3269	5.327	116901	
	Unknown Peak 5.3913	5.391	47940	
	Unknown Peak 5.4773	5.477	476812	
	Ethyl Acetate	5.578	269658	
✓	Unknown Peak 5.7065	5.707	58938	
✓	Bromochloromethane	5.785	1071729	
	Unknown Peak 5.8713	5.871	1071808	
	Unknown Peak 5.9572	5.957	471264	
	Unknown Peak 6.0503	6.050	562116	
	Unknown Peak 6.2294	6.229	411117	
✓	1,2-Dichloroethane-d4	6.315	1254189	
	Unknown Peak 6.4586	6.459	215339	
	Unknown Peak 6.5231	6.523	241198	
✓	1,4-Difluorobenzene	6.666	1646524	
✓	Unknown Peak 6.8311	6.831	22594	
✓	Unknown Peak 6.9744	6.974	18457	
✓	Unknown Peak 7.0317	7.032	20724	
	Unknown Peak 7.1248	7.125	17671	
	Unknown Peak 7.2466	7.247	73084	
✓	Unknown Peak 7.3254	7.325	25082	
	Unknown Peak 7.4400	7.440	42428	
	Unknown Peak 7.5761	7.576	102810	
	Unknown Peak 7.791	7.791	12038	
✓	Toluene-d8	7.891	1872456	
✓	Toluene	7.956	1163419	
	Unknown Peak 8.0488	8.049	61958	
	Unknown Peak 8.1563	8.156	377541	
	Unknown Peak 8.3139	8.314	164652	
	Tetrachloroethene	8.471	221293	
	Unknown Peak 8.5144	8.514	42981	
	Unknown Peak 8.6648	8.665	185316	
	Unknown Peak 8.7580	8.758	312781	
	Unknown Peak 8.8296	8.830	70531	
	Unknown Peak 8.9084	8.908	293910	
	Unknown Peak 9.2236	9.224	184855	

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List of Selected Compounds

Data File: File Information: p072811.d
Sample #: 2107361-05A
Client ID:
Spike Level: 0
Dilution Factor: 1.98

	Compounds	RT	Peak Area	10
✓	Chlorobenzene-d5	9.460	2027237	
✓	Unknown Peak 9.5674	9.567	41074	
✓	Unknown Peak 9.6605	9.661	29354	
✓	m,p-Xylene	9.718	112293	
✓	Unknown Peak 10.133	10.133	23958	
✓	Unknown Peak 10.233	10.234	51557	
✓	Unknown Peak 10.362	10.363	10923	
	Unknown Peak 10.541	10.542	29900	
	Unknown Peak 10.849	10.850	737489	
✓	4-Bromofluorobenzene	10.921	2449410	
✓	Unknown Peak 11.265	11.265	35106	
✓	Unknown Peak 11.401	11.401	11839	
✓	Unknown Peak 11.637	11.638	28981	
✓	Unknown Peak 11.816	11.817	26022	
	Unknown Peak 11.931	11.931	69025	
✓	Unknown Peak 12.074	12.075	18944	
	Unknown Peak 12.117	12.117	30080	
✓	Unknown Peak 12.246	12.246	56116	
	Unknown Peak 12.318	12.318	36187	
✓	Unknown Peak 12.454	12.454	58977	
✓	Unknown Peak 12.654	12.655	11442	
✓	Unknown Peak 12.690	12.691	12653	
	Unknown Peak 12.812	12.812	12703	
✓	Unknown Peak 12.912	12.913	21682	
	Unknown Peak 12.984	12.984	277970	
✓	Unknown Peak 13.156	13.156	19629	
	Unknown Peak 13.363	13.364	45531	
✓	Unknown Peak 13.514	13.514	41034	
✓	Unknown Peak 13.800	13.801	16891	
✓	Unknown Peak 14.517	14.517	18619	
✓	Unknown Peak 14.731	14.732	11582	
	Unknown Peak 14.911	14.911	23197	
✓	Unknown Peak 15.469	15.470	15667	

Air Toxics Ltd.

File Results

Data File: File Information: p072812.d
Sample #: 2107361-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	24	(9930082.8057056 - 9149588.5785201 / 67484) *

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072812.d
Sample #: 2107361-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2408	1.241	90542	
	Unknown Peak 1.5066	1.507	8426688	
	Unknown Peak 1.7724	1.772	3737284	
	Unknown Peak 1.8984	1.898	332280	
✓	Unknown Peak 2.2395	2.240	73746	
✓	Unknown Peak 3.2853	3.285	19094	
	Acetone	3.729	164203	
✓	Unknown Peak 3.8297	3.830	31056	
✓	Unknown Peak 3.9085	3.909	39171	
✓	Unknown Peak 4.7036	4.704	17532	
✓	Unknown Peak 5.3268	5.327	10610	
✓	Unknown Peak 5.3913	5.391	21125	
✓	Unknown Peak 5.4342	5.434	59790	
✓	Unknown Peak 5.5632	5.563	26839	
✓	Bromochloromethane	5.785	1229108	
✓	Chloroform	5.843	22283	
✓	Unknown Peak 5.9715	5.972	30278	
✓	1,2-Dichloroethane-d4	6.315	650913	
✓	Unknown Peak 6.5230	6.523	17575	
✓	1,4-Difluorobenzene	6.666	1430128	
✓	Unknown Peak 6.8239	6.824	22443	
✓	Unknown Peak 6.8668	6.867	15852	
✓	Unknown Peak 7.1319	7.132	23765	
✓	Unknown Peak 7.5975	7.598	53414	
✓	Toluene-d8	7.891	1747822	
✓	Unknown Peak 8.0488	8.049	28431	
✓	Unknown Peak 8.1562	8.156	13527	
	Tetrachloroethene	8.471	222488	
✓	Unknown Peak 8.7006	8.701	18467	
✓	Chlorobenzene-d5	9.460	1908806	
✓	Unknown Peak 10.505	10.506	13763	
✓	4-Bromofluorobenzene	10.921	2268215	
✓	Unknown Peak 11.408	11.408	11159	
✓	Unknown Peak 11.630	11.630	14499	
✓	Unknown Peak 11.952	11.953	14802	
✓	Unknown Peak 12.246	12.246	26976	
✓	Unknown Peak 12.475	12.476	12446	
✓	Unknown Peak 12.654	12.655	13530	
✓	Unknown Peak 12.962	12.963	14765	
✓	Unknown Peak 13.342	13.342	12004	
✓	Unknown Peak 15.462	15.463	16152	

Air Toxics Ltd.

File Results

Data File: File Information: p072813.d
Sample #: 2107361-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	41	(10475287.8774461 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072813.d
Sample #: 2107361-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2408	1.241	73492	
	Unknown Peak 1.5067	1.507	9616805	
	Unknown Peak 1.7585	1.759	488050	
	Unknown Peak 1.8844	1.884	89495	
	Unknown Peak 2.2467	2.247	122279	
✓	Unknown Peak 2.6479	2.648	13171	
✓	Ethanol	3.264	41109	
✓	Unknown Peak 3.6149	3.615	12395	
	Acetone	3.737	122692	
✓	Unknown Peak 3.9157	3.916	25481	
✓	Unknown Peak 5.3841	5.384	38965	
✓	Unknown Peak 5.4343	5.434	51553	
✓	Unknown Peak 5.5704	5.570	20669	
✓	Bromochloromethane	5.785	1103405	
✓	Unknown Peak 6.2222	6.222	14038	
✓	1,2-Dichloroethane-d4	6.315	683376	
✓	Unknown Peak 6.5302	6.530	24727	
✓	1,4-Difluorobenzene	6.666	1454903	
✓	Unknown Peak 6.738	6.738	19332	
✓	Unknown Peak 6.8311	6.831	11090	
✓	Unknown Peak 7.1248	7.125	27090	
✓	Unknown Peak 7.2394	7.239	23570	
✓	Unknown Peak 7.5760	7.576	45429	
✓	Toluene-d8	7.891	1802213	
✓	Toluene	7.956	16258	
✓	Unknown Peak 8.2064	8.206	23582	
	Tetrachloroethene	8.471	2907199	
✓	Unknown Peak 8.7006	8.701	51383	
✓	Unknown Peak 8.7579	8.758	46840	
✓	Unknown Peak 8.9084	8.908	58382	
✓	Unknown Peak 9.2164	9.216	69474	
✓	Chlorobenzene-d5	9.460	1980883	
✓	Unknown Peak 9.5674	9.567	13131	
✓	Unknown Peak 9.7178	9.718	39003	
✓	Unknown Peak 10.226	10.226	12782	
✓	Unknown Peak 10.505	10.506	24936	
✓	Unknown Peak 10.591	10.592	31925	
✓	Unknown Peak 10.763	10.764	19397	
✓	4-Bromofluorobenzene	10.921	2328280	
✓	Unknown Peak 11.257	11.258	38273	
✓	Unknown Peak 11.401	11.401	24838	
✓	Unknown Peak 11.616	11.616	11222	
✓	Unknown Peak 11.816	11.817	19038	
✓	Unknown Peak 11.931	11.931	28341	
✓	Unknown Peak 11.988	11.989	20128	
✓	Unknown Peak 12.074	12.074	36038	
✓	Unknown Peak 12.160	12.160	13098	
✓	Unknown Peak 12.253	12.254	13856	
✓	Unknown Peak 12.812	12.812	28593	
✓	Unknown Peak 13.363	13.364	53949	
✓	Unknown Peak 13.507	13.507	12422	
✓	Unknown Peak 14.517	14.517	20477	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072813.d
Sample #: 2107361-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
✓	Unknown Peak 14.903	14.904	15523	
✓	Unknown Peak 15.462	15.463	10720	

Air Toxics Ltd.

File Results

Data File: File Information: p072816.d
Sample #: 2107361-08A
Client ID:
Spike Level: 0
Dilution Factor: 282

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9081486.17901523 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072816.d
Sample #: 2107361-08A
Client ID:
Spike Level: 0
Dilution Factor: 282

	Compounds	RT	Peak Area	10
	Unknown Peak 1.5067	1.507	263650	
	1,1-Difluoroethane	1.703	2462546	
✓	Bromochloromethane	5.785	1006288	
✓	Unknown Peak 5.8641	5.864	16969	
✓	1,2-Dichloroethane-d4	6.315	647091	
✓	1,4-Difluorobenzene	6.666	1403516	
✓	Unknown Peak 7.5832	7.583	20370	
✓	Toluene-d8	7.891	1732507	
✓	4-Methyl-2-pentanone	7.891	6714	
✓	Unknown Peak 8.3640	8.364	40165	
✓	Chlorobenzene-d5	9.460	1903385	
✓	4-Bromofluorobenzene	10.921	2256709	
✓	Unknown Peak 11.408	11.408	11230	
✓	Unknown Peak 12.260	12.261	10270	
✓	Unknown Peak 12.647	12.648	12447	
✓	Unknown Peak 15.462	15.463	13825	

Air Toxics Ltd.

File Results

Data File: File Information: p072814.d
Sample #: 2107361-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	53	(10884909.9958362 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072814.d
Sample #: 2107361-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2547	1.255	90932	
	Unknown Peak 1.5066	1.507	1955825	
	1,1-Difluoroethane	1.717	212415	
	Unknown Peak 1.9124	1.912	142772	
	Unknown Peak 2.2395	2.240	61943	
✓	Unknown Peak 2.6335	2.634	14813	
✓	Unknown Peak 2.7767	2.777	14620	
✓	Unknown Peak 2.8627	2.863	13153	
✓	Unknown Peak 3.2209	3.221	23240	
✓	Unknown Peak 3.3641	3.364	35255	
	Acetone	3.729	822854	
✓	Unknown Peak 3.9085	3.909	58324	
✓	Unknown Peak 4.2452	4.245	11091	
✓	Unknown Peak 4.4099	4.410	86811	
✓	Unknown Peak 4.8970	4.897	13286	
✓	Unknown Peak 5.3841	5.384	30450	
	2-Butanone (Methyl Ethyl Ketone)	5.563	77180	
✓	Bromochloromethane	5.785	1033183	
✓	Unknown Peak 5.8640	5.864	183003	
✓	Unknown Peak 5.9643	5.964	54950	
✓	Unknown Peak 6.2222	6.222	95321	
✓	1,2-Dichloroethane-d4	6.315	722001	
✓	Unknown Peak 6.5302	6.530	11728	
✓	1,4-Difluorobenzene	6.666	1446720	
✓	Unknown Peak 6.7594	6.759	12110	
✓	Unknown Peak 6.9313	6.931	12818	
✓	Unknown Peak 7.0388	7.039	23551	
✓	Unknown Peak 7.2465	7.247	19103	
✓	Unknown Peak 7.5760	7.576	77773	
✓	Unknown Peak 7.7980	7.798	17715	
✓	Toluene-d8	7.891	1838657	
✓	Unknown Peak 8.0058	8.006	34726	
✓	Unknown Peak 8.1347	8.135	20546	
✓	Unknown Peak 8.2135	8.214	27946	
	Tetrachloroethene	8.471	1890111	
✓	Unknown Peak 8.6648	8.665	20578	
✓	Unknown Peak 8.7579	8.758	85056	
✓	Unknown Peak 8.9011	8.901	92171	
✓	Unknown Peak 9.2163	9.216	57850	
✓	Chlorobenzene-d5	9.460	2046069	
✓	Unknown Peak 9.7177	9.718	26580	
✓	Unknown Peak 9.9541	9.954	12238	
✓	Unknown Peak 10.405	10.405	10549	
✓	Unknown Peak 10.763	10.764	23342	
✓	4-Bromofluorobenzene	10.921	2335175	
✓	Unknown Peak 11.264	11.265	28342	
✓	Unknown Peak 11.644	11.645	10121	
✓	Unknown Peak 11.809	11.809	11453	
✓	Unknown Peak 12.246	12.246	18871	
	Unknown Peak 12.317	12.318	432051	
✓	Unknown Peak 12.647	12.647	11420	
✓	Unknown Peak 12.812	12.812	17945	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072814.d
Sample #: 2107361-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.06

	Compounds	RT	Peak Area	10
✓	Unknown Peak 12.984	12.984	50877	
✓	Unknown Peak 13.170	13.170	10870	
✓	Unknown Peak 13.349	13.349	15680	
✓	Unknown Peak 13.492	13.493	11411	
✓	Unknown Peak 13.807	13.808	11458	
✓	Unknown Peak 14.903	14.904	23101	
✓	Unknown Peak 15.462	15.463	20856	

Air Toxics Ltd.

File Results

Data File: File Information: p072815.d
Sample #: 2107361-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	80	(11686833.7082908 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072815.d
Sample #: 2107361-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2548	1.255	83911	
	Unknown Peak 1.5486	1.549	6523502	
	1,1-Difluoroethane	1.717	3545836	
	Freon 12	1.759	17843	
	Unknown Peak 1.8984	1.898	154630	
✓	Unknown Peak 2.0247	2.025	78422	
✓	Unknown Peak 2.2467	2.247	15305	
✓	Unknown Peak 2.3255	2.326	26991	
✓	Unknown Peak 2.6335	2.634	21768	
✓	Unknown Peak 2.7768	2.777	11088	
✓	Unknown Peak 2.8484	2.848	49059	
✓	Unknown Peak 3.3641	3.364	26329	
✓	Unknown Peak 4.4171	4.417	51263	
✓	Unknown Peak 5.1836	5.184	10801	
✓	Bromochloromethane	5.785	1029907	
✓	Chloroform	5.843	237416	
✓	Unknown Peak 5.9643	5.964	71870	
✓	Unknown Peak 6.2222	6.222	24317	
✓	1,2-Dichloroethane-d4	6.315	695192	
✓	Unknown Peak 6.3798	6.380	15389	
✓	1,4-Difluorobenzene	6.666	1421793	
	Trichloroethene	6.867	84041	
✓	Unknown Peak 6.9743	6.974	31577	
✓	Unknown Peak 7.2393	7.239	15976	
✓	Unknown Peak 7.4399	7.440	13422	
✓	Unknown Peak 7.5760	7.576	47341	
✓	Unknown Peak 7.7981	7.798	12733	
✓	Toluene-d8	7.891	1793836	
✓	Toluene	7.956	312006	
✓	Unknown Peak 8.3425	8.342	46897	
	Tetrachloroethene	8.471	612250	
✓	Unknown Peak 8.6648	8.665	37754	
✓	Unknown Peak 8.7579	8.758	87907	
✓	Unknown Peak 8.8224	8.822	16524	
✓	Unknown Peak 8.9083	8.908	77061	
✓	Unknown Peak 9.2235	9.224	59212	
✓	Chlorobenzene-d5	9.460	1970672	
✓	Unknown Peak 9.5673	9.567	44144	
✓	Unknown Peak 9.7178	9.718	86941	
✓	Unknown Peak 10.090	10.090	21788	
✓	Unknown Peak 10.226	10.226	19237	
✓	Unknown Peak 10.405	10.405	20634	
✓	Unknown Peak 10.548	10.549	19561	
✓	Unknown Peak 10.598	10.599	77309	
✓	4-Bromofluorobenzene	10.921	2325256	
✓	Unknown Peak 11.021	11.021	29048	
✓	Unknown Peak 11.150	11.150	19205	
✓	Unknown Peak 11.279	11.279	49315	
✓	Unknown Peak 11.422	11.423	55561	
✓	Unknown Peak 11.623	11.623	20945	
✓	Unknown Peak 11.816	11.817	21437	
✓	Unknown Peak 12.088	12.089	40887	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072815.d
Sample #: 2107361-10A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

	Compounds	RT	Peak Area	10
✓	Unknown Peak 12.160	12.160	60547	
✓	Unknown Peak 12.253	12.254	11095	
✓	Unknown Peak 12.611	12.612	53436	
✓	Unknown Peak 12.912	12.913	12024	
✓	Unknown Peak 12.991	12.991	66535	
✓	Unknown Peak 13.170	13.170	11708	
✓	Unknown Peak 13.363	13.364	103114	
✓	Unknown Peak 13.492	13.493	19046	
✓	Unknown Peak 13.800	13.801	14664	
✓	Unknown Peak 13.951	13.951	15220	
✓	Unknown Peak 14.123	14.123	18563	
✓	Unknown Peak 14.380	14.381	11313	
✓	Unknown Peak 14.517	14.517	56886	
✓	Unknown Peak 14.918	14.918	29774	
✓	Unknown Peak 15.161	15.162	20359	
✓	Unknown Peak 15.261	15.262	10089	
✓	Unknown Peak 15.462	15.463	11365	

Air Toxics Ltd.

File Results

Data File: File Information: p072818.d
Sample #: 2107361-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	8.5	(9418156.55449295 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072818.d
Sample #: 2107361-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2408	1.241	86829	
	Unknown Peak 1.5486	1.549	20415925	
	Unknown Peak 1.7725	1.773	3654040	
✓	Unknown Peak 2.2396	2.240	93974	
✓	Unknown Peak 3.3642	3.364	23434	
	Acetone	3.722	142997	
✓	2-Propanol	3.901	37306	
✓	Unknown Peak 4.9329	4.933	10431	
✓	Unknown Peak 5.3770	5.377	29297	
✓	Unknown Peak 5.4343	5.434	47787	
✓	Unknown Peak 5.5632	5.563	25037	
✓	Bromochloromethane	5.785	1048567	
	Chloroform	5.843	26075	
✓	Unknown Peak 5.9643	5.964	22556	
✓	1,2-Dichloroethane-d4	6.315	634672	
✓	Unknown Peak 6.5231	6.523	15519	
✓	1,4-Difluorobenzene	6.659	1346269	
✓	Unknown Peak 6.8167	6.817	19333	
	Trichloroethene	6.867	176426	
✓	Unknown Peak 7.0316	7.032	12465	
✓	Unknown Peak 7.1248	7.125	37610	
✓	Unknown Peak 7.5832	7.583	26589	
✓	Toluene-d8	7.891	1701174	
✓	Toluene	7.956	12968	
✓	Unknown Peak 8.0488	8.049	22645	
✓	Unknown Peak 8.3281	8.328	37672	
	Tetrachloroethene	8.464	781597	
✓	Unknown Peak 8.5860	8.586	11406	
✓	Unknown Peak 8.7006	8.701	35712	
✓	Chlorobenzene-d5	9.460	1818276	
✓	Unknown Peak 10.505	10.506	25877	
✓	4-Bromofluorobenzene	10.921	2104441	
✓	Unknown Peak 11.931	11.931	22002	
✓	Unknown Peak 11.981	11.981	17113	
✓	Unknown Peak 12.067	12.067	32182	
✓	Unknown Peak 12.246	12.246	22652	
✓	Unknown Peak 12.468	12.468	17571	
✓	Unknown Peak 12.826	12.827	15005	
✓	Unknown Peak 12.998	12.998	19143	
✓	Unknown Peak 13.378	13.378	55186	
✓	Unknown Peak 14.552	14.553	16287	

Air Toxics Ltd.

File Results

Data File: File Information: p072819.d
Sample #: 2107361-12A
Client ID:
Spike Level: 0
Dilution Factor: 2.34

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	30	(10027421.1855843 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072819.d
Sample #: 2107361-12A
Client ID:
Spike Level: 0
Dilution Factor: 2.34

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2548	1.255	70933	
✓	Unknown Peak 1.5207	1.521	579053	
✓	Unknown Peak 1.7306	1.731	74384	
✓	Unknown Peak 1.9544	1.954	27245	
✓	Unknown Peak 2.2396	2.240	65371	
✓	Unknown Peak 2.6407	2.641	17320	
	Acetone	3.730	122614	
✓	2-Propanol	3.901	58626	
✓	Hexane	4.697	36867	
✓	Unknown Peak 4.9329	4.933	10864	
✓	Unknown Peak 5.4343	5.434	24048	
✓	Unknown Peak 5.4701	5.470	29224	
✓	Unknown Peak 5.6277	5.628	11999	
✓	Bromochloromethane	5.785	993770	
✓	Unknown Peak 6.1578	6.158	11395	
✓	1,2-Dichloroethane-d4	6.315	628716	
✓	1,4-Difluorobenzene	6.659	1349543	
✓	Unknown Peak 7.1248	7.125	18552	
✓	Unknown Peak 7.5761	7.576	21010	
✓	Toluene-d8	7.891	1665675	
✓	Toluene	7.956	69130	
✓	Unknown Peak 8.3497	8.350	34020	
✓	Unknown Peak 8.4643	8.464	39277	
✓	Unknown Peak 8.7007	8.701	22357	
✓	Chlorobenzene-d5	9.460	1814219	
✓	Unknown Peak 9.5531	9.553	20162	
✓	Unknown Peak 9.7107	9.711	21951	
✓	Unknown Peak 10.505	10.506	10183	
✓	Unknown Peak 10.849	10.850	12358	
✓	4-Bromofluorobenzene	10.921	2113509	
✓	Unknown Peak 11.272	11.272	20829	
✓	Unknown Peak 11.401	11.401	15932	
✓	Unknown Peak 11.630	11.630	11197	
✓	Unknown Peak 11.816	11.817	16326	
✓	Unknown Peak 11.931	11.931	15656	
✓	Unknown Peak 12.067	12.067	11697	
✓	Unknown Peak 12.253	12.254	12850	
✓	Unknown Peak 12.461	12.461	13981	
✓	Unknown Peak 12.912	12.913	14973	
✓	Unknown Peak 13.363	13.364	34538	
✓	Unknown Peak 13.643	13.643	13661	
✓	Unknown Peak 13.800	13.801	28475	
✓	Unknown Peak 14.911	14.911	19183	
✓	Unknown Peak 15.455	15.455	17298	

Air Toxics Ltd.

File Results

Data File: File Information: p072820.d
Sample #: 2107361-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	32	(10144977.9873306 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072820.d
Sample #: 2107361-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.14

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2406	1.241	68115	
	Unknown Peak 1.5065	1.506	6900896	
	Unknown Peak 1.7583	1.758	1936301	
✓	Unknown Peak 2.0531	2.053	11976	
✓	Unknown Peak 2.2465	2.247	49973	
✓	Unknown Peak 3.7293	3.729	61254	
✓	Unknown Peak 3.9012	3.901	40187	
✓	Unknown Peak 5.3983	5.398	10366	
✓	Unknown Peak 5.4771	5.477	76095	
✓	Bromochloromethane	5.785	1015608	
	Chloroform	5.835	10223	
✓	1,2-Dichloroethane-d4	6.308	623546	
✓	Unknown Peak 6.5157	6.516	15170	
✓	1,4-Difluorobenzene	6.659	1335424	
	Trichloroethene	6.867	60021	
✓	Unknown Peak 7.5830	7.583	14400	
✓	Toluene-d8	7.891	1688074	
✓	Unknown Peak 8.0486	8.049	37105	
✓	Unknown Peak 8.1560	8.156	93713	
✓	Unknown Peak 8.2492	8.249	68324	
✓	Unknown Peak 8.3709	8.371	22485	
	Tetrachloroethene	8.464	1945963	
✓	Chlorobenzene-d5	9.460	1819521	
✓	Unknown Peak 10.849	10.849	25444	
✓	4-Bromofluorobenzene	10.921	2112977	
✓	Unknown Peak 11.393	11.394	11907	
✓	Unknown Peak 11.938	11.938	18055	
✓	Unknown Peak 12.246	12.246	15390	
✓	Unknown Peak 12.317	12.318	39286	
✓	Unknown Peak 12.468	12.468	19108	
✓	Unknown Peak 12.647	12.647	10634	
✓	Unknown Peak 12.812	12.812	10339	
✓	Unknown Peak 12.983	12.984	105569	
✓	Unknown Peak 13.356	13.356	25842	
✓	Unknown Peak 13.528	13.528	17431	
✓	Unknown Peak 13.793	13.793	11903	
✓	Unknown Peak 14.509	14.510	11250	
✓	Unknown Peak 14.724	14.725	13675	
✓	Unknown Peak 14.910	14.911	622857	
✓	Unknown Peak 15.462	15.462	90090	

Air Toxics Ltd.

File Results

Data File: File Information: p072821.d
Sample #: 2107361-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	72	(11479345.2612555 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072821.d
Sample #: 2107361-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2546	1.255	68397	
	Unknown Peak 1.5064	1.506	5944127	
	1,1-Difluoroethane	1.716	1096656	
✓	Unknown Peak 2.0245	2.025	55880	
✓	Unknown Peak 2.2465	2.247	24187	
✓	Unknown Peak 3.2565	3.257	13555	
✓	Unknown Peak 3.7293	3.729	69368	
✓	Unknown Peak 3.9012	3.901	30356	
✓	Hexane	4.696	48041	
✓	Unknown Peak 5.3266	5.327	14560	
✓	Unknown Peak 5.4771	5.477	13405	
✓	Unknown Peak 5.5702	5.570	18641	
✓	Bromochloromethane	5.785	1012704	
✓	1,2-Dichloroethane-d4	6.315	653325	
✓	Unknown Peak 6.4512	6.451	11242	
✓	1,4-Difluorobenzene	6.666	1341251	
✓	Unknown Peak 6.8165	6.817	15381	
✓	Unknown Peak 7.1246	7.125	12282	
✓	Unknown Peak 7.3036	7.304	12387	
✓	Unknown Peak 7.4111	7.411	25718	
✓	Unknown Peak 7.5830	7.583	35425	
✓	Unknown Peak 7.7979	7.798	11163	
✓	Toluene-d8	7.891	1700316	
✓	Unknown Peak 8.0486	8.049	28632	
✓	Unknown Peak 8.1560	8.156	39606	
✓	Unknown Peak 8.3781	8.378	14956	
✓	Tetrachloroethene	8.471	1510805	
✓	Unknown Peak 8.6646	8.665	80310	
✓	Chlorobenzene-d5	9.460	1815456	
✓	Unknown Peak 9.5671	9.567	28125	
✓	Unknown Peak 9.7176	9.718	47137	
✓	Unknown Peak 10.226	10.226	20814	
✓	4-Bromofluorobenzene	10.921	2112411	
✓	Unknown Peak 11.150	11.150	14220	
✓	Unknown Peak 11.257	11.258	28342	
✓	Unknown Peak 11.816	11.816	22804	
✓	Unknown Peak 11.931	11.931	36052	
✓	Unknown Peak 12.067	12.067	13930	
✓	Unknown Peak 12.239	12.239	11848	
✓	Unknown Peak 12.317	12.318	36909	
✓	Unknown Peak 12.461	12.461	42454	
✓	Unknown Peak 12.611	12.611	11310	
✓	Unknown Peak 12.812	12.812	10058	
✓	Unknown Peak 12.940	12.941	17096	
✓	Unknown Peak 12.983	12.984	18335	
✓	Unknown Peak 13.170	13.170	12446	
✓	Unknown Peak 13.306	13.306	14497	
✓	Unknown Peak 13.363	13.364	47400	
✓	Unknown Peak 13.535	13.536	53128	
✓	Unknown Peak 13.642	13.643	28896	
✓	Unknown Peak 13.743	13.743	16360	
✓	Unknown Peak 13.800	13.801	14547	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072821.d
Sample #: 2107361-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
✓	Unknown Peak 13.943	13.944	22406	
✓	Unknown Peak 14.115	14.116	50707	
✓	Unknown Peak 14.223	14.223	11786	
✓	Unknown Peak 14.337	14.338	16376	
✓	Unknown Peak 14.495	14.495	59114	
✓	Unknown Peak 14.832	14.832	10802	
✓	Unknown Peak 14.910	14.911	16747	
✓	Unknown Peak 15.154	15.154	23338	

Air Toxics Ltd.

File Results

Data File: File Information: p072822.d
Sample #: 2107361-15A
Client ID:
Spike Level: 0
Dilution Factor: 42

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(8629592.65069297 - 9149588.5785201 / 67484)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p072822.d
Sample #: 2107361-15A
Client ID:
Spike Level: 0
Dilution Factor: 42

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2549	1.255	60948	
	Unknown Peak 1.5067	1.507	927171	
	1,1-Difluoroethane	1.689	2182984	
✓	Unknown Peak 1.9545	1.954	37981	
✓	Unknown Peak 3.7081	3.708	22583	
✓	Unknown Peak 4.6966	4.697	12116	
✓	Bromochloromethane	5.778	1009490	
✓	1,2-Dichloroethane-d4	6.308	646372	
✓	1,4-Difluorobenzene	6.666	1309713	
✓	Toluene-d8	7.891	1641365	
✓	Unknown Peak 8.3927	8.393	14664	
✓	Unknown Peak 8.4643	8.464	34556	
✓	Chlorobenzene-d5	9.460	1800995	
✓	4-Bromofluorobenzene	10.921	2087552	
✓	Unknown Peak 13.335	13.335	12208	

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 **Workorder #** 2107361	Data Review Checklist			Release Date: 10/22/19
	Form F1.27	Revision #17	Revision Date: 10/22/19	Page 1 of 2

S 1	S 2	S 3	S 4	D	***Section 1* – Spec Out**				
					Initials/Instrument/Date	**S1:** UD MSD3 7/27/21	**S2:** MSDP 7/28/21 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				
NA	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: QC - last ICAL Ø out daily. LB - 09a. S2: QC - Ø out. LB - 07a.

A 1	A 2	A 3	A 4	D	***Section 2* – Sample Analysis**				
					Initials/Date	**A1:** UD 7/28/21	**A2:** MM 07/28/21	**A3:** UD 7/29/21	**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		N/A	**a)** Tedlar Bag IDs verified against COC **b)** Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
NA	NA	NA		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				
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 Full load, A2: ~~03A~~ 07A, 09A, 10A; full loads (02A MM 07/28/21) A2: 08A: dil TC, 11A: full load A3: 12A-14A - Full loads. 15A - Dil TC.

D 1	D 2	D 3	D 4	T	3 T	***Section 3* – Target Data Reduction**	**Technical Review Needed?** Circle one: Yes/(No)		**T:**	
						Initials/Instrument/ Date	**D1:** MSD-3, MSD-P MJB 7/29/21	**D2:**	**D3:**	**D4:**
N/A					■	CAR # *(if applicable)*				
↓					■	Spectra Verified *(documentation of spectral defense included if applicable)*				
✓					■	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	3 T	***Section 4*- Atlas Data Entry**	**Lumen verified and included in folder** **Circle one:** (Yes)/No
		Initials/Date: MJB 7/29/21	**3rd Tier:** *(needed only for DOD or per client request)*
N/A		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 08-02-2021

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WORK ORDER #: 2107362A

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:	07/15/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/29/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-VW61A-01	TO-15	5.1 "Hg	10 psi
02A	SG-VW61B-01	TO-15	1.8 "Hg	10.1 psi
03A	SG-VW62-01	TO-15	6.5 "Hg	10.1 psi
04A	SG-VW30A-03	TO-15	6.5 "Hg	10.1 psi
05A	SG-VW30B-03	TO-15	7.6 "Hg	9.9 psi
06A	SG-VW63A-01	TO-15	5.5 "Hg	9.8 psi
07A	SG-VW63B-01	TO-15	5.9 "Hg	10 psi
08A	SG-VW64A-01	TO-15	6.3 "Hg	9.7 psi
09A	SG-VW64B-01	TO-15	8.4 "Hg	9.9 psi
10A	SG-VW29A-02	TO-15	5.9 "Hg	10.1 psi
11A	SG-VW29B-02	TO-15	5.9 "Hg	9.8 psi
12A	SG-VW28B-02	TO-15	6.1 "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: 07/29/21

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# 2107362A

Nineteen 1 Liter Summa Canister samples were received on July 15, 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.

The reported result for 4-Ethyltoluene in samples SG-VW61A-01, SG-VW63A-01 and SG-VW64A-01 may be biased high due to co-elution with a non target compound with similar characteristic ions. Both the primary and secondary ion for 4-Ethyltoluene exhibited potential interference.

Dilution was performed on samples SG-VW62-01, SG-VW30A-03, SG-VW30B-03, SG-VW29A-02 and SG-VW28B-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-VW61A-01	2107362A-01A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW61B-01	2107362A-02A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW62-01	2107362A-03A	07/15/2021	07/15/2021	NA	12	07/27/2021	NA	GOOD
SG-VW30A-03	2107362A-04A	07/15/2021	07/15/2021	NA	12	07/27/2021	NA	GOOD
SG-VW30B-03	2107362A-05A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW63A-01	2107362A-06A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW63B-01	2107362A-07A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW64A-01	2107362A-08A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW64B-01	2107362A-09A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW29A-02	2107362A-10A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW29B-02	2107362A-11A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
SG-VW28B-02	2107362A-12A	07/15/2021	07/15/2021	NA	13	07/28/2021	NA	GOOD
Lab Blank	2107362A-13A	NA	NA	NA	NA	07/27/2021	NA	GOOD
CCV	2107362A-14A	NA	NA	NA	NA	07/27/2021	NA	GOOD
LCS	2107362A-15A	NA	NA	NA	NA	07/27/2021	NA	GOOD
LCSD	2107362A-15AA	NA	NA	NA	NA	07/27/2021	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-VW61A-01

Lab ID#: 2107362A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.0	14	11	37
1,2,4-Trimethylbenzene	1.0	3.3	5.0	16
1,3,5-Trimethylbenzene	1.0	2.2	5.0	11
2,2,4-Trimethylpentane	1.0	13	4.7	62
2-Propanol	4.0	5.3	9.9	13
4-Ethyltoluene	1.0	5.1	5.0	25
Acetone	10	28	24	67
Benzene	1.0	14	3.2	44
Bromodichloromethane	1.0	2.0	6.8	13
Carbon Disulfide	4.0	23	12	72
Chloroform	1.0	61	4.9	300
Cumene	1.0	1.0	5.0	5.1
Cyclohexane	1.0	1.7	3.5	5.9
Ethyl Benzene	1.0	29	4.4	130
Freon 12	1.0	1.1	5.0	5.2
Heptane	1.0	5.0	4.1	21
Hexane	1.0	36	3.6	130
m,p-Xylene	1.0	88	4.4	380
o-Xylene	1.0	29	4.4	130
Propylene	4.0	9.5	7.0	16
Tetrachloroethene	1.0	14	6.8	95
Tetrahydrofuran	1.0	1.2	3.0	3.5
Toluene	1.0	120	3.8	450
TPH ref. to Gasoline (MW=100)	100	810	410	3300

Client Sample ID: SG-VW61B-01

Lab ID#: 2107362A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	3.6	4.1	9.7	11
2-Propanol	3.6	5.4	8.8	13
Bromodichloromethane	0.90	1.5	6.0	9.9
Chloroform	0.90	32	4.4	160

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

Client Sample ID: SG-VW61B-01

Lab ID#: 2107362A-02A

Freon 12	0.90	1.1	4.4	5.4
Hexane	0.90	4.7	3.2	16
Tetrachloroethene	0.90	17	6.1	120
Toluene	0.90	1.4	3.4	5.4

Client Sample ID: SG-VW62-01

Lab ID#: 2107362A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	17000	2000000 E	46000	5300000 E

Client Sample ID: SG-VW30A-03

Lab ID#: 2107362A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	15	16	36	37
Bromodichloromethane	1.5	6.4	10	43
Chloroform	1.5	300	7.5	1500
Freon 12	1.5	2.2	7.6	11
Tetrachloroethene	1.5	37	10	250

Client Sample ID: SG-VW30B-03

Lab ID#: 2107362A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	45	3500	120	9600
Chloroform	11	110	55	540
Tetrachloroethene	11	35	76	240

Client Sample ID: SG-VW63A-01

Lab ID#: 2107362A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.1	17	11	45

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

Client Sample ID: SG-VW63A-01

Lab ID#: 2107362A-06A

1,2,4-Trimethylbenzene	1.0	2.4	5.0	12
1,3,5-Trimethylbenzene	1.0	1.5	5.0	7.5
2,2,4-Trimethylpentane	1.0	4.8	4.8	22
2-Propanol	4.1	7.5	10	18
4-Ethyltoluene	1.0	3.1	5.0	15
Acetone	10	14	24	32
Benzene	1.0	4.4	3.2	14
Carbon Disulfide	4.1	8.9	13	28
Chloroform	1.0	1.2	5.0	6.0
Ethyl Benzene	1.0	7.0	4.4	30
Heptane	1.0	1.6	4.2	6.6
Hexane	1.0	12	3.6	42
m,p-Xylene	1.0	22	4.4	96
o-Xylene	1.0	7.7	4.4	33
Tetrahydrofuran	1.0	1.5	3.0	4.4
Toluene	1.0	30	3.8	110
TPH ref. to Gasoline (MW=100)	100	290	420	1200

Client Sample ID: SG-VW63B-01

Lab ID#: 2107362A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.2	34	11	92
2-Propanol	4.2	9.7	10	24
Acetone	10	16	25	39
Bromodichloromethane	1.0	1.5	7.0	9.8
Chloroform	1.0	26	5.1	130
Freon 12	1.0	3.6	5.2	18
Tetrachloroethene	1.0	14	7.1	96
TPH ref. to Gasoline (MW=100)	100	140	430	570

Client Sample ID: SG-VW64A-01

Lab ID#: 2107362A-08A

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

Client Sample ID: SG-VW64A-01

Lab ID#: 2107362A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.2	110	11	310
1,2,4-Trimethylbenzene	1.0	1.6	5.2	8.1
1,3,5-Trimethylbenzene	1.0	1.1	5.2	5.6
2,2,4-Trimethylpentane	1.0	9.6	4.9	45
2-Butanone (Methyl Ethyl Ketone)	4.2	6.0	12	18
2-Propanol	4.2	14	10	35
4-Ethyltoluene	1.0	2.6	5.2	13
4-Methyl-2-pentanone	1.0	2.1	4.3	8.5
Acetone	10	49	25	120
Benzene	1.0	3.6	3.4	11
Bromodichloromethane	1.0	1.1	7.0	7.2
Carbon Disulfide	4.2	9.3	13	29
Chloroform	1.0	42	5.1	210
Ethyl Benzene	1.0	6.4	4.6	28
Freon 12	1.0	2.7	5.2	13
Heptane	1.0	2.3	4.3	9.5
Hexane	1.0	21	3.7	75
m,p-Xylene	1.0	16	4.6	71
o-Xylene	1.0	5.5	4.6	24
Tetrachloroethene	1.0	45	7.1	310
Tetrahydrofuran	1.0	1.5	3.1	4.4
Toluene	1.0	27	4.0	100
TPH ref. to Gasoline (MW=100)	100	360	430	1500

Client Sample ID: SG-VW64B-01

Lab ID#: 2107362A-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.6	8.9	12	24
2-Propanol	4.6	10	11	26
Acetone	12	13	28	31
Bromodichloromethane	1.2	2.9	7.8	19
Chloroform	1.2	43	5.7	210

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

Client Sample ID: SG-VW64B-01

Lab ID#: 2107362A-09A

Freon 12	1.2	3.6	5.7	18
Tetrachloroethene	1.2	34	7.9	230

Client Sample ID: SG-VW29A-02

Lab ID#: 2107362A-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	28	1500	76	4100
Tetrachloroethene	7.0	24	47	160

Client Sample ID: SG-VW29B-02

Lab ID#: 2107362A-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.1	8.3	11	22
2-Propanol	4.1	5.4	10	13
Acetone	10	16	24	37
Chloroform	1.0	2.0	5.0	9.6
Freon 12	1.0	2.7	5.1	13
Tetrachloroethene	1.0	56	7.0	380
Toluene	1.0	1.3	3.9	4.9

Client Sample ID: SG-VW28B-02

Lab ID#: 2107362A-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	34	2300	91	6300
Tetrachloroethene	8.4	17	57	110

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Client Sample ID: SG-VW61A-01

Lab ID#: 2107362A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072723**	**Date of Collection:**	**7/15/21 6:32:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/28/21 12:45 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	14	11	37
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	3.3	5.0	16
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	2.2	5.0	11
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	13	4.7	62
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	5.3	9.9	13
3-Chloropropene	4.0	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	5.1	5.0	25
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Acetone	10	28	24	67
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	14	3.2	44
Bromodichloromethane	1.0	2.0	6.8	13
Bromoform	1.0	Not Detected	10	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Carbon Disulfide	4.0	23	12	72
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	61	4.9	300
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-VW61A-01

Lab ID#: 2107362A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072723**	**Date of Collection:**	**7/15/21 6:32:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/28/21 12:45 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	1.0	5.0	5.1
Cyclohexane	1.0	1.7	3.5	5.9
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	29	4.4	130
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	1.1	5.0	5.2
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	5.0	4.1	21
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected
Hexachloroethane	4.0	Not Detected	39	Not Detected
Hexane	1.0	36	3.6	130
Iodomethane	10	Not Detected	59	Not Detected
Isopropyl ether	4.0	Not Detected	17	Not Detected
m,p-Xylene	1.0	88	4.4	380
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	29	4.4	130
Propylbenzene	1.0	Not Detected	5.0	Not Detected
Propylene	4.0	9.5	7.0	16
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	14	6.8	95
Tetrahydrofuran	1.0	1.2	3.0	3.5
Toluene	1.0	120	3.8	450
TPH ref. to Gasoline (MW=100)	100	810	410	3300
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-VW61A-01

Lab ID#: 2107362A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072723**	**Date of Collection:**	**7/15/21 6:32:00 AM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**7/28/21 12:45 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072723.d
Lab Smp Id: 2107362A-01A
Inj Date : 28-JUL-2021 00:45
Operator : kk Inst ID: msd3.i
Smp Info : 200mL 1L3927
Misc Info : 5.1 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2
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	223738	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	175193				48.46- 108.46	78.30
5.284	5.270 (1.000)	49	312418				120.39- 180.39	139.64
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	772958	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	113314				0.00- 45.52	14.66
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	682676	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	362198				25.46- 85.46	53.06
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	312165	25.3534	25.353		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	155829				21.66- 81.66	49.92
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	737232	23.1566	23.156		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	84962				0.00- 41.47	11.52

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	488715			36.47- 96.47	66.29
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	448412	24.8330	24.833	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	507729			93.06- 153.06	113.23
9.601	9.601 (1.114)	176	418614			62.87- 122.87	93.35
5 Propylene					CAS #: 115-07-1		
1.437	1.423 (0.272)	41	25535	4.72493	9.544	80.00- 120.00	100.00
1.437	1.423 (0.272)	42	17412			35.61- 95.61	68.19
1.437	1.423 (0.272)	39	19801			42.66- 102.66	77.54
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	24187	6.86577	13.869	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	84256			321.86- 381.86	348.34
1.465	1.451 (0.277)	47	14525			45.34- 105.34	60.05
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	8203	0.52631	1.063	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	3822			2.63- 62.63	46.60
47 Acetone					CAS #: 67-64-1		
3.228	3.214 (0.611)	58	52171	13.9063	28.091	80.00- 120.00	100.00
3.228	3.214 (0.611)	43	183499			299.66- 359.66	351.72
48 Carbon Disulfide					CAS #: 75-15-0		
3.312	3.298 (0.627)	76	192718	11.4076	23.043	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.424	3.409 (0.648)	45	35495	2.63078	5.314	80.00- 120.00	100.00
3.424	3.395 (0.648)	43	5122			0.00- 48.61	14.43
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	223463	18.0359	36.432	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	138693			32.99- 92.99	62.07
4.179	4.179 (0.791)	86	27609			0.00- 42.56	12.36
89 Tetrahydrofuran					CAS #: 109-99-9		
5.284	5.270 (1.000)	42	5264	0.59001	1.192	80.00- 120.00	100.00
5.298	5.270 (1.003)	71	1435			2.92- 62.92	27.27
5.284	5.270 (1.000)	72	2447			3.54- 63.54	46.50
92 Chloroform					CAS #: 67-66-3		
5.354	5.340 (1.013)	83	422683	30.1319	60.866	80.00- 120.00	100.00
5.354	5.340 (1.013)	85	293004			34.71- 94.71	69.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	7538	0.85015	1.717	80.00- 120.00	100.00
5.466	5.438 (1.034)	56	41336			120.40- 180.40	548.33
5.466	5.438 (1.034)	41	25790			54.20- 114.20	342.11
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	254058	6.55704	13.245	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	94209			1.12- 61.12	37.08
5.774	5.774 (1.093)	41	106683			0.00- 57.49	41.99
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	121892	6.91048	13.959	80.00- 120.00	100.00
5.802	5.788 (0.939)	77	31984			0.00- 53.80	26.24
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	17398	2.50420	5.058	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	27818			179.02- 239.02	159.89
5.942	5.942 (0.962)	57	16862			84.85- 144.85	96.92
122 Bromodichloromethane					CAS #: 75-27-4		
6.843	6.836 (1.107)	83	14764	0.99593	2.012	80.00- 120.00	100.00
6.843	6.836 (1.107)	85	9127			34.31- 94.31	61.82
137 Toluene					CAS #: 108-88-3		
7.445	7.437 (1.205)	91	1389157	58.6947	118.56	80.00- 120.00	100.00
7.445	7.437 (1.205)	92	793477			28.30- 88.30	57.12
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.914)	166	73932	6.91283	13.964	80.00- 120.00	100.00
7.882	7.881 (0.914)	129	58978			48.71- 108.71	79.77
7.882	7.874 (0.914)	131	56855			46.55- 106.55	76.90
155 Ethyl Benzene					CAS #: 100-41-4		
8.691	8.684 (1.008)	106	135213	14.4925	29.275	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	411064			282.48- 342.48	304.01
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	506530	43.6396	88.152	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1006381			171.36- 231.36	198.68
164 o-Xylene					CAS #: 95-47-6		
9.128	9.121 (1.059)	106	160383	14.5550	29.401	80.00- 120.00	100.00
9.128	9.121 (1.059)	91	332247			179.99- 239.99	207.16
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	17824	0.51162	1.033	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
168 Cumene (continued)							
9.414	9.414 (1.092)	120	4536			0.00- 56.99	25.45
9.371	9.407 (1.087)	51	26585			0.00- 41.77	149.16
183 4-Ethyltoluene					CAS #: 622-96-8		
9.830	9.851 (1.140)	120	26817	2.54510	5.141	80.00- 120.00	100.00
9.830	9.851 (1.140)	105	85552			296.79- 356.79	319.02
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.902	9.901 (1.149)	120	16332	1.10356	2.229	80.00- 120.00	100.00
9.902	9.901 (1.149)	105	34703			176.40- 236.40	212.48
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	47429	1.62525	3.283	80.00- 120.00	100.00
10.231	10.224 (1.187)	120	21909			16.58- 76.58	46.19

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072723.d
Lab Smp Id: 2107362A-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.1 Hg->10 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	223738	-6.38
108 1,4-Difluorobenze	785289	471173	1099405	772958	-1.57
153 Chlorobenzene-d5	683596	410158	957034	682676	-0.13

		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	8.61	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: 29-Jul-2021 11:00

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-01A
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/msd3.i/27JUL21.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	25.353	101.41	70-130
$ 134 Toluene-d8	25.000	23.156	92.63	70-130
$ 170 4-Bromofluorobenz	25.000	24.833	99.33	70-130

Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

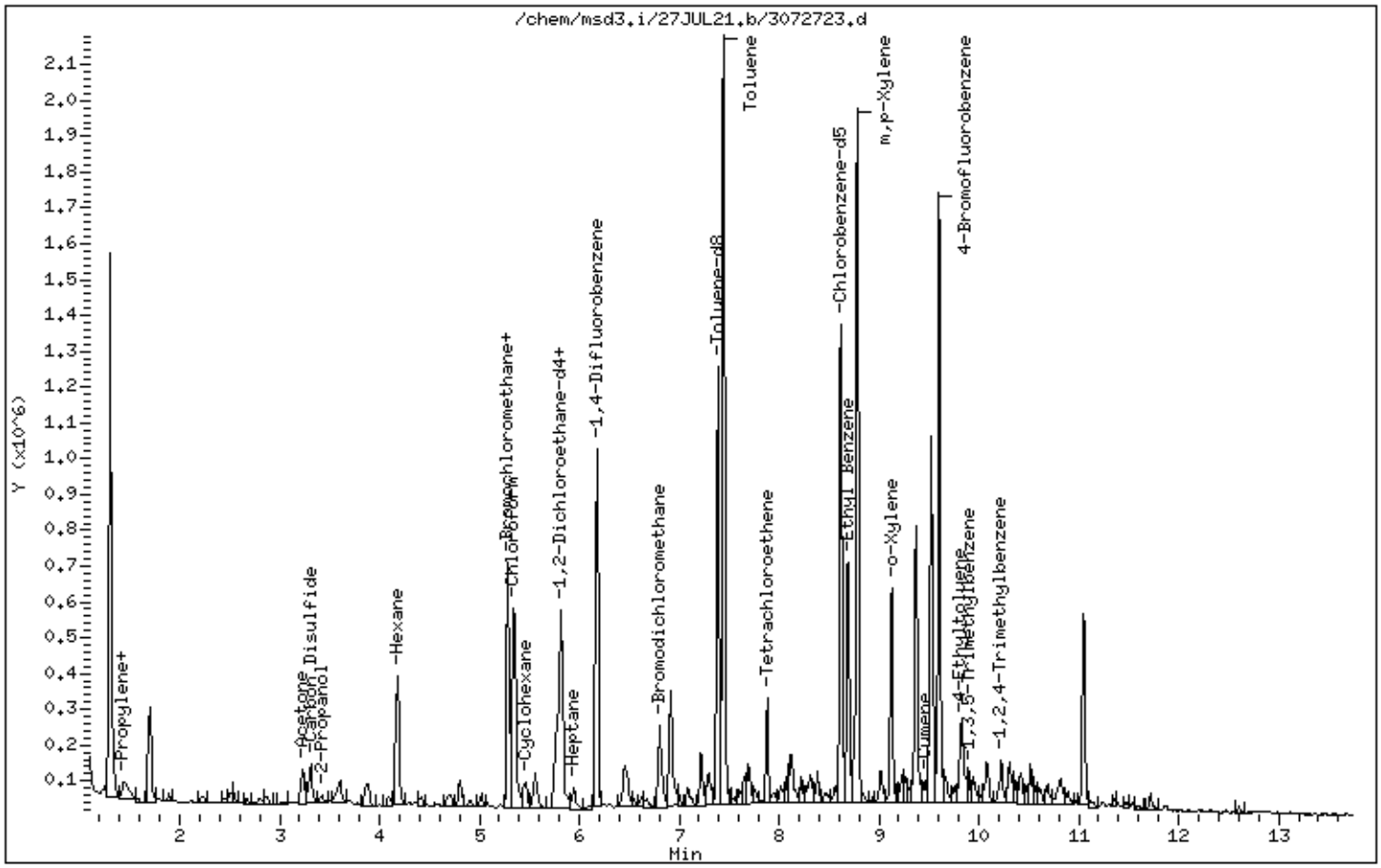
Instrument: msd3.i

Sample Info: 200mL 1L3927

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

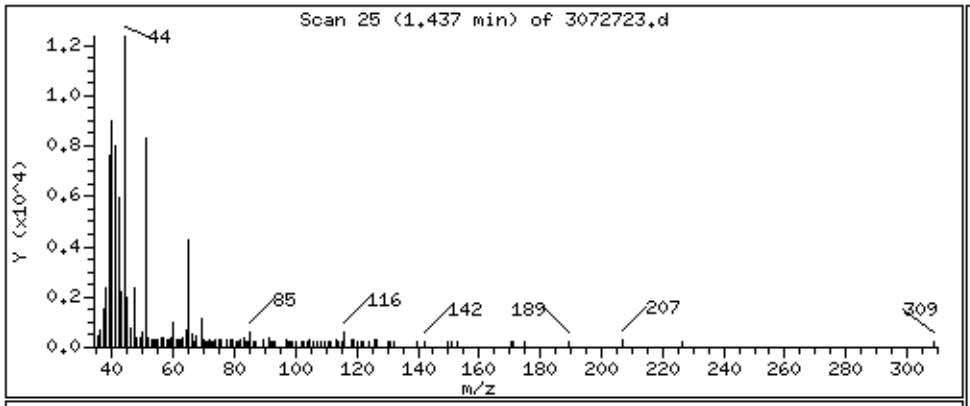
Operator: kk

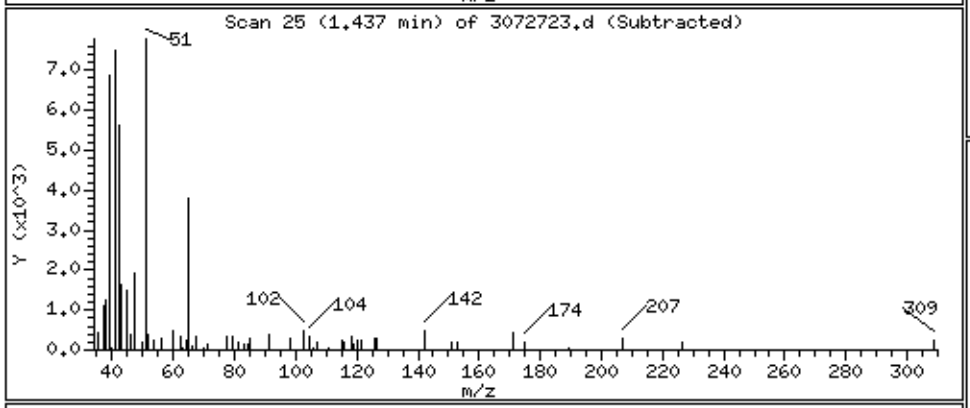
Column phase: RTX-624

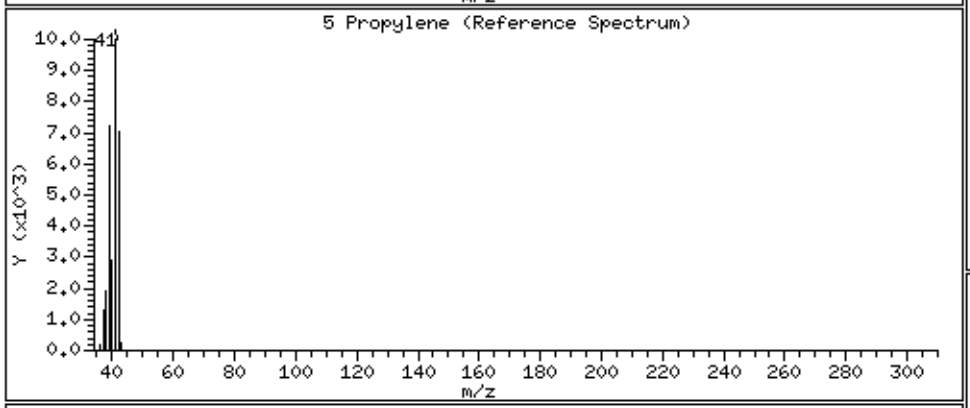
Column diameter: 0.25

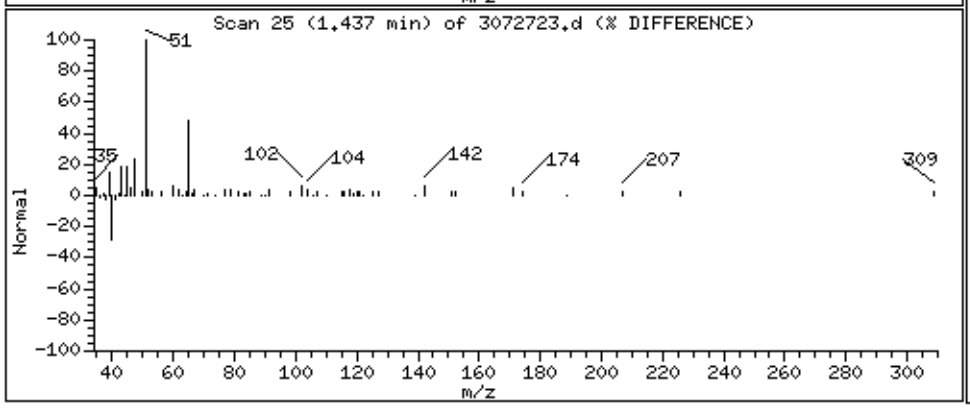
5 Propylene

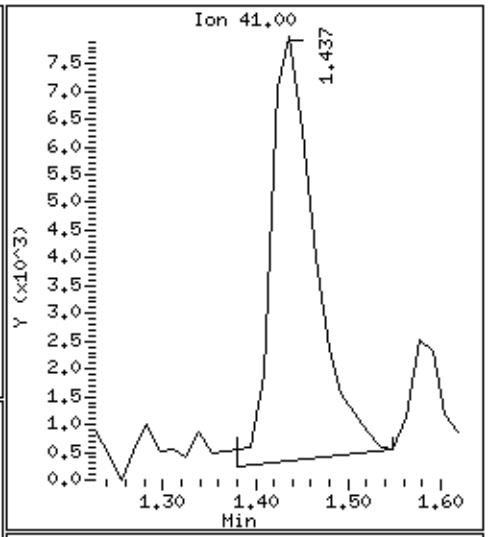
Concentration: 9.544 PPBV

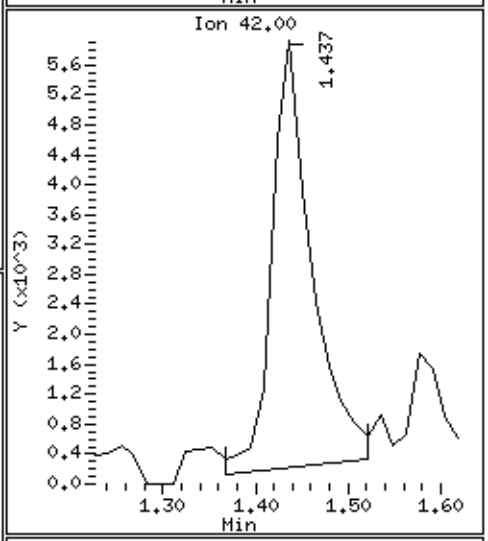


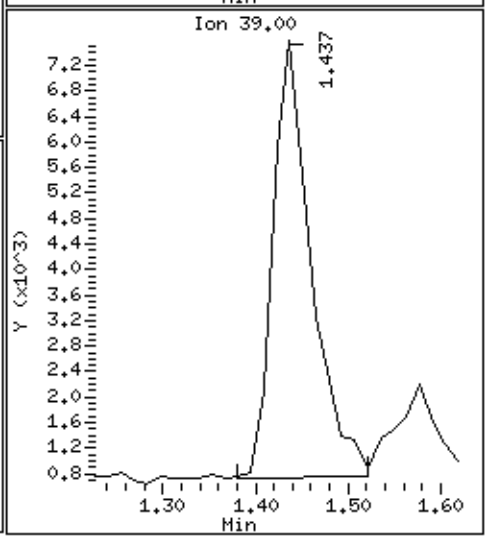












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

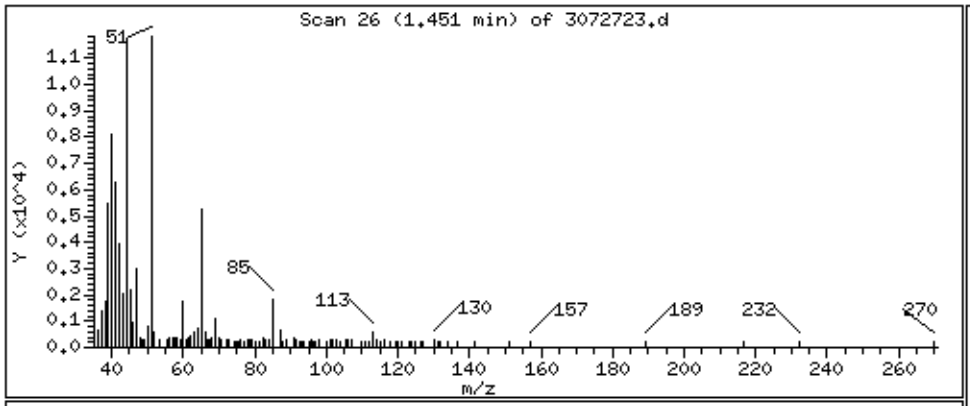
Operator: kk

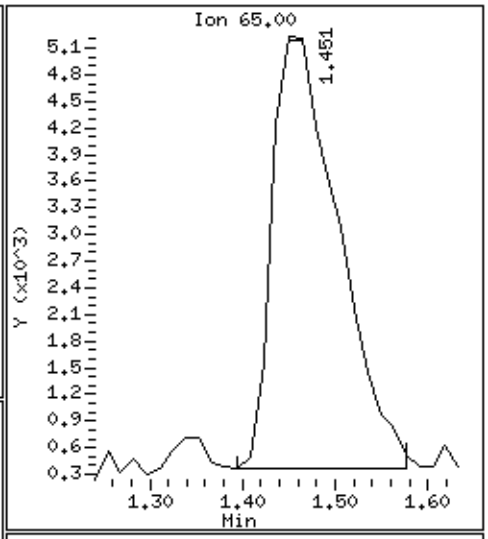
Column phase: RTX-624

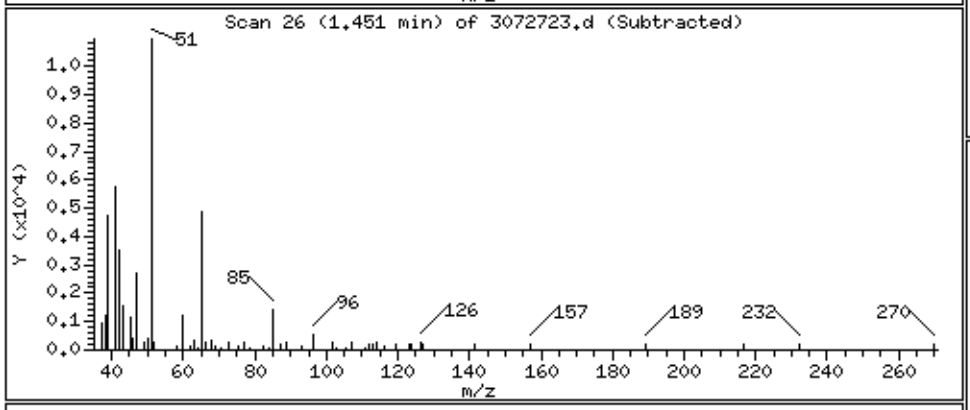
Column diameter: 0.25

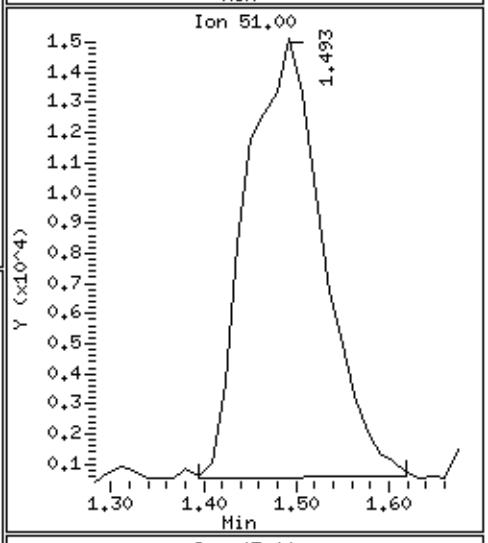
7 1,1-Difluoroethane

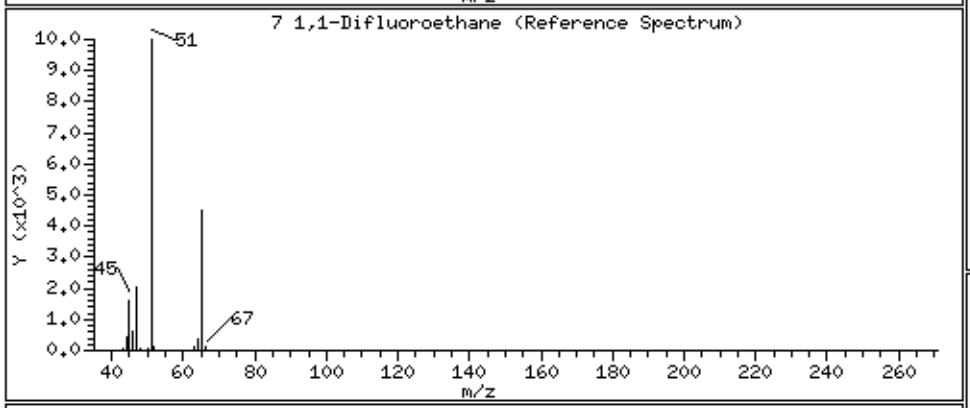
Concentration: 13.869 PPBV

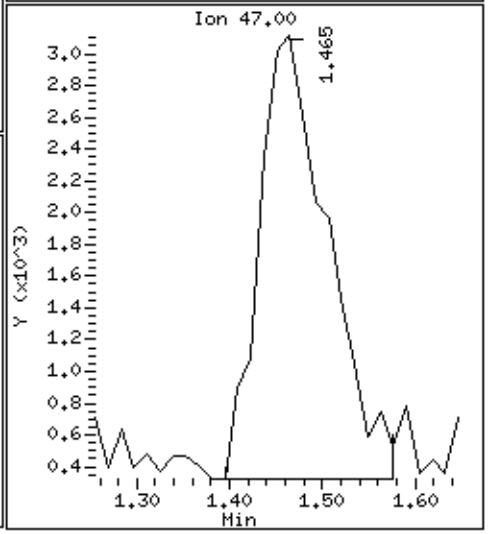


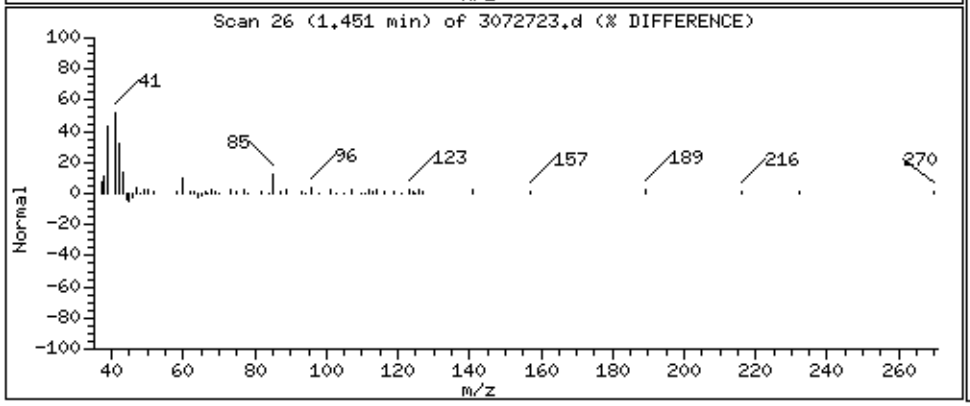












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

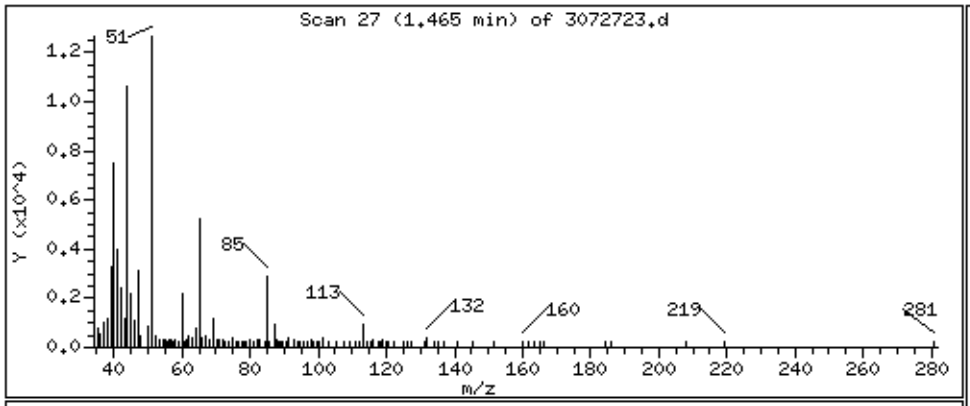
Operator: kk

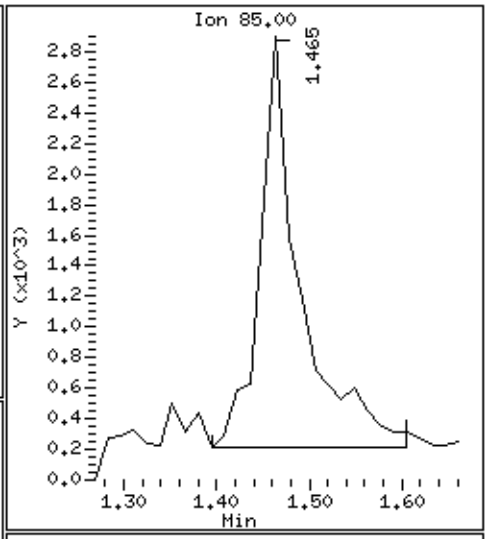
Column phase: RTX-624

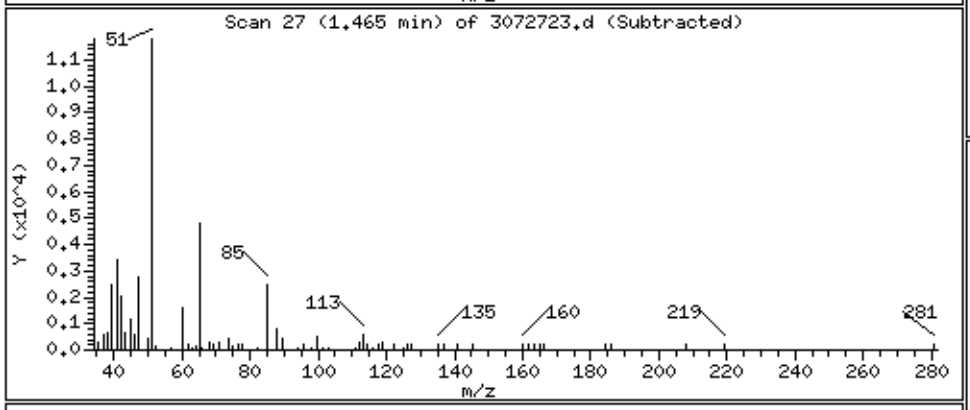
Column diameter: 0.25

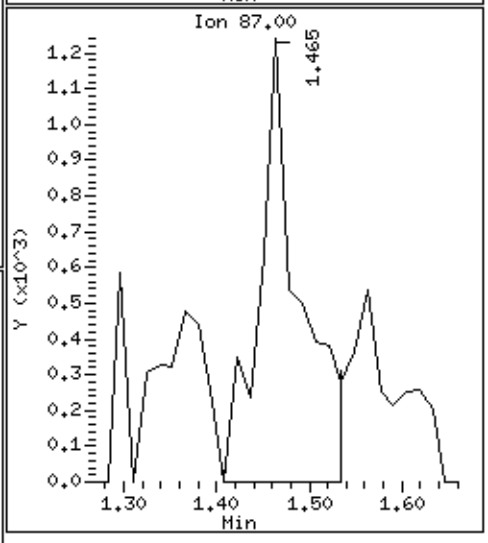
8 Freon 12

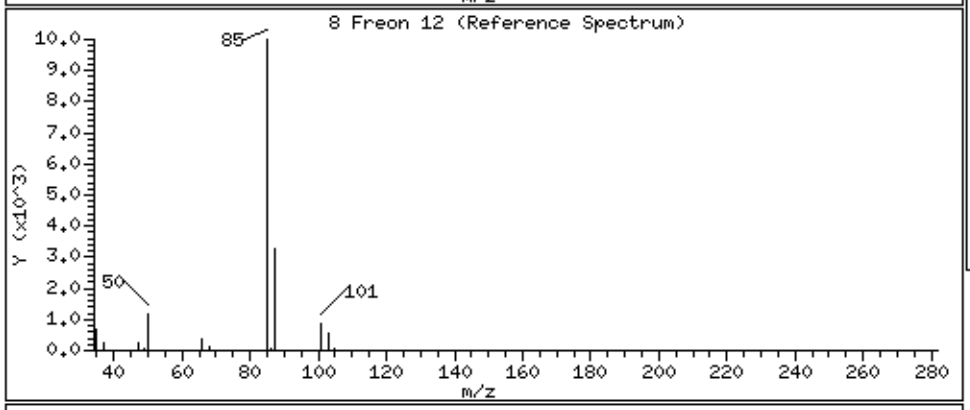
Concentration: 1.063 PPBV

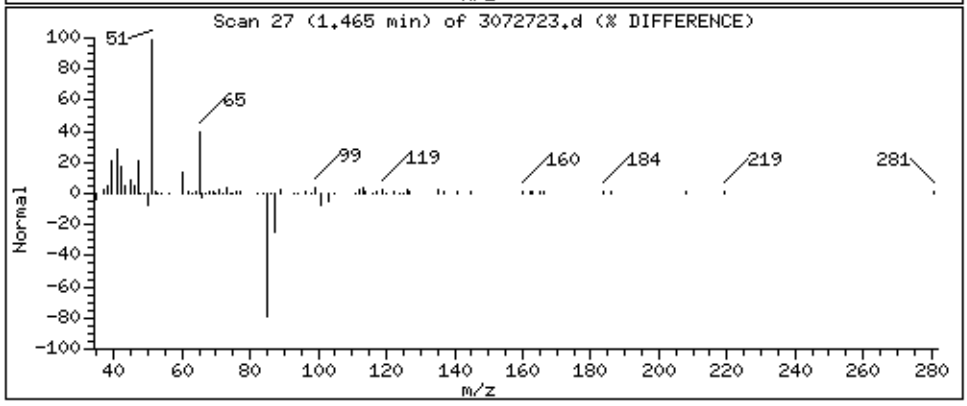












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

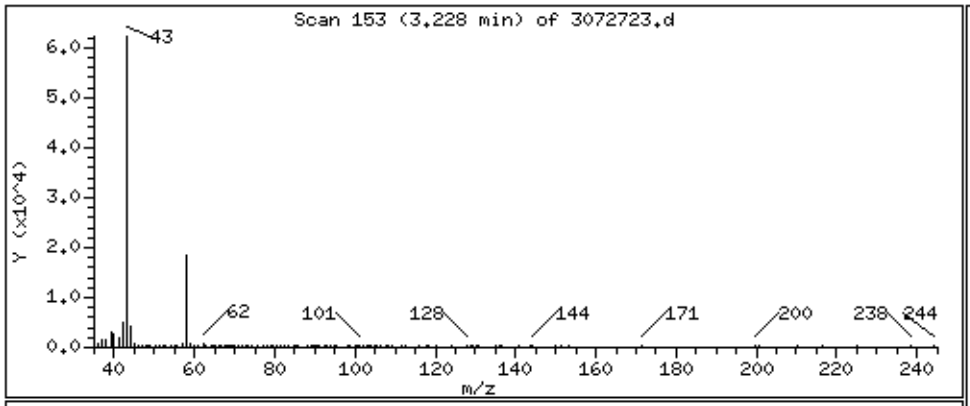
Operator: kk

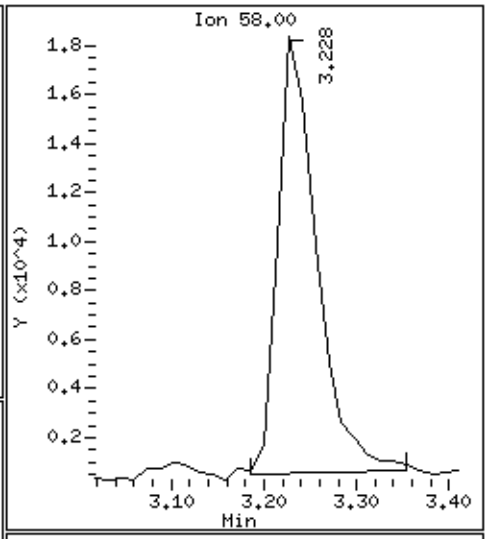
Column phase: RTX-624

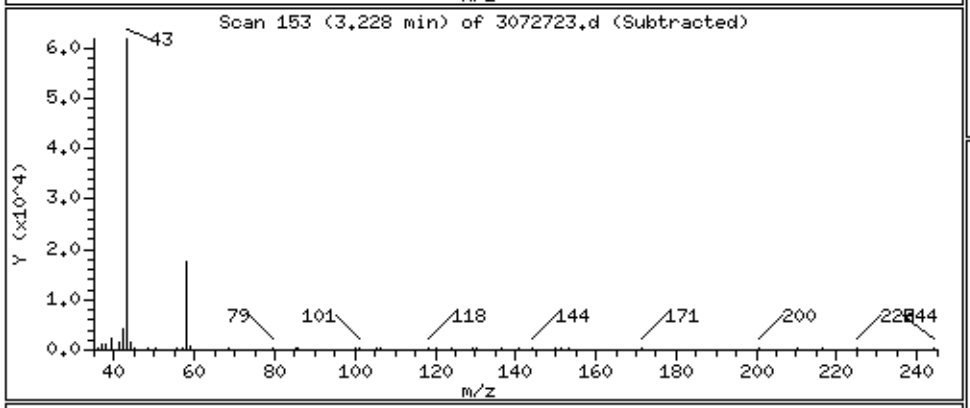
Column diameter: 0.25

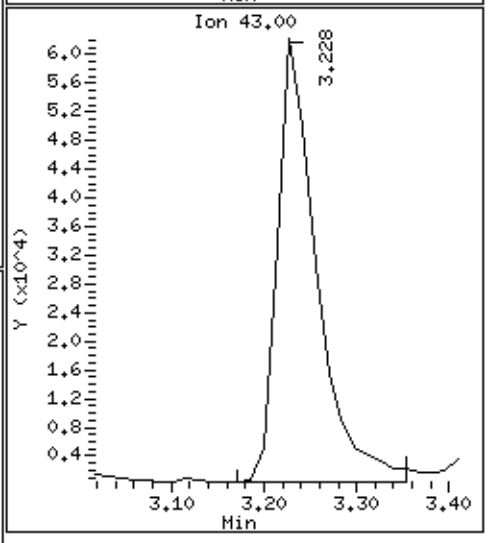
47 Acetone

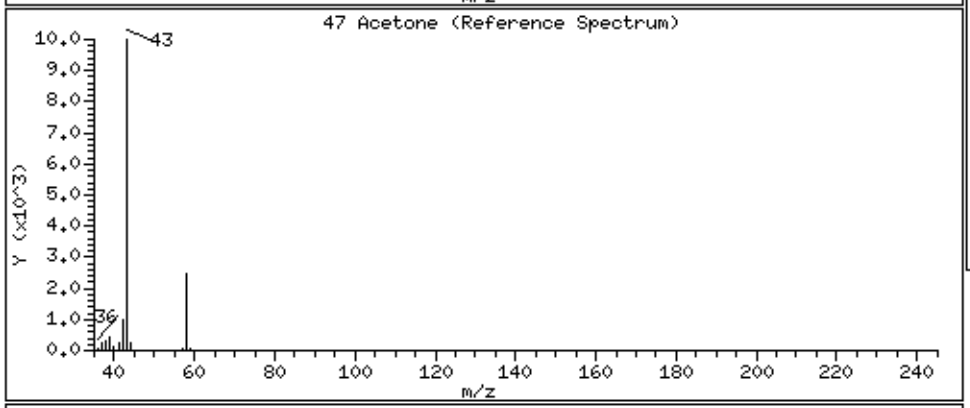
Concentration: 28.091 PPBV

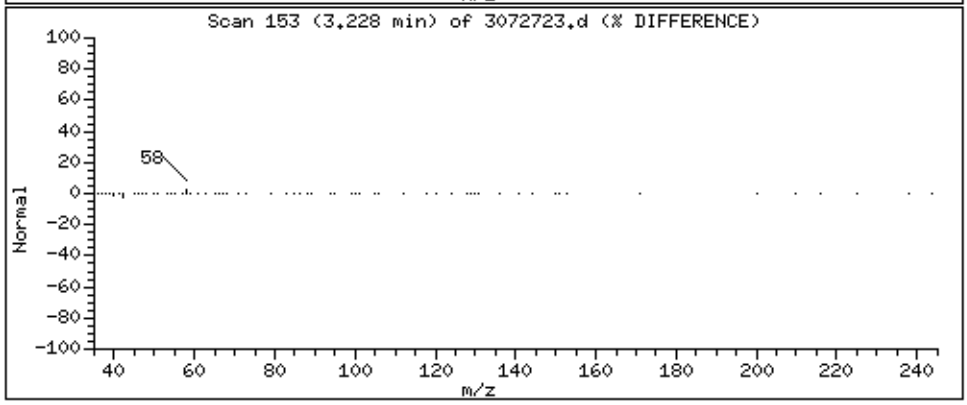












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

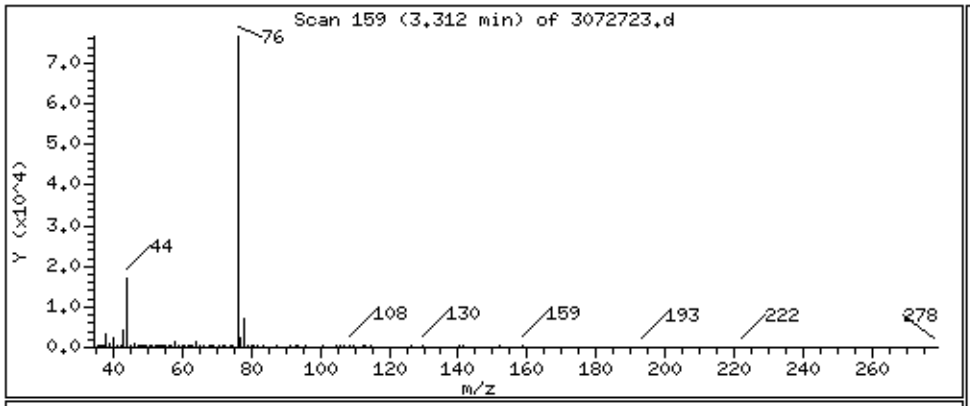
Operator: kk

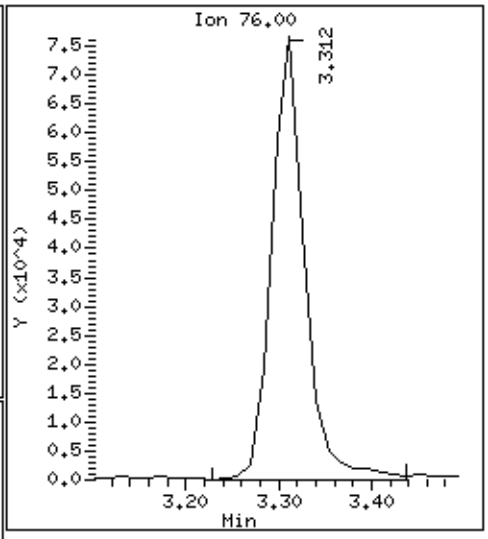
Column phase: RTX-624

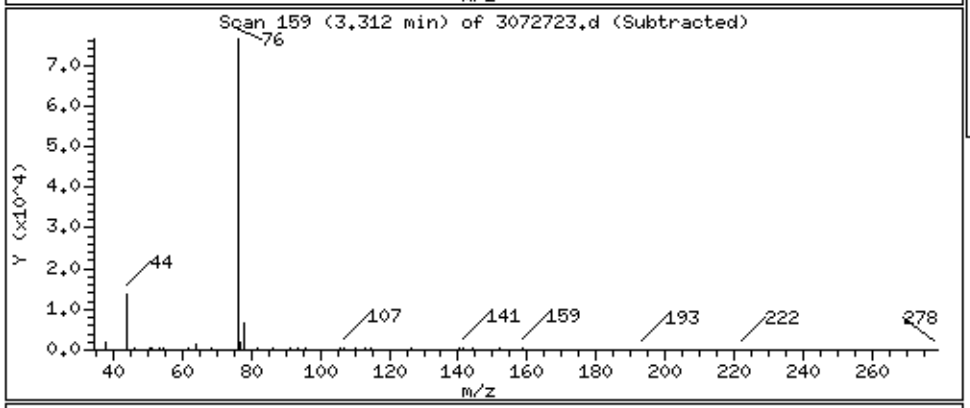
Column diameter: 0.25

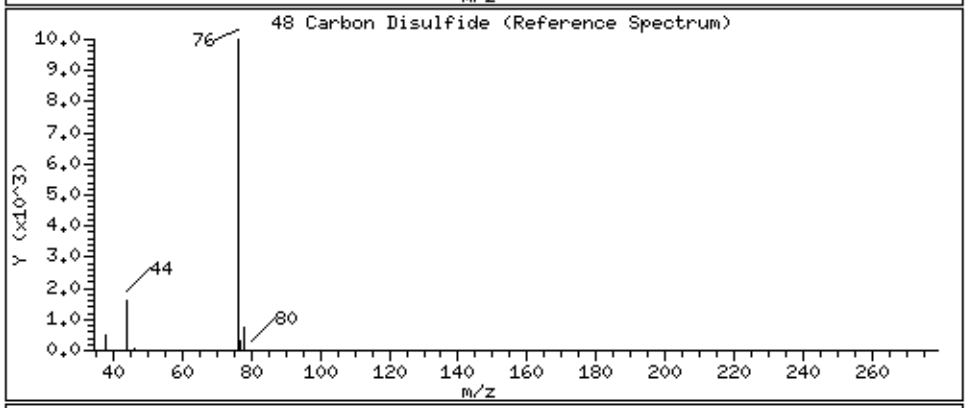
48 Carbon Disulfide

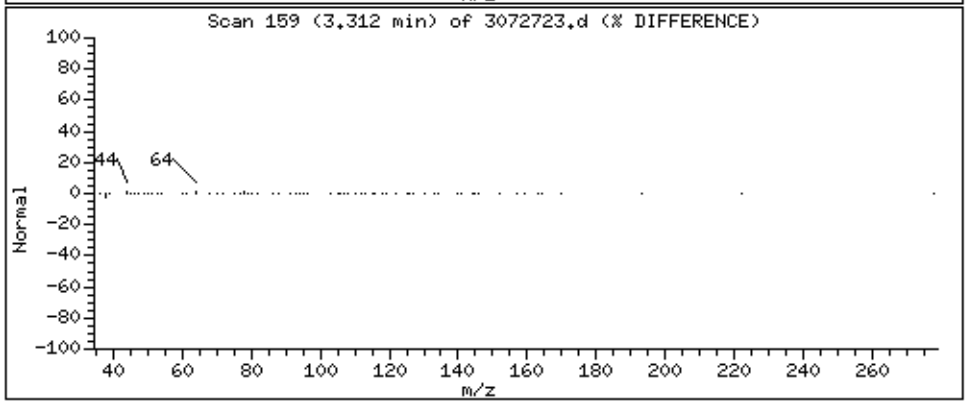
Concentration: 23.043 PPBV











Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

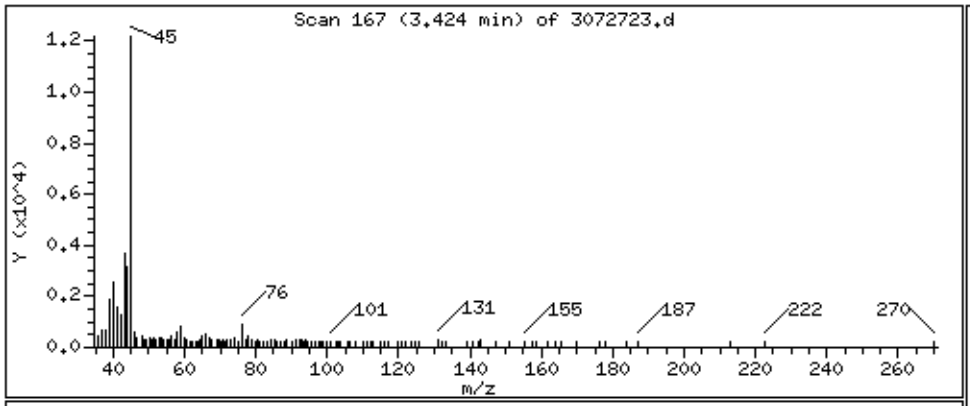
Operator: kk

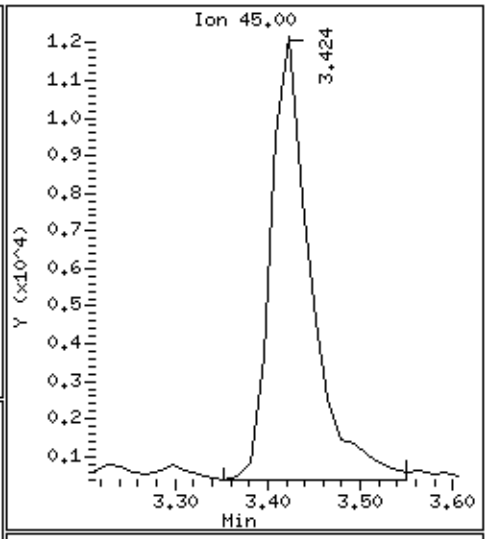
Column phase: RTX-624

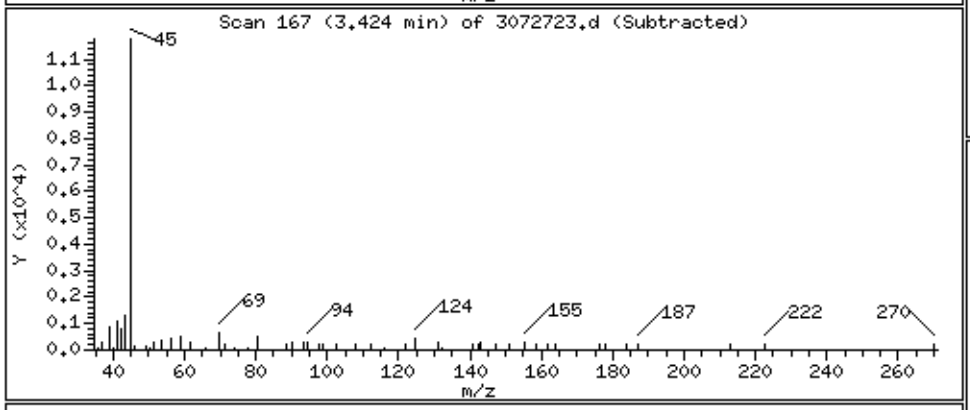
Column diameter: 0.25

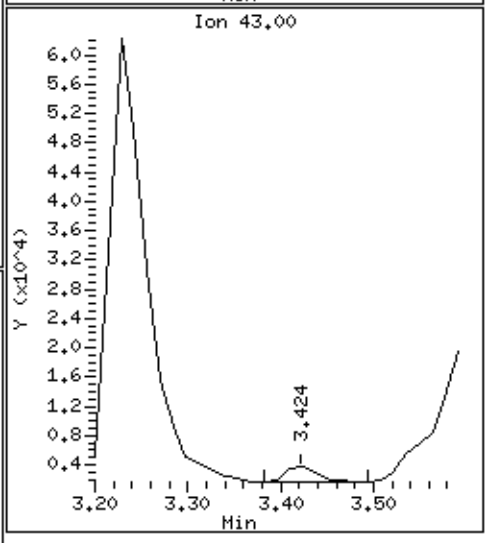
52 2-Propanol

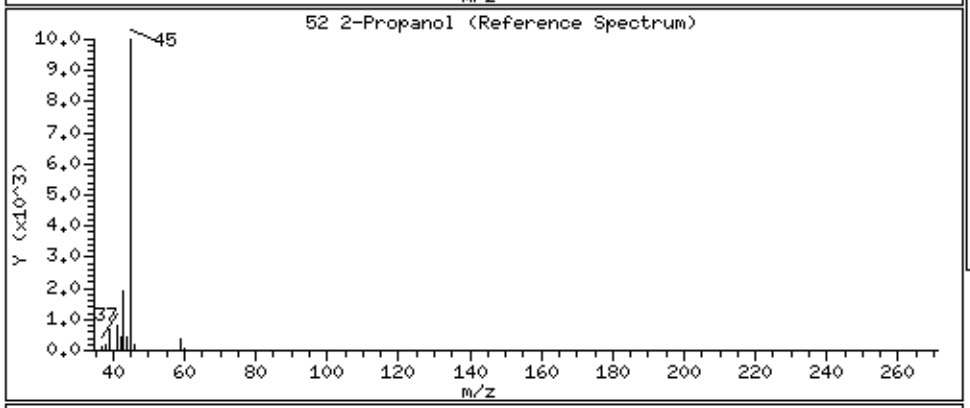
Concentration: 5.314 PPBV

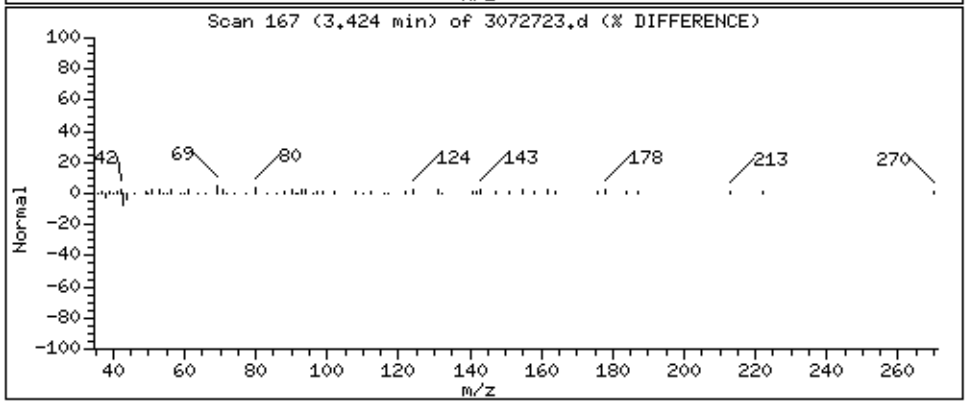












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

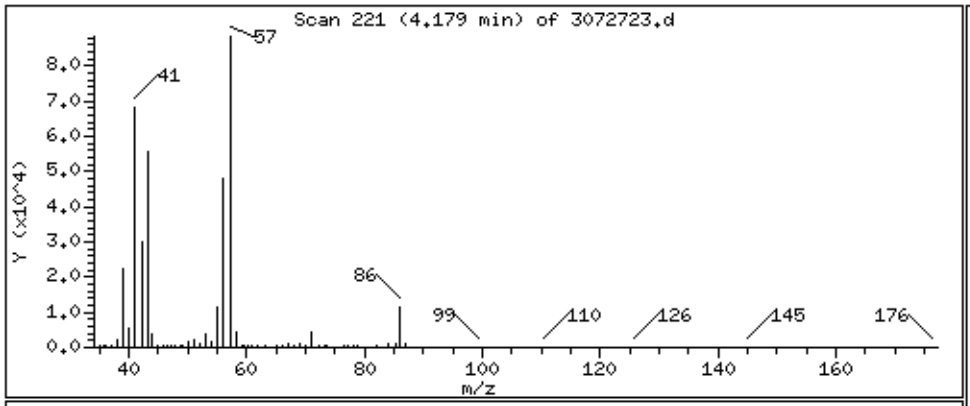
Operator: kk

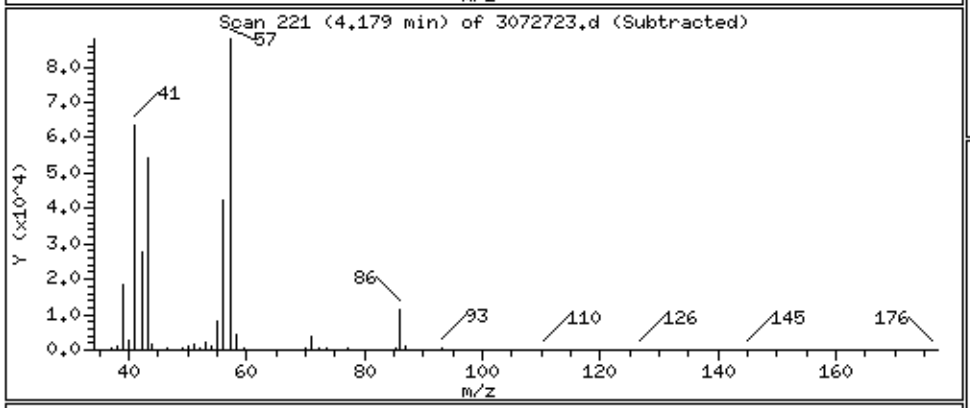
Column phase: RTX-624

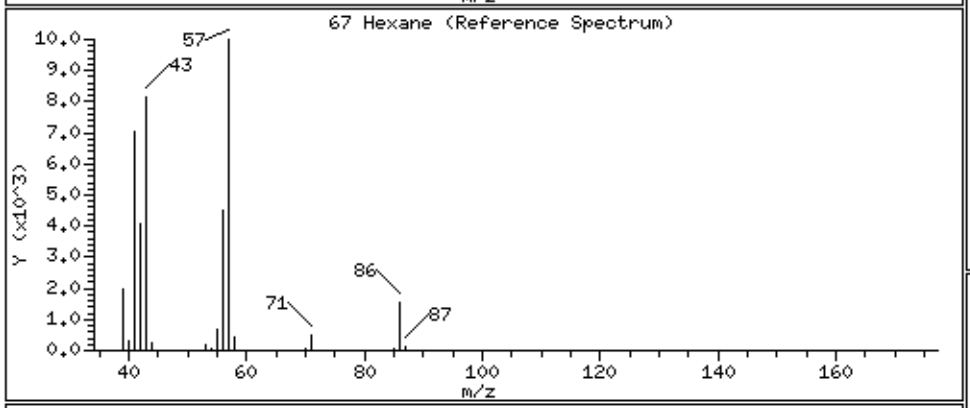
Column diameter: 0.25

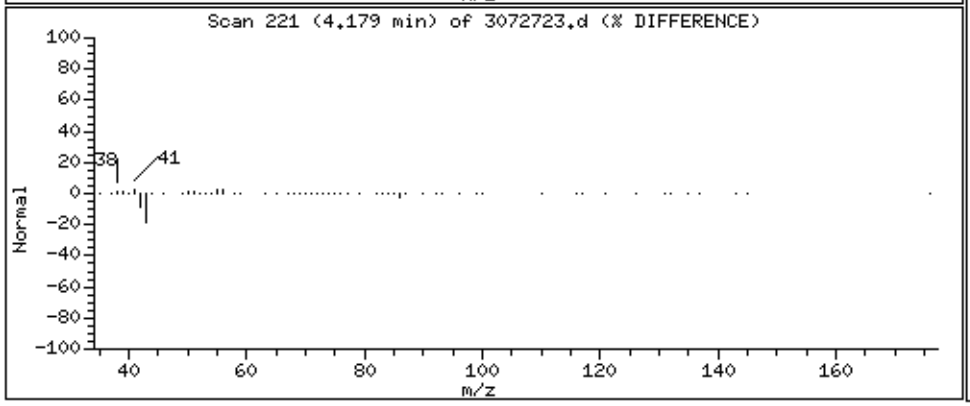
67 Hexane

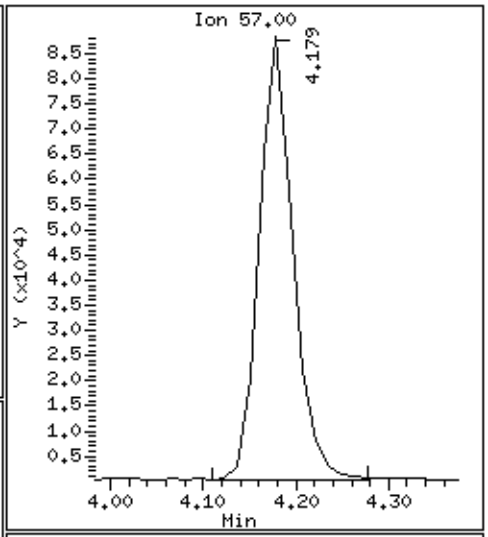
Concentration: 36.432 PPBV

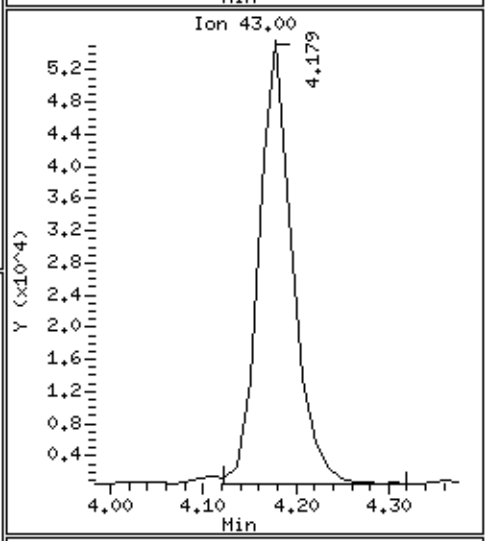


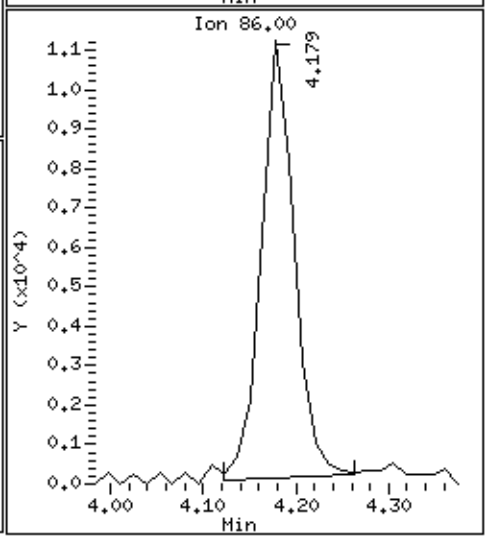












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

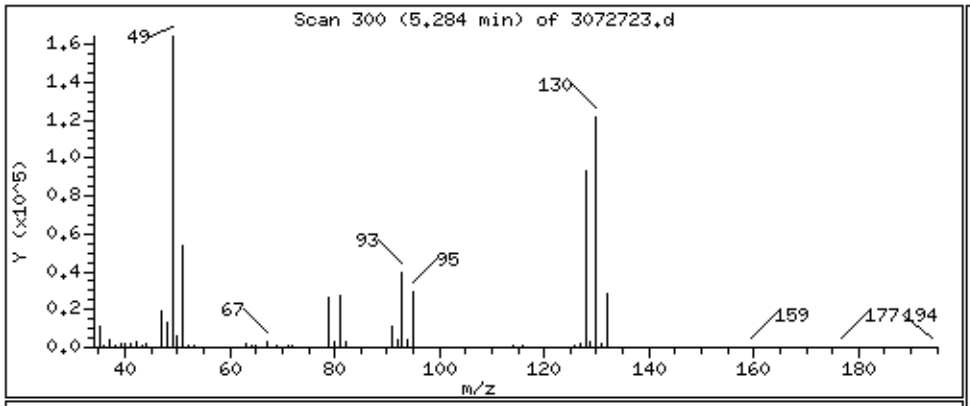
Operator: kk

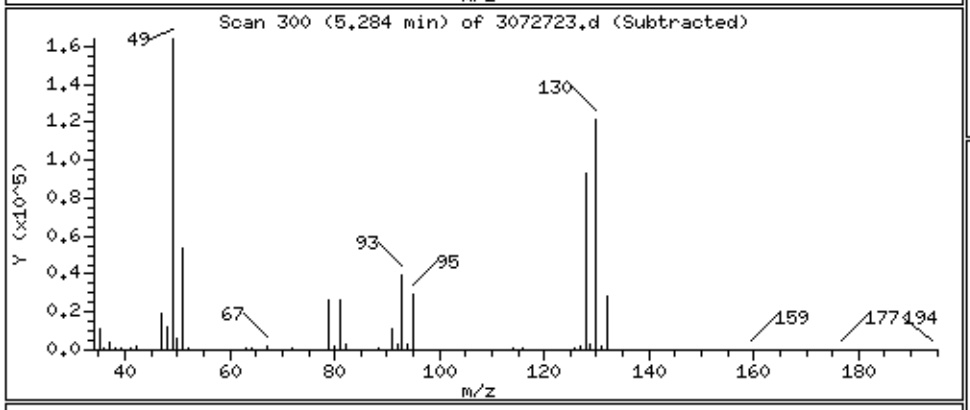
Column phase: RTX-624

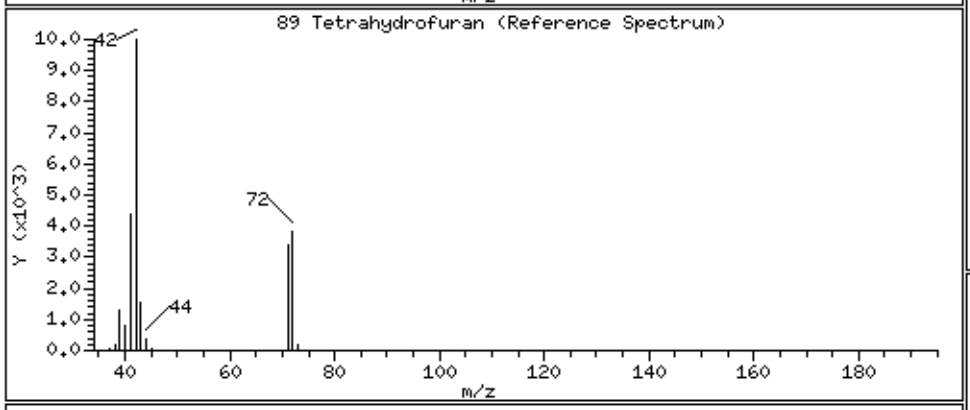
Column diameter: 0.25

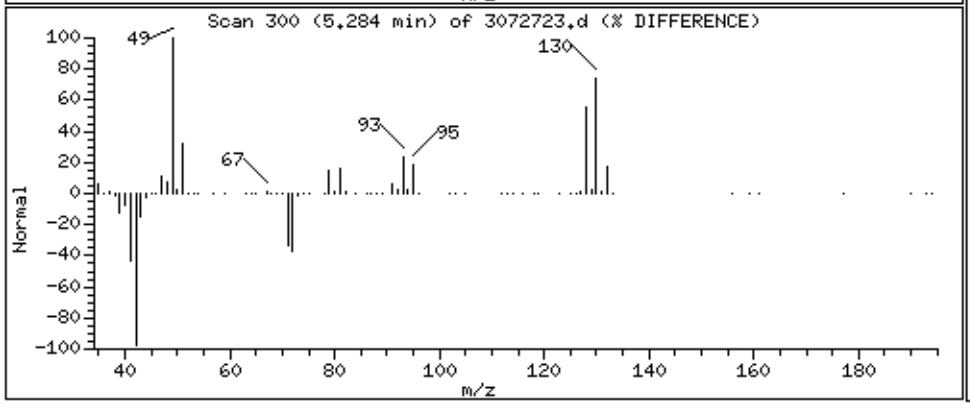
89 Tetrahydrofuran

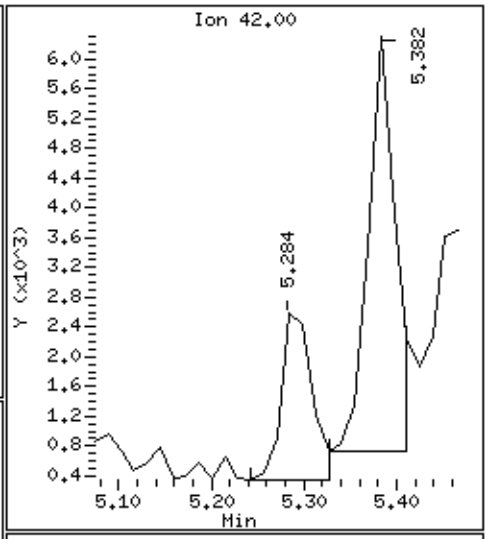
Concentration: 1.192 PPBV

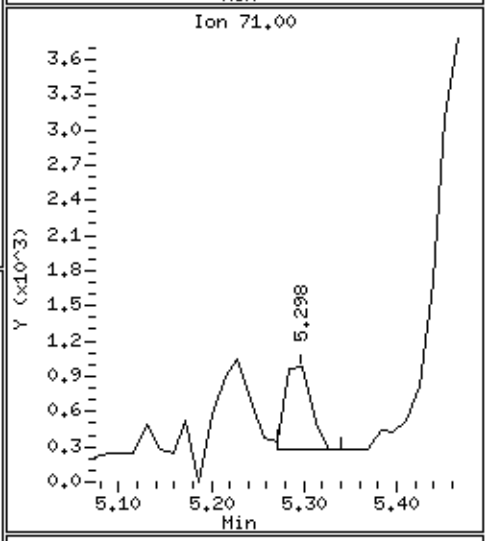


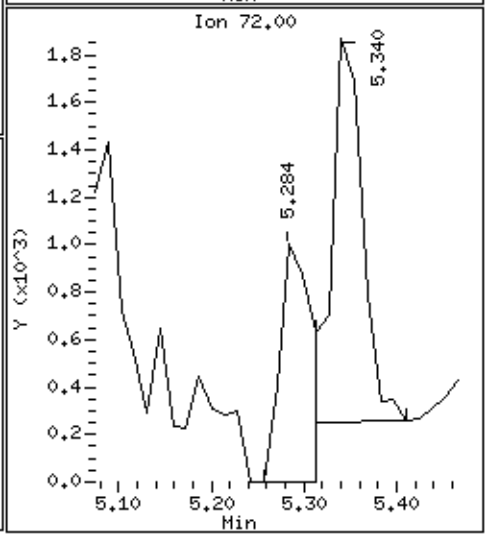












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

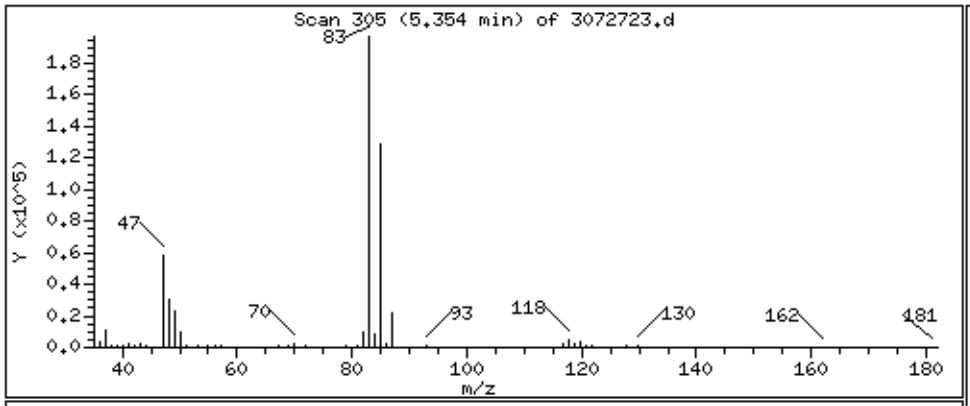
Operator: kk

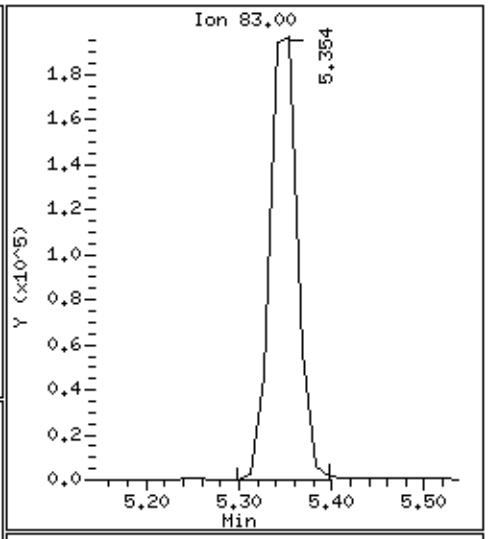
Column phase: RTX-624

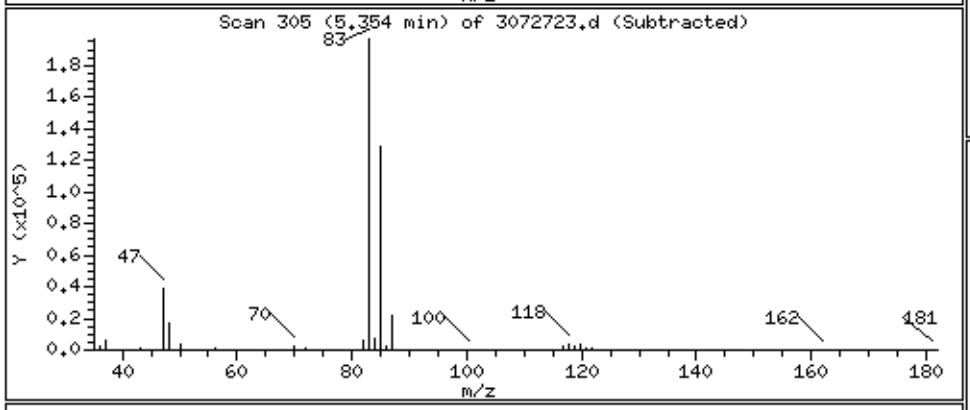
Column diameter: 0.25

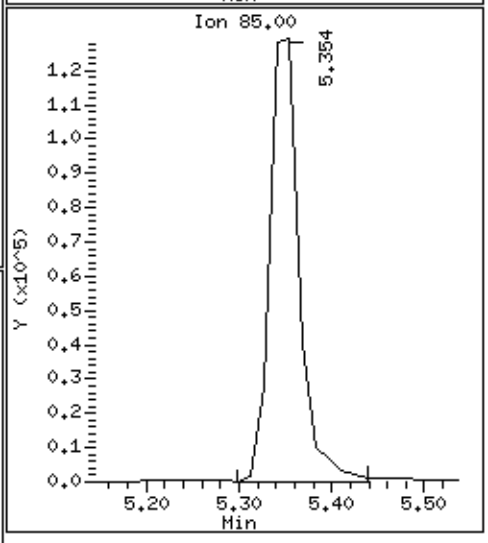
92 Chloroform

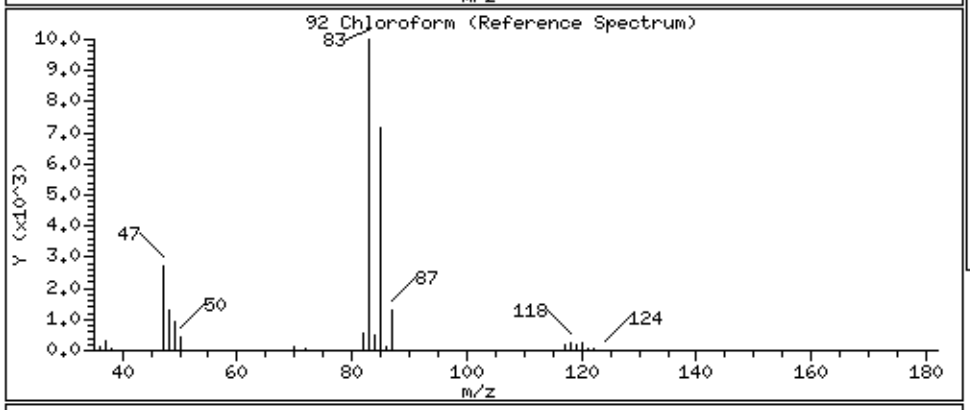
Concentration: 60.866 PPBV

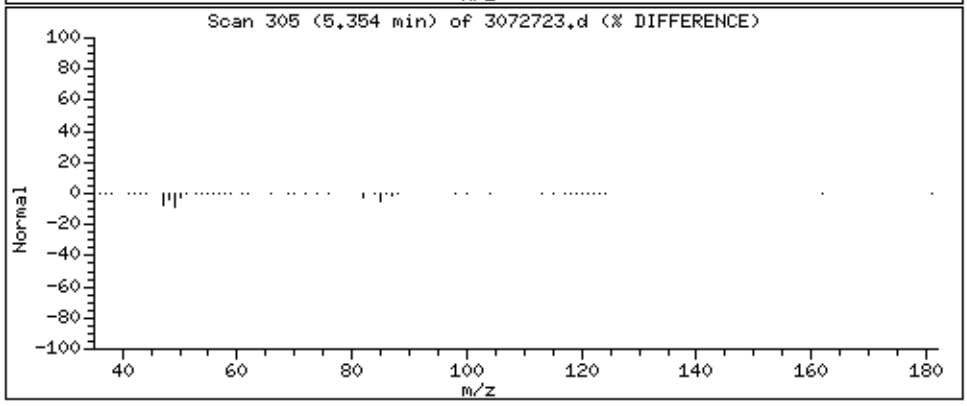












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

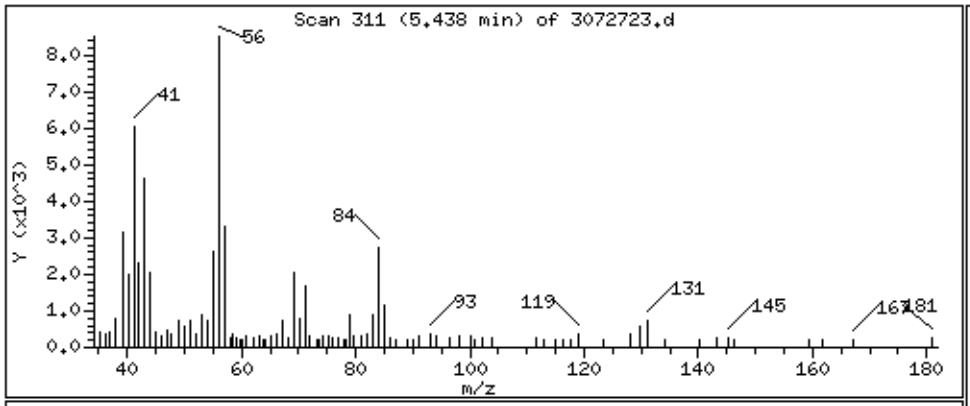
Operator: kk

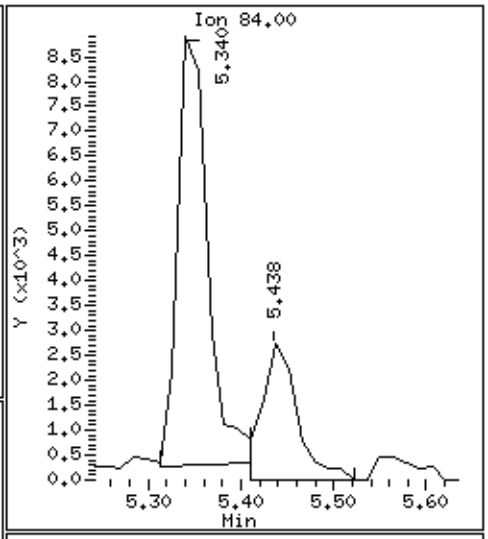
Column phase: RTX-624

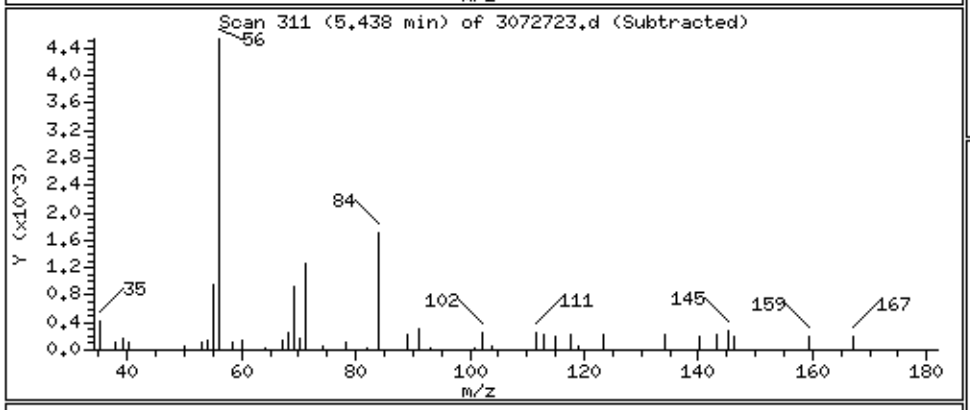
Column diameter: 0.25

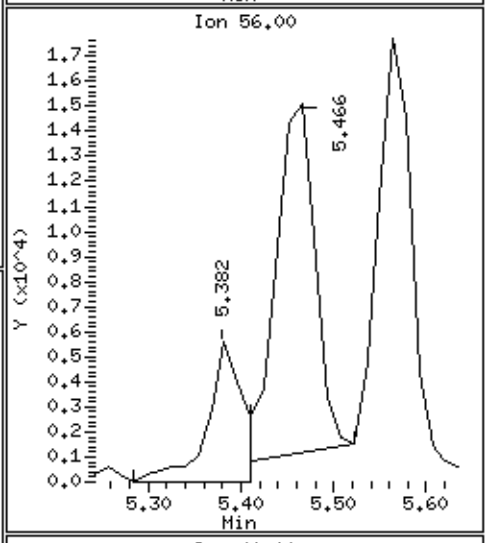
94 Cyclohexane

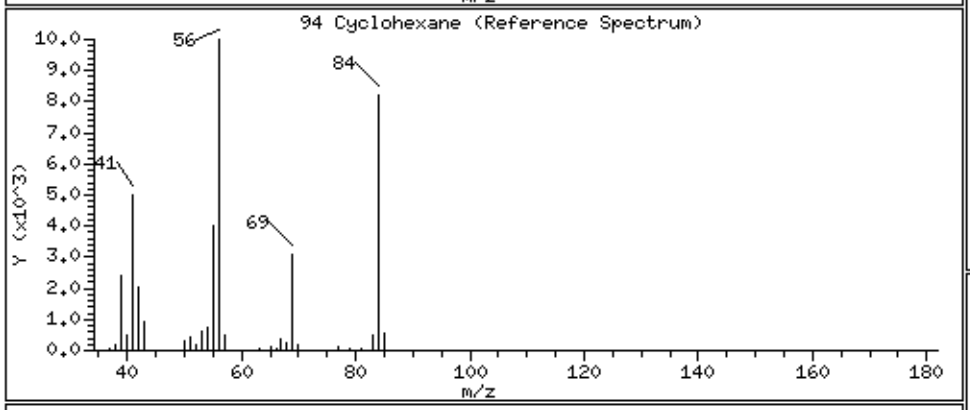
Concentration: 1.717 PPBV

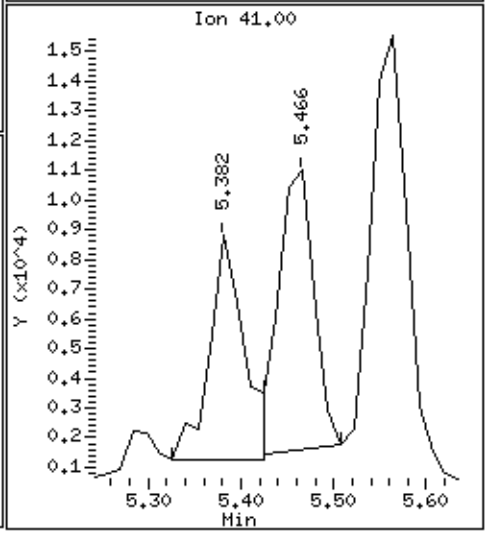


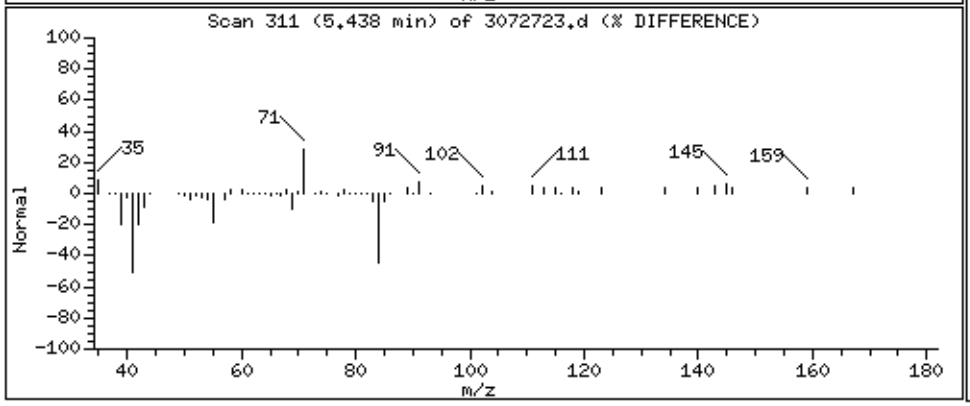












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

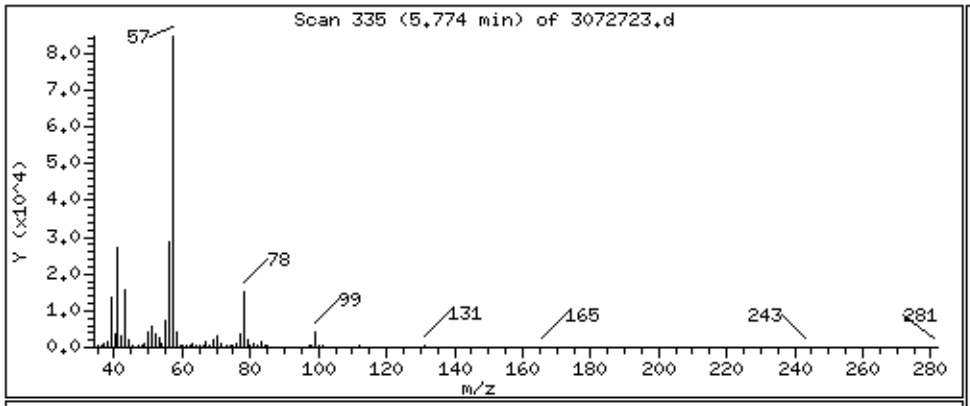
Operator: kk

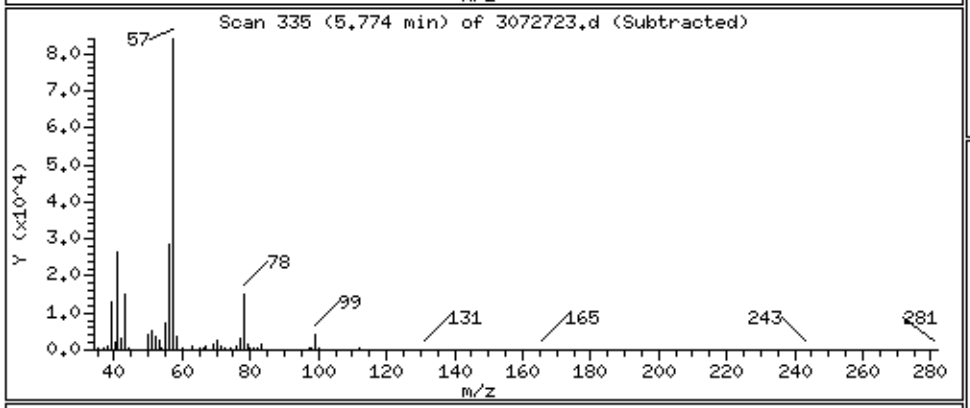
Column phase: RTX-624

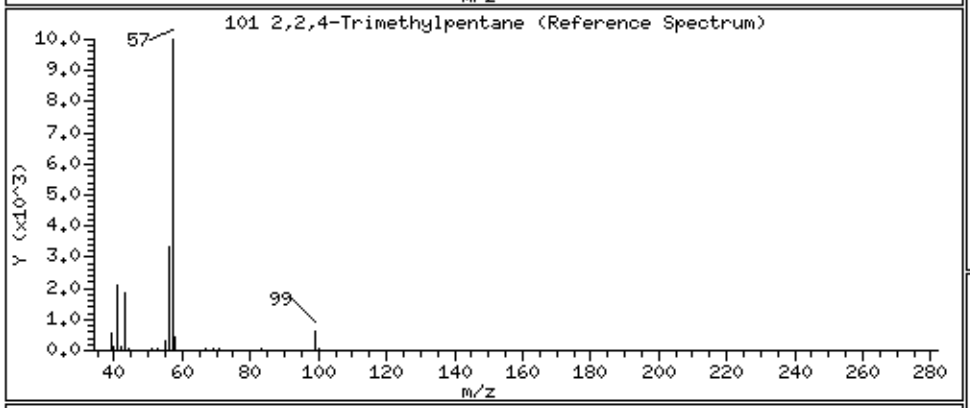
Column diameter: 0.25

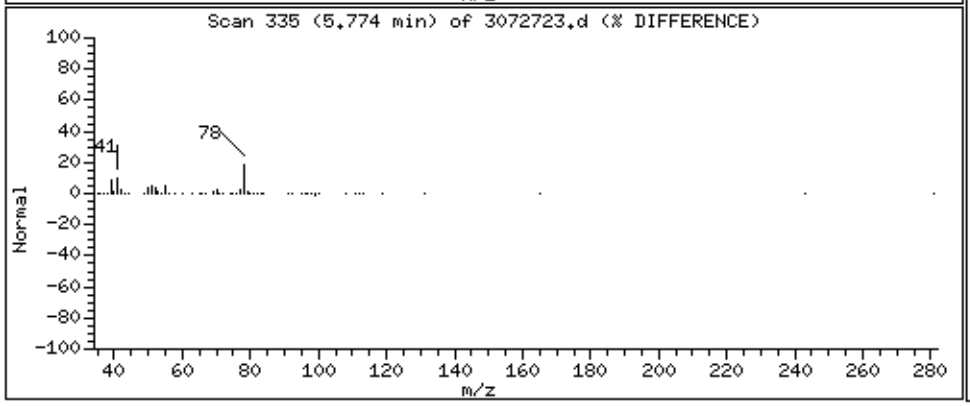
101 2,2,4-Trimethylpentane

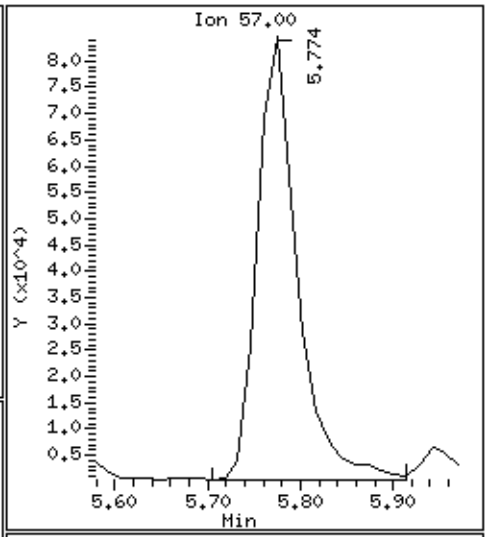
Concentration: 13.245 PPBV

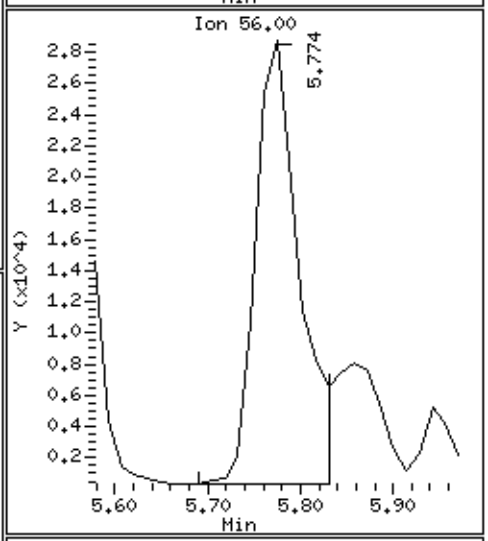


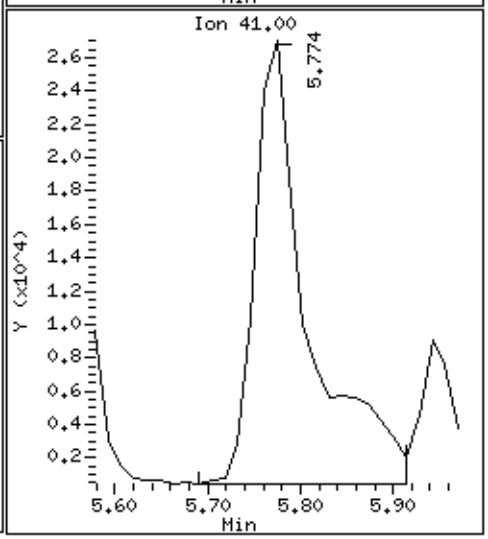












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

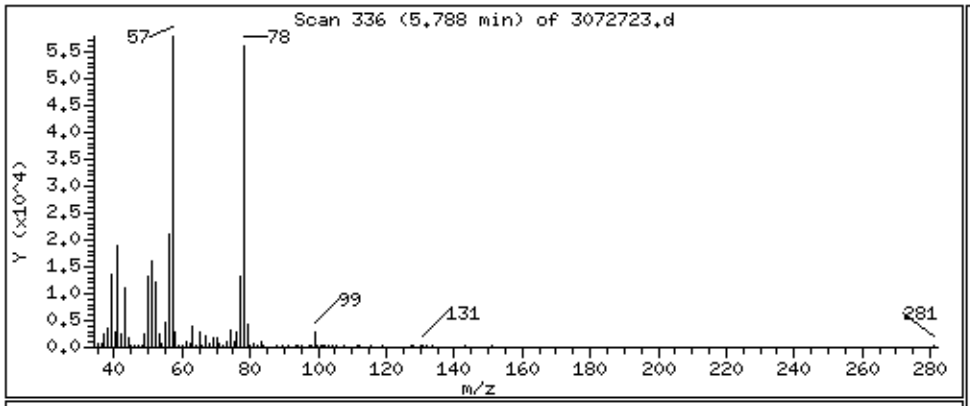
Operator: kk

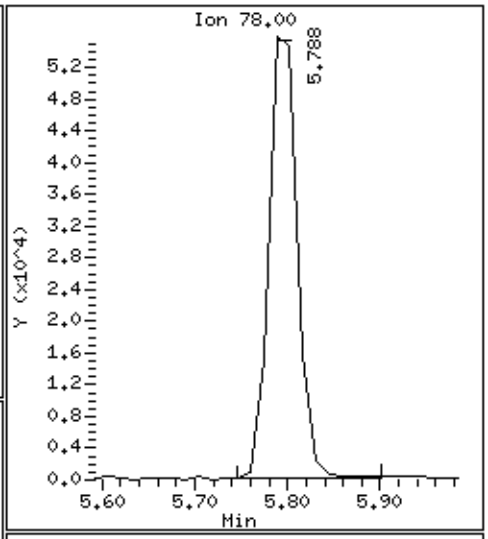
Column phase: RTX-624

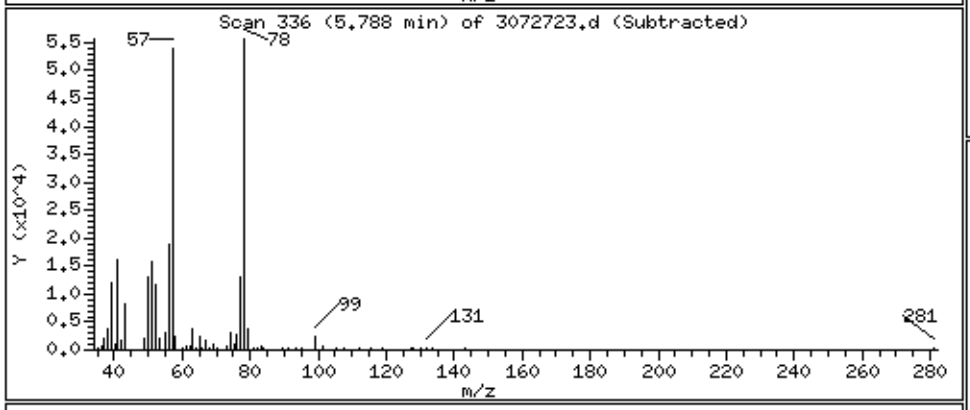
Column diameter: 0.25

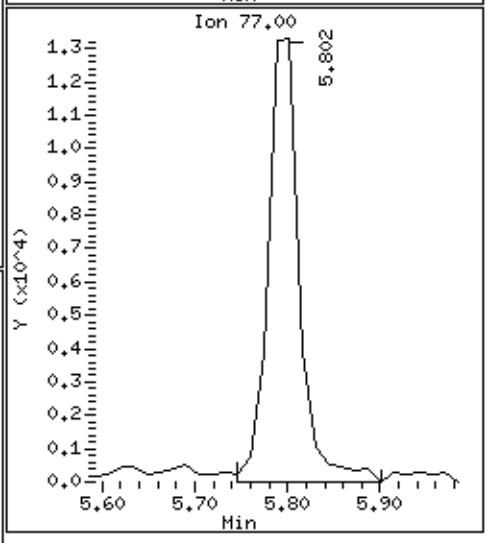
102 Benzene

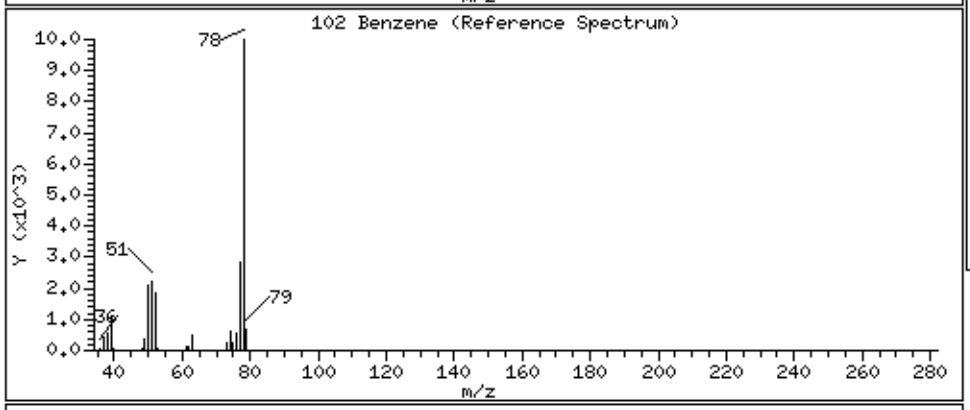
Concentration: 13.959 PPBV

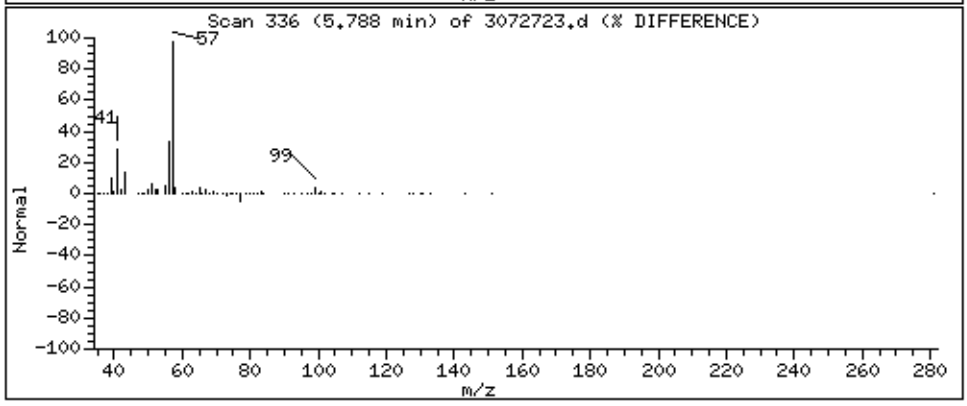












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

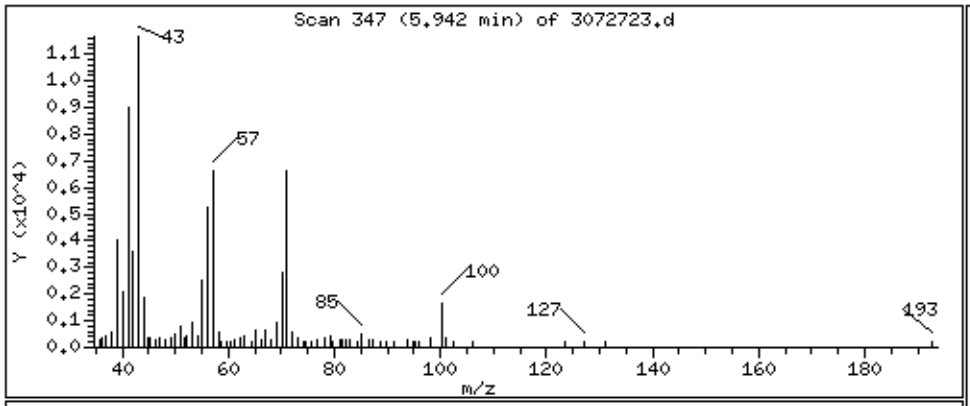
Operator: kk

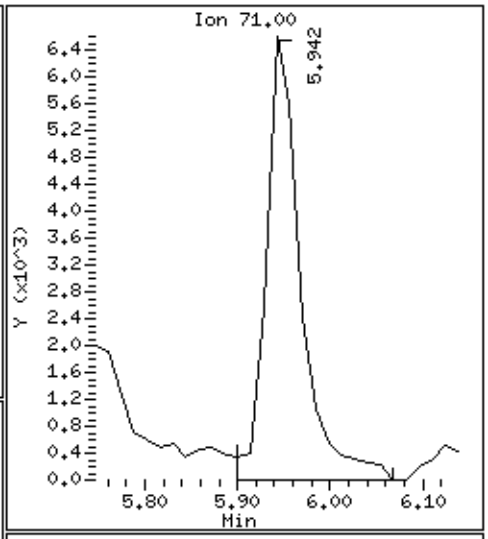
Column phase: RTX-624

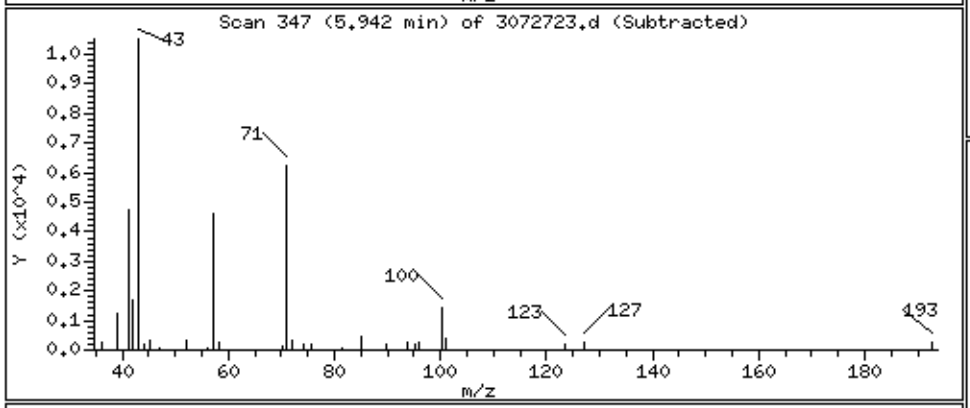
Column diameter: 0.25

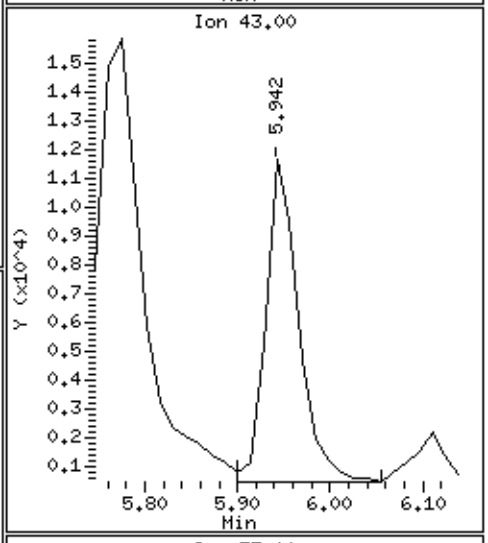
107 Heptane

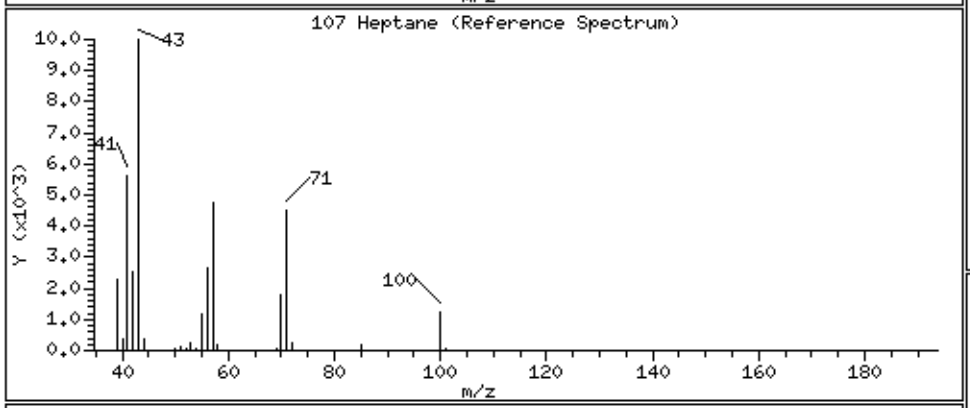
Concentration: 5.058 PPBV

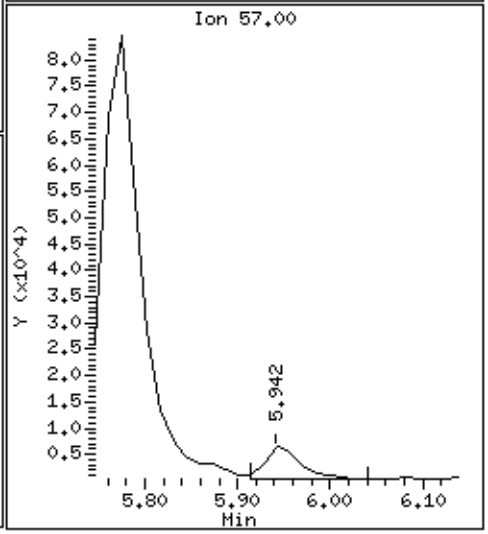


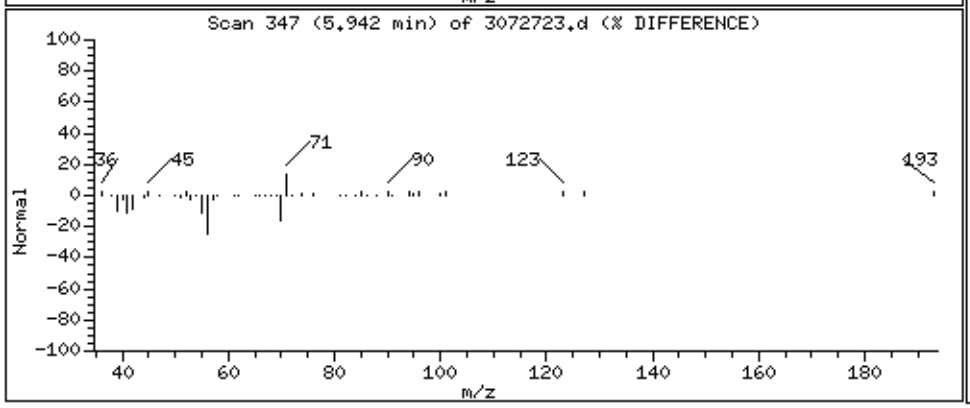












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

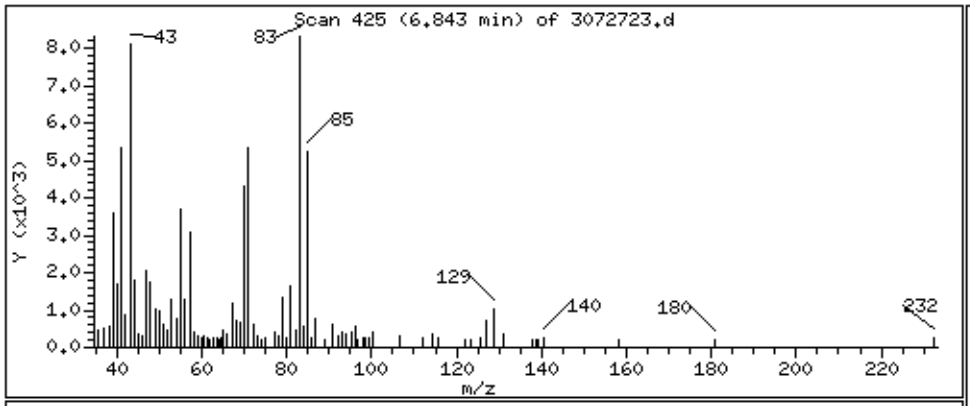
Operator: kk

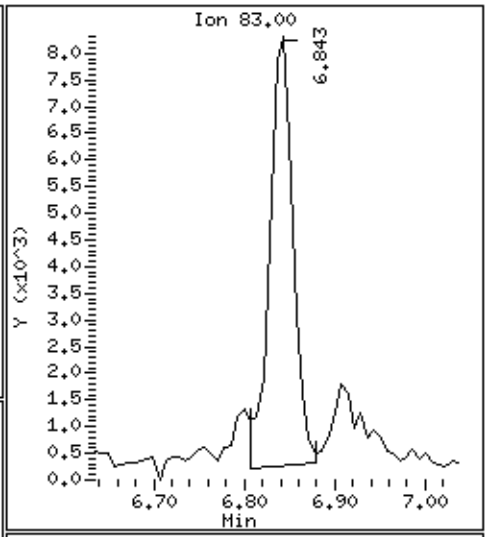
Column phase: RTX-624

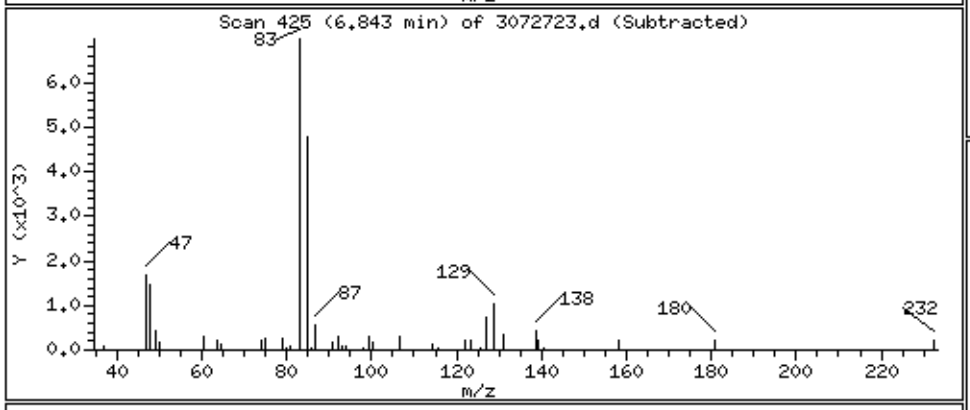
Column diameter: 0.25

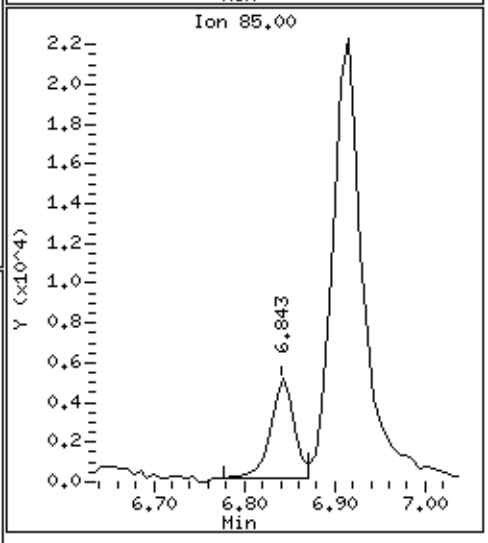
122 Bromodichloromethane

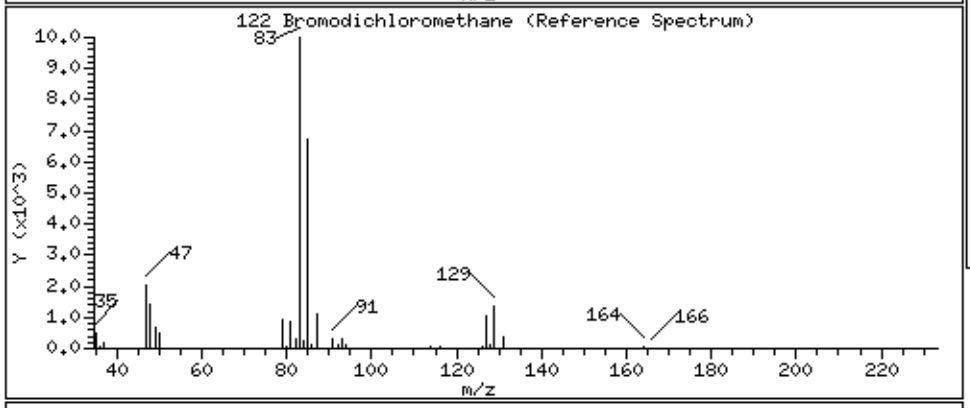
Concentration: 2.012 PPBV

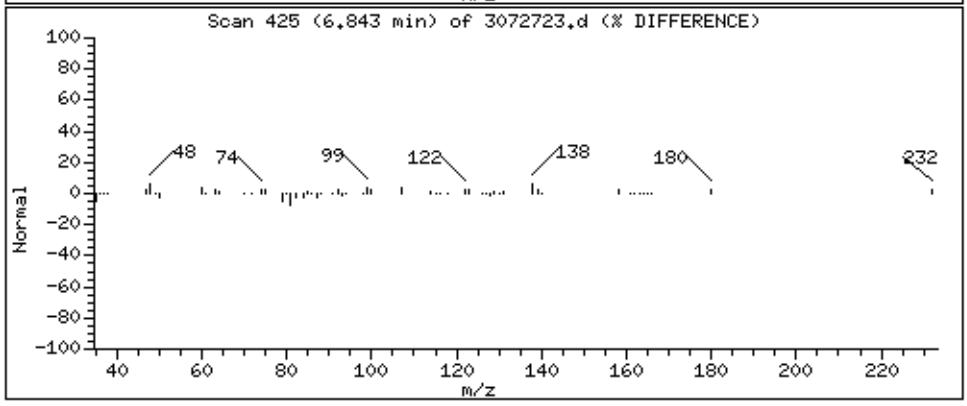












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

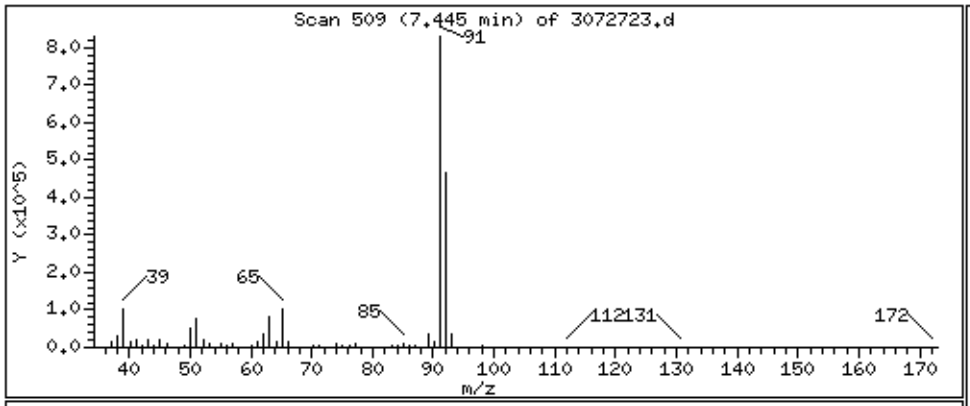
Operator: kk

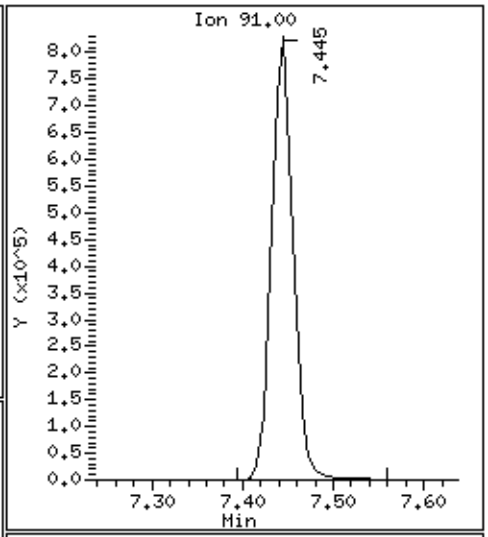
Column phase: RTX-624

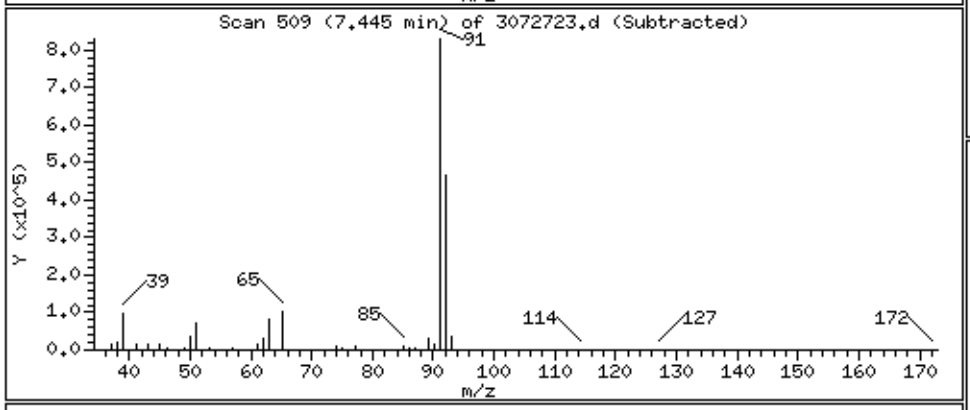
Column diameter: 0.25

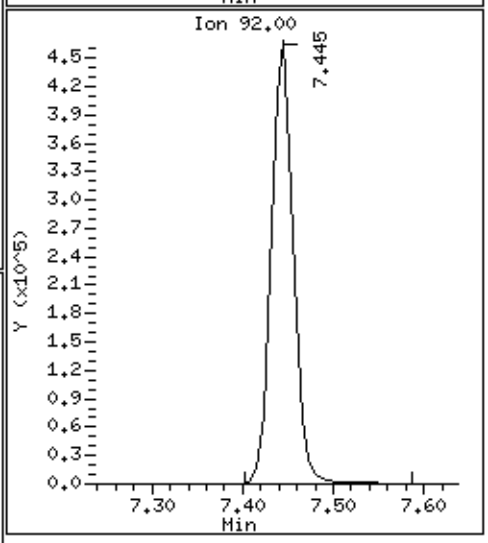
137 Toluene

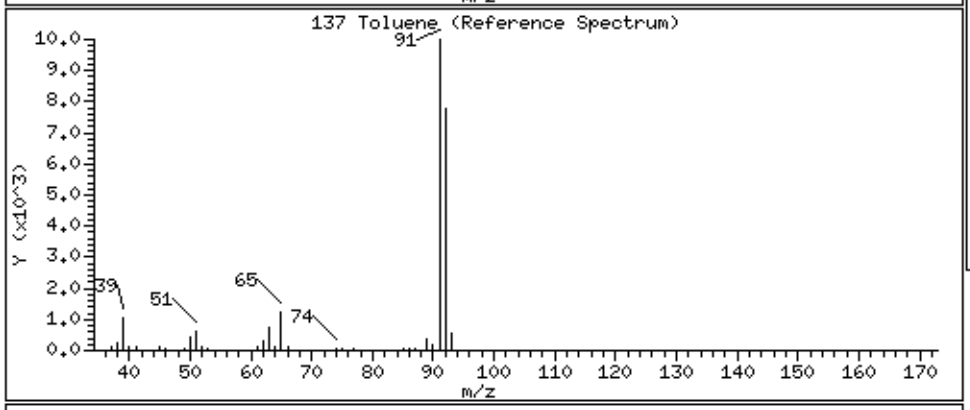
Concentration: 118.56 PPBV

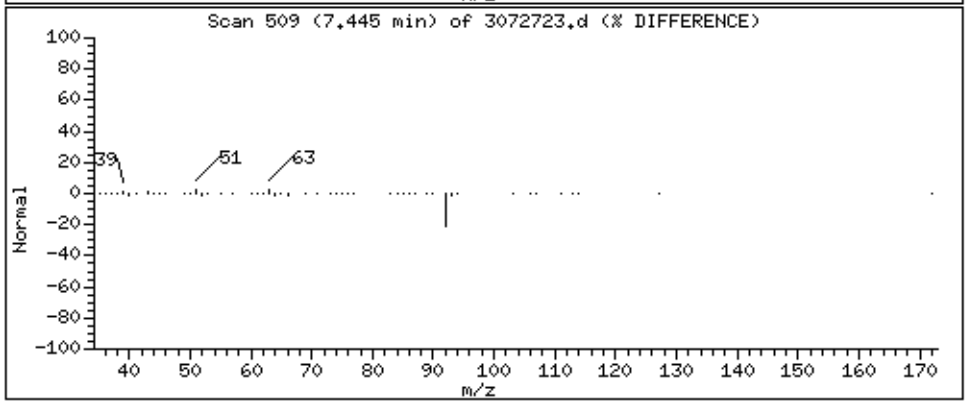












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

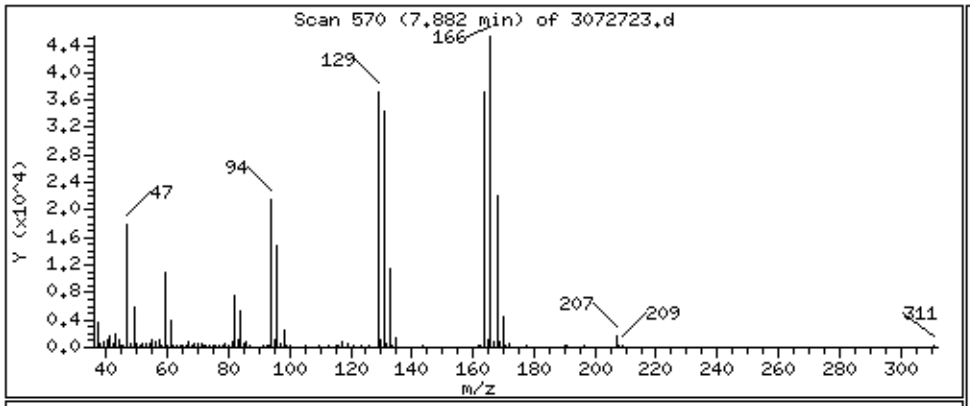
Operator: kk

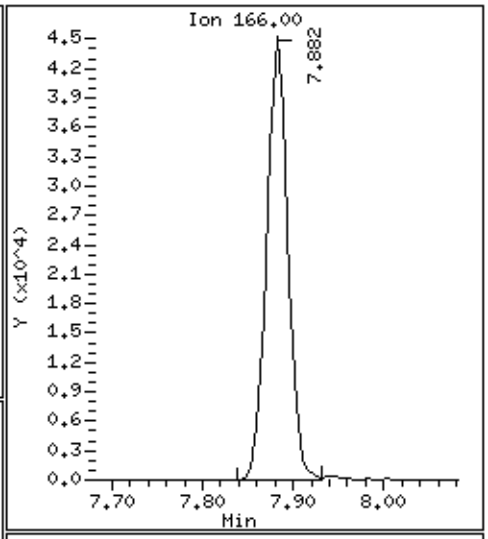
Column phase: RTX-624

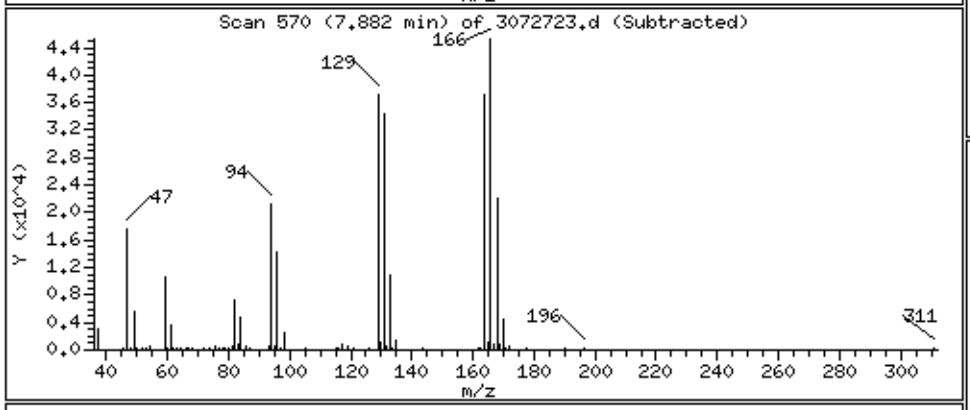
Column diameter: 0.25

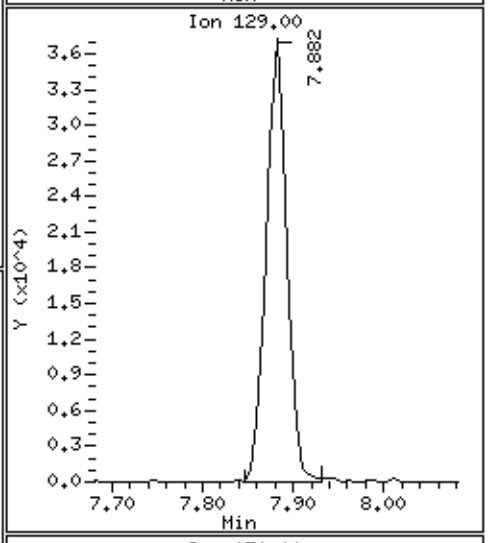
142 Tetrachloroethene

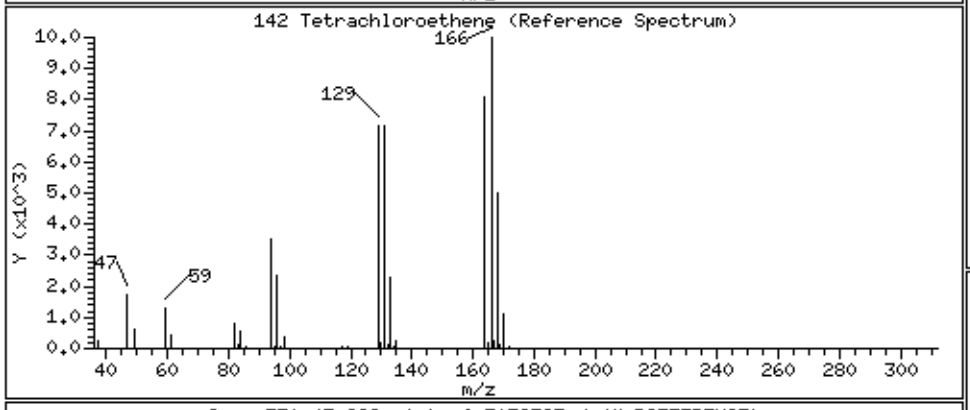
Concentration: 13.964 PPBV

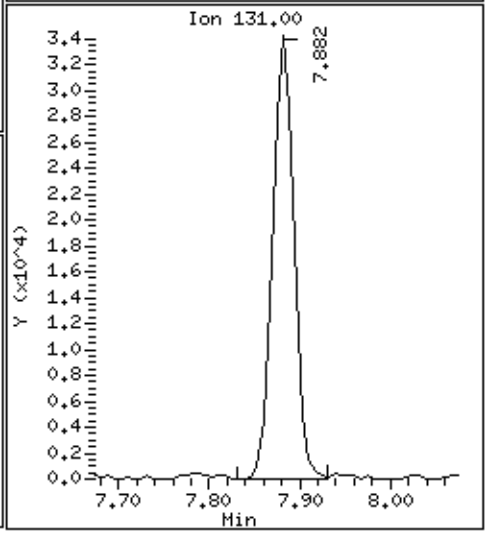


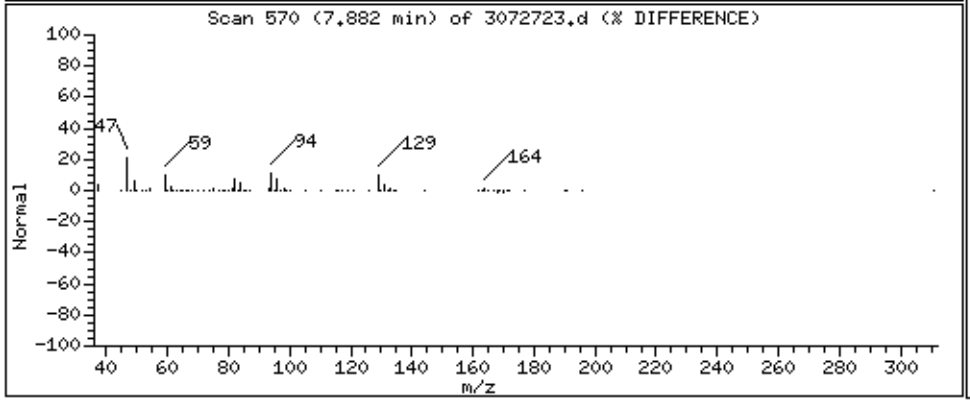












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

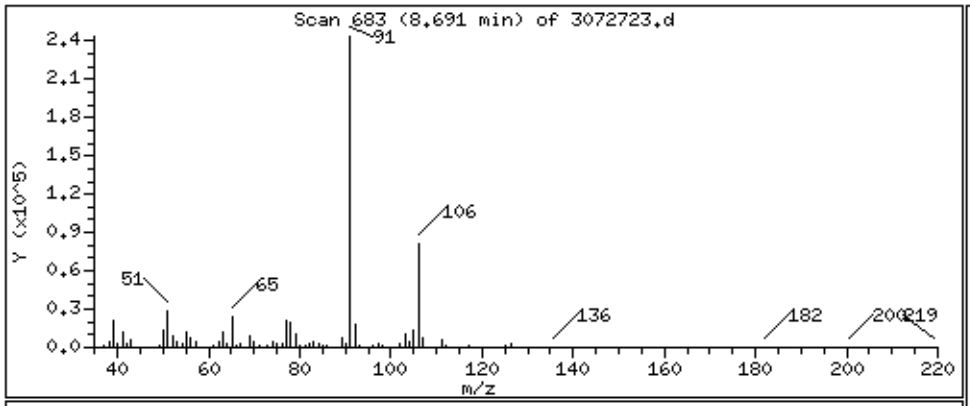
Operator: kk

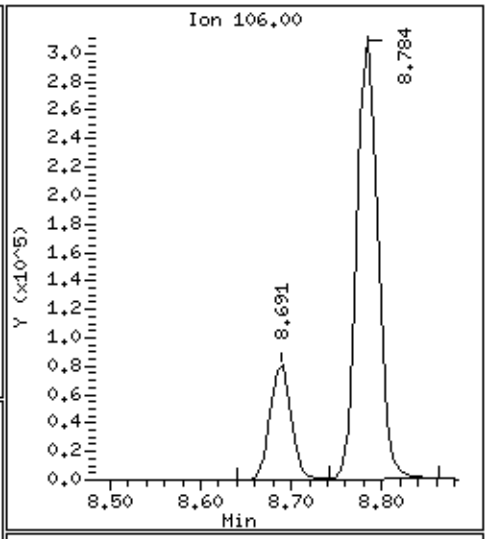
Column phase: RTX-624

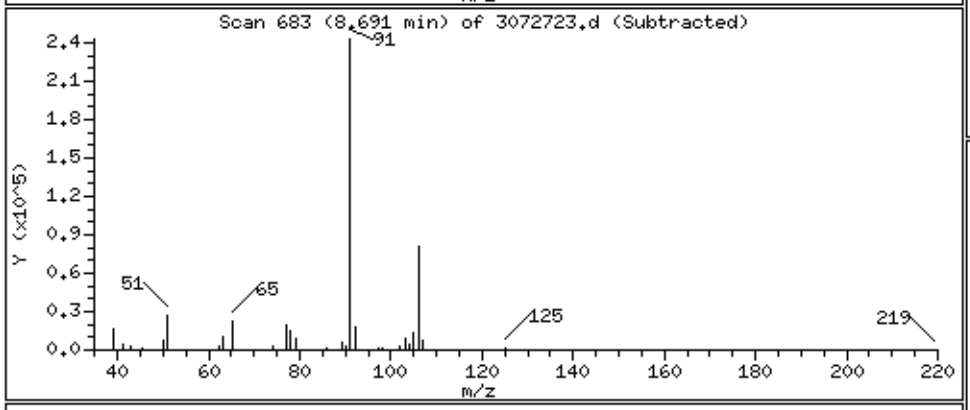
Column diameter: 0.25

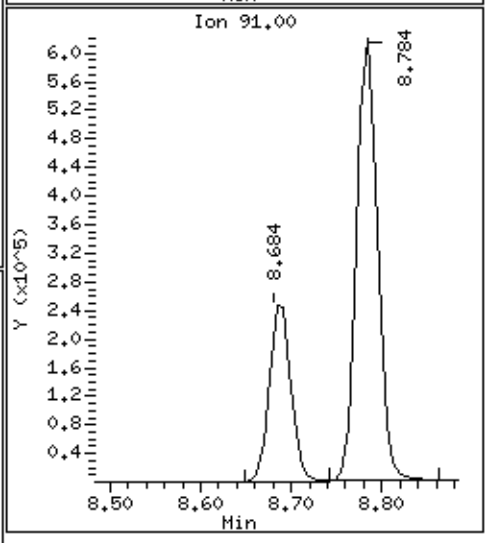
155 Ethyl Benzene

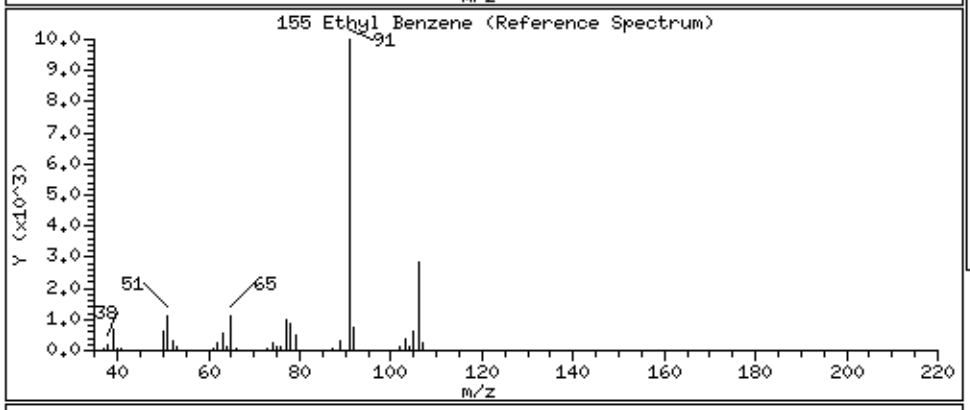
Concentration: 29.275 PPBV

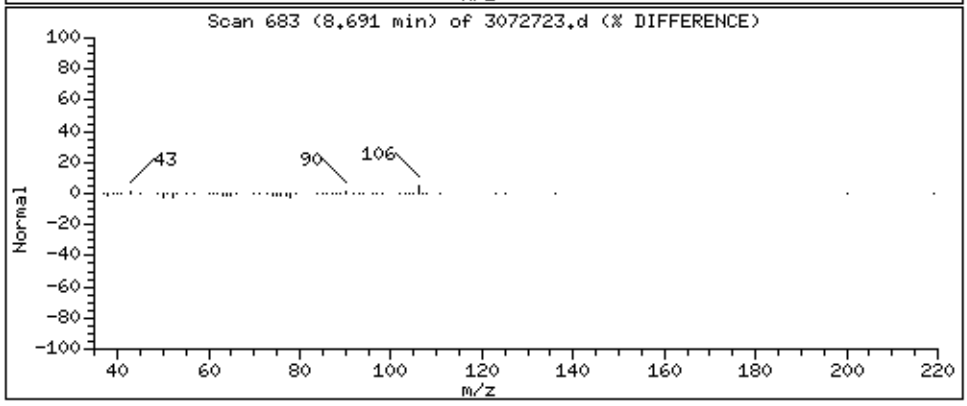












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

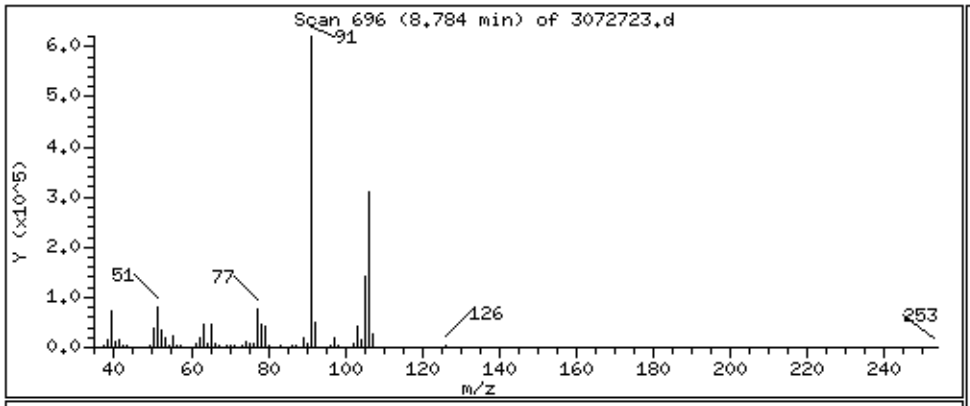
Operator: kk

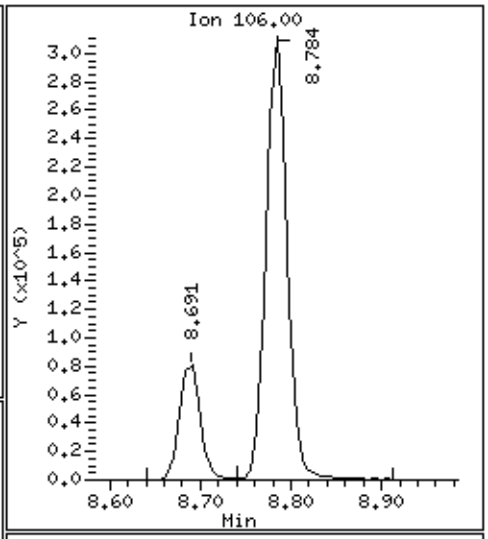
Column phase: RTX-624

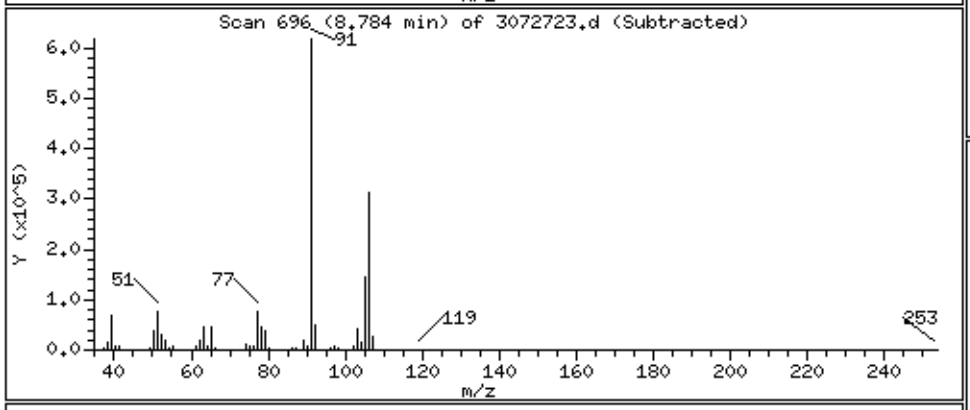
Column diameter: 0.25

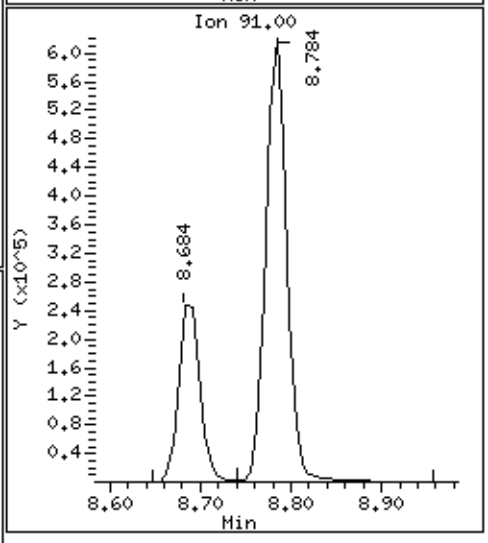
158 m,p-Xylene

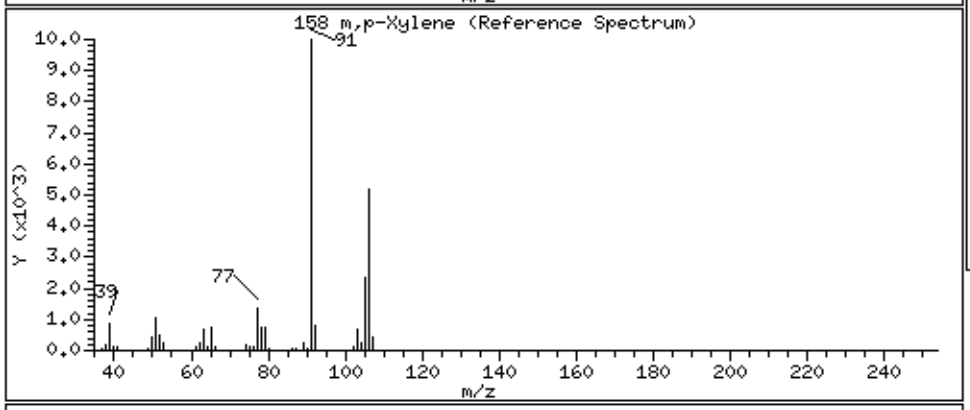
Concentration: 88.152 PPBV

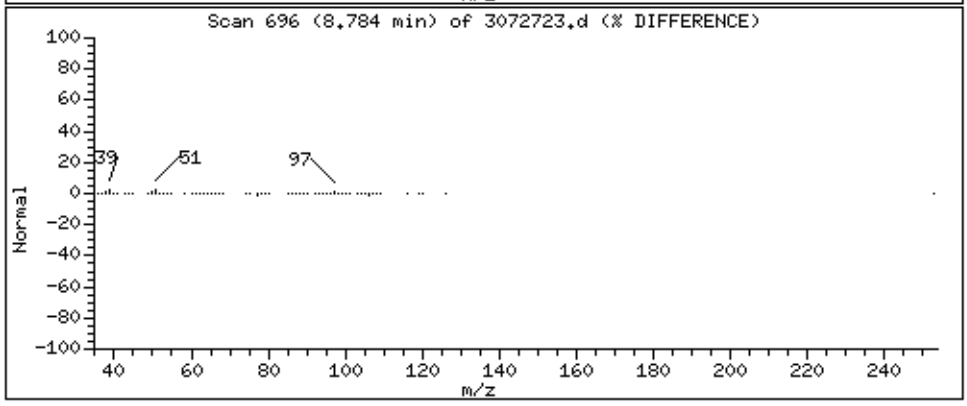












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

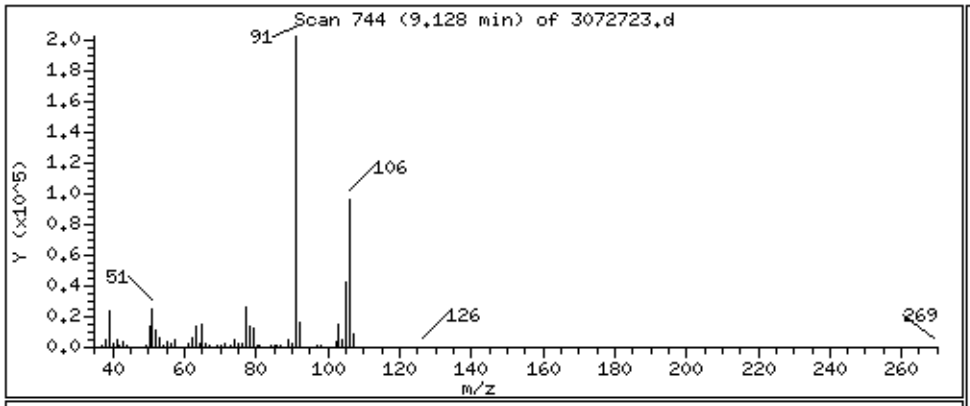
Operator: kk

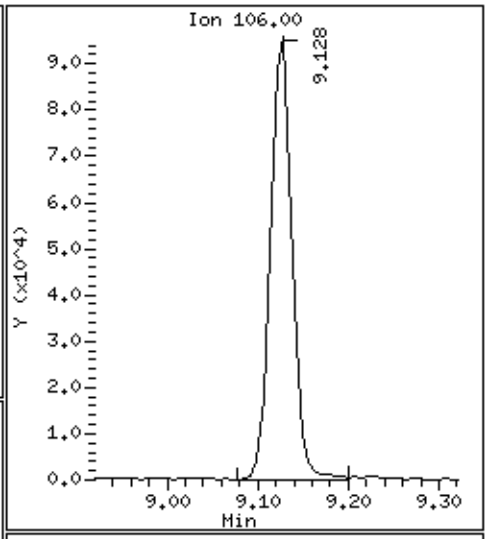
Column phase: RTX-624

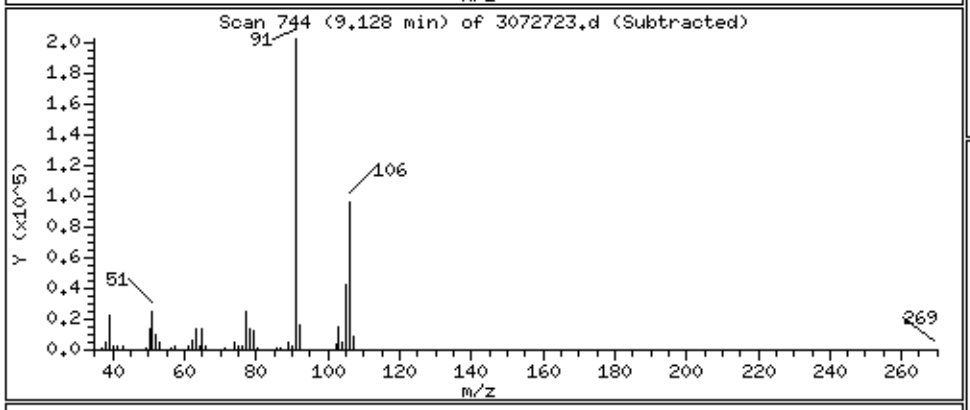
Column diameter: 0.25

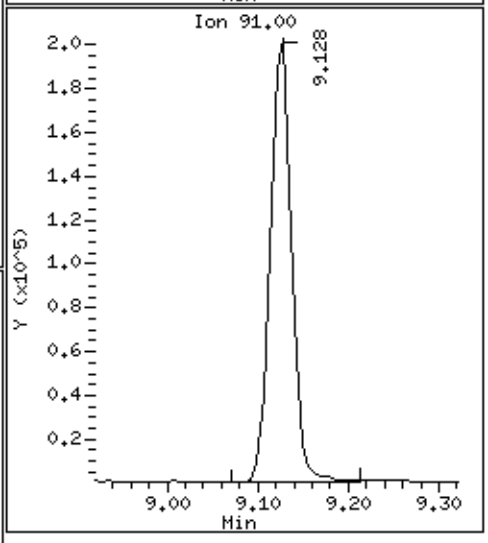
164 o-Xylene

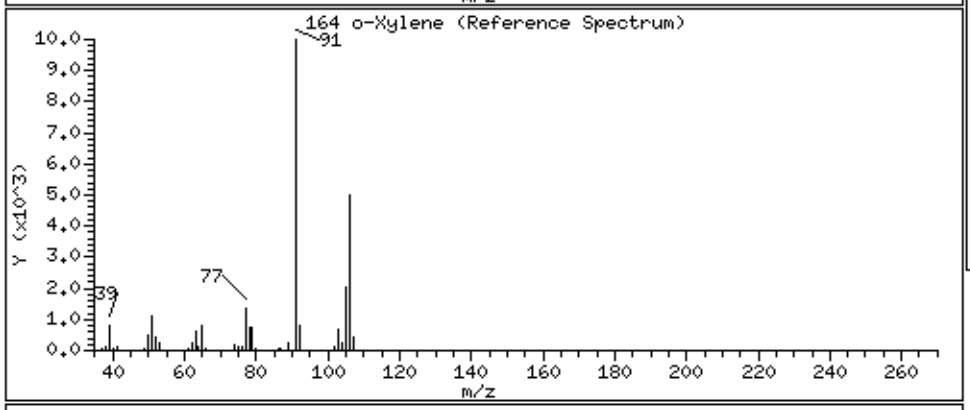
Concentration: 29.401 PPBV

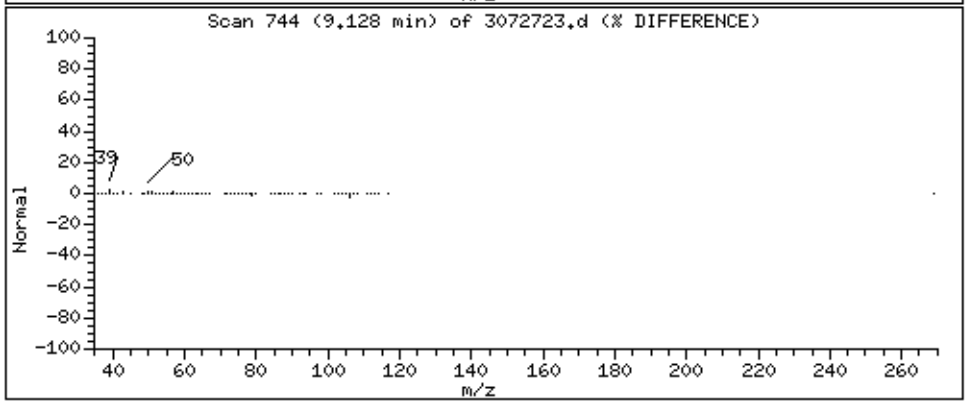












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

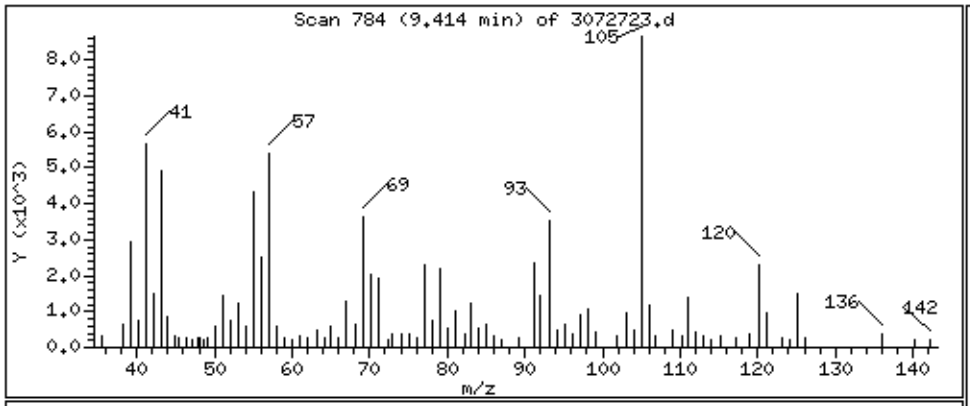
Operator: kk

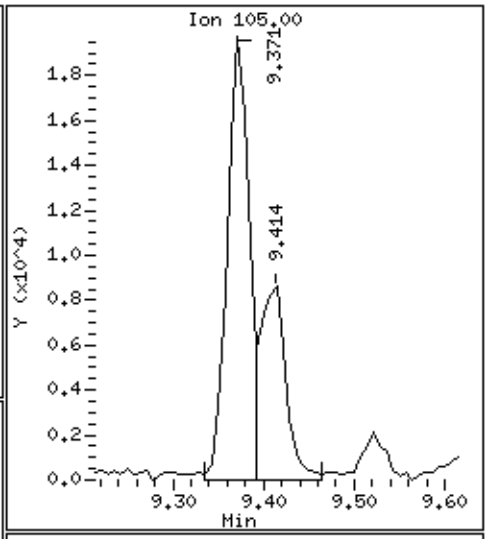
Column phase: RTX-624

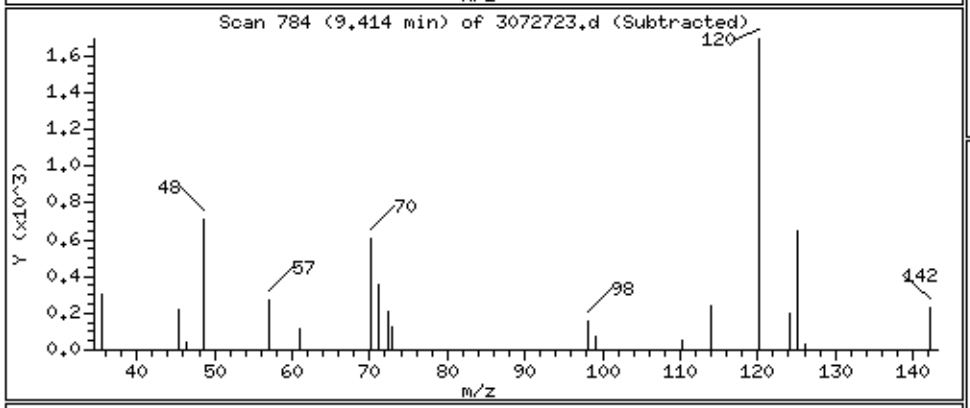
Column diameter: 0.25

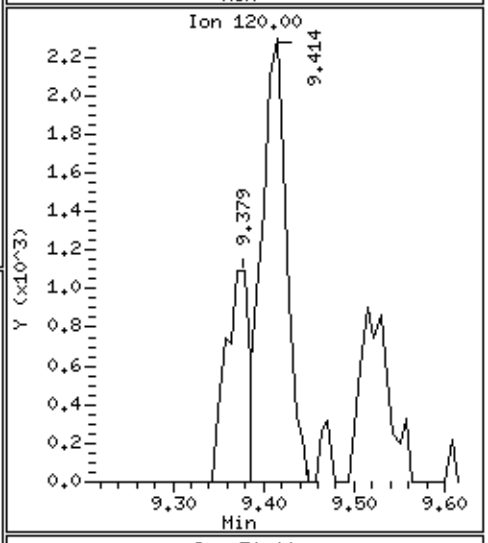
168 Cumene

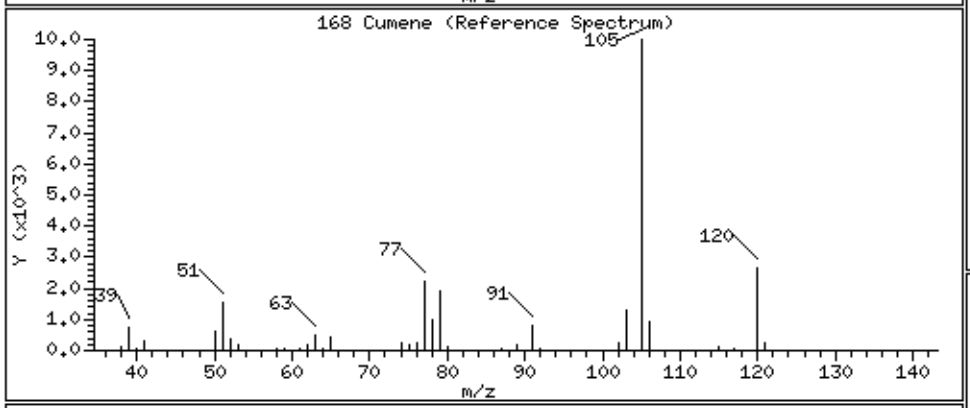
Concentration: 1.033 PPBV

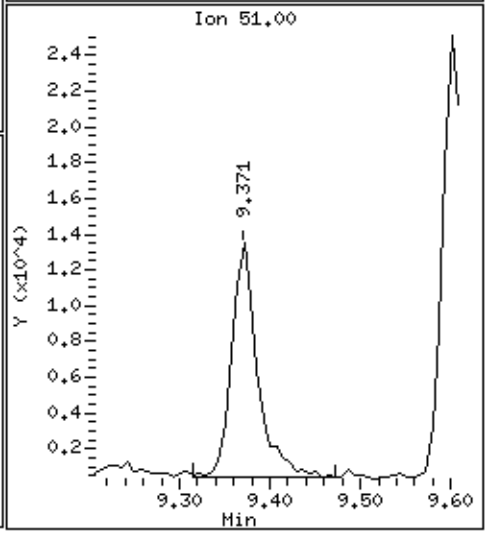


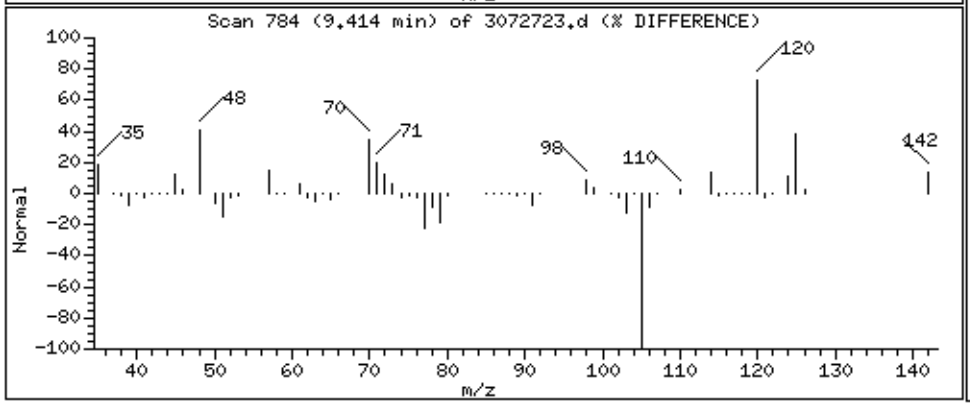












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

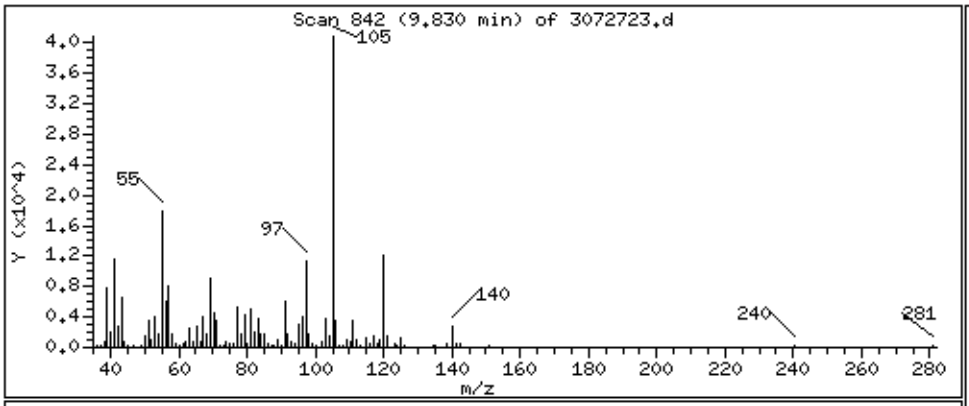
Operator: kk

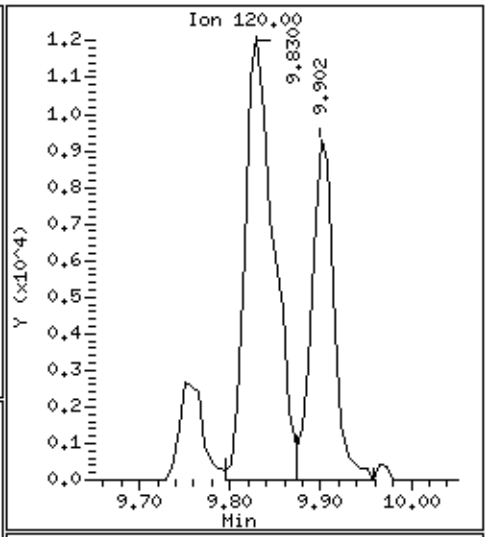
Column phase: RTX-624

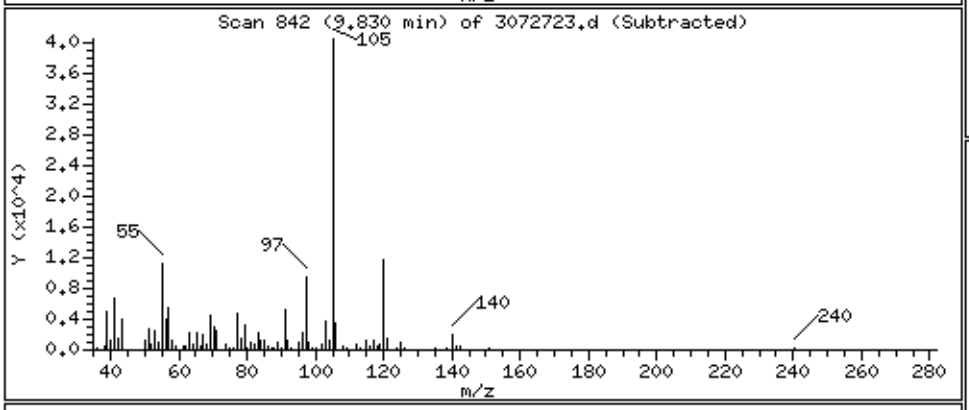
Column diameter: 0.25

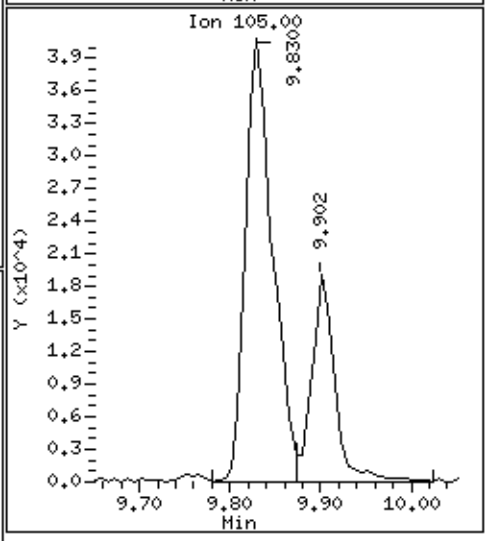
183 4-Ethyltoluene

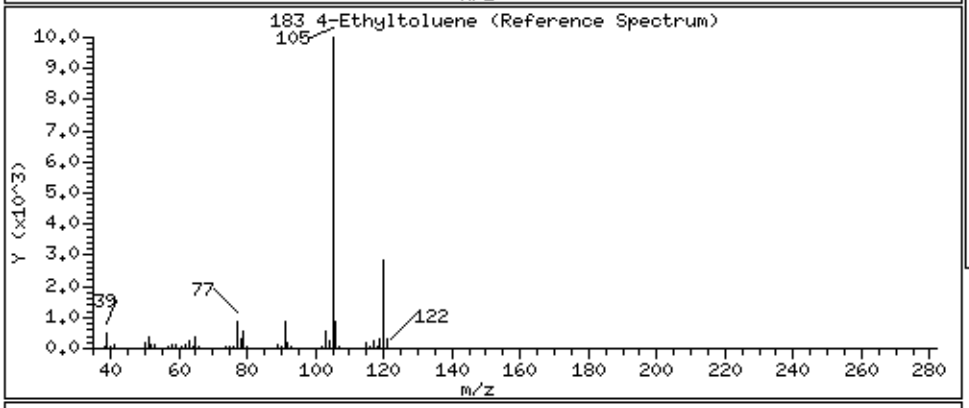
Concentration: 5.141 PPBV

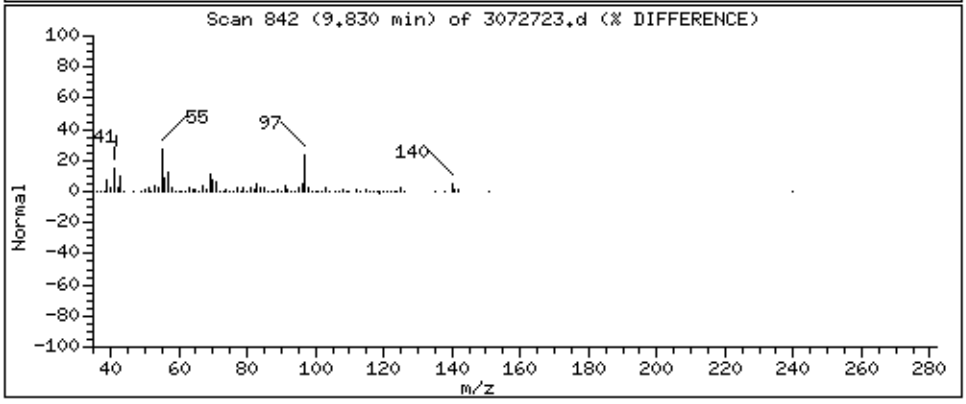












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

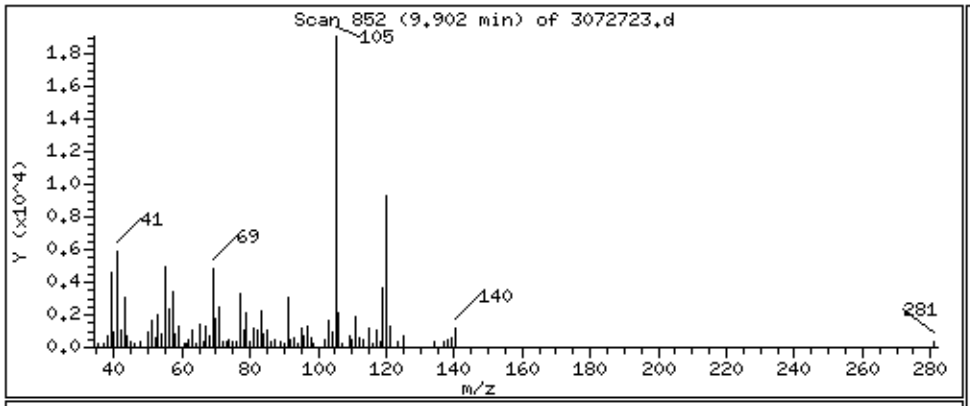
Operator: kk

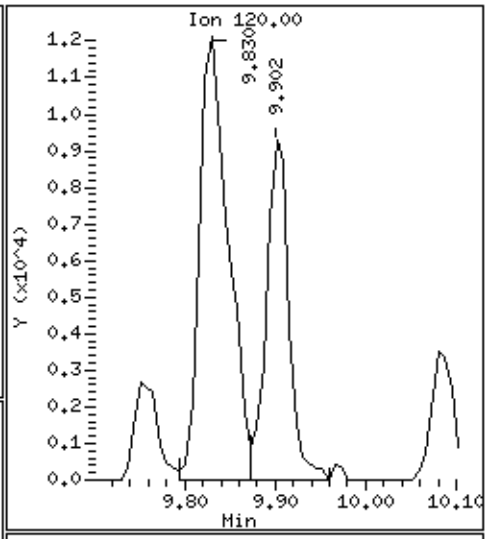
Column phase: RTX-624

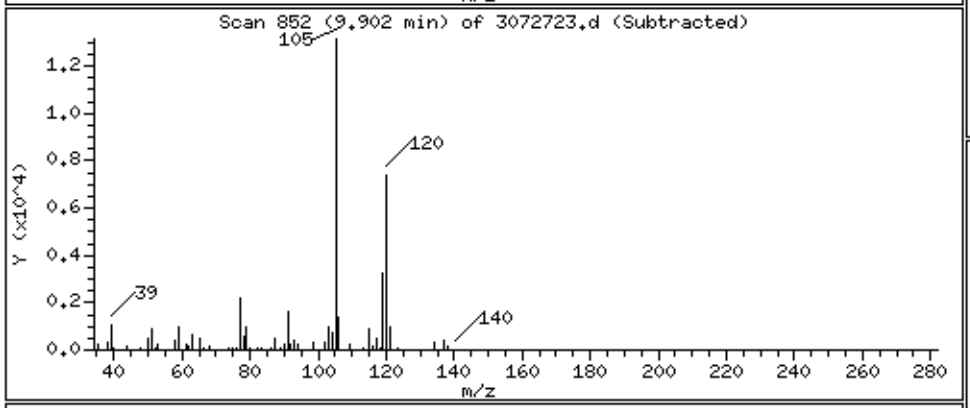
Column diameter: 0.25

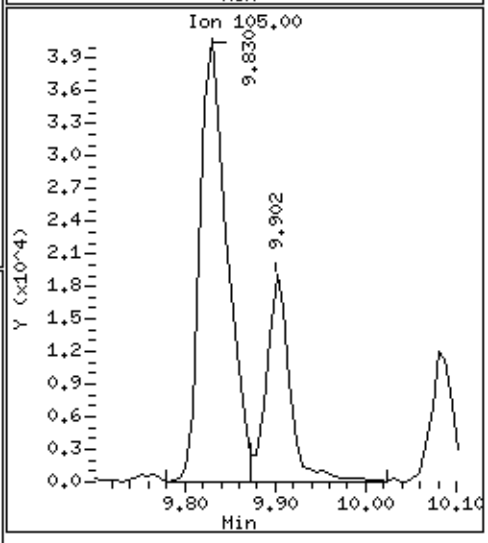
185 1,3,5-Trimethylbenzene

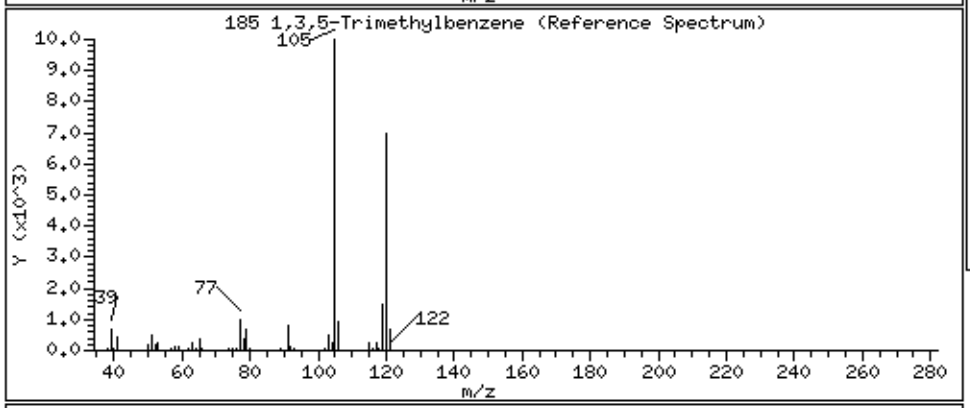
Concentration: 2.229 PPBV

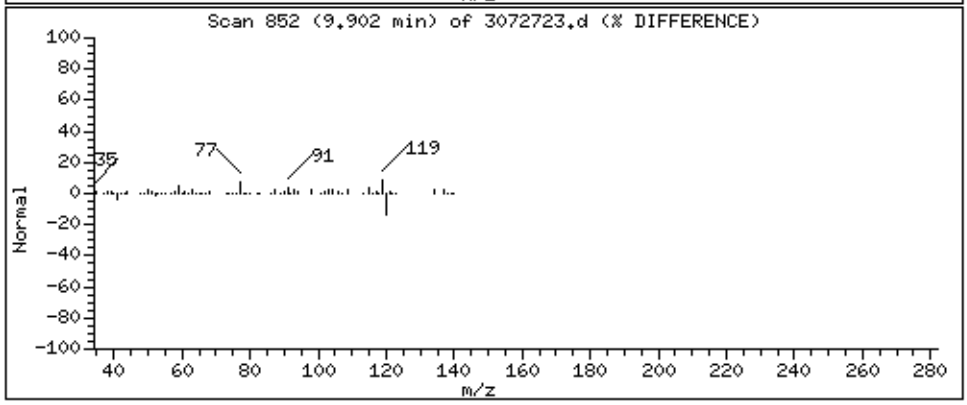












Data File: /chem/msd3.i/27JUL21.b/3072723.d

Date : 28-JUL-2021 00:45

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3927

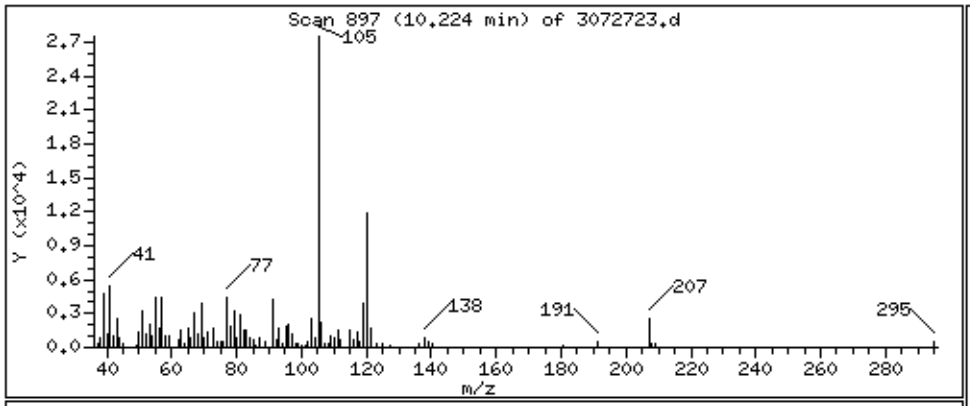
Operator: kk

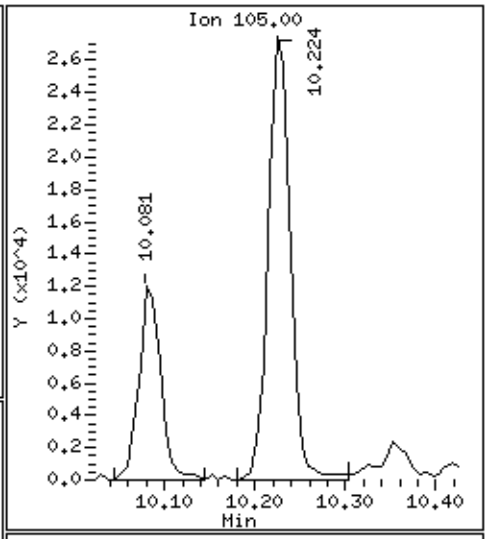
Column phase: RTX-624

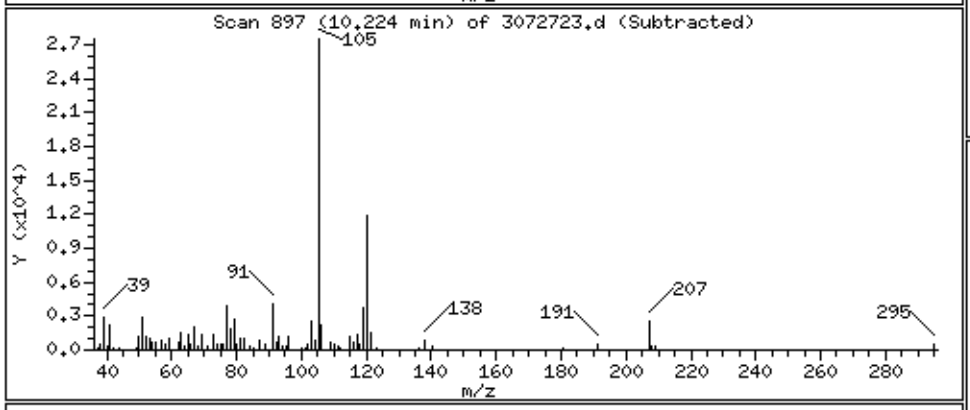
Column diameter: 0.25

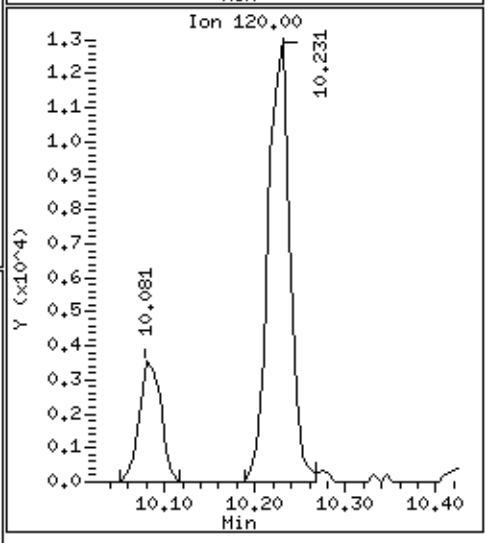
190 1,2,4-Trimethylbenzene

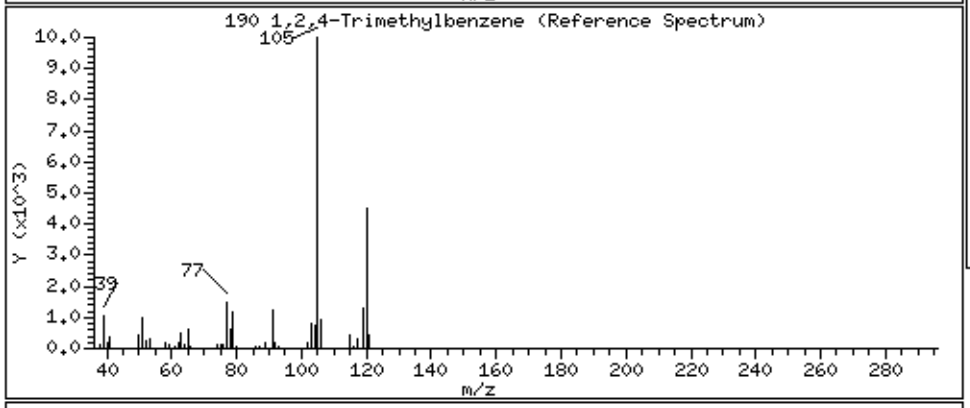
Concentration: 3.283 PPBV

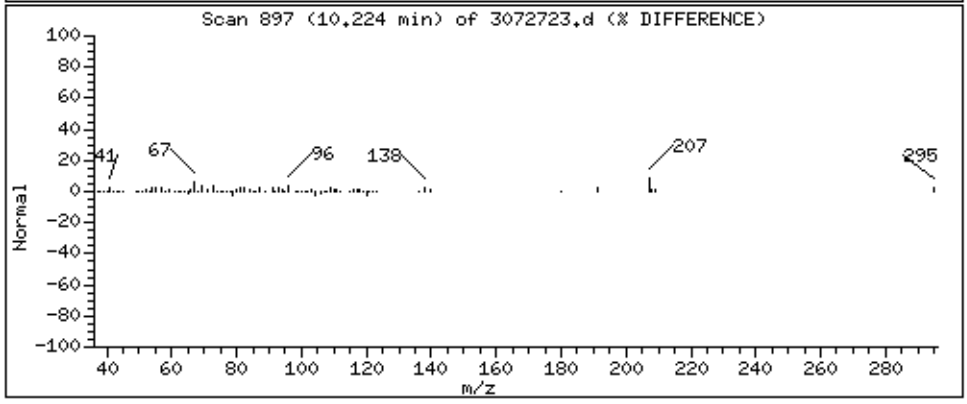












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Client Sample ID: SG-VW61B-01

Lab ID#: 2107362A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072724**	**Date of Collection:**	**7/15/21 6:58:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**7/28/21 01:14 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	3.6	Not Detected	24	Not Detected
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
1,1-Difluoroethane	3.6	4.1	9.7	11
1,2,3-Trichloropropane	3.6	Not Detected	22	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	26	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2-Dibromo-3-chloropropane	3.6	Not Detected	35	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
1,2-Dichloropropane	0.90	Not Detected	4.1	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dioxane	3.6	Not Detected	13	Not Detected
2,2,4-Trimethylpentane	0.90	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.6	Not Detected	10	Not Detected
2-Hexanone	3.6	Not Detected	15	Not Detected
2-Propanol	3.6	5.4	8.8	13
3-Chloropropene	3.6	Not Detected	11	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
Acetone	9.0	Not Detected	21	Not Detected
Acrolein	3.6	Not Detected	8.2	Not Detected
Acrylonitrile	3.6	Not Detected	7.8	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
Benzene	0.90	Not Detected	2.8	Not Detected
Bromodichloromethane	0.90	1.5	6.0	9.9
Bromoform	0.90	Not Detected	9.2	Not Detected
Bromomethane	9.0	Not Detected	35	Not Detected
Carbon Disulfide	3.6	Not Detected	11	Not Detected
Carbon Tetrachloride	0.90	Not Detected	5.6	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Chloroethane	3.6	Not Detected	9.4	Not Detected
Chloroform	0.90	32	4.4	160
Chloromethane	9.0	Not Detected	18	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected

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Client Sample ID: SG-VW61B-01

Lab ID#: 2107362A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072724**	**Date of Collection:**	**7/15/21 6:58:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**7/28/21 01:14 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
Cumene	0.90	Not Detected	4.4	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Dibromochloromethane	0.90	Not Detected	7.6	Not Detected
Dibromomethane	3.6	Not Detected	25	Not Detected
Ethanol	9.0	Not Detected	17	Not Detected
Ethyl Acetate	3.6	Not Detected	13	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
Ethyl-tert-butyl ether	3.6	Not Detected	15	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
Freon 12	0.90	1.1	4.4	5.4
Freon 113	0.90	Not Detected	6.8	Not Detected
Freon 114	0.90	Not Detected	6.2	Not Detected
Freon 134a	3.6	Not Detected	15	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Hexachloroethane	3.6	Not Detected	35	Not Detected
Hexane	0.90	4.7	3.2	16
Iodomethane	9.0	Not Detected	52	Not Detected
Isopropyl ether	3.6	Not Detected	15	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
Methyl tert-butyl ether	3.6	Not Detected	13	Not Detected
Methylene Chloride	9.0	Not Detected	31	Not Detected
Naphthalene	1.8	Not Detected	9.4	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Propylbenzene	0.90	Not Detected	4.4	Not Detected
Propylene	3.6	Not Detected	6.2	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
tert-Amyl methyl ether	3.6	Not Detected	15	Not Detected
tert-Butyl alcohol	3.6	Not Detected	11	Not Detected
Tetrachloroethene	0.90	17	6.1	120
Tetrahydrofuran	0.90	Not Detected	2.6	Not Detected
Toluene	0.90	1.4	3.4	5.4
TPH ref. to Gasoline (MW=100)	90	Not Detected	370	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
Trichloroethene	0.90	Not Detected	4.8	Not Detected
Vinyl Acetate	3.6	Not Detected	13	Not Detected
Vinyl Bromide	3.6	Not Detected	16	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW61B-01

Lab ID#: 2107362A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072724**	**Date of Collection: 7/15/21 6:58:00 AM**	
Dil. Factor:	**1.79**	**Date of Analysis: 7/28/21 01:14 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072724.d
Lab Smp Id: 2107362A-02A
Inj Date : 28-JUL-2021 01:14
Operator : kk Inst ID: msd3.i
Smp Info : 200mL N2650
Misc Info : 1.8 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 4
Dil Factor: 1.79000
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	214821	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	167505				48.46- 108.46	77.97
5.284	5.270 (1.000)	49	295235				120.39- 180.39	137.43
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	702909	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	103816				0.00- 45.52	14.77
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	635784	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	330998				25.46- 85.46	52.06
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	285926	24.1863	24.186		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	139816				21.66- 81.66	48.90
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	728920	25.1772	25.177		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	80224				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	476796			36.47- 96.47	65.41
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.608	9.601 (1.115)	174	412420	24.5243	24.524	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	464040			93.06- 153.06	112.52
9.608	9.601 (1.115)	176	383271			62.87- 122.87	92.93
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	7679	2.27026	4.064	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	65824			321.86- 381.86	857.16
1.465	1.451 (0.277)	47	3287			45.34- 105.34	42.80
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	9043	0.60429	1.082	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	3364			2.63- 62.63	37.20
52 2-Propanol					CAS #: 67-63-0		
3.423	3.409 (0.648)	45	39112	3.01919	5.404	80.00- 120.00	100.00
3.423	3.395 (0.648)	43	9441			0.00- 48.61	24.14
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	30984	2.60456	4.662	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	19507			32.99- 92.99	62.96
4.179	4.179 (0.791)	86	4830			0.00- 42.56	15.59
92 Chloroform					CAS #: 67-66-3		
5.354	5.340 (1.013)	83	242006	17.9680	32.163	80.00- 120.00	100.00
5.354	5.340 (1.013)	85	160309			34.71- 94.71	66.24
122 Bromodichloromethane					CAS #: 75-27-4		
6.843	6.836 (1.107)	83	11146	0.82680	1.480	80.00- 120.00	100.00
6.843	6.836 (1.107)	85	7703			34.31- 94.31	69.11
137 Toluene					CAS #: 108-88-3		
7.445	7.437 (1.205)	91	17210	0.79962	1.431	80.00- 120.00	100.00
7.445	7.437 (1.205)	92	10283			28.30- 88.30	59.76
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	95943	9.63256	17.242	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	75745			48.71- 108.71	78.95
7.881	7.874 (0.914)	131	73885			46.55- 106.55	77.01

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072724.d
Lab Smp Id: 2107362A-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 1.8 Hg->10.1 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	214821	-10.11
108 1,4-Difluorobenze	785289	471173	1099405	702909	-10.49
153 Chlorobenzene-d5	683596	410158	957034	635784	-6.99

		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	8.61	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: 29-Jul-2021 11:02

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-02A
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/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 1.8 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.186	96.75	70-130
$ 134 Toluene-d8	25.000	25.177	100.71	70-130
$ 170 4-Bromofluorobenz	25.000	24.524	98.10	70-130

Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

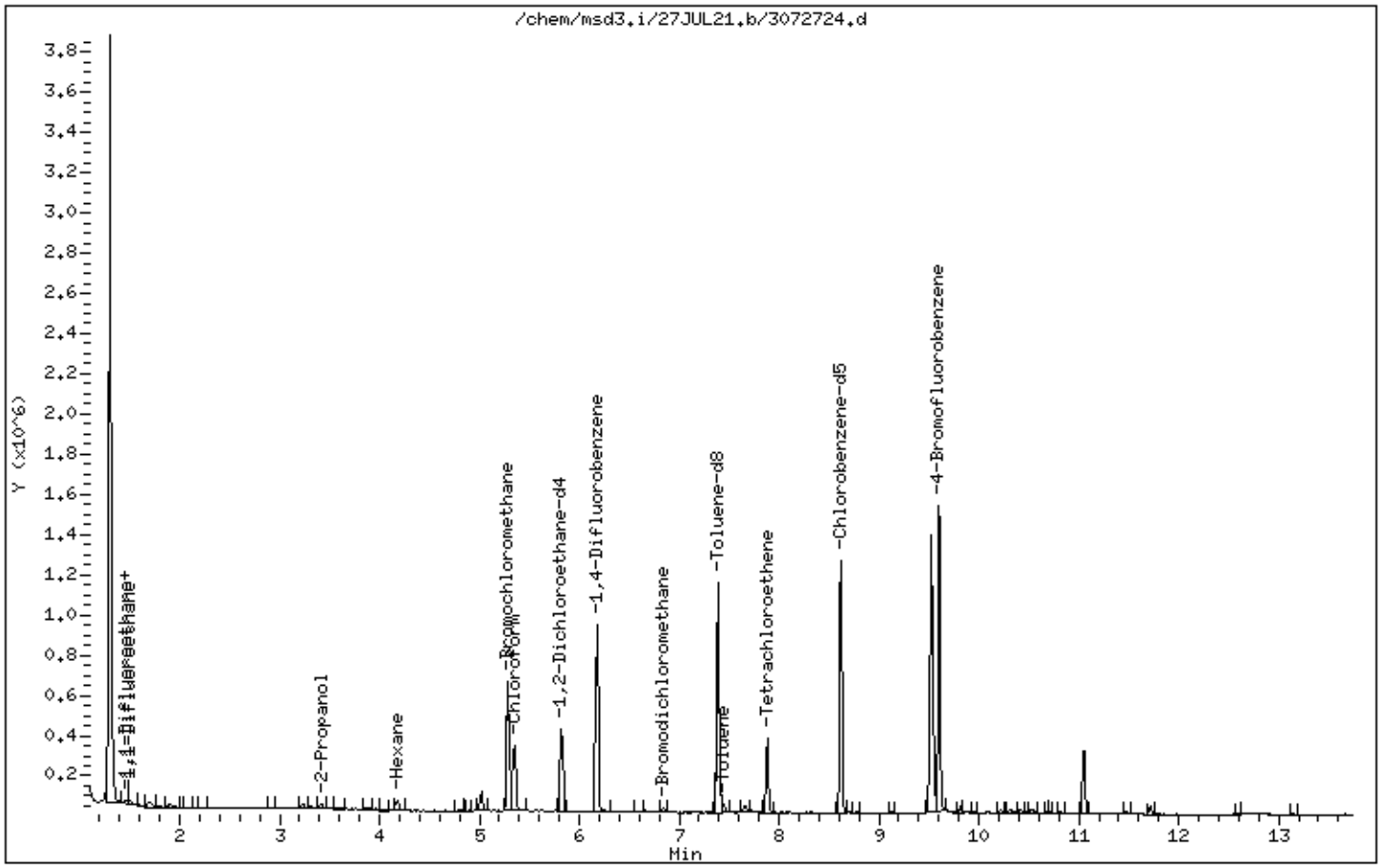
Instrument: msd3.i

Sample Info: 200mL N2650

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

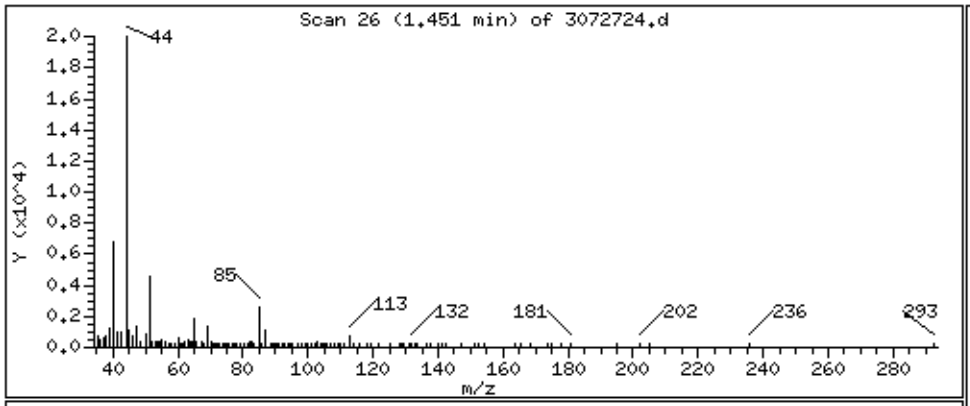
Operator: kk

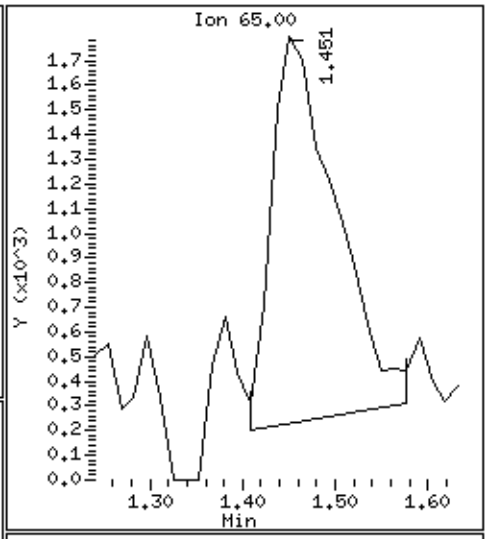
Column phase: RTX-624

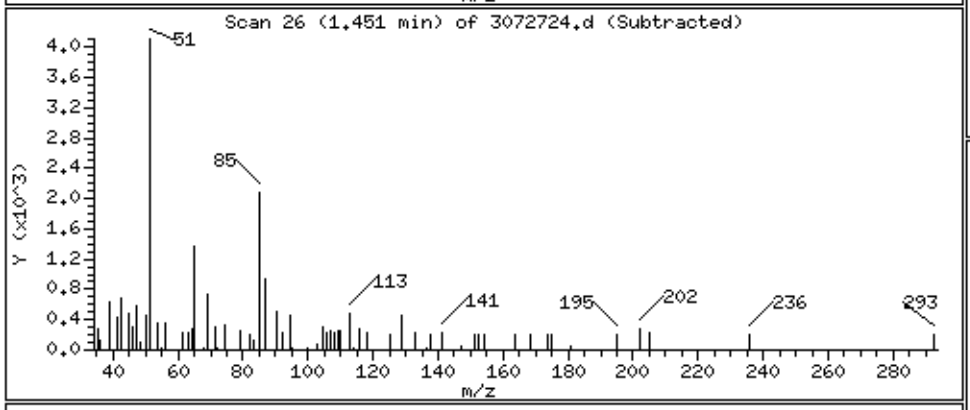
Column diameter: 0.25

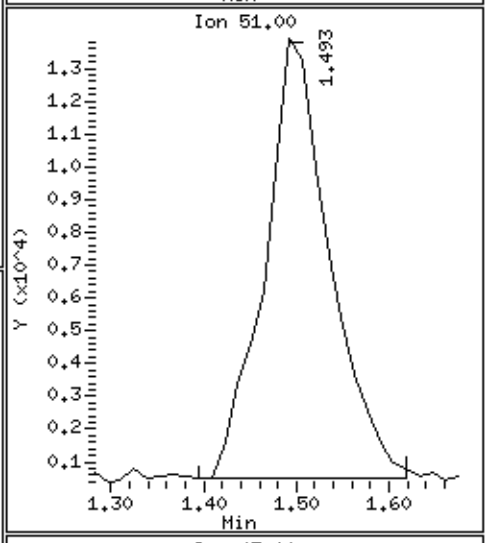
7 1,1-Difluoroethane

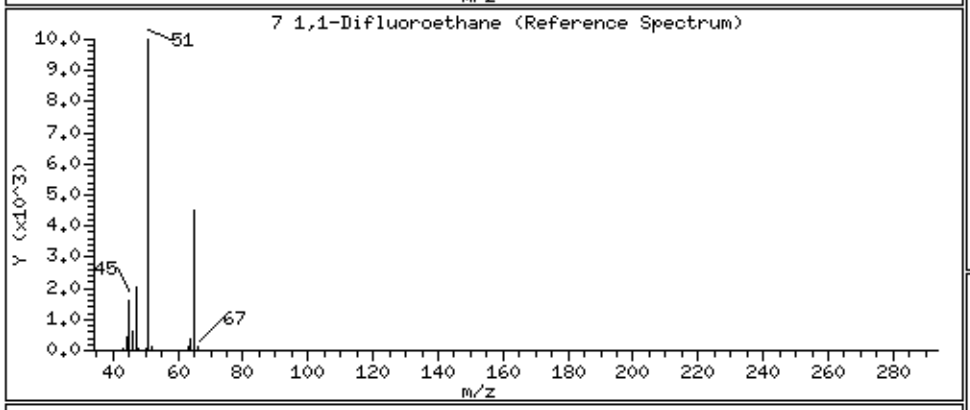
Concentration: 4.064 PPBV

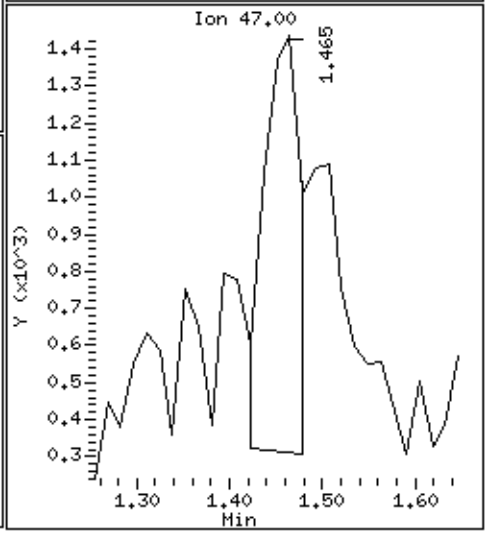


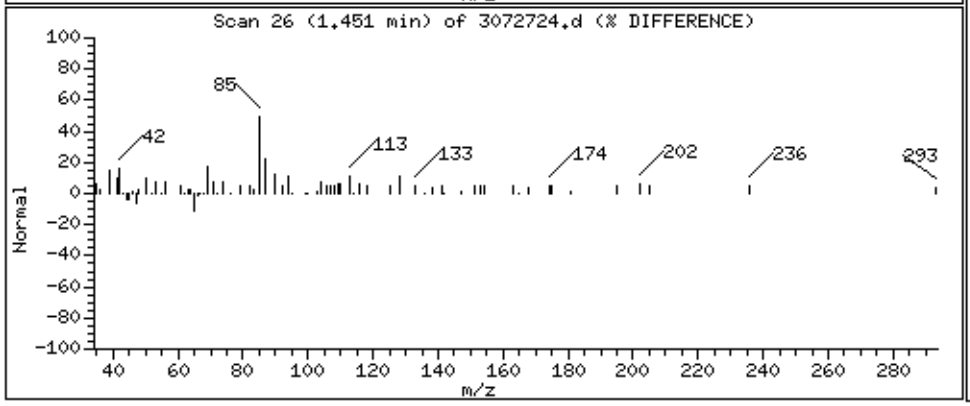












Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

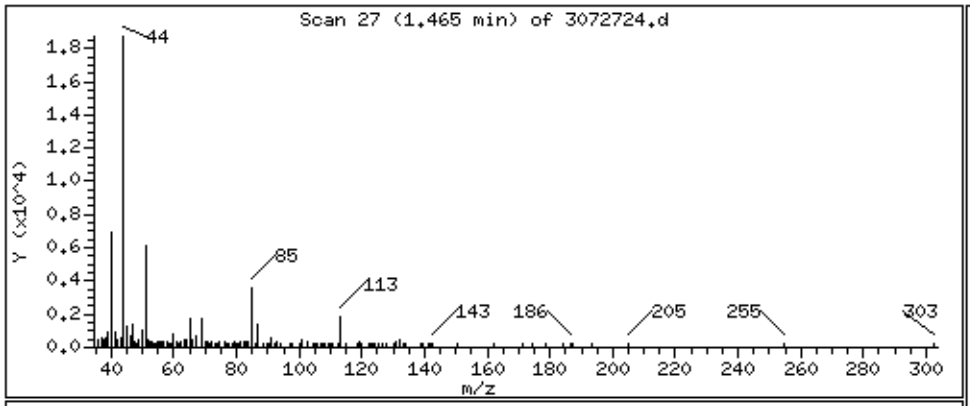
Operator: kk

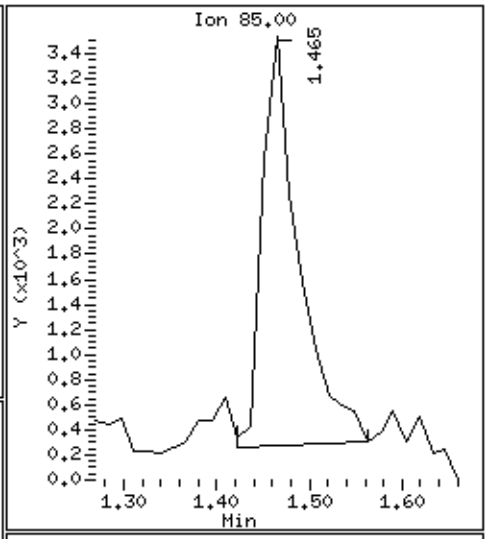
Column phase: RTX-624

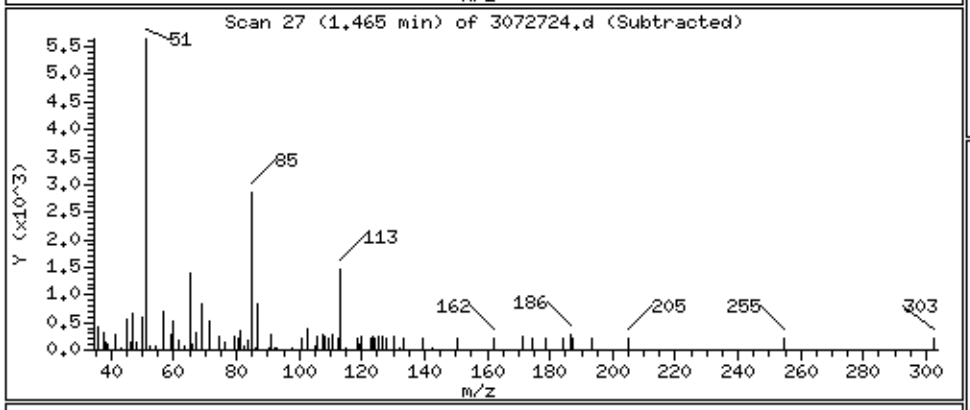
Column diameter: 0.25

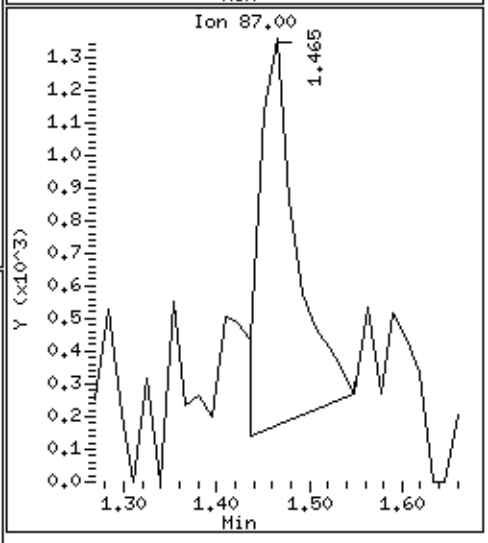
8 Freon 12

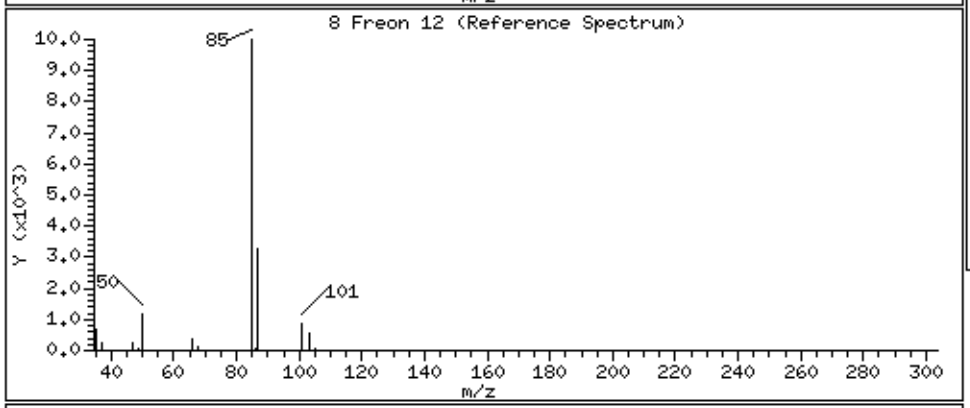
Concentration: 1.082 PPBV

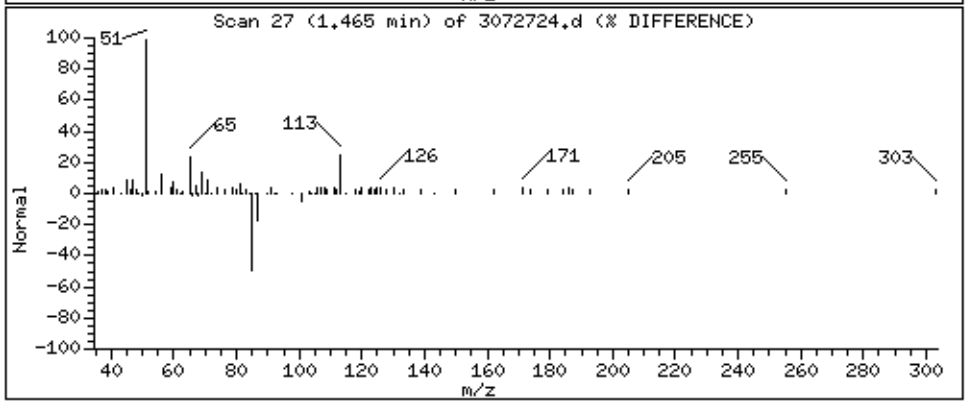












Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

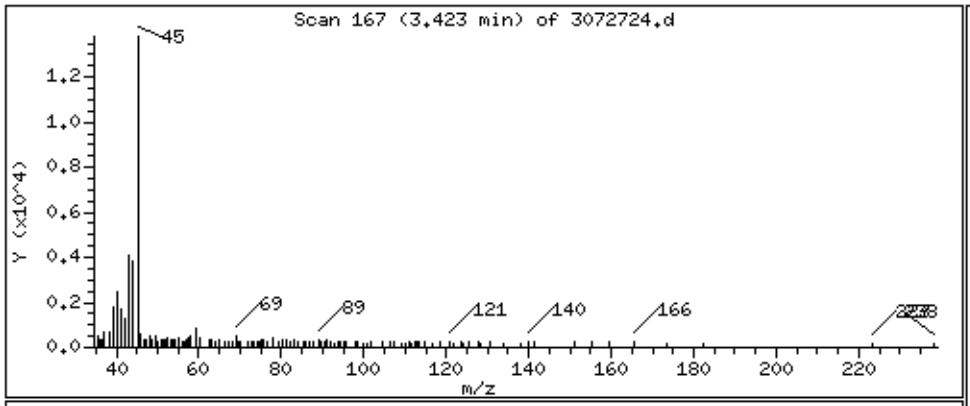
Operator: kk

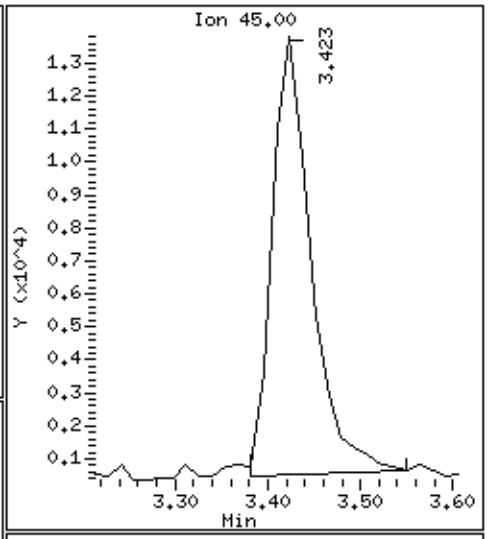
Column phase: RTX-624

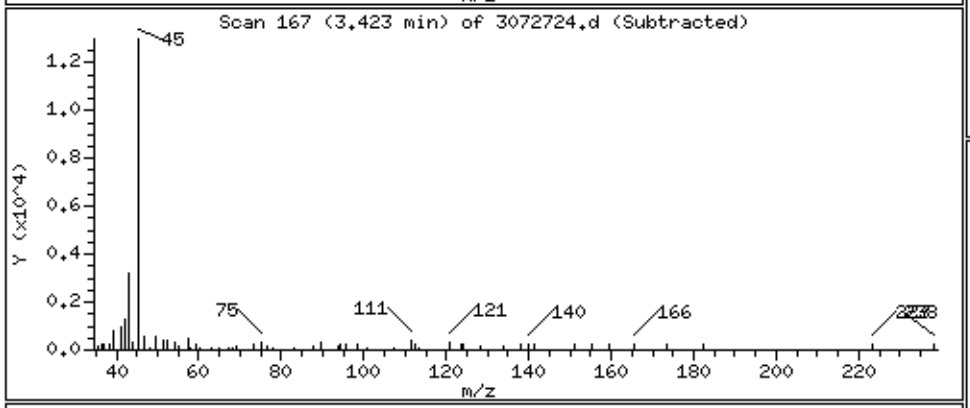
Column diameter: 0.25

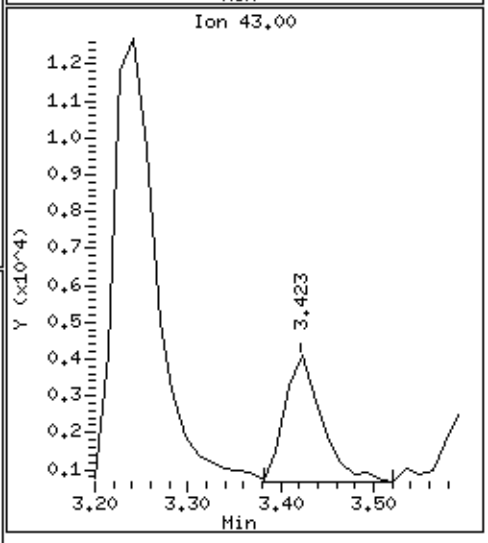
52 2-Propanol

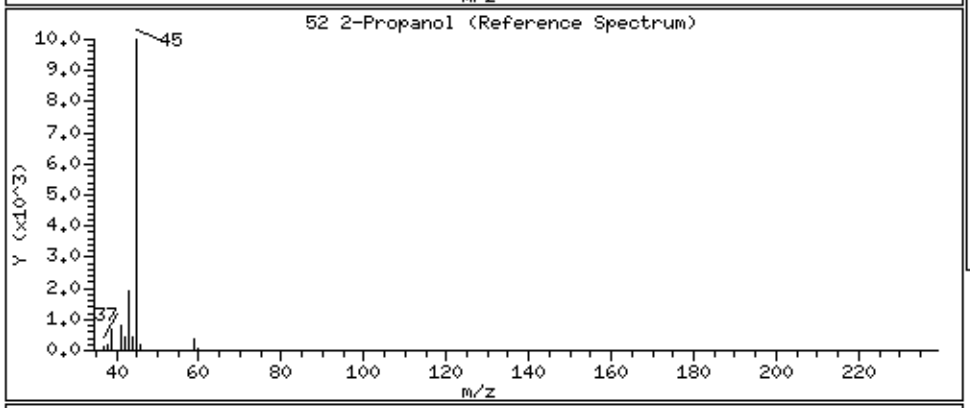
Concentration: 5.404 PPBV

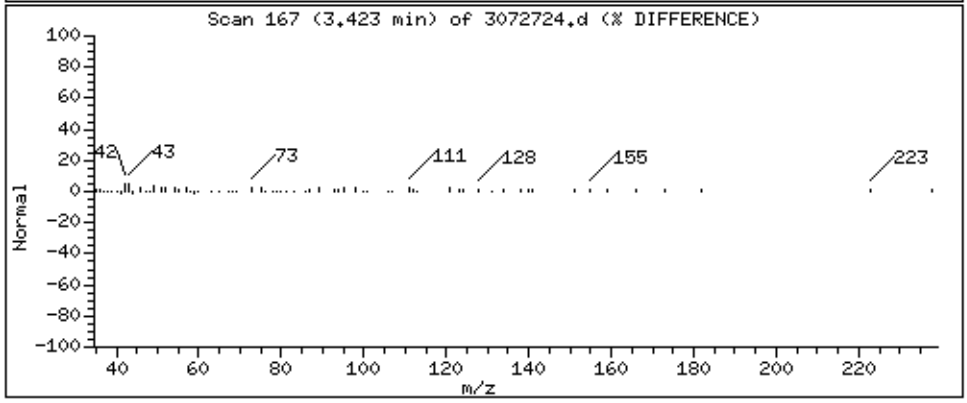












Data File: /chem/msd3.i/27JUL21.b/3072724.d

Page 5

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

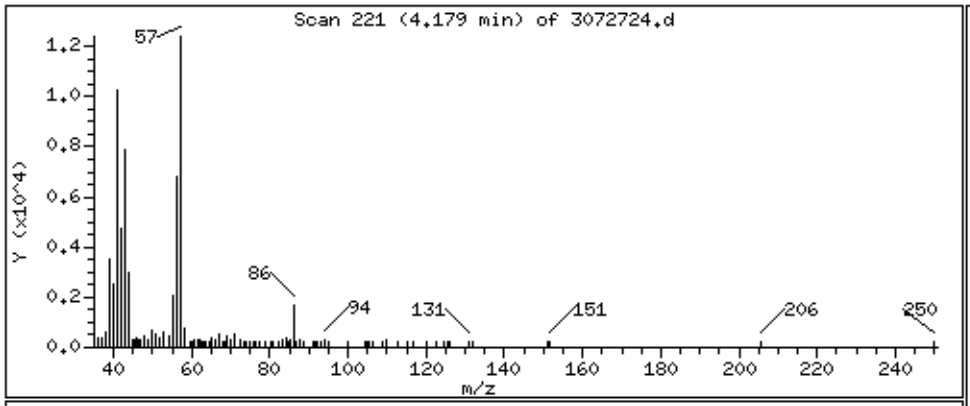
Operator: kk

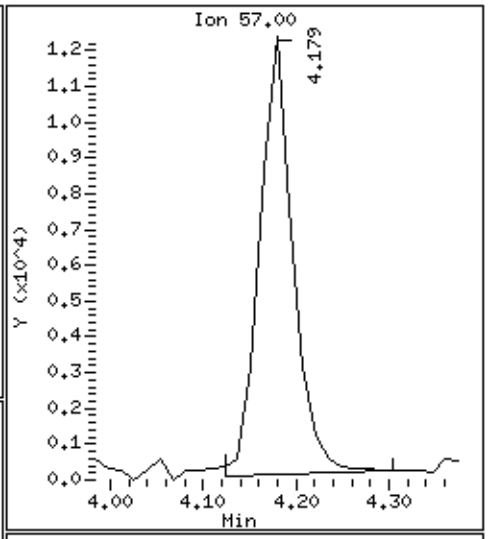
Column phase: RTX-624

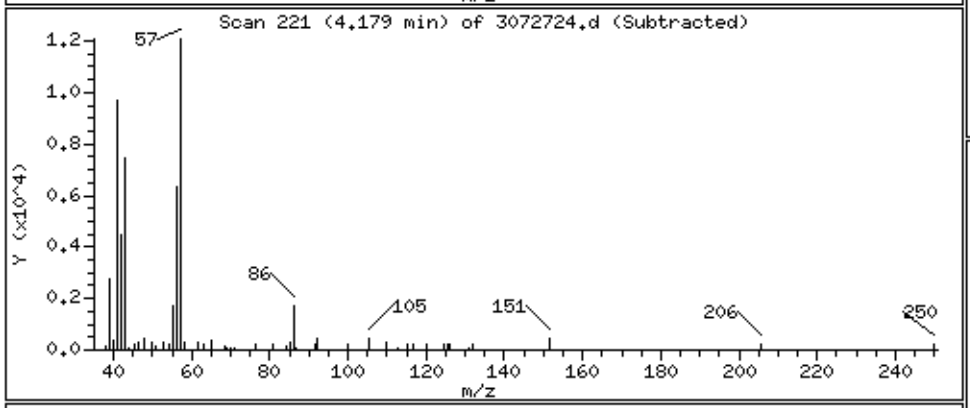
Column diameter: 0.25

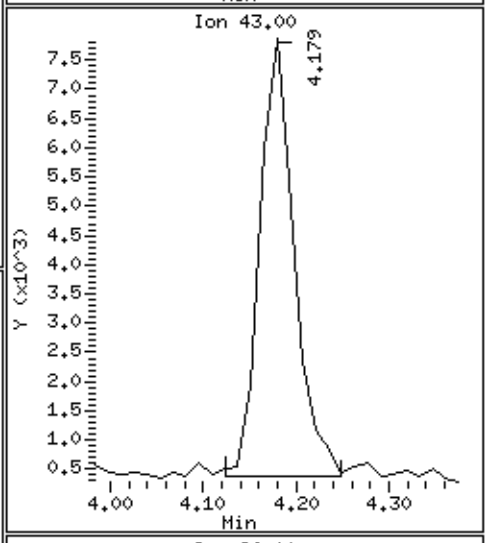
67 Hexane

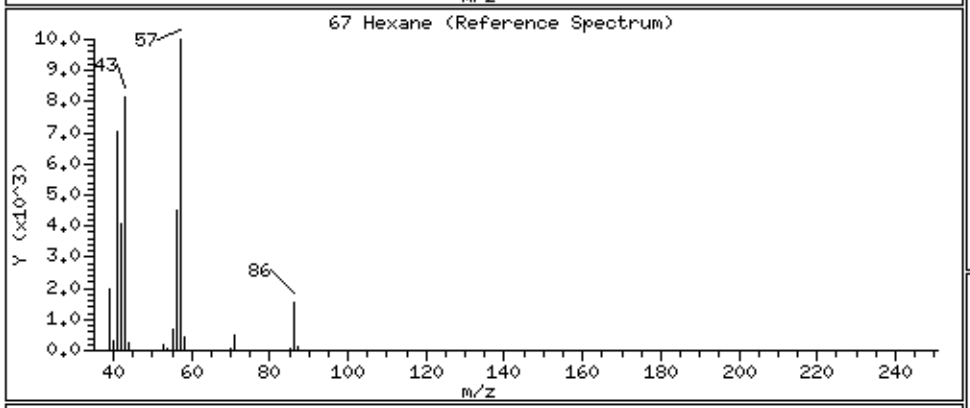
Concentration: 4.662 PPBV

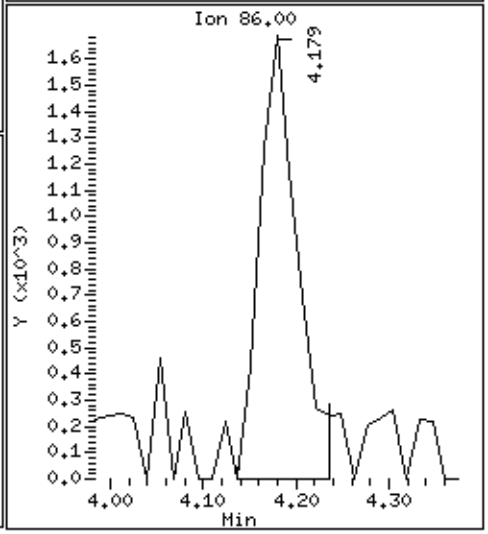


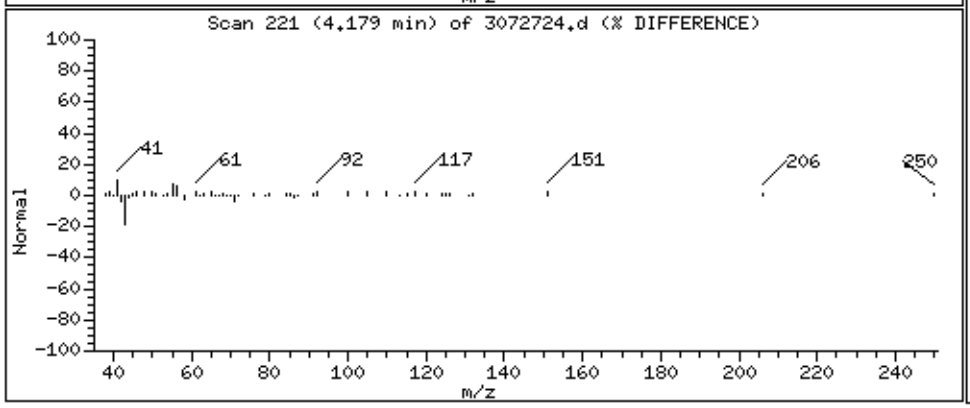












Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

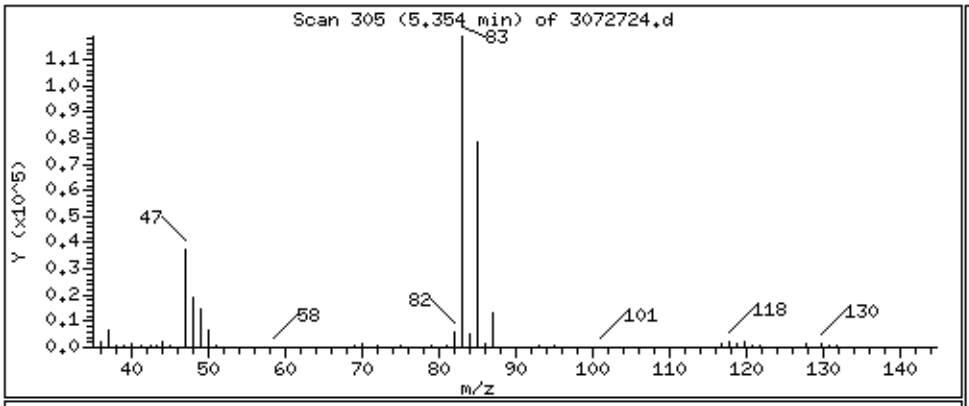
Operator: kk

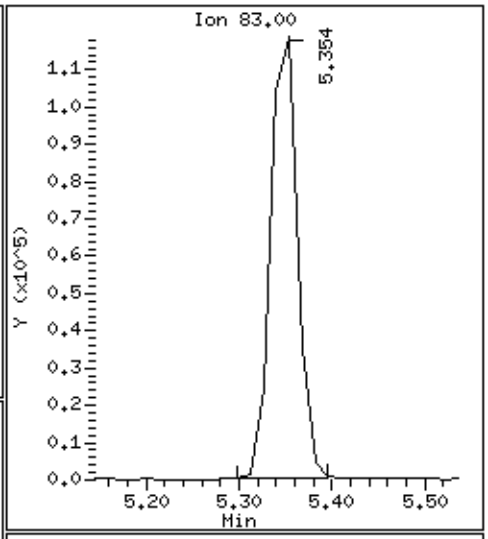
Column phase: RTX-624

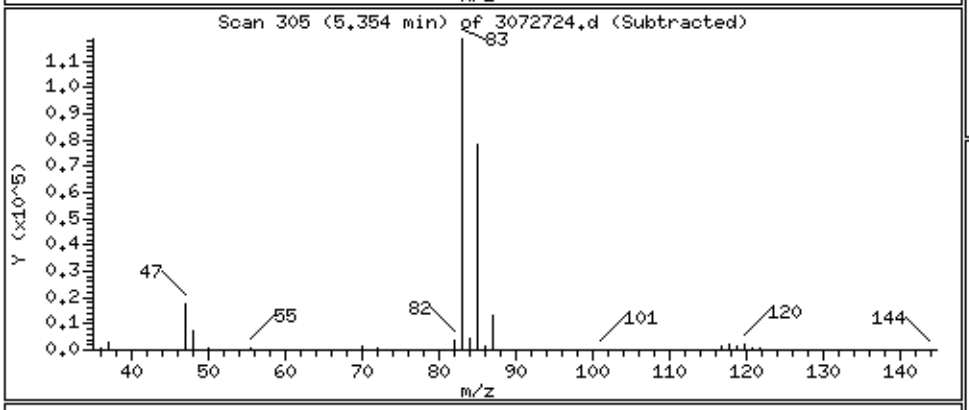
Column diameter: 0.25

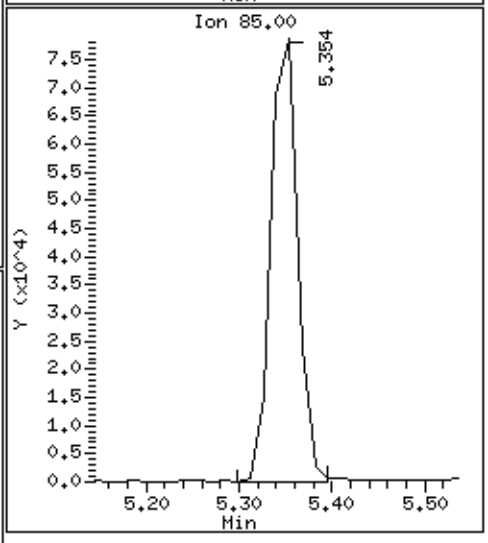
92 Chloroform

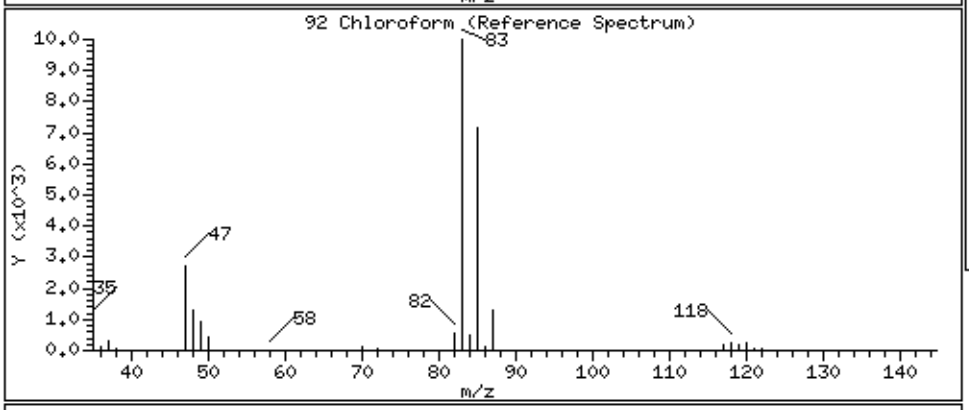
Concentration: 32.163 PPBV

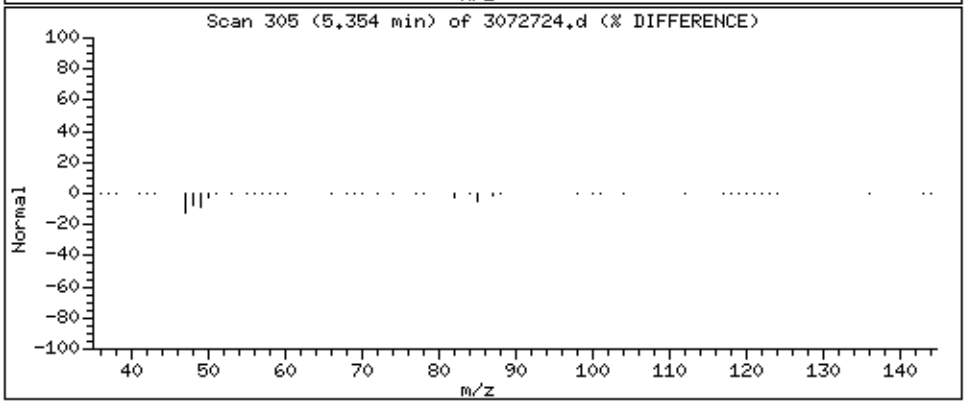












Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

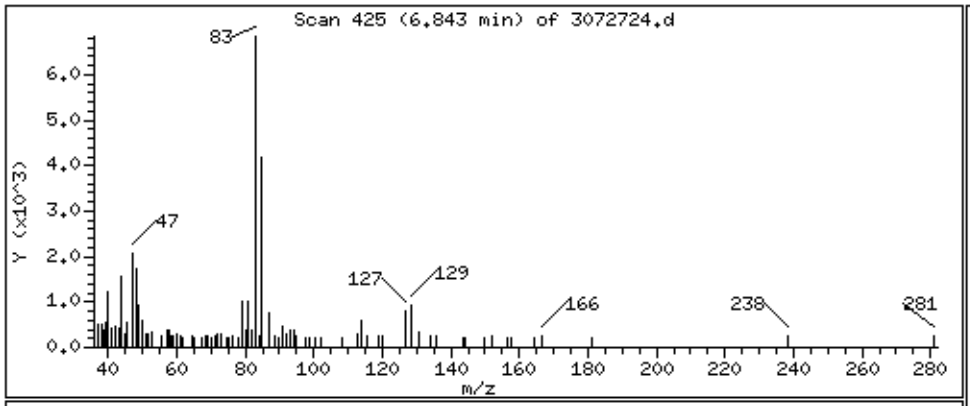
Operator: kk

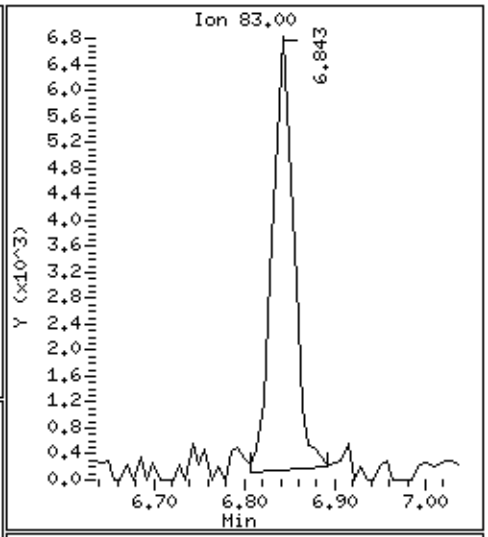
Column phase: RTX-624

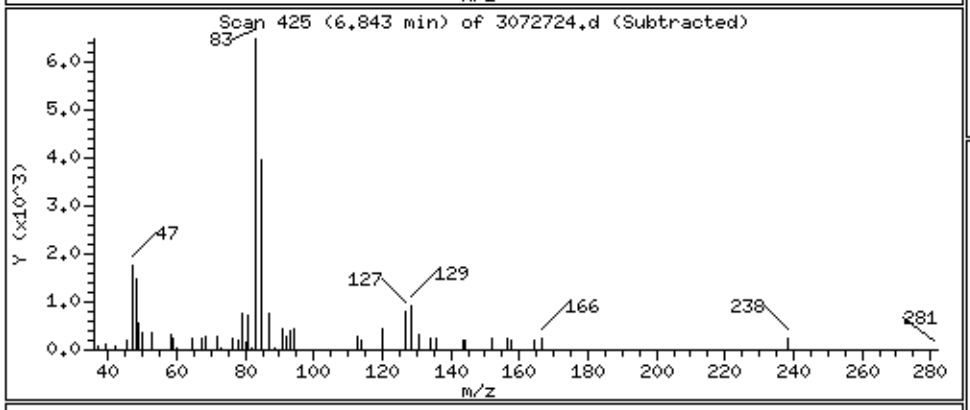
Column diameter: 0.25

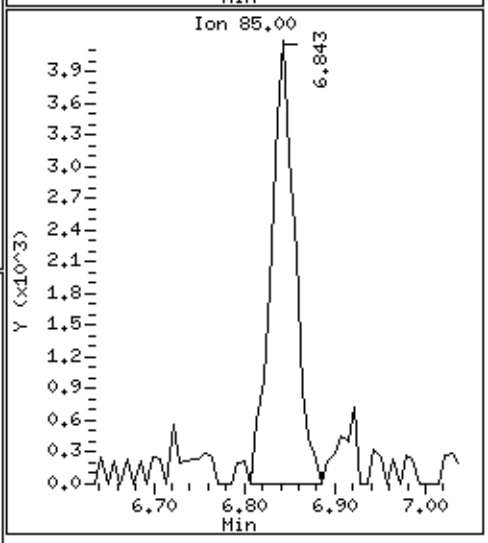
122 Bromodichloromethane

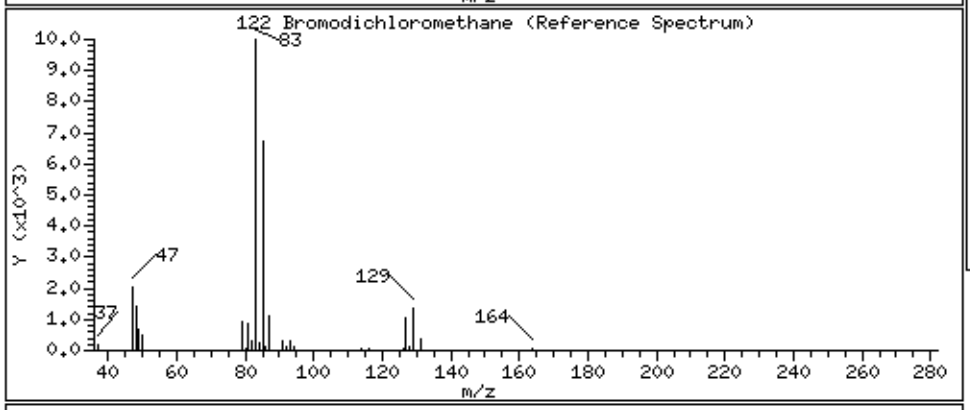
Concentration: 1.480 PPBV

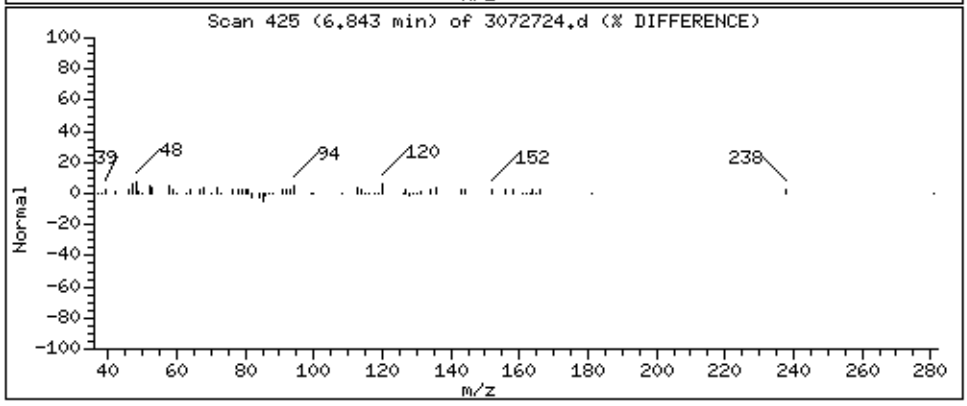












Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

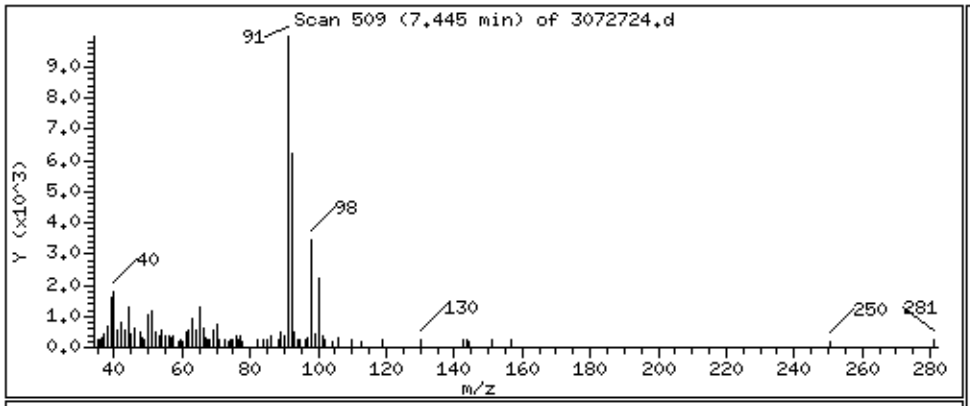
Operator: kk

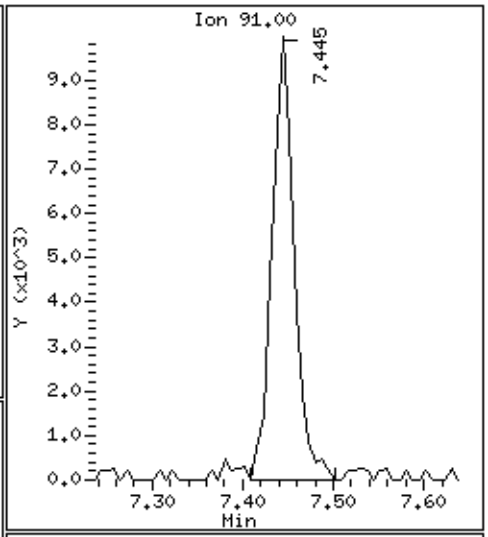
Column phase: RTX-624

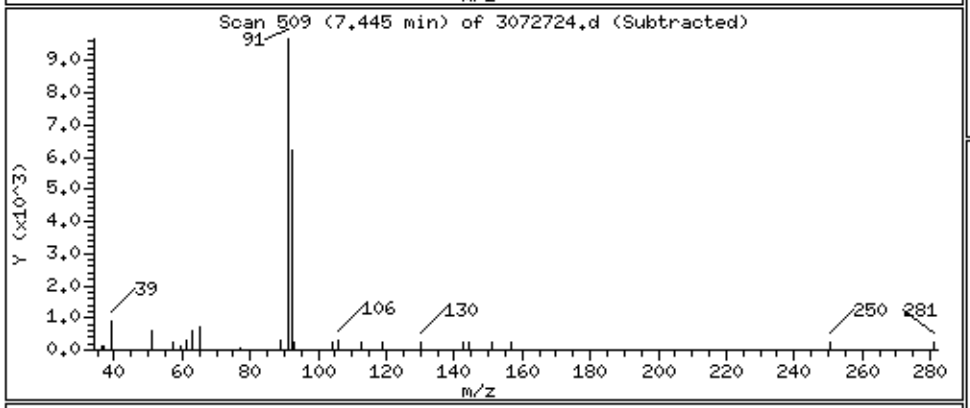
Column diameter: 0.25

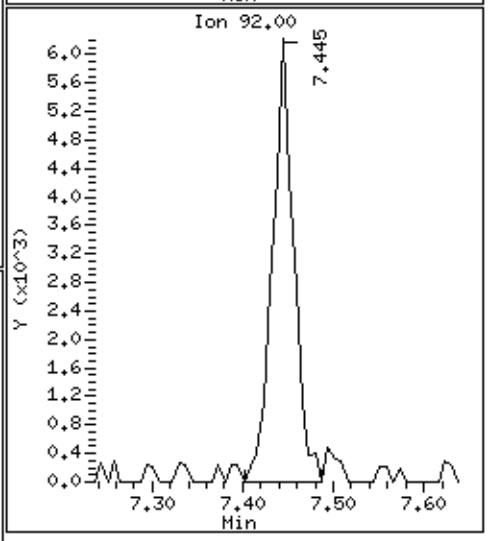
137 Toluene

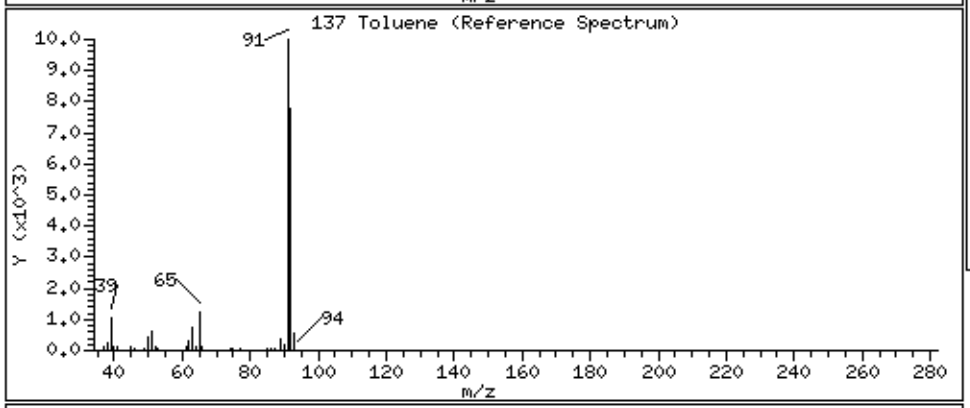
Concentration: 1.431 PPBV

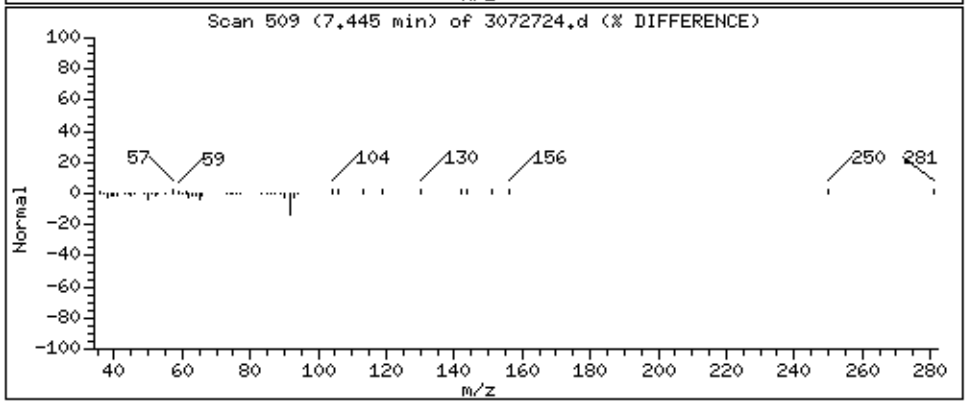












Data File: /chem/msd3.i/27JUL21.b/3072724.d

Date : 28-JUL-2021 01:14

Client ID:

Instrument: msd3.i

Sample Info: 200mL N2650

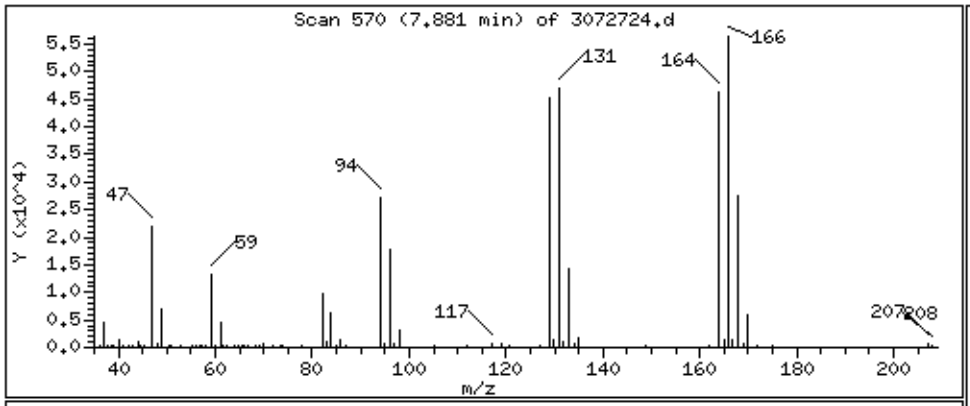
Operator: kk

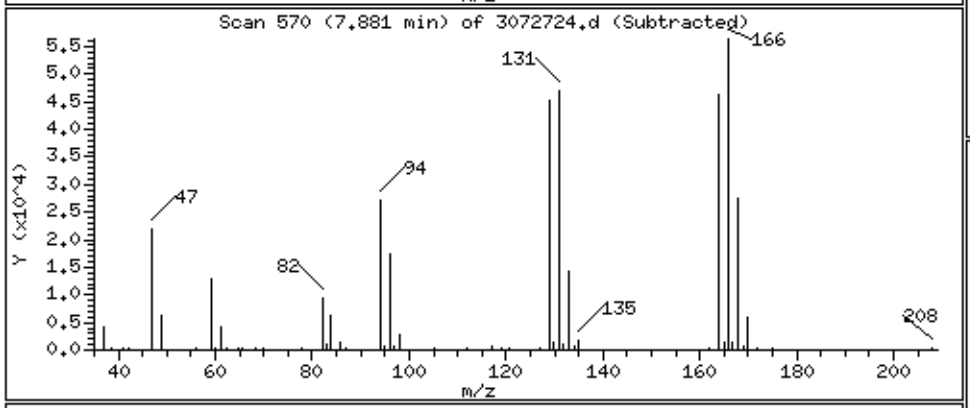
Column phase: RTX-624

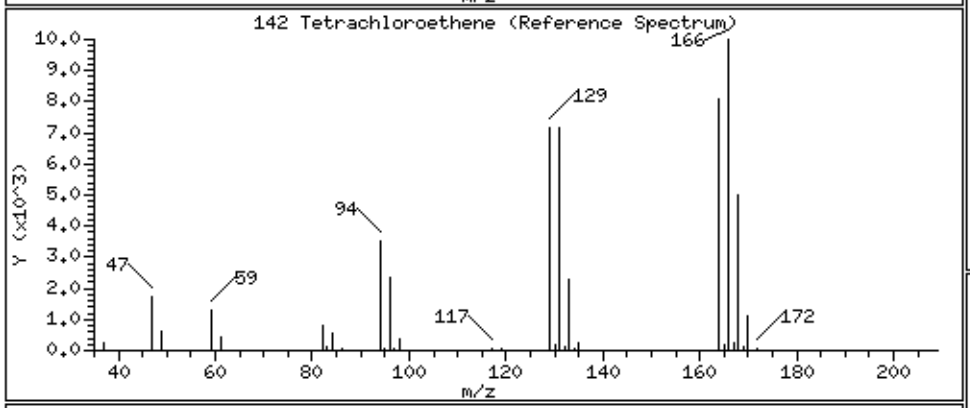
Column diameter: 0.25

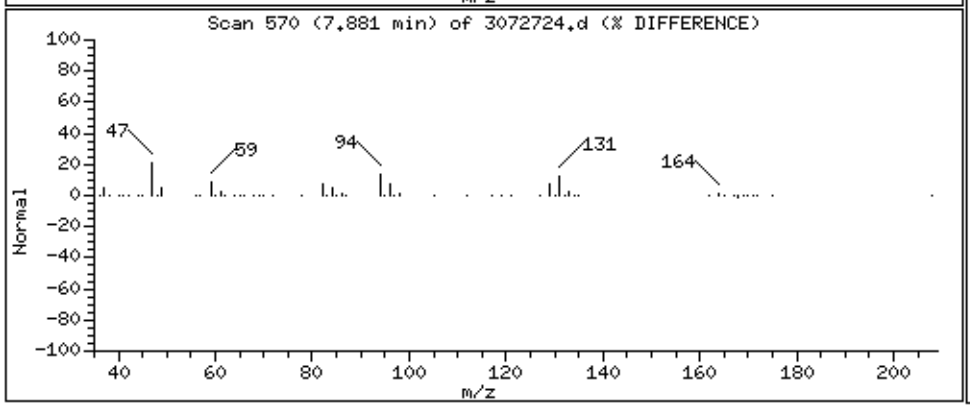
142 Tetrachloroethene

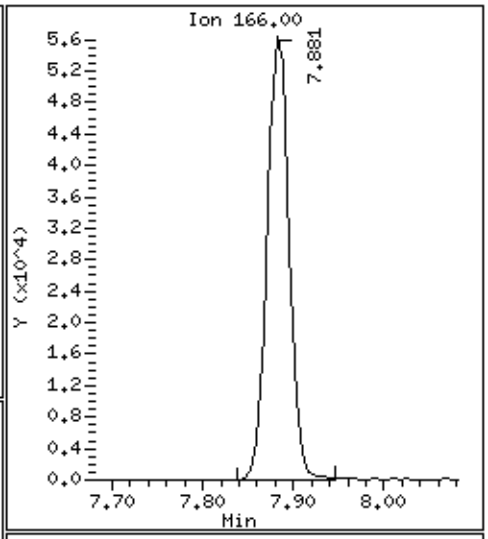
Concentration: 17.242 PPBV

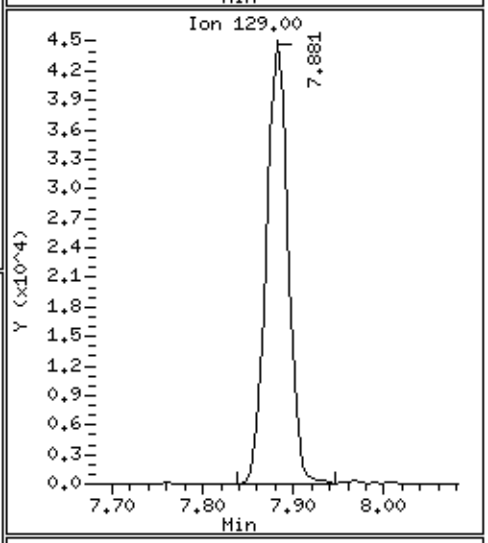


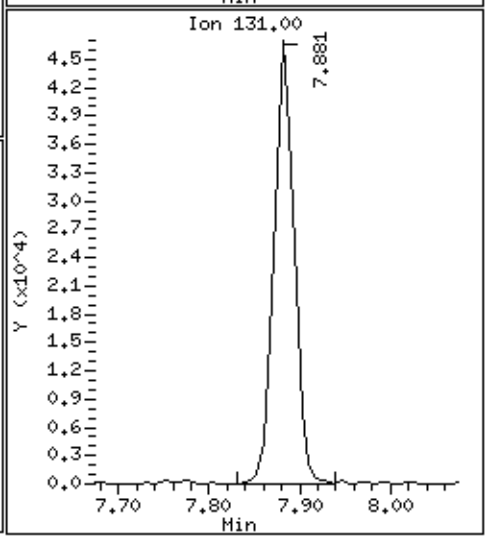












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Client Sample ID: SG-VW62-01

Lab ID#: 2107362A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072717**	**Date of Collection:**	**7/15/21 7:34:00 AM**
Dil. Factor:	**8620**	**Date of Analysis:**	**7/27/21 08:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	17000	Not Detected	120000	Not Detected
1,1,1-Trichloroethane	4300	Not Detected	24000	Not Detected
1,1,2,2-Tetrachloroethane	4300	Not Detected	30000	Not Detected
1,1,2-Trichloroethane	4300	Not Detected	24000	Not Detected
1,1-Dichloroethane	4300	Not Detected	17000	Not Detected
1,1-Dichloroethene	4300	Not Detected	17000	Not Detected
1,1-Difluoroethane	17000	2000000 E	46000	5300000 E
1,2,3-Trichloropropane	17000	Not Detected	100000	Not Detected
1,2,4-Trichlorobenzene	17000	Not Detected	130000	Not Detected
1,2,4-Trimethylbenzene	4300	Not Detected	21000	Not Detected
1,2-Dibromo-3-chloropropane	17000	Not Detected	170000	Not Detected
1,2-Dibromoethane (EDB)	4300	Not Detected	33000	Not Detected
1,2-Dichlorobenzene	4300	Not Detected	26000	Not Detected
1,2-Dichloroethane	4300	Not Detected	17000	Not Detected
1,2-Dichloropropane	4300	Not Detected	20000	Not Detected
1,3,5-Trimethylbenzene	4300	Not Detected	21000	Not Detected
1,3-Butadiene	4300	Not Detected	9500	Not Detected
1,3-Dichlorobenzene	4300	Not Detected	26000	Not Detected
1,4-Dichlorobenzene	4300	Not Detected	26000	Not Detected
1,4-Dioxane	17000	Not Detected	62000	Not Detected
2,2,4-Trimethylpentane	4300	Not Detected	20000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17000	Not Detected	51000	Not Detected
2-Hexanone	17000	Not Detected	71000	Not Detected
2-Propanol	17000	Not Detected	42000	Not Detected
3-Chloropropene	17000	Not Detected	54000	Not Detected
4-Ethyltoluene	4300	Not Detected	21000	Not Detected
4-Methyl-2-pentanone	4300	Not Detected	18000	Not Detected
Acetone	43000	Not Detected	100000	Not Detected
Acrolein	17000	Not Detected	40000	Not Detected
Acrylonitrile	17000	Not Detected	37000	Not Detected
alpha-Chlorotoluene	4300	Not Detected	22000	Not Detected
Benzene	4300	Not Detected	14000	Not Detected
Bromodichloromethane	4300	Not Detected	29000	Not Detected
Bromoform	4300	Not Detected	44000	Not Detected
Bromomethane	43000	Not Detected	170000	Not Detected
Carbon Disulfide	17000	Not Detected	54000	Not Detected
Carbon Tetrachloride	4300	Not Detected	27000	Not Detected
Chlorobenzene	4300	Not Detected	20000	Not Detected
Chloroethane	17000	Not Detected	45000	Not Detected
Chloroform	4300	Not Detected	21000	Not Detected
Chloromethane	43000	Not Detected	89000	Not Detected
cis-1,2-Dichloroethene	4300	Not Detected	17000	Not Detected

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Client Sample ID: SG-VW62-01

Lab ID#: 2107362A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072717**	**Date of Collection:**	**7/15/21 7:34:00 AM**
Dil. Factor:	**8620**	**Date of Analysis:**	**7/27/21 08:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	4300	Not Detected	20000	Not Detected
Cumene	4300	Not Detected	21000	Not Detected
Cyclohexane	4300	Not Detected	15000	Not Detected
Dibromochloromethane	4300	Not Detected	37000	Not Detected
Dibromomethane	17000	Not Detected	120000	Not Detected
Ethanol	43000	Not Detected	81000	Not Detected
Ethyl Acetate	17000	Not Detected	62000	Not Detected
Ethyl Benzene	4300	Not Detected	19000	Not Detected
Ethyl-tert-butyl ether	17000	Not Detected	72000	Not Detected
Freon 11	4300	Not Detected	24000	Not Detected
Freon 12	4300	Not Detected	21000	Not Detected
Freon 113	4300	Not Detected	33000	Not Detected
Freon 114	4300	Not Detected	30000	Not Detected
Freon 134a	17000	Not Detected	72000	Not Detected
Heptane	4300	Not Detected	18000	Not Detected
Hexachlorobutadiene	17000	Not Detected	180000	Not Detected
Hexachloroethane	17000	Not Detected	170000	Not Detected
Hexane	4300	Not Detected	15000	Not Detected
Iodomethane	43000	Not Detected	250000	Not Detected
Isopropyl ether	17000	Not Detected	72000	Not Detected
m,p-Xylene	4300	Not Detected	19000	Not Detected
Methyl tert-butyl ether	17000	Not Detected	62000	Not Detected
Methylene Chloride	43000	Not Detected	150000	Not Detected
Naphthalene	8600	Not Detected	45000	Not Detected
o-Xylene	4300	Not Detected	19000	Not Detected
Propylbenzene	4300	Not Detected	21000	Not Detected
Propylene	17000	Not Detected	30000	Not Detected
Styrene	4300	Not Detected	18000	Not Detected
tert-Amyl methyl ether	17000	Not Detected	72000	Not Detected
tert-Butyl alcohol	17000	Not Detected	52000	Not Detected
Tetrachloroethene	4300	Not Detected	29000	Not Detected
Tetrahydrofuran	4300	Not Detected	13000	Not Detected
Toluene	4300	Not Detected	16000	Not Detected
TPH ref. to Gasoline (MW=100)	430000	Not Detected	1800000	Not Detected
trans-1,2-Dichloroethene	4300	Not Detected	17000	Not Detected
trans-1,3-Dichloropropene	4300	Not Detected	20000	Not Detected
Trichloroethene	4300	Not Detected	23000	Not Detected
Vinyl Acetate	17000	Not Detected	61000	Not Detected
Vinyl Bromide	17000	Not Detected	75000	Not Detected
Vinyl Chloride	4300	Not Detected	11000	Not Detected

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Client Sample ID: SG-VW62-01

Lab ID#: 2107362A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072717**	**Date of Collection: 7/15/21 7:34:00 AM**
Dil. Factor:	**8620**	**Date of Analysis: 7/27/21 08:22 PM**

E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	92	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072717.d
Lab Smp Id: 2107362A-03A
Inj Date : 27-JUL-2021 20:22
Operator : LD Inst ID: msd3.i
Smp Info : 100mL S0605
Misc Info : 6.5 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 8
Dil Factor: 8620.00000
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	
5.285	5.284 (1.000)	130	206957	25.0000			80.00- 120.00	100.00
5.285	5.284 (1.000)	128	158351				48.46- 108.46	76.51
5.285	5.270 (1.000)	49	293232				120.39- 180.39	141.69
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	667200	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	98903				0.00- 45.52	14.82
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	607603	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	312361				25.46- 85.46	51.41
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	277087	24.3292	24.329		80.00- 120.00	100.00(a)
5.816	5.816 (1.101)	67	132610				21.66- 81.66	47.86
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	689055	25.0740	25.074		80.00- 120.00	100.00(a)
7.387	7.387 (1.195)	70	80062				0.00- 41.47	11.62

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	449209			36.47- 96.47	65.19
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	370387	23.0464	23.046	80.00- 120.00	100.00(a)
9.601	9.601 (1.114)	95	416984			93.06- 153.06	112.58
9.601	9.601 (1.114)	176	342443			62.87- 122.87	92.46
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	740393	227.211	1958600	80.00- 120.00	100.00(A)
1.437	1.479 (0.272)	51	1631364			321.86- 381.86	220.34
1.437	1.451 (0.272)	47	390885			45.34- 105.34	52.79

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
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: 3072717.d
Lab Smp Id: 2107362A-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 6.5 Hg->10.1 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	206957	-13.40
108 1,4-Difluorobenze	785289	471173	1099405	667200	-15.04
153 Chlorobenzene-d5	683596	410158	957034	607603	-11.12

		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	8.61	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: 29-Jul-2021 10:58

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/27JUL21.b/321q0622a.m
Misc Info: 6.5 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.329	97.32	70-130
$ 134 Toluene-d8	25.000	25.074	100.30	70-130
$ 170 4-Bromofluorobenz	25.000	23.046	92.19	70-130

Data File: /chem/msd3.i/27JUL21.b/3072717.d

Date : 27-JUL-2021 20:22

Client ID:

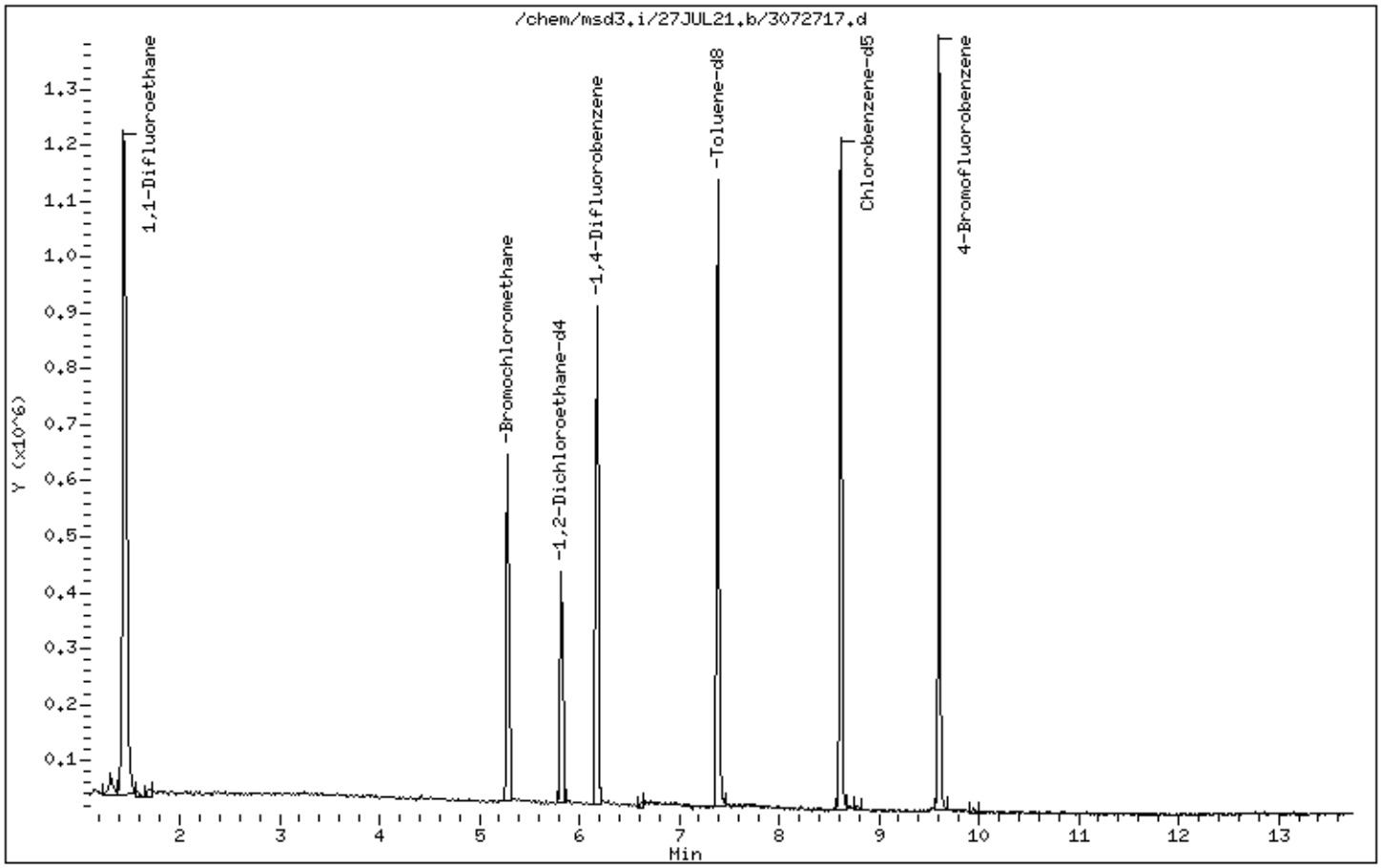
Instrument: msd3.i

Sample Info: 100mL S0605

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072717.d

Date : 27-JUL-2021 20:22

Client ID:

Instrument: msd3.i

Sample Info: 100mL S0605

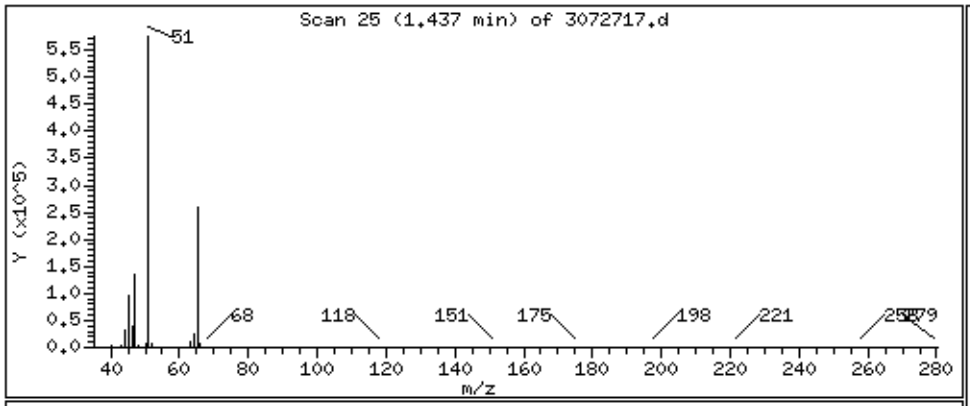
Operator: LD

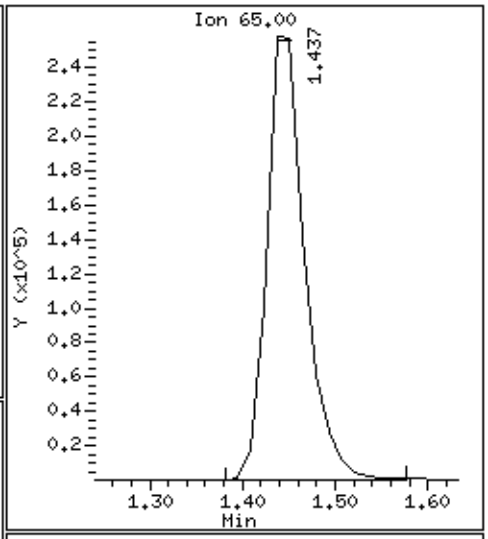
Column phase: RTX-624

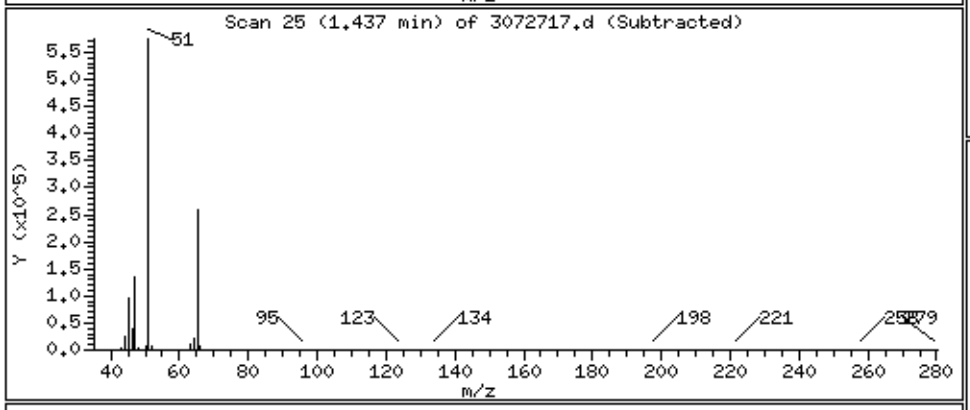
Column diameter: 0.25

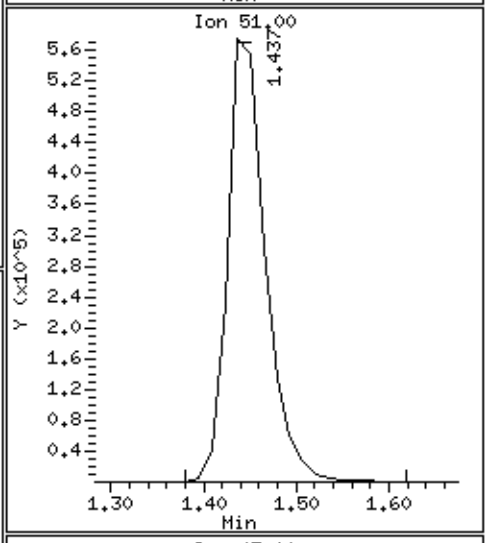
7 1,1-Difluoroethane

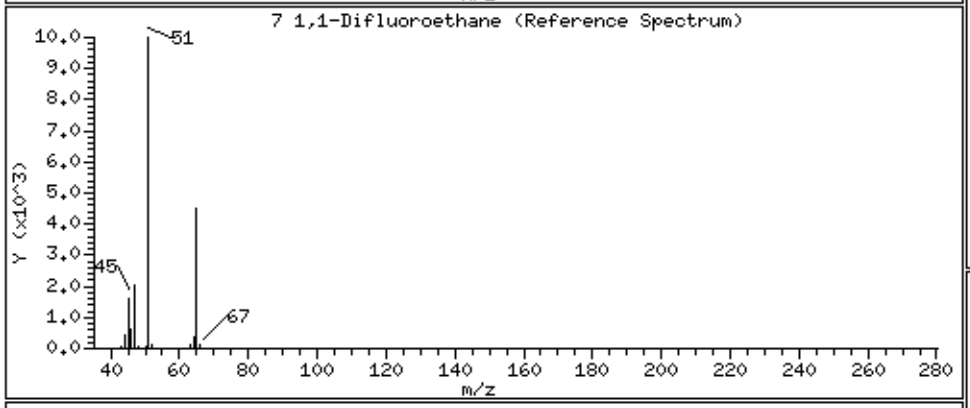
Concentration: 1958600 PPBV

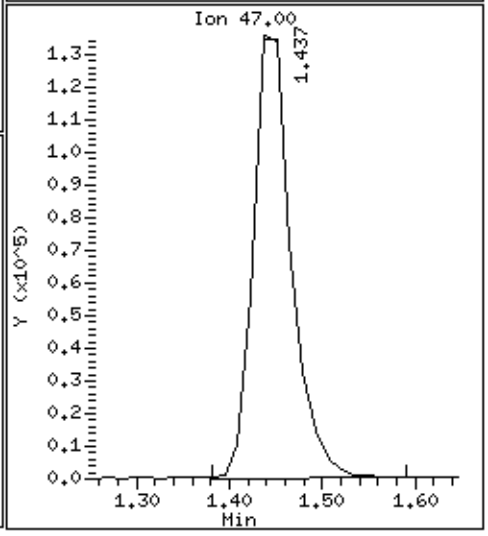


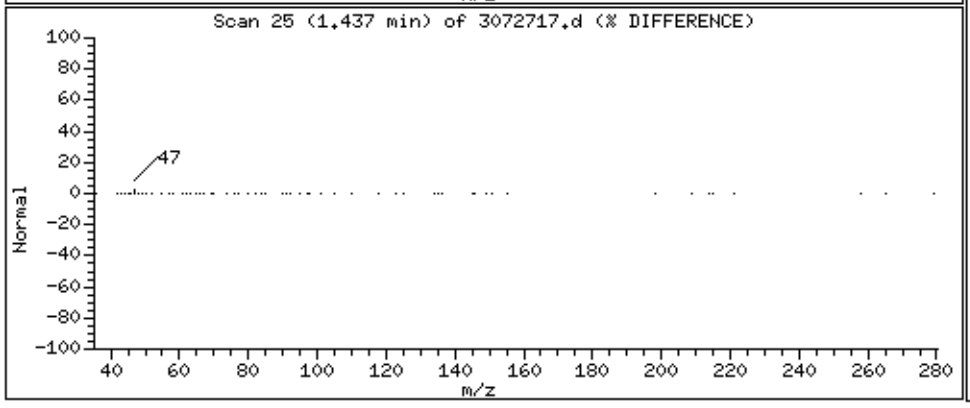












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Client Sample ID: SG-VW30A-03

Lab ID#: 2107362A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072716**	**Date of Collection:**	**7/15/21 8:17:00 AM**
Dil. Factor:	**3.08**	**Date of Analysis:**	**7/27/21 07:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	6.2	Not Detected	42	Not Detected
1,1,1-Trichloroethane	1.5	Not Detected	8.4	Not Detected
1,1,2,2-Tetrachloroethane	1.5	Not Detected	10	Not Detected
1,1,2-Trichloroethane	1.5	Not Detected	8.4	Not Detected
1,1-Dichloroethane	1.5	Not Detected	6.2	Not Detected
1,1-Dichloroethene	1.5	Not Detected	6.1	Not Detected
1,1-Difluoroethane	6.2	Not Detected	17	Not Detected
1,2,3-Trichloropropane	6.2	Not Detected	37	Not Detected
1,2,4-Trichlorobenzene	6.2	Not Detected	46	Not Detected
1,2,4-Trimethylbenzene	1.5	Not Detected	7.6	Not Detected
1,2-Dibromo-3-chloropropane	6.2	Not Detected	60	Not Detected
1,2-Dibromoethane (EDB)	1.5	Not Detected	12	Not Detected
1,2-Dichlorobenzene	1.5	Not Detected	9.2	Not Detected
1,2-Dichloroethane	1.5	Not Detected	6.2	Not Detected
1,2-Dichloropropane	1.5	Not Detected	7.1	Not Detected
1,3,5-Trimethylbenzene	1.5	Not Detected	7.6	Not Detected
1,3-Butadiene	1.5	Not Detected	3.4	Not Detected
1,3-Dichlorobenzene	1.5	Not Detected	9.2	Not Detected
1,4-Dichlorobenzene	1.5	Not Detected	9.2	Not Detected
1,4-Dioxane	6.2	Not Detected	22	Not Detected
2,2,4-Trimethylpentane	1.5	Not Detected	7.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.2	Not Detected	18	Not Detected
2-Hexanone	6.2	Not Detected	25	Not Detected
2-Propanol	6.2	Not Detected	15	Not Detected
3-Chloropropene	6.2	Not Detected	19	Not Detected
4-Ethyltoluene	1.5	Not Detected	7.6	Not Detected
4-Methyl-2-pentanone	1.5	Not Detected	6.3	Not Detected
Acetone	15	16	36	37
Acrolein	6.2	Not Detected	14	Not Detected
Acrylonitrile	6.2	Not Detected	13	Not Detected
alpha-Chlorotoluene	1.5	Not Detected	8.0	Not Detected
Benzene	1.5	Not Detected	4.9	Not Detected
Bromodichloromethane	1.5	6.4	10	43
Bromoform	1.5	Not Detected	16	Not Detected
Bromomethane	15	Not Detected	60	Not Detected
Carbon Disulfide	6.2	Not Detected	19	Not Detected
Carbon Tetrachloride	1.5	Not Detected	9.7	Not Detected
Chlorobenzene	1.5	Not Detected	7.1	Not Detected
Chloroethane	6.2	Not Detected	16	Not Detected
Chloroform	1.5	300	7.5	1500
Chloromethane	15	Not Detected	32	Not Detected
cis-1,2-Dichloroethene	1.5	Not Detected	6.1	Not Detected

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Client Sample ID: SG-VW30A-03

Lab ID#: 2107362A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072716**	**Date of Collection:**	**7/15/21 8:17:00 AM**
Dil. Factor:	**3.08**	**Date of Analysis:**	**7/27/21 07:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	1.5	Not Detected	7.0	Not Detected
Cumene	1.5	Not Detected	7.6	Not Detected
Cyclohexane	1.5	Not Detected	5.3	Not Detected
Dibromochloromethane	1.5	Not Detected	13	Not Detected
Dibromomethane	6.2	Not Detected	44	Not Detected
Ethanol	15	Not Detected	29	Not Detected
Ethyl Acetate	6.2	Not Detected	22	Not Detected
Ethyl Benzene	1.5	Not Detected	6.7	Not Detected
Ethyl-tert-butyl ether	6.2	Not Detected	26	Not Detected
Freon 11	1.5	Not Detected	8.6	Not Detected
Freon 12	1.5	2.2	7.6	11
Freon 113	1.5	Not Detected	12	Not Detected
Freon 114	1.5	Not Detected	11	Not Detected
Freon 134a	6.2	Not Detected	26	Not Detected
Heptane	1.5	Not Detected	6.3	Not Detected
Hexachlorobutadiene	6.2	Not Detected	66	Not Detected
Hexachloroethane	6.2	Not Detected	60	Not Detected
Hexane	1.5	Not Detected	5.4	Not Detected
Iodomethane	15	Not Detected	89	Not Detected
Isopropyl ether	6.2	Not Detected	26	Not Detected
m,p-Xylene	1.5	Not Detected	6.7	Not Detected
Methyl tert-butyl ether	6.2	Not Detected	22	Not Detected
Methylene Chloride	15	Not Detected	54	Not Detected
Naphthalene	3.1	Not Detected	16	Not Detected
o-Xylene	1.5	Not Detected	6.7	Not Detected
Propylbenzene	1.5	Not Detected	7.6	Not Detected
Propylene	6.2	Not Detected	11	Not Detected
Styrene	1.5	Not Detected	6.6	Not Detected
tert-Amyl methyl ether	6.2	Not Detected	26	Not Detected
tert-Butyl alcohol	6.2	Not Detected	19	Not Detected
Tetrachloroethene	1.5	37	10	250
Tetrahydrofuran	1.5	Not Detected	4.5	Not Detected
Toluene	1.5	Not Detected	5.8	Not Detected
TPH ref. to Gasoline (MW=100)	150	Not Detected	630	Not Detected
trans-1,2-Dichloroethene	1.5	Not Detected	6.1	Not Detected
trans-1,3-Dichloropropene	1.5	Not Detected	7.0	Not Detected
Trichloroethene	1.5	Not Detected	8.3	Not Detected
Vinyl Acetate	6.2	Not Detected	22	Not Detected
Vinyl Bromide	6.2	Not Detected	27	Not Detected
Vinyl Chloride	1.5	Not Detected	3.9	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-VW30A-03

Lab ID#: 2107362A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072716**	**Date of Collection:**	**7/15/21 8:17:00 AM**
Dil. Factor:	**3.08**	**Date of Analysis:**	**7/27/21 07:55 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072716.d
Lab Smp Id: 2107362A-04A
Inj Date : 27-JUL-2021 19:55
Operator : LD Inst ID: msd3.i
Smp Info : 140mL 1028
Misc Info : 6.5 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 7
Dil Factor: 3.08000
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	276733	25.0000			80.00- 120.00	100.00
5.270	5.284 (1.000)	128	212744				48.46- 108.46	76.88
5.270	5.270 (1.000)	49	386015				120.39- 180.39	139.49
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.180 (1.000)	114	906043	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	129769				0.00- 45.52	14.32
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	802065	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	423074				25.46- 85.46	52.75
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	365860	24.0241	24.024		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	176909				21.66- 81.66	48.35
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.380	7.387 (1.197)	98	891355	23.8852	23.885		80.00- 120.00	100.00
7.380	7.387 (1.197)	70	98848				0.00- 41.47	11.09

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	588984			36.47- 96.47	66.08
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	504748	23.7920	23.792	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	565970			93.06- 153.06	112.13
9.601	9.601 (1.115)	176	465926			62.87- 122.87	92.31
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	13678	0.70953	2.185	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	5457			2.63- 62.63	39.90
47 Acetone					CAS #: 67-64-1		
3.242	3.214 (0.613)	58	23769	5.12238	15.777	80.00- 120.00	100.00
3.242	3.214 (0.613)	43	83422			299.66- 359.66	350.96
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	1684716	97.0994	299.07	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	1087290			34.71- 94.71	64.54
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	36168	2.08140	6.411	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	23751			34.31- 94.31	65.67
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.881 (0.914)	166	150131	11.9481	36.800	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	115229			48.71- 108.71	76.75
7.874	7.874 (0.914)	131	110322			46.55- 106.55	73.48

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072716.d
Lab Smp Id: 2107362A-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 6.5 Hg->10.1 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	276733	15.79
108 1,4-Difluorobenze	785289	471173	1099405	906043	15.38
153 Chlorobenzene-d5	683596	410158	957034	802065	17.33

		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	8.61	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: 29-Jul-2021 10:57

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/27JUL21.b/321q0622a.m
Misc Info: 6.5 Hg->10.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.024	96.10	70-130
$ 134 Toluene-d8	25.000	23.885	95.54	70-130
$ 170 4-Bromofluorobenz	25.000	23.792	95.17	70-130

Data File: /chem/msd3.i/27JUL21.b/3072716.d

Date : 27-JUL-2021 19:55

Client ID:

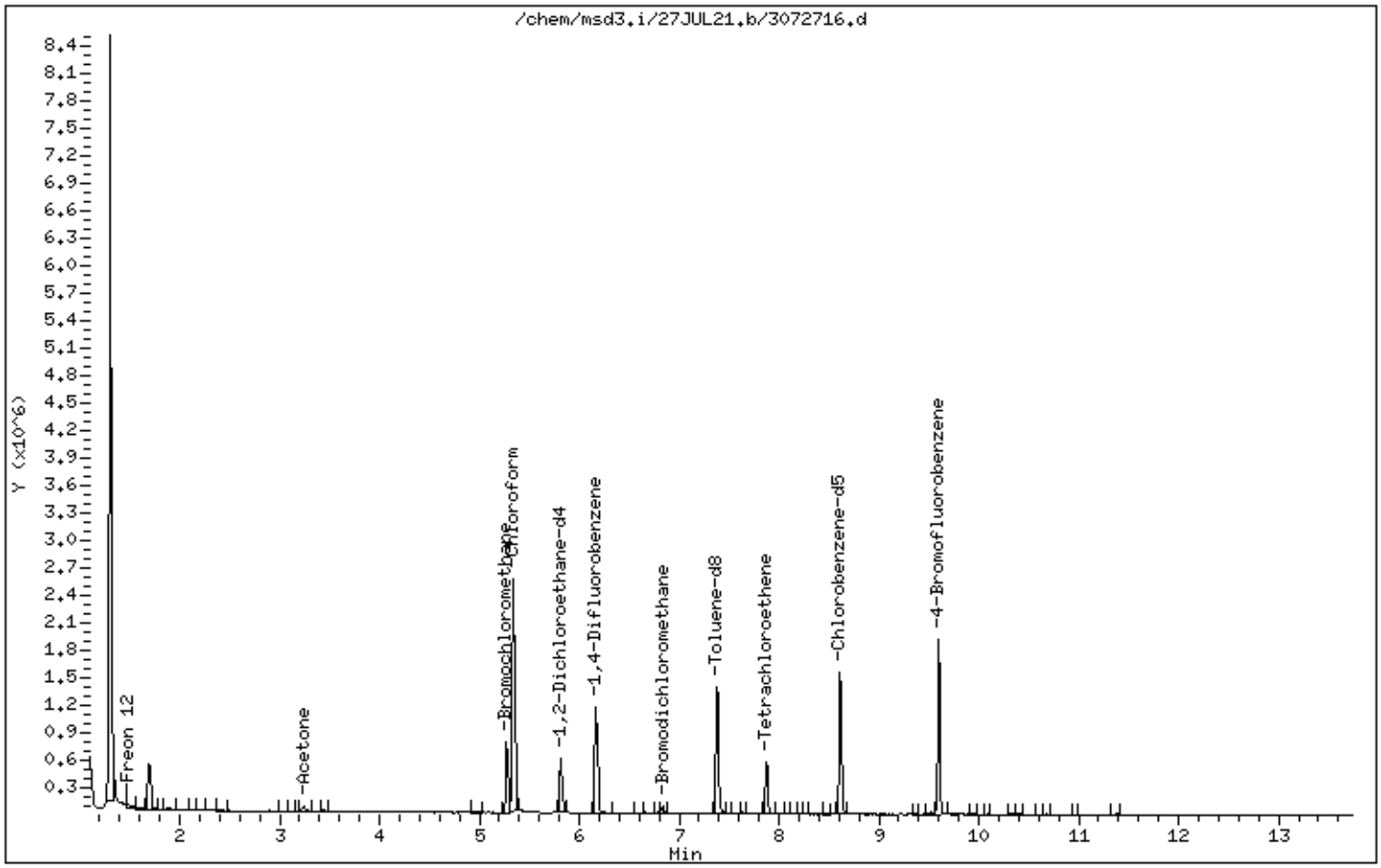
Instrument: msd3.i

Sample Info: 140mL 1028

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072716.d

Date : 27-JUL-2021 19:55

Client ID:

Instrument: msd3.i

Sample Info: 140mL 1028

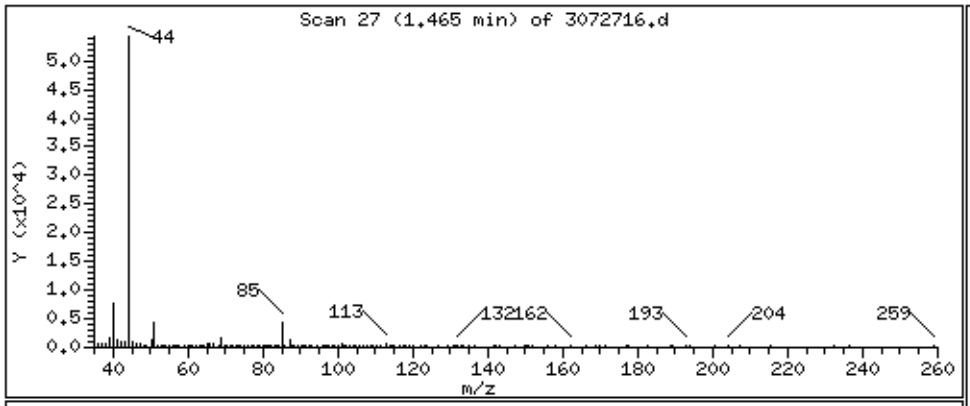
Operator: LD

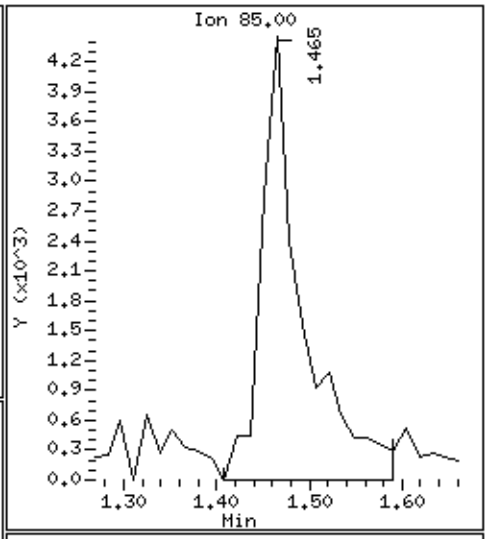
Column phase: RTX-624

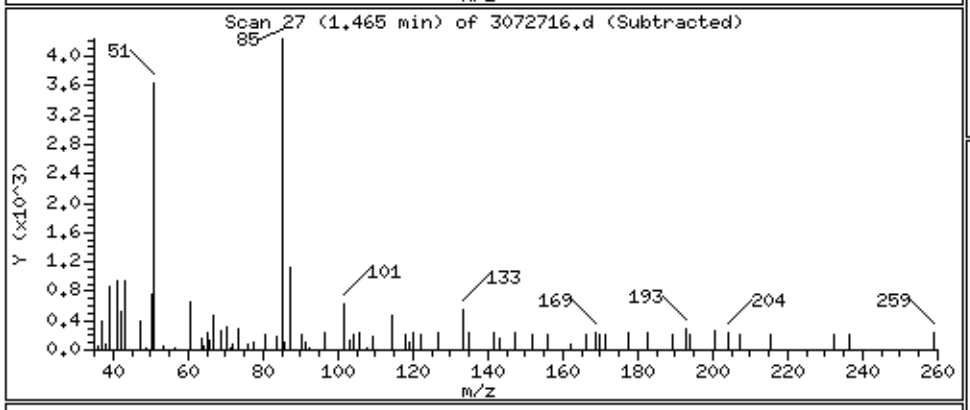
Column diameter: 0.25

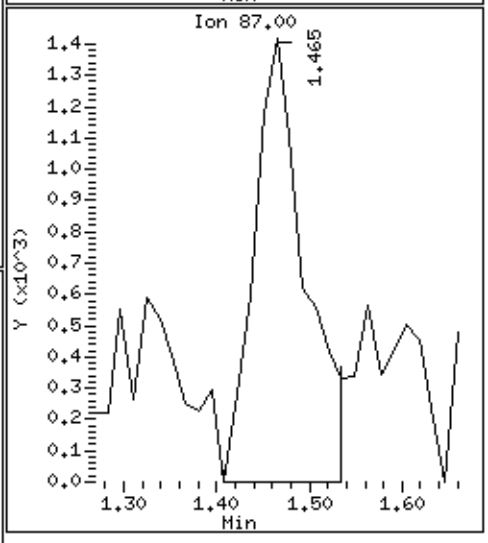
8 Freon 12

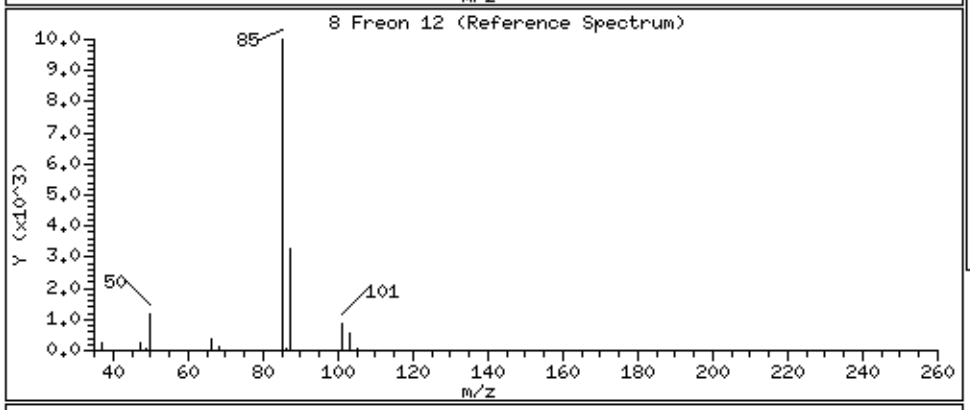
Concentration: 2.185 PPBV

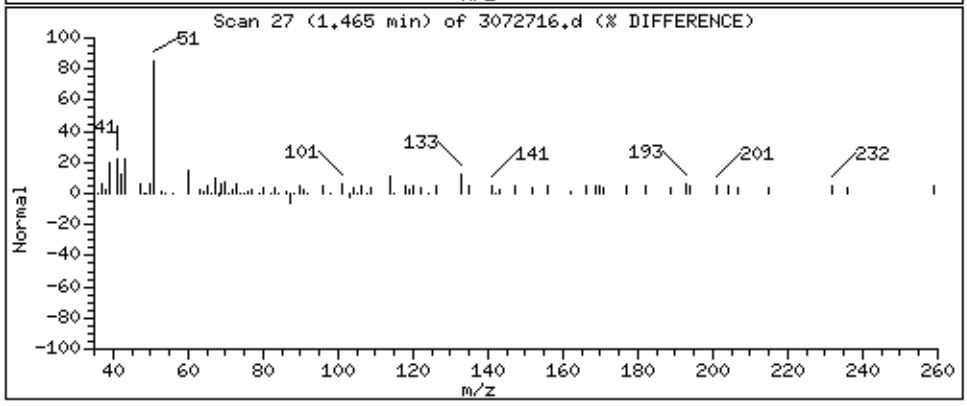












Data File: /chem/msd3.i/27JUL21.b/3072716.d

Date : 27-JUL-2021 19:55

Client ID:

Instrument: msd3.i

Sample Info: 140mL 1028

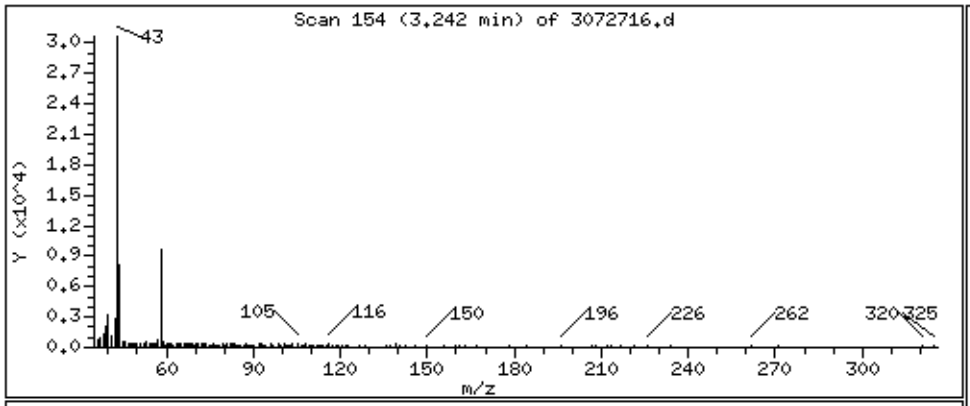
Operator: LD

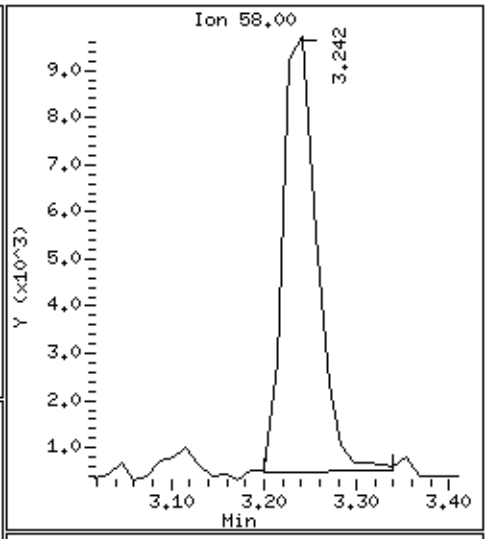
Column phase: RTX-624

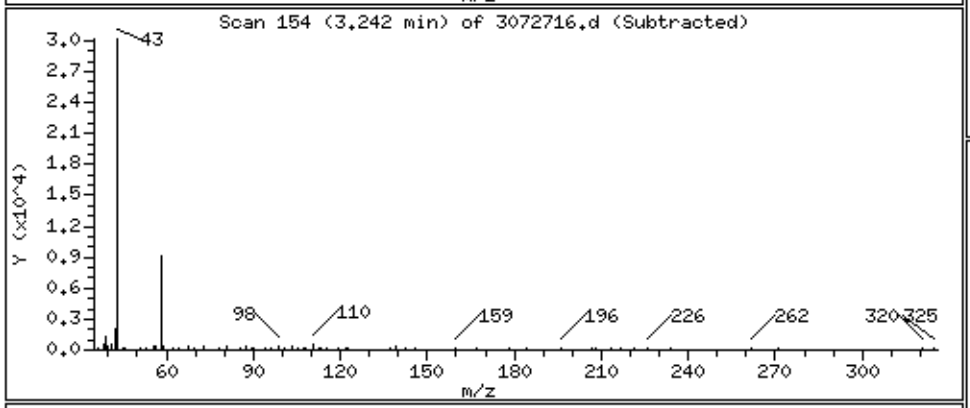
Column diameter: 0.25

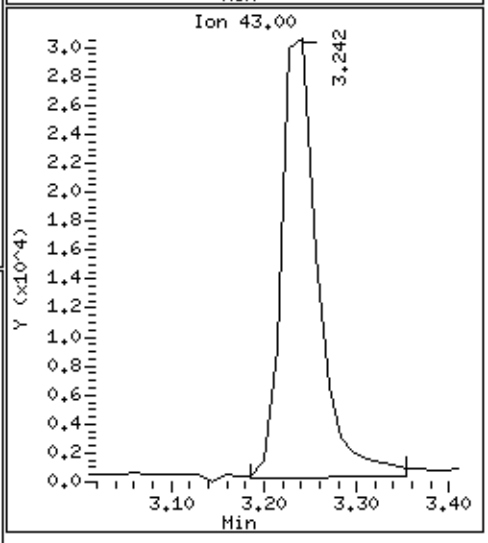
47 Acetone

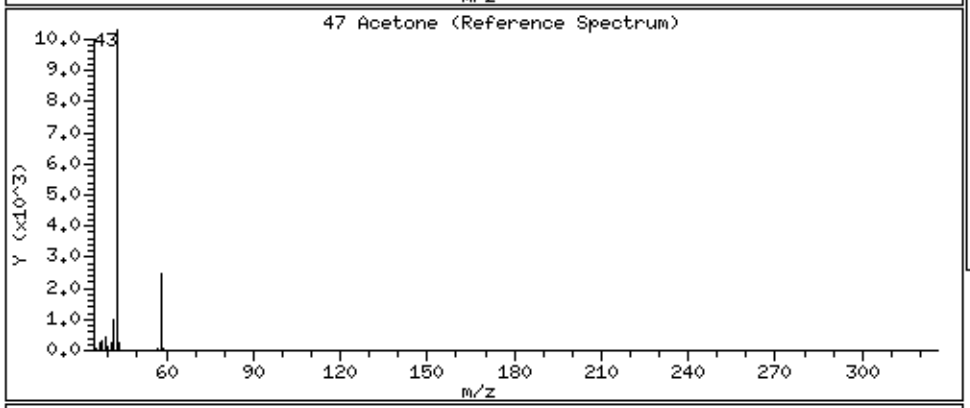
Concentration: 15.777 PPBV

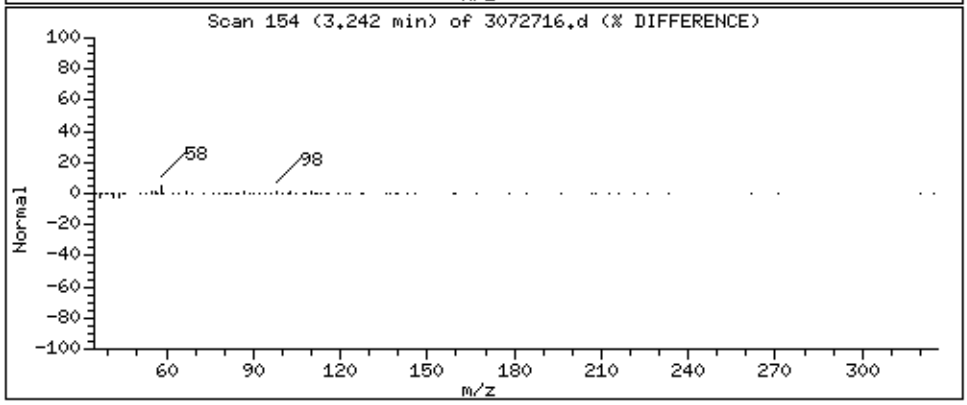












Data File: /chem/msd3.i/27JUL21.b/3072716.d

Date : 27-JUL-2021 19:55

Client ID:

Instrument: msd3.i

Sample Info: 140mL 1028

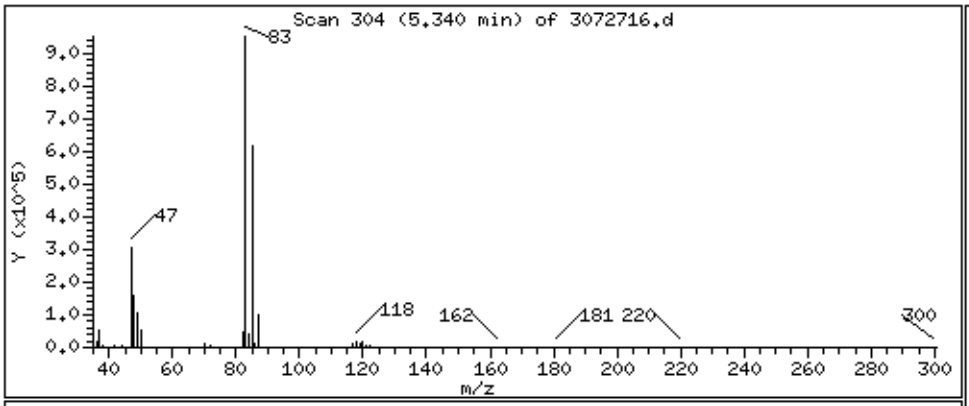
Operator: LD

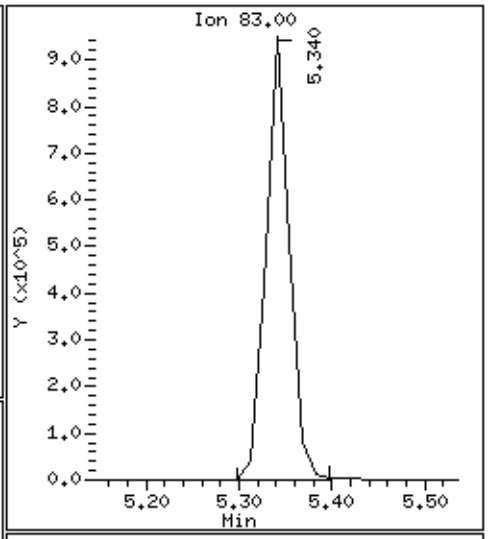
Column phase: RTX-624

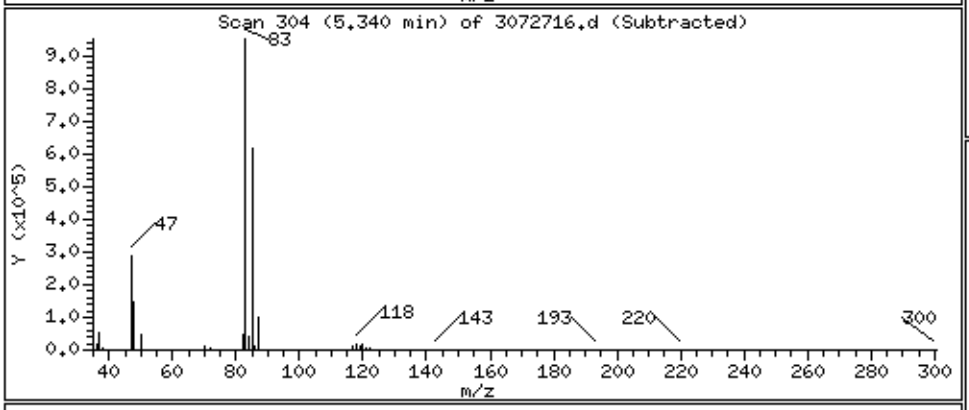
Column diameter: 0.25

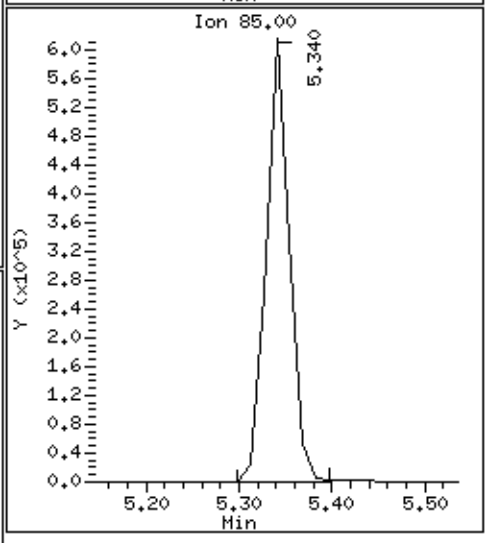
92 Chloroform

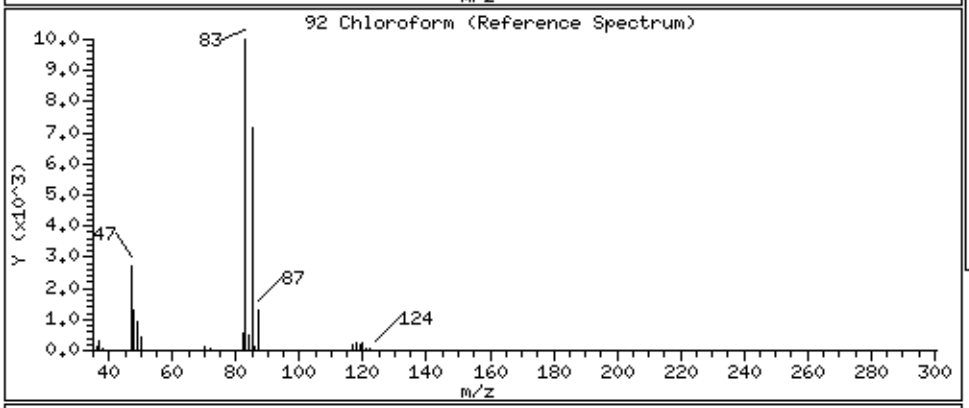
Concentration: 299.07 PPBV

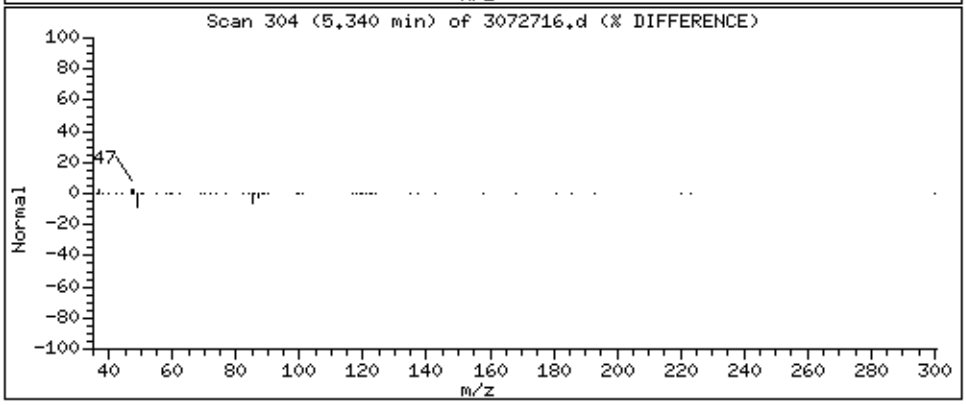












Data File: /chem/msd3.i/27JUL21.b/3072716.d

Date : 27-JUL-2021 19:55

Client ID:

Instrument: msd3.i

Sample Info: 140mL 1028

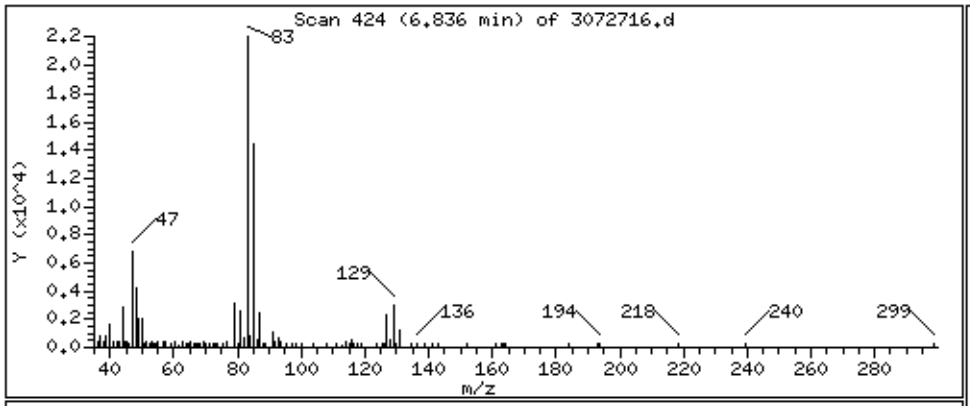
Operator: LD

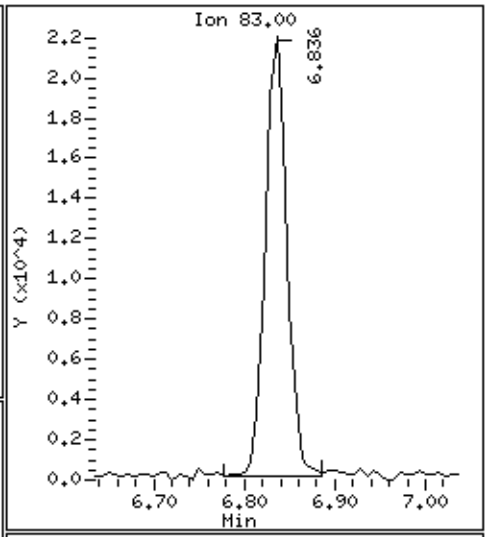
Column phase: RTX-624

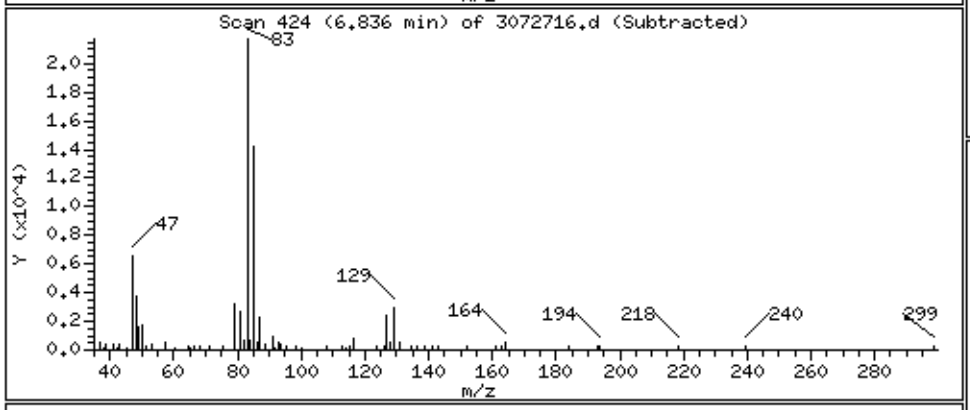
Column diameter: 0.25

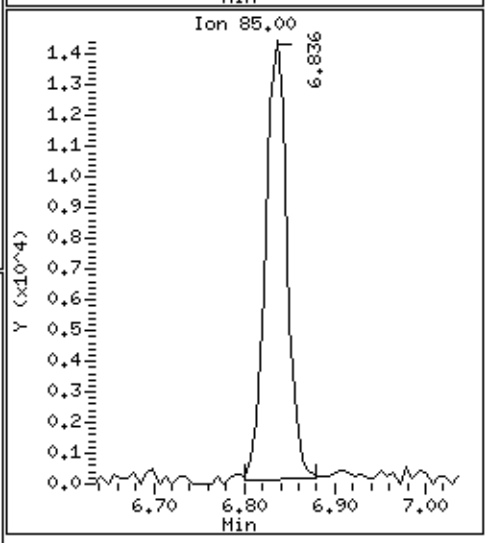
122 Bromodichloromethane

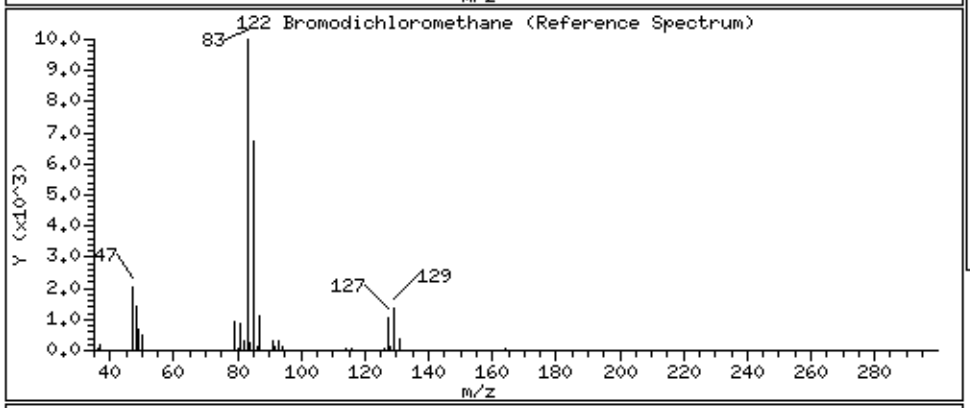
Concentration: 6.411 PPBV

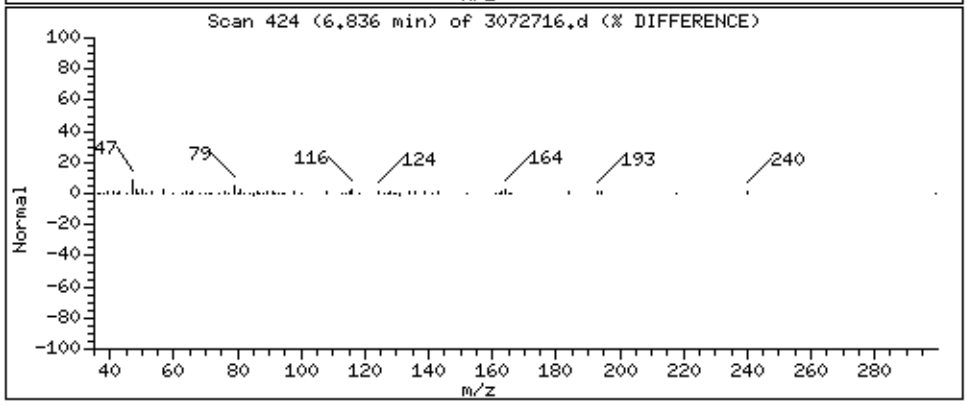












Data File: /chem/msd3.i/27JUL21.b/3072716.d

Date : 27-JUL-2021 19:55

Client ID:

Instrument: msd3.i

Sample Info: 140mL 1028

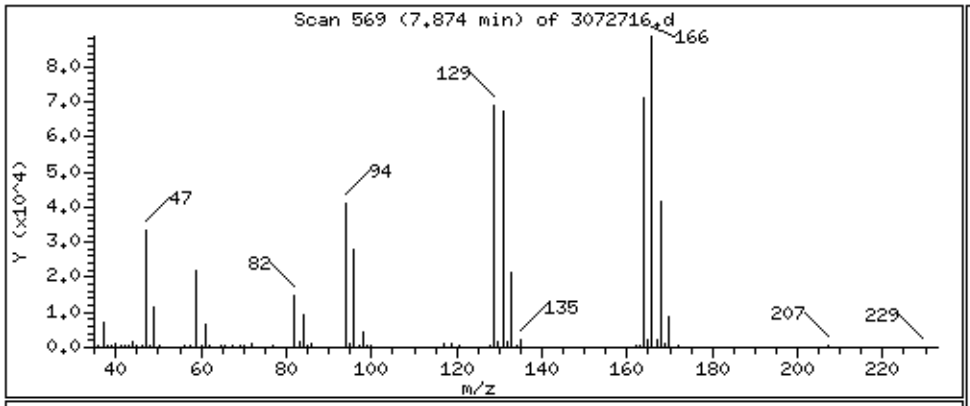
Operator: LD

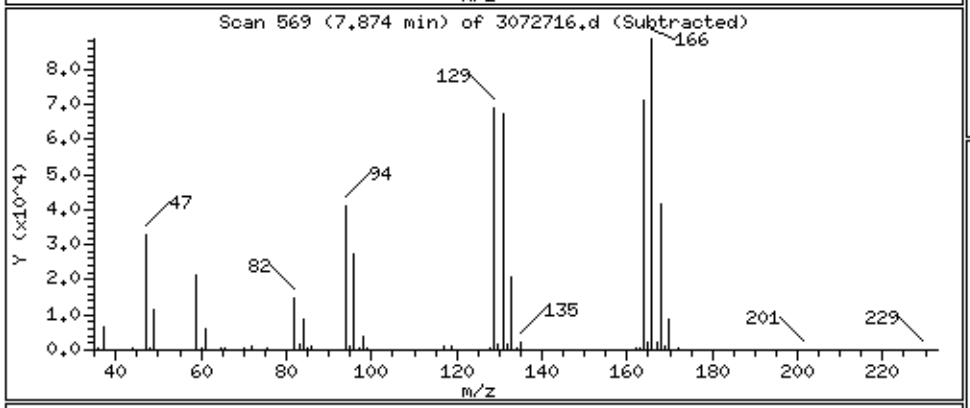
Column phase: RTX-624

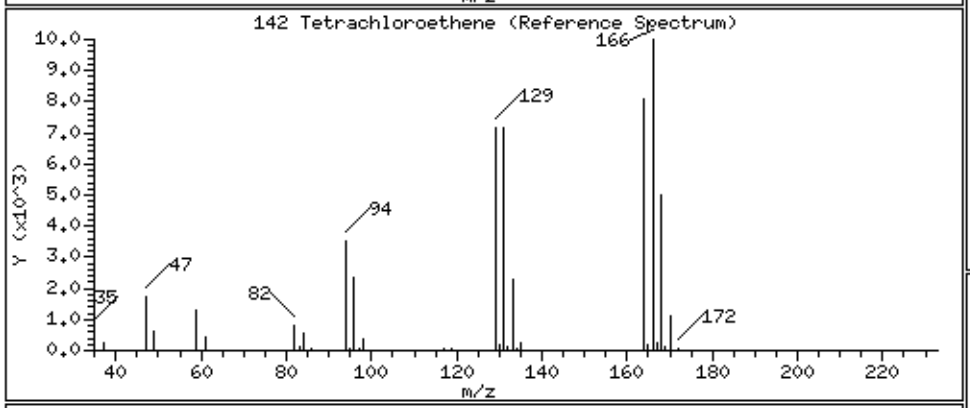
Column diameter: 0.25

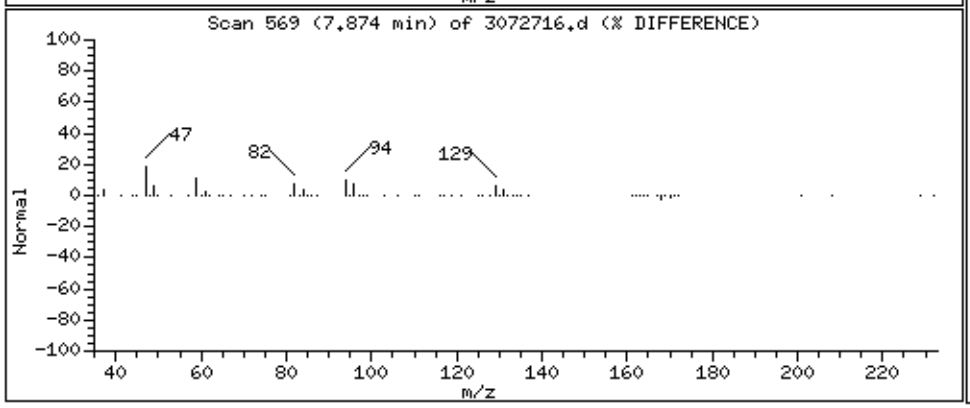
142 Tetrachloroethene

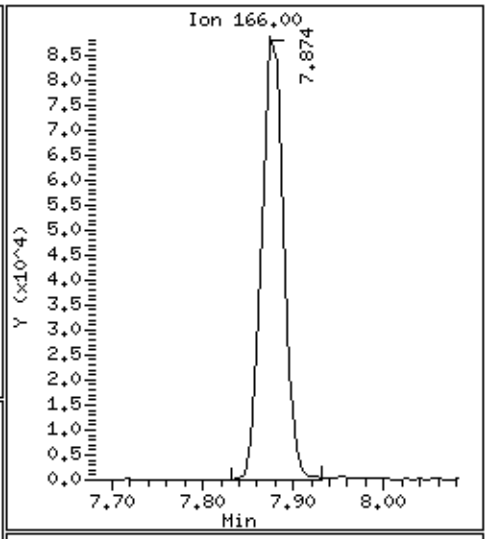
Concentration: 36.800 PPBV

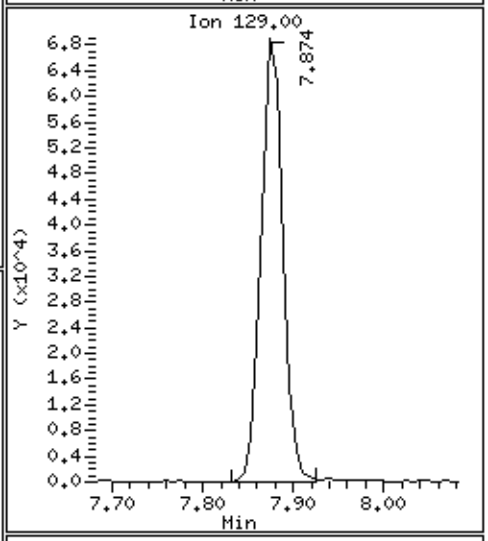


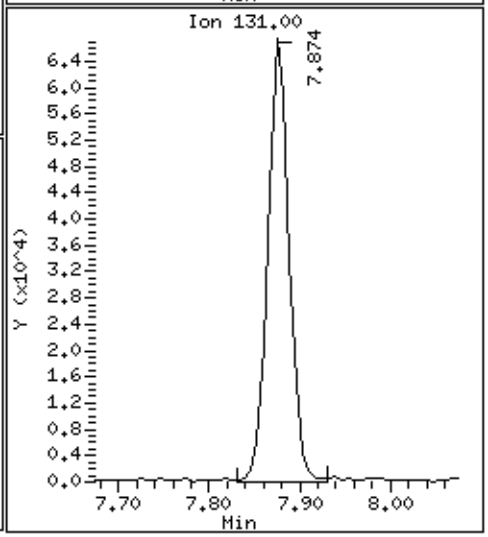












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Client Sample ID: SG-VW30B-03

Lab ID#: 2107362A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072730**	**Date of Collection:**	**7/15/21 9:01:00 AM**
Dil. Factor:	**22.4**	**Date of Analysis:**	**7/28/21 04:06 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	45	Not Detected	310	Not Detected
1,1,1-Trichloroethane	11	Not Detected	61	Not Detected
1,1,2,2-Tetrachloroethane	11	Not Detected	77	Not Detected
1,1,2-Trichloroethane	11	Not Detected	61	Not Detected
1,1-Dichloroethane	11	Not Detected	45	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Difluoroethane	45	3500	120	9600
1,2,3-Trichloropropane	45	Not Detected	270	Not Detected
1,2,4-Trichlorobenzene	45	Not Detected	330	Not Detected
1,2,4-Trimethylbenzene	11	Not Detected	55	Not Detected
1,2-Dibromo-3-chloropropane	45	Not Detected	430	Not Detected
1,2-Dibromoethane (EDB)	11	Not Detected	86	Not Detected
1,2-Dichlorobenzene	11	Not Detected	67	Not Detected
1,2-Dichloroethane	11	Not Detected	45	Not Detected
1,2-Dichloropropane	11	Not Detected	52	Not Detected
1,3,5-Trimethylbenzene	11	Not Detected	55	Not Detected
1,3-Butadiene	11	Not Detected	25	Not Detected
1,3-Dichlorobenzene	11	Not Detected	67	Not Detected
1,4-Dichlorobenzene	11	Not Detected	67	Not Detected
1,4-Dioxane	45	Not Detected	160	Not Detected
2,2,4-Trimethylpentane	11	Not Detected	52	Not Detected
2-Butanone (Methyl Ethyl Ketone)	45	Not Detected	130	Not Detected
2-Hexanone	45	Not Detected	180	Not Detected
2-Propanol	45	Not Detected	110	Not Detected
3-Chloropropene	45	Not Detected	140	Not Detected
4-Ethyltoluene	11	Not Detected	55	Not Detected
4-Methyl-2-pentanone	11	Not Detected	46	Not Detected
Acetone	110	Not Detected	270	Not Detected
Acrolein	45	Not Detected	100	Not Detected
Acrylonitrile	45	Not Detected	97	Not Detected
alpha-Chlorotoluene	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	36	Not Detected
Bromodichloromethane	11	Not Detected	75	Not Detected
Bromoform	11	Not Detected	120	Not Detected
Bromomethane	110	Not Detected	430	Not Detected
Carbon Disulfide	45	Not Detected	140	Not Detected
Carbon Tetrachloride	11	Not Detected	70	Not Detected
Chlorobenzene	11	Not Detected	52	Not Detected
Chloroethane	45	Not Detected	120	Not Detected
Chloroform	11	110	55	540
Chloromethane	110	Not Detected	230	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected

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Client Sample ID: SG-VW30B-03

Lab ID#: 2107362A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072730**	**Date of Collection:**	**7/15/21 9:01:00 AM**
Dil. Factor:	**22.4**	**Date of Analysis:**	**7/28/21 04:06 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	11	Not Detected	51	Not Detected
Cumene	11	Not Detected	55	Not Detected
Cyclohexane	11	Not Detected	38	Not Detected
Dibromochloromethane	11	Not Detected	95	Not Detected
Dibromomethane	45	Not Detected	320	Not Detected
Ethanol	110	Not Detected	210	Not Detected
Ethyl Acetate	45	Not Detected	160	Not Detected
Ethyl Benzene	11	Not Detected	49	Not Detected
Ethyl-tert-butyl ether	45	Not Detected	190	Not Detected
Freon 11	11	Not Detected	63	Not Detected
Freon 12	11	Not Detected	55	Not Detected
Freon 113	11	Not Detected	86	Not Detected
Freon 114	11	Not Detected	78	Not Detected
Freon 134a	45	Not Detected	190	Not Detected
Heptane	11	Not Detected	46	Not Detected
Hexachlorobutadiene	45	Not Detected	480	Not Detected
Hexachloroethane	45	Not Detected	430	Not Detected
Hexane	11	Not Detected	39	Not Detected
Iodomethane	110	Not Detected	650	Not Detected
Isopropyl ether	45	Not Detected	190	Not Detected
m,p-Xylene	11	Not Detected	49	Not Detected
Methyl tert-butyl ether	45	Not Detected	160	Not Detected
Methylene Chloride	110	Not Detected	390	Not Detected
Naphthalene	22	Not Detected	120	Not Detected
o-Xylene	11	Not Detected	49	Not Detected
Propylbenzene	11	Not Detected	55	Not Detected
Propylene	45	Not Detected	77	Not Detected
Styrene	11	Not Detected	48	Not Detected
tert-Amyl methyl ether	45	Not Detected	190	Not Detected
tert-Butyl alcohol	45	Not Detected	140	Not Detected
Tetrachloroethene	11	35	76	240
Tetrahydrofuran	11	Not Detected	33	Not Detected
Toluene	11	Not Detected	42	Not Detected
TPH ref. to Gasoline (MW=100)	1100	Not Detected	4600	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
trans-1,3-Dichloropropene	11	Not Detected	51	Not Detected
Trichloroethene	11	Not Detected	60	Not Detected
Vinyl Acetate	45	Not Detected	160	Not Detected
Vinyl Bromide	45	Not Detected	200	Not Detected
Vinyl Chloride	11	Not Detected	29	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW30B-03

Lab ID#: 2107362A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072730**	**Date of Collection:**	**7/15/21 9:01:00 AM**
Dil. Factor:	**22.4**	**Date of Analysis:**	**7/28/21 04:06 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	95	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072730.d
Lab Smp Id: 2107362A-05A
Inj Date : 28-JUL-2021 04:06
Operator : kk Inst ID: msd3.i
Smp Info : 20mL N5581
Misc Info : 7.6 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 11
Dil Factor: 22.40000
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	224023	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	175163				48.46- 108.46	78.19
5.270	5.270 (1.000)	49	316529				120.39- 180.39	141.29
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	756097	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	110098				0.00- 45.52	14.56
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	639967	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	333263				25.46- 85.46	52.07
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	321359	26.0670	26.067		80.00- 120.00	100.00(a)
5.816	5.816 (1.101)	67	155374				21.66- 81.66	48.35
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	714361	22.9386	22.938		80.00- 120.00	100.00(a)
7.387	7.387 (1.195)	70	78898				0.00- 41.47	11.04

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	465781			36.47- 96.47	65.20
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.608	9.601 (1.115)	174	403364	23.8290	23.829	80.00- 120.00	100.00(a)
9.601	9.601 (1.114)	95	449872			93.06- 153.06	111.53
9.601	9.601 (1.114)	176	375692			62.87- 122.87	93.14
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	558491	158.333	3546.6	80.00- 120.00	100.00
1.437	1.479 (0.272)	51	1255415			321.86- 381.86	224.79
1.437	1.451 (0.272)	47	295428			45.34- 105.34	52.90
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	69128	4.92167	110.24	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	44608			34.71- 94.71	64.53
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	15594	1.55538	34.841	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	12428			48.71- 108.71	79.69
7.881	7.874 (0.914)	131	12140			46.55- 106.55	77.85

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: 3072730.d
Lab Smp Id: 2107362A-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 7.6 Hg->9.9 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	224023	-6.26
108 1,4-Difluorobenze	785289	471173	1099405	756097	-3.72
153 Chlorobenzene-d5	683596	410158	957034	639967	-6.38

		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	8.61	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: 29-Jul-2021 11:12

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/msd3.i/27JUL21.b/321q0622a.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	26.067	104.27	70-130
$ 134 Toluene-d8	25.000	22.938	91.75	70-130
$ 170 4-Bromofluorobenz	25.000	23.829	95.32	70-130

Data File: /chem/msd3.i/27JUL21.b/3072730.d

Date : 28-JUL-2021 04:06

Client ID:

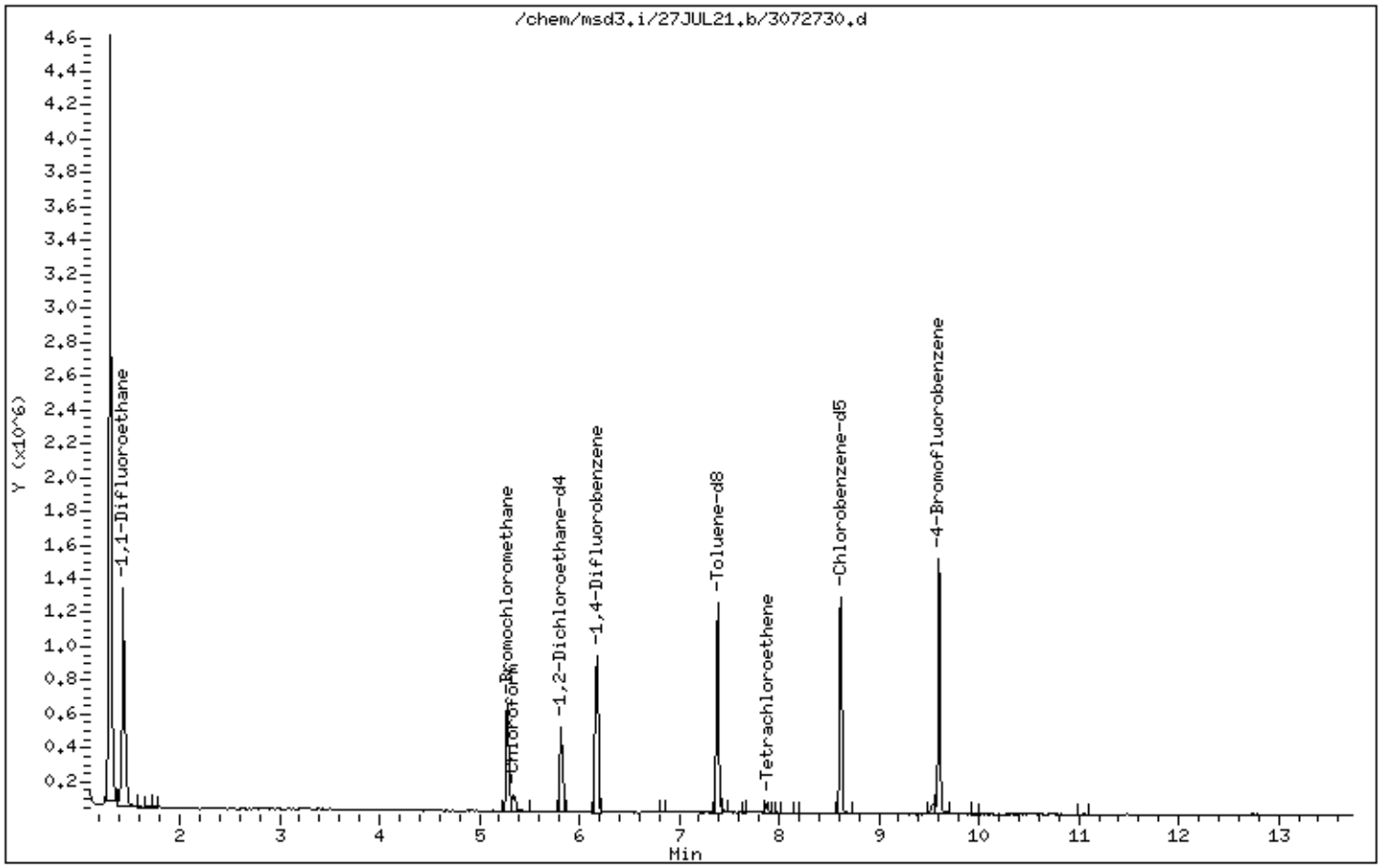
Instrument: msd3.i

Sample Info: 20mL N5581

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072730.d

Date : 28-JUL-2021 04:06

Client ID:

Instrument: msd3.i

Sample Info: 20mL N5581

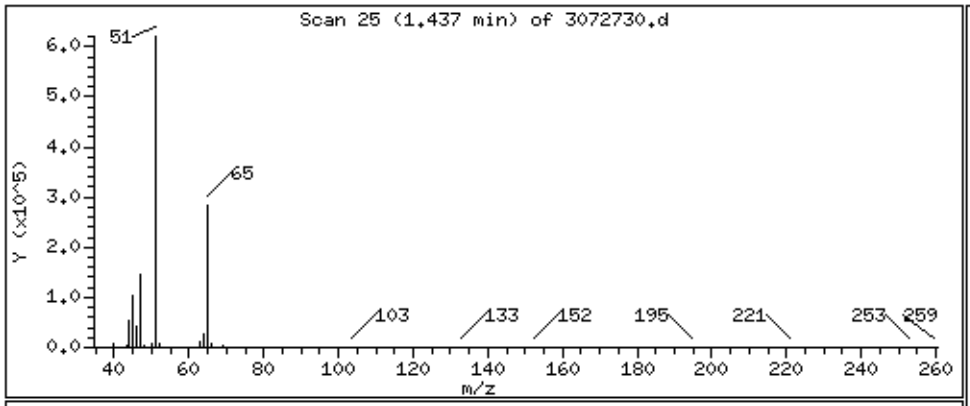
Operator: kk

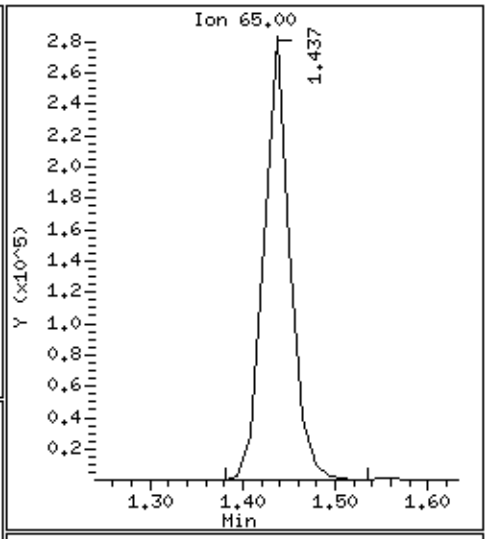
Column phase: RTX-624

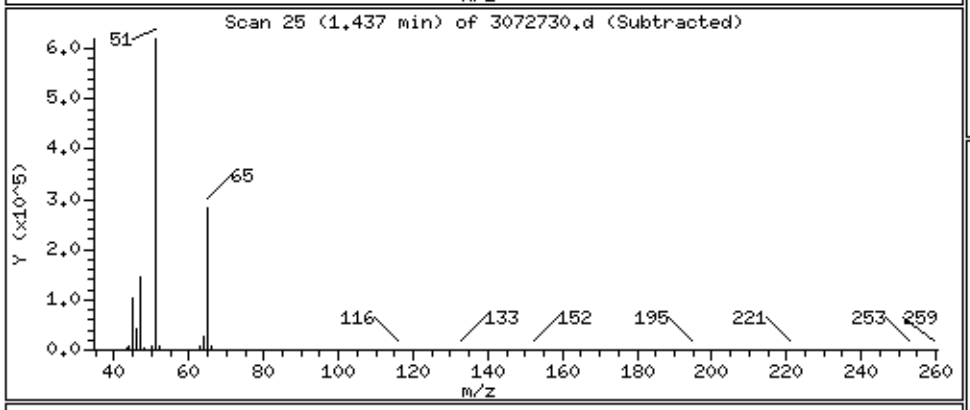
Column diameter: 0.25

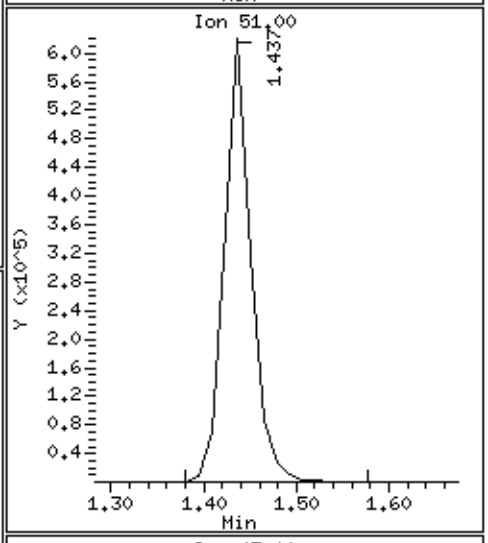
7 1,1-Difluoroethane

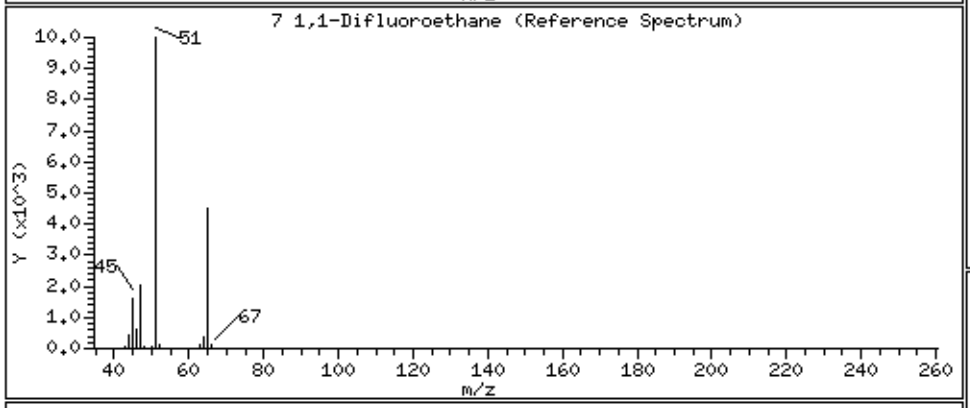
Concentration: 3546.6 PPBV

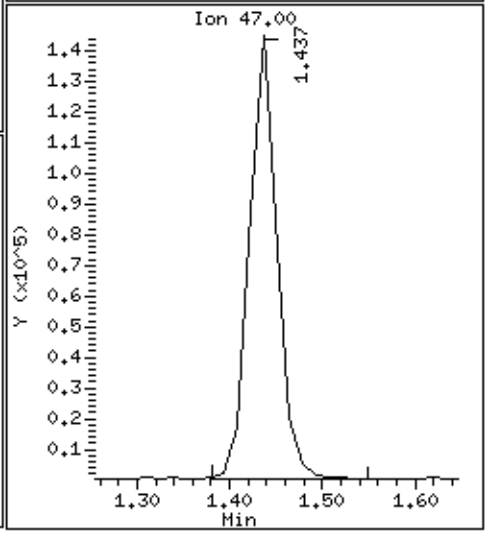


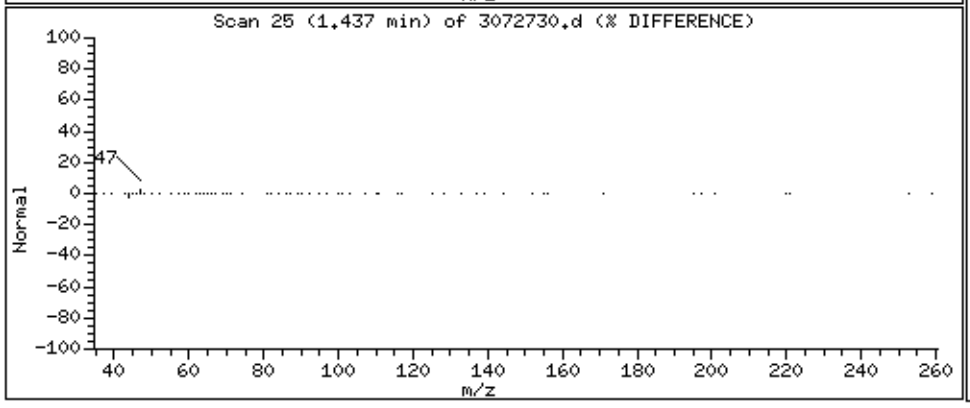












Data File: /chem/msd3.i/27JUL21.b/3072730.d

Date : 28-JUL-2021 04:06

Client ID:

Instrument: msd3.i

Sample Info: 20mL N5581

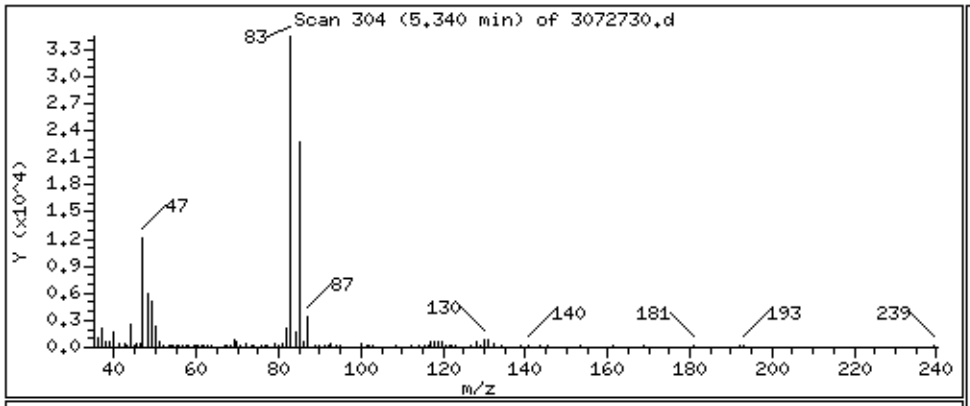
Operator: kk

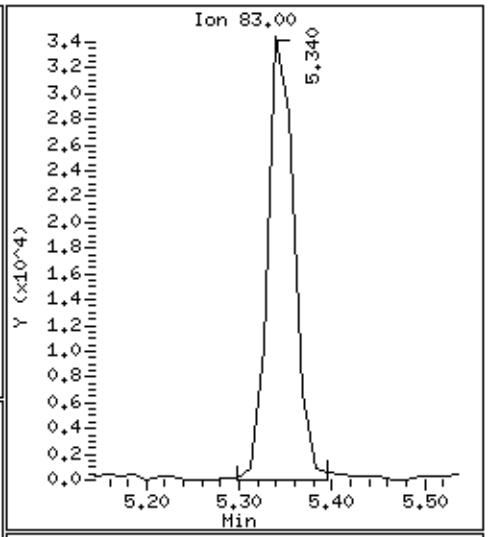
Column phase: RTX-624

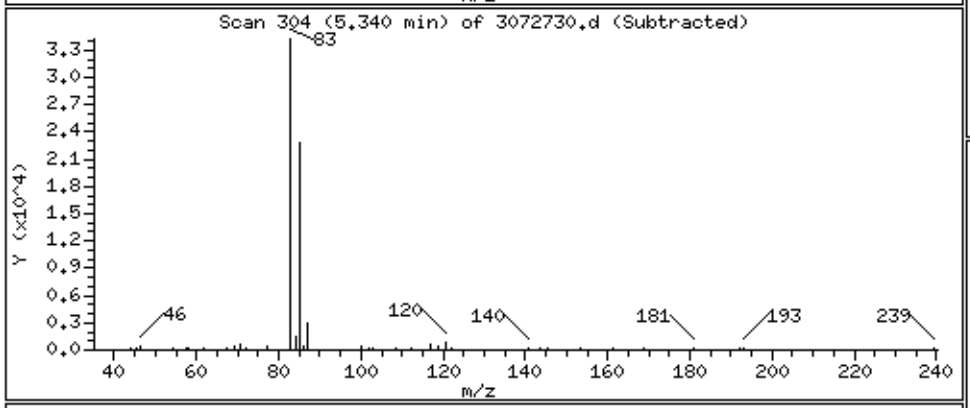
Column diameter: 0.25

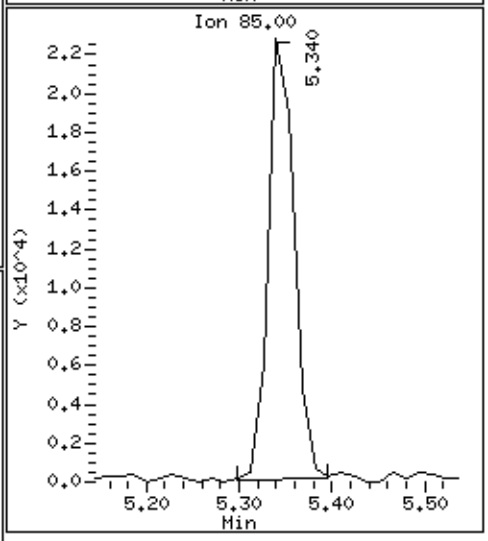
92 Chloroform

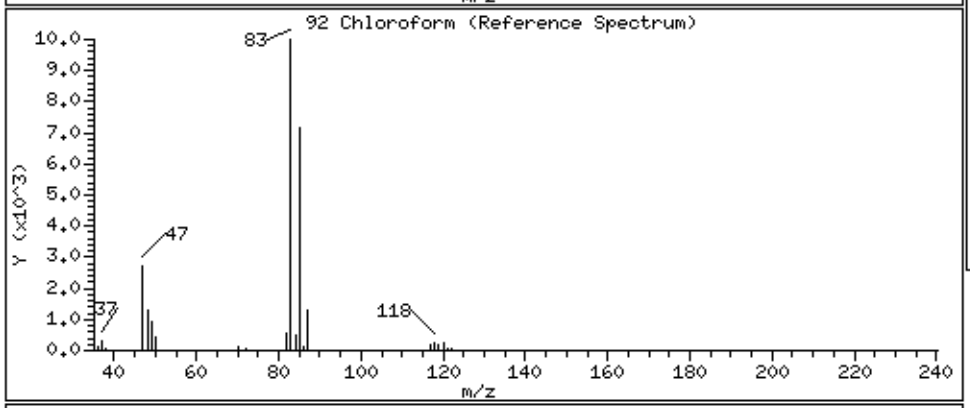
Concentration: 110.24 PPBV

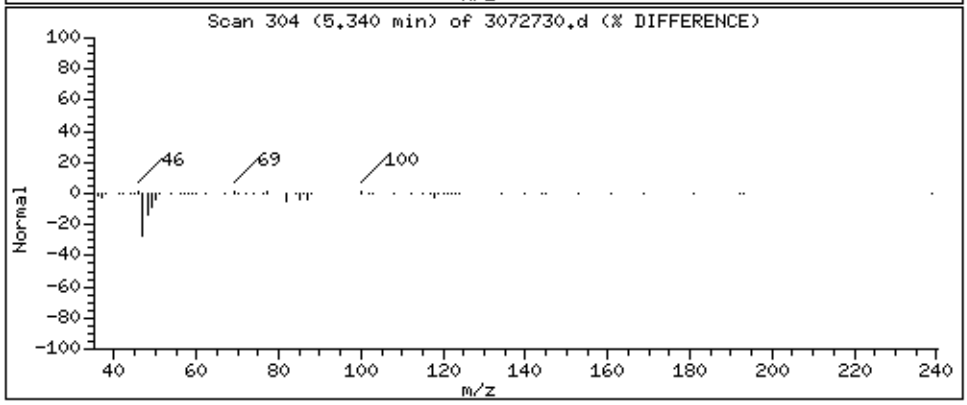












Data File: /chem/msd3.i/27JUL21.b/3072730.d

Date : 28-JUL-2021 04:06

Client ID:

Instrument: msd3.i

Sample Info: 20mL N5581

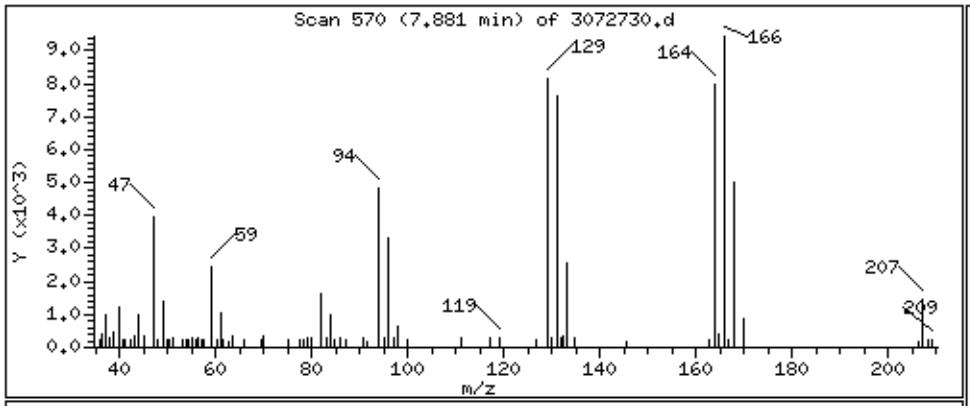
Operator: kk

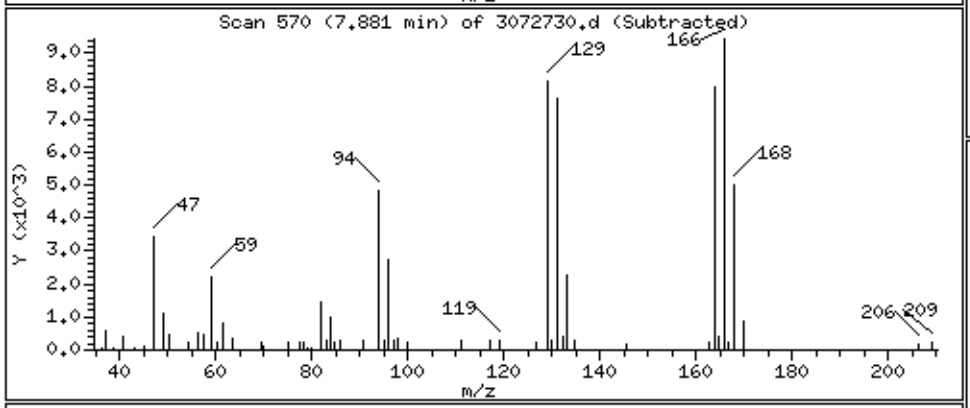
Column phase: RTX-624

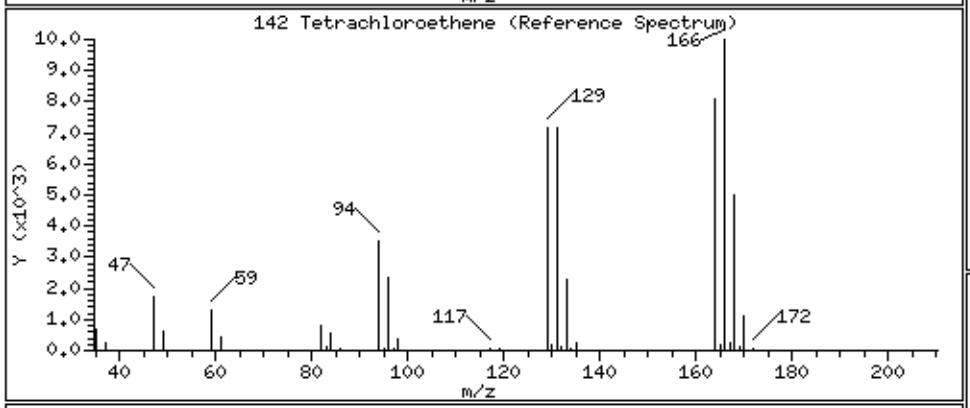
Column diameter: 0.25

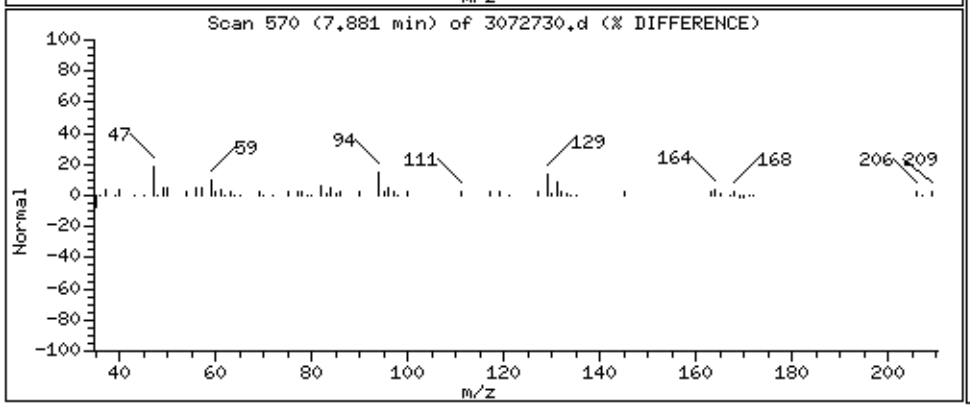
142 Tetrachloroethene

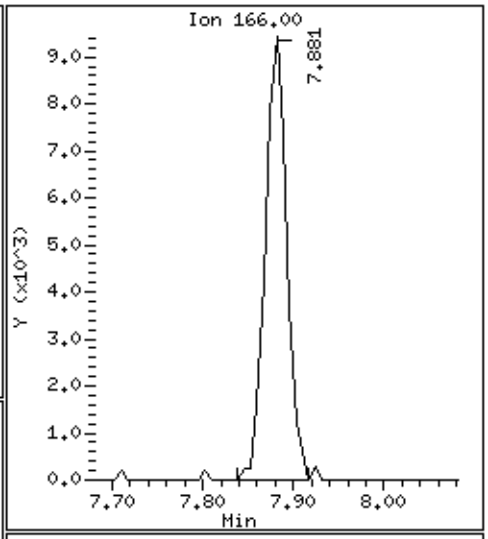
Concentration: 34.841 PPBV

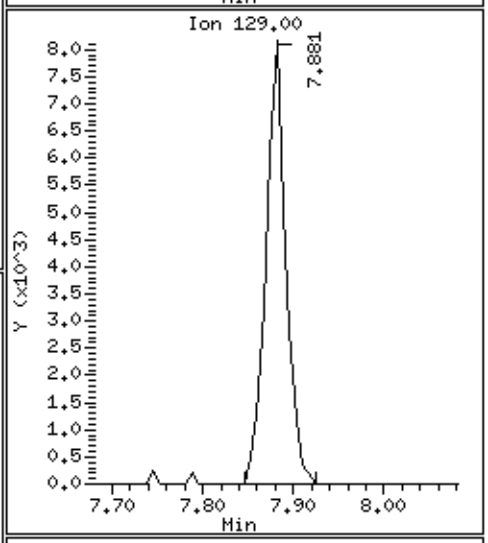


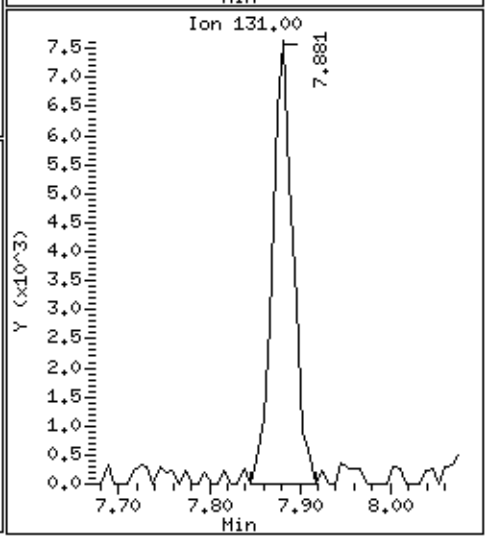












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Client Sample ID: SG-VW63A-01

Lab ID#: 2107362A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072725**	**Date of Collection:**	**7/15/21 9:54:00 AM**
Dil. Factor:	**2.04**	**Date of Analysis:**	**7/28/21 01:43 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	4.0	Not Detected
1,1-Difluoroethane	4.1	17	11	45
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	2.4	5.0	12
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	1.5	5.0	7.5
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	4.8	4.8	22
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	7.5	10	18
3-Chloropropene	4.1	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	3.1	5.0	15
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Acetone	10	14	24	32
Acrolein	4.1	Not Detected	9.4	Not Detected
Acrylonitrile	4.1	Not Detected	8.8	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
Benzene	1.0	4.4	3.2	14
Bromodichloromethane	1.0	Not Detected	6.8	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Carbon Disulfide	4.1	8.9	13	28
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	1.2	5.0	6.0
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-VW63A-01

Lab ID#: 2107362A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072725**	**Date of Collection:**	**7/15/21 9:54:00 AM**
Dil. Factor:	**2.04**	**Date of Analysis:**	**7/28/21 01:43 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	7.0	4.4	30
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	1.6	4.2	6.6
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Hexachloroethane	4.1	Not Detected	40	Not Detected
Hexane	1.0	12	3.6	42
Iodomethane	10	Not Detected	59	Not Detected
Isopropyl ether	4.1	Not Detected	17	Not Detected
m,p-Xylene	1.0	22	4.4	96
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	7.7	4.4	33
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	1.5	3.0	4.4
Toluene	1.0	30	3.8	110
TPH ref. to Gasoline (MW=100)	100	290	420	1200
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	5.5	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-VW63A-01

Lab ID#: 2107362A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072725**	**Date of Collection:**	**7/15/21 9:54:00 AM**
Dil. Factor:	**2.04**	**Date of Analysis:**	**7/28/21 01:43 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	89	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072725.d
Lab Smp Id: 2107362A-06A
Inj Date : 28-JUL-2021 01:43
Operator : kk Inst ID: msd3.i
Smp Info : 200mL O0476
Misc Info : 5.5 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 5
Dil Factor: 2.04000
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	240072	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	183593				48.46- 108.46	76.47
5.284	5.270 (1.000)	49	332096				120.39- 180.39	138.33
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	839032	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	124170				0.00- 45.52	14.80
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	710437	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	370491				25.46- 85.46	52.15
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	344815	26.0998	26.100		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	168494				21.66- 81.66	48.87
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	772813	22.3626	22.362		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	84141				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 (1.195)	100	505967			36.47- 96.47	65.47
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	460040	24.4814	24.481	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	525612			93.06- 153.06	114.25
9.601	9.601 (1.114)	176	427660			62.87- 122.87	92.96
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	30936	8.18408	16.696	80.00- 120.00	100.00
1.451	1.479 (0.275)	51	60979			321.86- 381.86	197.11
1.451	1.451 (0.275)	47	15305			45.34- 105.34	49.47
47 Acetone					CAS #: 67-64-1		
3.228	3.214 (0.611)	58	26720	6.63769	13.541	80.00- 120.00	100.00
3.228	3.214 (0.611)	43	93856			299.66- 359.66	351.25
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	79430	4.38183	8.939	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	53190	3.67406	7.495	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	11324			0.00- 48.61	21.29
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	78640	5.91527	12.067	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	48242			32.99- 92.99	61.35
4.179	4.179 (0.791)	86	9835			0.00- 42.56	12.51
89 Tetrahydrofuran					CAS #: 109-99-9		
5.284	5.270 (1.000)	42	6997	0.73090	1.491	80.00- 120.00	100.00
5.284	5.270 (1.000)	71	1987			2.92- 62.92	28.41
5.284	5.270 (1.000)	72	3806			3.54- 63.54	54.40
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	9063	0.60212	1.228	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	9126			34.71- 94.71	100.69
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.760	5.774 (1.090)	57	96889	2.33049	4.754	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	34106			1.12- 61.12	35.20
5.760	5.774 (1.090)	41	35625			0.00- 57.49	36.77
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.937)	78	41258	2.15486	4.396	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	11893			0.00- 53.80	28.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	5916	0.78447	1.600	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	9306			179.02- 239.02	157.29
5.942	5.942 (0.962)	57	5949			84.85- 144.85	100.55
137 Toluene					CAS #: 108-88-3		
7.445	7.437 (1.205)	91	374882	14.5922	29.768	80.00- 120.00	100.00
7.445	7.437 (1.205)	92	215045			28.30- 88.30	57.36
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	33132	3.41240	6.961	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	100116			282.48- 342.48	302.17
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	130531	10.8063	22.045	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	255796			171.36- 231.36	195.97
164 o-Xylene					CAS #: 95-47-6		
9.128	9.121 (1.059)	106	43117	3.76004	7.670	80.00- 120.00	100.00
9.128	9.121 (1.059)	91	92294			179.99- 239.99	214.06
183 4-Ethyltoluene					CAS #: 622-96-8		
9.830	9.851 (1.140)	120	16606	1.51443	3.089	80.00- 120.00	100.00
9.830	9.851 (1.140)	105	52922			296.79- 356.79	318.70
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	11562	0.75072	1.531	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	25896			176.40- 236.40	223.98
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	36416	1.19911	2.446	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	17358			16.58- 76.58	47.67

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072725.d
Lab Smp Id: 2107362A-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.5 Hg->9.8 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	240072	0.45
108 1,4-Difluorobenze	785289	471173	1099405	839032	6.84
153 Chlorobenzene-d5	683596	410158	957034	710437	3.93

		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	8.61	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: 29-Jul-2021 11:04

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.5 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	26.100	104.40	70-130
$ 134 Toluene-d8	25.000	22.362	89.45	70-130
$ 170 4-Bromofluorobenz	25.000	24.481	97.93	70-130

Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

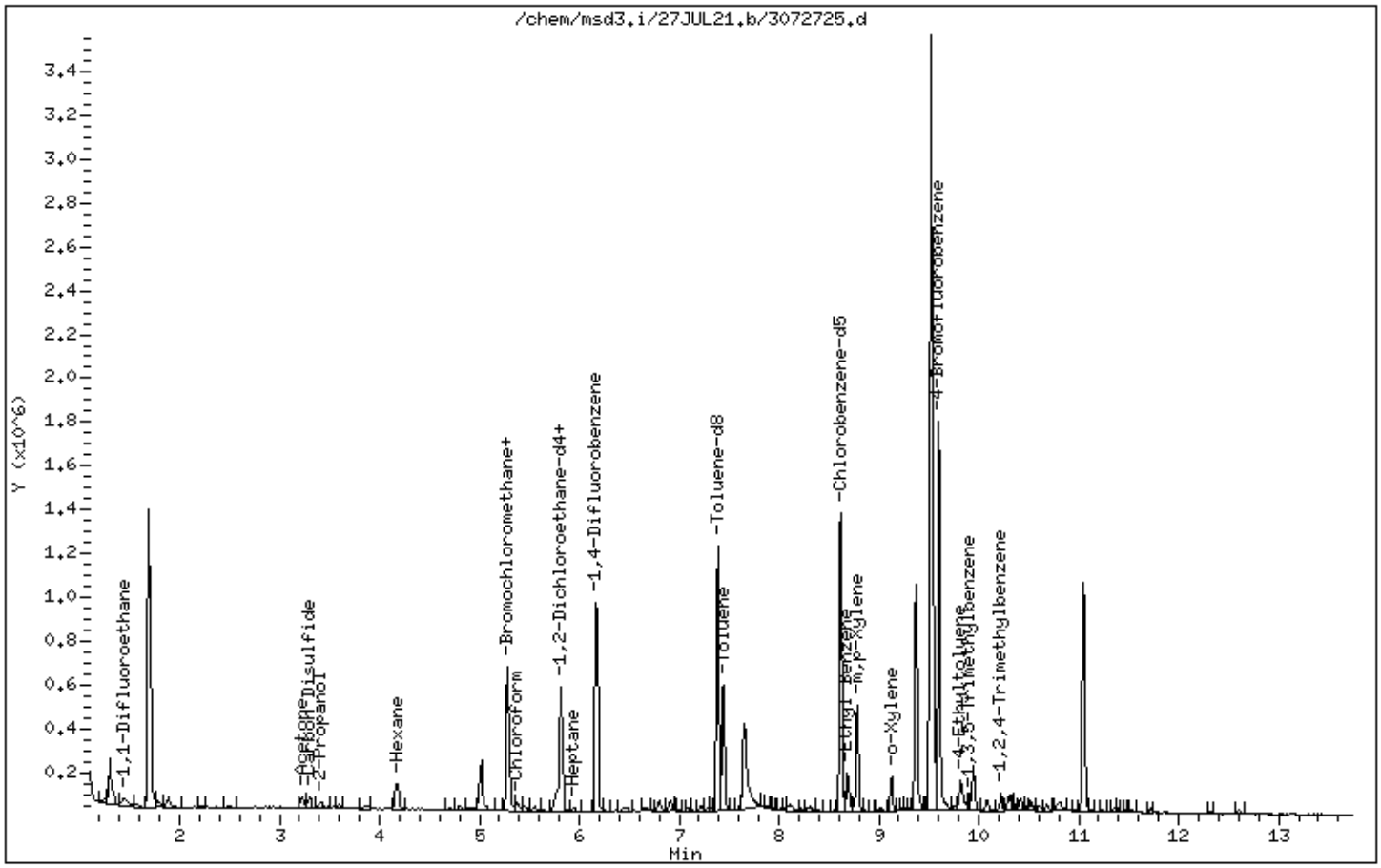
Instrument: msd3.i

Sample Info: 200mL 00476

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

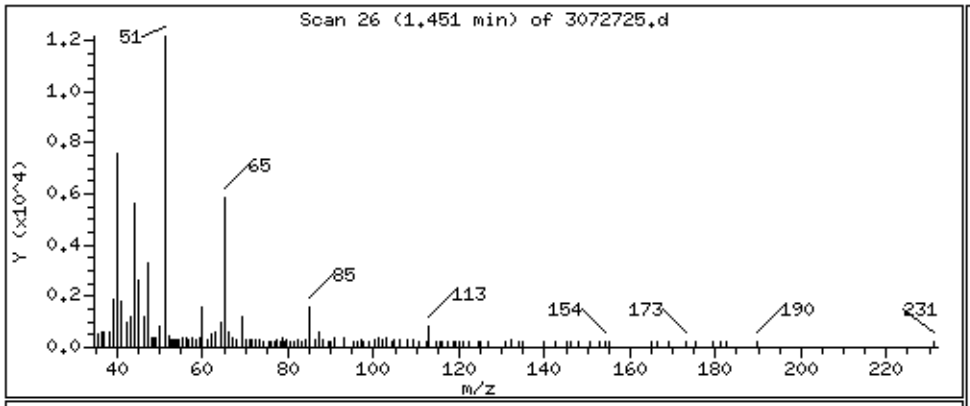
Operator: kk

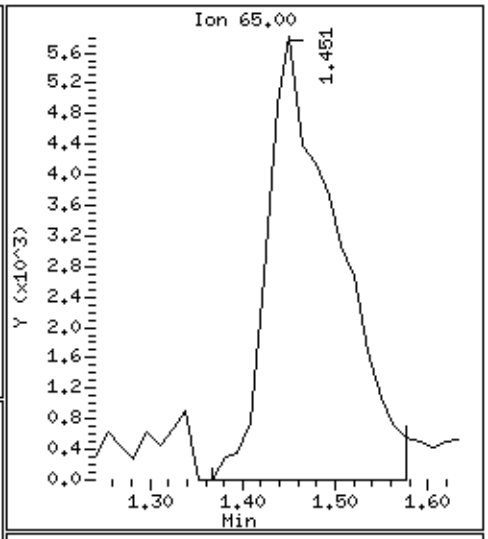
Column phase: RTX-624

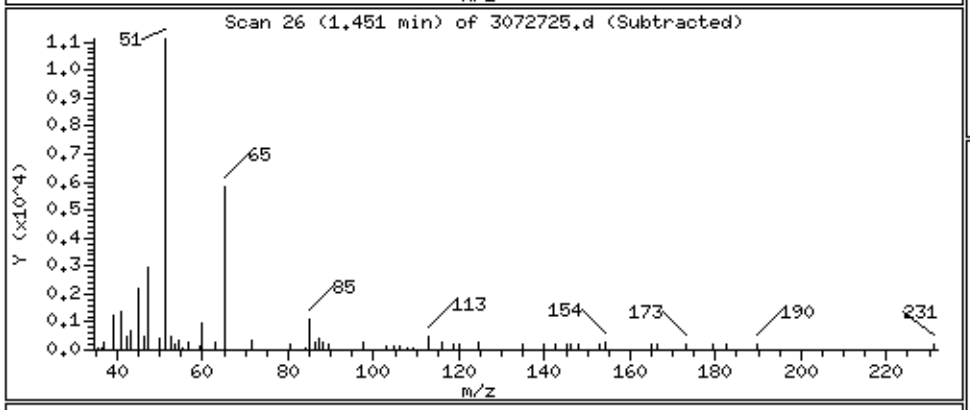
Column diameter: 0.25

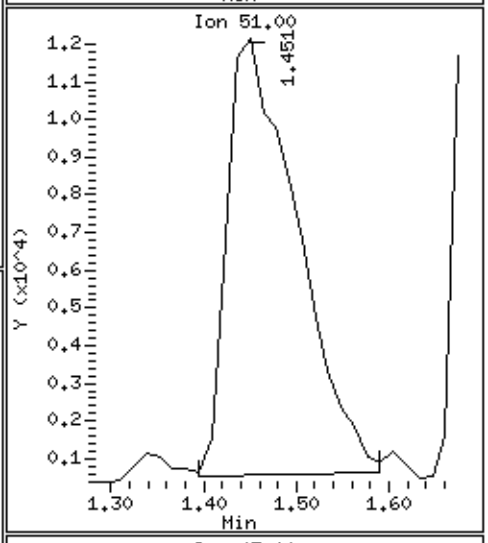
7 1,1-Difluoroethane

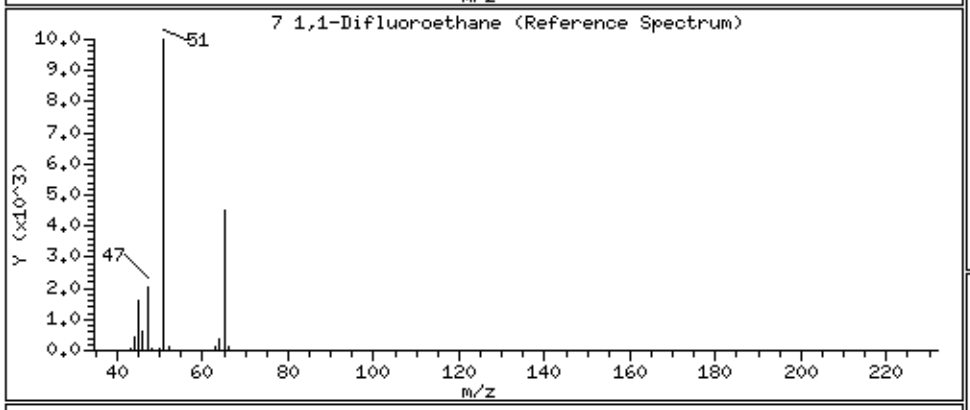
Concentration: 16.696 PPBV

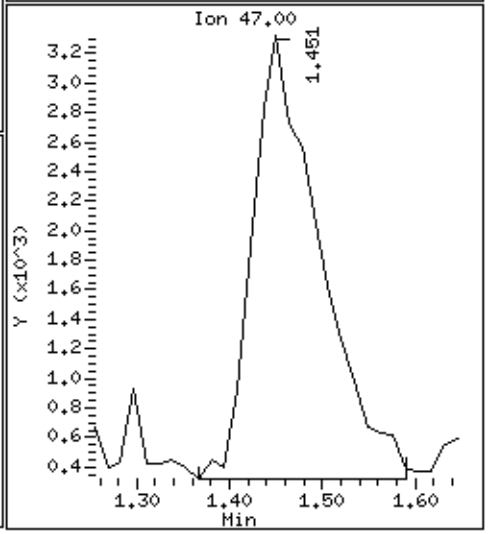


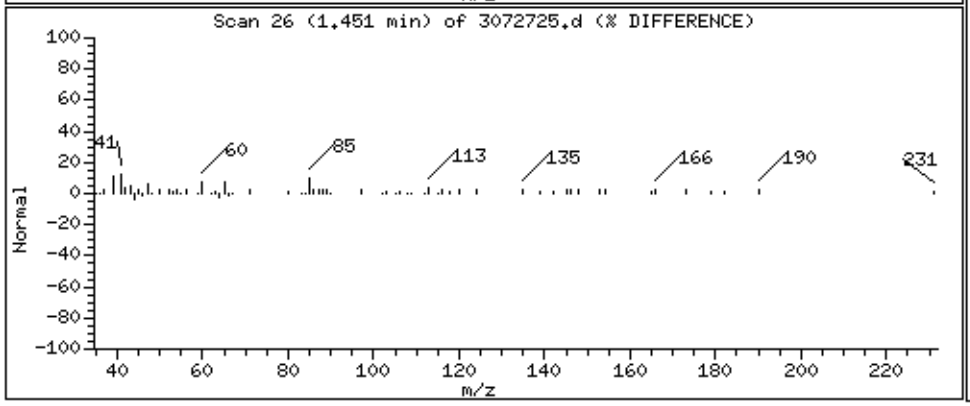












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

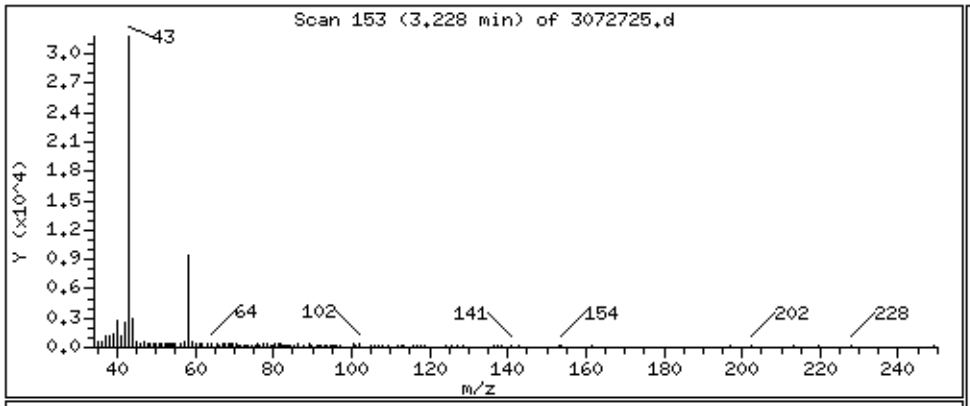
Operator: kk

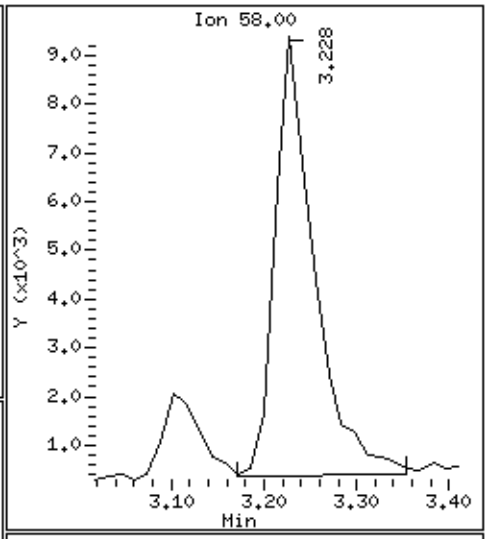
Column phase: RTX-624

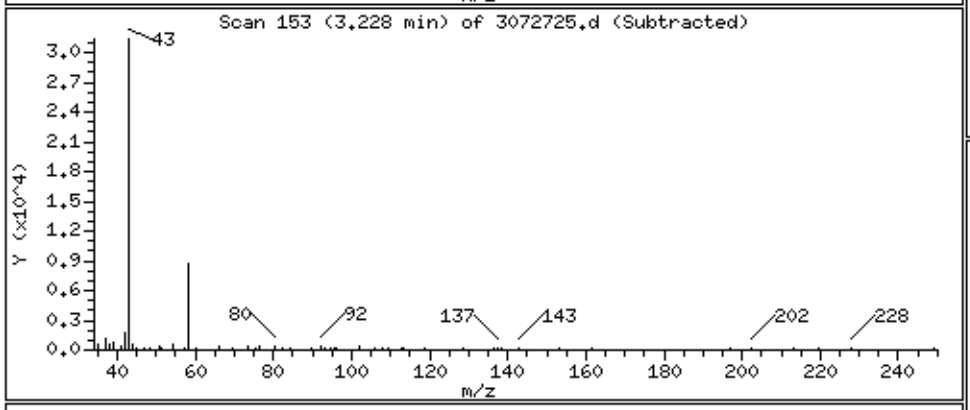
Column diameter: 0.25

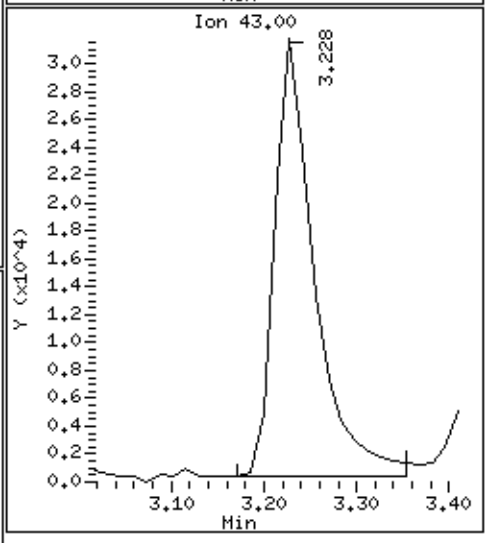
47 Acetone

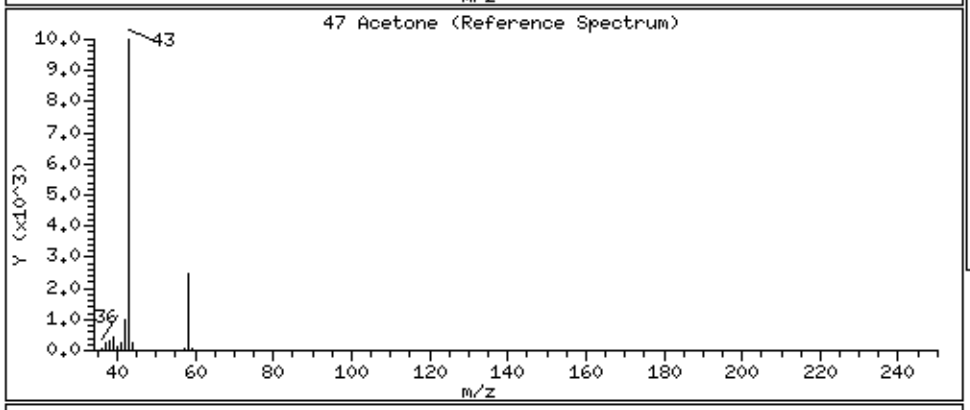
Concentration: 13.541 PPBV

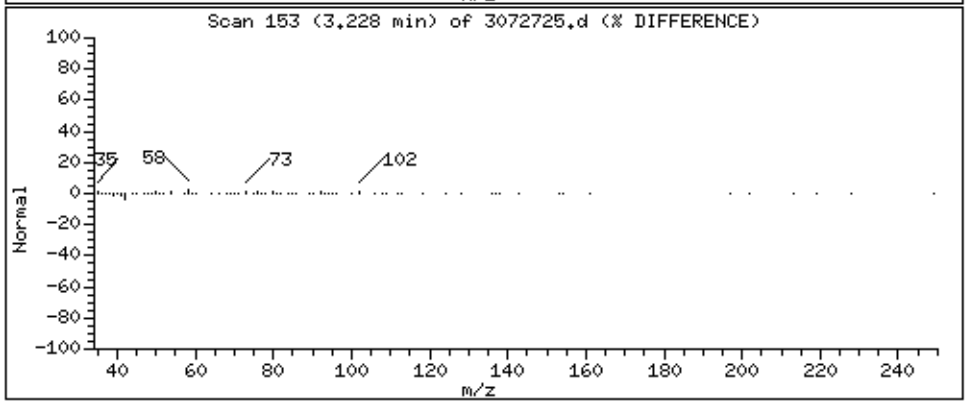












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

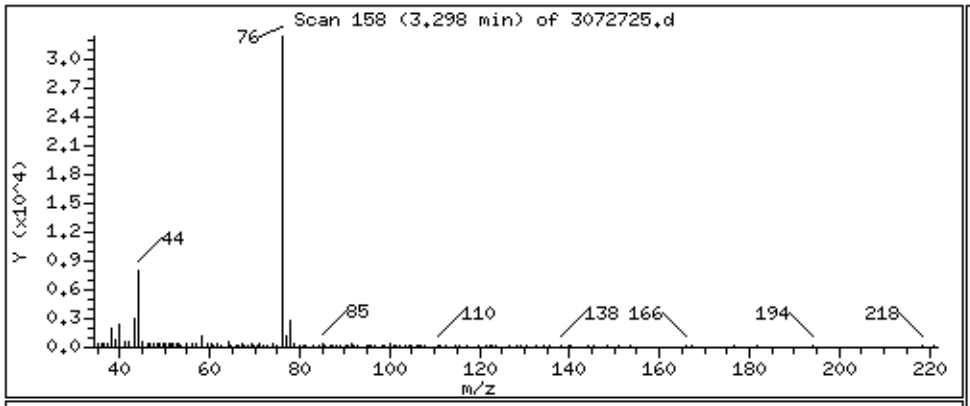
Operator: kk

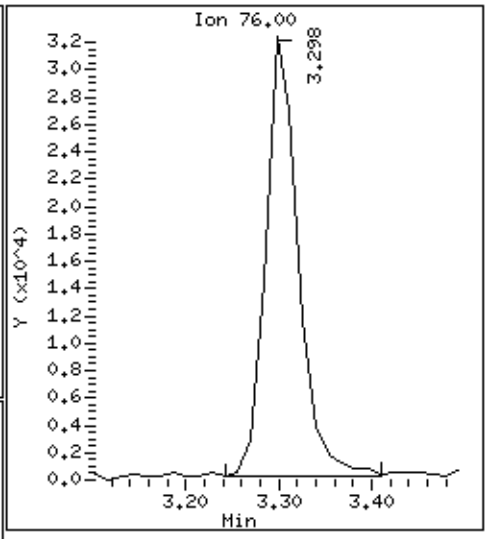
Column phase: RTX-624

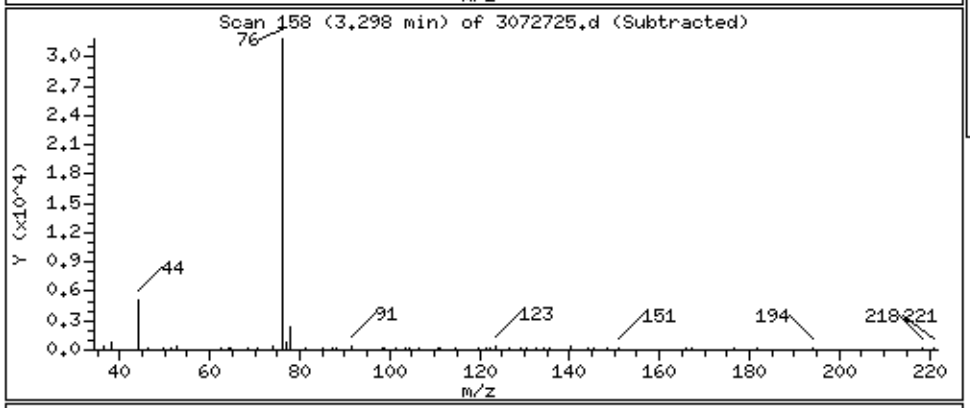
Column diameter: 0.25

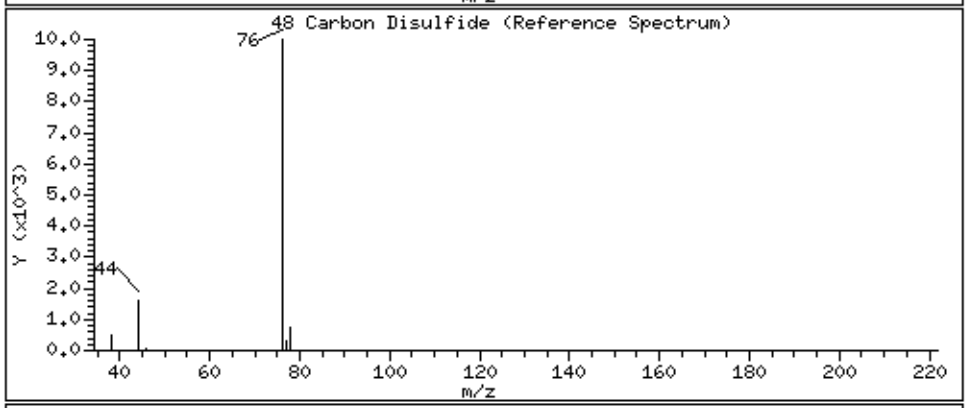
48 Carbon Disulfide

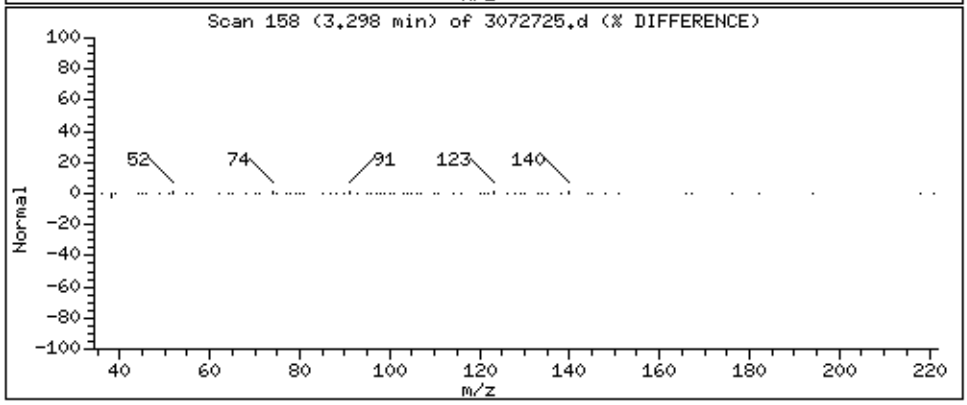
Concentration: 8.939 PPBV











Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

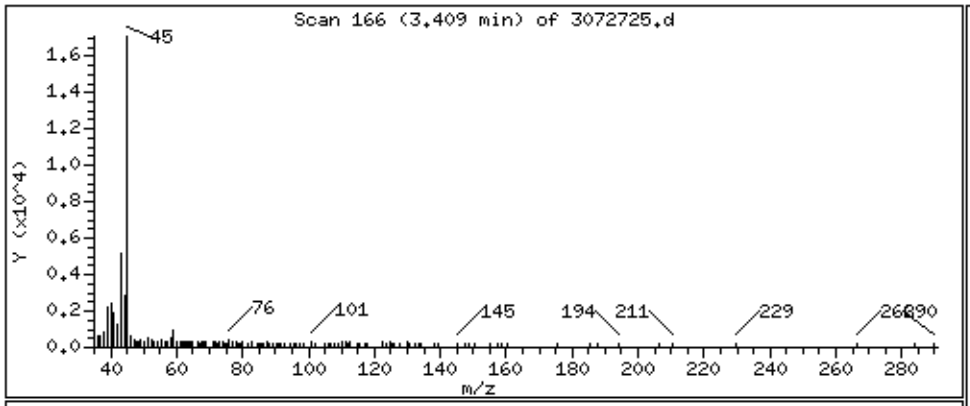
Operator: kk

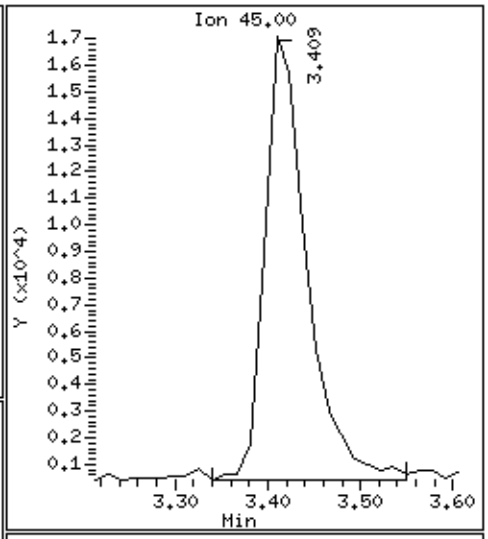
Column phase: RTX-624

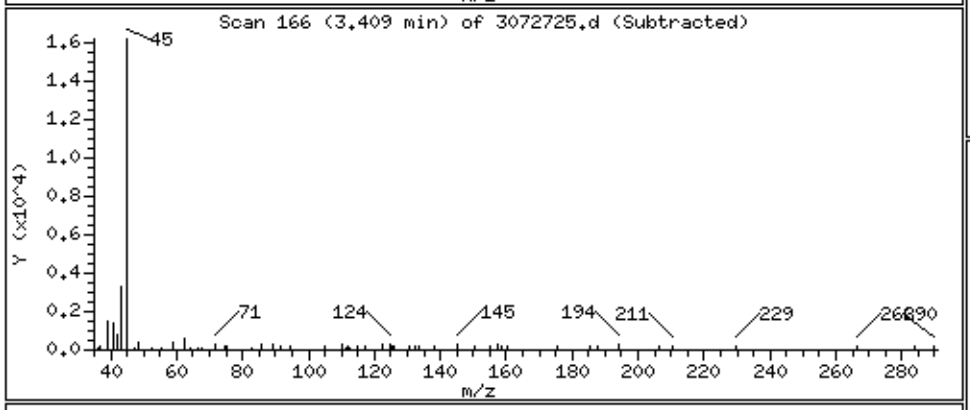
Column diameter: 0.25

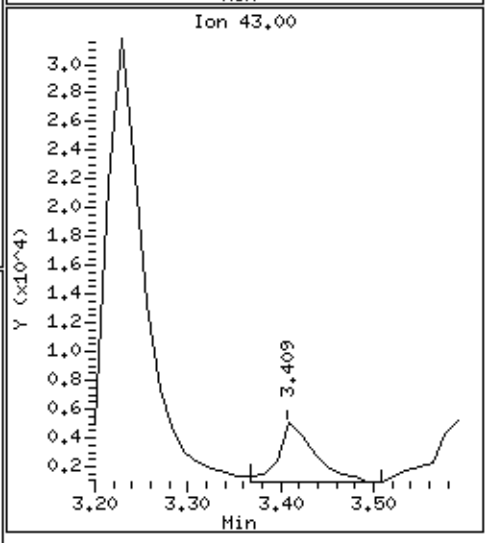
52 2-Propanol

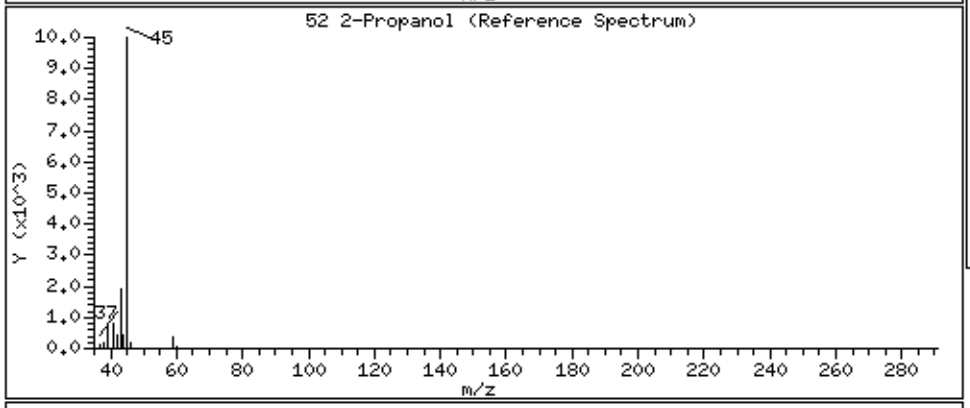
Concentration: 7.495 PPBV

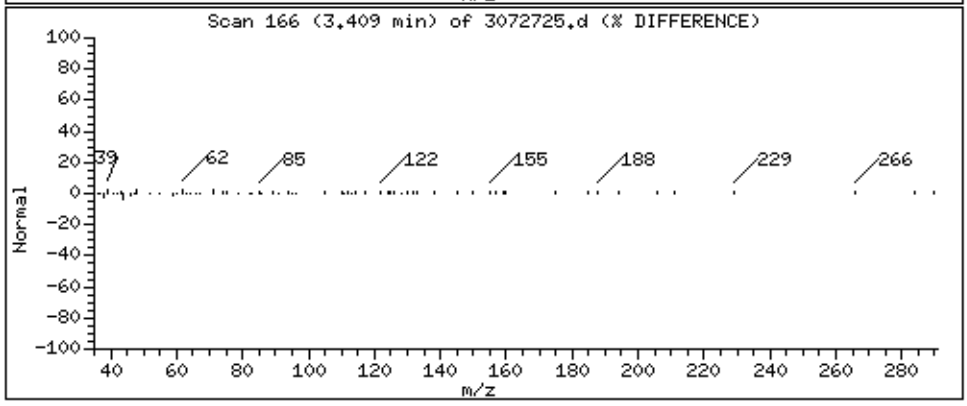












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

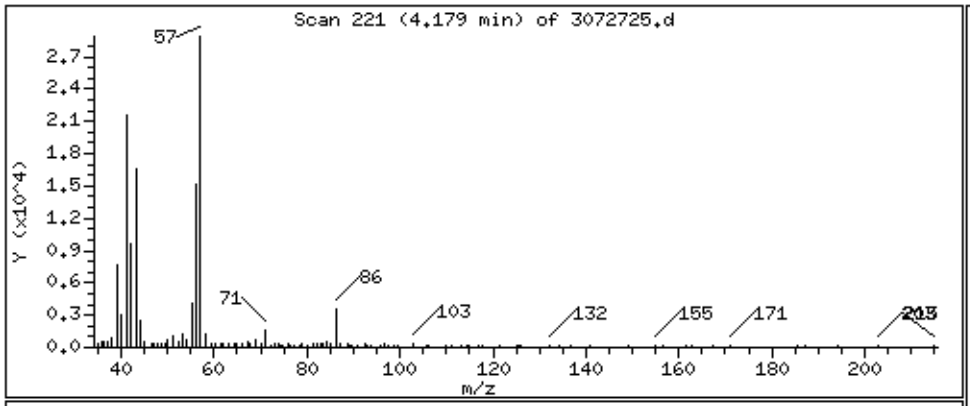
Operator: kk

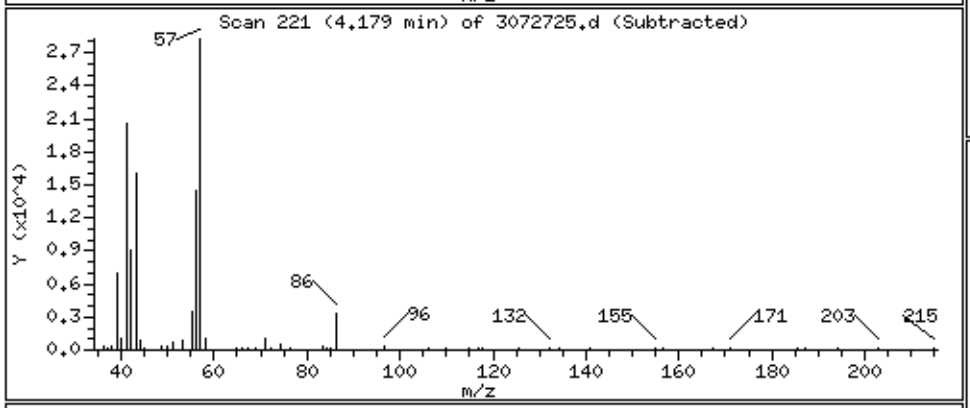
Column phase: RTX-624

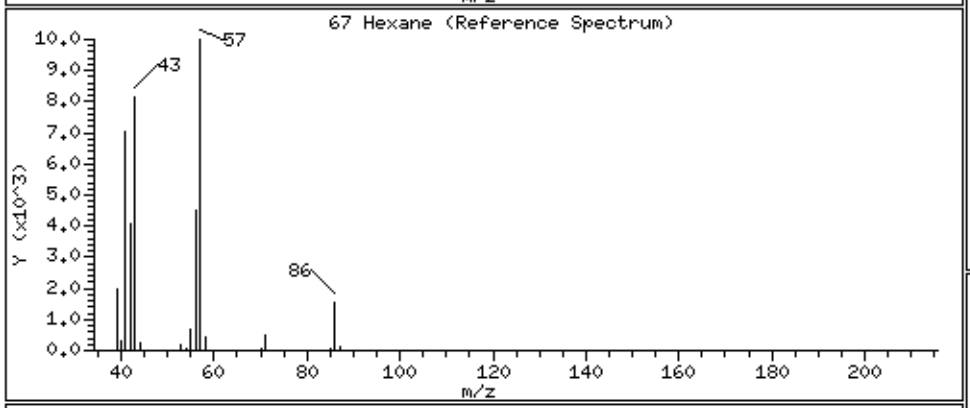
Column diameter: 0.25

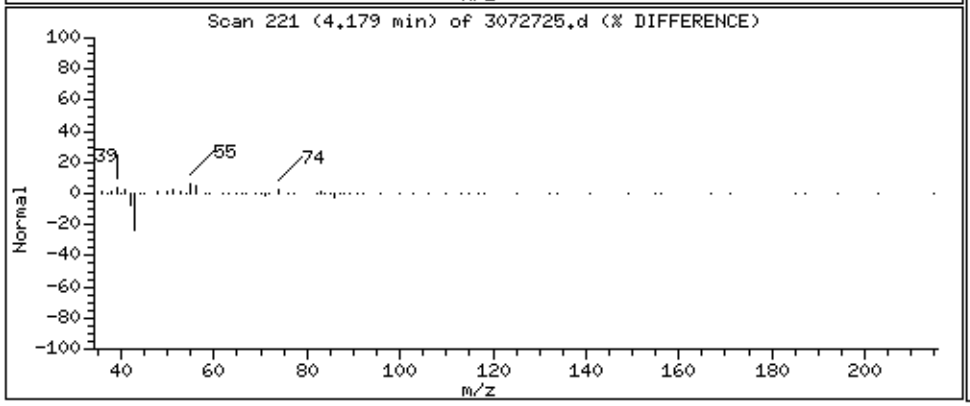
67 Hexane

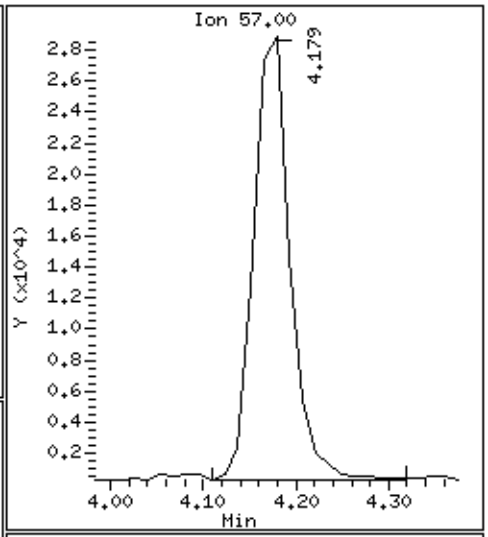
Concentration: 12.067 PPBV

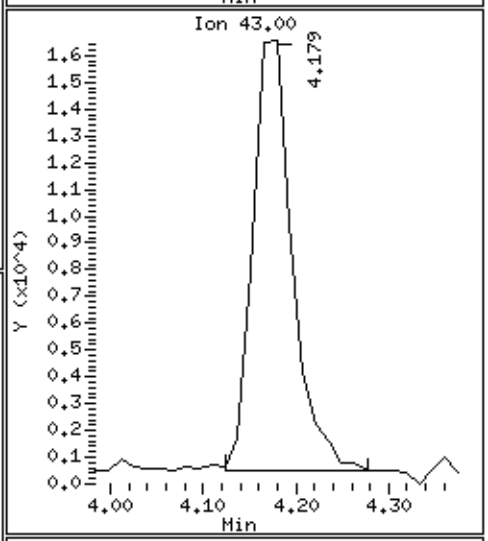


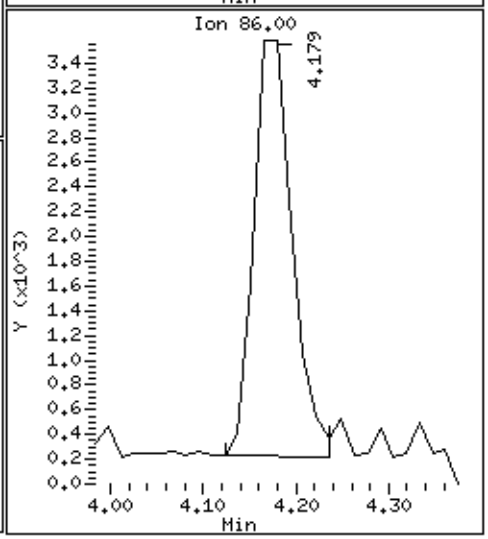












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

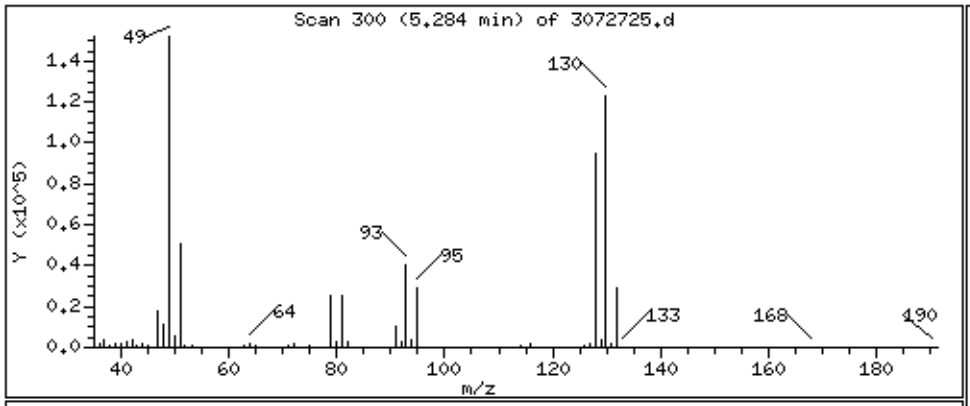
Operator: kk

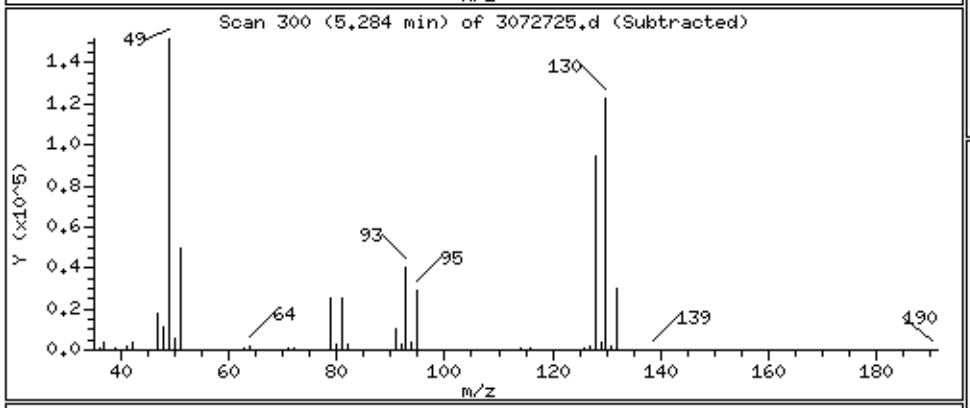
Column phase: RTX-624

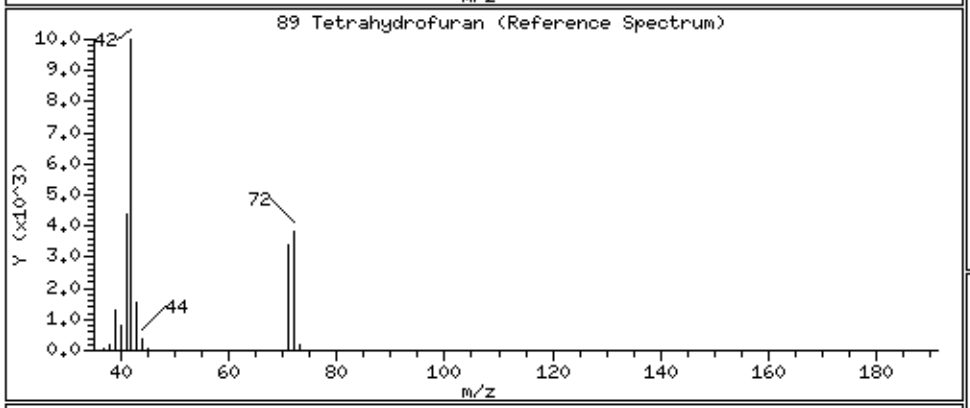
Column diameter: 0.25

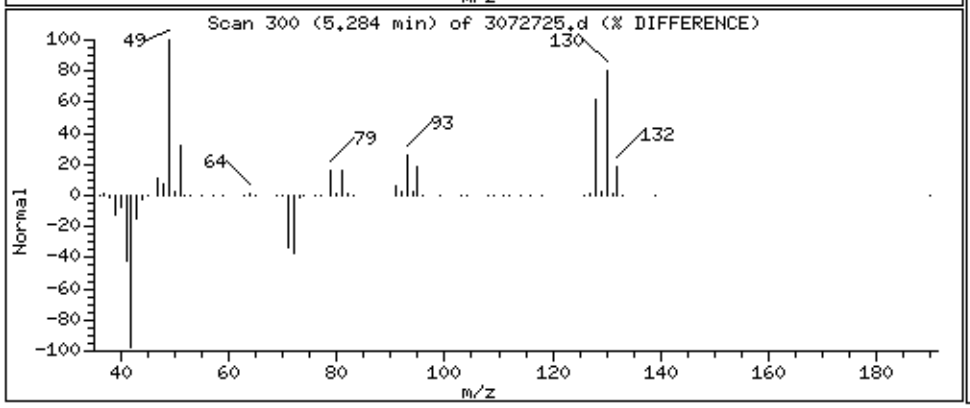
89 Tetrahydrofuran

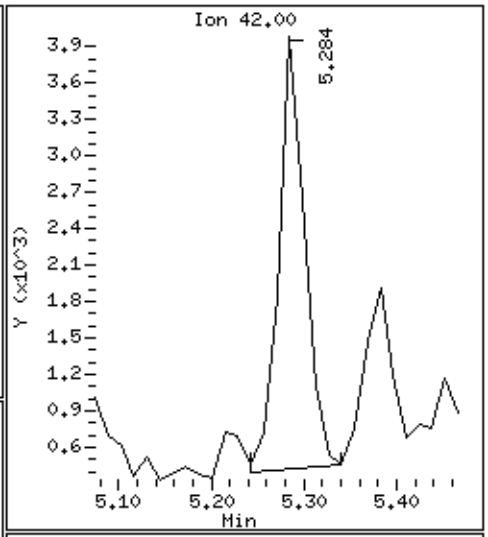
Concentration: 1.491 PPBV

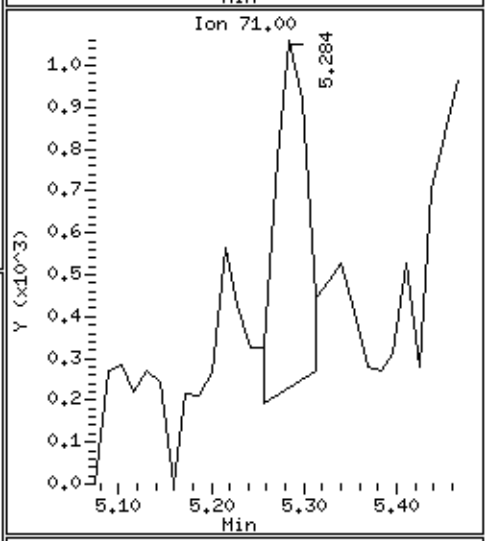


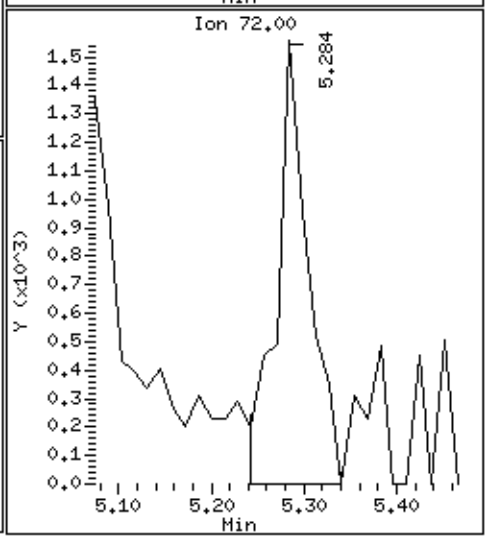












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

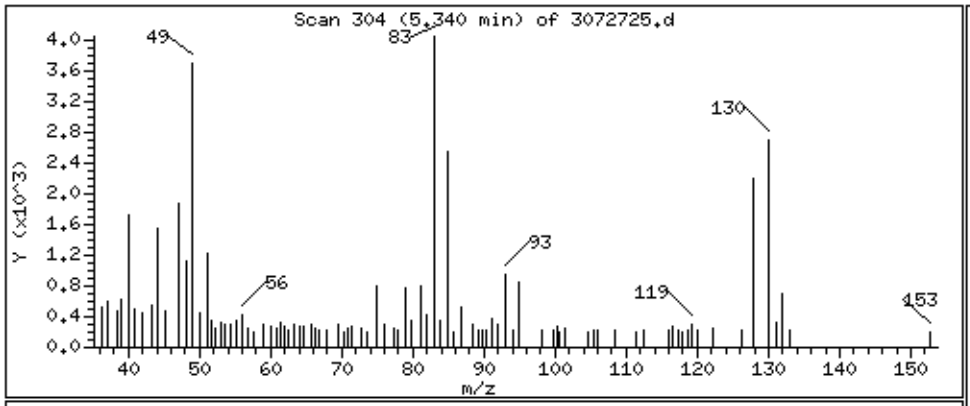
Operator: kk

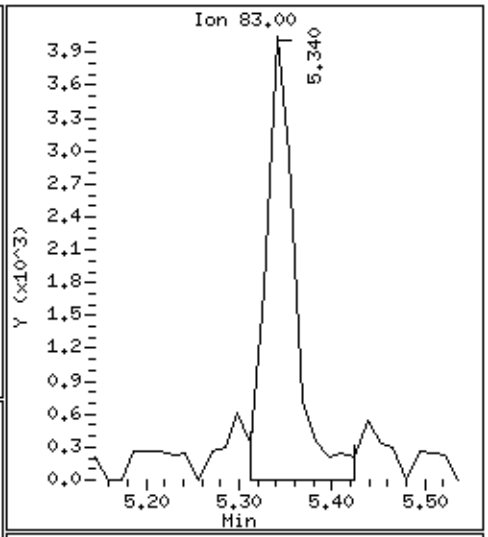
Column phase: RTX-624

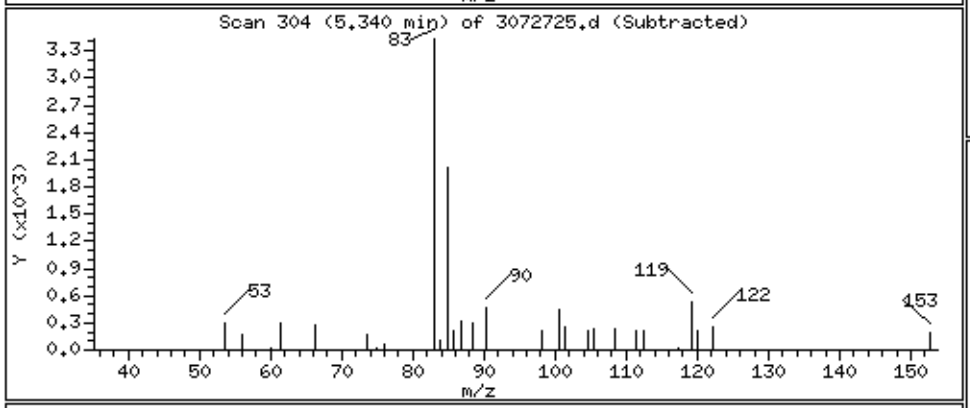
Column diameter: 0.25

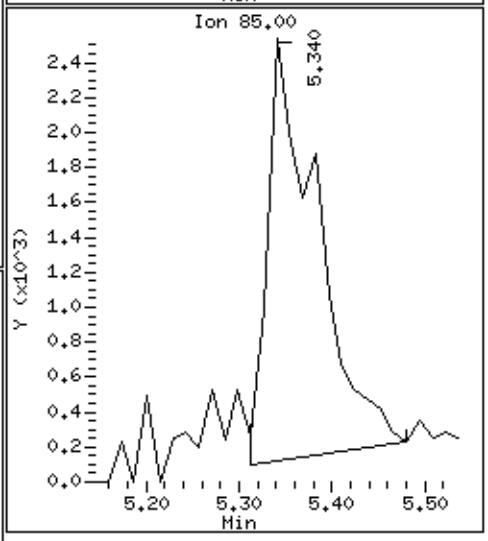
92 Chloroform

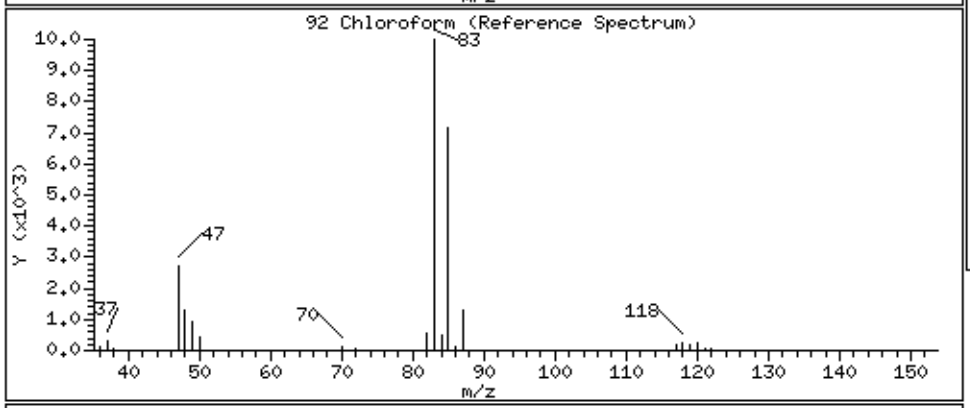
Concentration: 1.228 PPBV

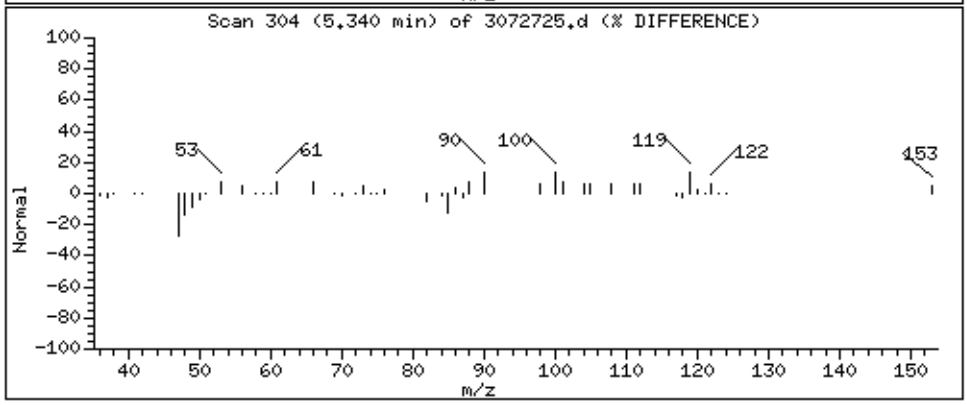












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

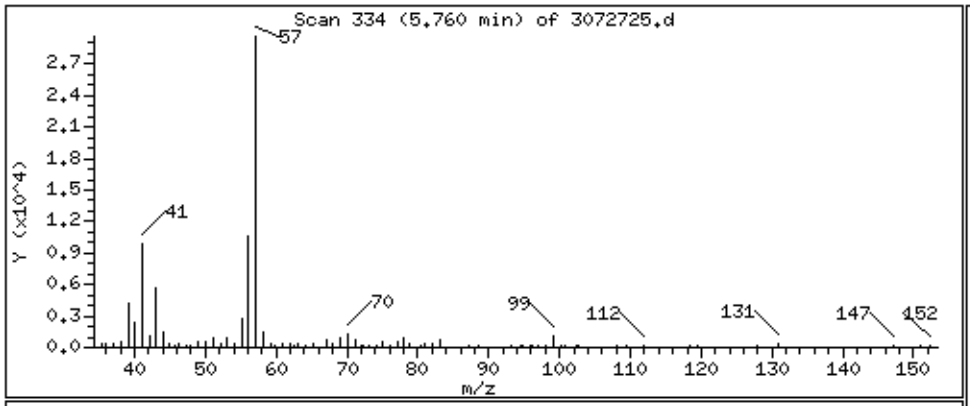
Operator: kk

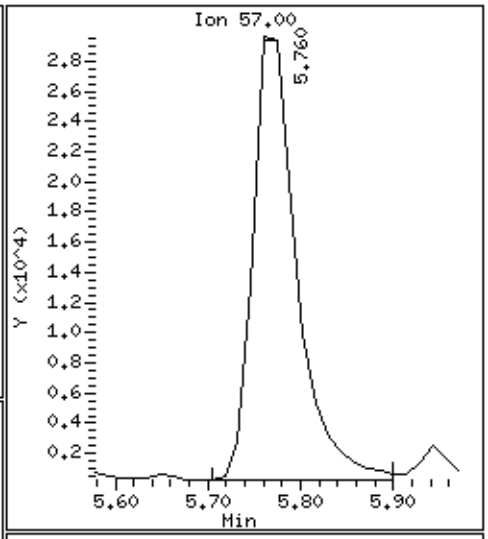
Column phase: RTX-624

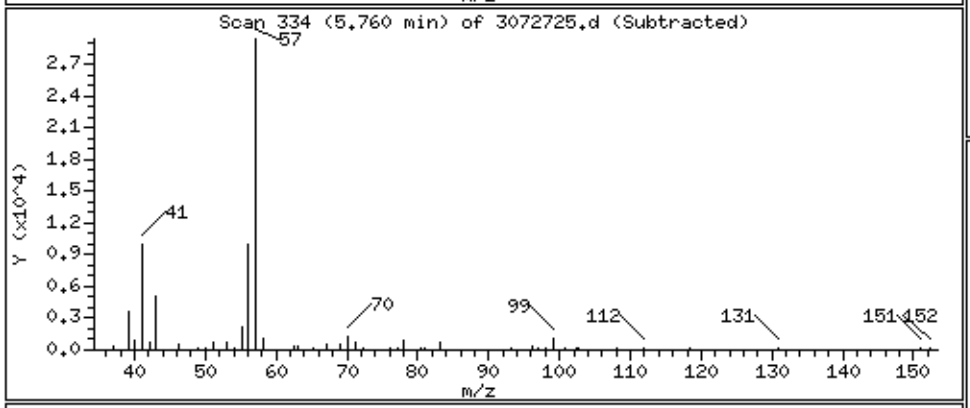
Column diameter: 0.25

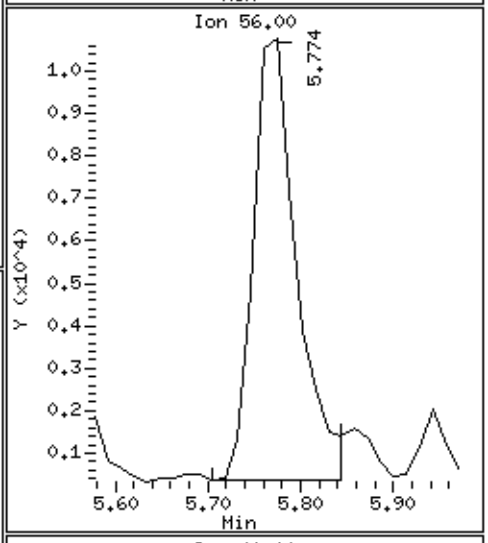
101 2,2,4-Trimethylpentane

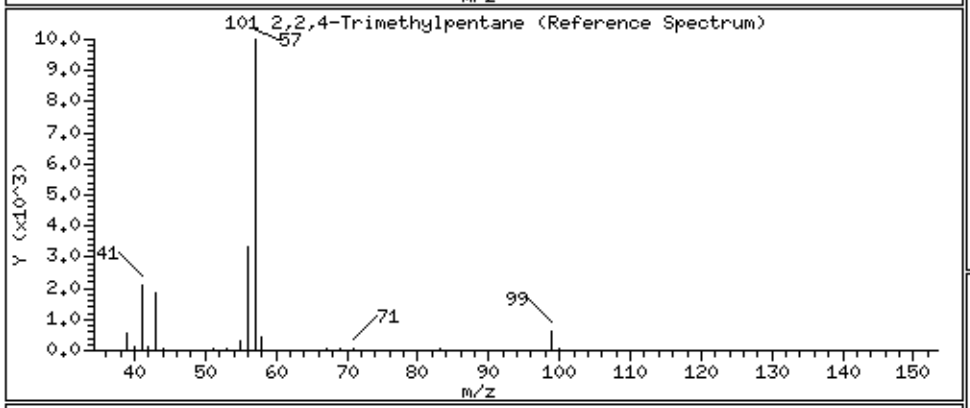
Concentration: 4.754 PPBV

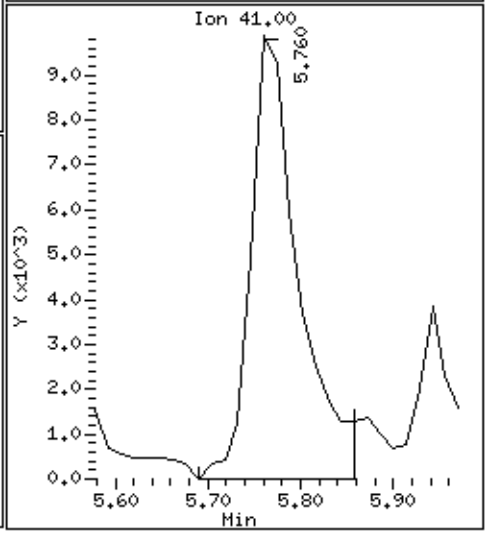


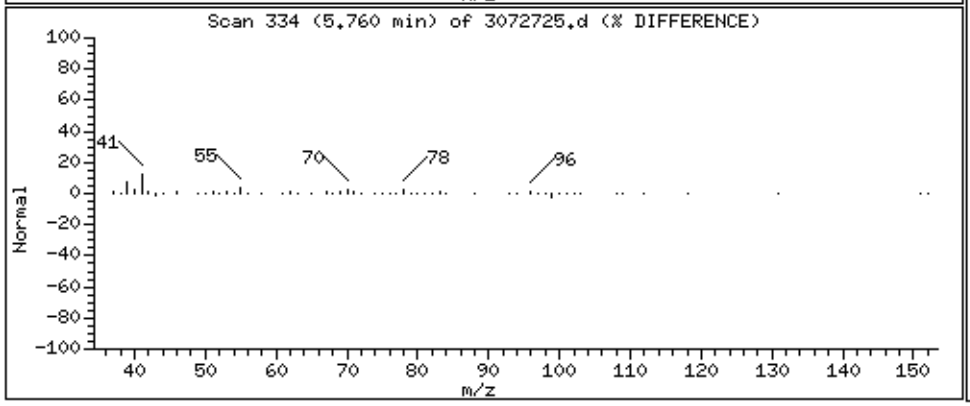












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

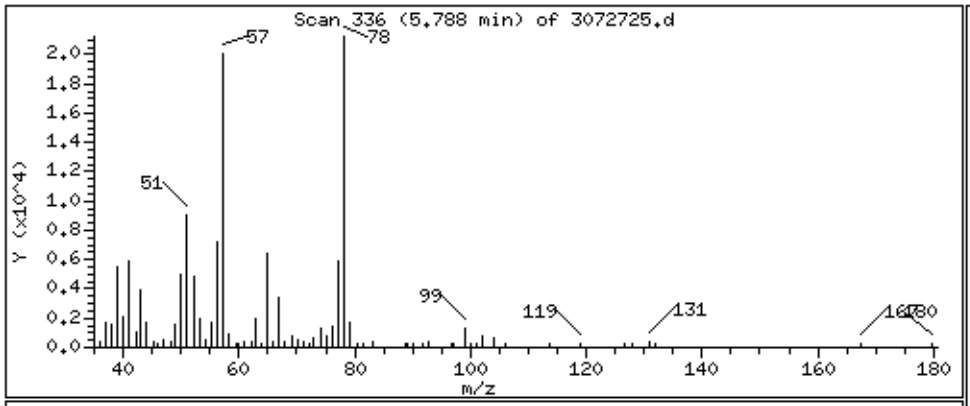
Operator: kk

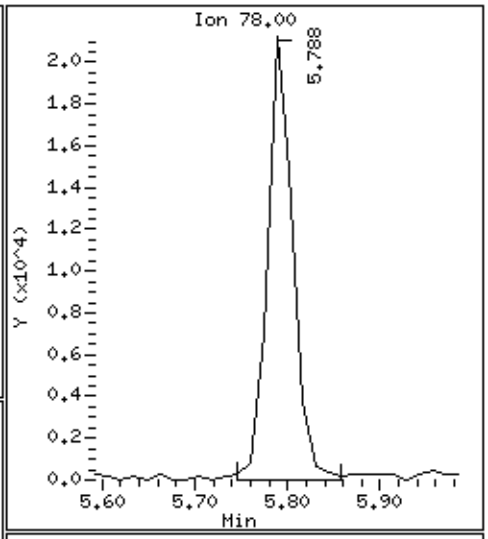
Column phase: RTX-624

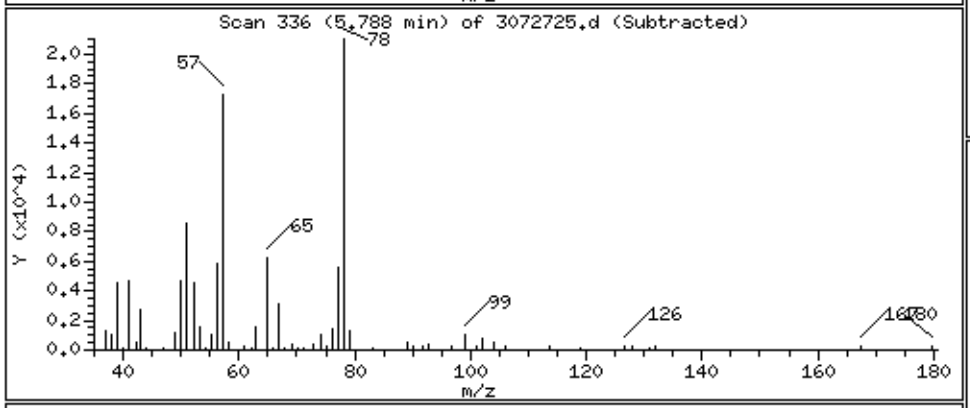
Column diameter: 0.25

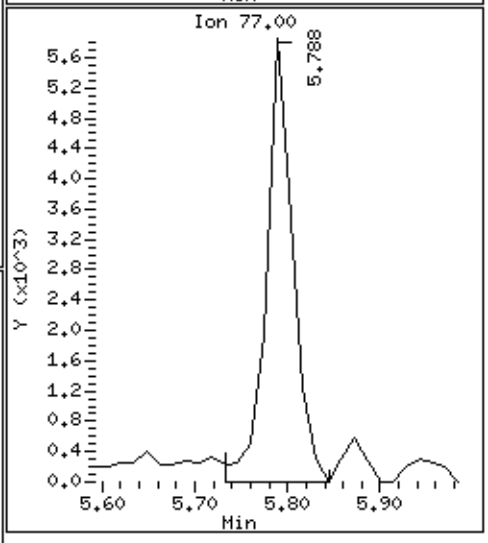
102 Benzene

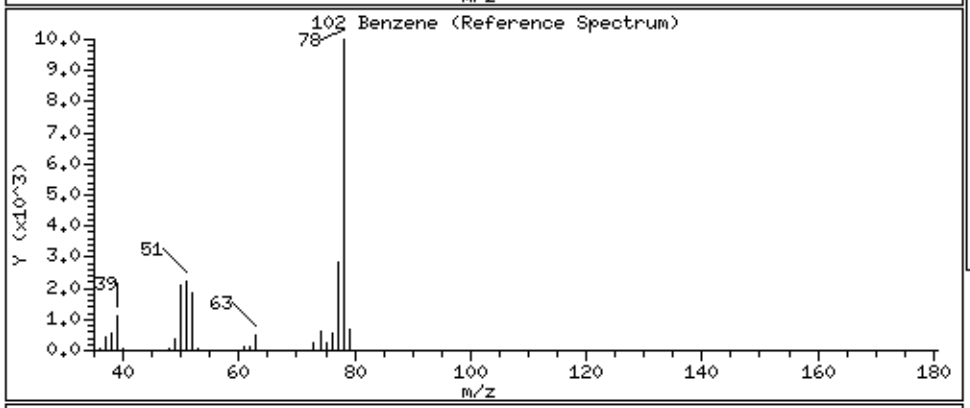
Concentration: 4.396 PPBV

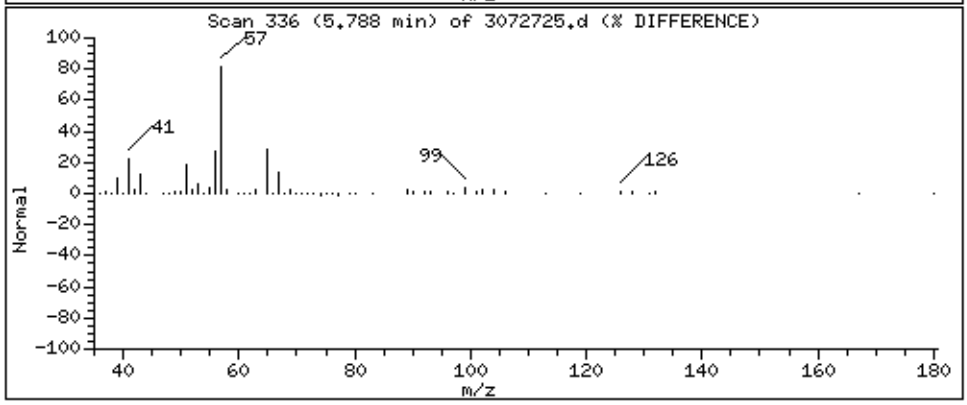












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

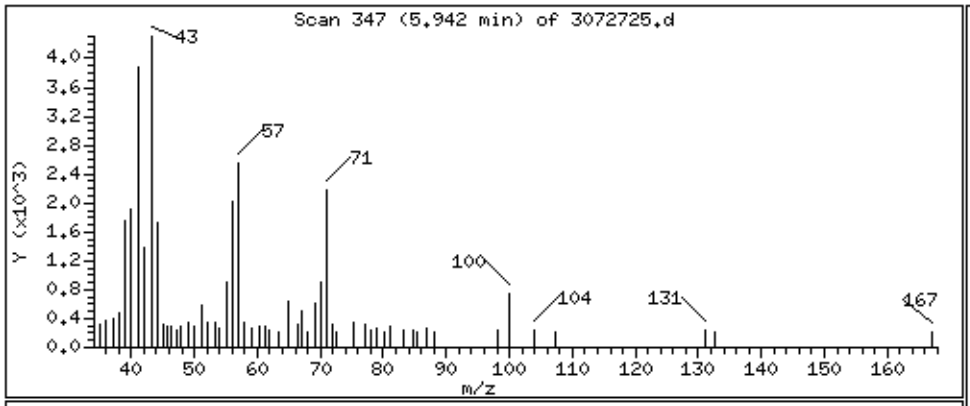
Operator: kk

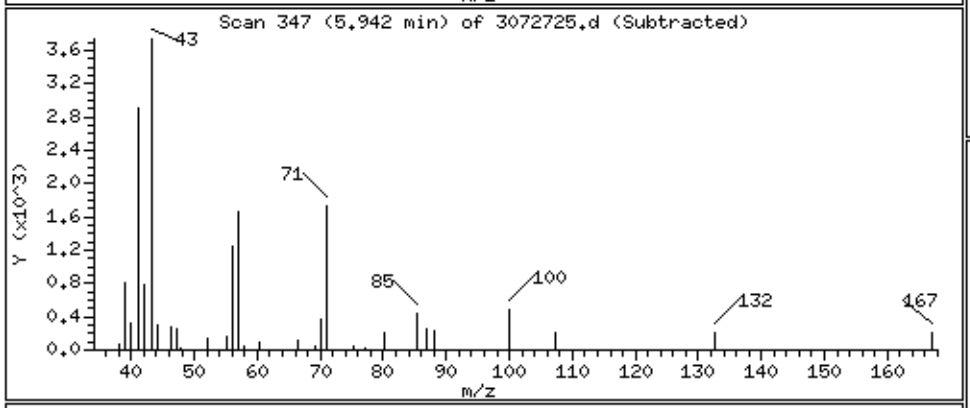
Column phase: RTX-624

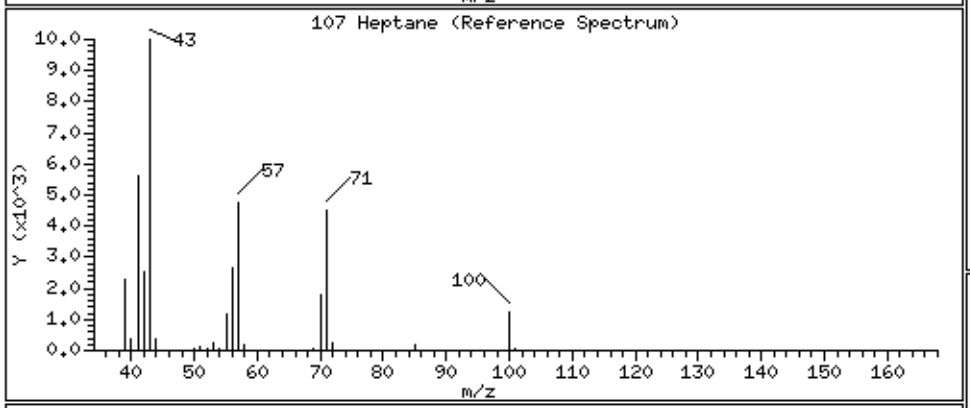
Column diameter: 0.25

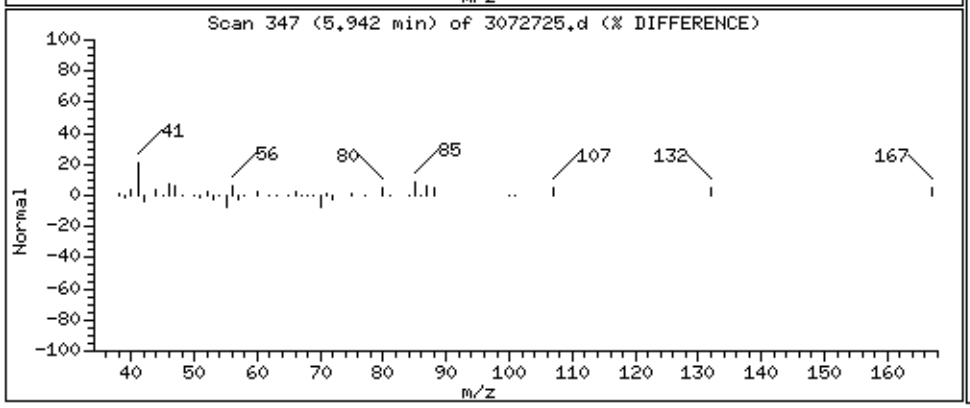
107 Heptane

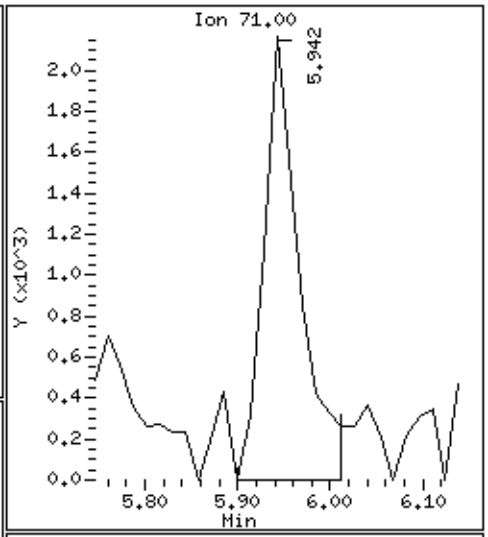
Concentration: 1.600 PPBV

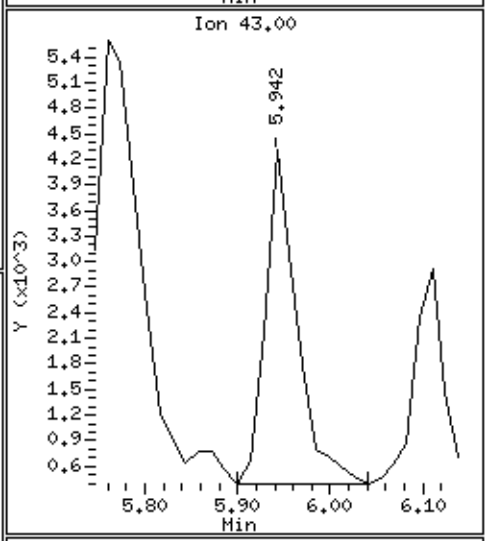


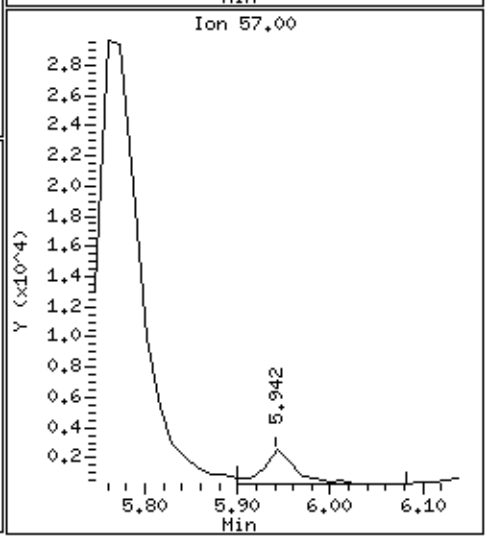












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

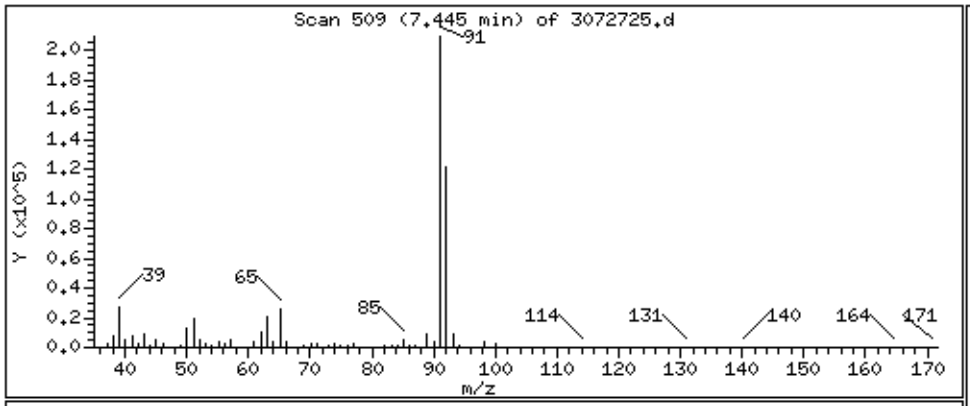
Operator: kk

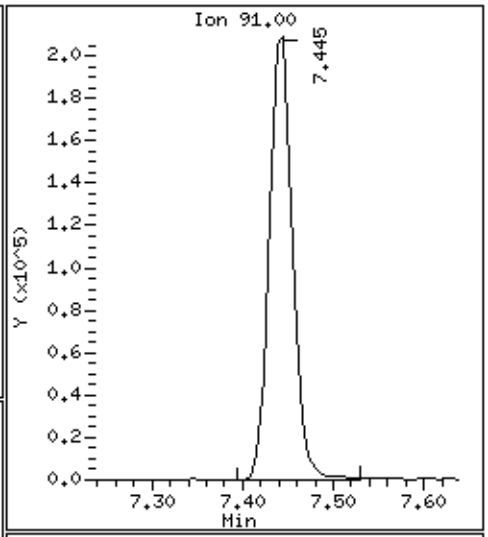
Column phase: RTX-624

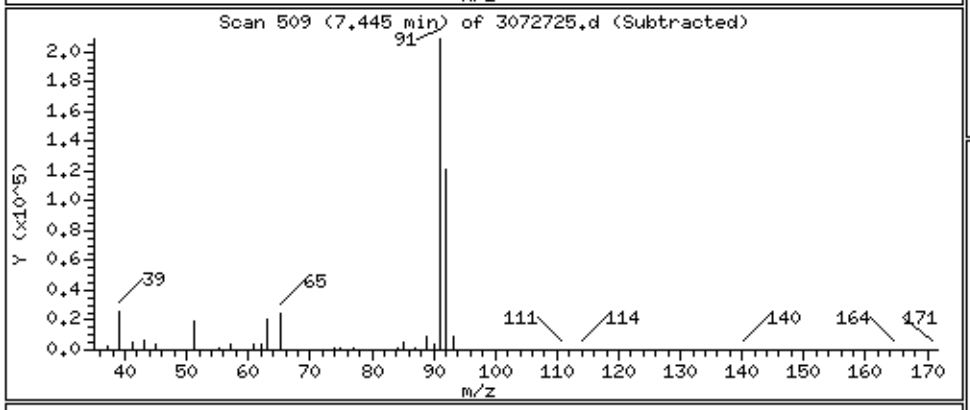
Column diameter: 0.25

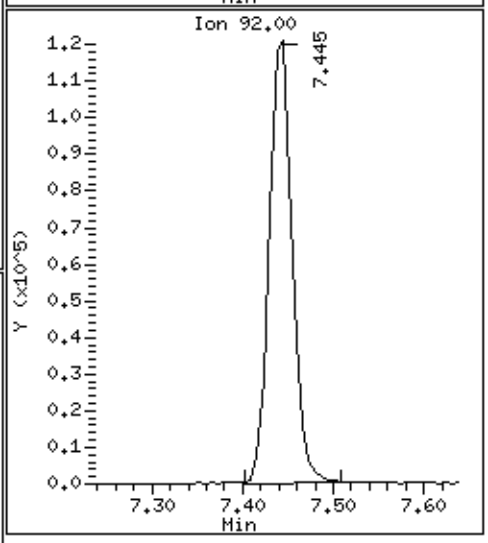
137 Toluene

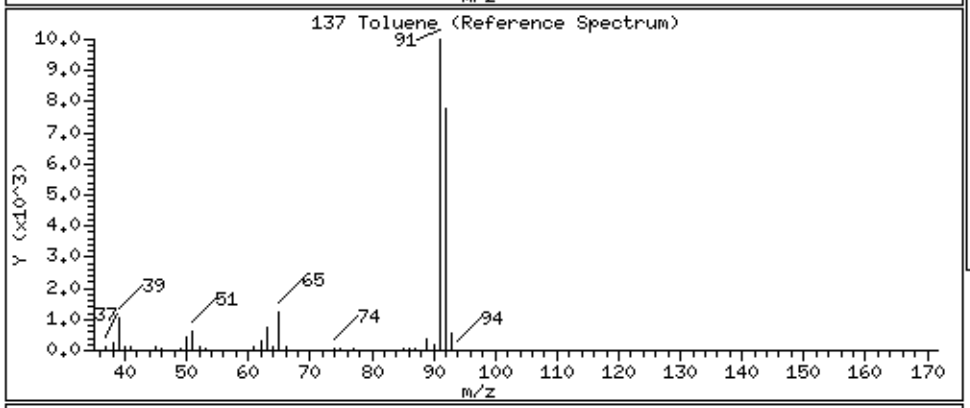
Concentration: 29.768 PPBV

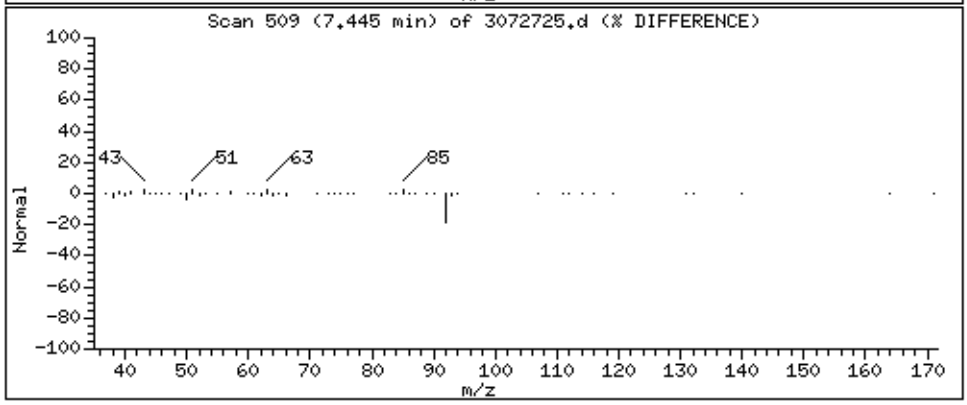












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

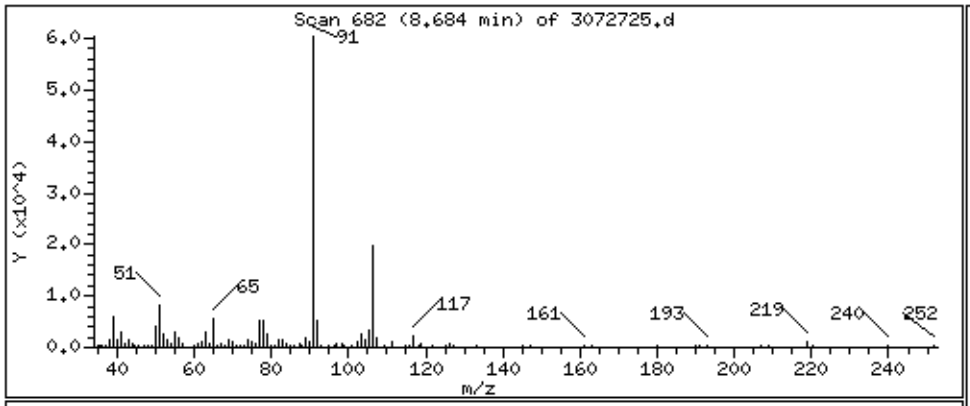
Operator: kk

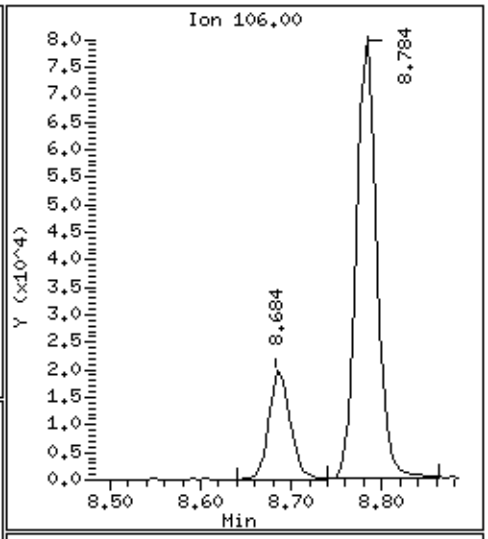
Column phase: RTX-624

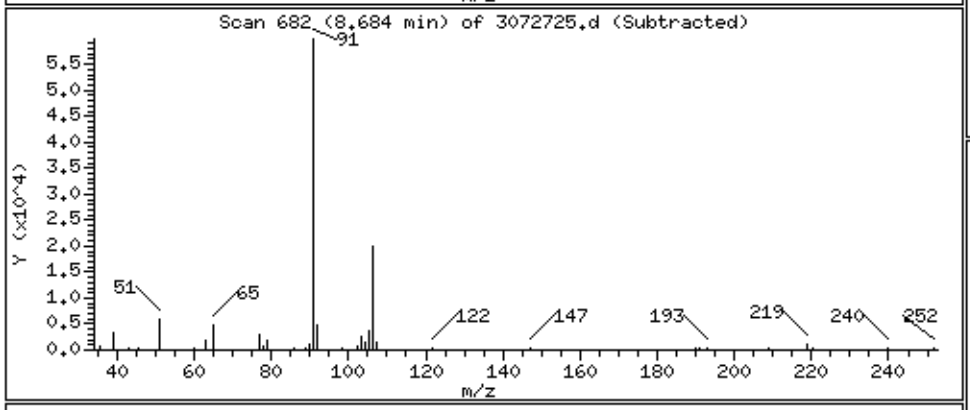
Column diameter: 0.25

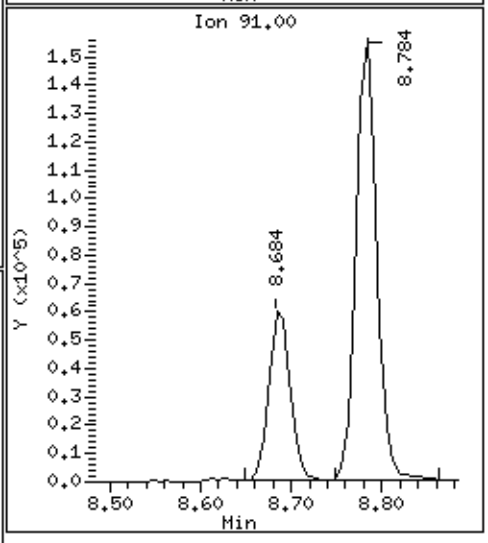
155 Ethyl Benzene

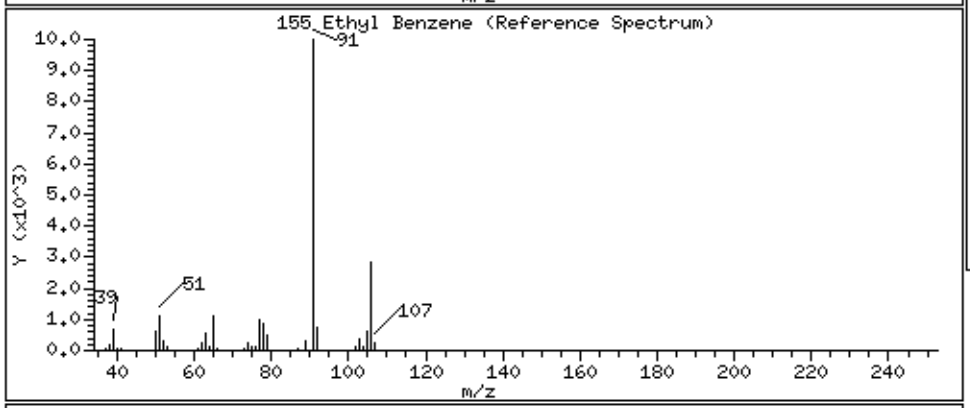
Concentration: 6.961 PPBV

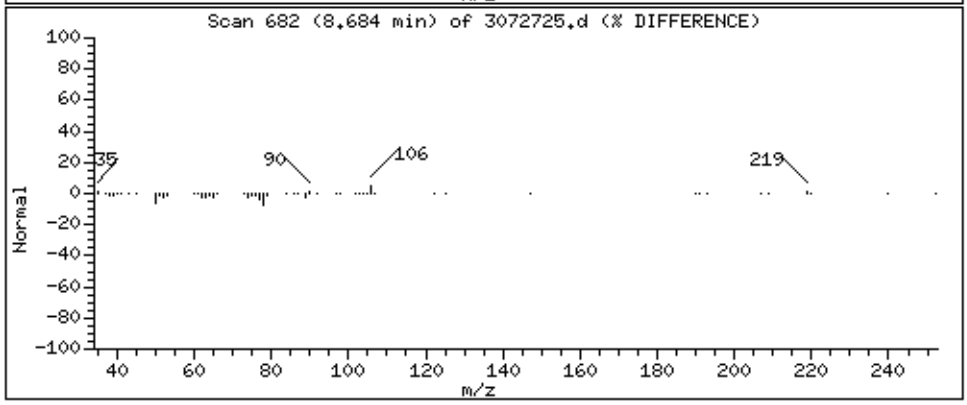












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

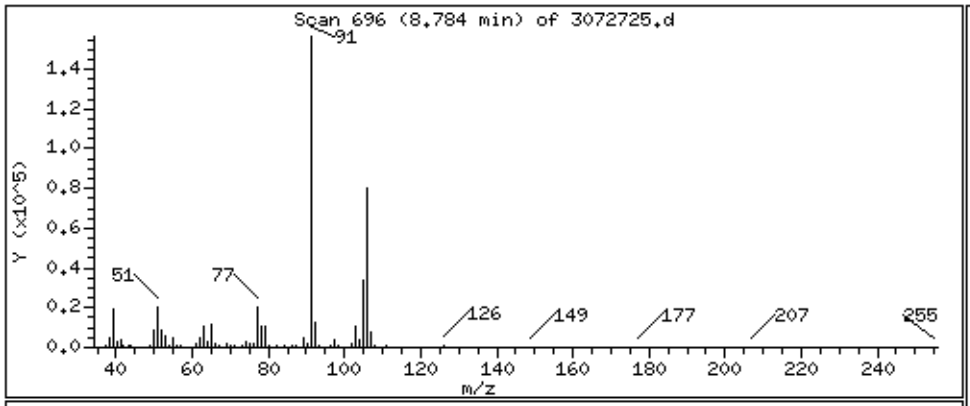
Operator: kk

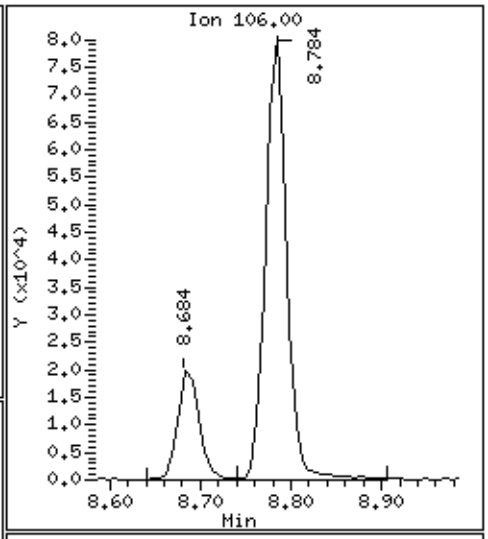
Column phase: RTX-624

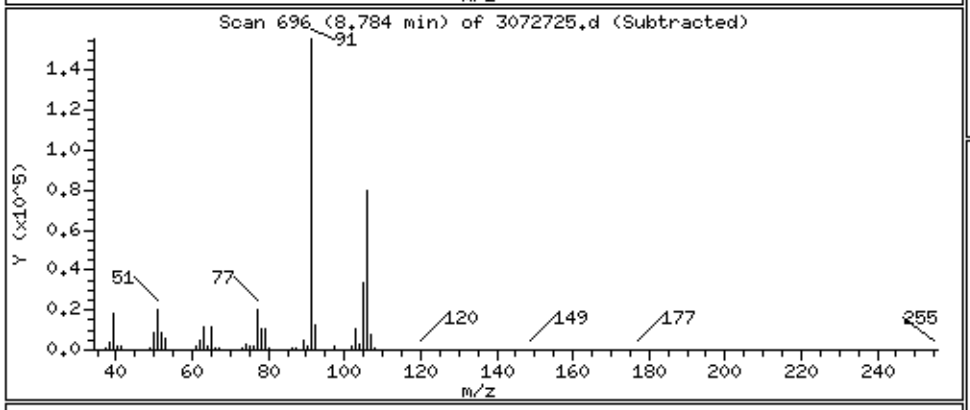
Column diameter: 0.25

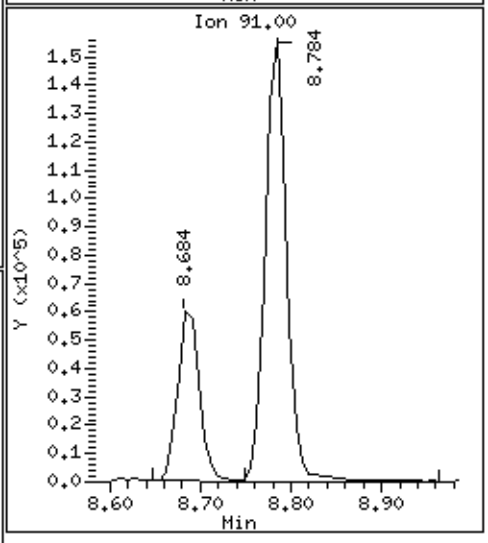
158 m,p-Xylene

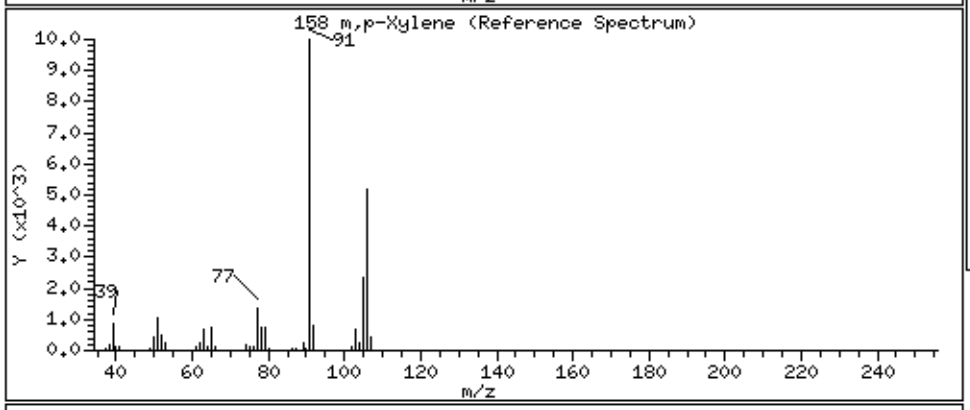
Concentration: 22.045 PPBV

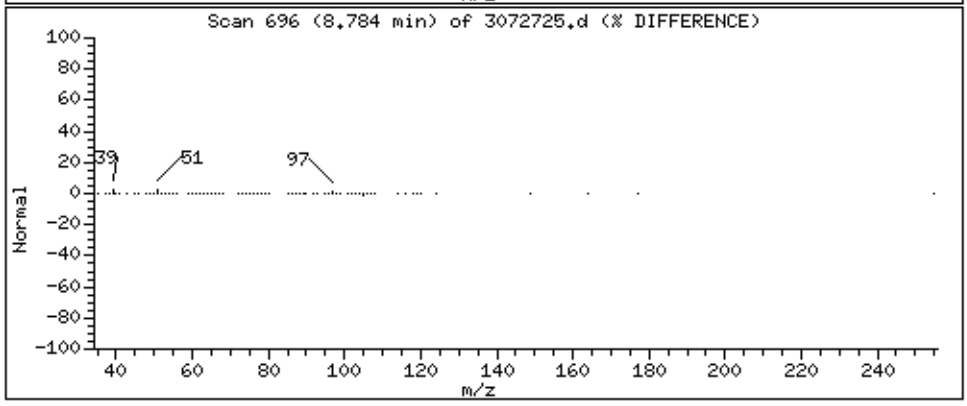












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

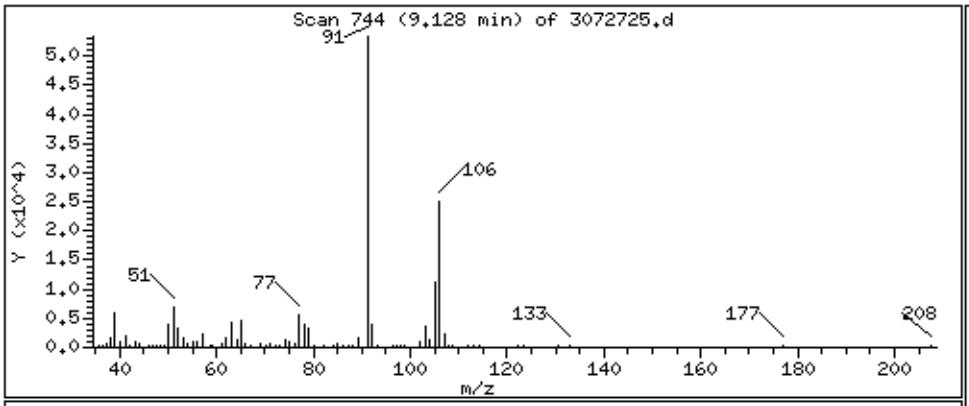
Operator: kk

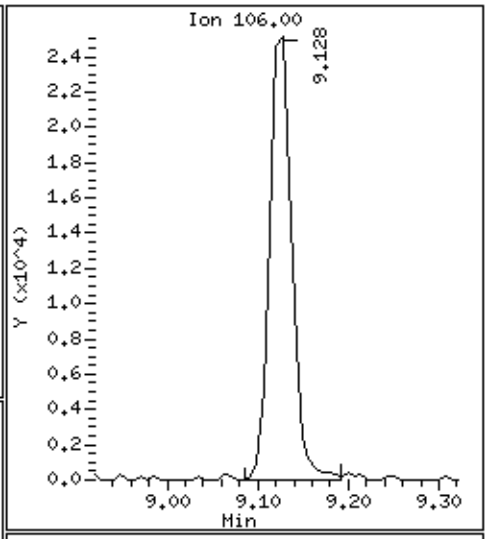
Column phase: RTX-624

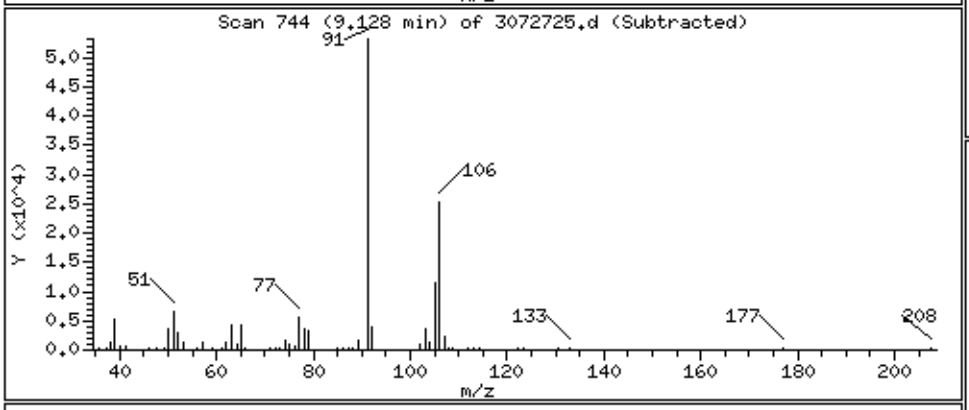
Column diameter: 0.25

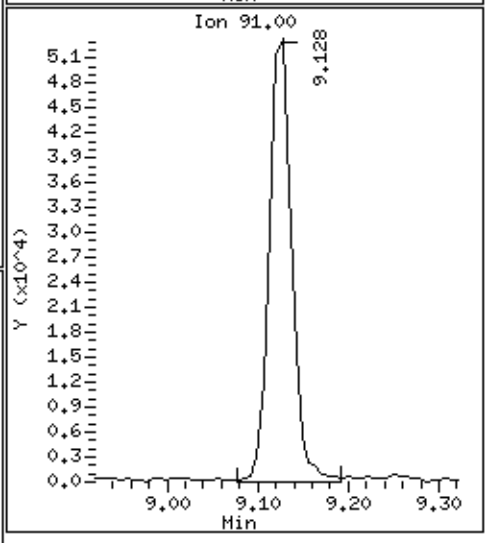
164 o-Xylene

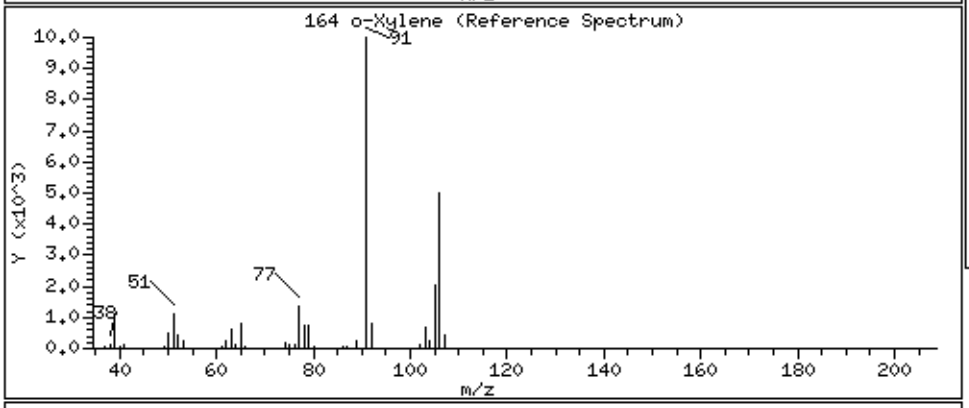
Concentration: 7.670 PPBV

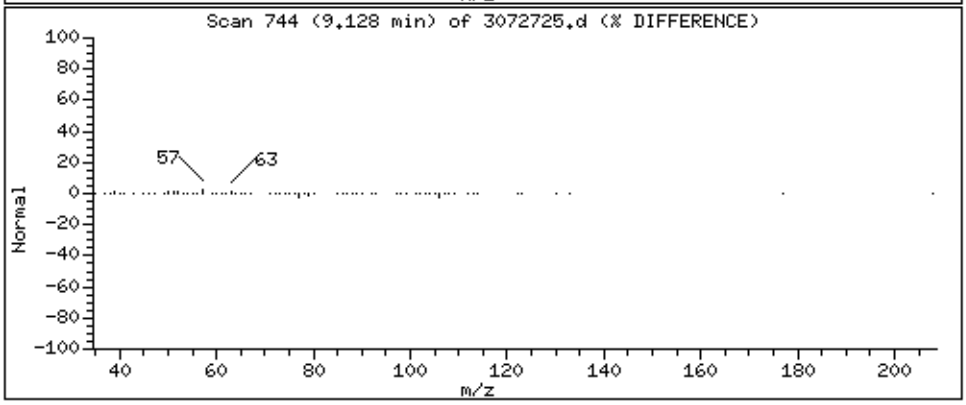












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

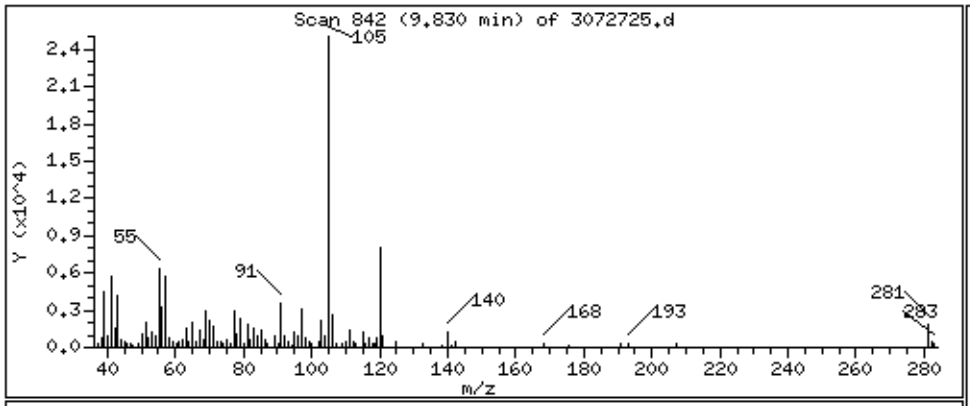
Operator: kk

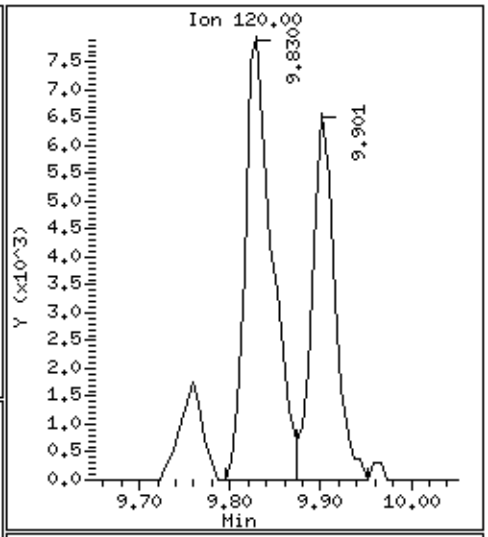
Column phase: RTX-624

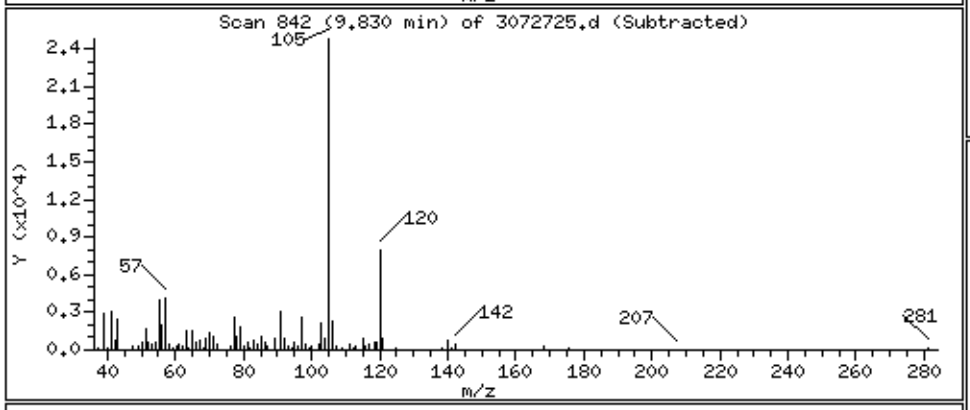
Column diameter: 0.25

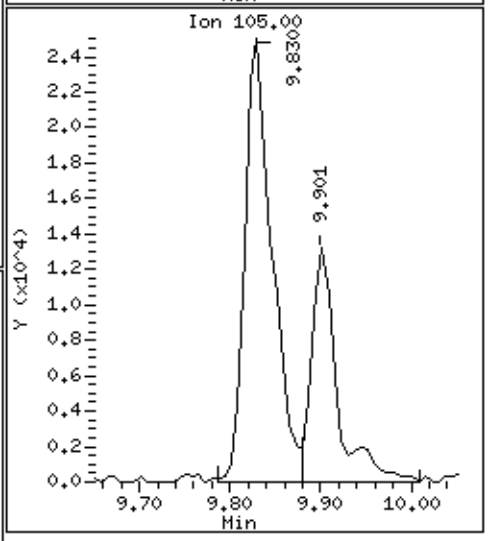
183 4-Ethyltoluene

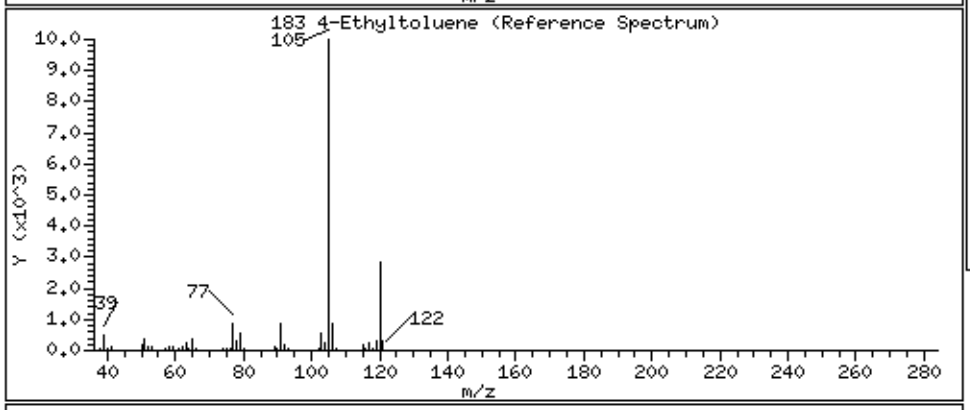
Concentration: 3.089 PPBV

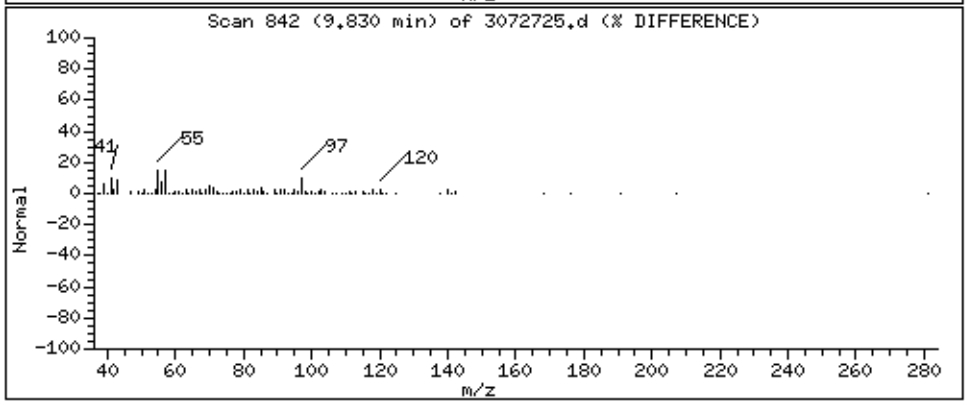












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

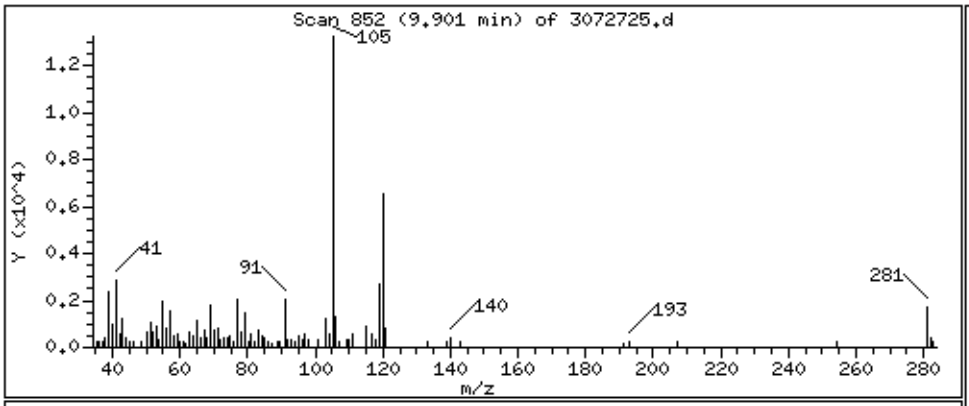
Operator: kk

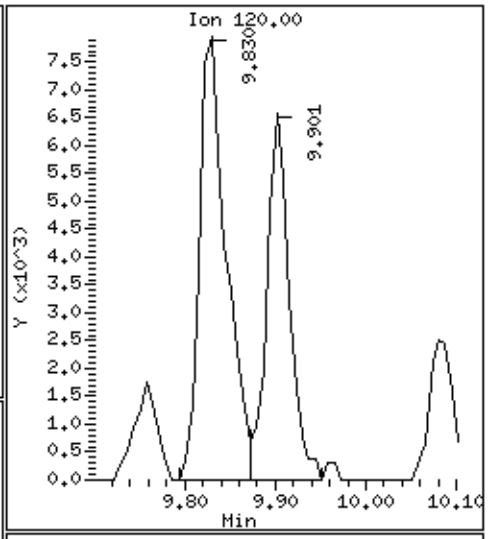
Column phase: RTX-624

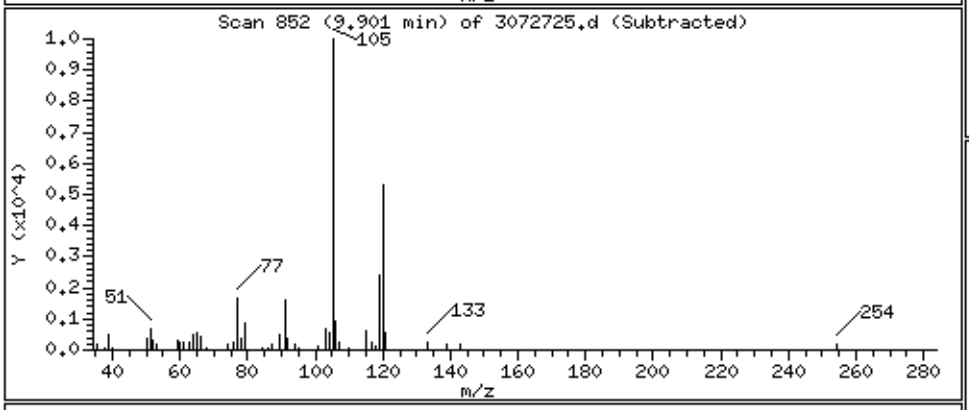
Column diameter: 0.25

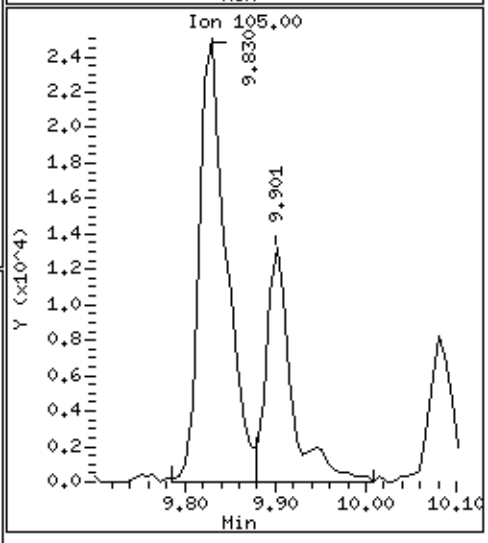
185 1,3,5-Trimethylbenzene

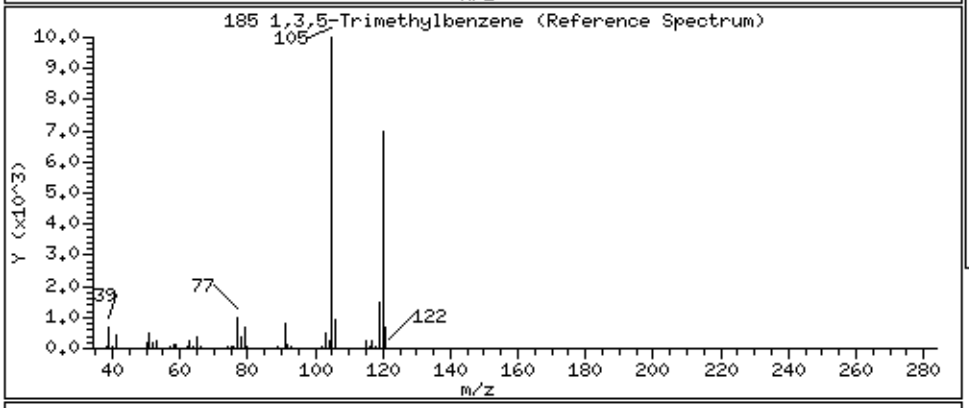
Concentration: 1.531 PPBV

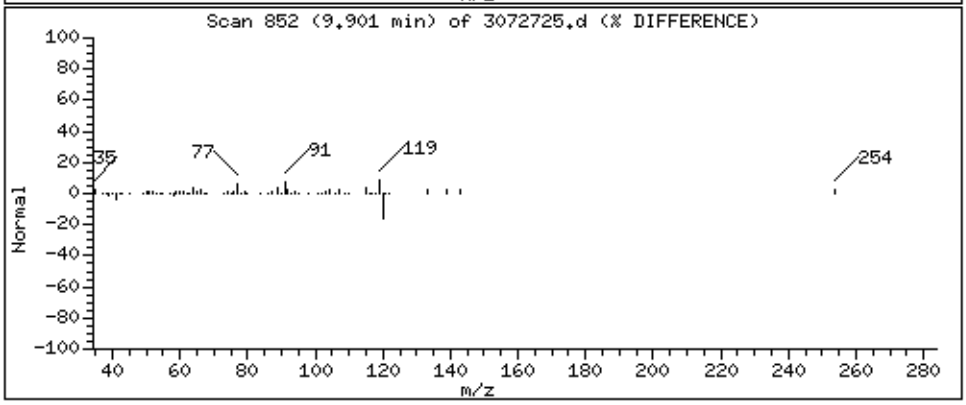












Data File: /chem/msd3.i/27JUL21.b/3072725.d

Date : 28-JUL-2021 01:43

Client ID:

Instrument: msd3.i

Sample Info: 200mL 00476

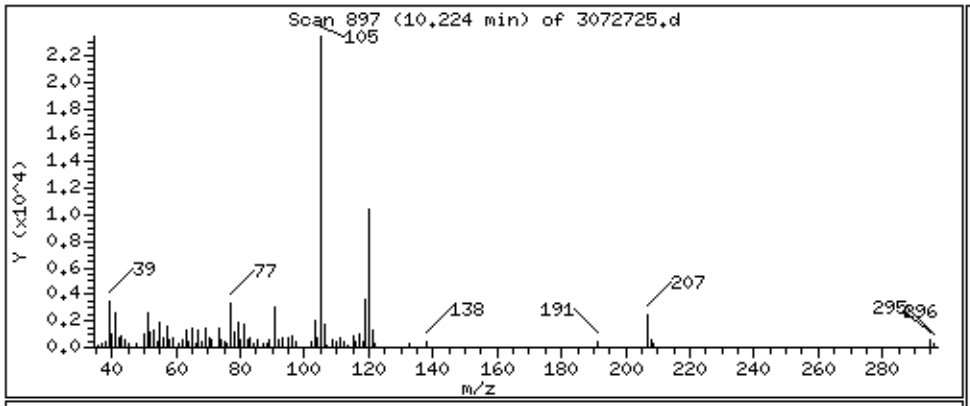
Operator: kk

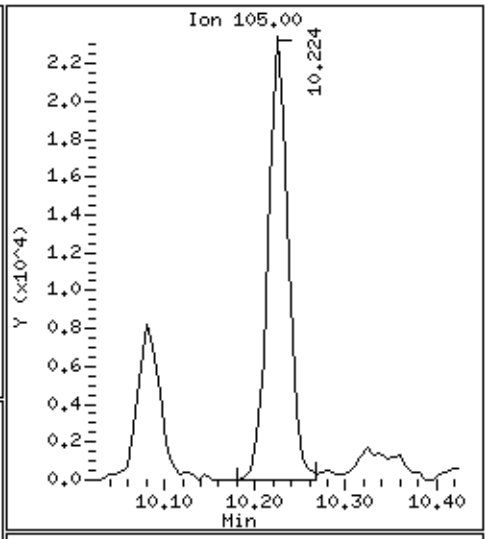
Column phase: RTX-624

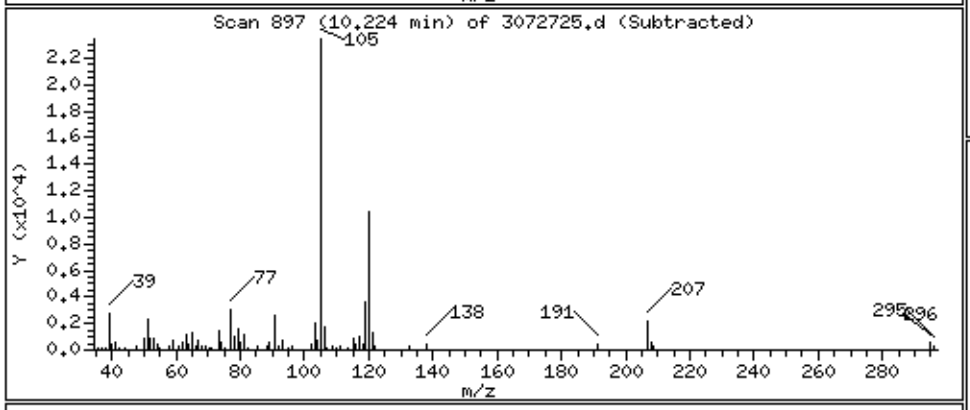
Column diameter: 0.25

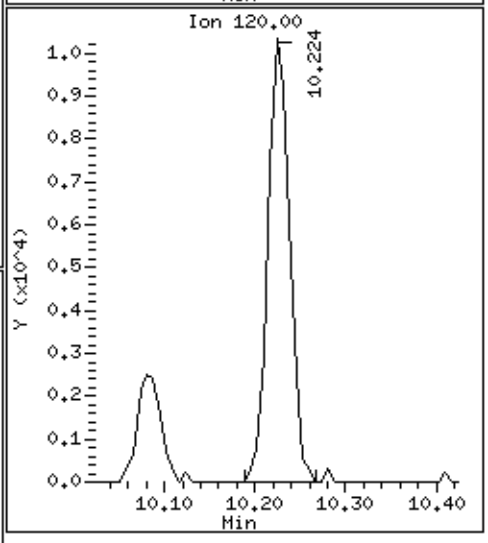
190 1,2,4-Trimethylbenzene

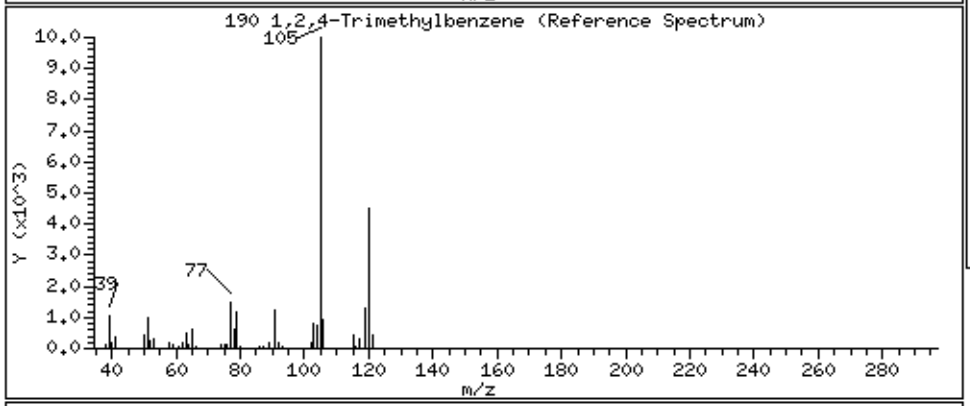
Concentration: 2.446 PPBV

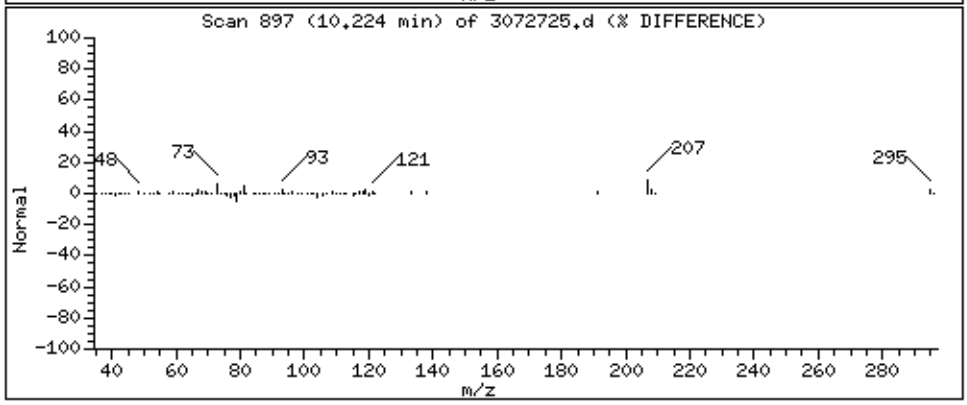












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Client Sample ID: SG-VW63B-01

Lab ID#: 2107362A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072726**	**Date of Collection:**	**7/15/21 10:22:00 AM**
Dil. Factor:	**2.09**	**Date of Analysis:**	**7/28/21 02:12 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	1.0	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	4.1	Not Detected
1,1-Difluoroethane	4.2	34	11	92
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	6.3	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	5.1	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	9.7	10	24
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	16	25	39
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	3.3	Not Detected
Bromodichloromethane	1.0	1.5	7.0	9.8
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	6.6	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Chloroform	1.0	26	5.1	130
Chloromethane	10	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected

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Client Sample ID: SG-VW63B-01

Lab ID#: 2107362A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072726**	**Date of Collection:**	**7/15/21 10:22:00 AM**
Dil. Factor:	**2.09**	**Date of Analysis:**	**7/28/21 02:12 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	8.9	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	4.5	Not Detected
Ethyl-tert-butyl ether	4.2	Not Detected	17	Not Detected
Freon 11	1.0	Not Detected	5.9	Not Detected
Freon 12	1.0	3.6	5.2	18
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	61	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	14	7.1	96
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	140	430	570
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	2.7	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW63B-01

Lab ID#: 2107362A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072726**	**Date of Collection:**	**7/15/21 10:22:00 AM**
Dil. Factor:	**2.09**	**Date of Analysis:**	**7/28/21 02:12 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	104	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072726.d
Lab Smp Id: 2107362A-07A
Inj Date : 28-JUL-2021 02:12
Operator : kk Inst ID: msd3.i
Smp Info : 200mL N6064
Misc Info : 5.9 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 6
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	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	303209	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	232820				48.46- 108.46	76.79
5.284	5.270 (1.000)	49	420279				120.39- 180.39	138.61
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.180 (1.000)	114	945815	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	139623				0.00- 45.52	14.76
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	833699	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	436088				25.46- 85.46	52.31
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	382752	22.9386	22.939		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	181756				21.66- 81.66	47.49
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	912578	23.4256	23.426		80.00- 120.00	100.00
7.387	7.387 (1.198)	70	103241				0.00- 41.47	11.31

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	601682			36.47- 96.47	65.93
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	571931	25.9359	25.936	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	641789			93.06- 153.06	112.21
9.601	9.601 (1.115)	176	523978			62.87- 122.87	91.62
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.465	1.437 (0.277)	65	77677	16.2704	34.005	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	362797			321.86- 381.86	467.06
1.465	1.451 (0.277)	47	44171			45.34- 105.34	56.87
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	36381	1.72243	3.600	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	11965			2.63- 62.63	32.89
47 Acetone					CAS #: 67-64-1		
3.228	3.214 (0.611)	58	40021	7.87169	16.452	80.00- 120.00	100.00
3.228	3.214 (0.611)	43	141110			299.66- 359.66	352.59
52 2-Propanol					CAS #: 67-63-0		
3.423	3.409 (0.648)	45	85269	4.66344	9.746	80.00- 120.00	100.00
3.423	3.395 (0.648)	43	22450			0.00- 48.61	26.33
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	238317	12.5361	26.200	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	155516			34.71- 94.71	65.26
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	12750	0.70288	1.469	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	8030			34.31- 94.31	62.98
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.915)	166	88509	6.77667	14.163	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	67539			48.71- 108.71	76.31
7.881	7.874 (0.915)	131	66777			46.55- 106.55	75.45

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072726.d
Lab Smp Id: 2107362A-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.9 Hg->10 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	303209	26.87
108 1,4-Difluorobenze	785289	471173	1099405	945815	20.44
153 Chlorobenzene-d5	683596	410158	957034	833699	21.96

		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	8.61	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: 29-Jul-2021 11:05

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RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.9 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	22.939	91.75	70-130
$ 134 Toluene-d8	25.000	23.426	93.70	70-130
$ 170 4-Bromofluorobenz	25.000	25.936	103.74	70-130

Data File: /chem/msd3.i/27JUL21.b/3072726.d

Date : 28-JUL-2021 02:12

Client ID:

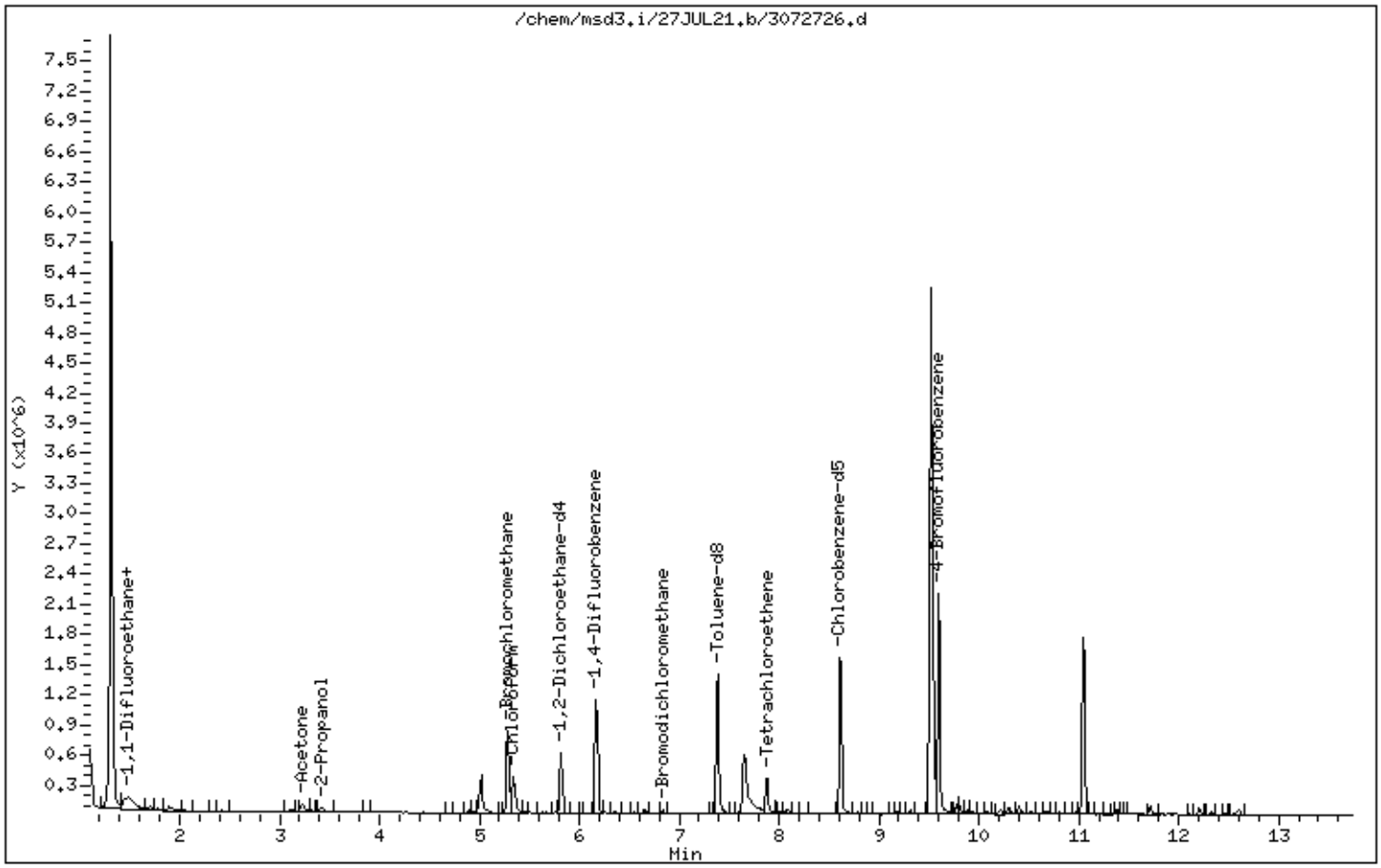
Instrument: msd3.i

Sample Info: 200mL N6064

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072726.d

Date : 28-JUL-2021 02:12

Client ID:

Instrument: msd3.i

Sample Info: 200mL N6064

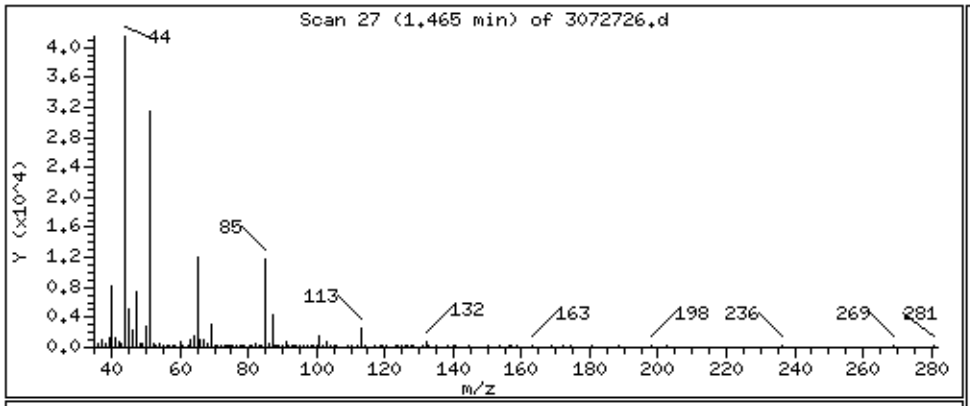
Operator: kk

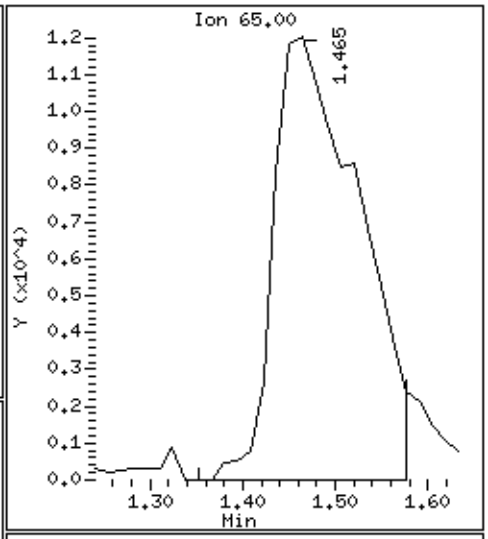
Column phase: RTX-624

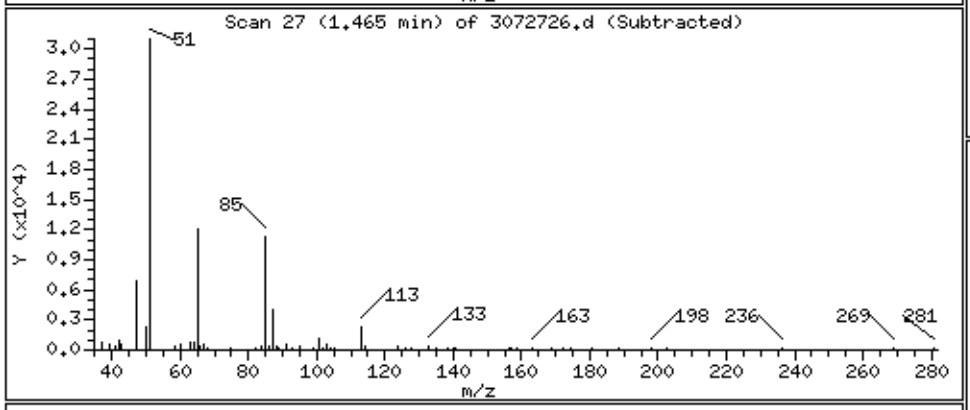
Column diameter: 0.25

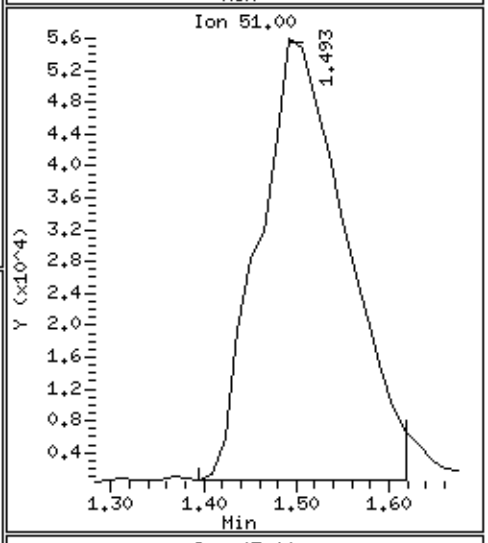
7 1,1-Difluoroethane

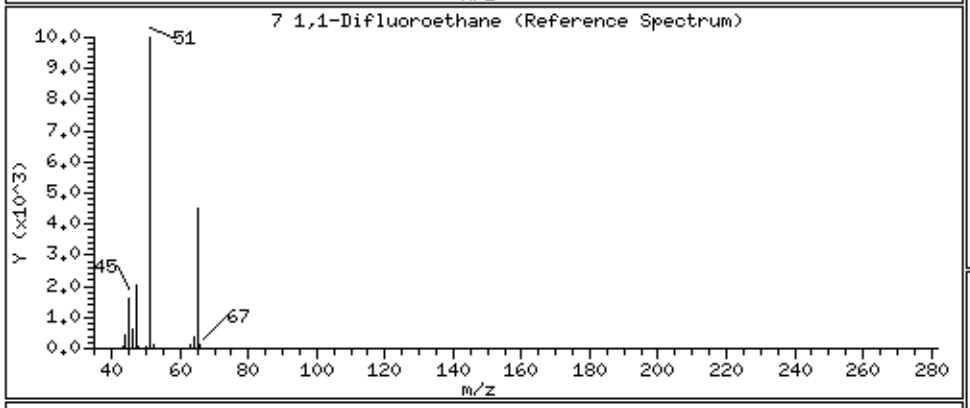
Concentration: 34.005 PPBV

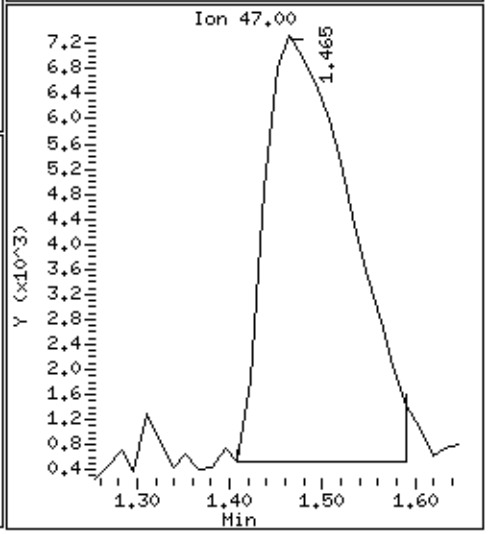


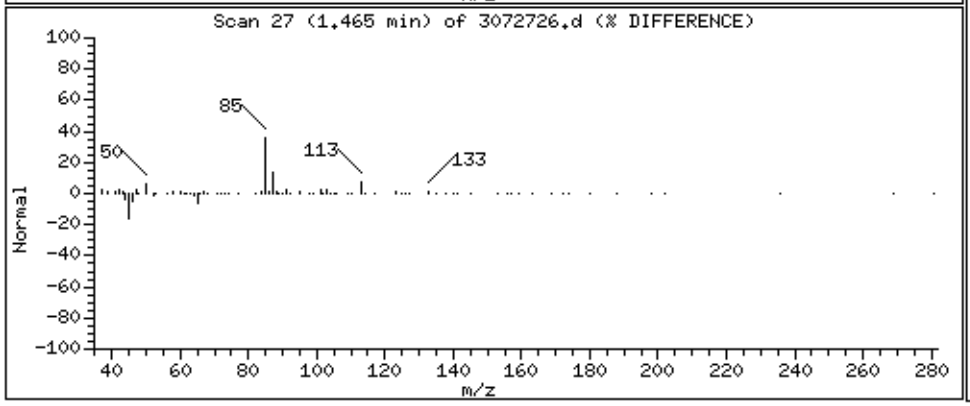












Data File: /chem/msd3.i/27JUL21.b/3072726.d

Date : 28-JUL-2021 02:12

Client ID:

Instrument: msd3.i

Sample Info: 200mL N6064

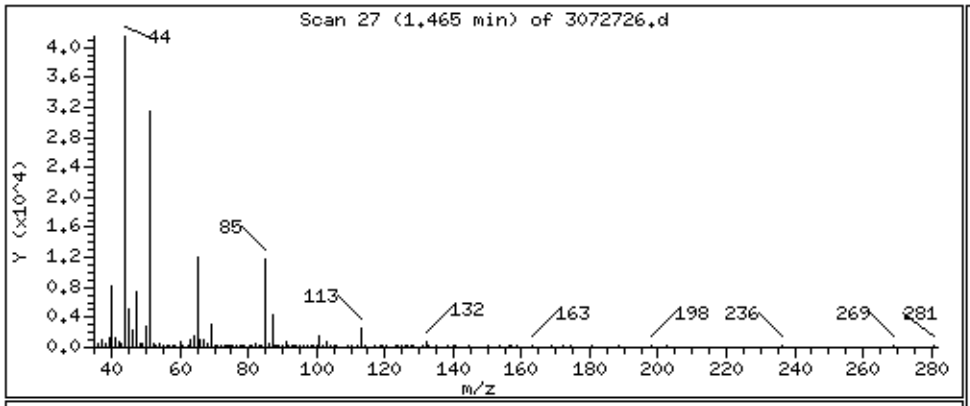
Operator: kk

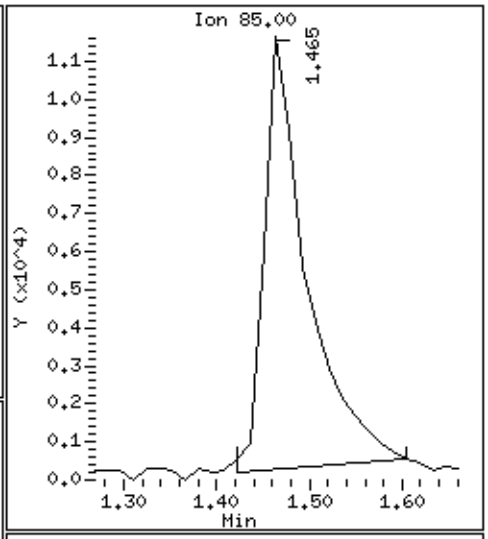
Column phase: RTX-624

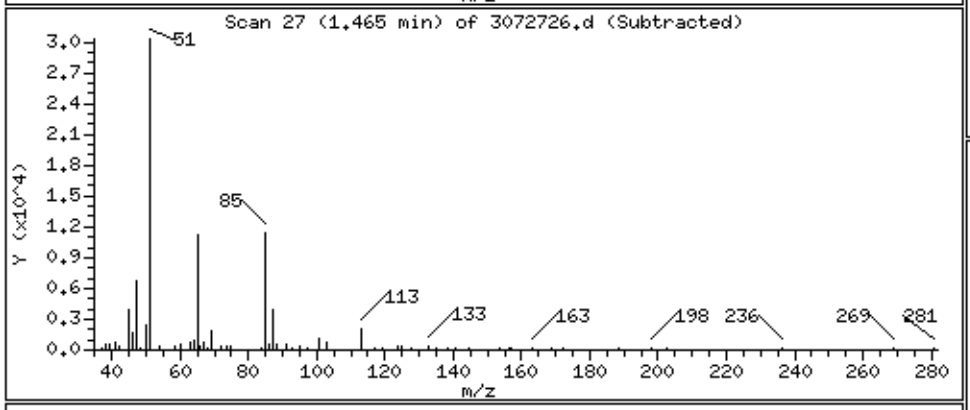
Column diameter: 0.25

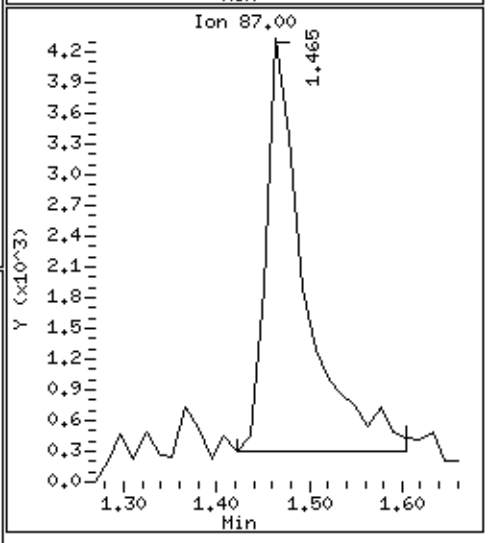
8 Freon 12

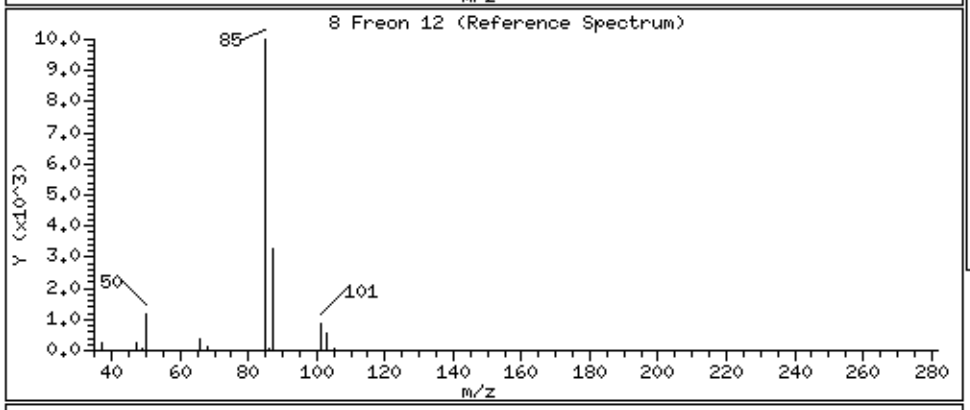
Concentration: 3.600 PPBV

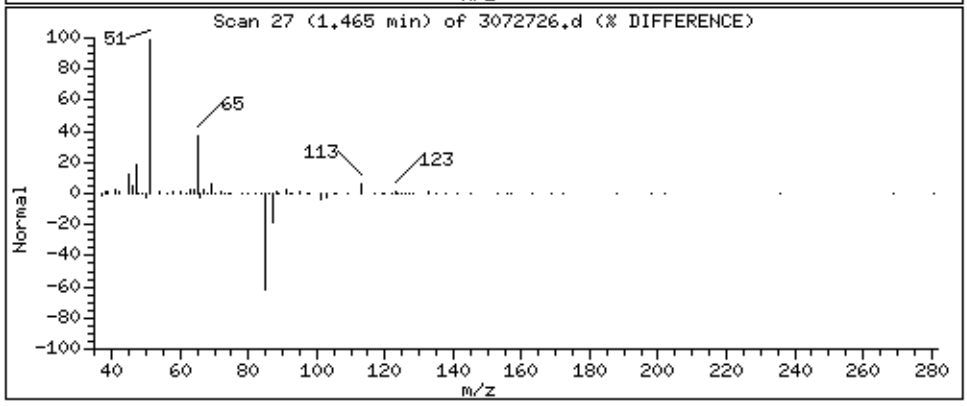












Data File: /chem/msd3.i/27JUL21.b/3072726.d

Date : 28-JUL-2021 02:12

Client ID:

Instrument: msd3.i

Sample Info: 200mL N6064

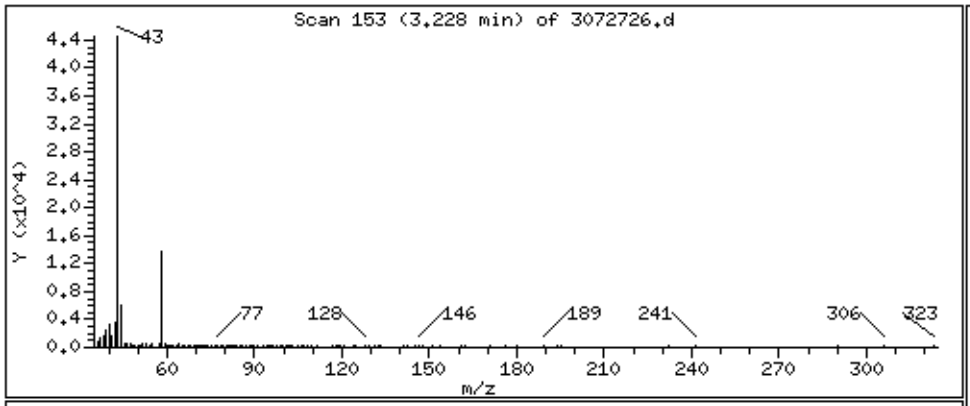
Operator: kk

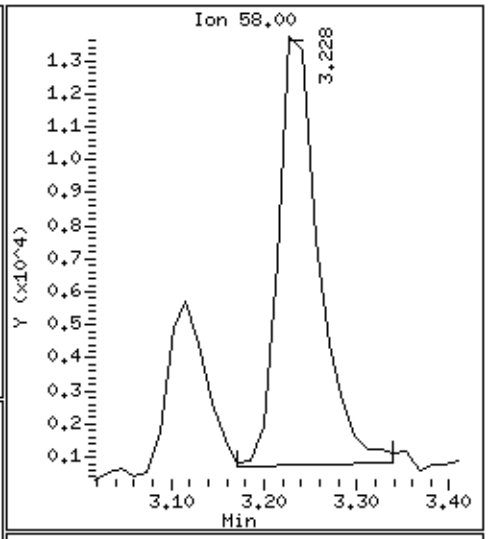
Column phase: RTX-624

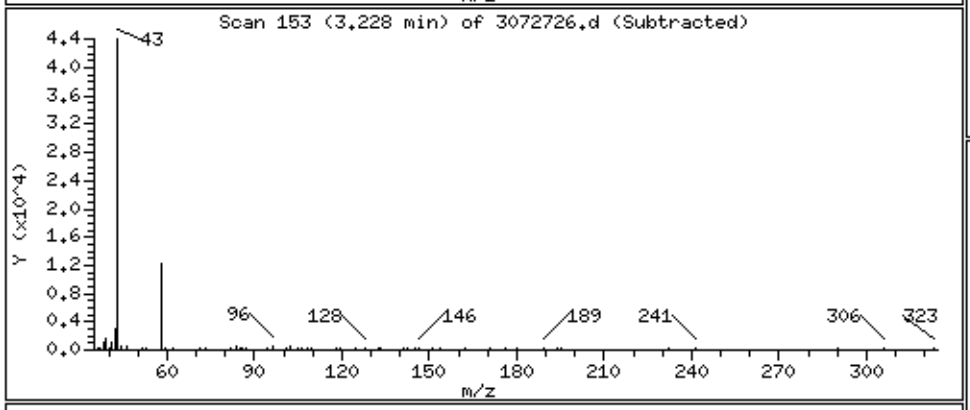
Column diameter: 0.25

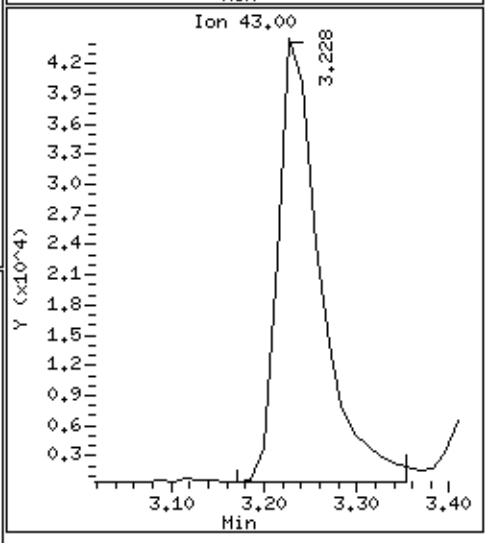
47 Acetone

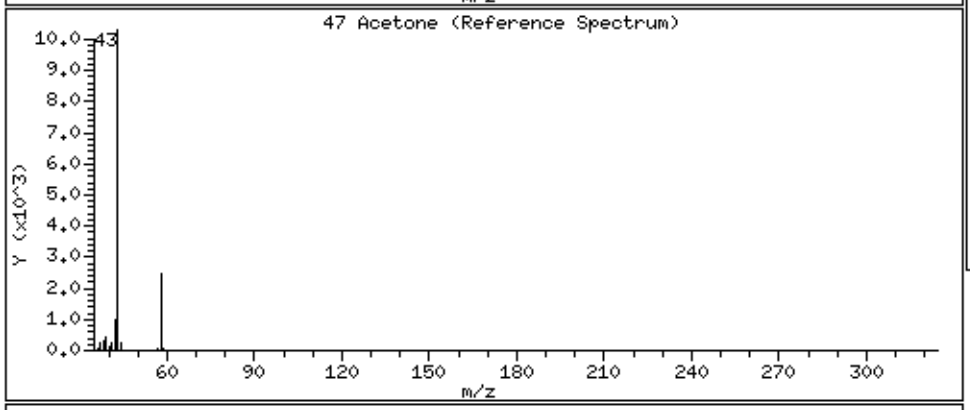
Concentration: 16.452 PPBV

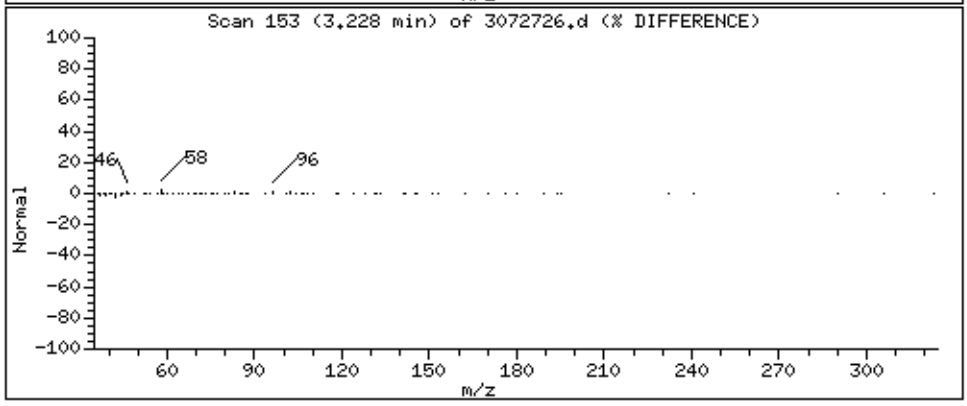












Data File: /chem/msd3.i/27JUL21.b/3072726.d

Date : 28-JUL-2021 02:12

Client ID:

Instrument: msd3.i

Sample Info: 200mL N6064

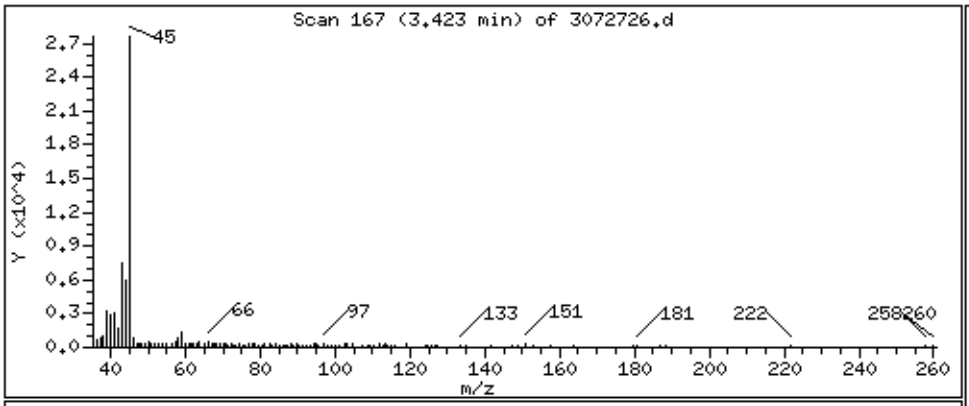
Operator: kk

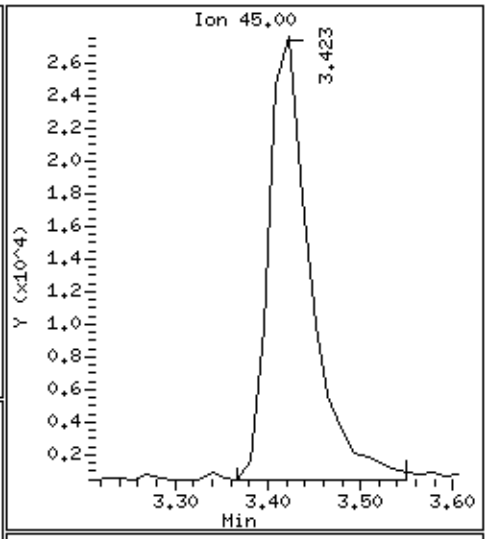
Column phase: RTX-624

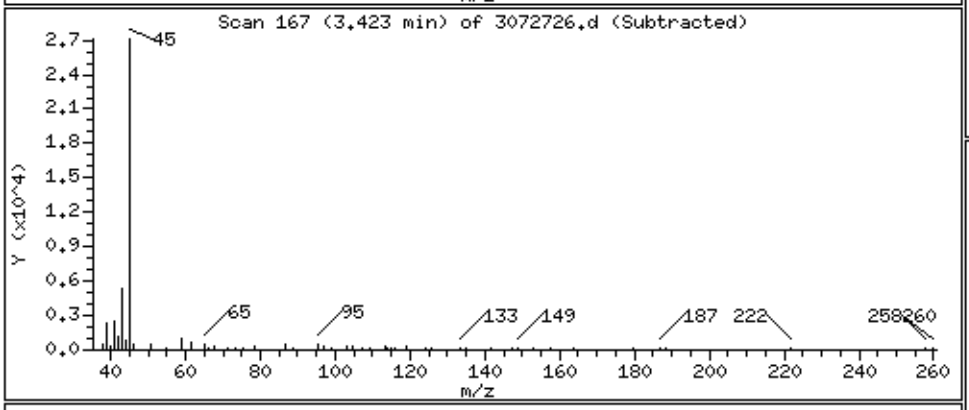
Column diameter: 0.25

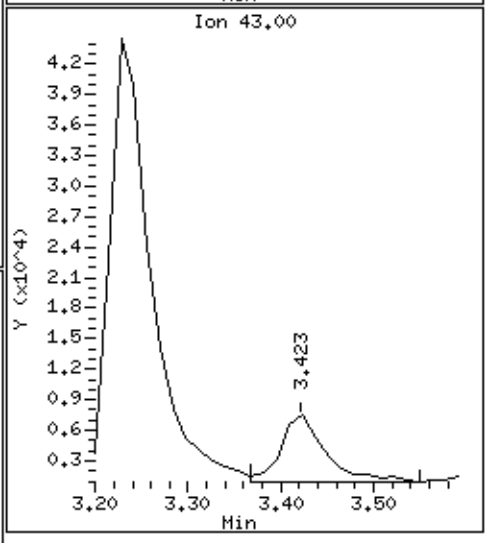
52 2-Propanol

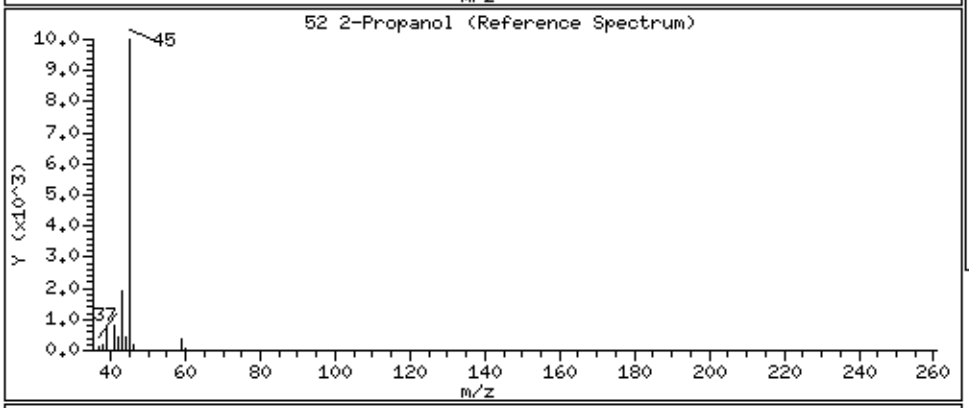
Concentration: 9.746 PPBV

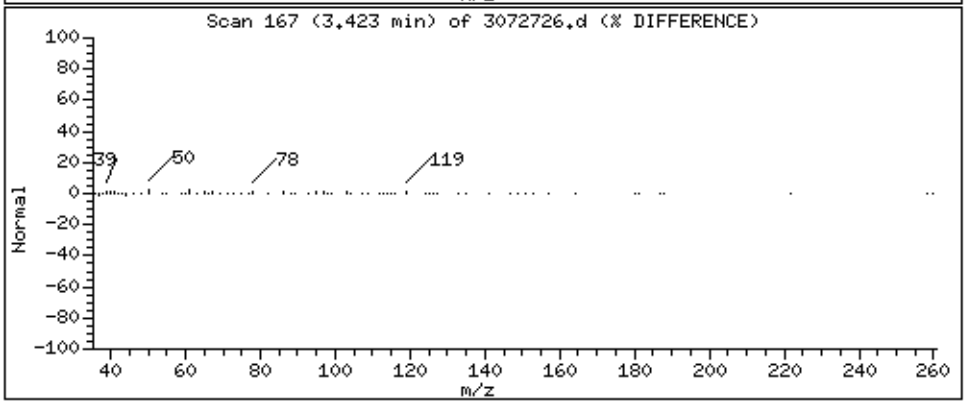












Data File: /chem/msd3.i/27JUL21.b/3072726.d

Date : 28-JUL-2021 02:12

Client ID:

Instrument: msd3.i

Sample Info: 200mL N6064

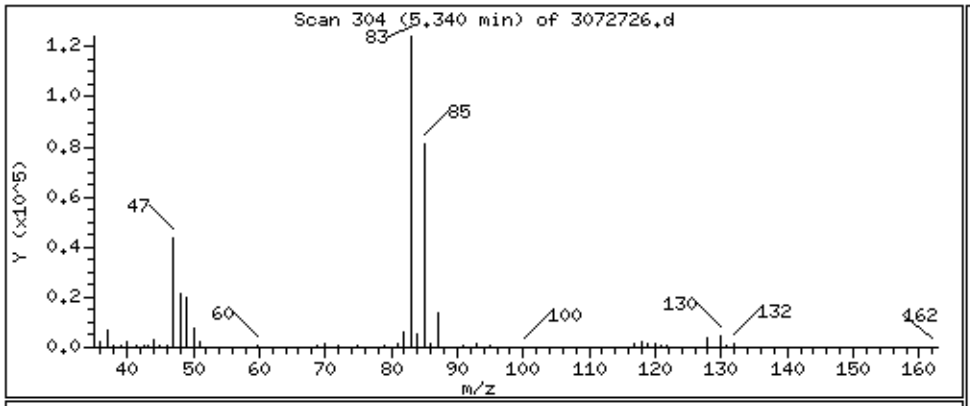
Operator: kk

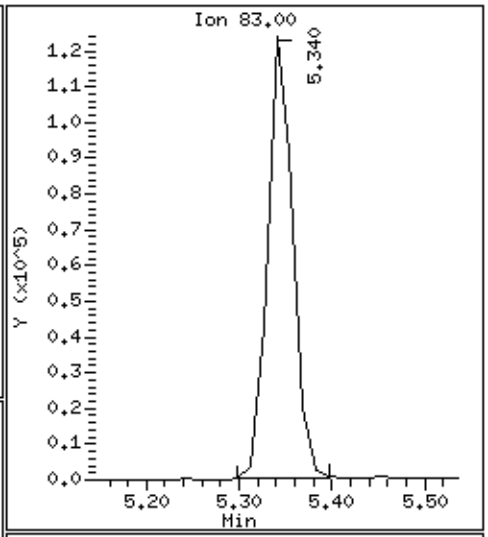
Column phase: RTX-624

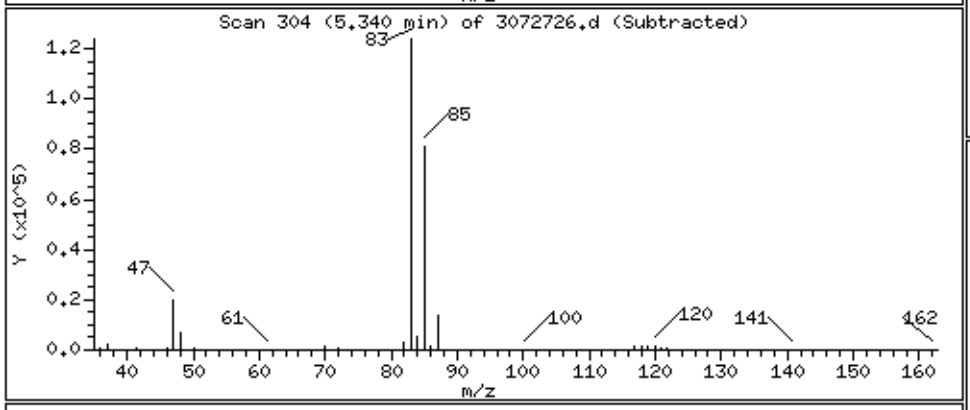
Column diameter: 0.25

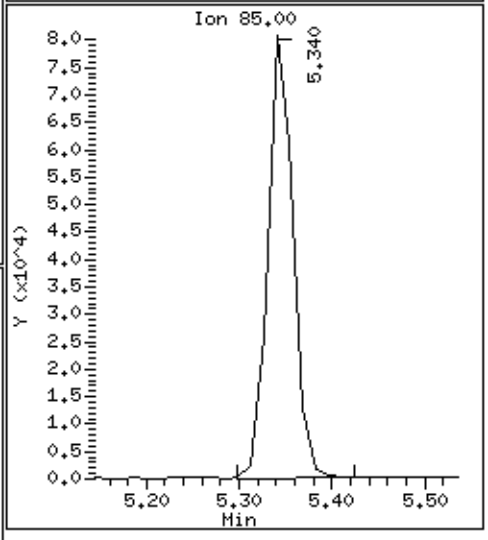
92 Chloroform

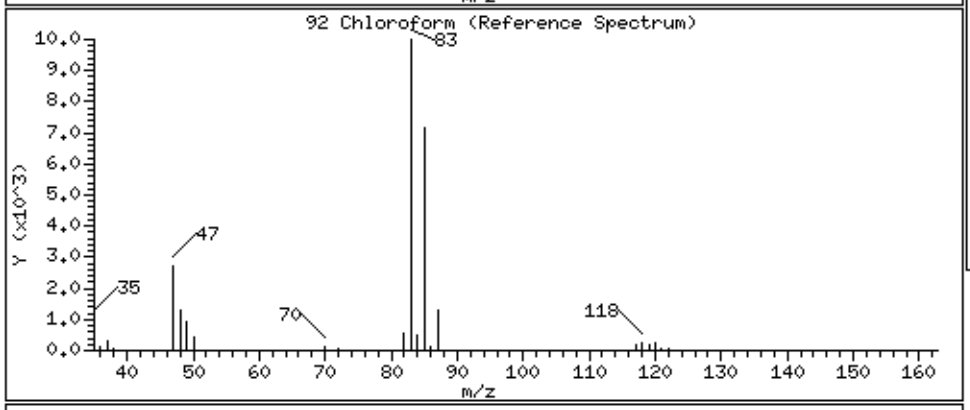
Concentration: 26.200 PPBV

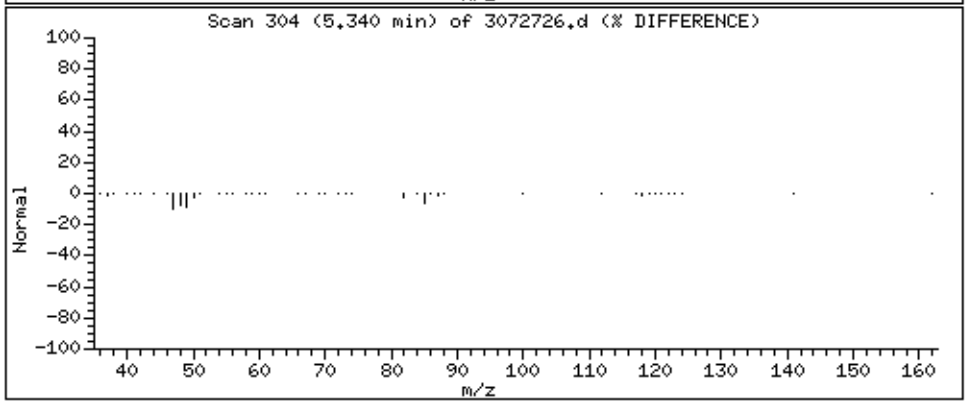












Data File: /chem/msd3.i/27JUL21.b/3072726.d

Page 7

Date : 28-JUL-2021 02:12

Client ID:

Instrument: msd3.i

Sample Info: 200mL N6064

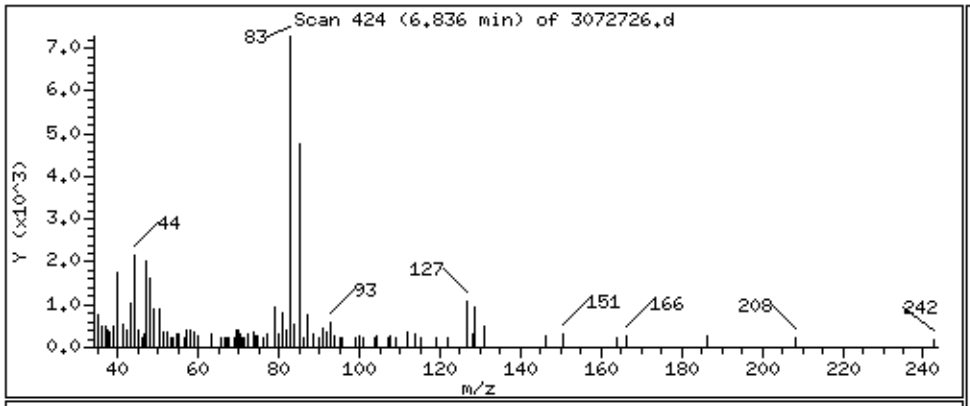
Operator: kk

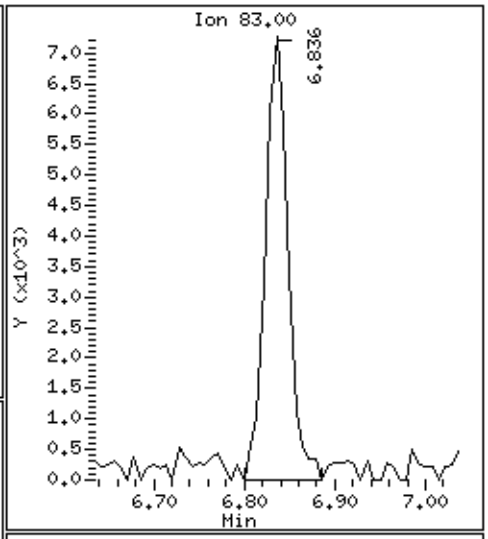
Column phase: RTX-624

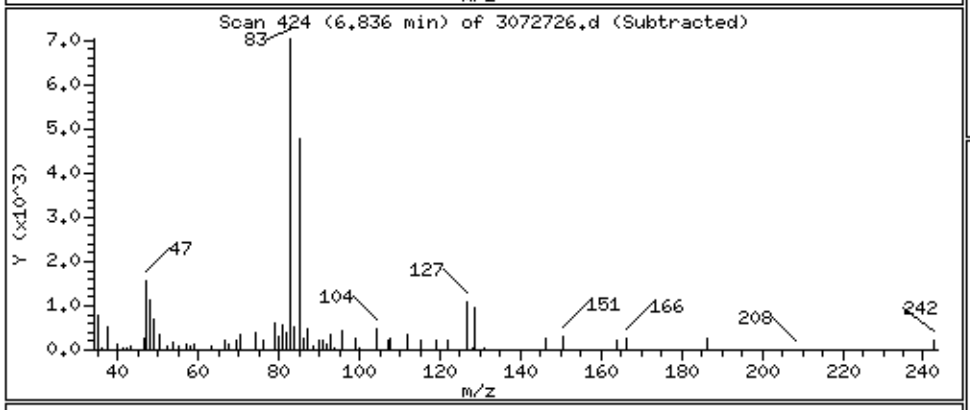
Column diameter: 0.25

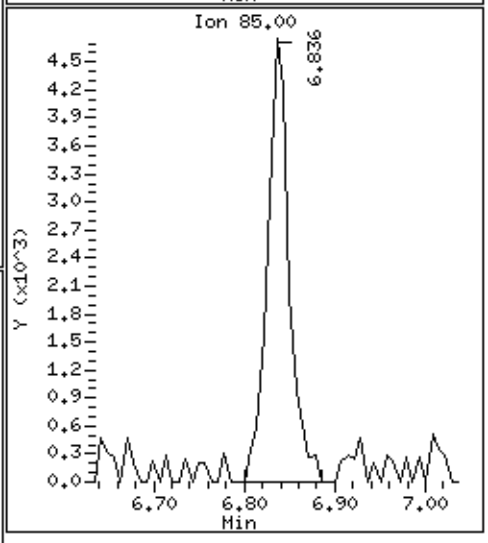
122 Bromodichloromethane

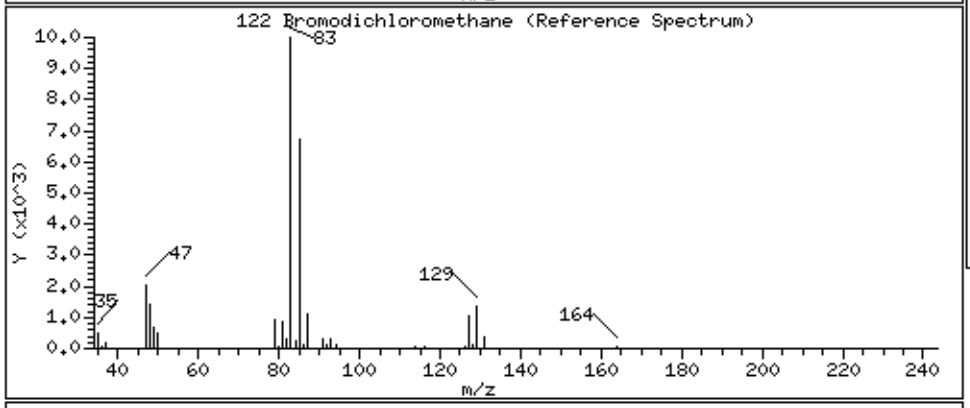
Concentration: 1.469 PPBV

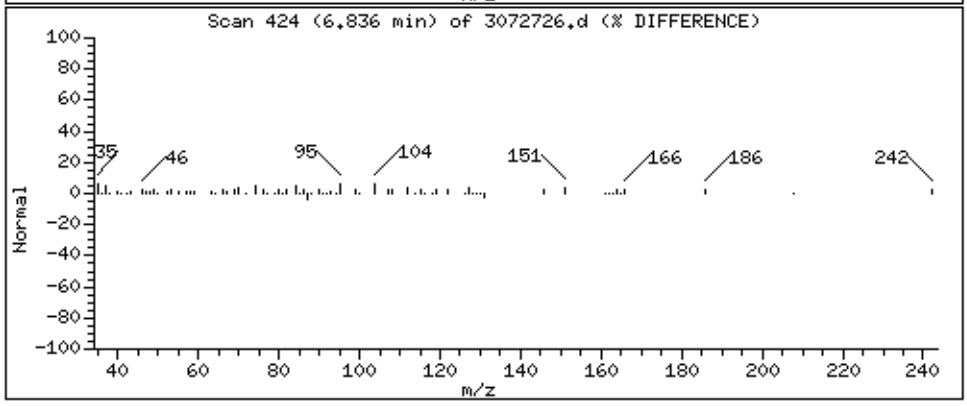












Data File: /chem/msd3.i/27JUL21.b/3072726.d

Date : 28-JUL-2021 02:12

Client ID:

Instrument: msd3.i

Sample Info: 200mL N6064

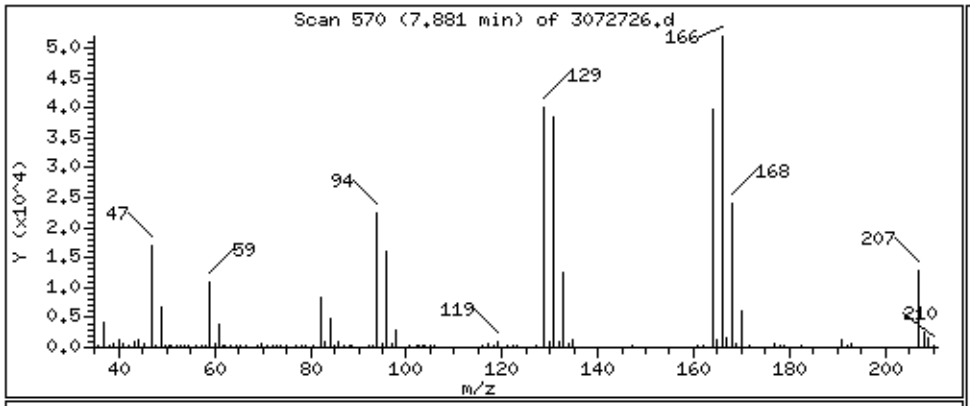
Operator: kk

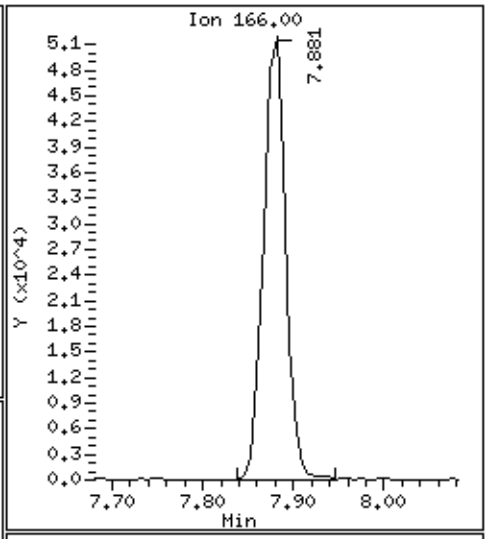
Column phase: RTX-624

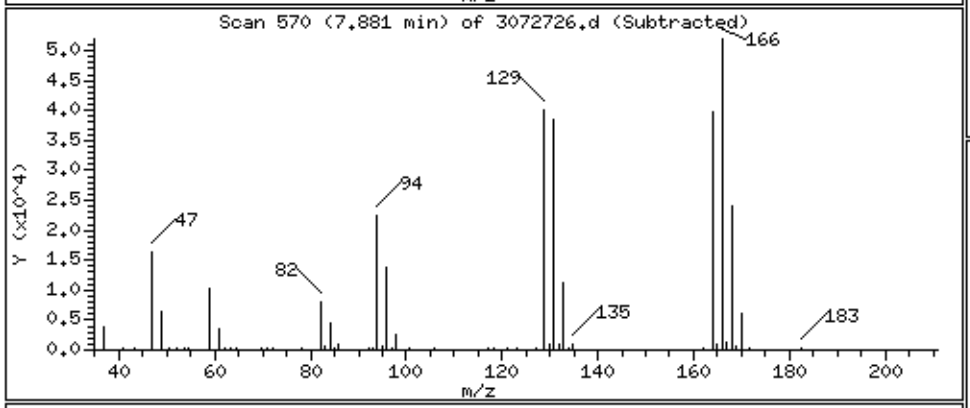
Column diameter: 0.25

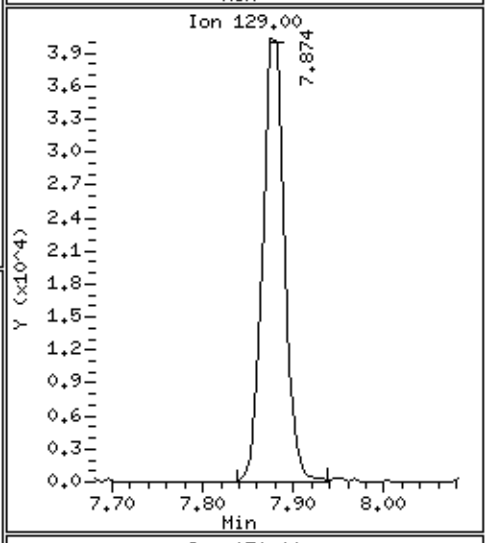
142 Tetrachloroethene

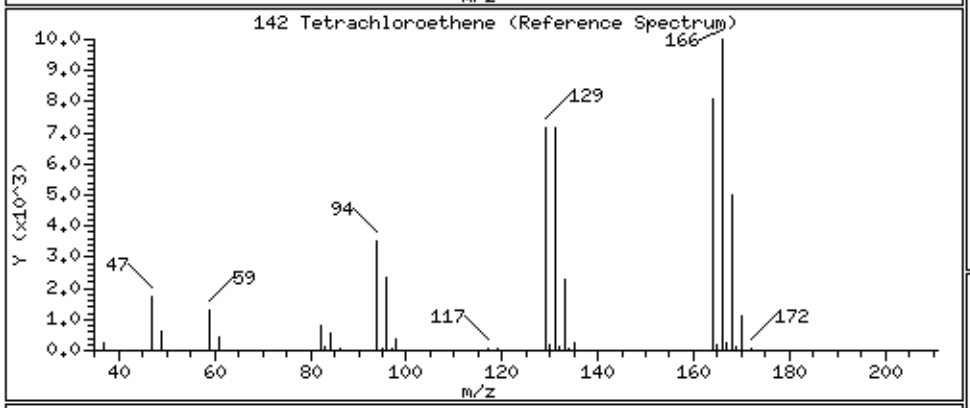
Concentration: 14.163 PPBV

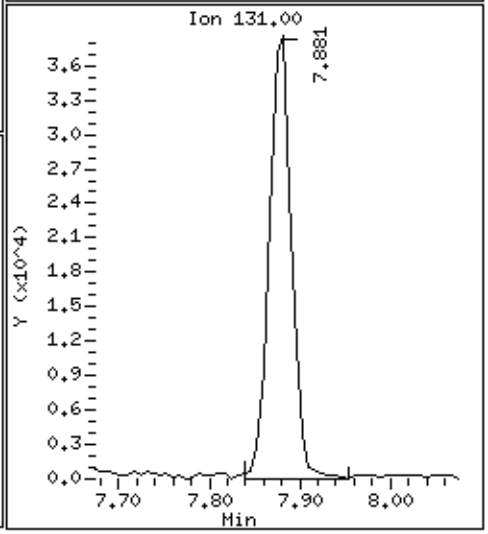


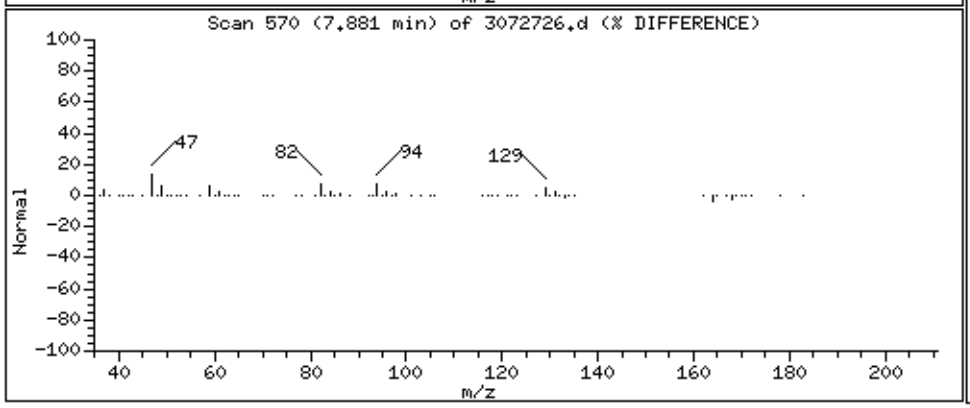












eurofins | Air Toxics

Client Sample ID: SG-VW64A-01

Lab ID#: 2107362A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072727**	**Date of Collection:**	**7/15/21 11:09:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 02:42 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	1.0	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	110	11	310
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	1.6	5.2	8.1
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	1.1	5.2	5.6
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	9.6	4.9	45
2-Butanone (Methyl Ethyl Ketone)	4.2	6.0	12	18
2-Hexanone	4.2	Not Detected	17	Not Detected
2-Propanol	4.2	14	10	35
3-Chloropropene	4.2	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	2.6	5.2	13
4-Methyl-2-pentanone	1.0	2.1	4.3	8.5
Acetone	10	49	25	120
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	3.6	3.4	11
Bromodichloromethane	1.0	1.1	7.0	7.2
Bromoform	1.0	Not Detected	11	Not Detected
Bromomethane	10	Not Detected	41	Not Detected
Carbon Disulfide	4.2	9.3	13	29
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	42	5.1	210
Chloromethane	10	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected

eurofins | Air Toxics

Client Sample ID: SG-VW64A-01

Lab ID#: 2107362A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072727**	**Date of Collection:**	**7/15/21 11:09:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 02:42 AM**

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	6.4	4.6	28
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	2.7	5.2	13
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	2.3	4.3	9.5
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected
Hexachloroethane	4.2	Not Detected	41	Not Detected
Hexane	1.0	21	3.7	75
Iodomethane	10	Not Detected	61	Not Detected
Isopropyl ether	4.2	Not Detected	18	Not Detected
m,p-Xylene	1.0	16	4.6	71
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	5.5	4.6	24
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	45	7.1	310
Tetrahydrofuran	1.0	1.5	3.1	4.4
Toluene	1.0	27	4.0	100
TPH ref. to Gasoline (MW=100)	100	360	430	1500
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

eurofins | Air Toxics

Client Sample ID: SG-VW64A-01

Lab ID#: 2107362A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072727**	**Date of Collection:**	**7/15/21 11:09:00 AM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**7/28/21 02:42 AM**

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072727.d
Lab Smp Id: 2107362A-08A
Inj Date : 28-JUL-2021 02:42
Operator : kk Inst ID: msd3.i
Smp Info : 200mL S1437
Misc Info : 6.3 Hg->9.7 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 7
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	248008	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	195103				48.46- 108.46	78.67
5.270	5.270 (1.000)	49	337588				120.39- 180.39	136.12
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.180 (1.000)	114	816510	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	122338				0.00- 45.52	14.98
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	729190	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	384205				25.46- 85.46	52.69
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	327023	23.9610	23.961		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	161014				21.66- 81.66	49.24
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.198)	98	809153	24.0600	24.060		80.00- 120.00	100.00
7.387	7.387 (1.198)	70	90427				0.00- 41.47	11.18

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	528590			36.47- 96.47	65.33
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.600	9.601 (1.114)	174	473562	24.5529	24.553	80.00- 120.00	100.00
9.600	9.601 (1.114)	95	531416			93.06- 153.06	112.22
9.600	9.601 (1.114)	176	437532			62.87- 122.87	92.39
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	213433	54.6566	114.78	80.00- 120.00	100.00
1.478	1.479 (0.280)	51	391397			321.86- 381.86	183.38
1.437	1.451 (0.272)	47	114931			45.34- 105.34	53.85
8 Freon 12					CAS #: 75-71-8		
1.450	1.465 (0.274)	85	22243	1.28747	2.704	80.00- 120.00	100.00
1.450	1.465 (0.274)	87	7687			2.63- 62.63	34.56
47 Acetone					CAS #: 67-64-1		
3.241	3.214 (0.613)	58	96948	23.3129	48.957	80.00- 120.00	100.00
3.241	3.214 (0.613)	43	326531			299.66- 359.66	336.81
48 Carbon Disulfide					CAS #: 75-15-0		
3.283	3.298 (0.621)	76	83160	4.44080	9.326	80.00- 120.00	100.00
52 2-Propanol					CAS #: 67-63-0		
3.451	3.409 (0.653)	45	100852	6.74336	14.161	80.00- 120.00	100.00
3.451	3.395 (0.653)	43	20219			0.00- 48.61	20.05
67 Hexane					CAS #: 110-54-3		
4.165	4.179 (0.788)	57	139612	10.1655	21.348	80.00- 120.00	100.00
4.165	4.179 (0.788)	43	87025			32.99- 92.99	62.33
4.165	4.179 (0.788)	86	18422			0.00- 42.56	13.20
86 2-Butanone					CAS #: 78-93-3		
5.088	5.074 (0.963)	72	9977	2.84479	5.974	80.00- 120.00	100.00
5.074	5.074 (0.960)	43	54301			1055.75-1115.75	544.24
5.074	5.074 (0.960)	57	4326			10.59- 70.59	43.37
89 Tetrahydrofuran					CAS #: 109-99-9		
5.284	5.270 (1.000)	42	7028	0.71064	1.492	80.00- 120.00	100.00
5.284	5.270 (1.000)	71	3010			2.92- 62.92	42.84
5.284	5.270 (1.000)	72	2778			3.54- 63.54	39.53
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	314516	20.2268	42.476	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	212283			34.71- 94.71	67.50

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.760	5.774 (1.090)	57	195450	4.55077	9.557	80.00- 120.00	100.00
5.760	5.774 (1.090)	56	72487			1.12- 61.12	37.09
5.760	5.774 (1.090)	41	66996			0.00- 57.49	34.28
102 Benzene					CAS #: 71-43-2		
5.788	5.788 (0.939)	78	31833	1.70846	3.588	80.00- 120.00	100.00
5.788	5.788 (0.939)	77	7544			0.00- 53.80	23.70
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.964)	71	8137	1.10874	2.328	80.00- 120.00	100.00
5.942	5.942 (0.964)	43	13003			179.02- 239.02	159.79
5.942	5.942 (0.964)	57	7543			84.85- 144.85	92.70
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.109)	83	8061	0.51476	1.081	80.00- 120.00	100.00
6.836	6.836 (1.109)	85	5801			34.31- 94.31	71.96
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.323	7.316 (1.188)	58	7862	0.99342	2.086	80.00- 120.00	100.00
7.315	7.316 (1.186)	43	20236			231.30- 291.30	257.37
7.323	7.316 (1.188)	85	3647			8.94- 68.94	46.39
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.206)	91	327377	13.0945	27.498	80.00- 120.00	100.00
7.437	7.437 (1.206)	92	185674			28.30- 88.30	56.72
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	246063	21.5399	45.234	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	188854			48.71- 108.71	76.75
7.874	7.874 (0.914)	131	182810			46.55- 106.55	74.29
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	30248	3.03525	6.374	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	88909			282.48- 342.48	293.93
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	97113	7.83297	16.449	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	196929			171.36- 231.36	202.78
164 o-Xylene					CAS #: 95-47-6		
9.128	9.121 (1.059)	106	30736	2.61142	5.484	80.00- 120.00	100.00
9.128	9.121 (1.059)	91	62787			179.99- 239.99	204.28
183 4-Ethyltoluene					CAS #: 622-96-8		
9.830	9.851 (1.140)	120	13902	1.23522	2.594	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
183 4-Ethyltoluene (continued)							
9.830	9.851 (1.140)	105	42471			296.79- 356.79	305.49
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	8559	0.54144	1.137	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	17490			176.40- 236.40	204.33
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	24561	0.78795	1.655	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	11211			16.58- 76.58	45.65

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072727.d
Lab Smp Id: 2107362A-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->9.7 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	248008	3.78
108 1,4-Difluorobenze	785289	471173	1099405	816510	3.98
153 Chlorobenzene-d5	683596	410158	957034	729190	6.67

		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	6.17	-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: 29-Jul-2021 11:10

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 6.3 Hg->9.7 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	23.961	95.84	70-130
$ 134 Toluene-d8	25.000	24.060	96.24	70-130
$ 170 4-Bromofluorobenz	25.000	24.553	98.21	70-130

Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

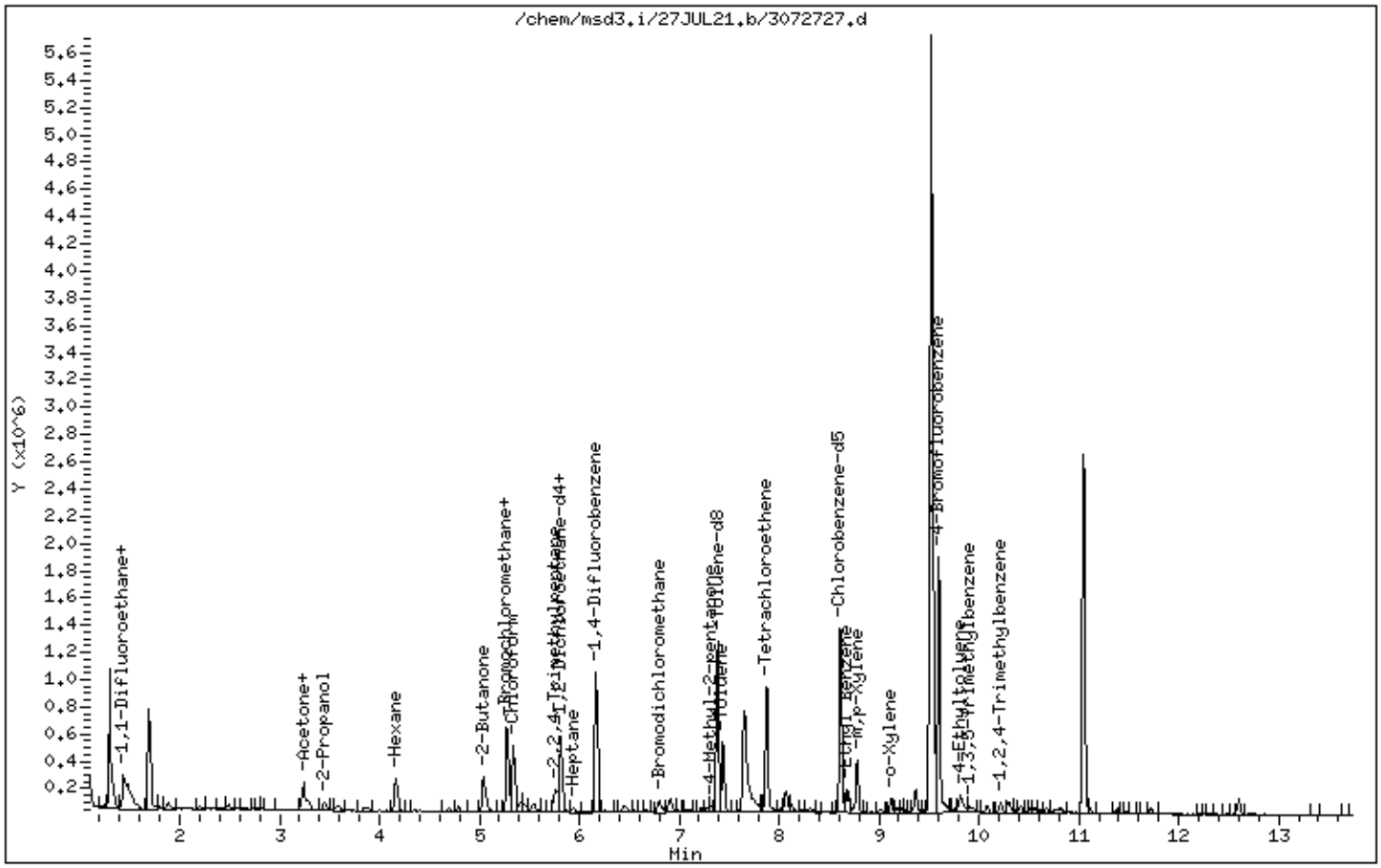
Instrument: msd3.i

Sample Info: 200mL S1437

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

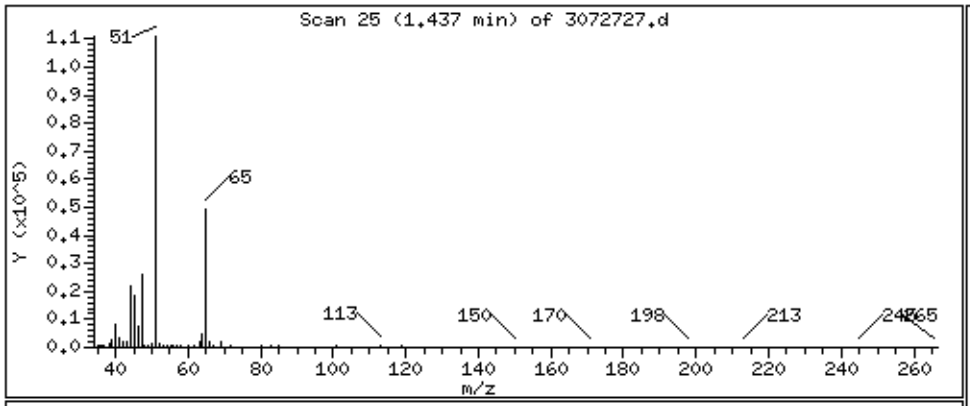
Operator: kk

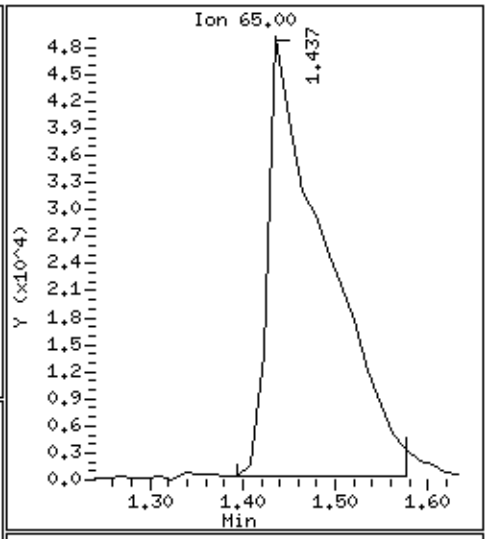
Column phase: RTX-624

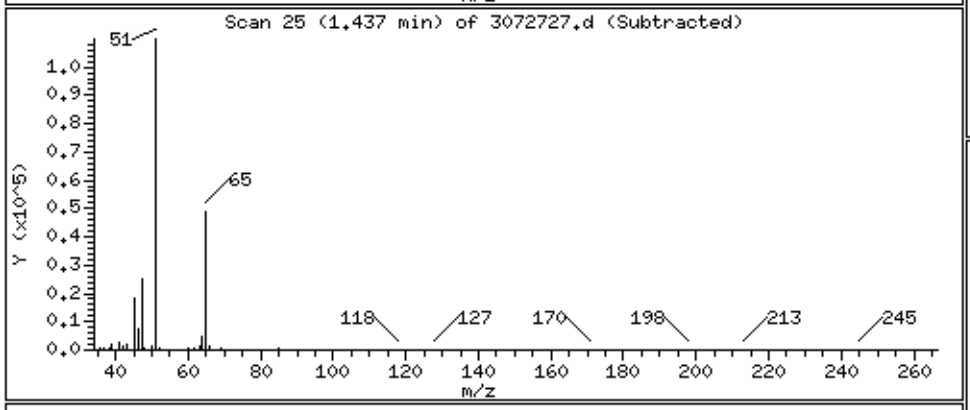
Column diameter: 0.25

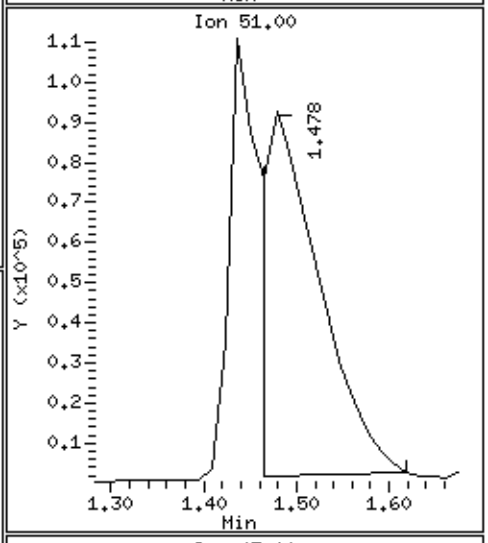
7 1,1-Difluoroethane

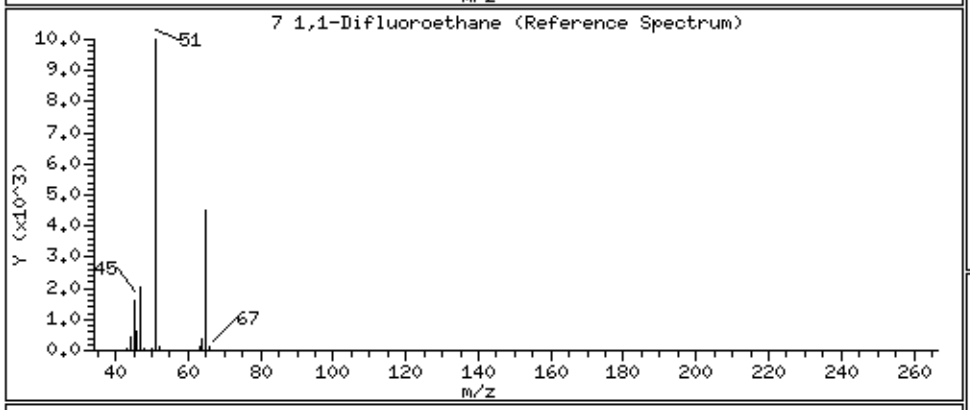
Concentration: 114.78 PPBV

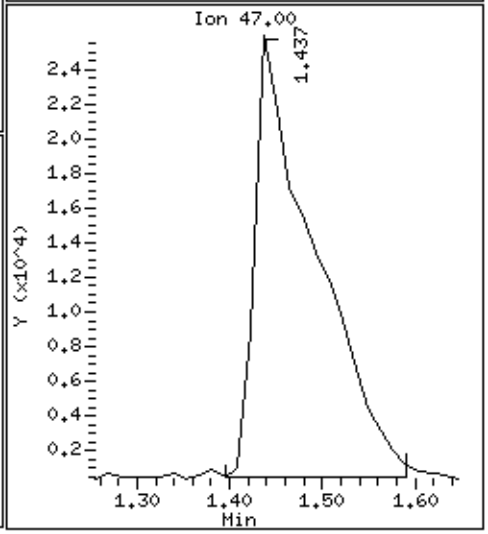


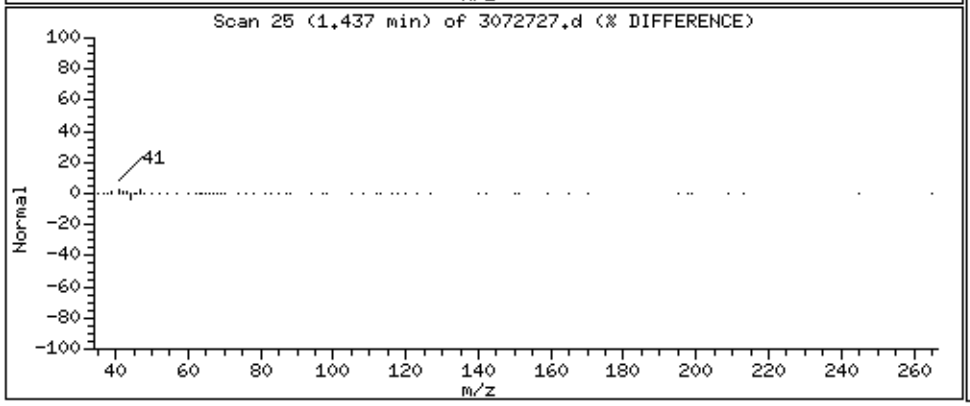












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

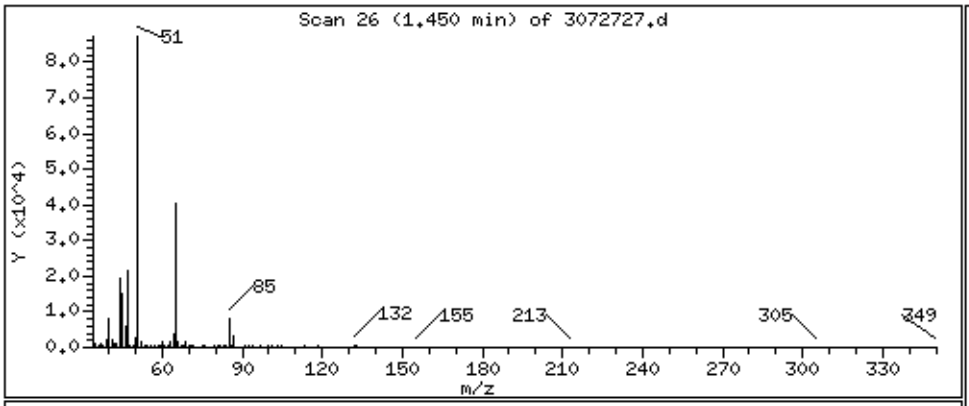
Operator: kk

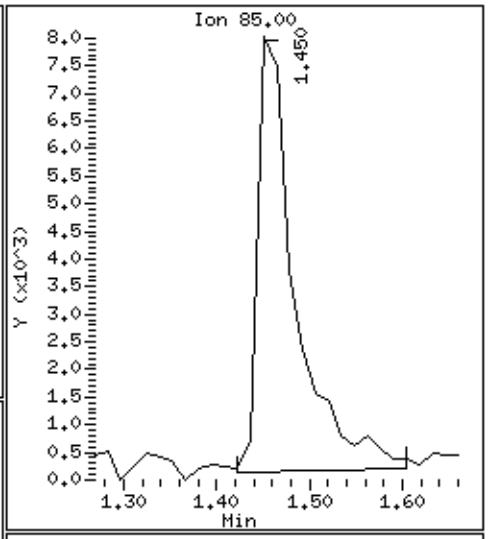
Column phase: RTX-624

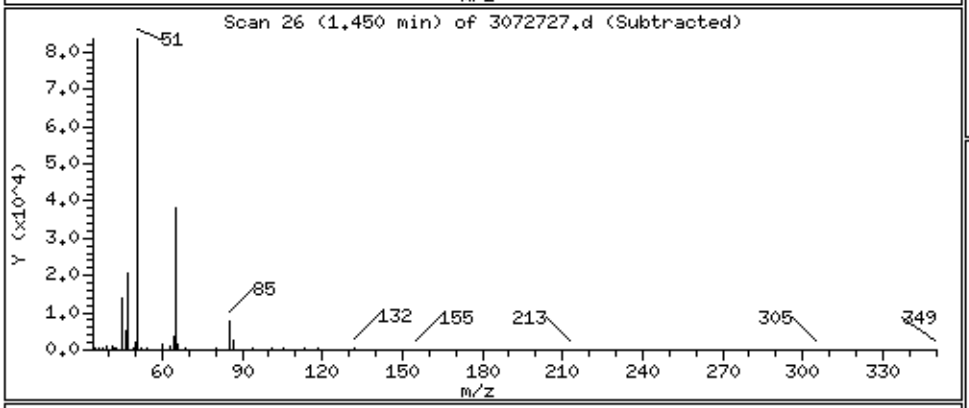
Column diameter: 0.25

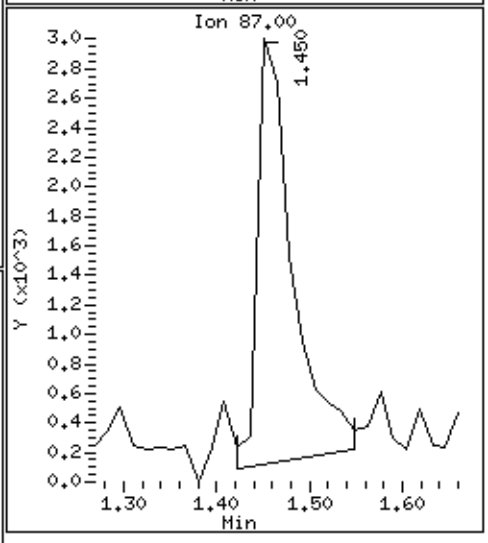
8 Freon 12

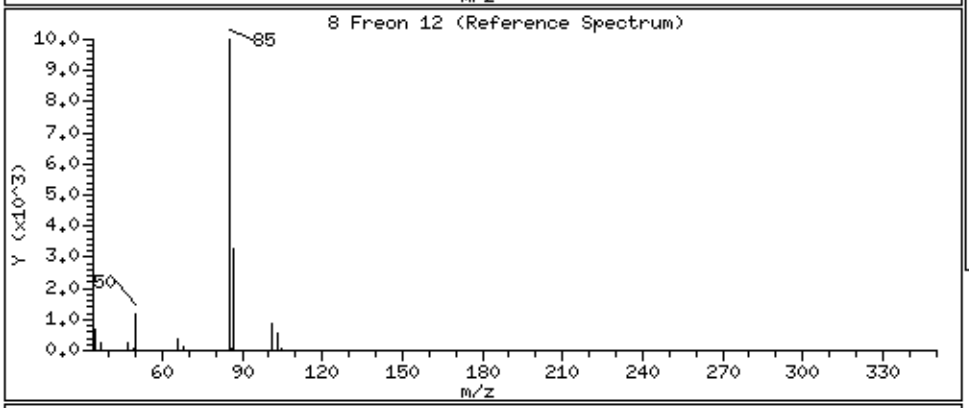
Concentration: 2.704 PPBV

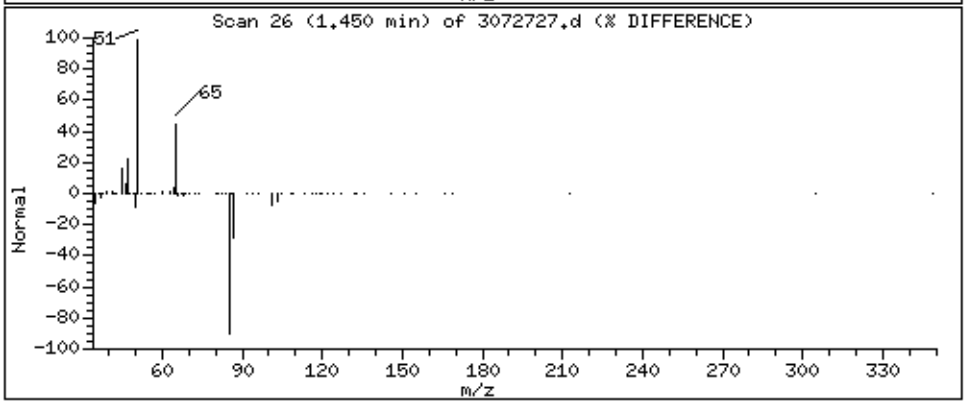












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

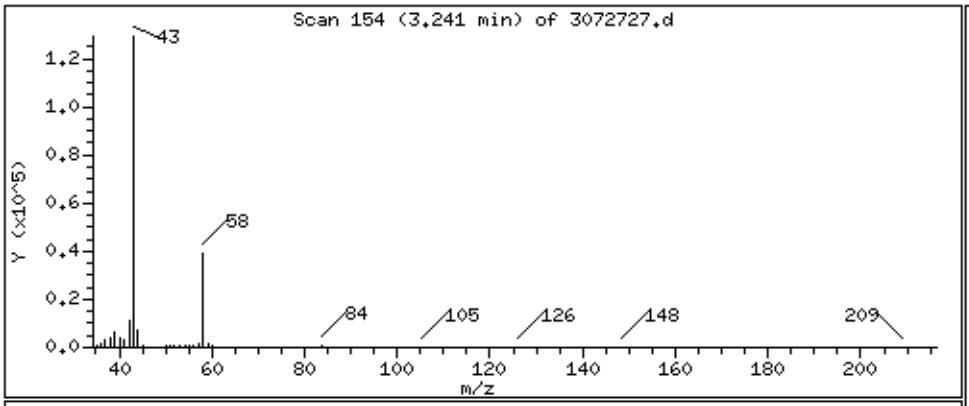
Operator: kk

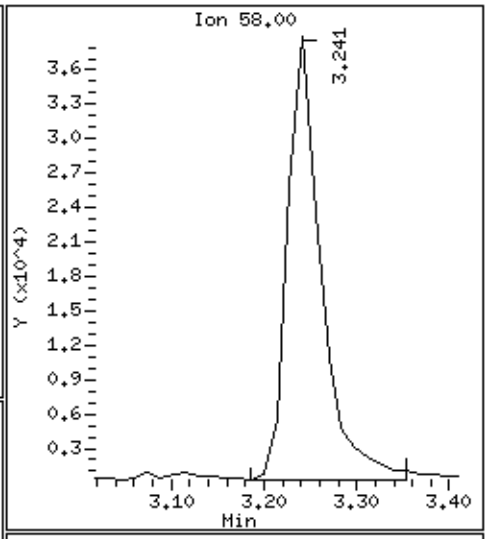
Column phase: RTX-624

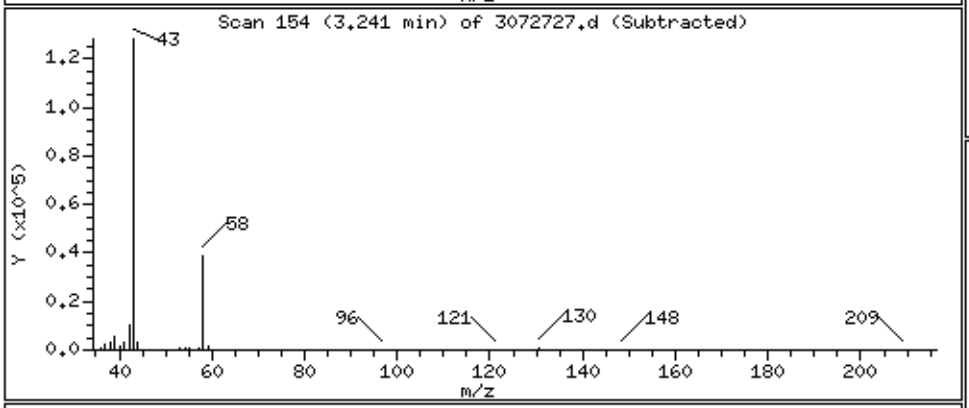
Column diameter: 0.25

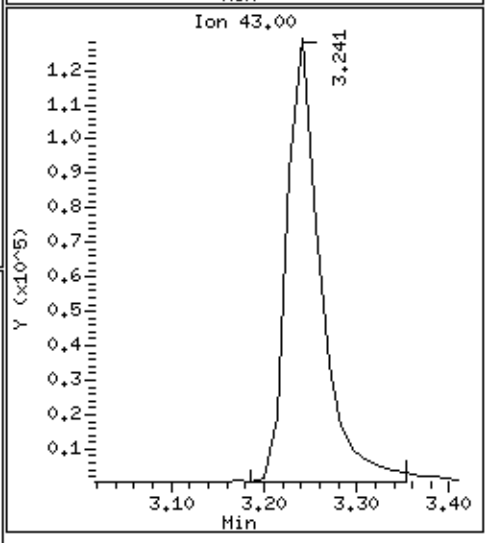
47 Acetone

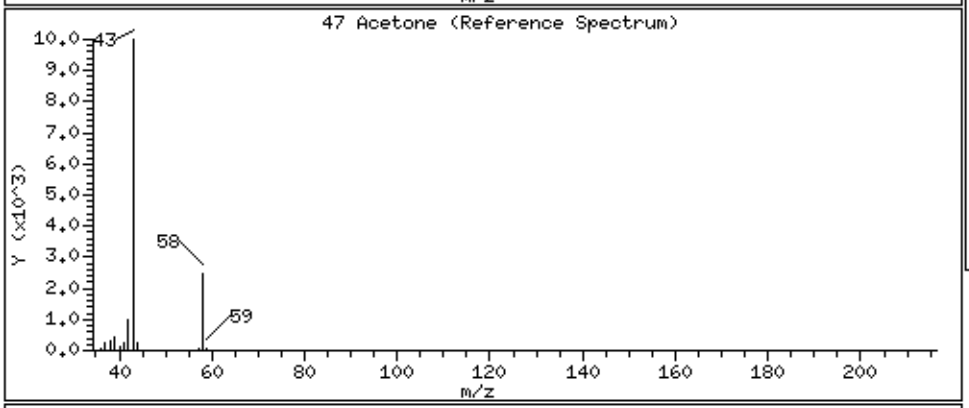
Concentration: 48.957 PPBV

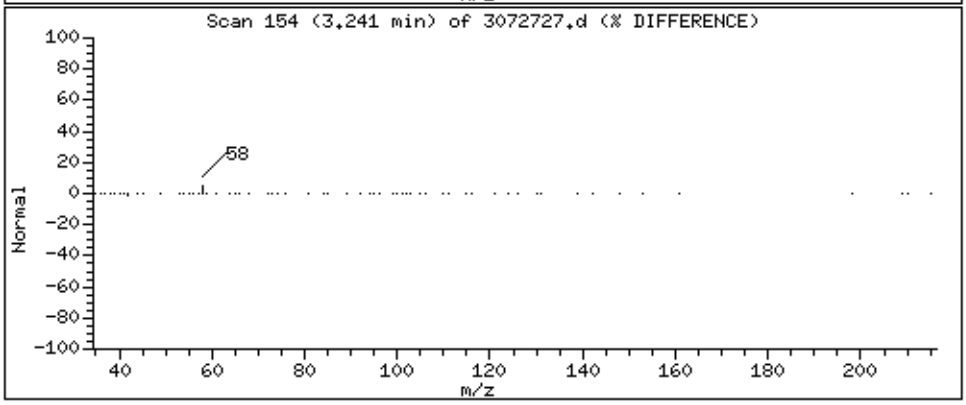












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

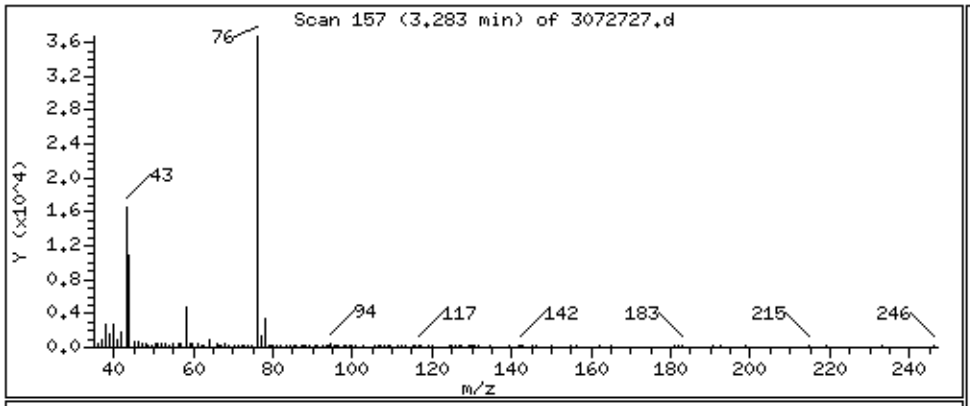
Operator: kk

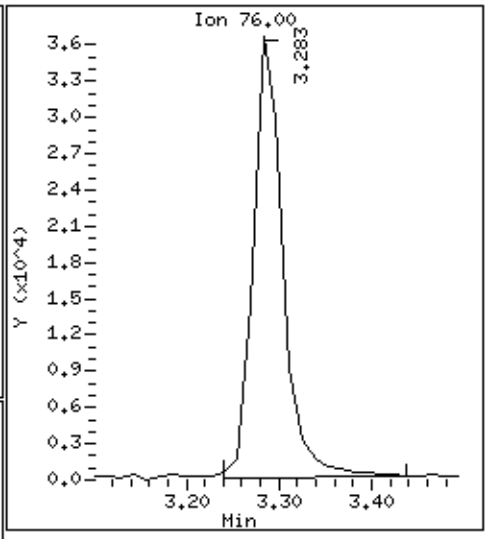
Column phase: RTX-624

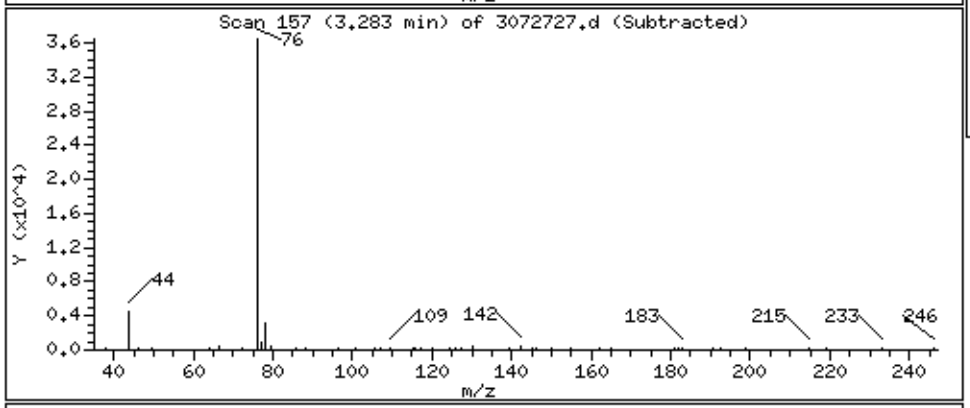
Column diameter: 0.25

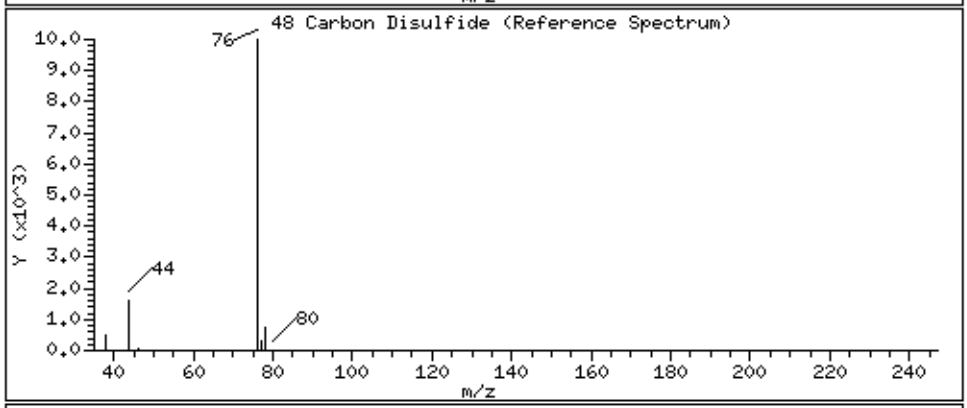
48 Carbon Disulfide

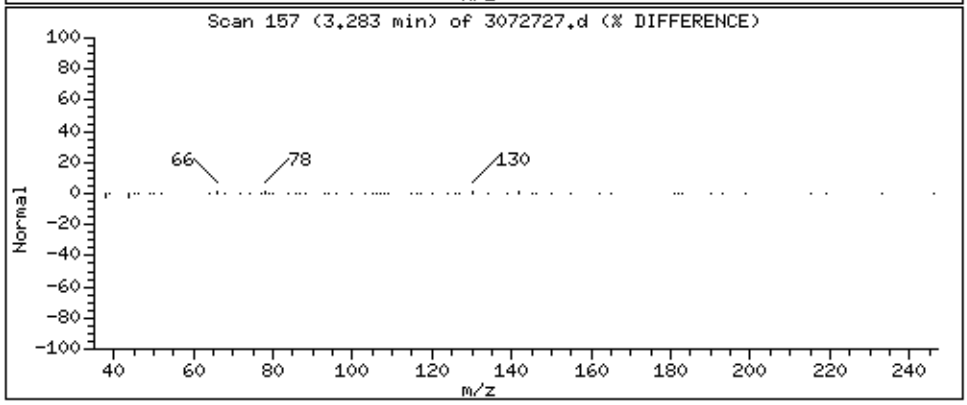
Concentration: 9.326 PPBV











Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

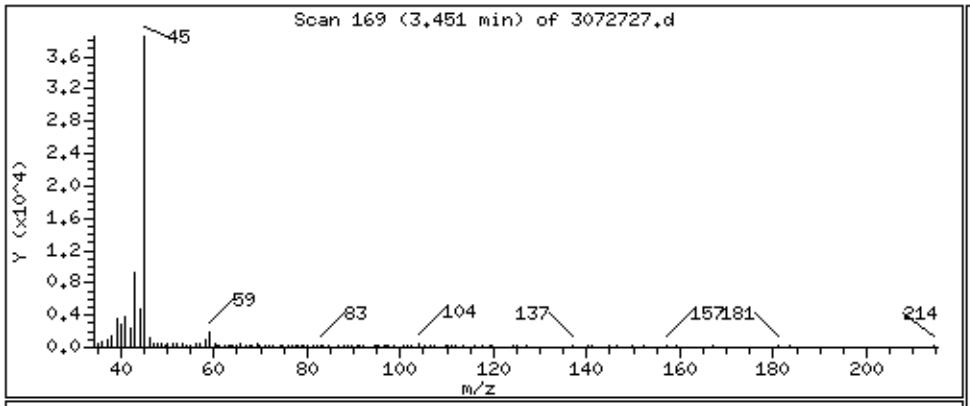
Operator: kk

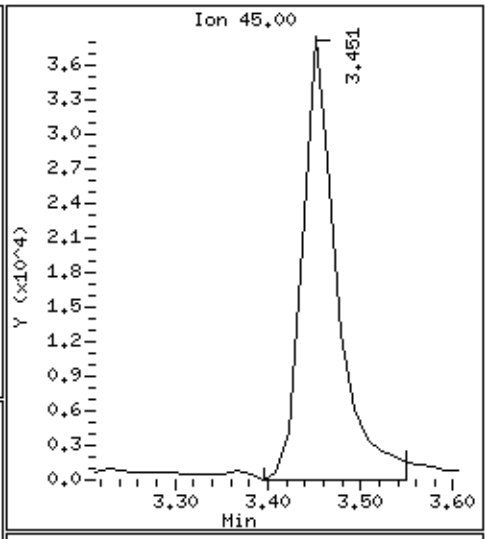
Column phase: RTX-624

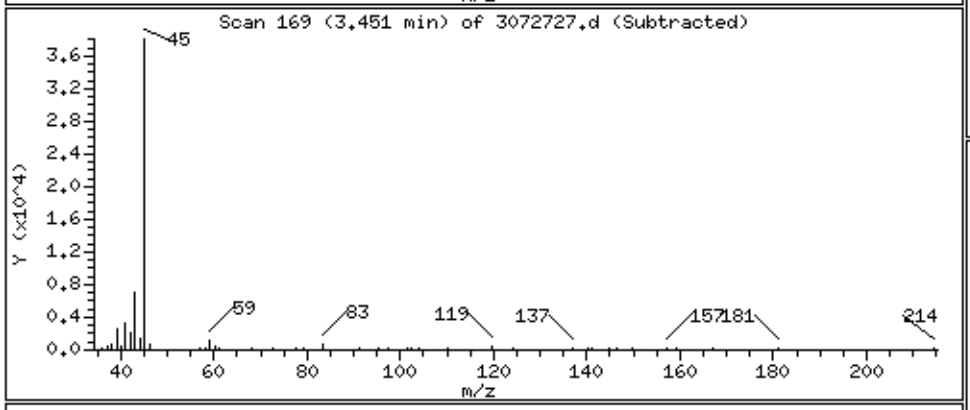
Column diameter: 0.25

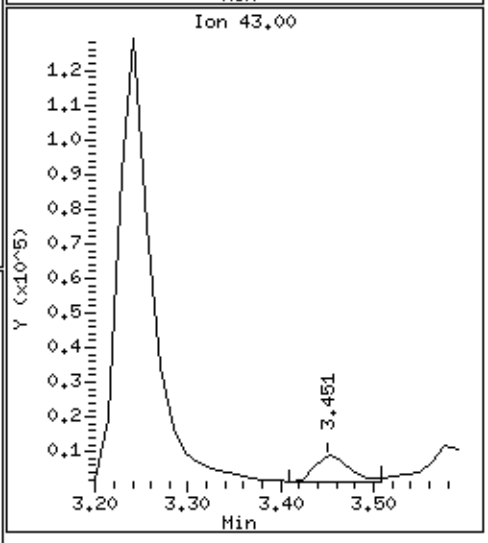
52 2-Propanol

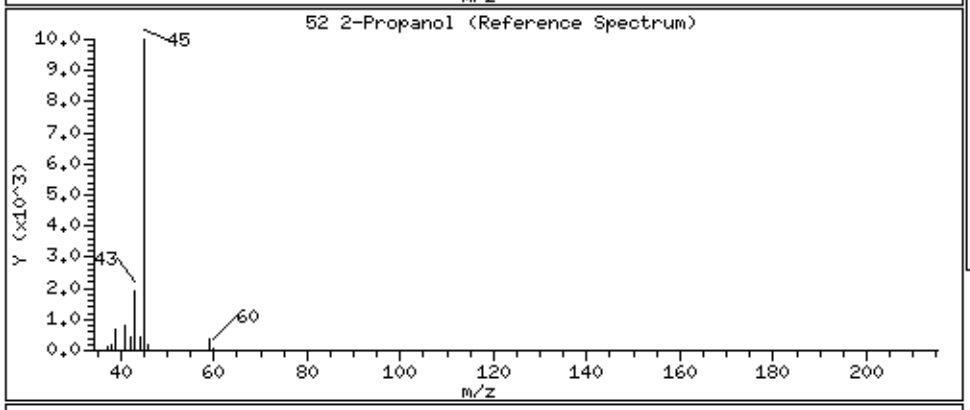
Concentration: 14.161 PPBV

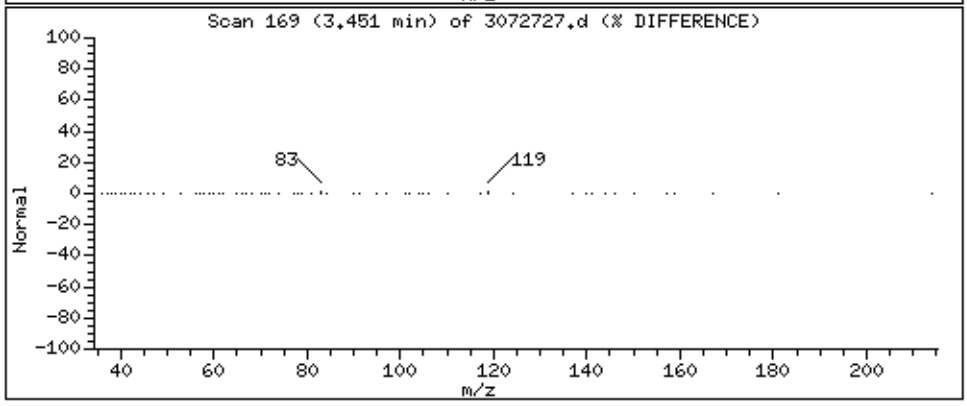












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

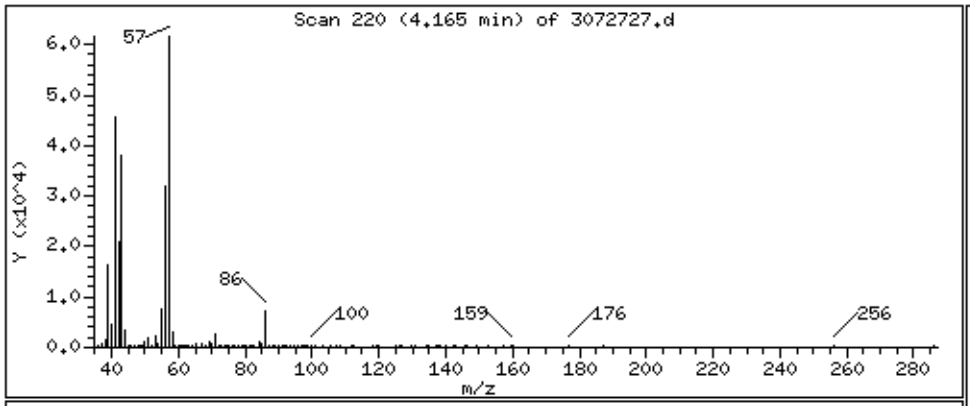
Operator: kk

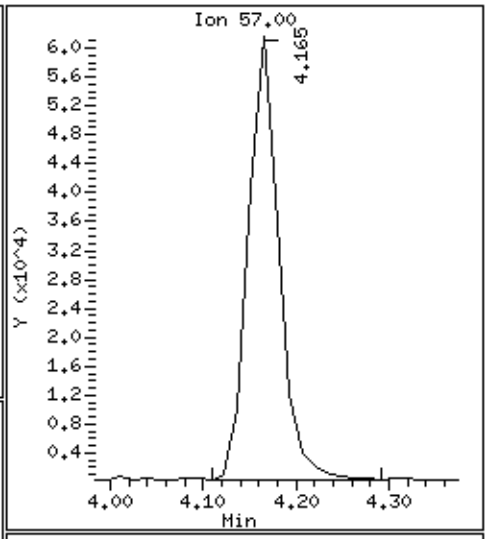
Column phase: RTX-624

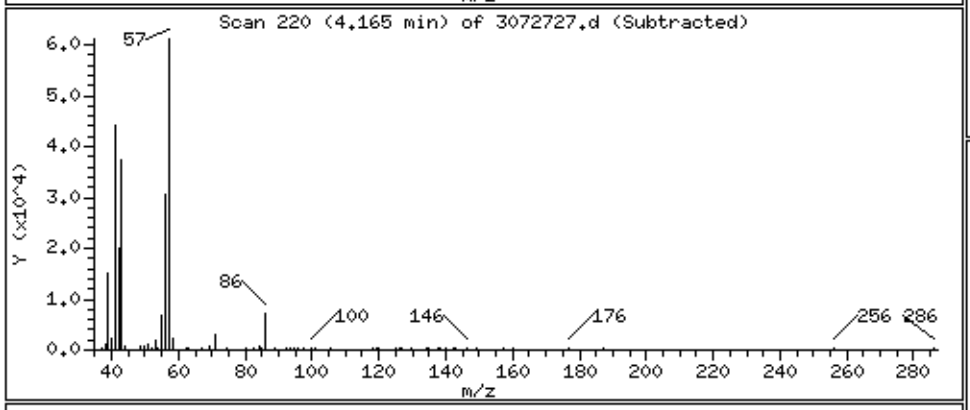
Column diameter: 0.25

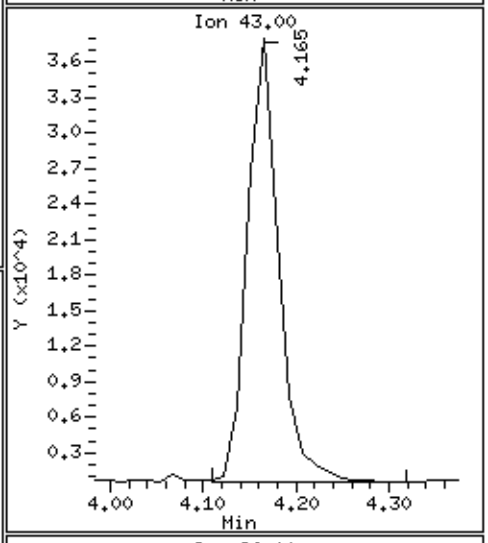
67 Hexane

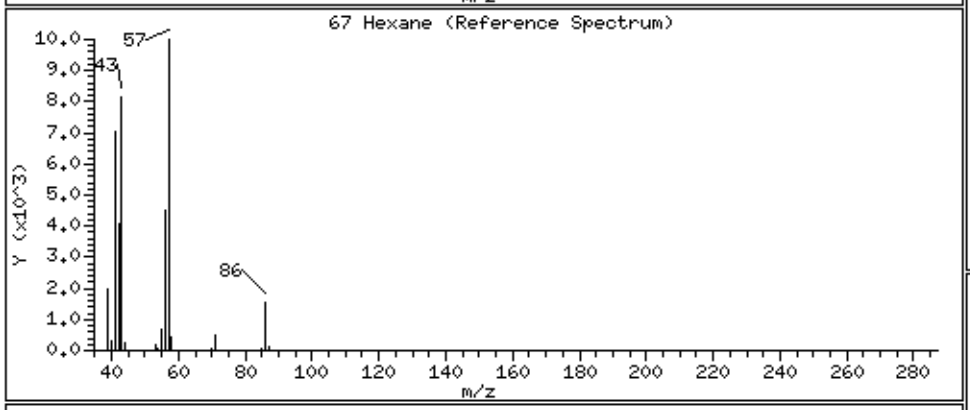
Concentration: 21.348 PPBV

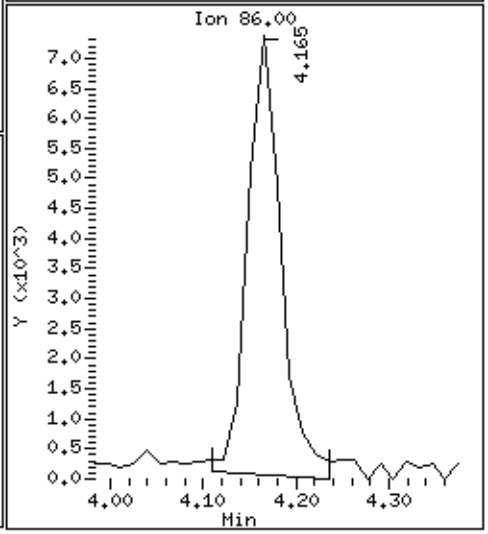


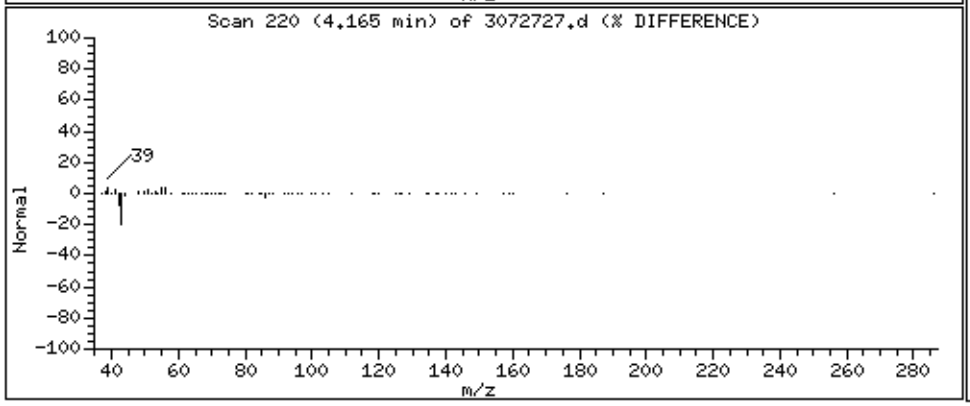












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

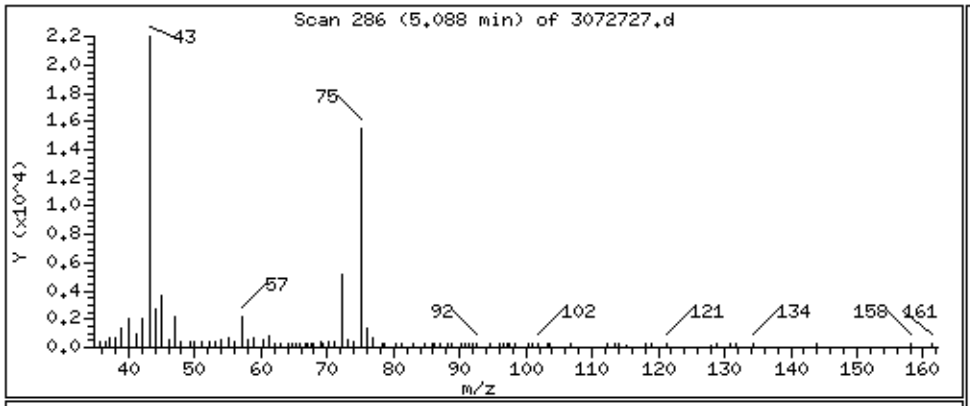
Operator: kk

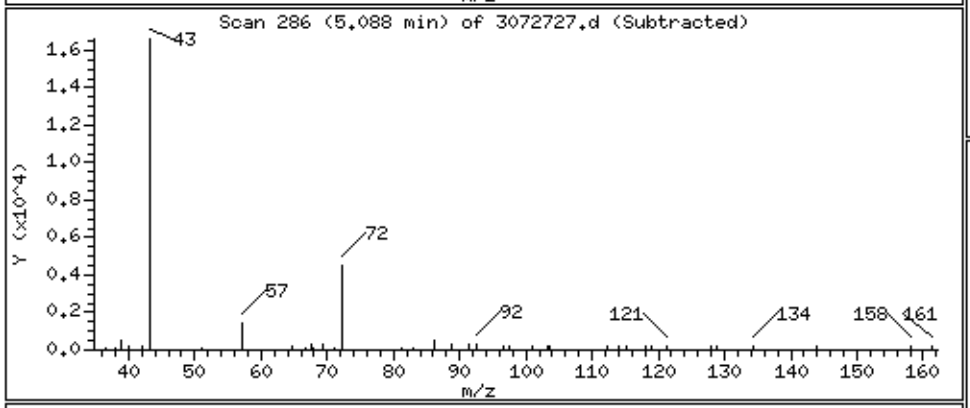
Column phase: RTX-624

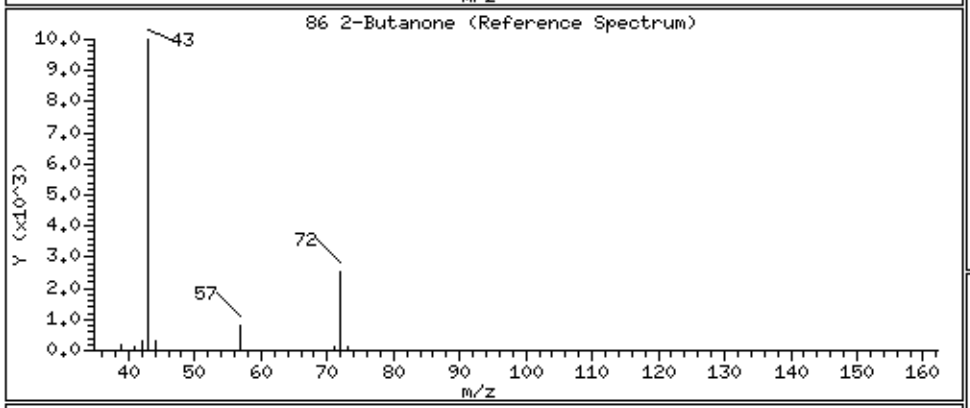
Column diameter: 0.25

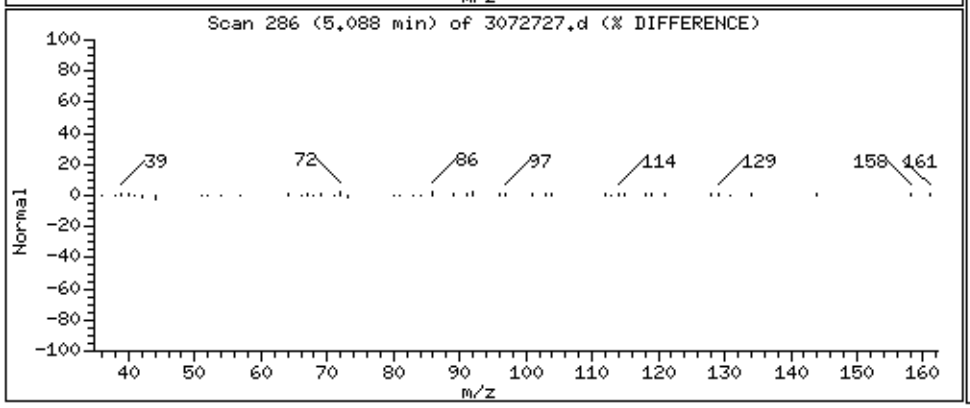
86 2-Butanone

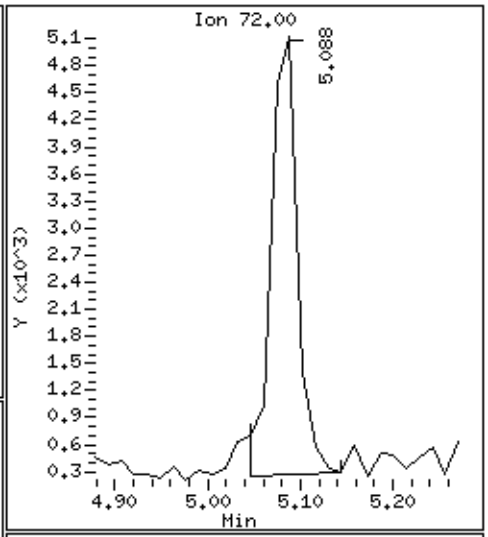
Concentration: 5.974 PPBV

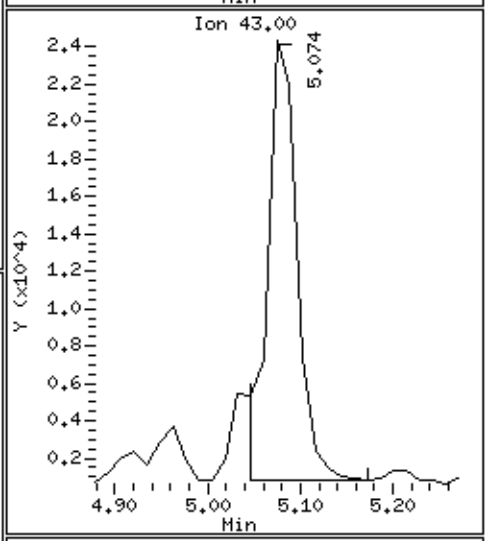


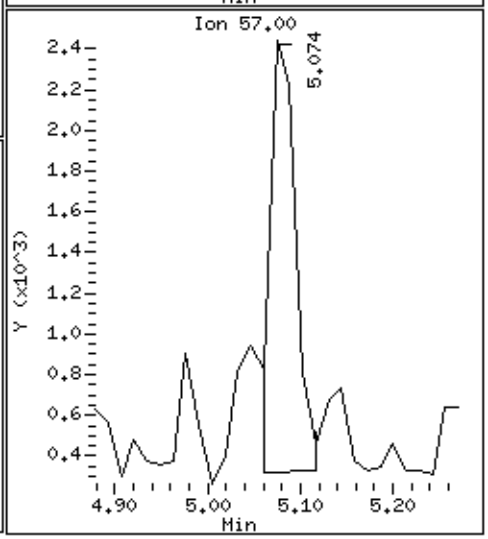












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

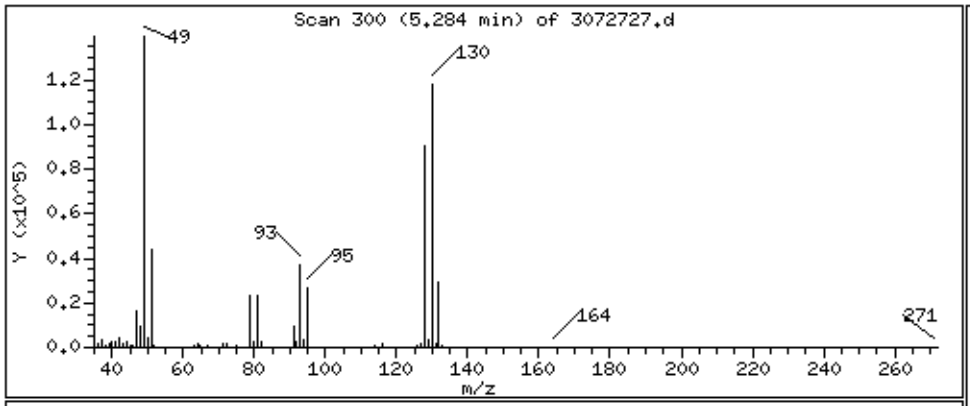
Operator: kk

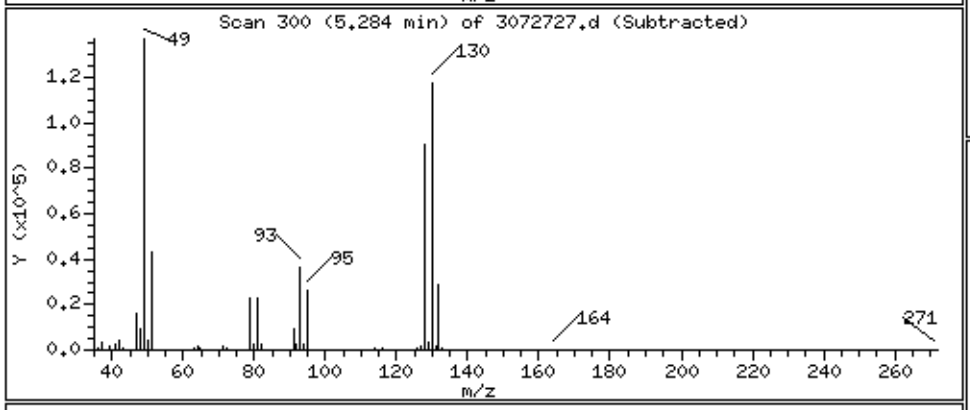
Column phase: RTX-624

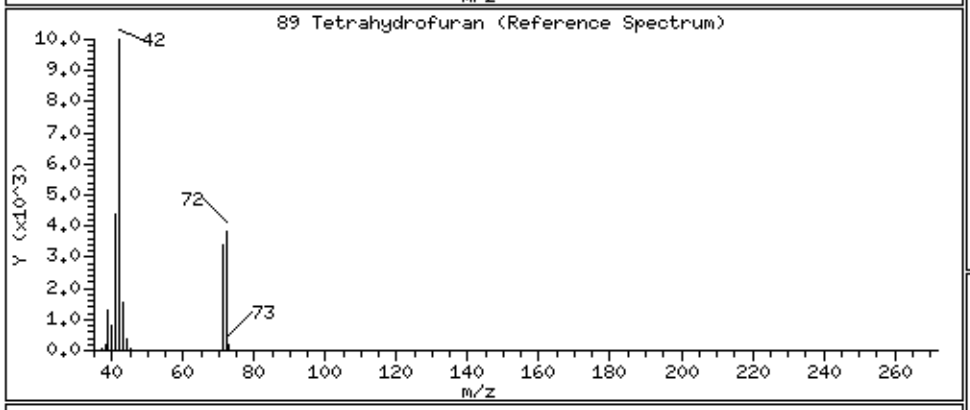
Column diameter: 0.25

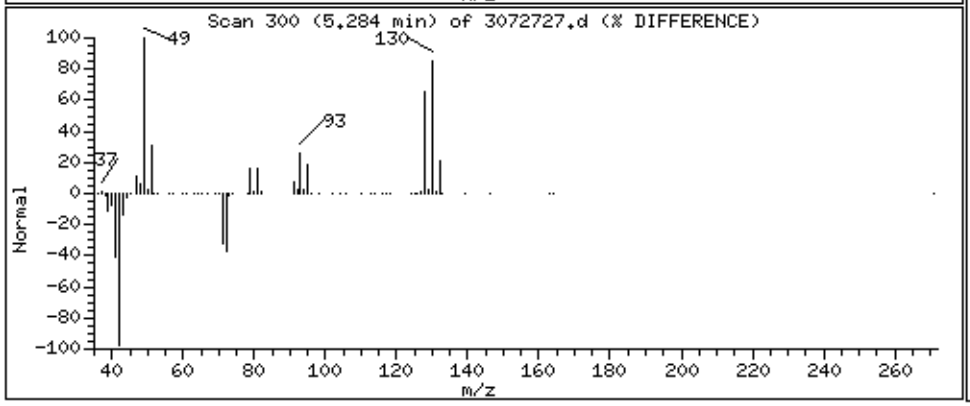
89 Tetrahydrofuran

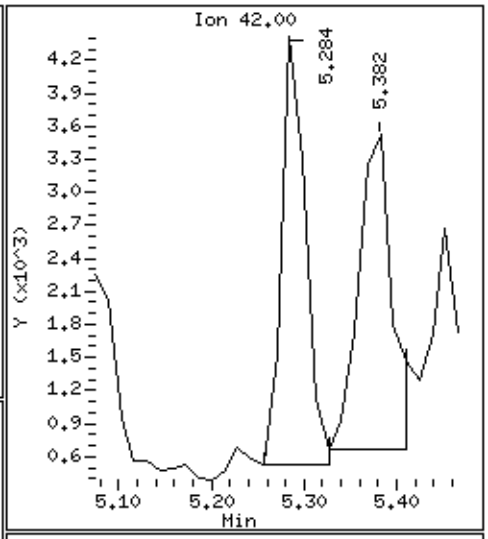
Concentration: 1.492 PPBV

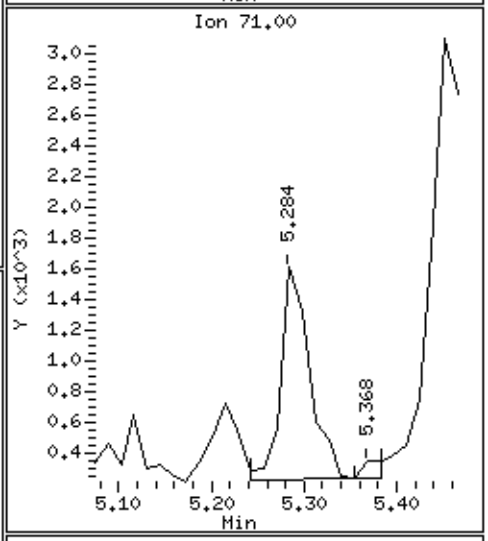


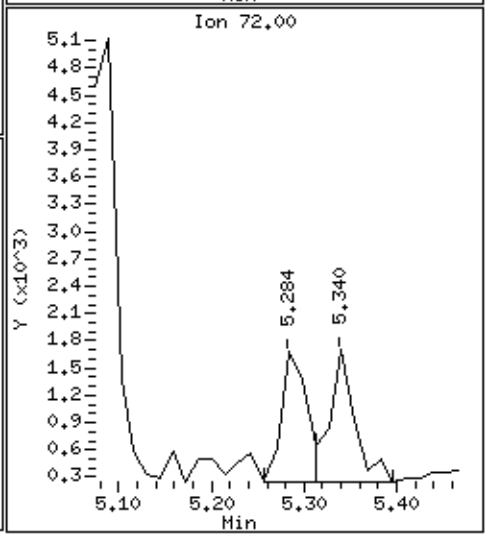












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

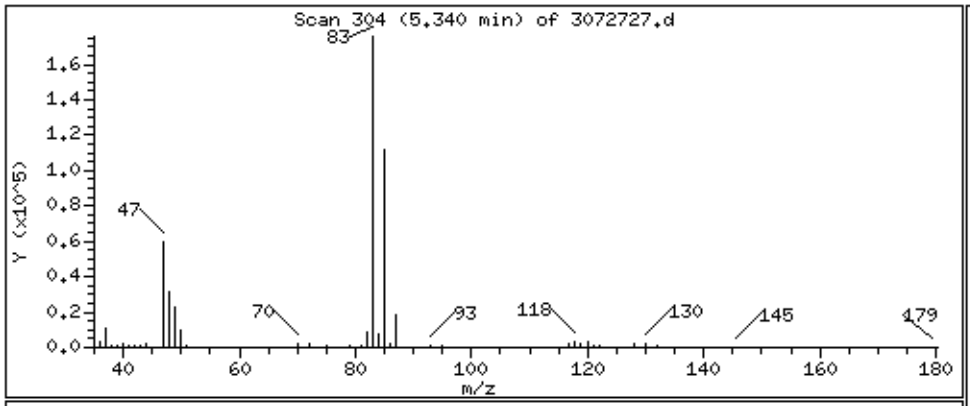
Operator: kk

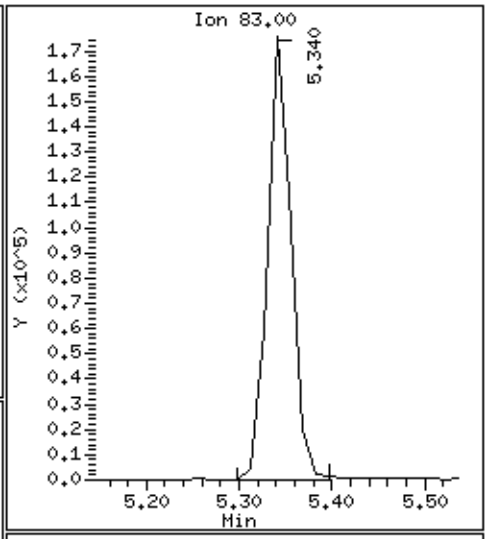
Column phase: RTX-624

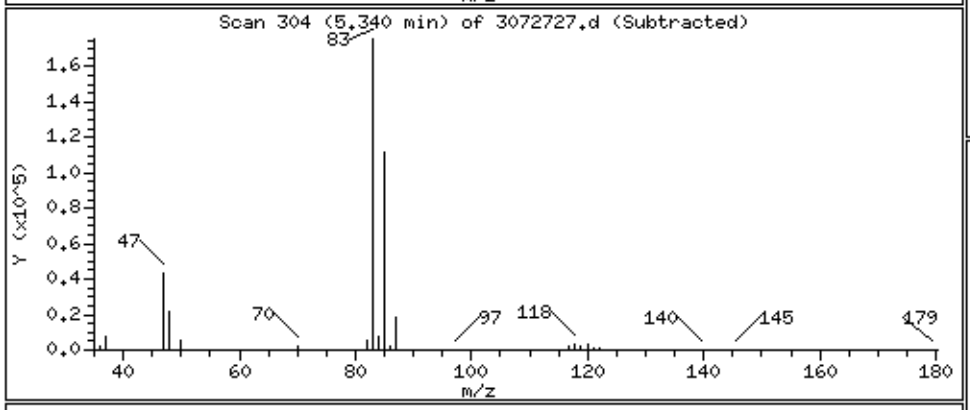
Column diameter: 0.25

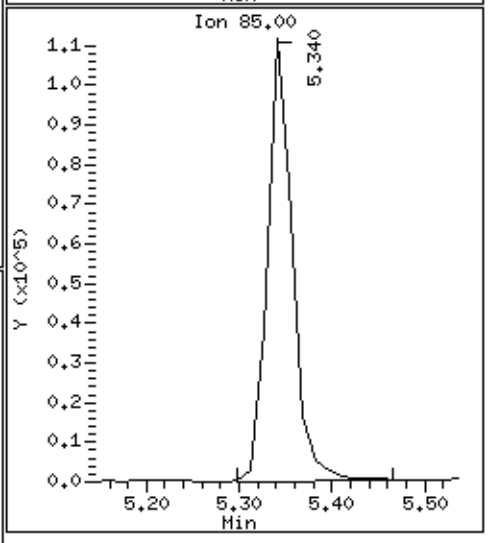
92 Chloroform

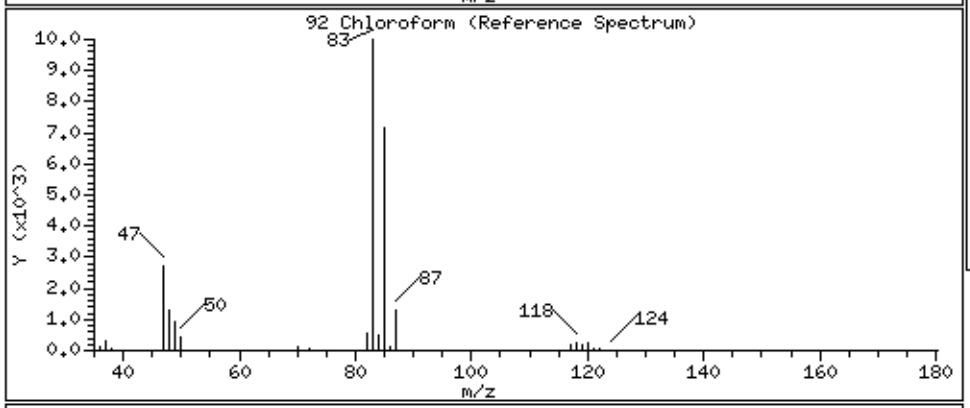
Concentration: 42.476 PPBV

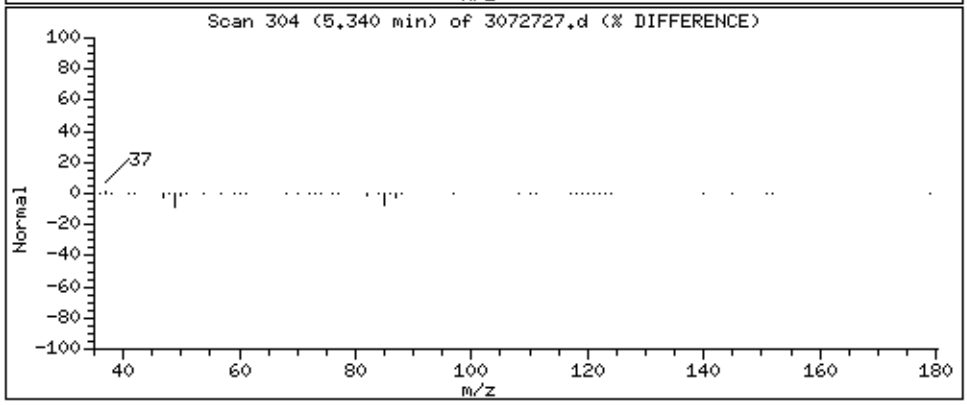












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

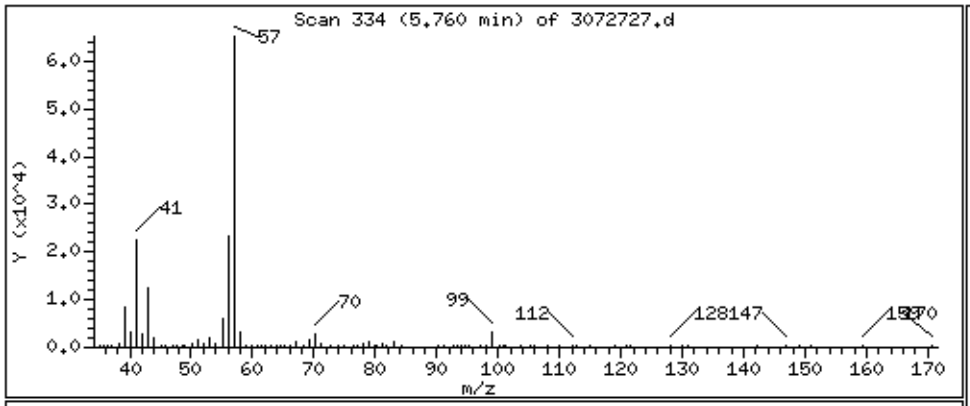
Operator: kk

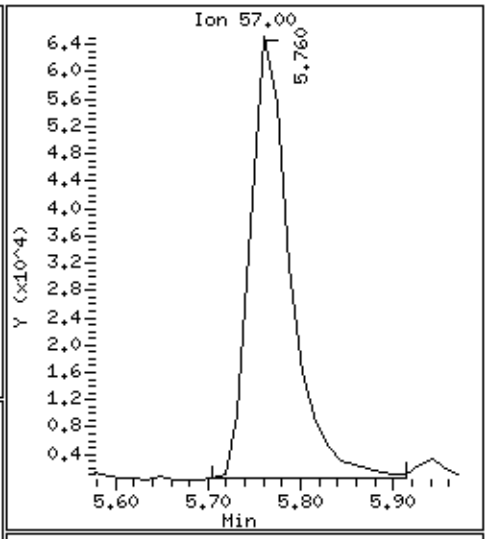
Column phase: RTX-624

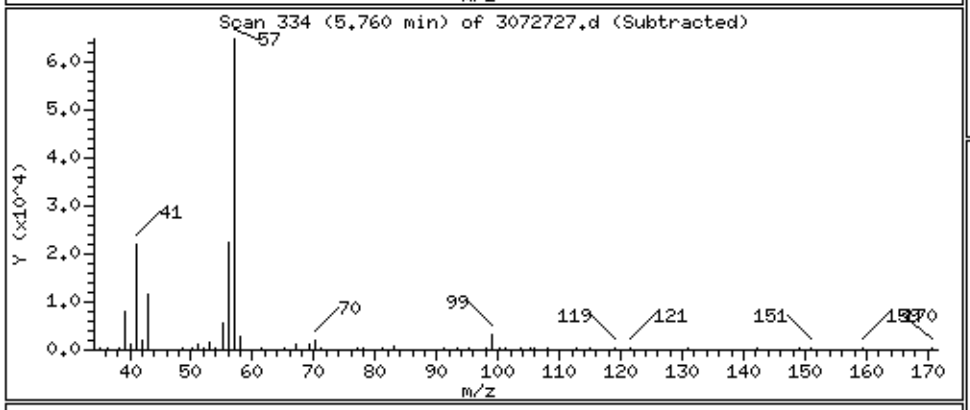
Column diameter: 0.25

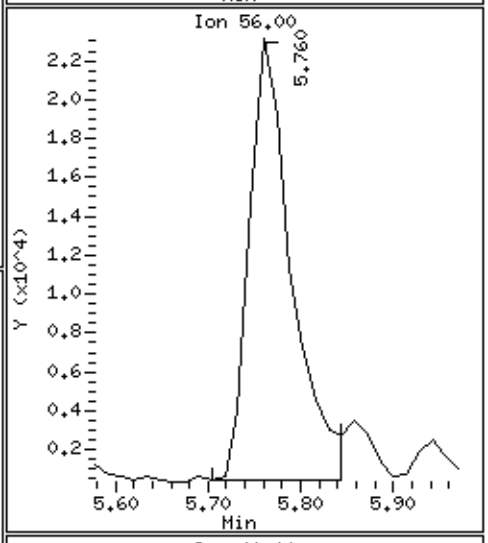
101 2,2,4-Trimethylpentane

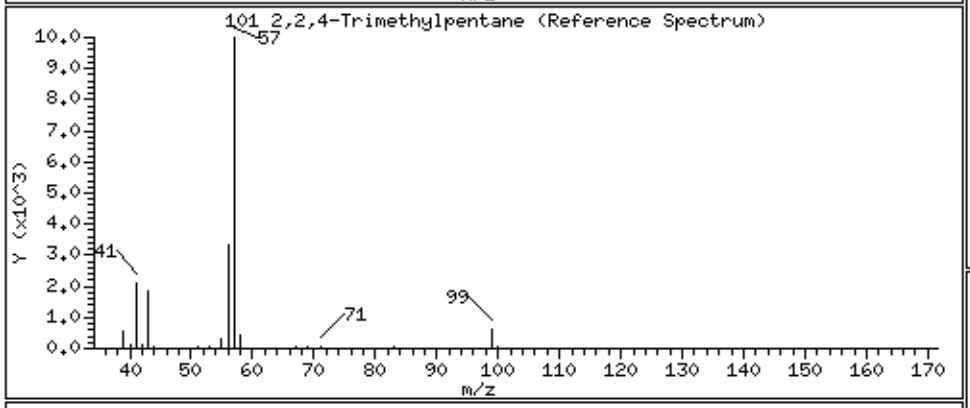
Concentration: 9.557 PPBV

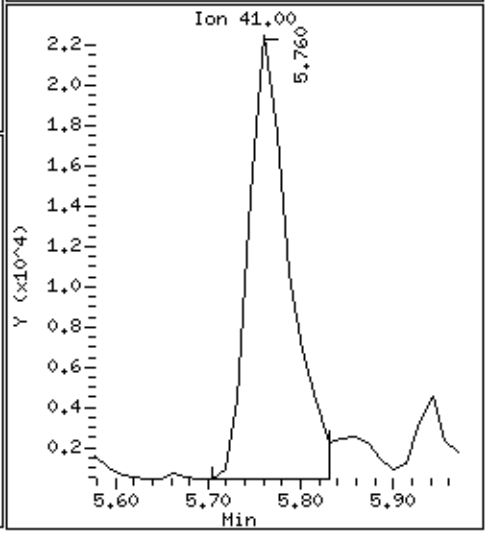


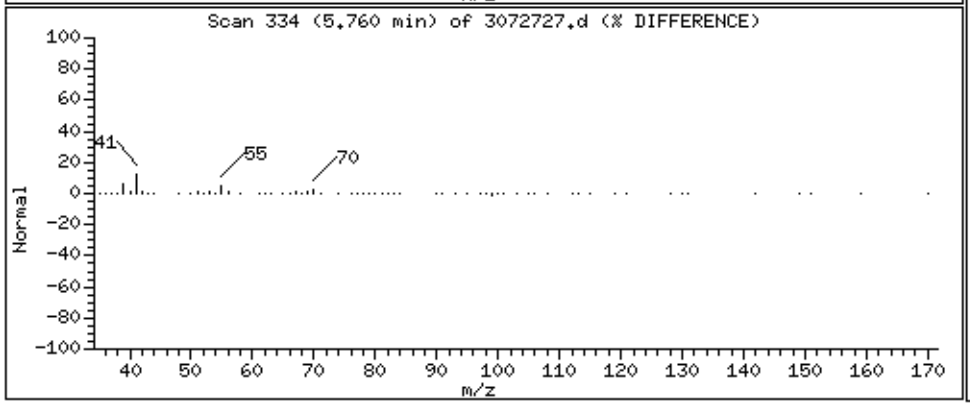












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

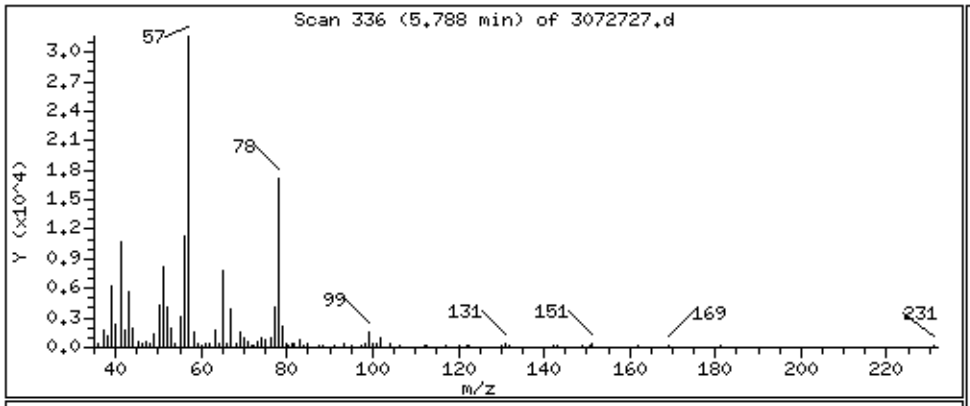
Operator: kk

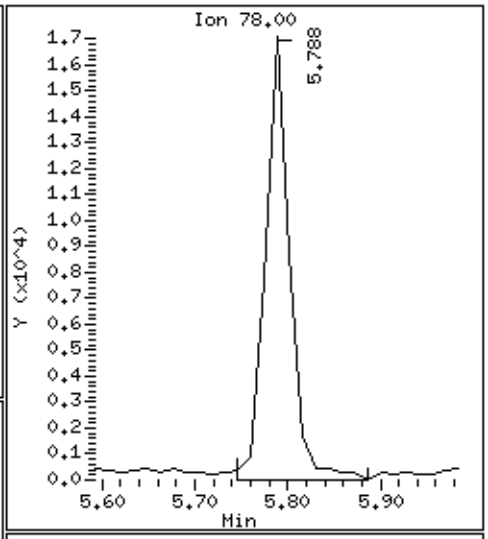
Column phase: RTX-624

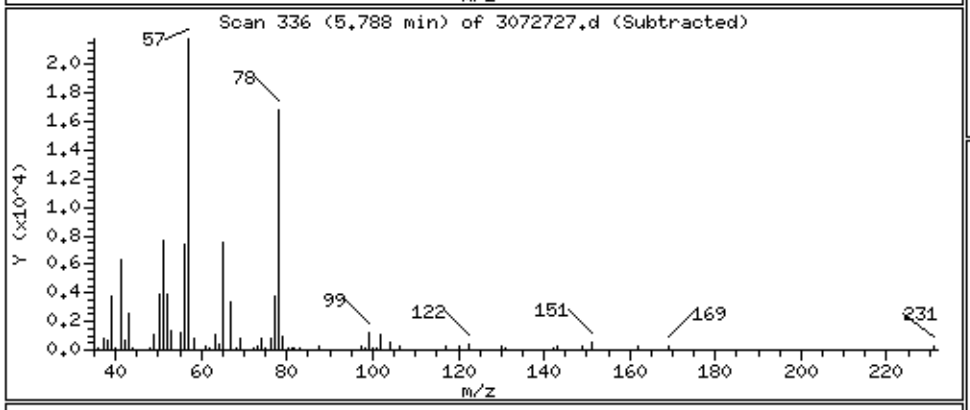
Column diameter: 0.25

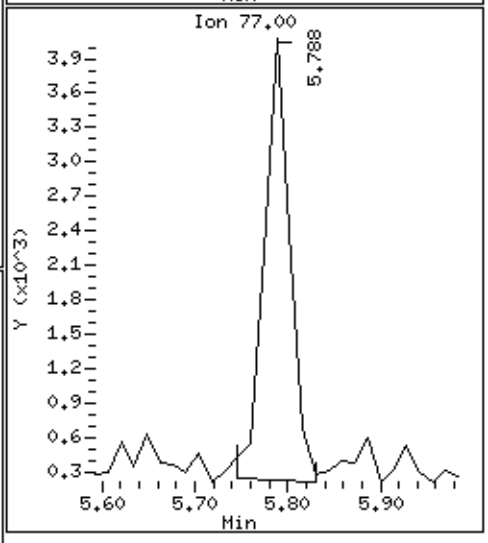
102 Benzene

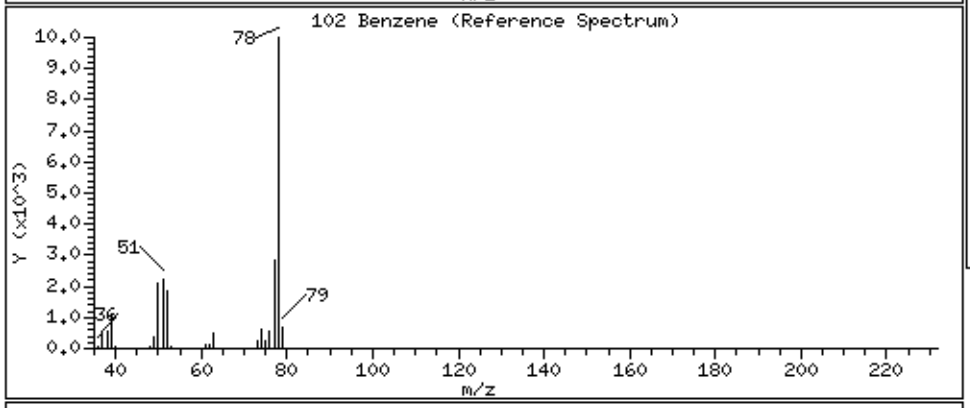
Concentration: 3.588 PPBV

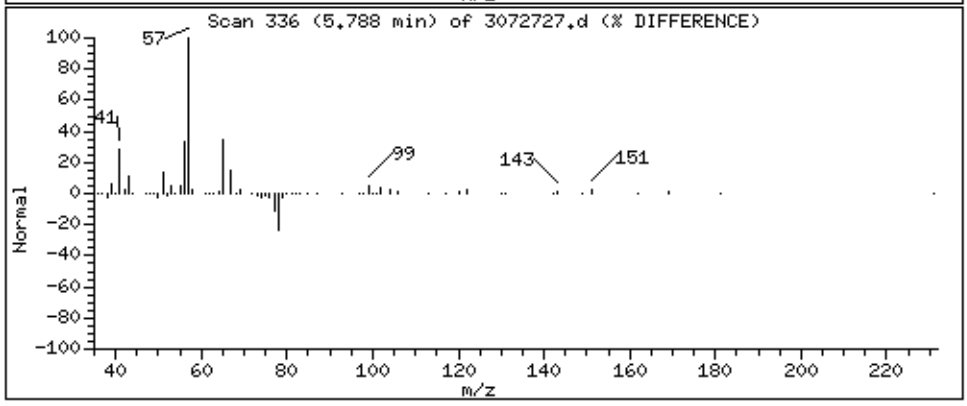












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

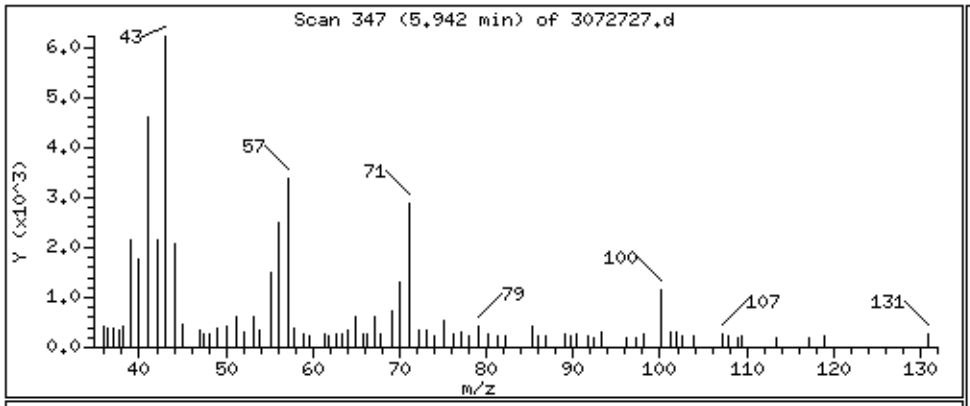
Operator: kk

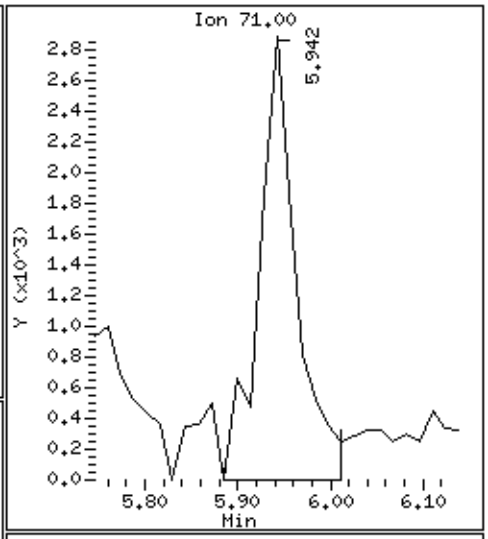
Column phase: RTX-624

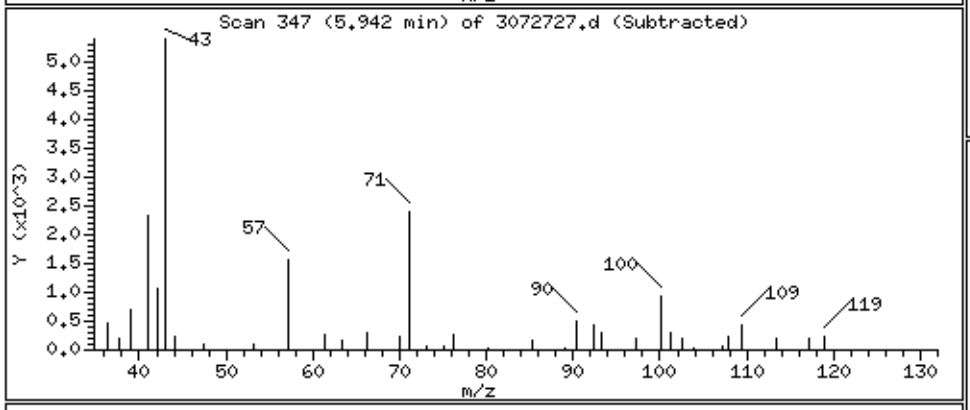
Column diameter: 0.25

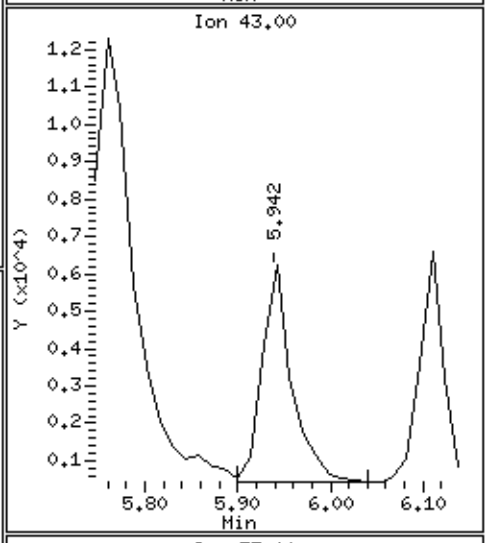
107 Heptane

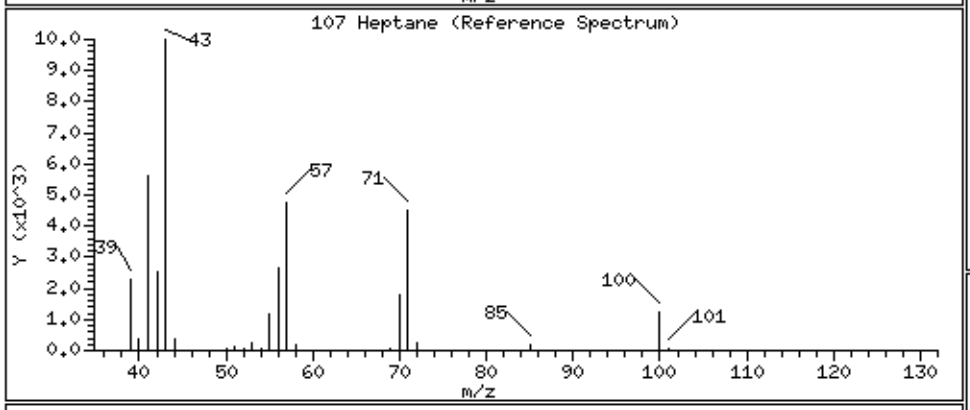
Concentration: 2.328 PPBV

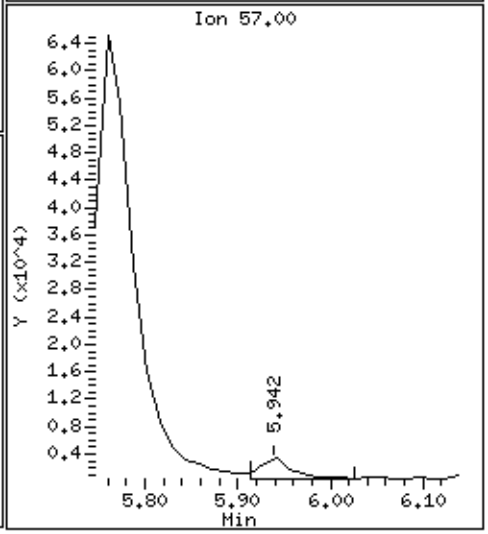


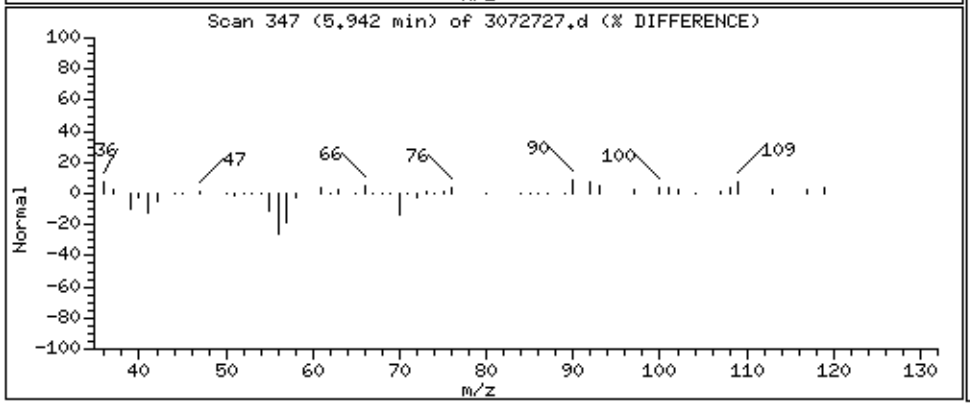












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

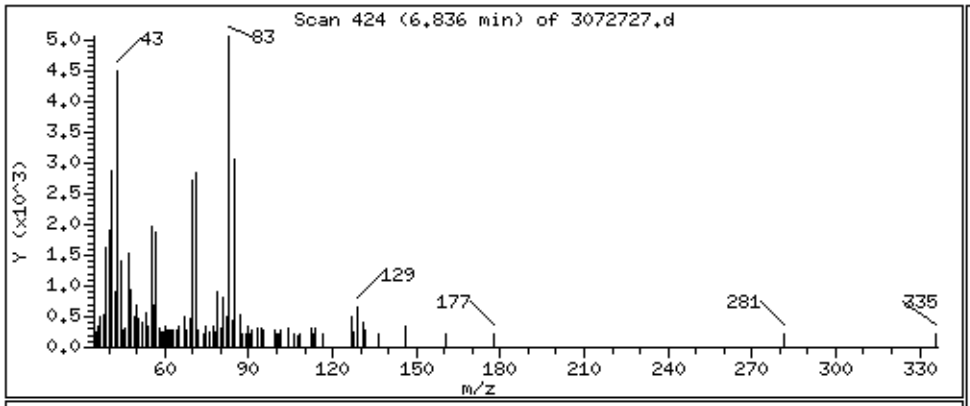
Operator: kk

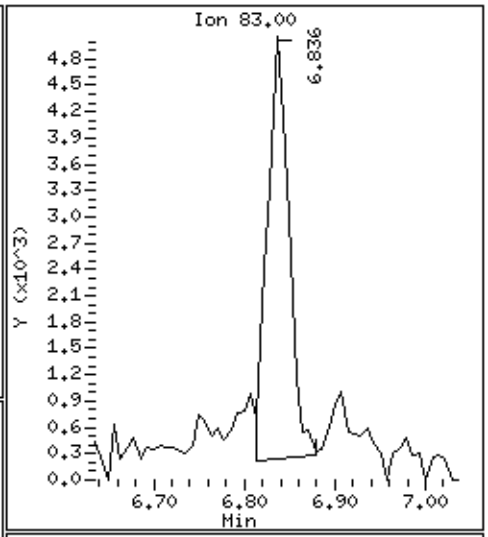
Column phase: RTX-624

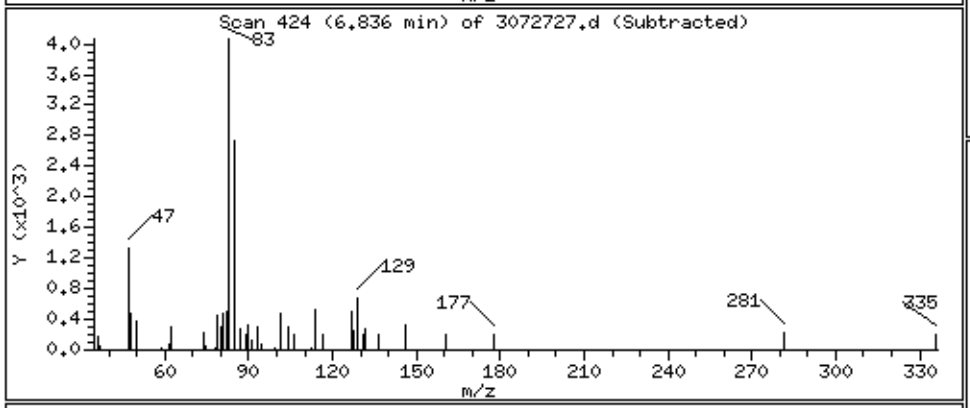
Column diameter: 0.25

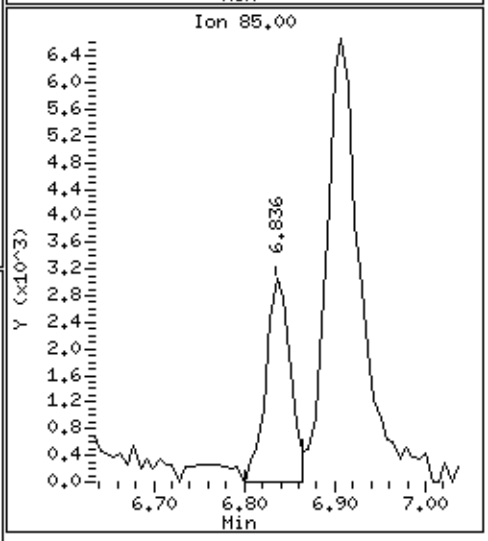
122 Bromodichloromethane

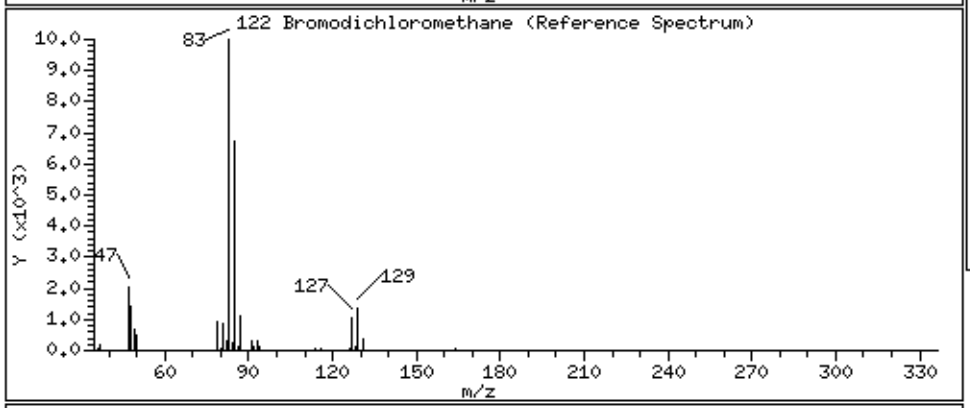
Concentration: 1.081 PPBV

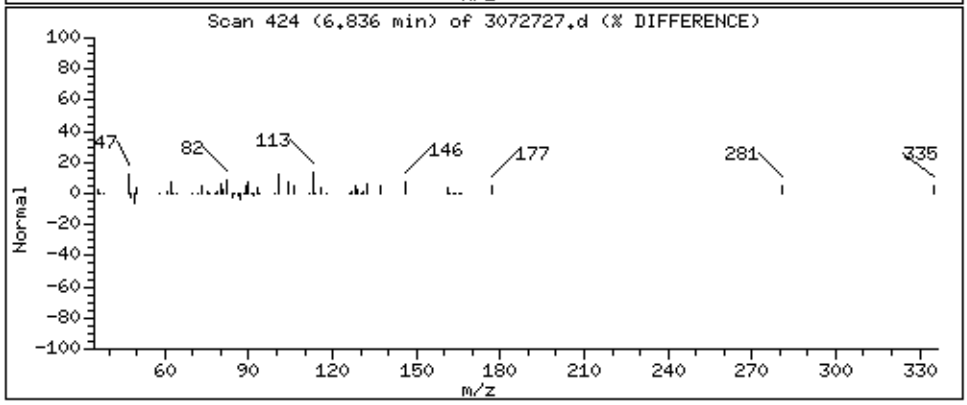












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

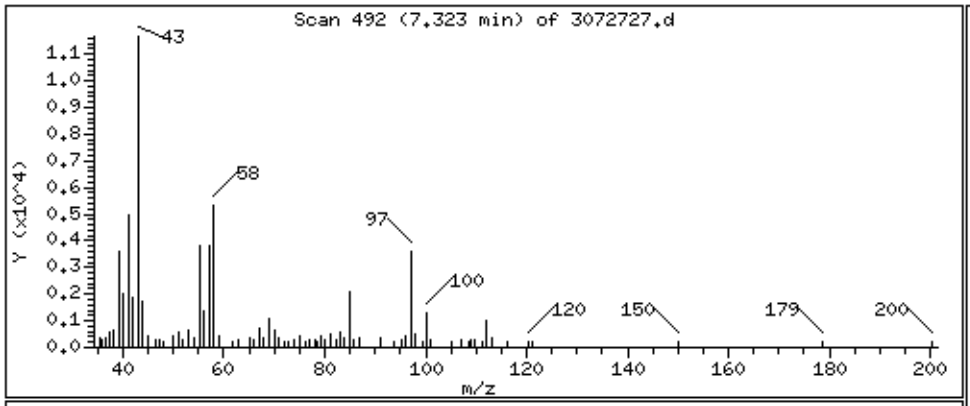
Operator: kk

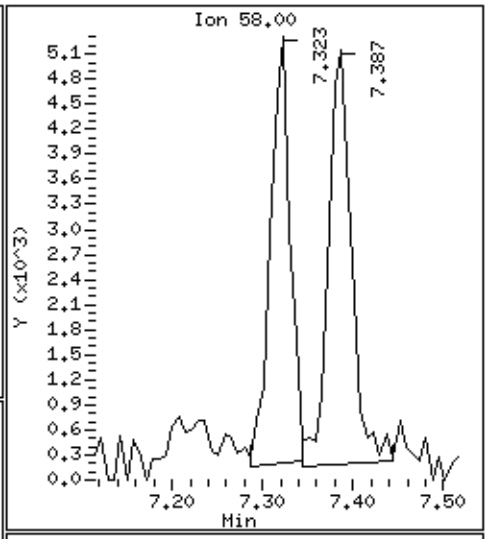
Column phase: RTX-624

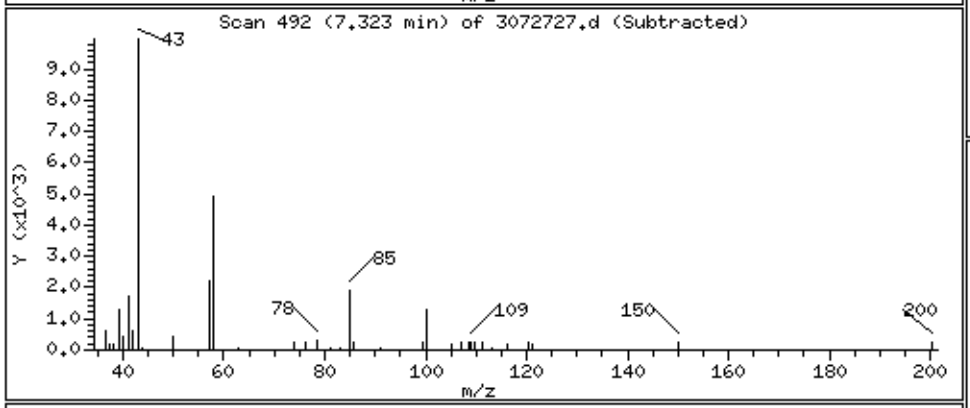
Column diameter: 0.25

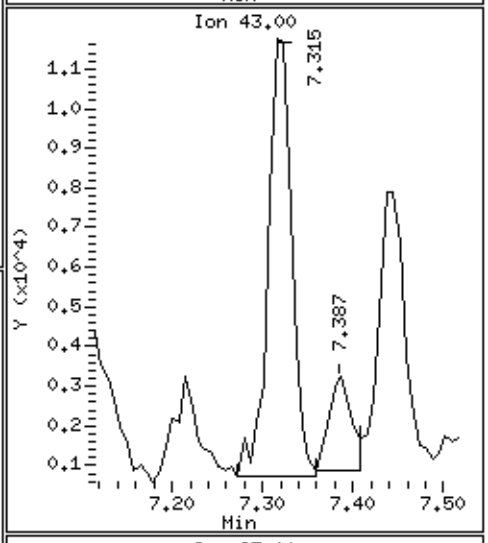
131 4-Methyl-2-pentanone

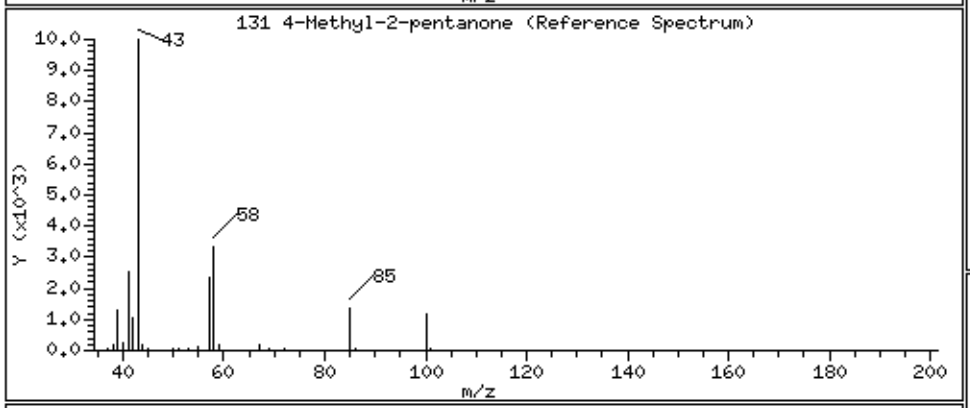
Concentration: 2.086 PPBV

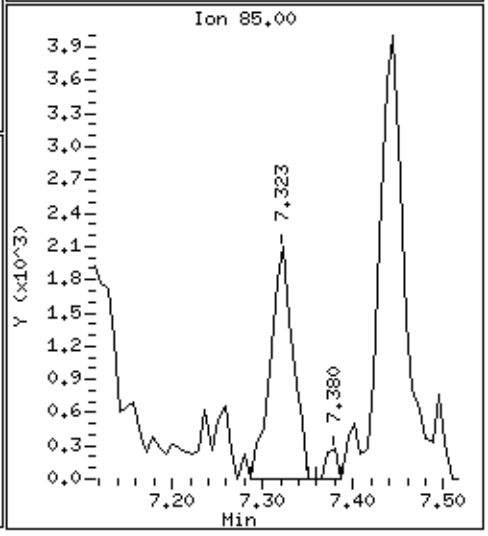


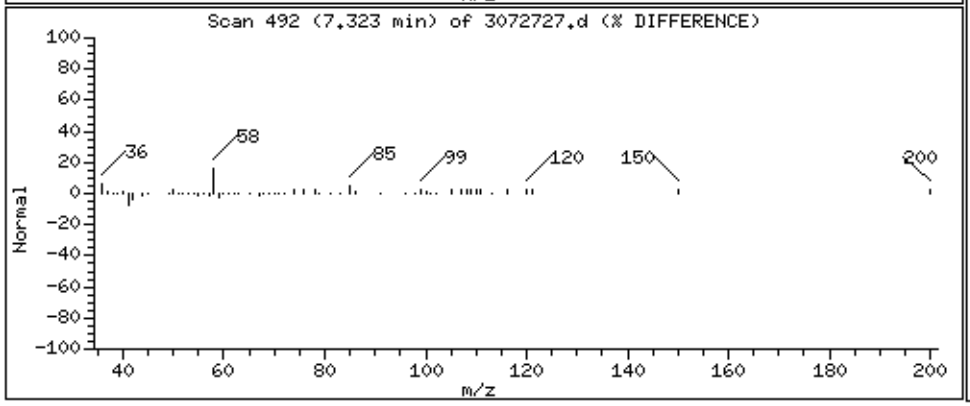












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

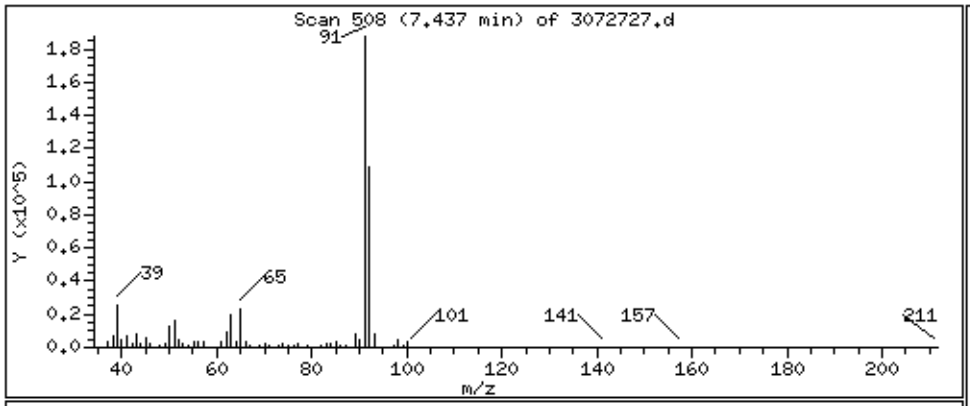
Operator: kk

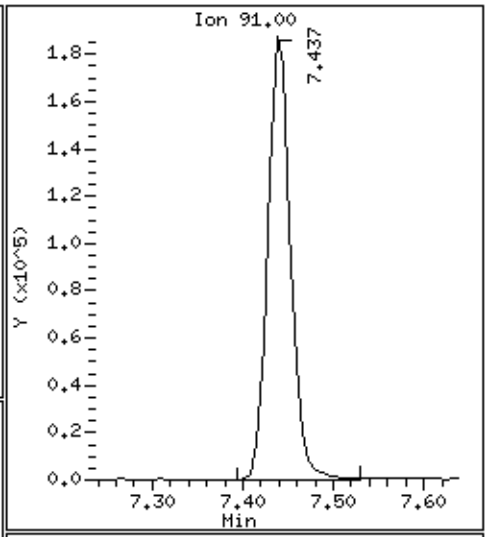
Column phase: RTX-624

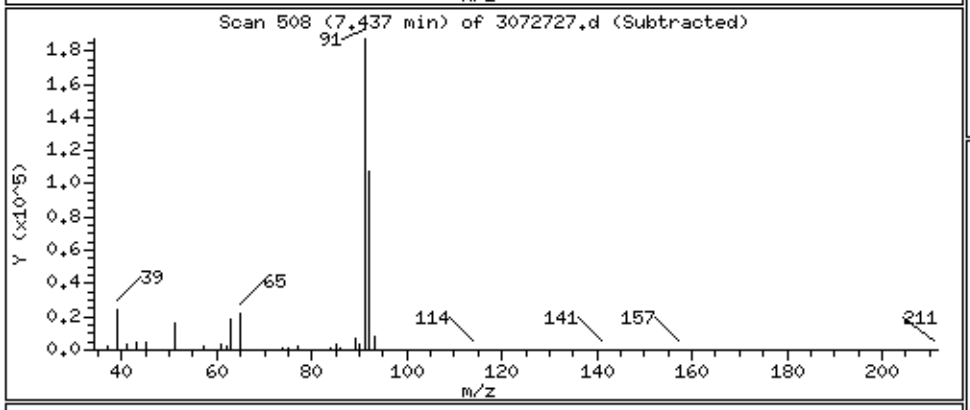
Column diameter: 0.25

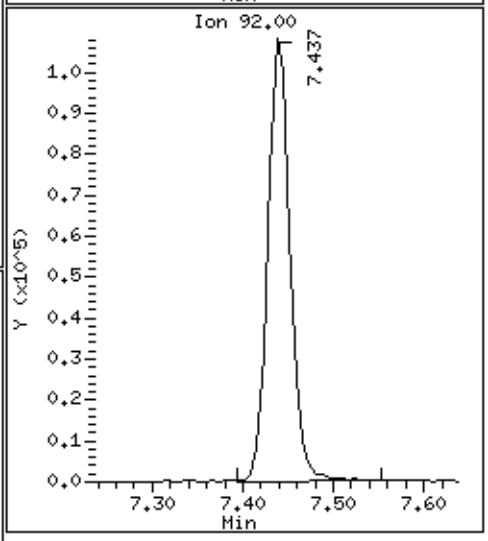
137 Toluene

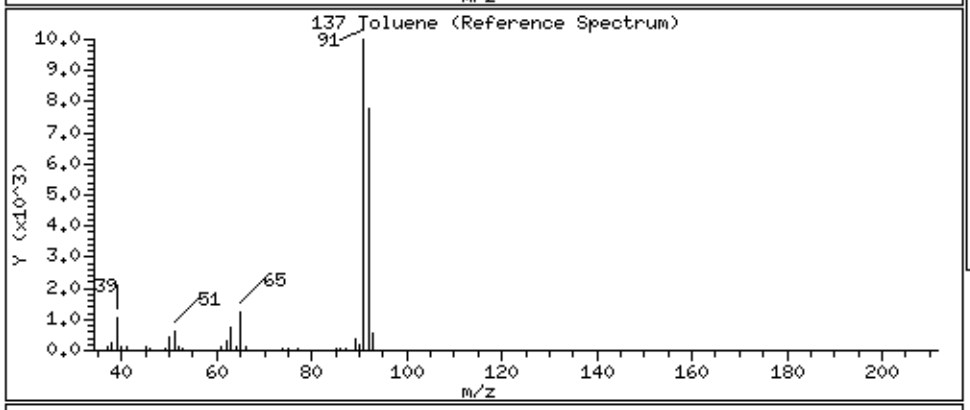
Concentration: 27.498 PPBV

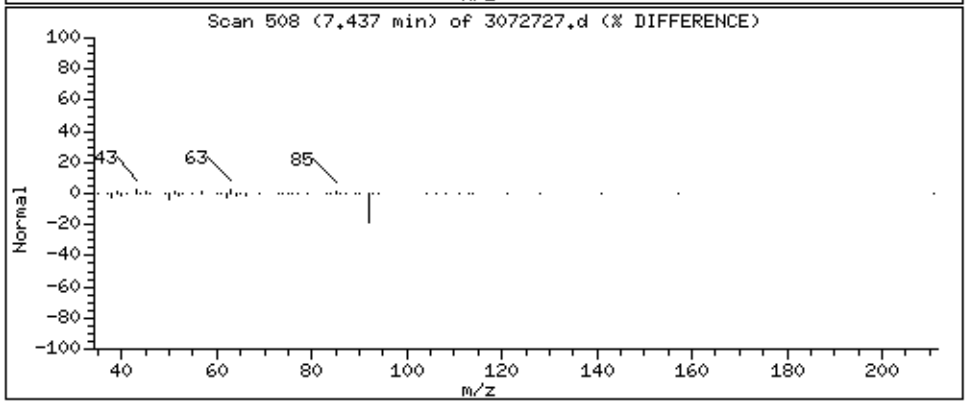












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

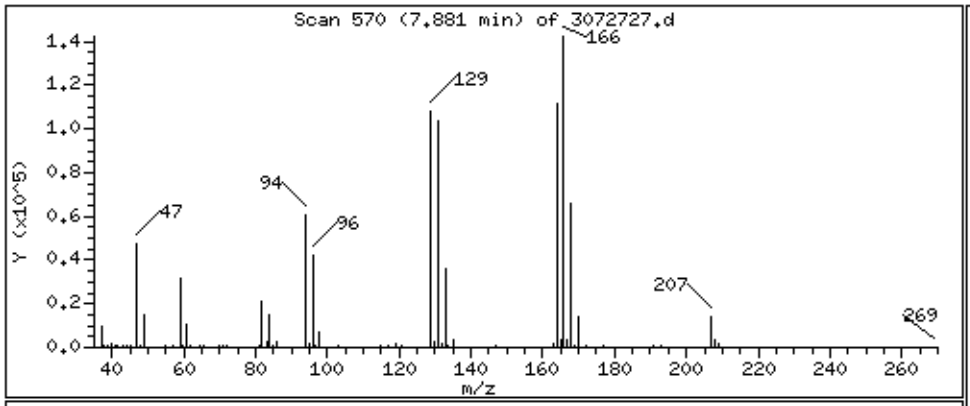
Operator: kk

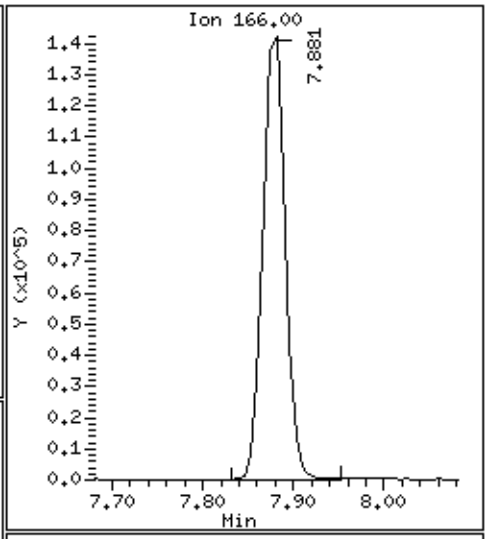
Column phase: RTX-624

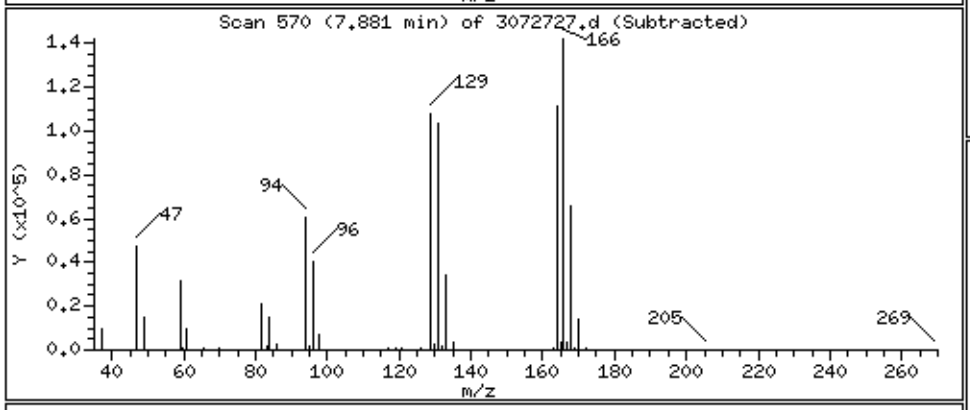
Column diameter: 0.25

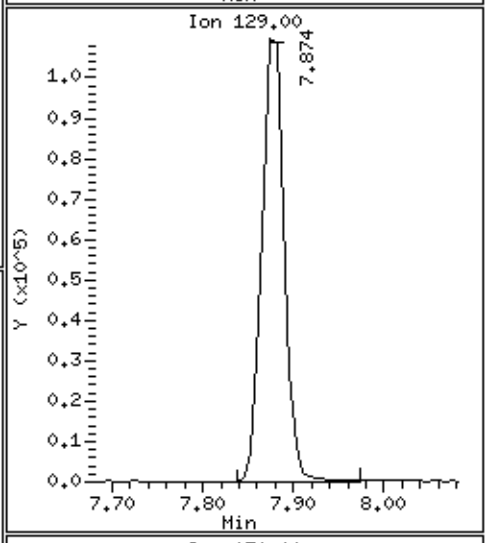
142 Tetrachloroethene

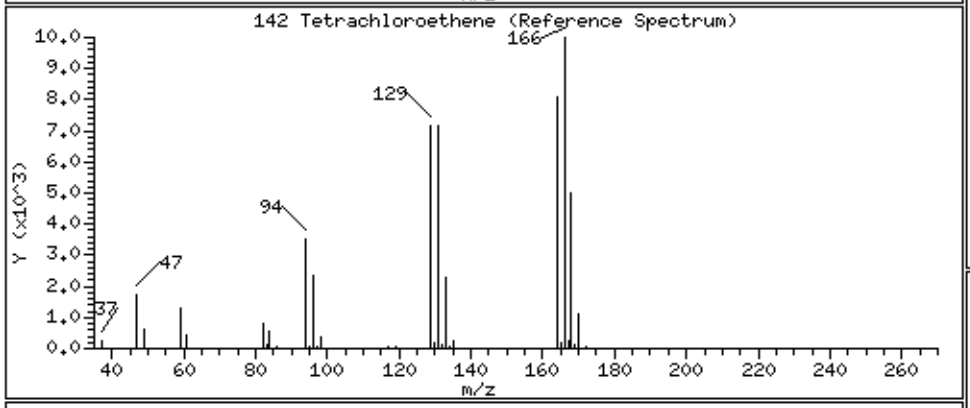
Concentration: 45.234 PPBV

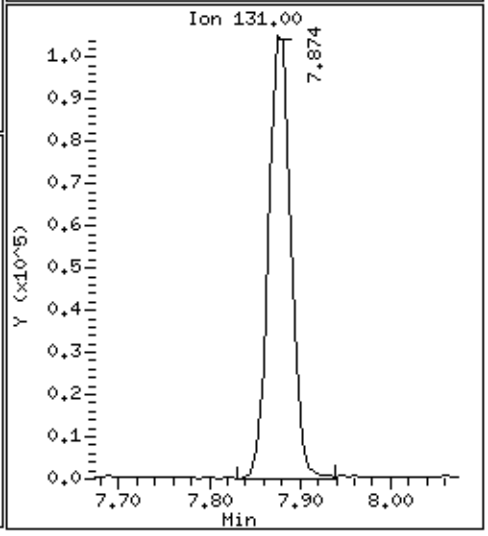


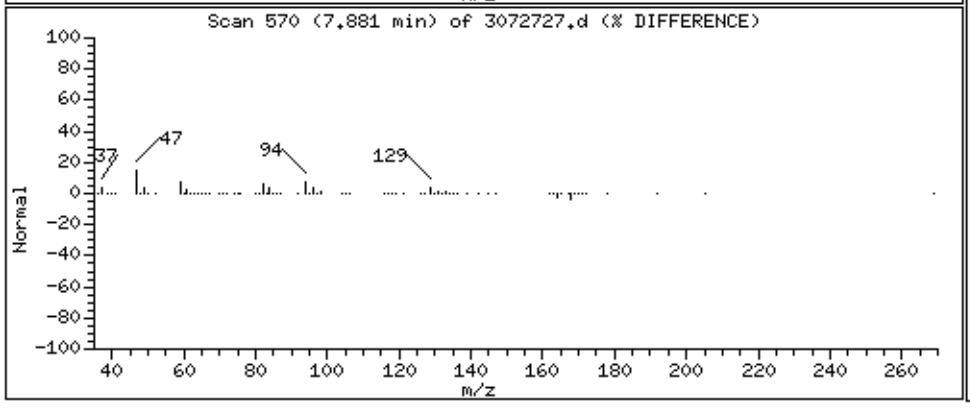












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

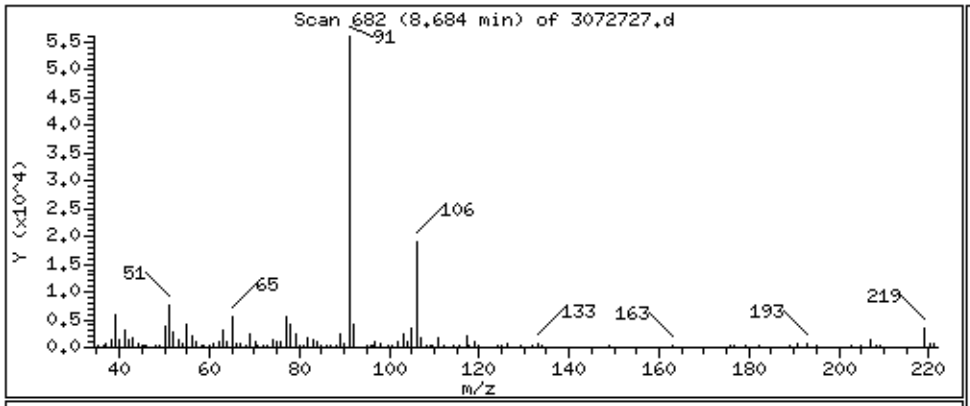
Operator: kk

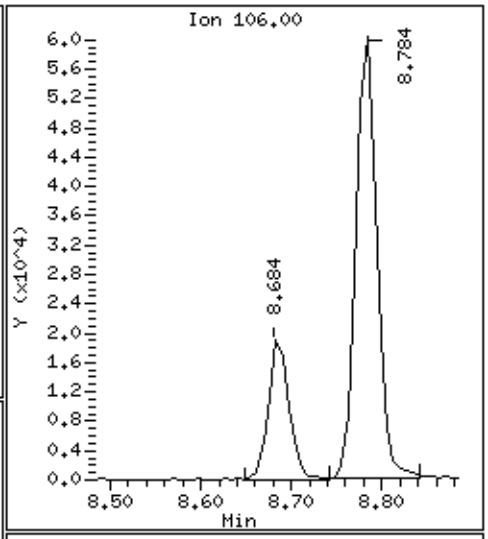
Column phase: RTX-624

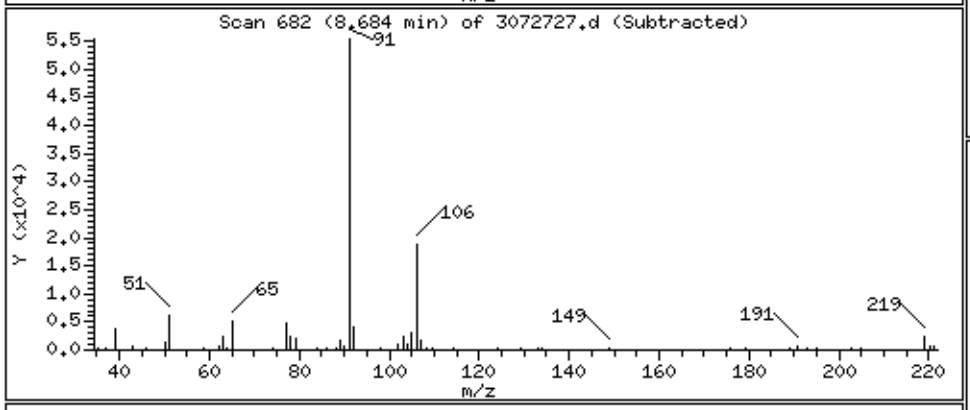
Column diameter: 0.25

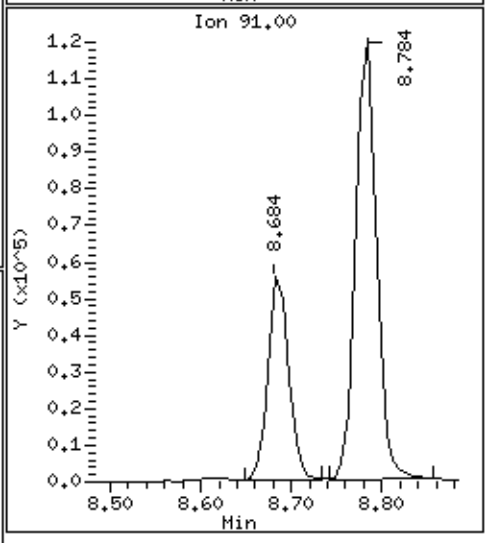
155 Ethyl Benzene

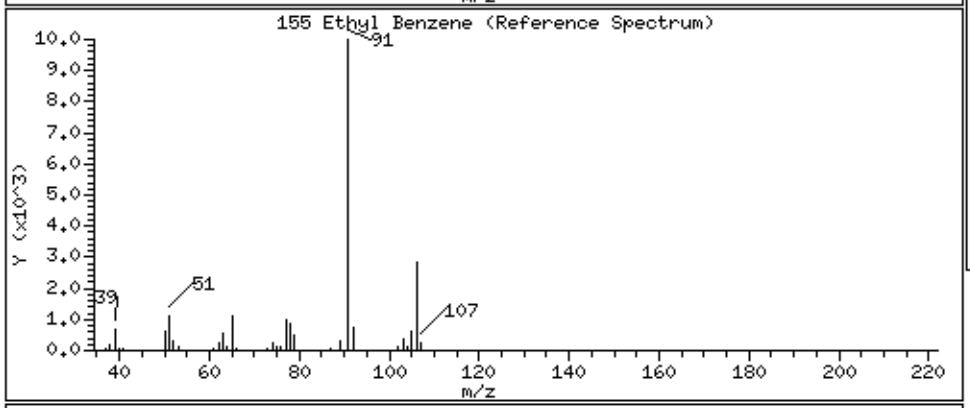
Concentration: 6.374 PPBV

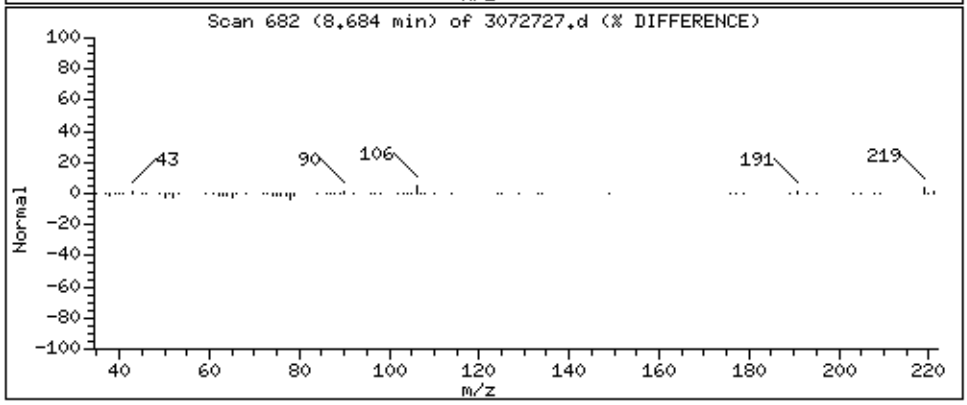












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

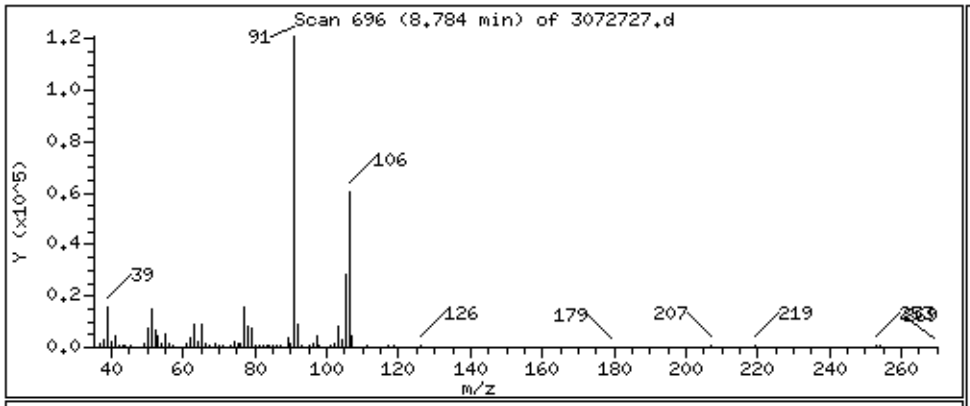
Operator: kk

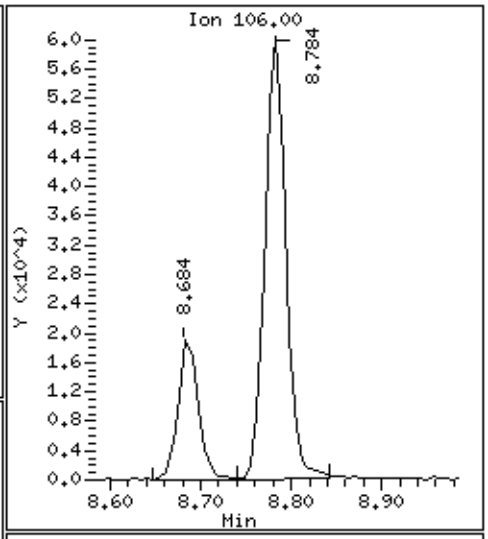
Column phase: RTX-624

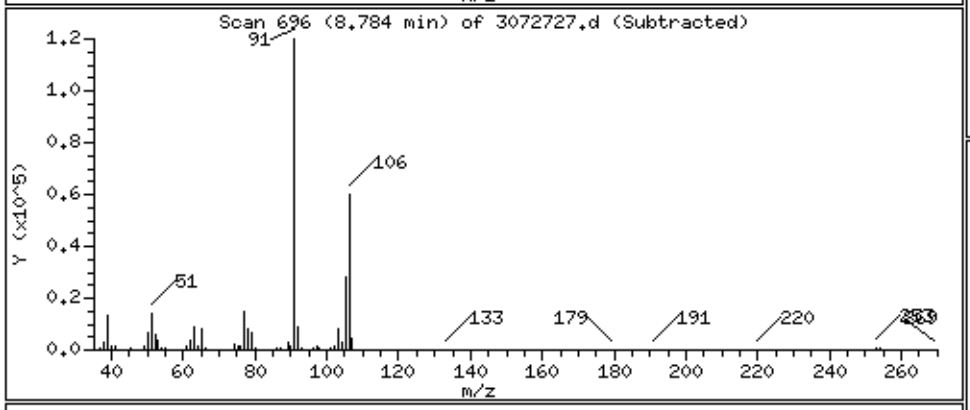
Column diameter: 0.25

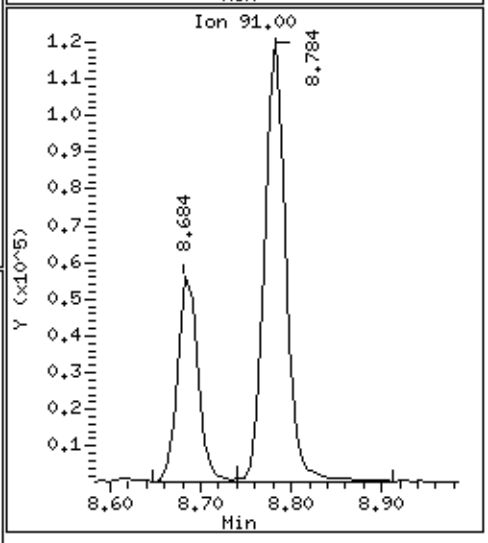
158 m,p-Xylene

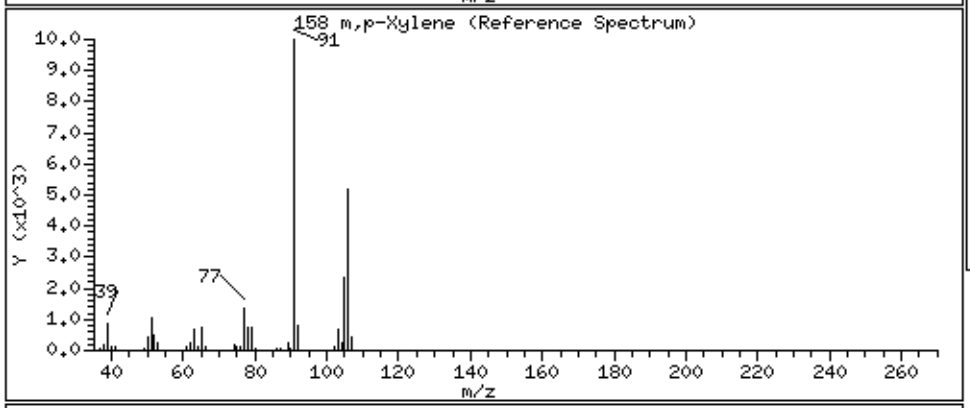
Concentration: 16.449 PPBV

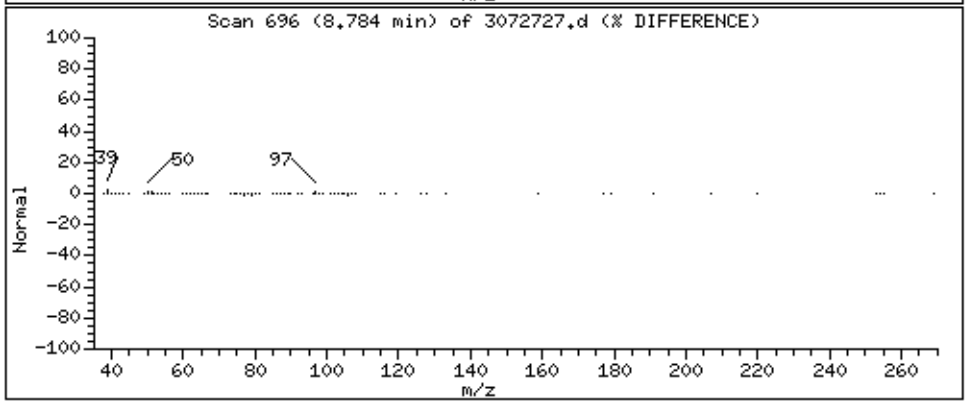












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

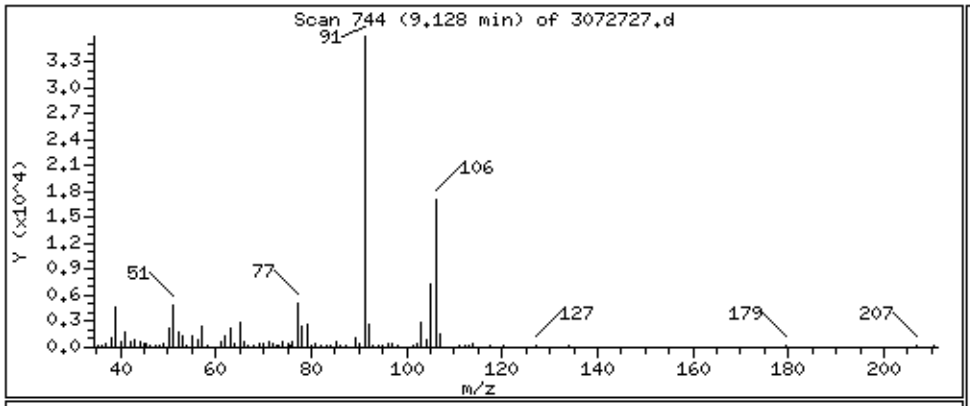
Operator: kk

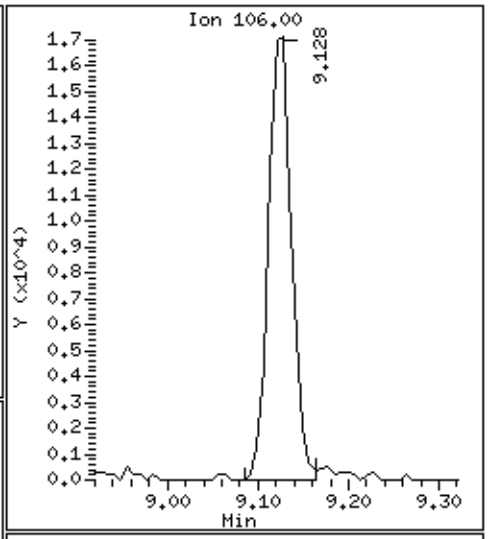
Column phase: RTX-624

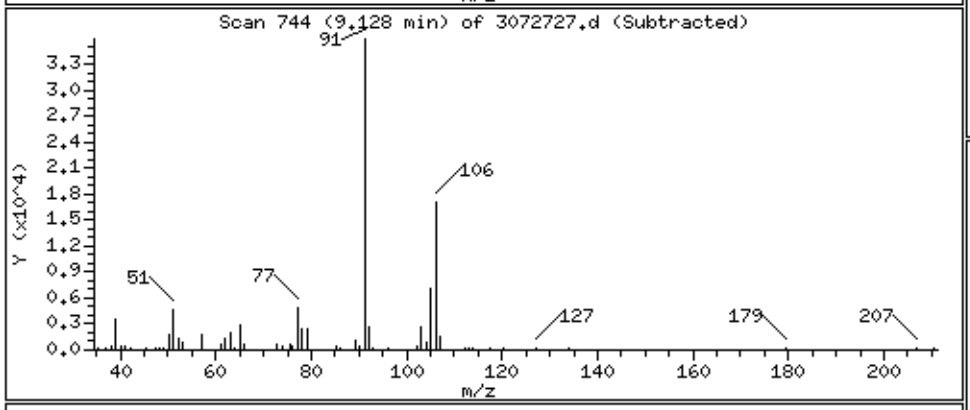
Column diameter: 0.25

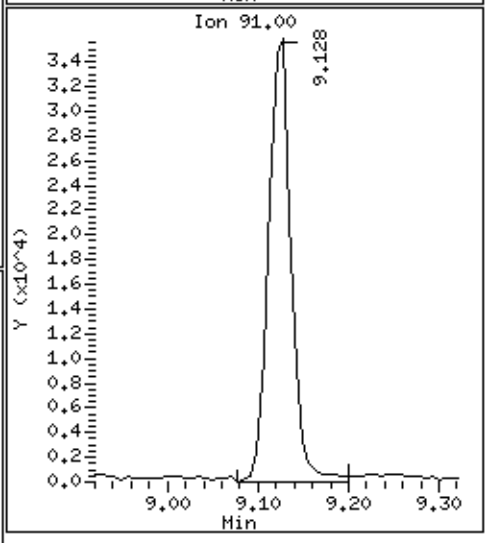
164 o-Xylene

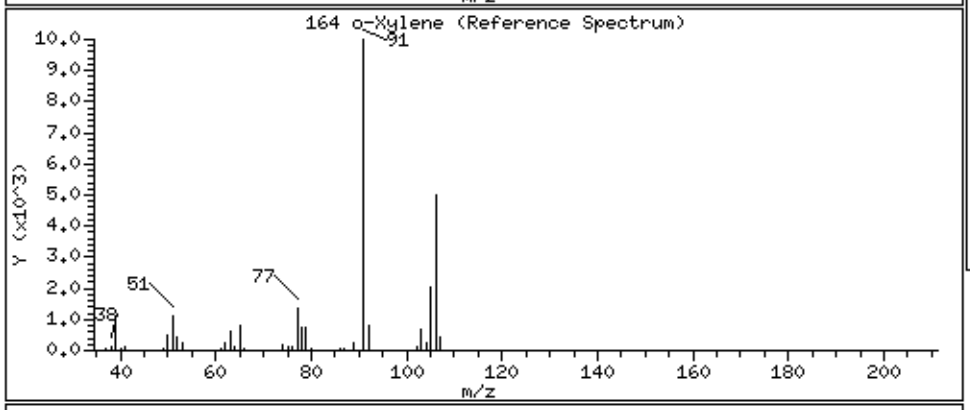
Concentration: 5.484 PPBV

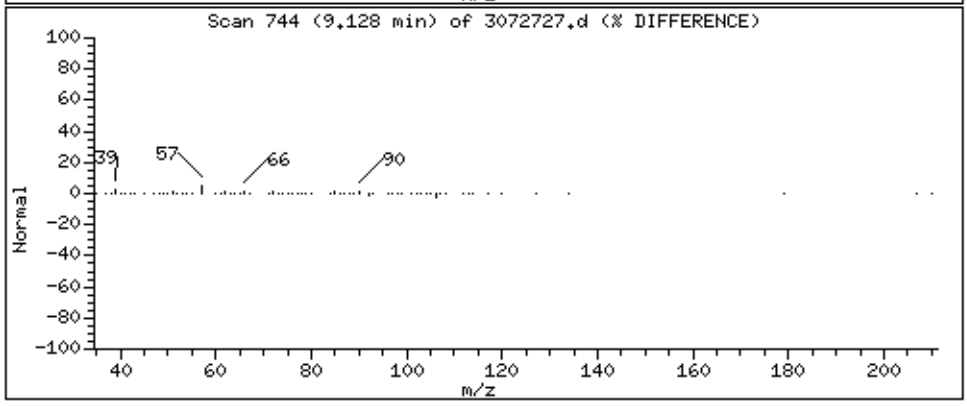












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

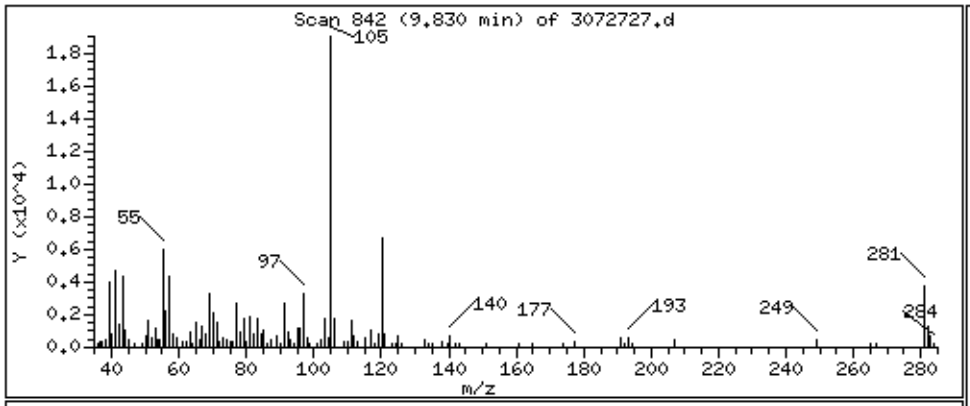
Operator: kk

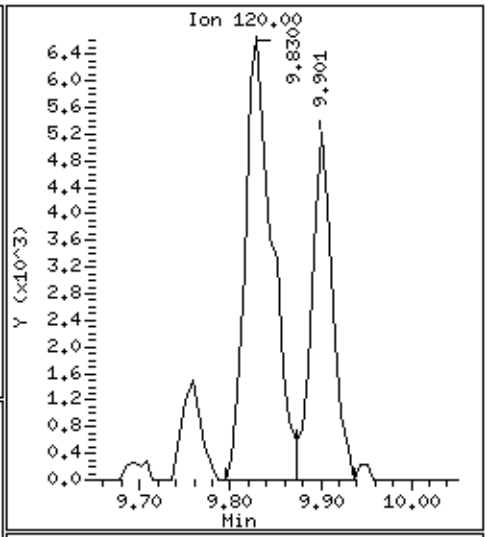
Column phase: RTX-624

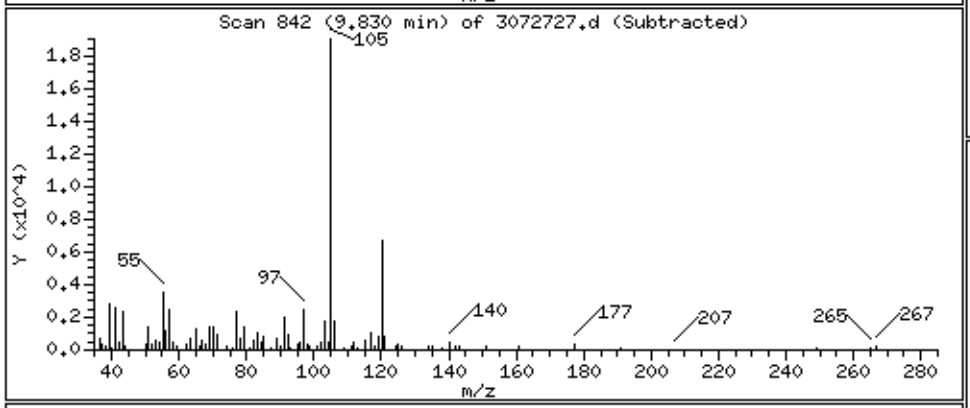
Column diameter: 0.25

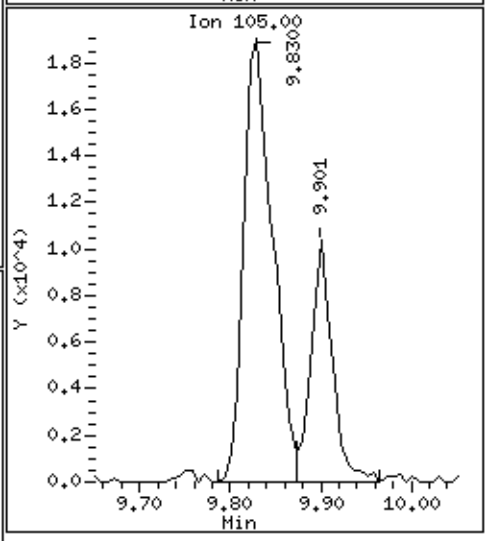
183 4-Ethyltoluene

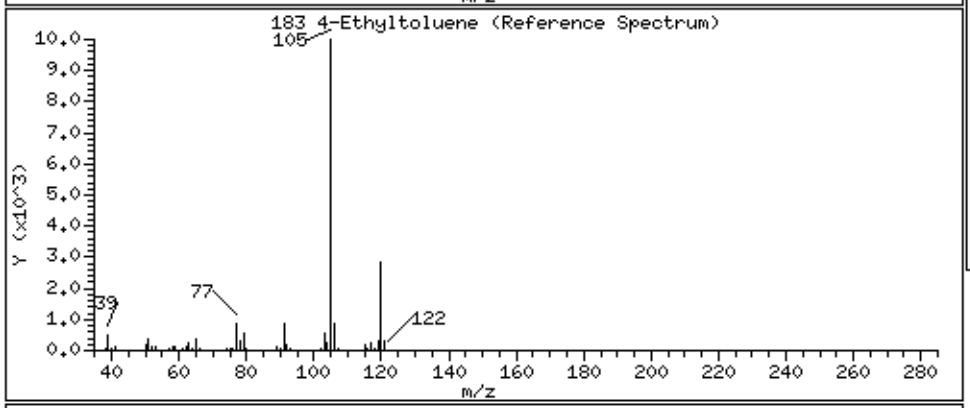
Concentration: 2.594 PPBV

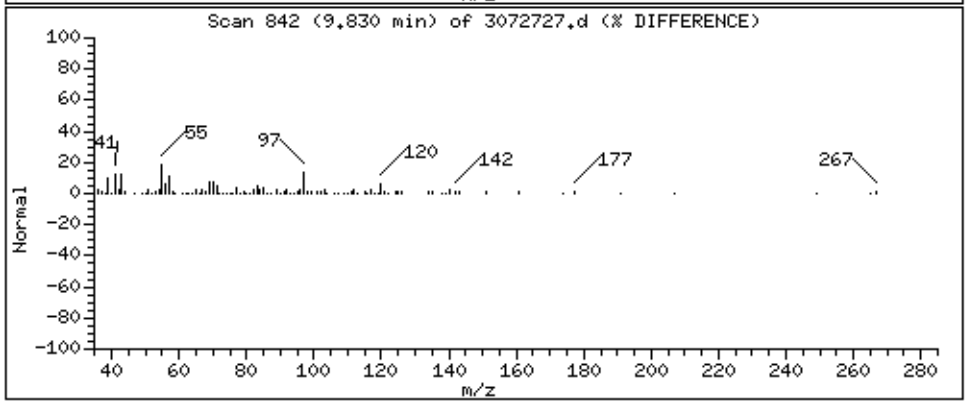












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Page 22

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

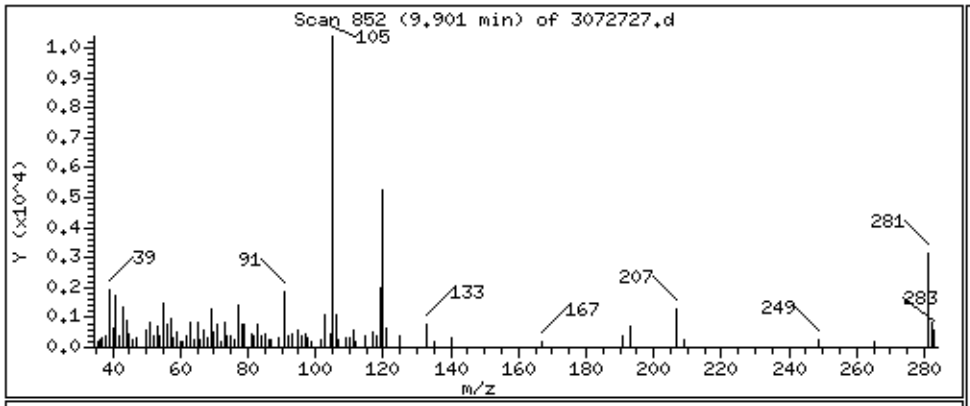
Operator: kk

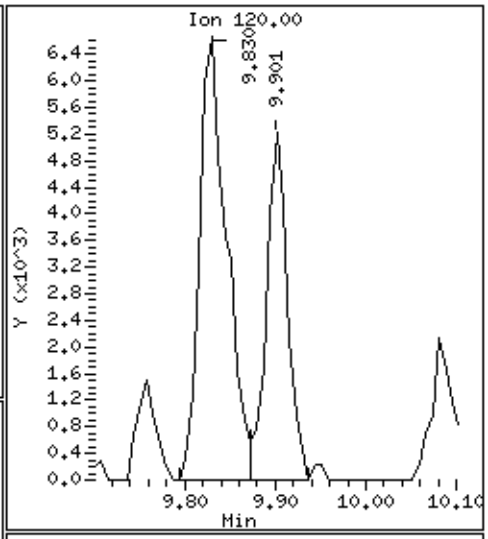
Column phase: RTX-624

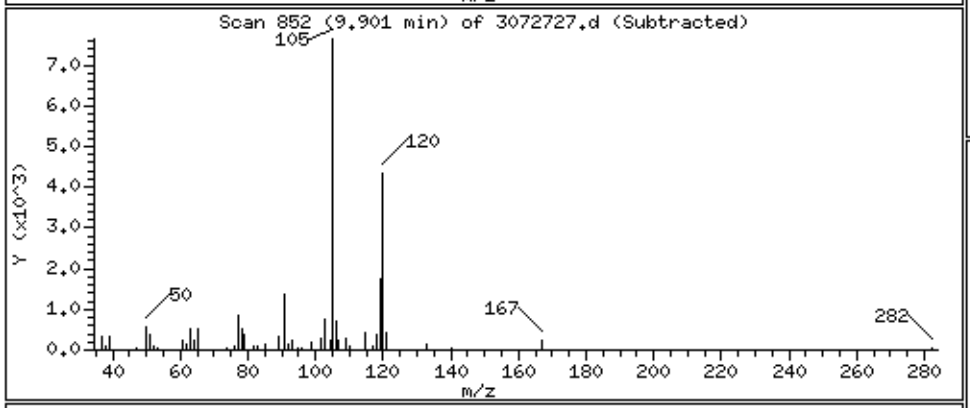
Column diameter: 0.25

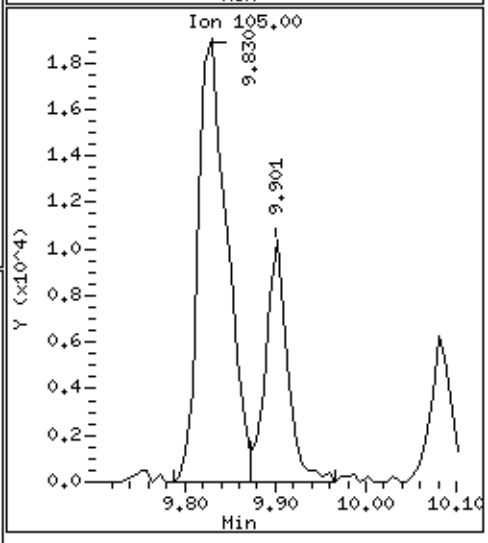
185 1,3,5-Trimethylbenzene

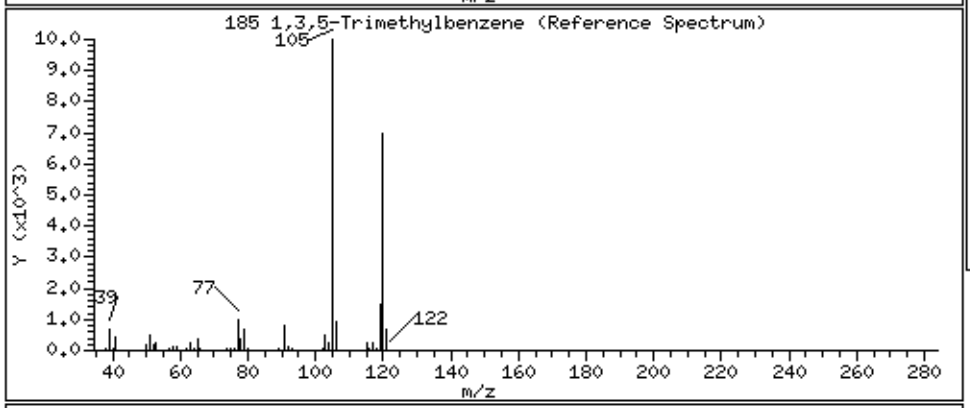
Concentration: 1.137 PPBV

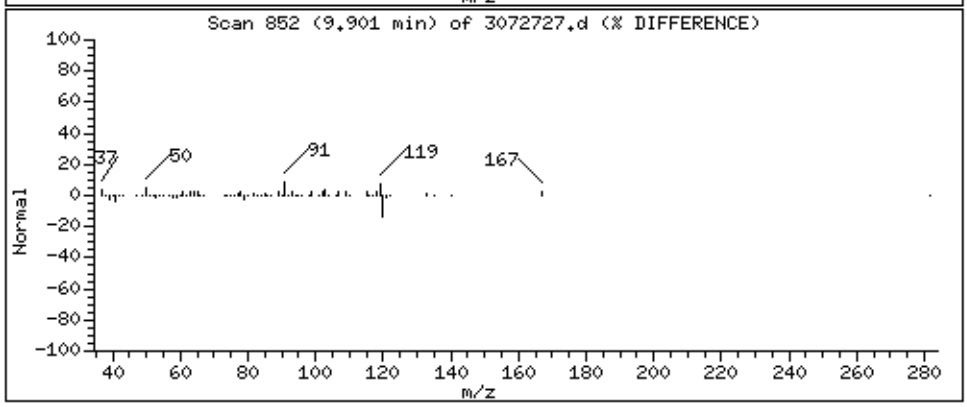












Data File: /chem/msd3.i/27JUL21.b/3072727.d

Date : 28-JUL-2021 02:42

Client ID:

Instrument: msd3.i

Sample Info: 200mL S1437

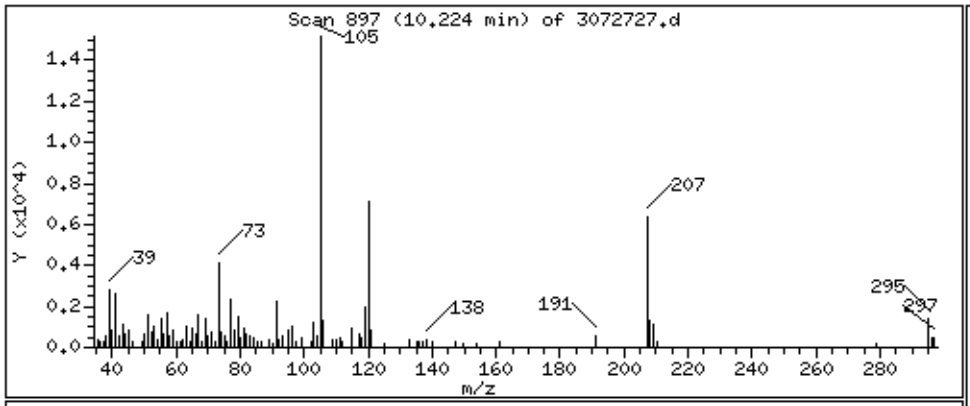
Operator: kk

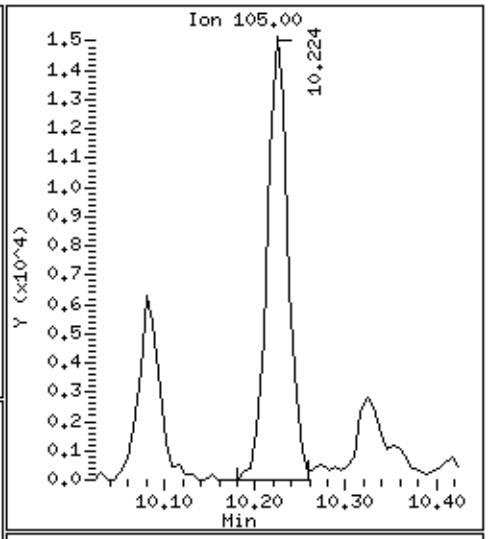
Column phase: RTX-624

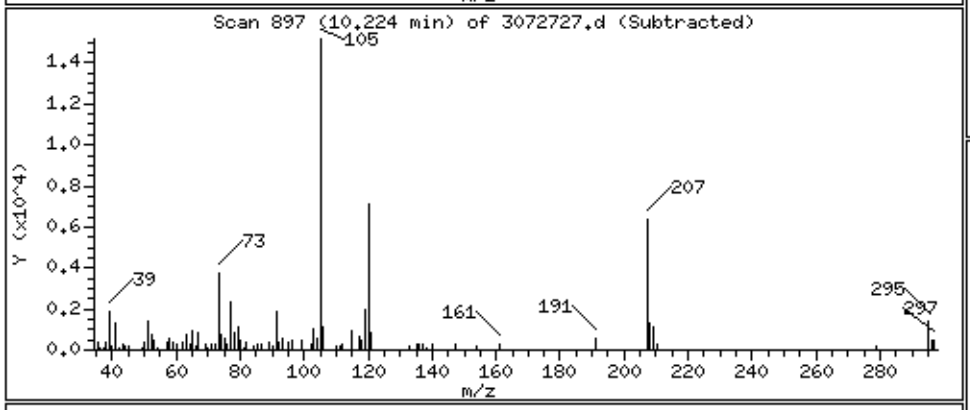
Column diameter: 0.25

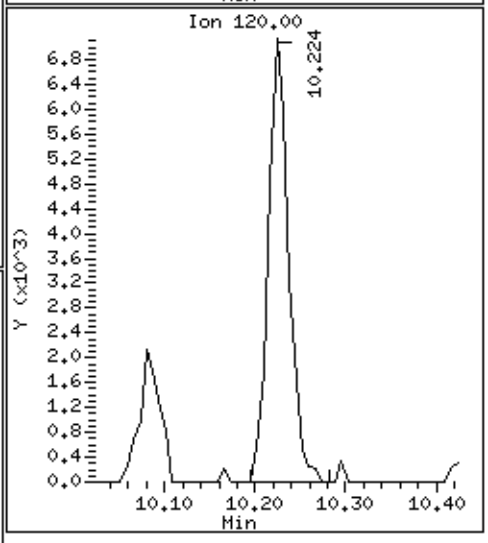
190 1,2,4-Trimethylbenzene

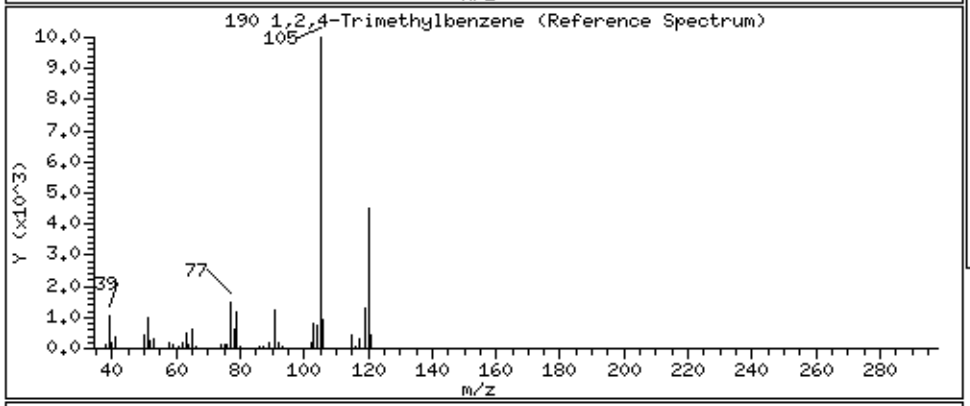
Concentration: 1.655 PPBV

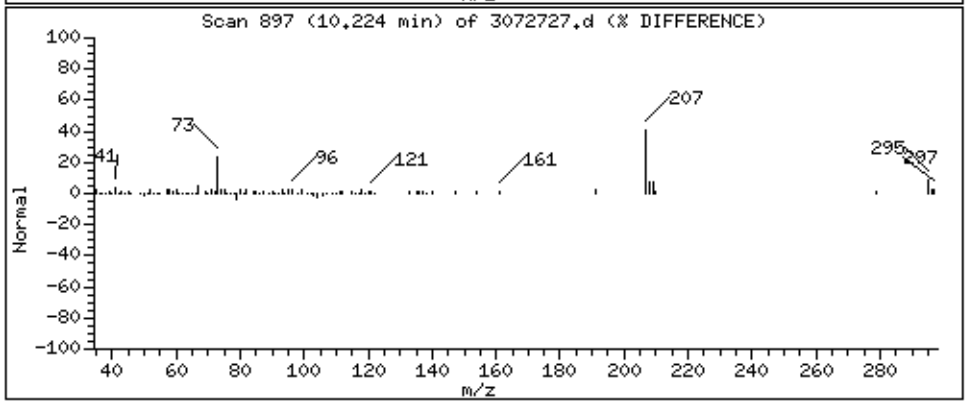












eurofins | Air Toxics

Client Sample ID: SG-VW64B-01

Lab ID#: 2107362A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072728**	**Date of Collection:**	**7/15/21 11:41:00 AM**
Dil. Factor:	**2.32**	**Date of Analysis:**	**7/28/21 03:11 AM**

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	8.9	12	24
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	10	11	26
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	13	28	31
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	2.9	7.8	19
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	43	5.7	210
Chloromethane	12	Not Detected	24	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected

eurofins | Air Toxics

Client Sample ID: SG-VW64B-01

Lab ID#: 2107362A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072728**	**Date of Collection:**	**7/15/21 11:41:00 AM**
Dil. Factor:	**2.32**	**Date of Analysis:**	**7/28/21 03:11 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	4.6	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	3.6	5.7	18
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	34	7.9	230
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

eurofins | Air Toxics

Client Sample ID: SG-VW64B-01

Lab ID#: 2107362A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072728**	**Date of Collection:**	**7/15/21 11:41:00 AM**
Dil. Factor:	**2.32**	**Date of Analysis:**	**7/28/21 03:11 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	98	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072728.d
Lab Smp Id: 2107362A-09A
Inj Date : 28-JUL-2021 03:11
Operator : kk Inst ID: msd3.i
Smp Info : 200mL 1L3957
Misc Info : 8.4 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 8
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	220973	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	170600				48.46- 108.46	77.20
5.284	5.270 (1.000)	49	303303				120.39- 180.39	137.26
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	712494	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	102735				0.00- 45.52	14.42
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	647937	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	339011				25.46- 85.46	52.32
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	295376	24.2900	24.290		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	142809				21.66- 81.66	48.35
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	697195	23.7574	23.757		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	76779				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	459236			36.47- 96.47	65.87
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.608	9.601 (1.115)	174	419712	24.4898	24.490	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	470787			93.06- 153.06	112.17
9.601	9.601 (1.114)	176	389096			62.87- 122.87	92.71
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	13312	3.82606	8.876	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	159325			321.86- 381.86	1196.81
1.479	1.451 (0.280)	47	9552			45.34- 105.34	71.75
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	23655	1.53671	3.565	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	7446			2.63- 62.63	31.48
47 Acetone					CAS #: 67-64-1		
3.242	3.214 (0.613)	58	20760	5.60287	12.999	80.00- 120.00	100.00
3.242	3.214 (0.613)	43	72515			299.66- 359.66	349.30
52 2-Propanol					CAS #: 67-63-0		
3.424	3.409 (0.648)	45	59752	4.48405	10.403	80.00- 120.00	100.00
3.424	3.395 (0.648)	43	14494			0.00- 48.61	24.26
92 Chloroform					CAS #: 67-66-3		
5.354	5.340 (1.013)	83	259417	18.7245	43.441	80.00- 120.00	100.00
5.354	5.340 (1.013)	85	168364			34.71- 94.71	64.90
122 Bromodichloromethane					CAS #: 75-27-4		
6.843	6.836 (1.107)	83	16904	1.23705	2.870	80.00- 120.00	100.00
6.843	6.836 (1.107)	85	11389			34.31- 94.31	67.37
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.914)	166	149624	14.7403	34.197	80.00- 120.00	100.00
7.882	7.881 (0.914)	129	114831			48.71- 108.71	76.75
7.882	7.874 (0.914)	131	111217			46.55- 106.55	74.33

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072728.d
Lab Smp Id: 2107362A-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 8.4 Hg->9.9 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	220973	-7.54
108 1,4-Difluorobenze	785289	471173	1099405	712494	-9.27
153 Chlorobenzene-d5	683596	410158	957034	647937	-5.22

		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	6.18	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: 29-Jul-2021 11:11

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/msd3.i/27JUL21.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	24.290	97.16	70-130
$ 134 Toluene-d8	25.000	23.757	95.03	70-130
$ 170 4-Bromofluorobenz	25.000	24.490	97.96	70-130

Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

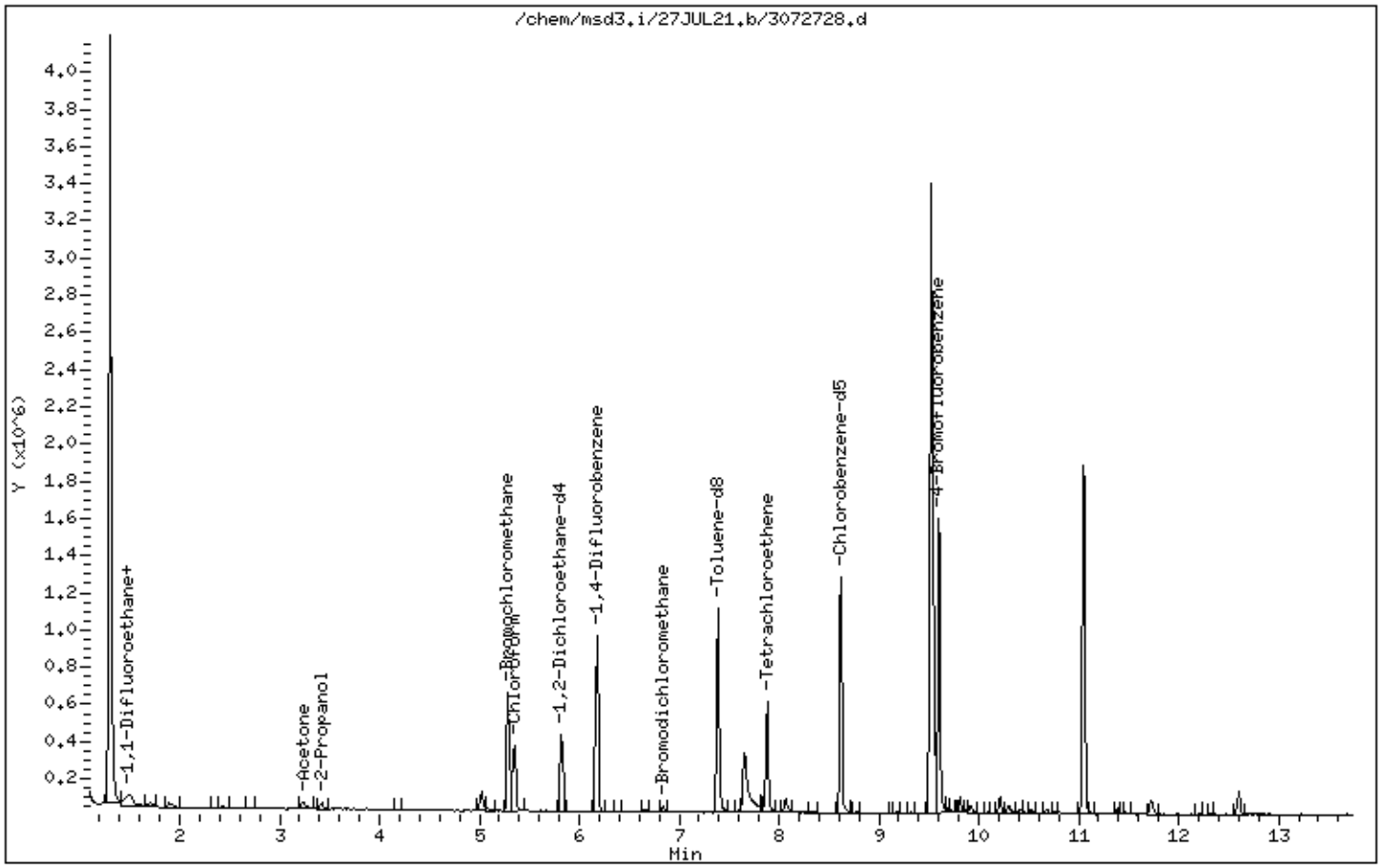
Instrument: msd3.i

Sample Info: 200mL 1L3957

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3957

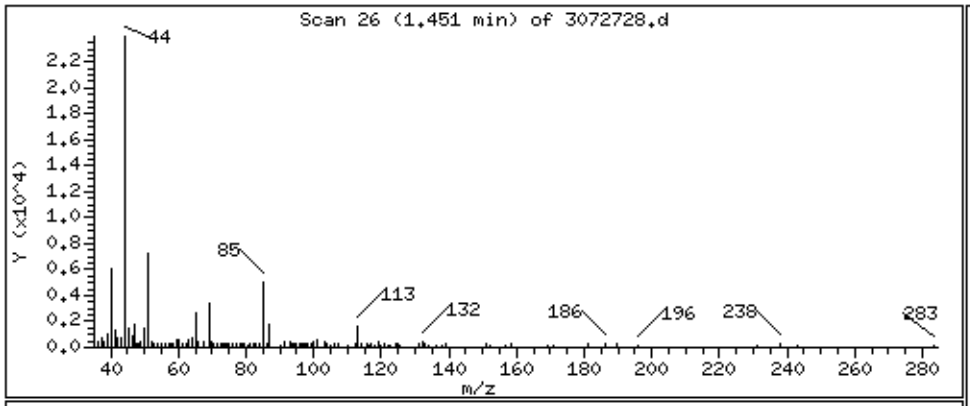
Operator: kk

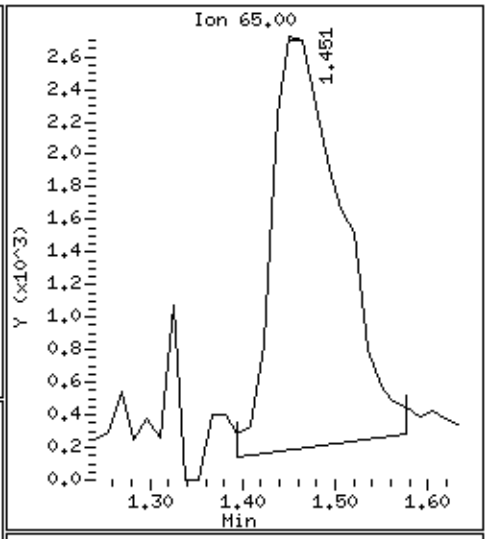
Column phase: RTX-624

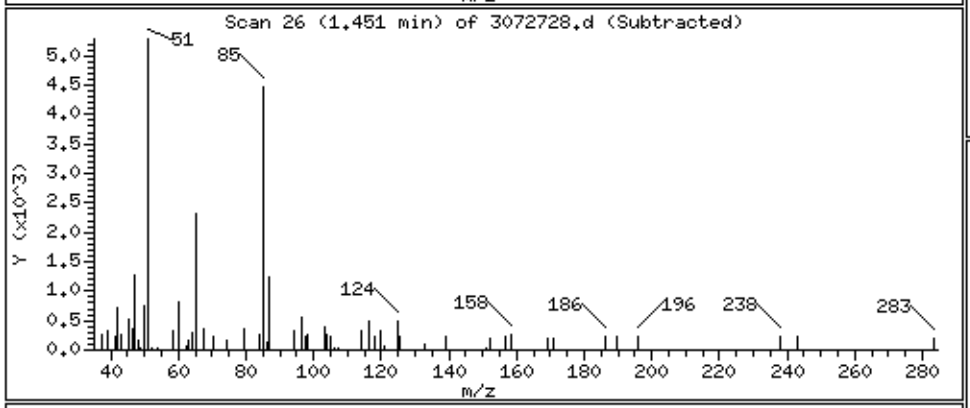
Column diameter: 0.25

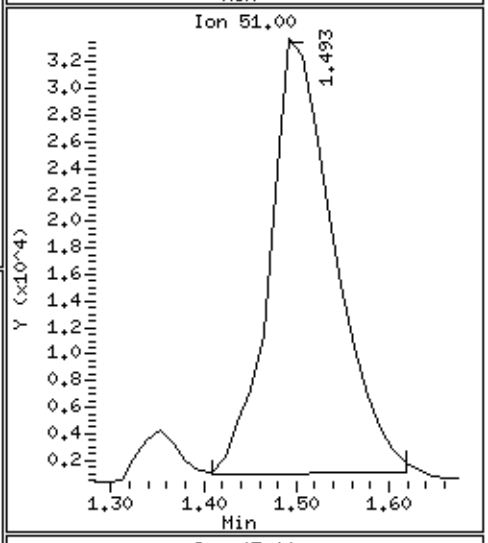
7 1,1-Difluoroethane

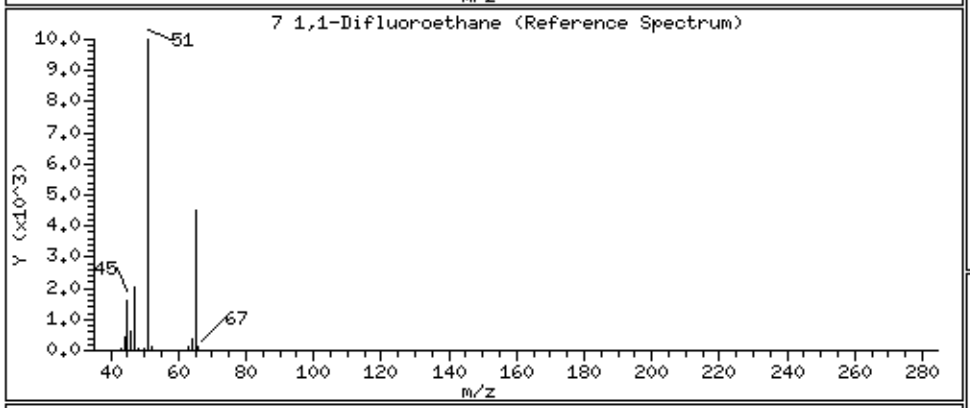
Concentration: 8.876 PPBV

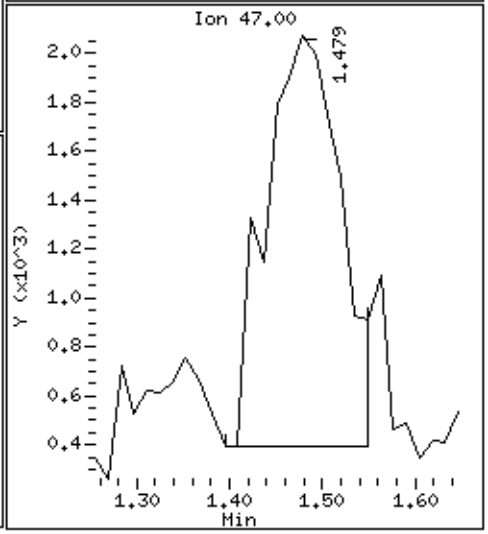


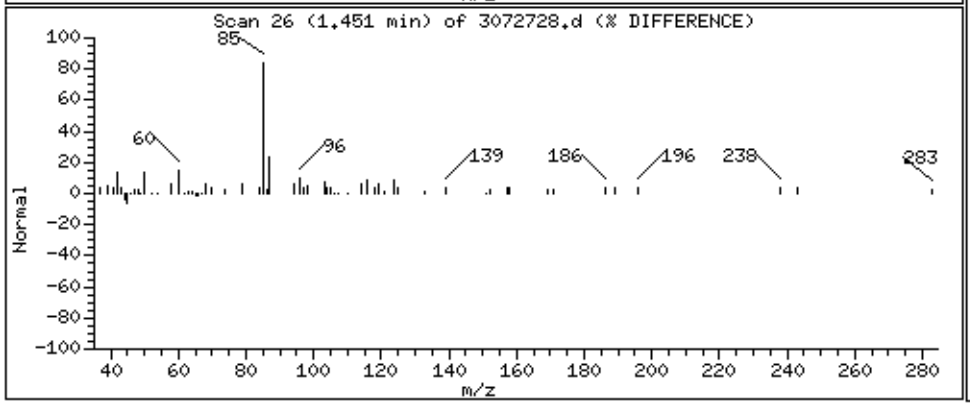












Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3957

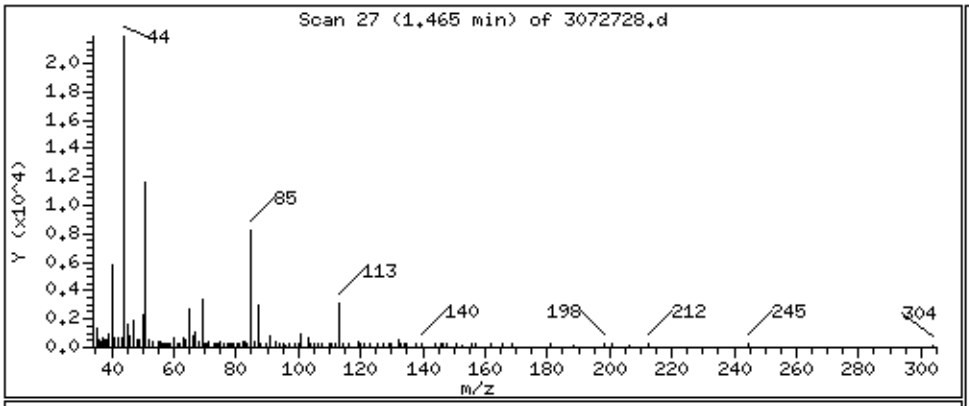
Operator: kk

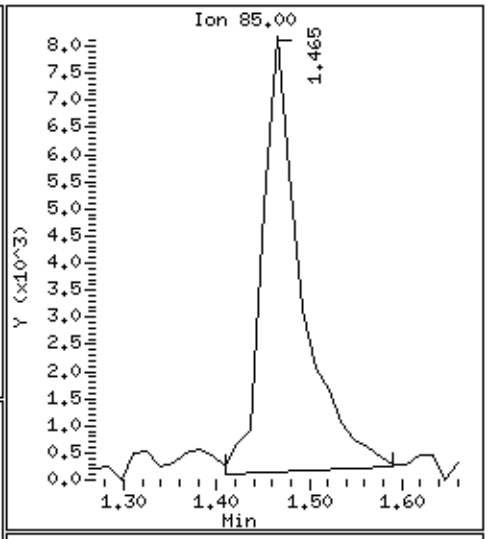
Column phase: RTX-624

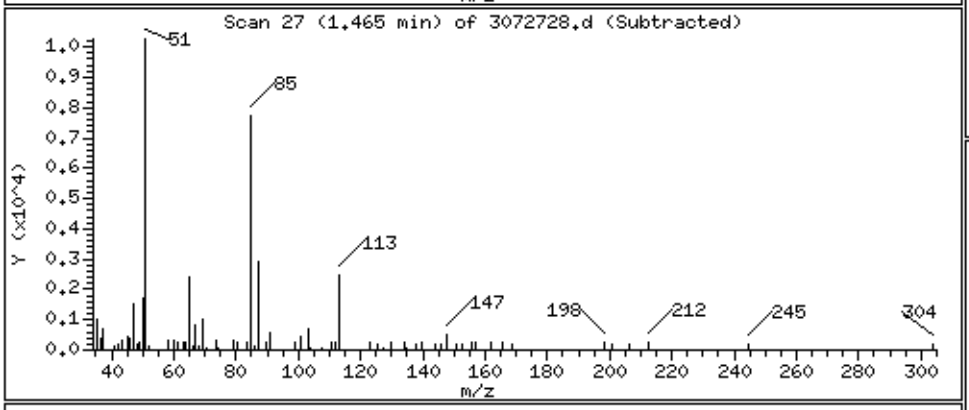
Column diameter: 0.25

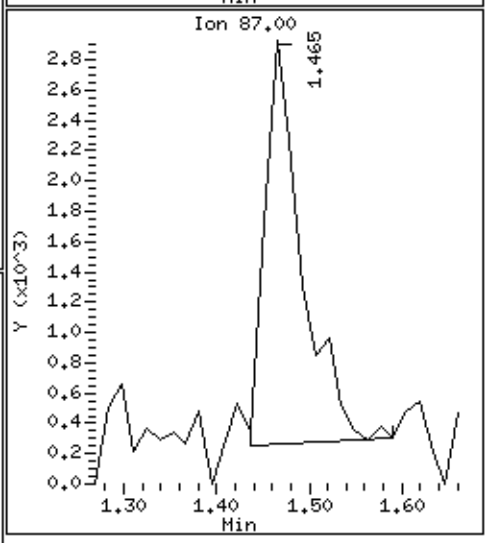
8 Freon 12

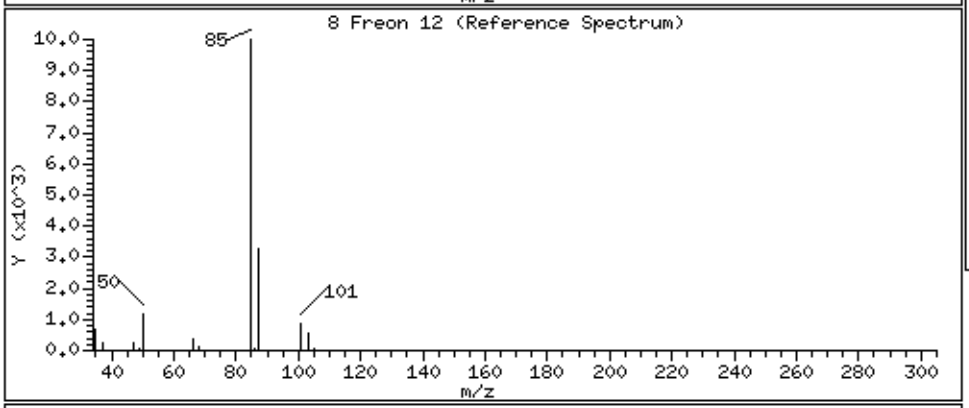
Concentration: 3.565 PPBV

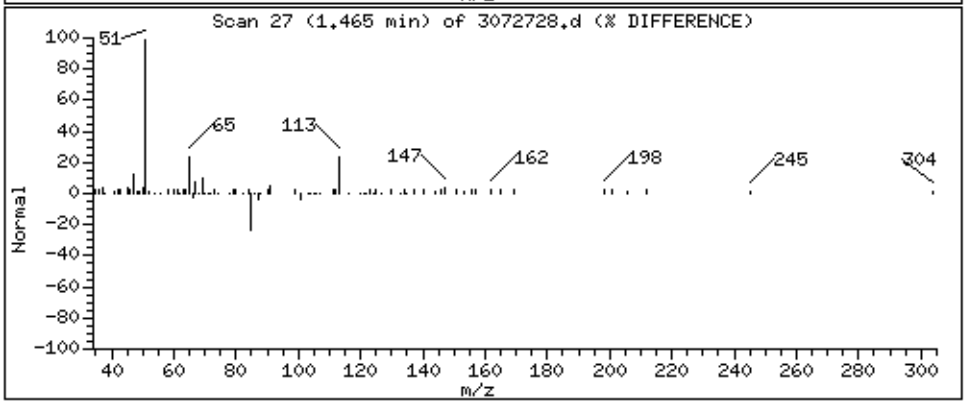












Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3957

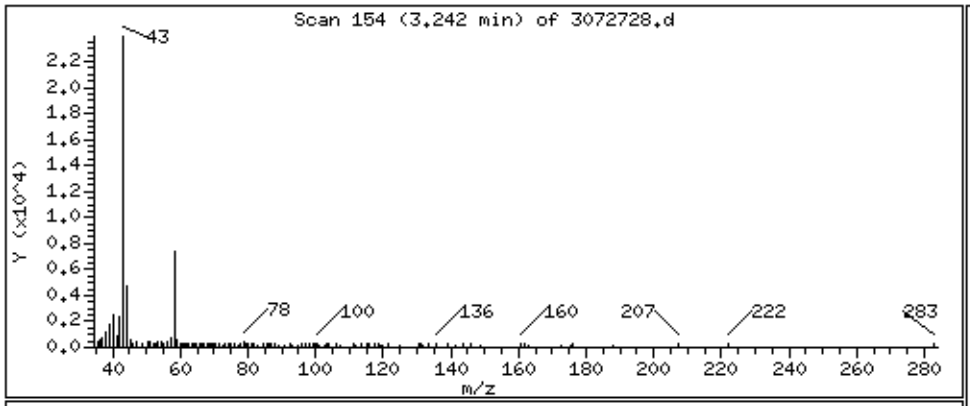
Operator: kk

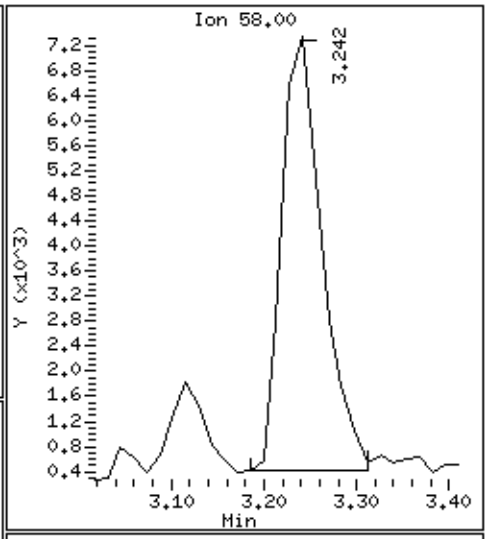
Column phase: RTX-624

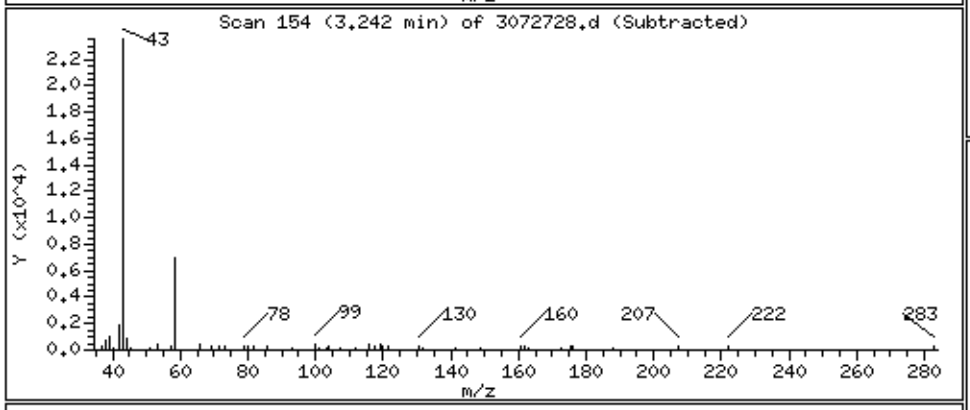
Column diameter: 0.25

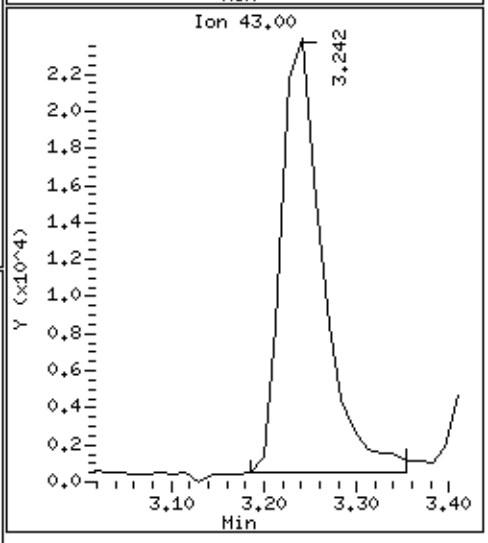
47 Acetone

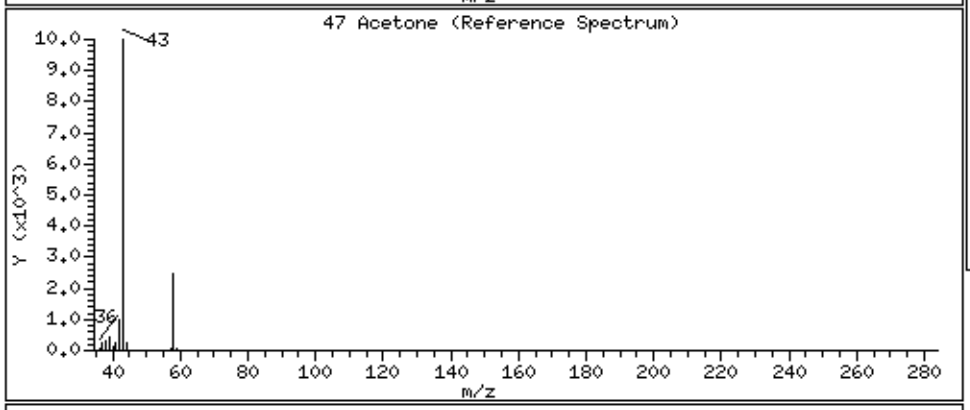
Concentration: 12.999 PPBV

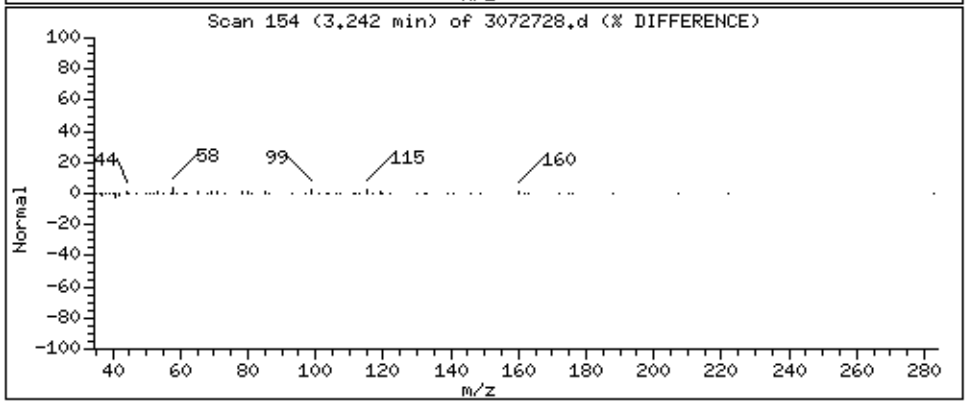












Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3957

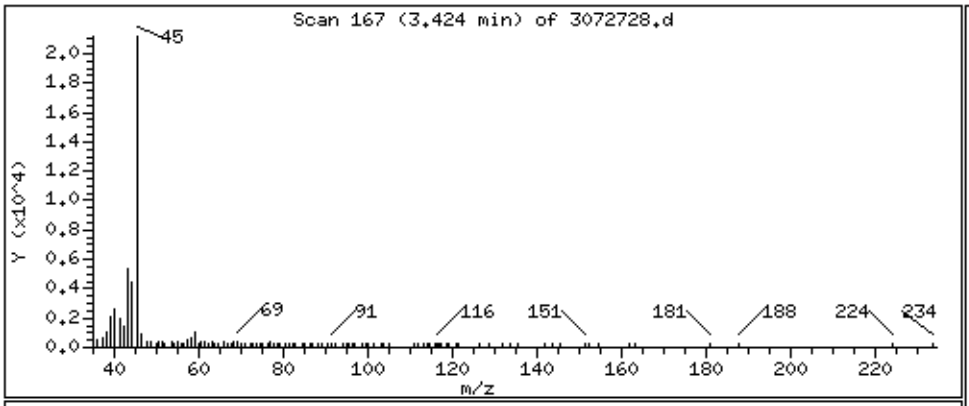
Operator: kk

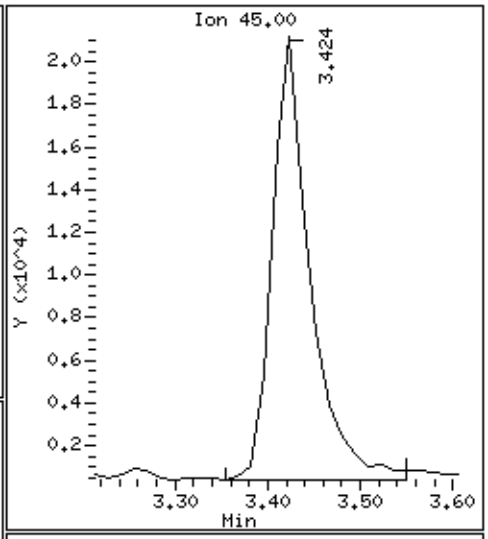
Column phase: RTX-624

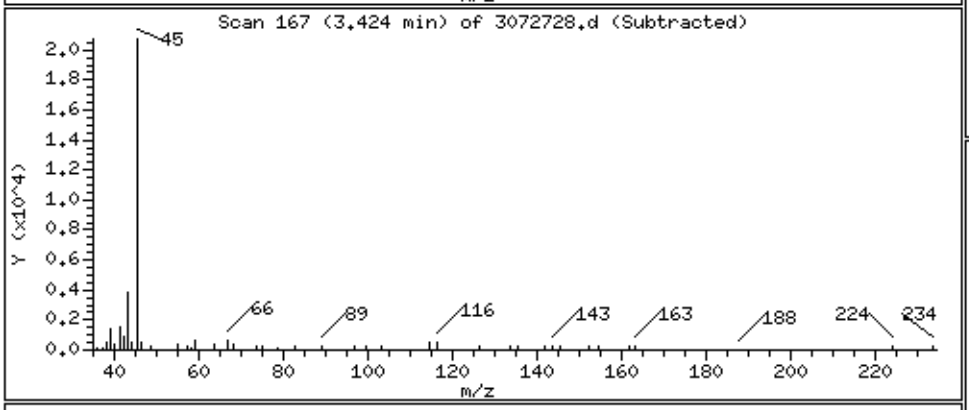
Column diameter: 0.25

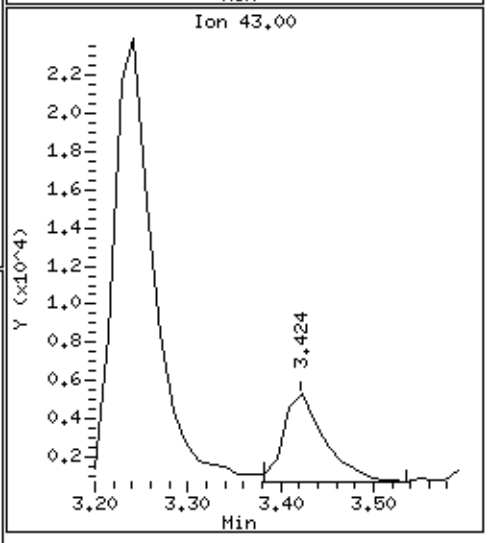
52 2-Propanol

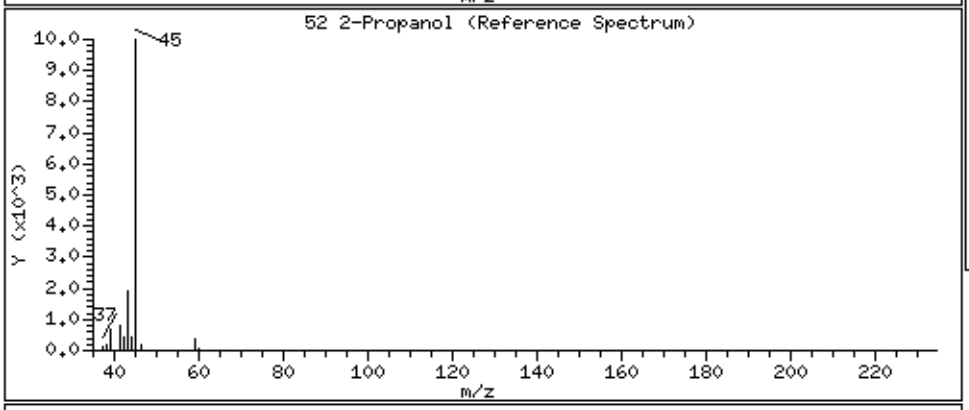
Concentration: 10.403 PPBV

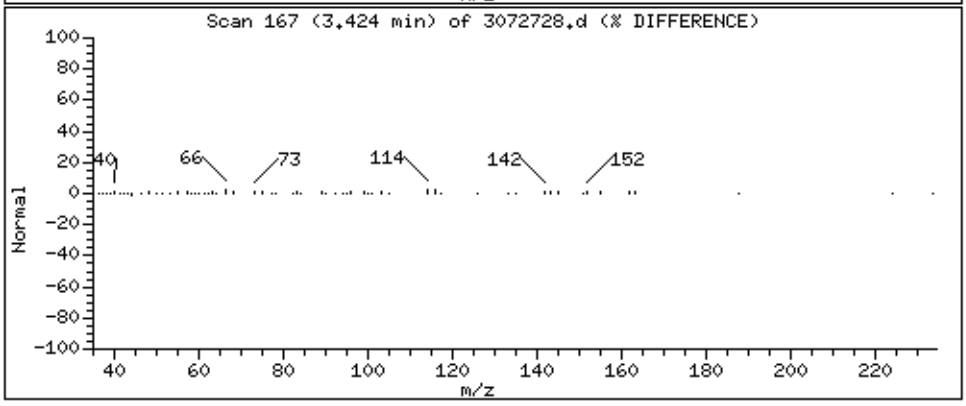












Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3957

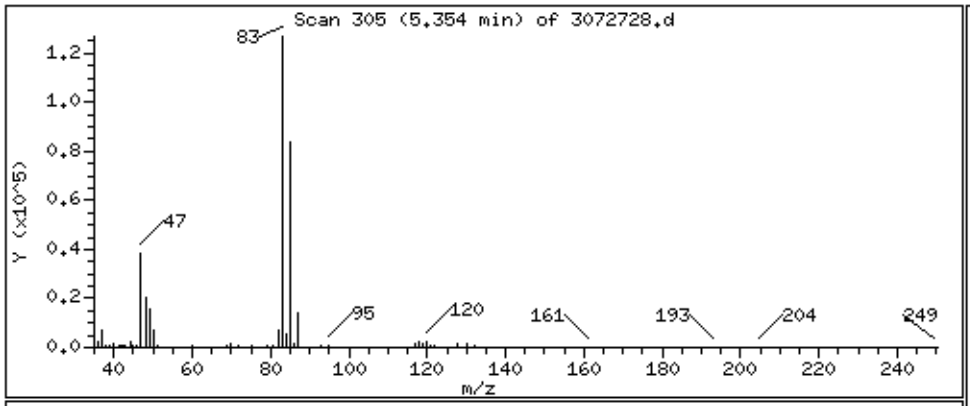
Operator: kk

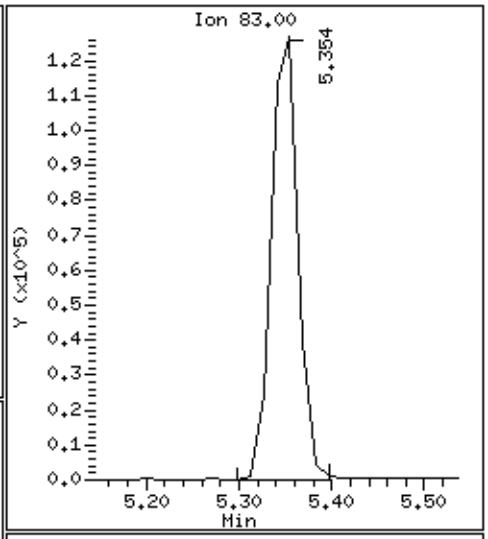
Column phase: RTX-624

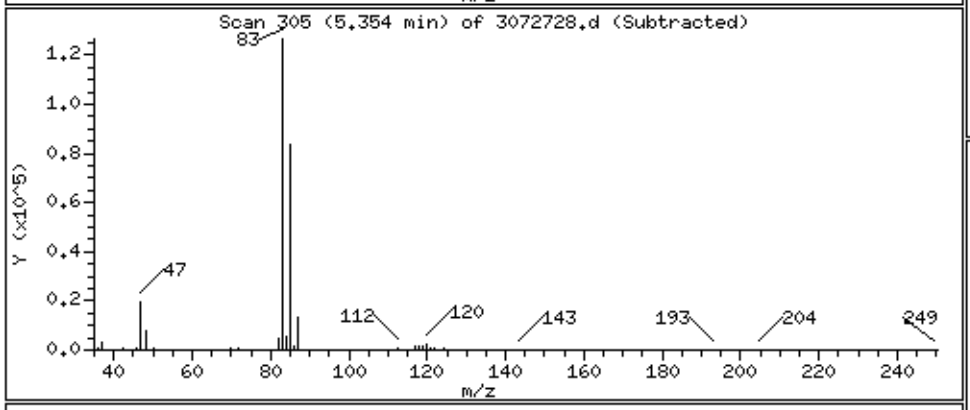
Column diameter: 0.25

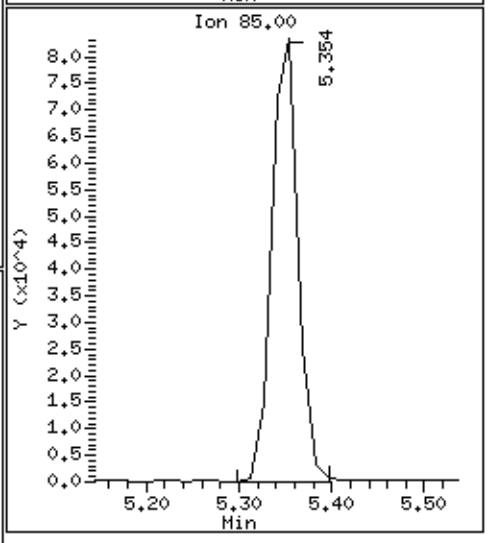
92 Chloroform

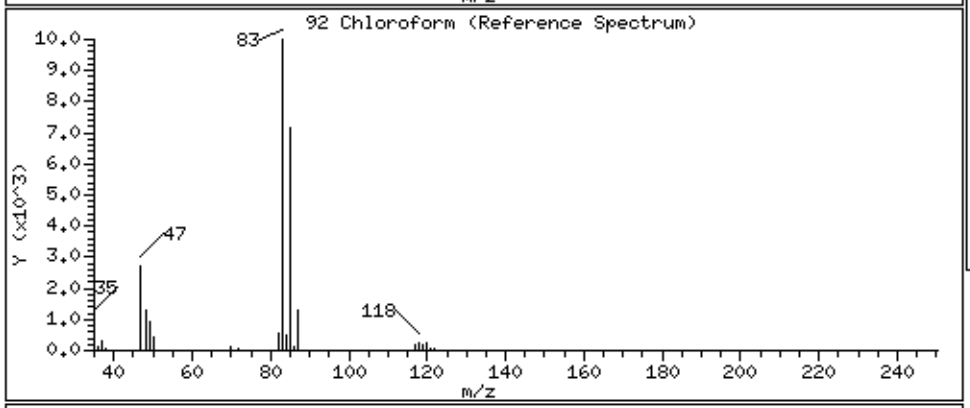
Concentration: 43.441 PPBV

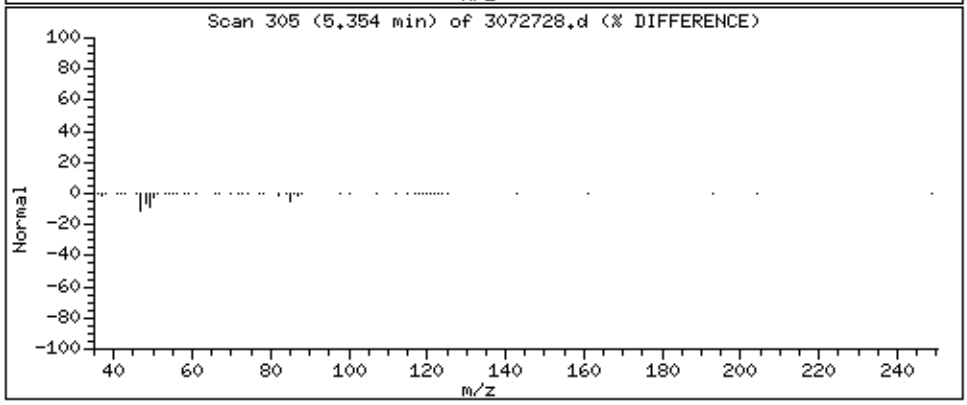












Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3957

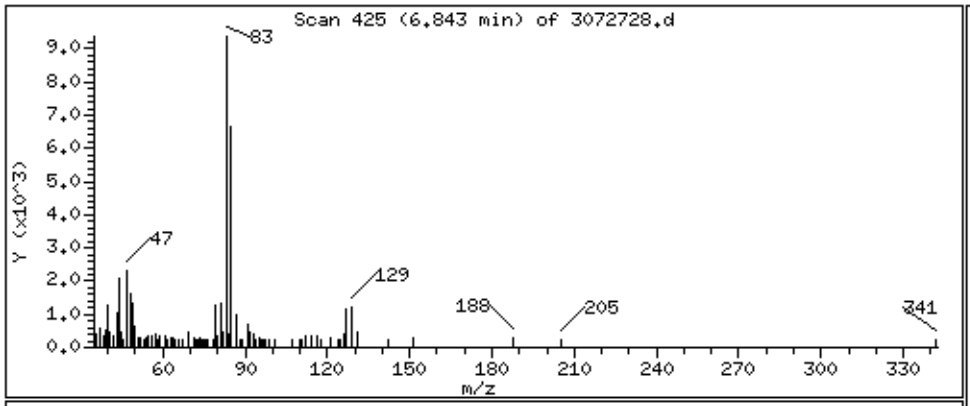
Operator: kk

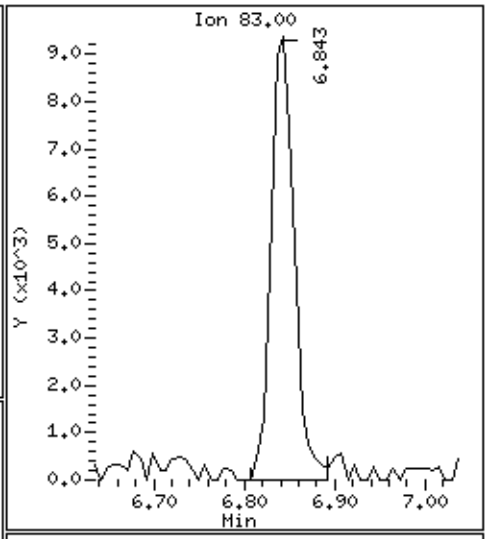
Column phase: RTX-624

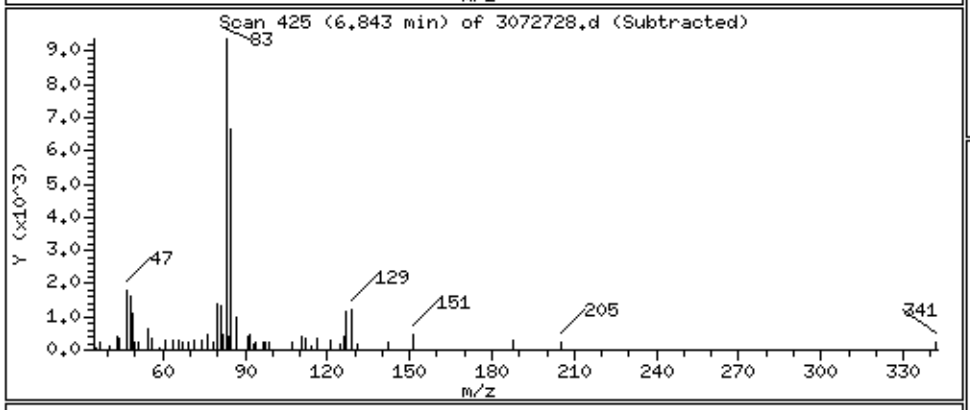
Column diameter: 0.25

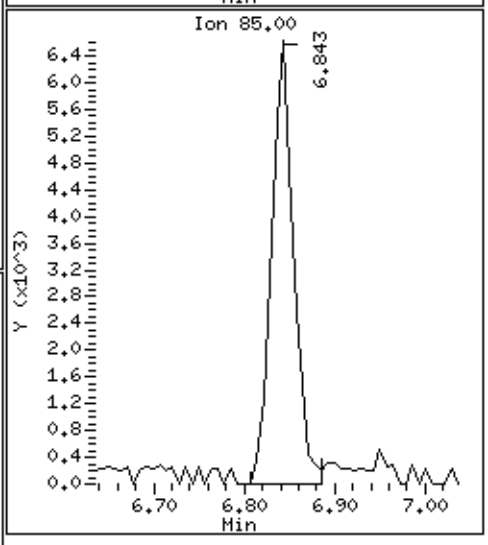
122 Bromodichloromethane

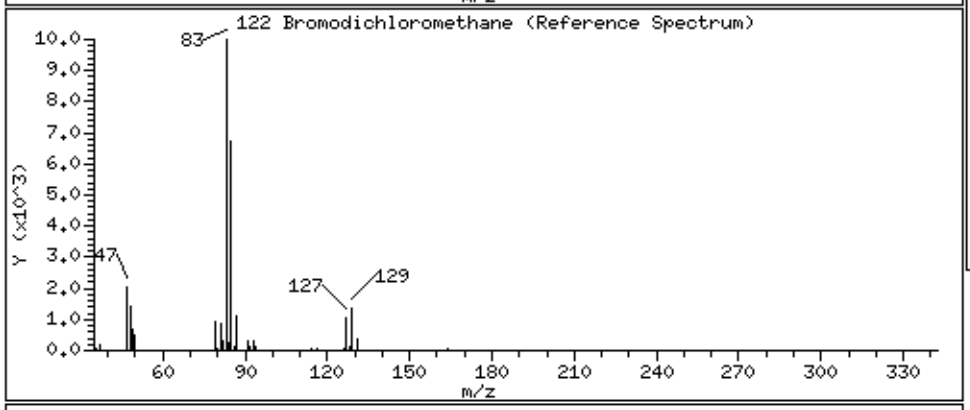
Concentration: 2.870 PPBV

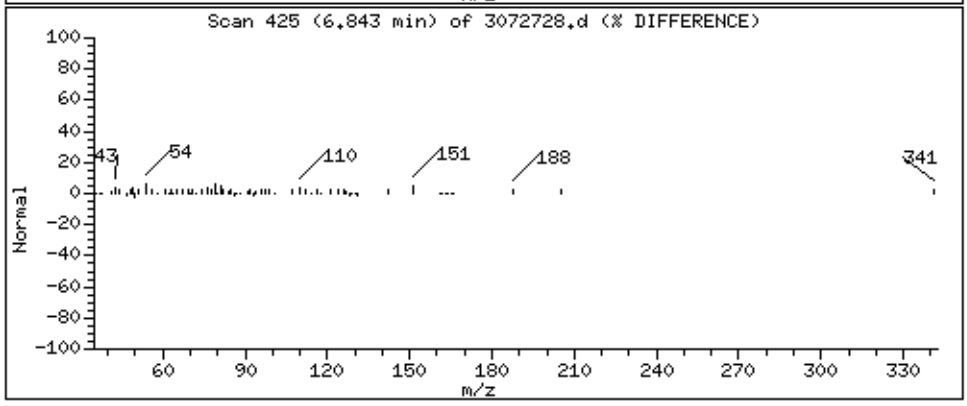












Data File: /chem/msd3.i/27JUL21.b/3072728.d

Date : 28-JUL-2021 03:11

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L3957

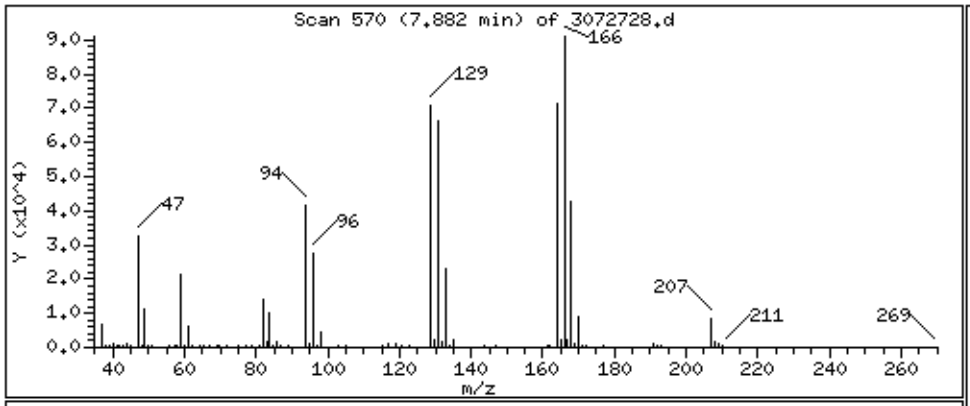
Operator: kk

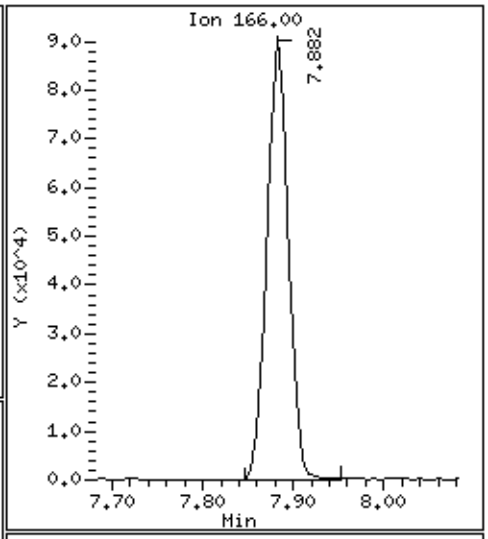
Column phase: RTX-624

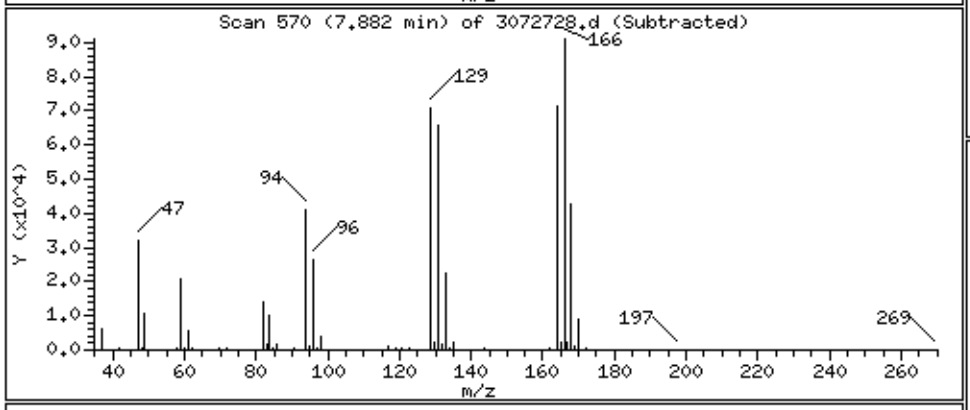
Column diameter: 0.25

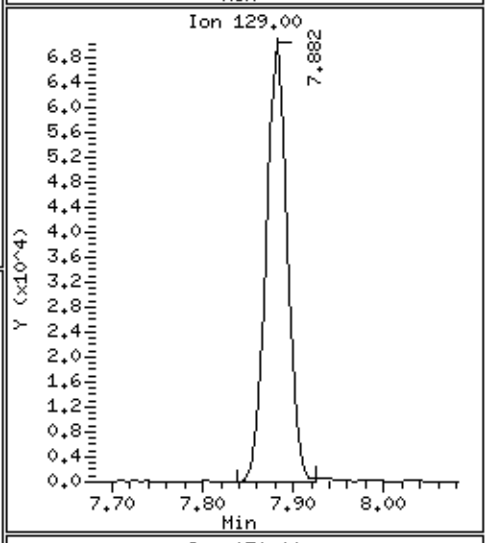
142 Tetrachloroethene

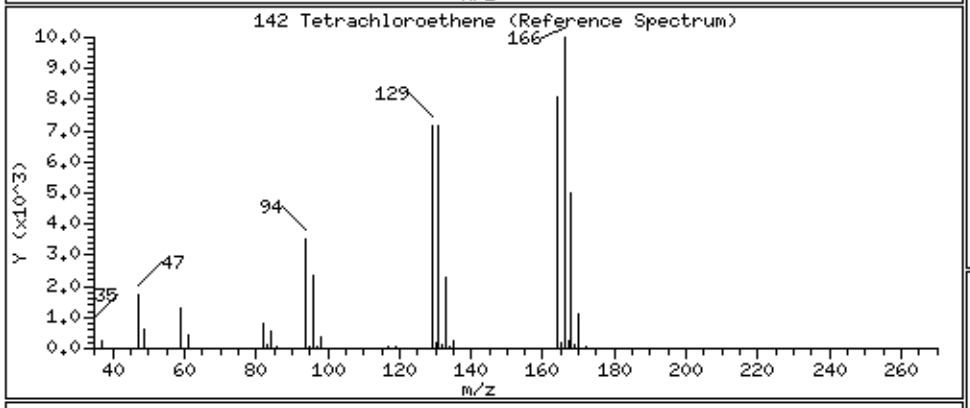
Concentration: 34.197 PPBV

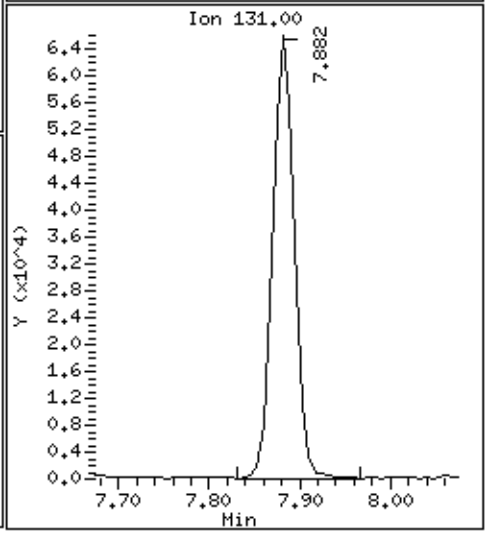


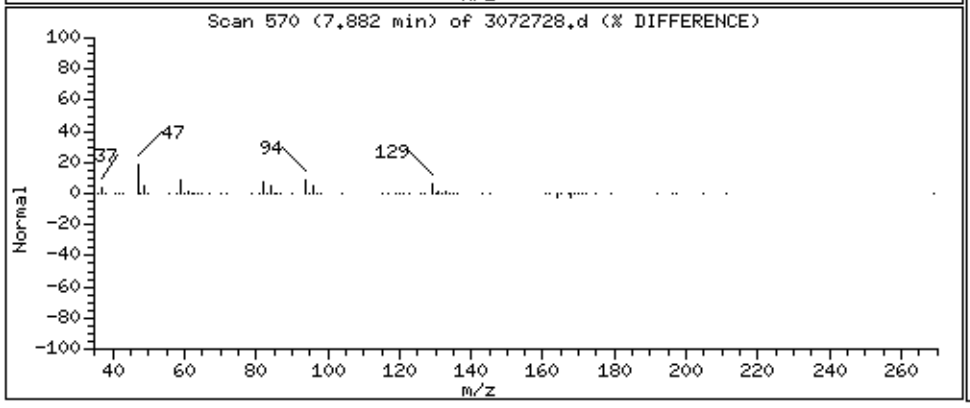












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Client Sample ID: SG-VW29A-02

Lab ID#: 2107362A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072732**	**Date of Collection:**	**7/15/21 12:38:00 PM**
Dil. Factor:	**14.0**	**Date of Analysis:**	**7/28/21 07:53 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	28	Not Detected	190	Not Detected
1,1,1-Trichloroethane	7.0	Not Detected	38	Not Detected
1,1,2,2-Tetrachloroethane	7.0	Not Detected	48	Not Detected
1,1,2-Trichloroethane	7.0	Not Detected	38	Not Detected
1,1-Dichloroethane	7.0	Not Detected	28	Not Detected
1,1-Dichloroethene	7.0	Not Detected	28	Not Detected
1,1-Difluoroethane	28	1500	76	4100
1,2,3-Trichloropropane	28	Not Detected	170	Not Detected
1,2,4-Trichlorobenzene	28	Not Detected	210	Not Detected
1,2,4-Trimethylbenzene	7.0	Not Detected	34	Not Detected
1,2-Dibromo-3-chloropropane	28	Not Detected	270	Not Detected
1,2-Dibromoethane (EDB)	7.0	Not Detected	54	Not Detected
1,2-Dichlorobenzene	7.0	Not Detected	42	Not Detected
1,2-Dichloroethane	7.0	Not Detected	28	Not Detected
1,2-Dichloropropane	7.0	Not Detected	32	Not Detected
1,3,5-Trimethylbenzene	7.0	Not Detected	34	Not Detected
1,3-Butadiene	7.0	Not Detected	15	Not Detected
1,3-Dichlorobenzene	7.0	Not Detected	42	Not Detected
1,4-Dichlorobenzene	7.0	Not Detected	42	Not Detected
1,4-Dioxane	28	Not Detected	100	Not Detected
2,2,4-Trimethylpentane	7.0	Not Detected	33	Not Detected
2-Butanone (Methyl Ethyl Ketone)	28	Not Detected	82	Not Detected
2-Hexanone	28	Not Detected	110	Not Detected
2-Propanol	28	Not Detected	69	Not Detected
3-Chloropropene	28	Not Detected	88	Not Detected
4-Ethyltoluene	7.0	Not Detected	34	Not Detected
4-Methyl-2-pentanone	7.0	Not Detected	29	Not Detected
Acetone	70	Not Detected	170	Not Detected
Acrolein	28	Not Detected	64	Not Detected
Acrylonitrile	28	Not Detected	61	Not Detected
alpha-Chlorotoluene	7.0	Not Detected	36	Not Detected
Benzene	7.0	Not Detected	22	Not Detected
Bromodichloromethane	7.0	Not Detected	47	Not Detected
Bromoform	7.0	Not Detected	72	Not Detected
Bromomethane	70	Not Detected	270	Not Detected
Carbon Disulfide	28	Not Detected	87	Not Detected
Carbon Tetrachloride	7.0	Not Detected	44	Not Detected
Chlorobenzene	7.0	Not Detected	32	Not Detected
Chloroethane	28	Not Detected	74	Not Detected
Chloroform	7.0	Not Detected	34	Not Detected
Chloromethane	70	Not Detected	140	Not Detected
cis-1,2-Dichloroethene	7.0	Not Detected	28	Not Detected

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Client Sample ID: SG-VW29A-02

Lab ID#: 2107362A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072732**	**Date of Collection:**	**7/15/21 12:38:00 PM**
Dil. Factor:	**14.0**	**Date of Analysis:**	**7/28/21 07:53 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	7.0	Not Detected	32	Not Detected
Cumene	7.0	Not Detected	34	Not Detected
Cyclohexane	7.0	Not Detected	24	Not Detected
Dibromochloromethane	7.0	Not Detected	60	Not Detected
Dibromomethane	28	Not Detected	200	Not Detected
Ethanol	70	Not Detected	130	Not Detected
Ethyl Acetate	28	Not Detected	100	Not Detected
Ethyl Benzene	7.0	Not Detected	30	Not Detected
Ethyl-tert-butyl ether	28	Not Detected	120	Not Detected
Freon 11	7.0	Not Detected	39	Not Detected
Freon 12	7.0	Not Detected	35	Not Detected
Freon 113	7.0	Not Detected	54	Not Detected
Freon 114	7.0	Not Detected	49	Not Detected
Freon 134a	28	Not Detected	120	Not Detected
Heptane	7.0	Not Detected	29	Not Detected
Hexachlorobutadiene	28	Not Detected	300	Not Detected
Hexachloroethane	28	Not Detected	270	Not Detected
Hexane	7.0	Not Detected	25	Not Detected
Iodomethane	70	Not Detected	410	Not Detected
Isopropyl ether	28	Not Detected	120	Not Detected
m,p-Xylene	7.0	Not Detected	30	Not Detected
Methyl tert-butyl ether	28	Not Detected	100	Not Detected
Methylene Chloride	70	Not Detected	240	Not Detected
Naphthalene	14	Not Detected	73	Not Detected
o-Xylene	7.0	Not Detected	30	Not Detected
Propylbenzene	7.0	Not Detected	34	Not Detected
Propylene	28	Not Detected	48	Not Detected
Styrene	7.0	Not Detected	30	Not Detected
tert-Amyl methyl ether	28	Not Detected	120	Not Detected
tert-Butyl alcohol	28	Not Detected	85	Not Detected
Tetrachloroethene	7.0	24	47	160
Tetrahydrofuran	7.0	Not Detected	21	Not Detected
Toluene	7.0	Not Detected	26	Not Detected
TPH ref. to Gasoline (MW=100)	700	Not Detected	2900	Not Detected
trans-1,2-Dichloroethene	7.0	Not Detected	28	Not Detected
trans-1,3-Dichloropropene	7.0	Not Detected	32	Not Detected
Trichloroethene	7.0	Not Detected	38	Not Detected
Vinyl Acetate	28	Not Detected	98	Not Detected
Vinyl Bromide	28	Not Detected	120	Not Detected
Vinyl Chloride	7.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW29A-02

Lab ID#: 2107362A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072732**	**Date of Collection:**	**7/15/21 12:38:00 PM**
Dil. Factor:	**14.0**	**Date of Analysis:**	**7/28/21 07:53 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	94	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/27JUL21.b/3072732.d
Lab Smp Id: 2107362A-10A
Inj Date : 28-JUL-2021 07:53
Operator : LD Inst ID: msd3.i
Smp Info : 30mL O0801
Misc Info : 5.9 Hg->10.1 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 1
Dil Factor: 14.00000
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	
5.270	5.284 (1.000)	130	256218	25.0000			80.00- 120.00	100.00
5.270	5.284 (1.000)	128	203314				48.46- 108.46	79.35
5.270	5.270 (1.000)	49	372752				120.39- 180.39	145.48
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.166	6.180 (1.000)	114	829292	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	120270				0.00- 45.52	14.50
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.612 (1.000)	117	730151	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	381569				25.46- 85.46	52.26
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.104)	65	341483	24.2188	24.219		80.00- 120.00	100.00(a)
5.816	5.816 (1.104)	67	164718				21.66- 81.66	48.24
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.380	7.387 (1.197)	98	807050	23.6276	23.628		80.00- 120.00	100.00(a)
7.380	7.387 (1.197)	70	89502				0.00- 41.47	11.09

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	529986			36.47- 96.47	65.67
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	483035	25.0111	25.011	80.00- 120.00	100.00(a)
9.601	9.601 (1.115)	95	554999			93.06- 153.06	114.90
9.601	9.601 (1.115)	176	444034			62.87- 122.87	91.93
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.273)	65	433318	107.410	1503.7	80.00- 120.00	100.00
1.437	1.479 (0.273)	51	949869			321.86- 381.86	219.21
1.437	1.451 (0.273)	47	223495			45.34- 105.34	51.58
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.881 (0.914)	166	19211	1.67948	23.513	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	15232			48.71- 108.71	79.29
7.874	7.874 (0.914)	131	14666			46.55- 106.55	76.34

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: 3072732.d
Lab Smp Id: 2107362A-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.9 Hg->10.1 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	256218	7.21
108 1,4-Difluorobenze	785289	471173	1099405	829292	5.60
153 Chlorobenzene-d5	683596	410158	957034	730151	6.81

		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	8.61	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: 29-Jul-2021 11:12

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/msd3.i/27JUL21.b/321q0622a.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	24.219	96.88	70-130
$ 134 Toluene-d8	25.000	23.628	94.51	70-130
$ 170 4-Bromofluorobenz	25.000	25.011	100.04	70-130

Data File: /chem/msd3.i/27JUL21.b/3072732.d

Date : 28-JUL-2021 07:53

Client ID:

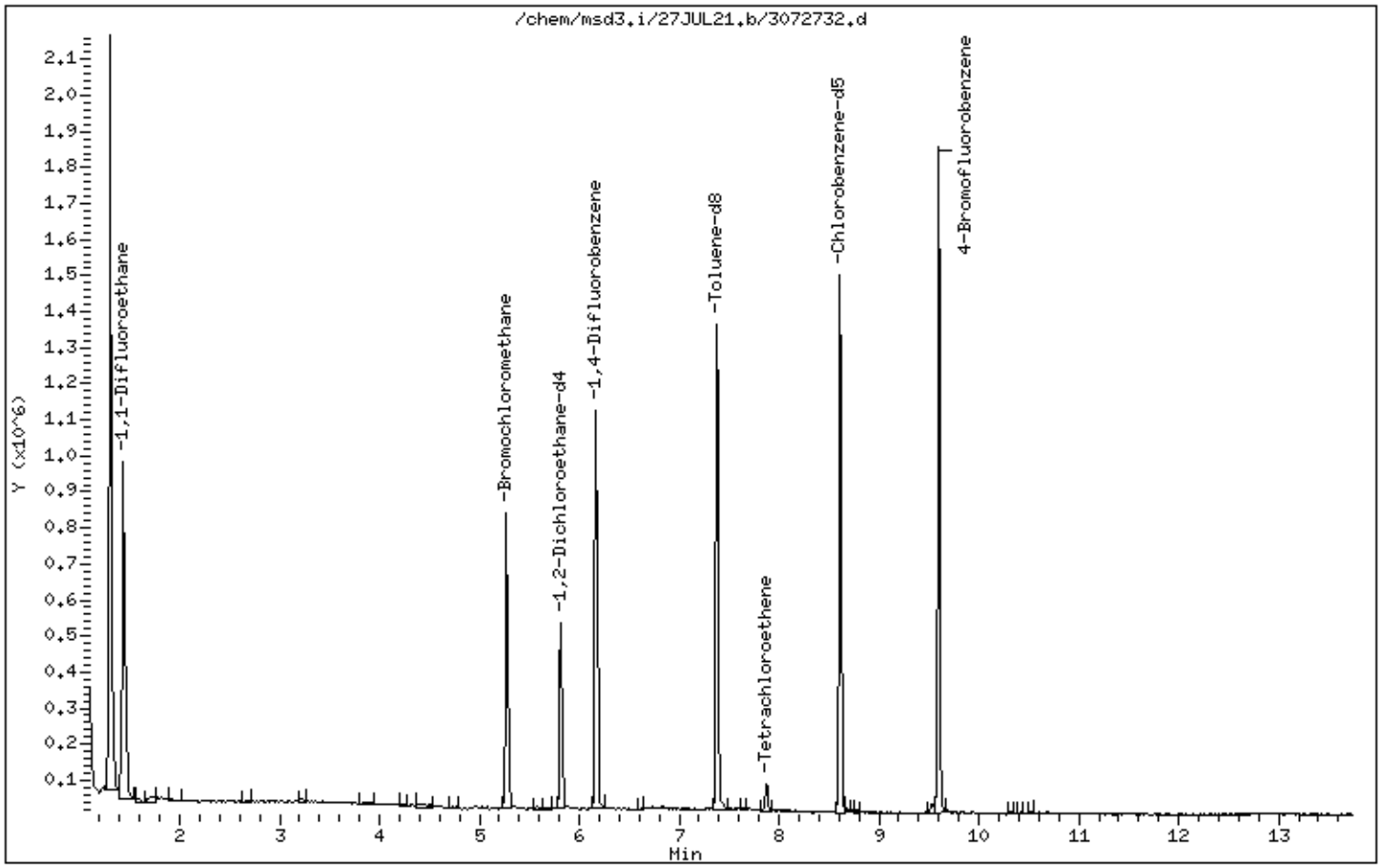
Instrument: msd3.i

Sample Info: 30mL 00801

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072732.d

Date : 28-JUL-2021 07:53

Client ID:

Instrument: msd3.i

Sample Info: 30mL 00801

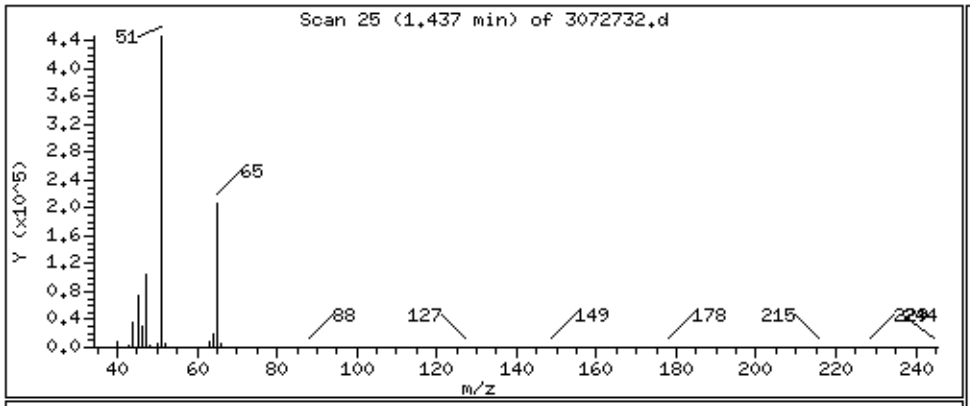
Operator: LD

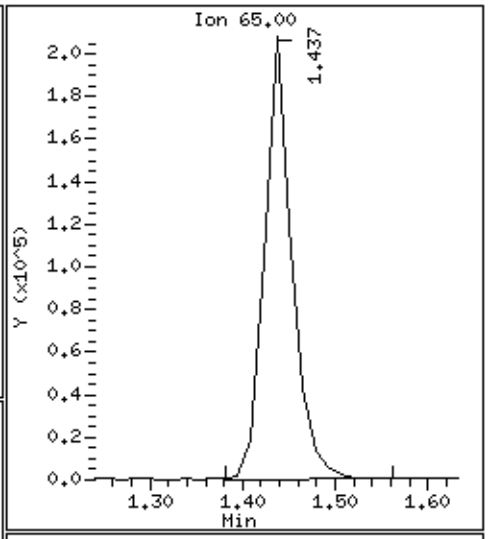
Column phase: RTX-624

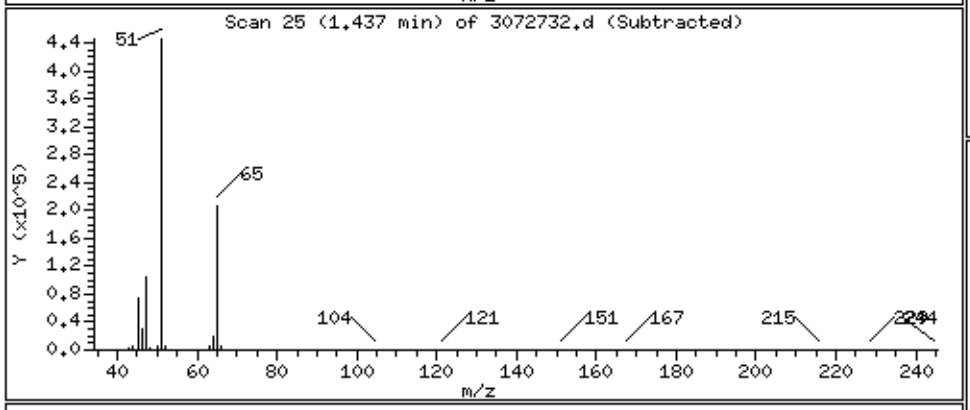
Column diameter: 0.25

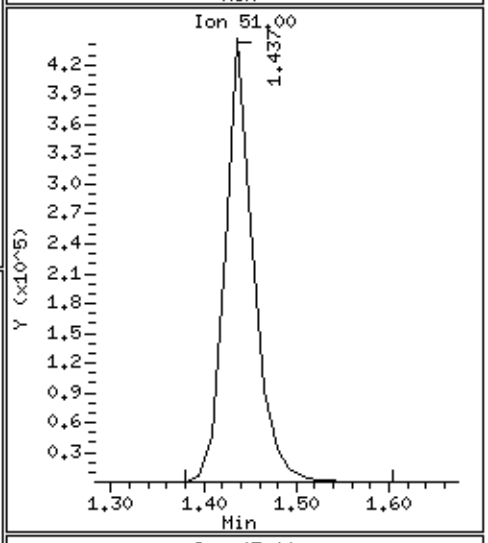
7 1,1-Difluoroethane

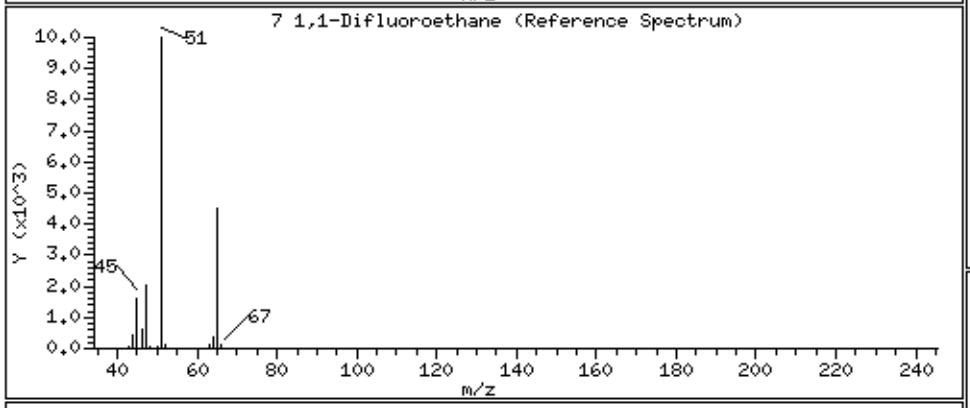
Concentration: 1503.7 PPBV

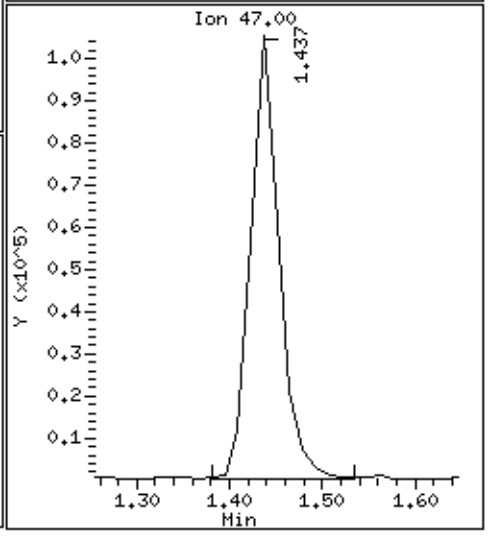


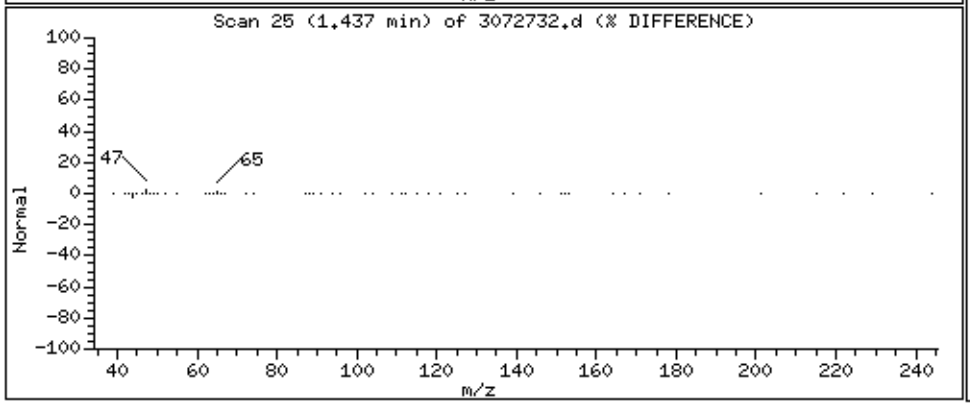












Data File: /chem/msd3.i/27JUL21.b/3072732.d

Date : 28-JUL-2021 07:53

Client ID:

Instrument: msd3.i

Sample Info: 30mL 00801

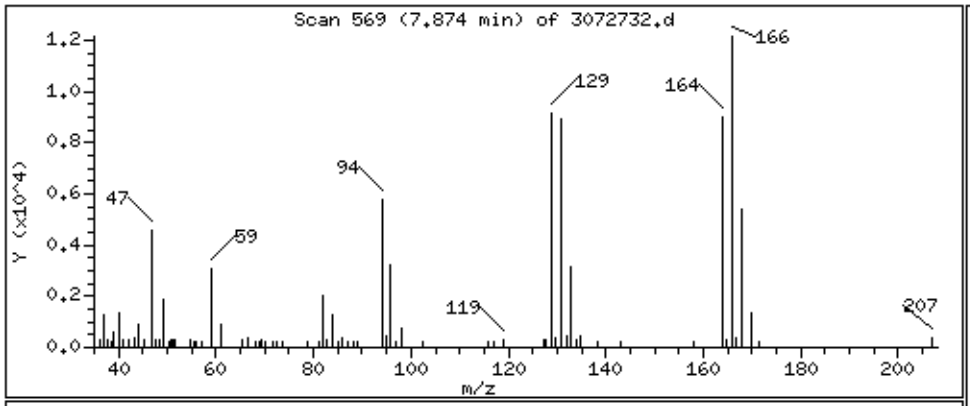
Operator: LD

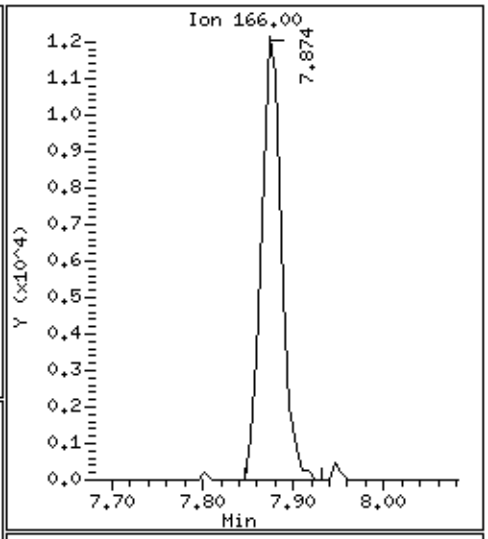
Column phase: RTX-624

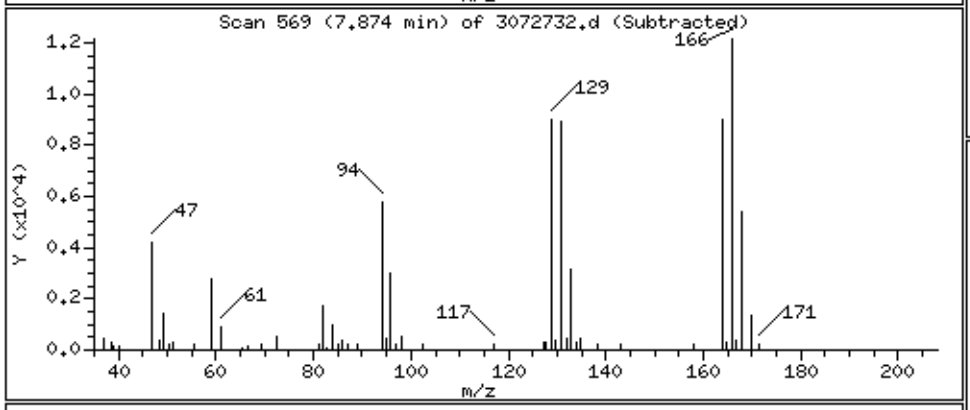
Column diameter: 0.25

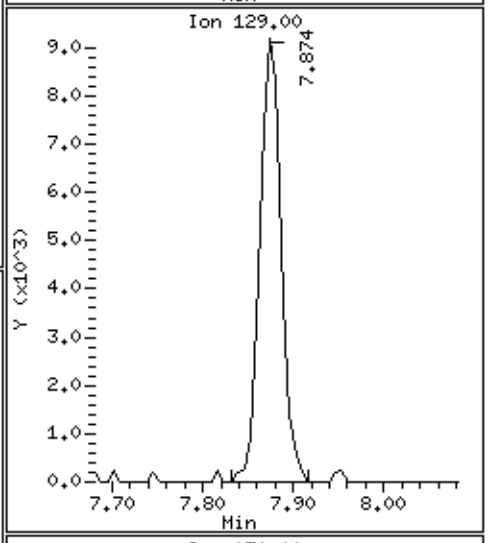
142 Tetrachloroethene

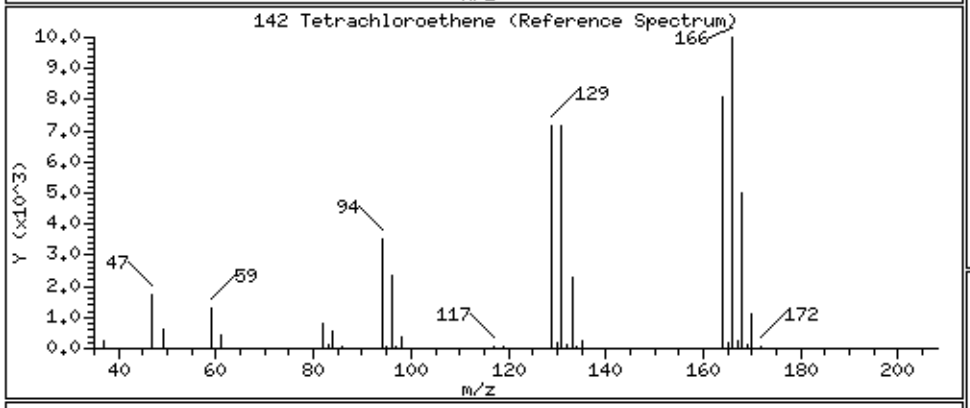
Concentration: 23.513 PPBV

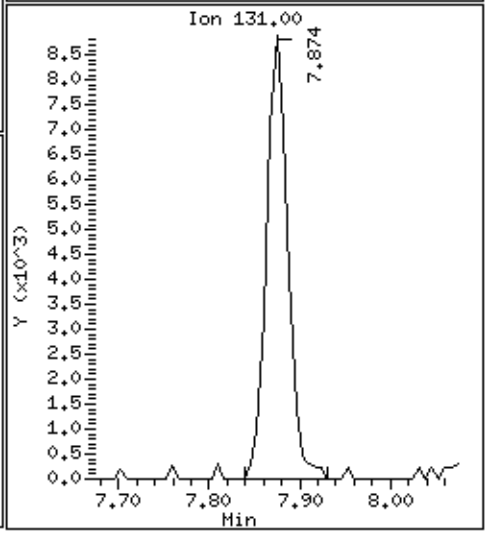


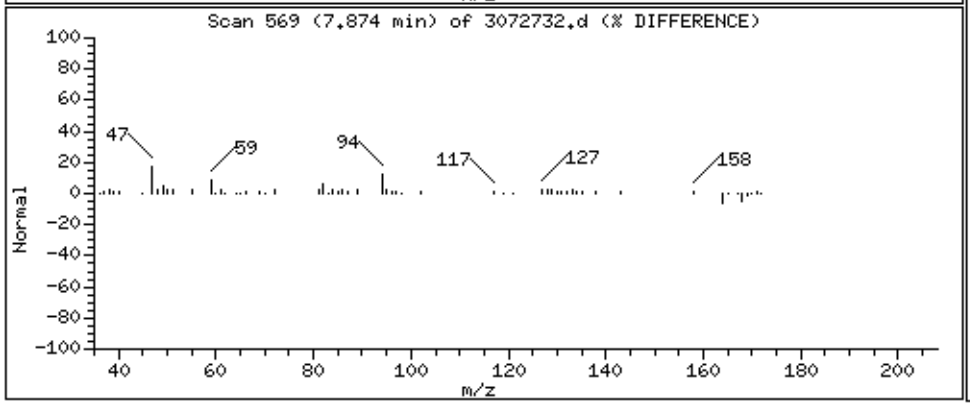












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Client Sample ID: SG-VW29B-02

Lab ID#: 2107362A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072729**	**Date of Collection:**	**7/15/21 1:05:00 PM**
Dil. Factor:	**2.07**	**Date of Analysis:**	**7/28/21 03:40 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	8.3	11	22
1,2,3-Trichloropropane	4.1	Not Detected	25	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	31	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	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	4.1	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	5.4	10	13
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	16	24	37
Acrolein	4.1	Not Detected	9.5	Not Detected
Acrylonitrile	4.1	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	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	4.8	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Chloroform	1.0	2.0	5.0	9.6
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-VW29B-02

Lab ID#: 2107362A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072729**	**Date of Collection:**	**7/15/21 1:05:00 PM**
Dil. Factor:	**2.07**	**Date of Analysis:**	**7/28/21 03:40 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	4.1	Not Detected	29	Not Detected
Ethanol	10	Not Detected	20	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	Not Detected	5.8	Not Detected
Freon 12	1.0	2.7	5.1	13
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	56	7.0	380
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	1.3	3.9	4.9
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	4.1	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-VW29B-02

Lab ID#: 2107362A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072729**	**Date of Collection:**	**7/15/21 1:05:00 PM**
Dil. Factor:	**2.07**	**Date of Analysis:**	**7/28/21 03:40 AM**

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	93	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072729.d
Lab Smp Id: 2107362A-11A
Inj Date : 28-JUL-2021 03:40
Operator : kk Inst ID: msd3.i
Smp Info : 200mL 1L2741
Misc Info : 5.9 Hg->9.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 9
Dil Factor: 2.07000
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	227166	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	179836				48.46- 108.46	79.16
5.284	5.270 (1.000)	49	327954				120.39- 180.39	144.37
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.180	6.180 (1.000)	114	750346	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	111943				0.00- 45.52	14.92
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.619	8.612 (1.000)	117	684522	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	356944				25.46- 85.46	52.14
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	311324	24.9036	24.904		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	150087				21.66- 81.66	48.21
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	749323	24.2456	24.246		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	84991				0.00- 41.47	11.34

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	496458			36.47- 96.47	66.25
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	423205	23.3738	23.374	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	481338			93.06- 153.06	113.74
9.601	9.601 (1.114)	176	398144			62.87- 122.87	94.08
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	14334	4.00748	8.295	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	204598			321.86- 381.86	1427.30
1.451	1.451 (0.275)	47	4740			45.34- 105.34	33.07
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	20395	1.28881	2.668	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	6412			2.63- 62.63	31.44
47 Acetone					CAS #: 67-64-1		
3.242	3.214 (0.613)	58	28833	7.56953	15.669	80.00- 120.00	100.00
3.242	3.214 (0.613)	43	102157			299.66- 359.66	354.30
52 2-Propanol					CAS #: 67-63-0		
3.437	3.409 (0.650)	45	35890	2.61992	5.423	80.00- 120.00	100.00
3.437	3.395 (0.650)	43	8002			0.00- 48.61	22.30
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	13573	0.95298	1.973	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	9669			34.71- 94.71	71.24
137 Toluene					CAS #: 108-88-3		
7.445	7.437 (1.205)	91	14516	0.63181	1.308	80.00- 120.00	100.00
7.445	7.437 (1.205)	92	8574			28.30- 88.30	59.07
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	289879	27.0313	55.955	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	225810			48.71- 108.71	77.90
7.881	7.874 (0.914)	131	219068			46.55- 106.55	75.57

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072729.d
Lab Smp Id: 2107362A-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: kk
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.9 Hg->9.8 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	227166	-4.95
108 1,4-Difluorobenze	785289	471173	1099405	750346	-4.45
153 Chlorobenzene-d5	683596	410158	957034	684522	0.14

		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	6.18	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: 29-Jul-2021 11:11

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-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/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 5.9 Hg->9.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.904	99.61	70-130
$ 134 Toluene-d8	25.000	24.246	96.98	70-130
$ 170 4-Bromofluorobenz	25.000	23.374	93.50	70-130

Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

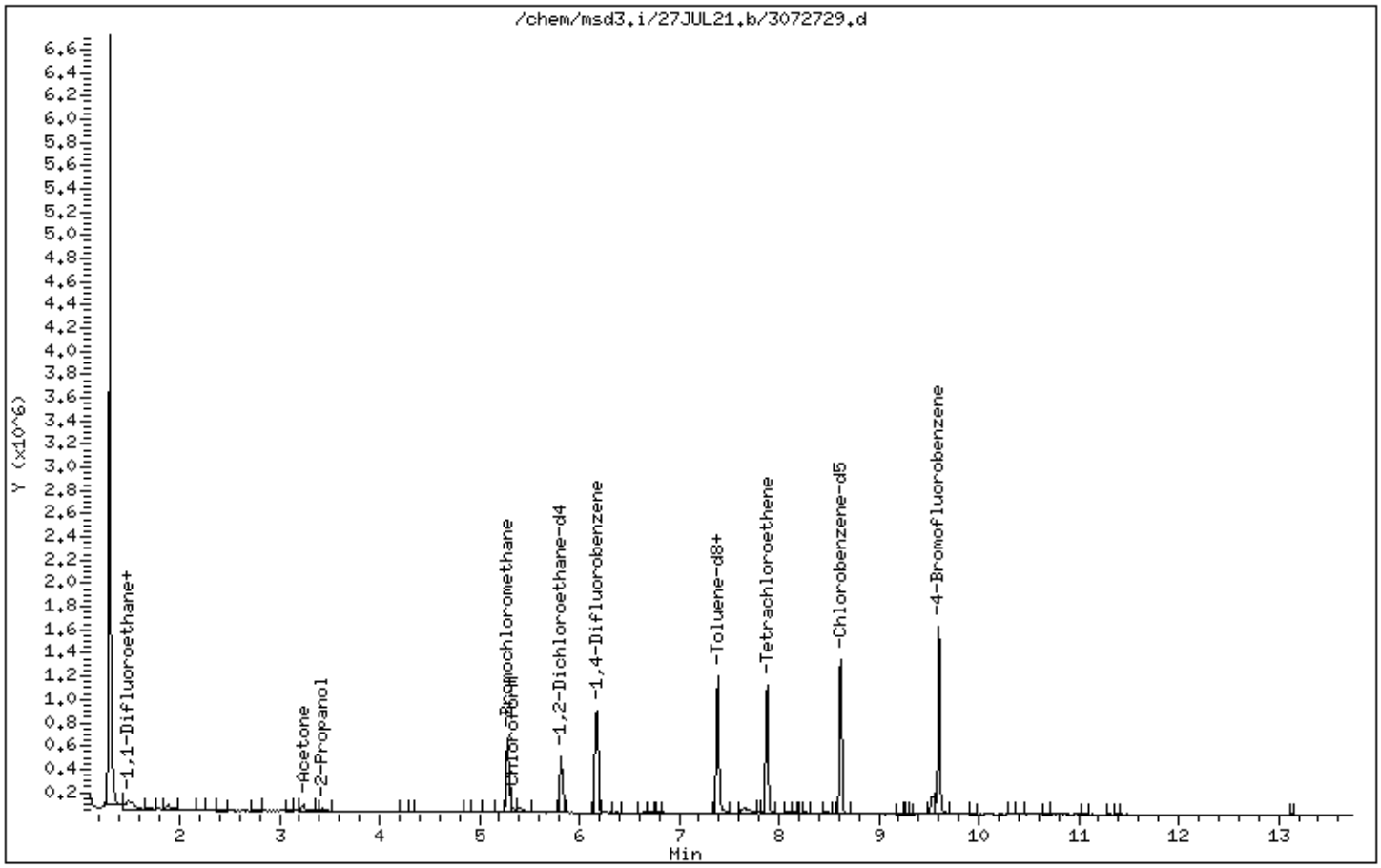
Instrument: msd3.i

Sample Info: 200mL 1L2741

Operator: kk

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L2741

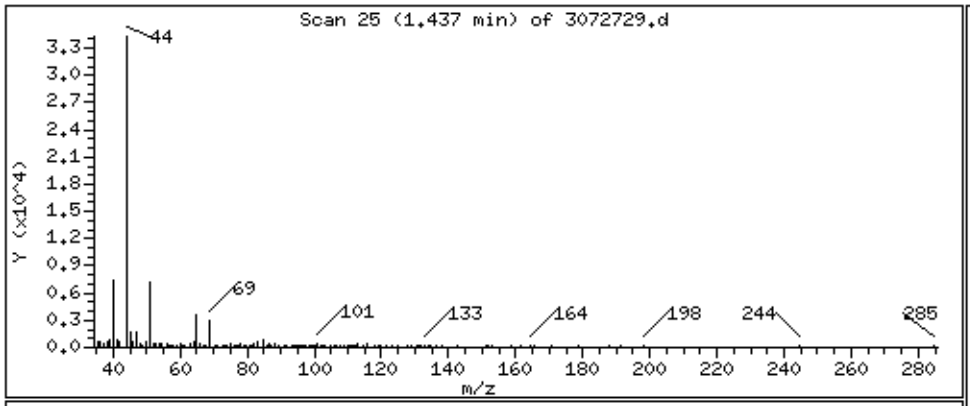
Operator: kk

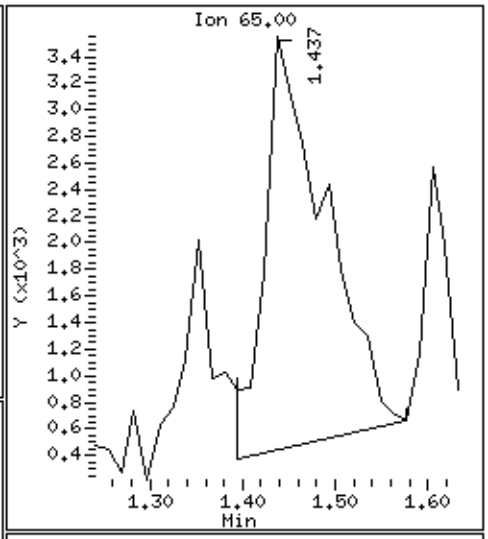
Column phase: RTX-624

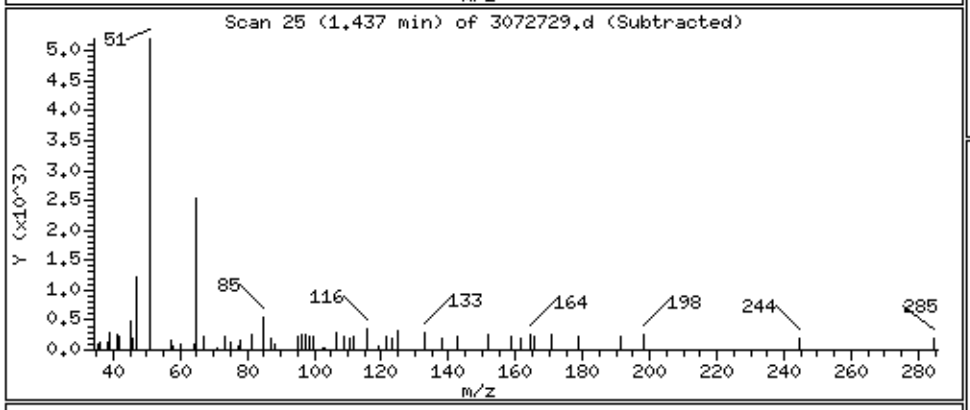
Column diameter: 0.25

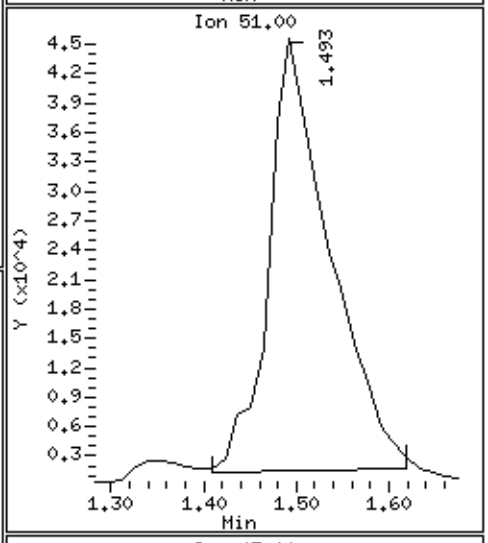
7 1,1-Difluoroethane

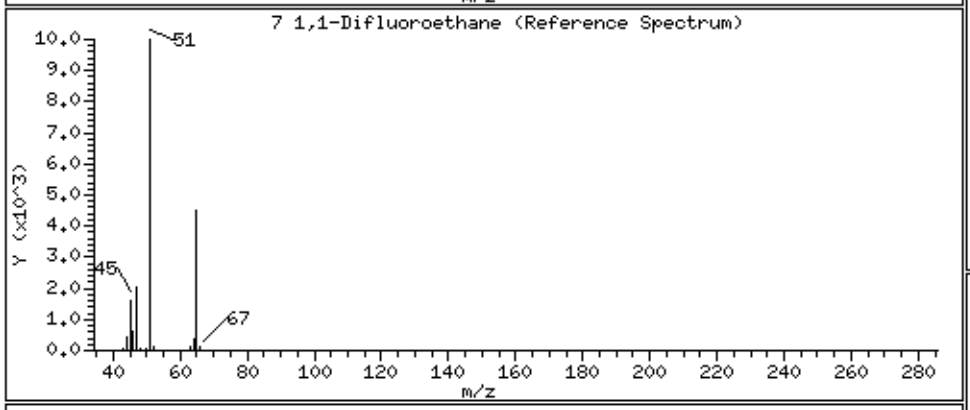
Concentration: 8.295 PPBV

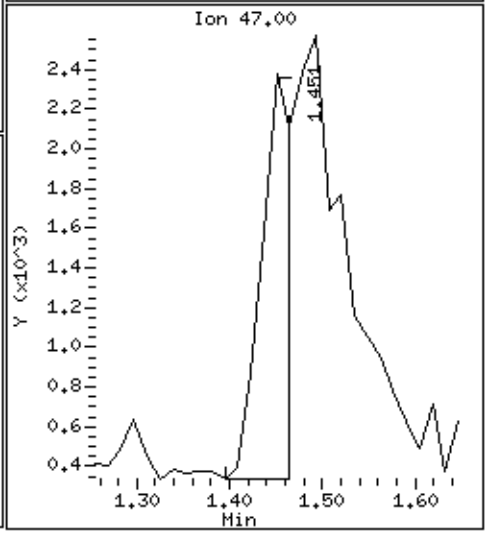


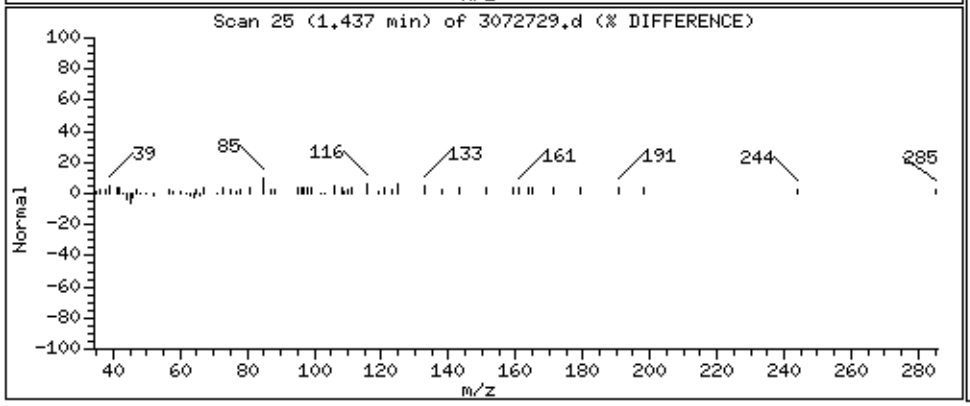












Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L2741

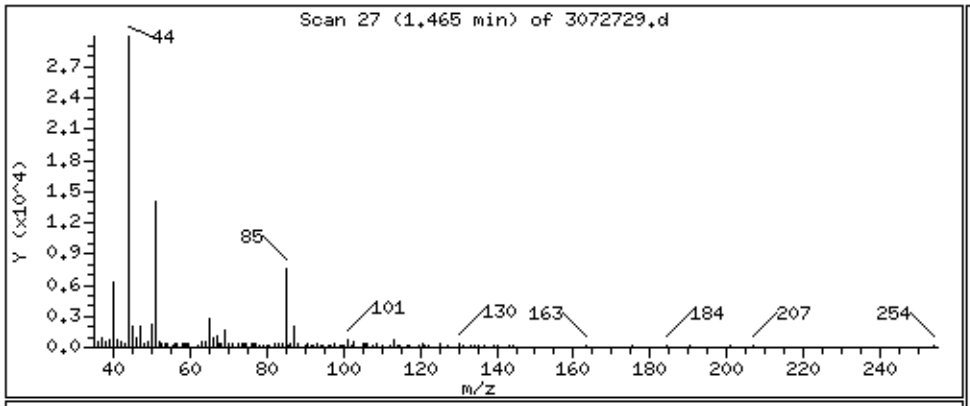
Operator: kk

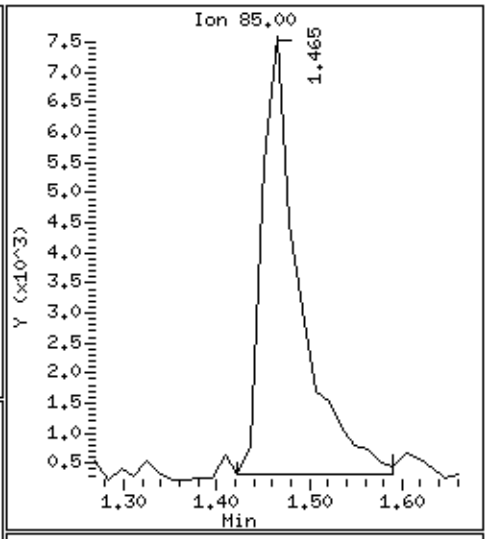
Column phase: RTX-624

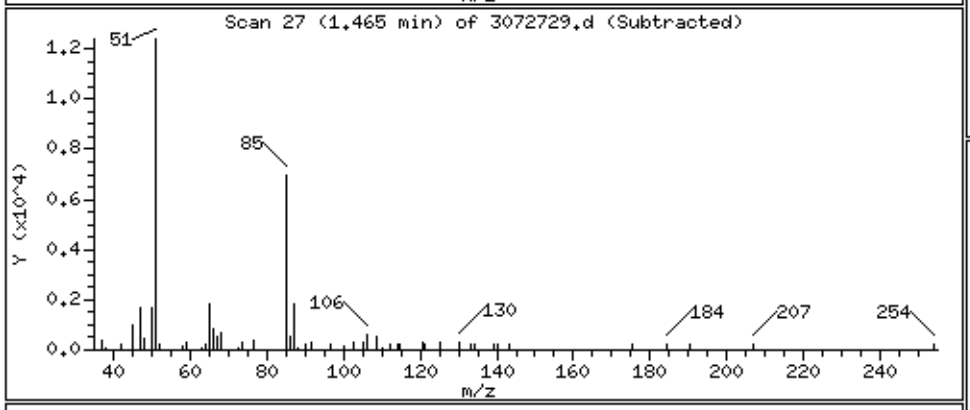
Column diameter: 0.25

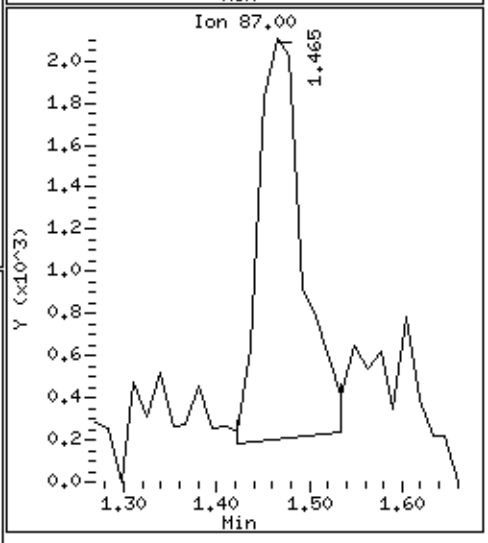
8 Freon 12

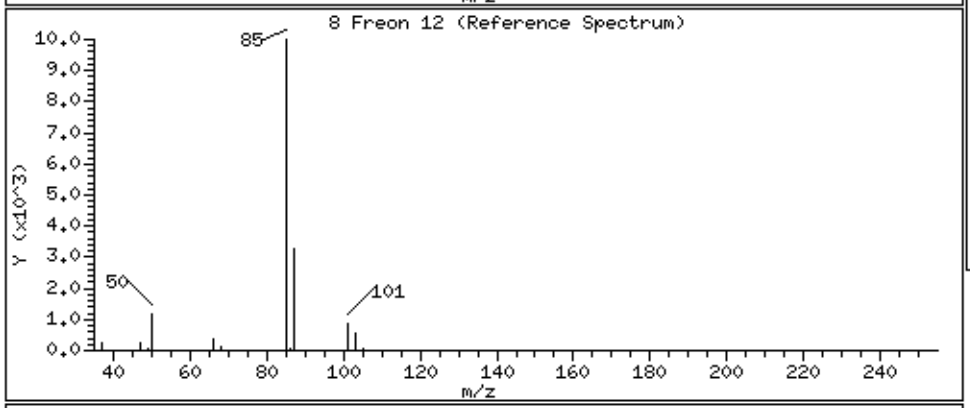
Concentration: 2.668 PPBV

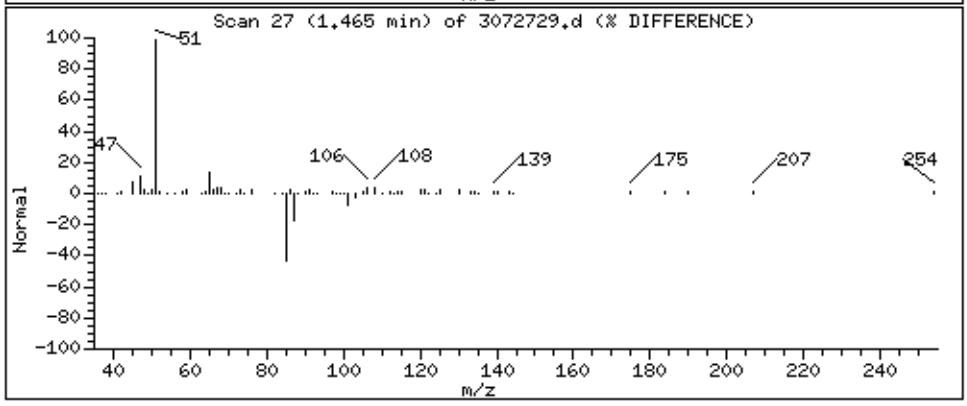












Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L2741

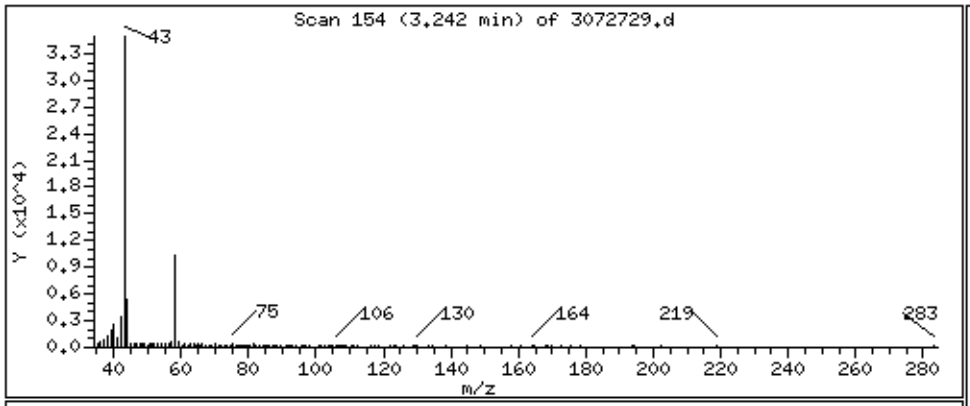
Operator: kk

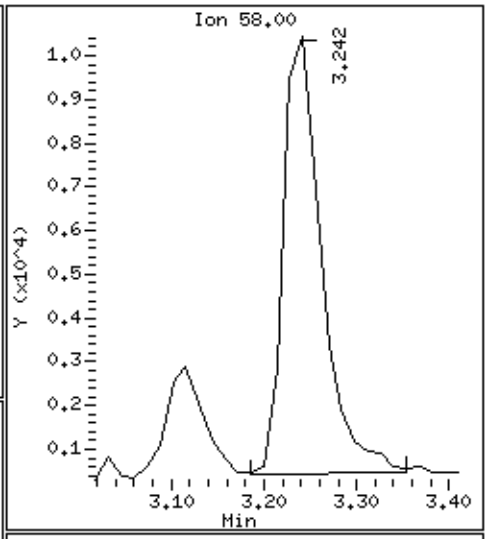
Column phase: RTX-624

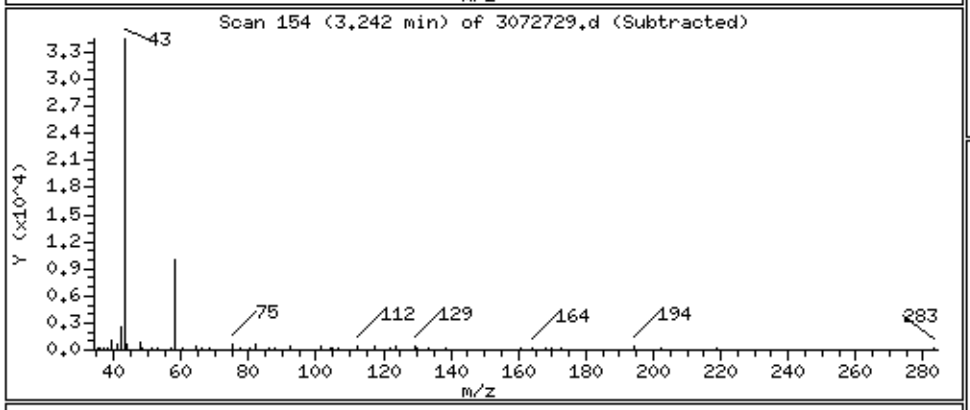
Column diameter: 0.25

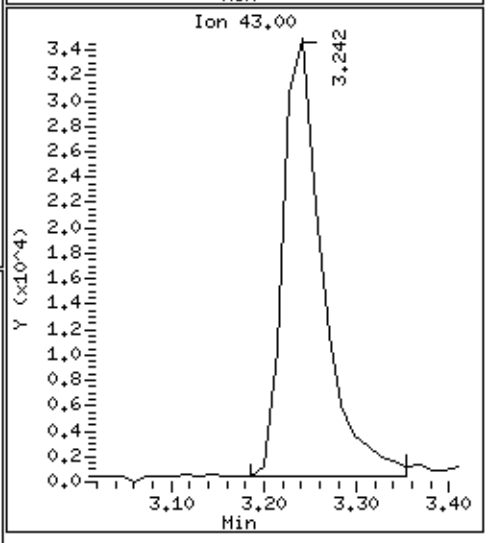
47 Acetone

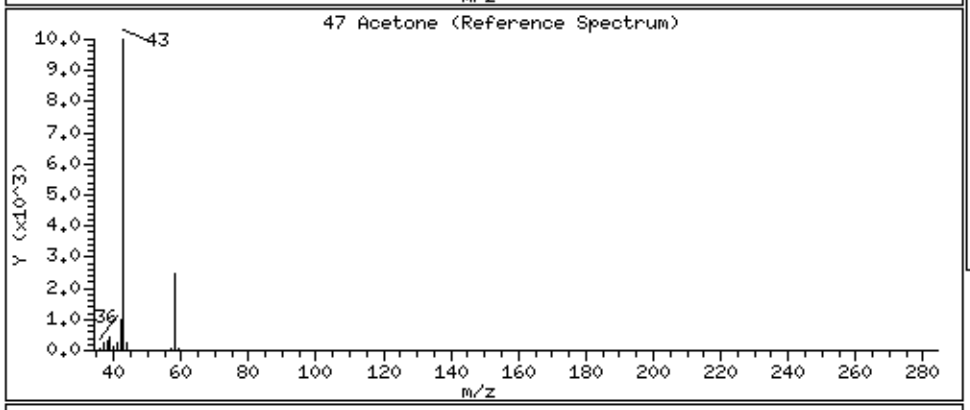
Concentration: 15.669 PPBV

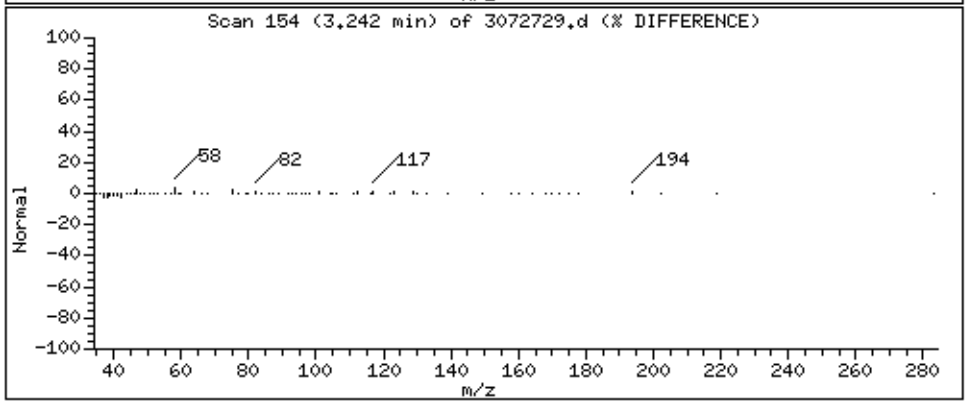












Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L2741

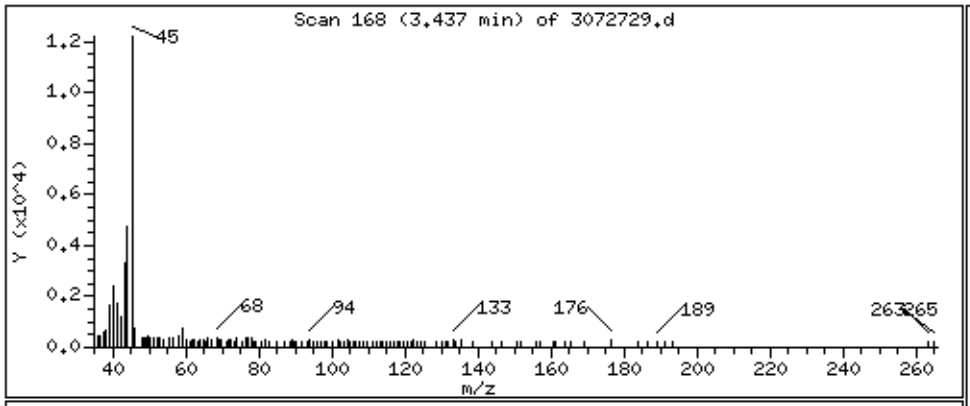
Operator: kk

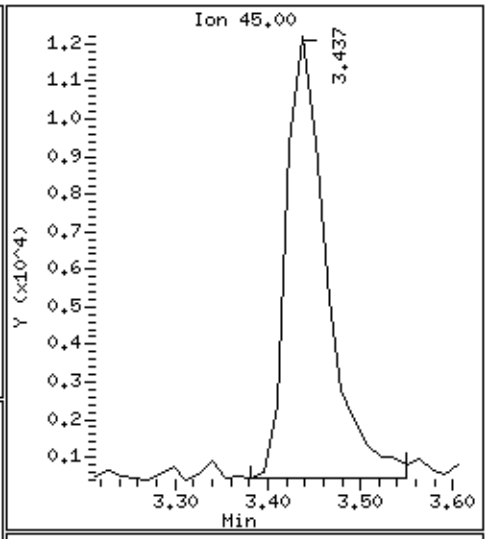
Column phase: RTX-624

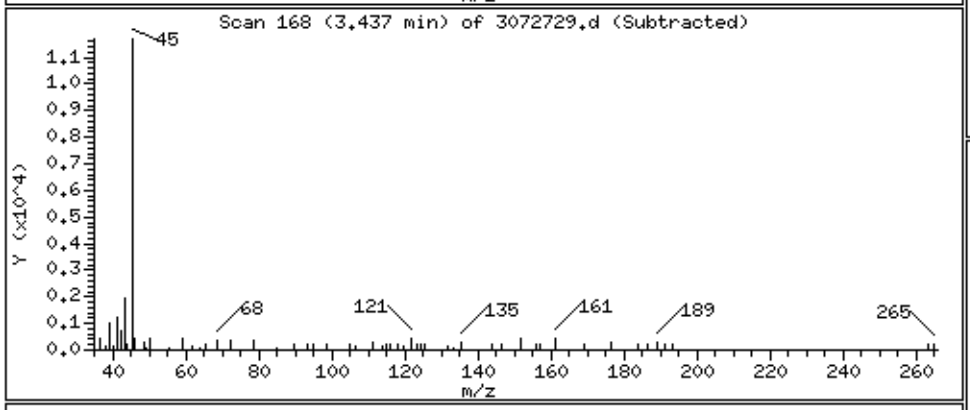
Column diameter: 0.25

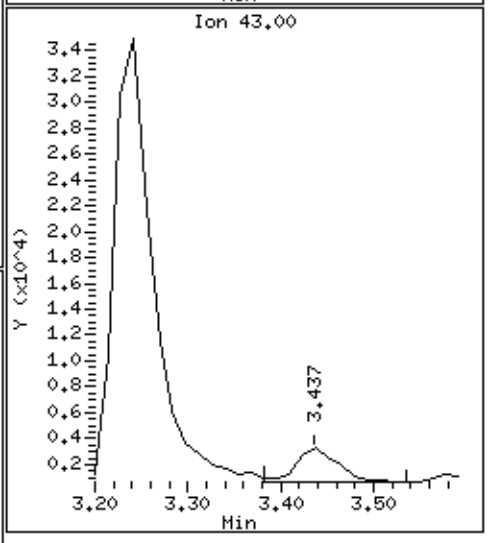
52 2-Propanol

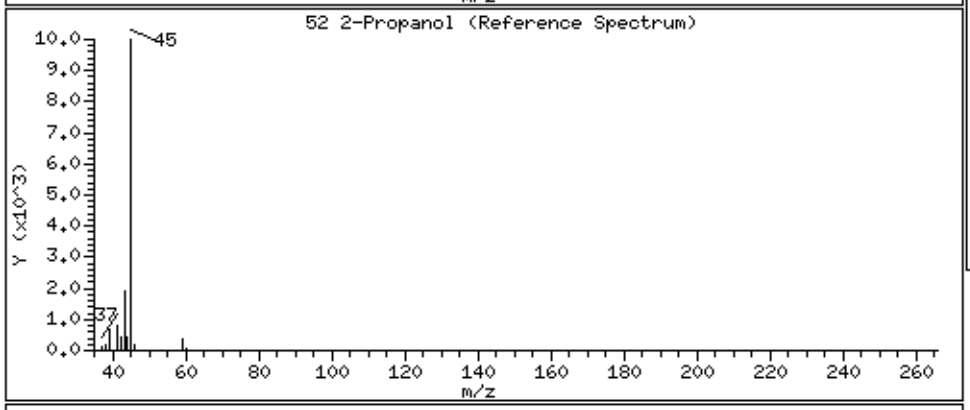
Concentration: 5.423 PPBV

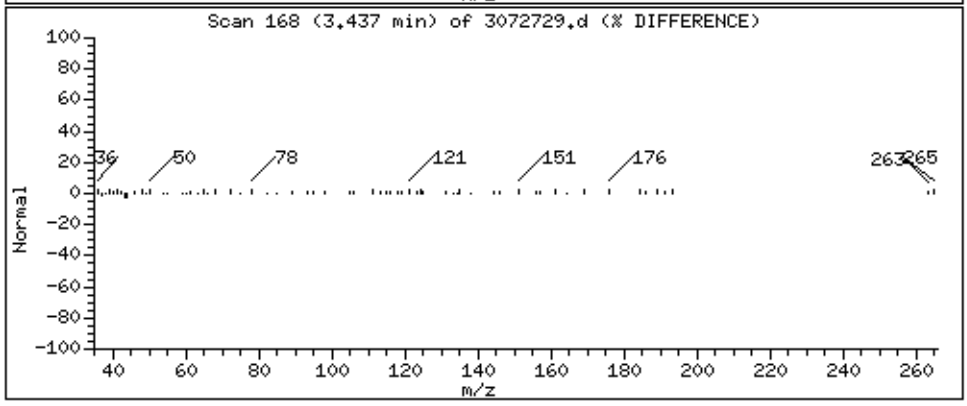












Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L2741

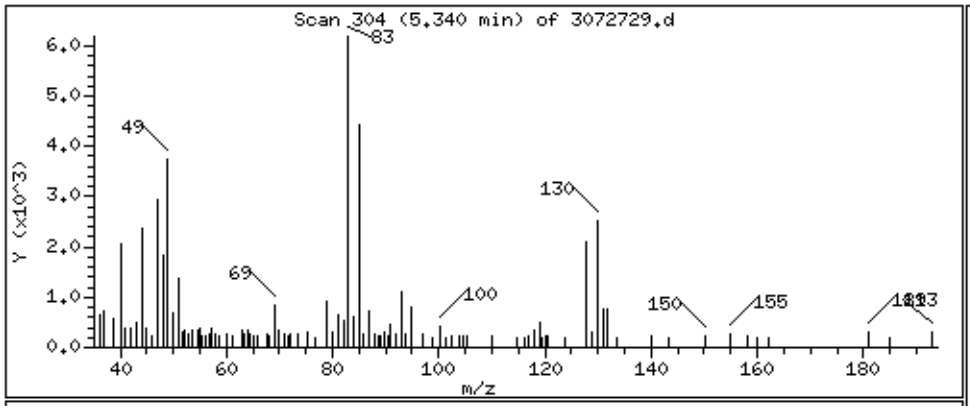
Operator: kk

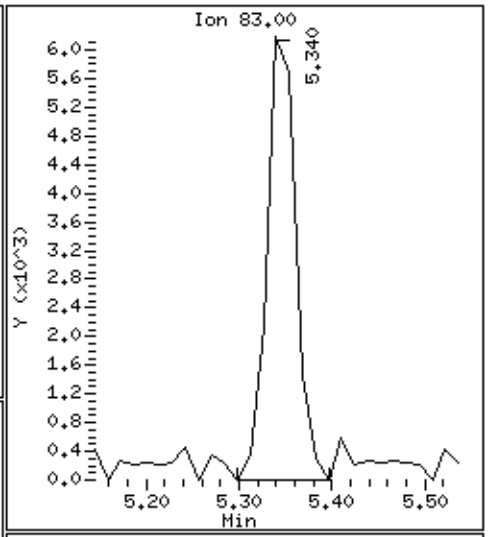
Column phase: RTX-624

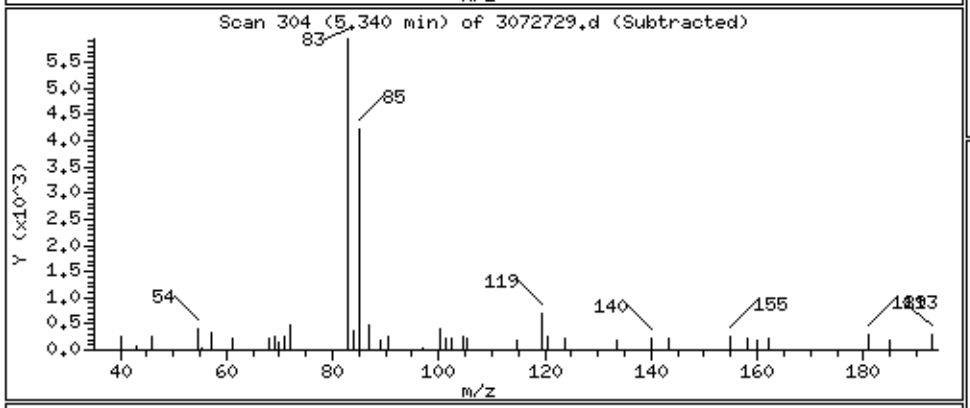
Column diameter: 0.25

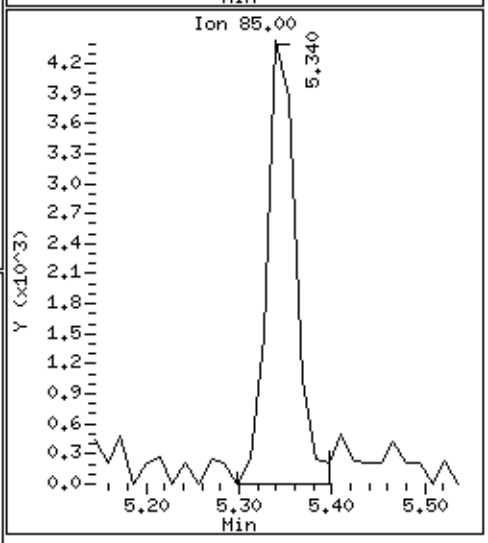
92 Chloroform

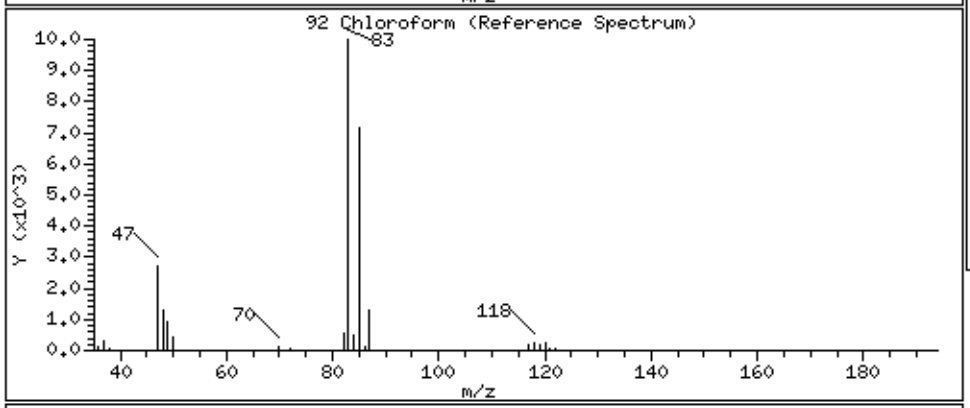
Concentration: 1.973 PPBV

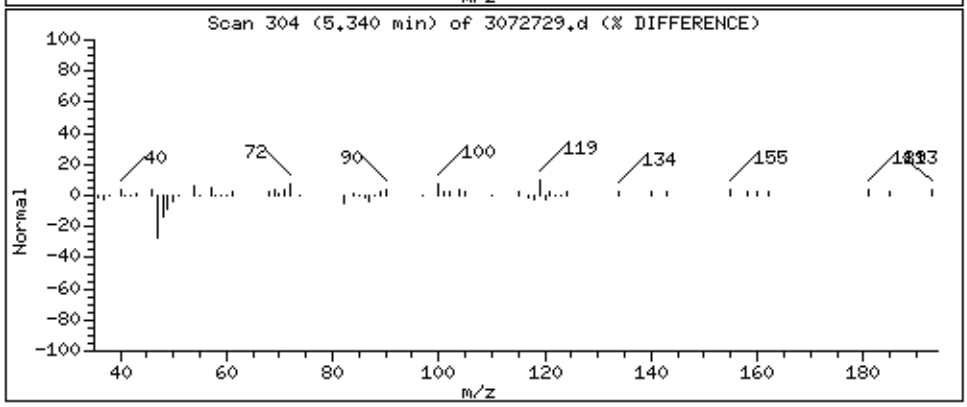












Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L2741

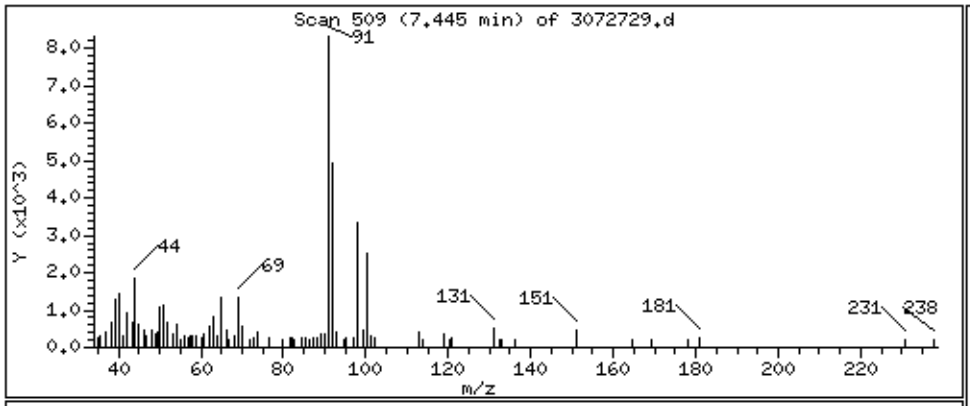
Operator: kk

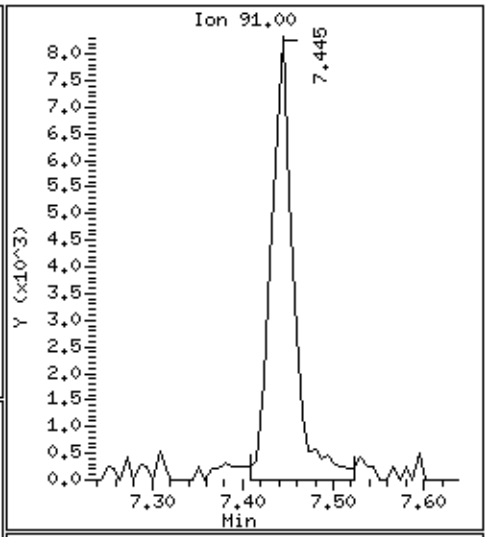
Column phase: RTX-624

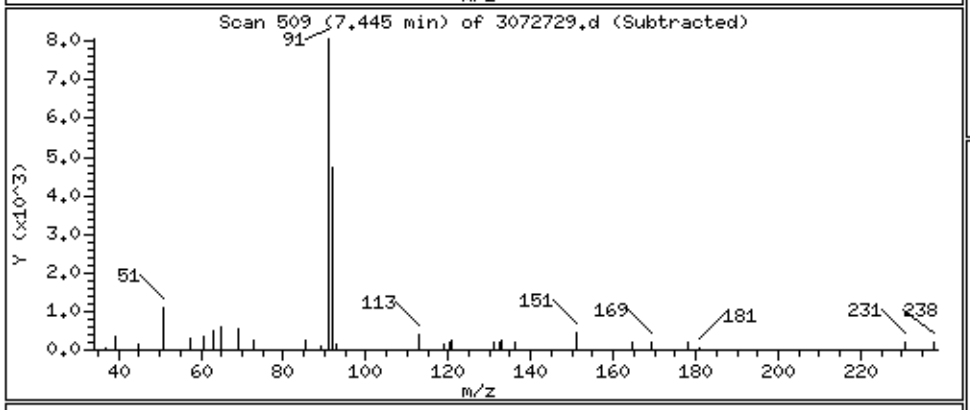
Column diameter: 0.25

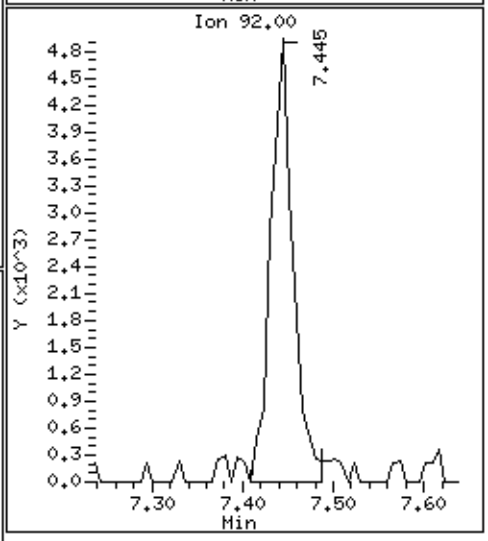
137 Toluene

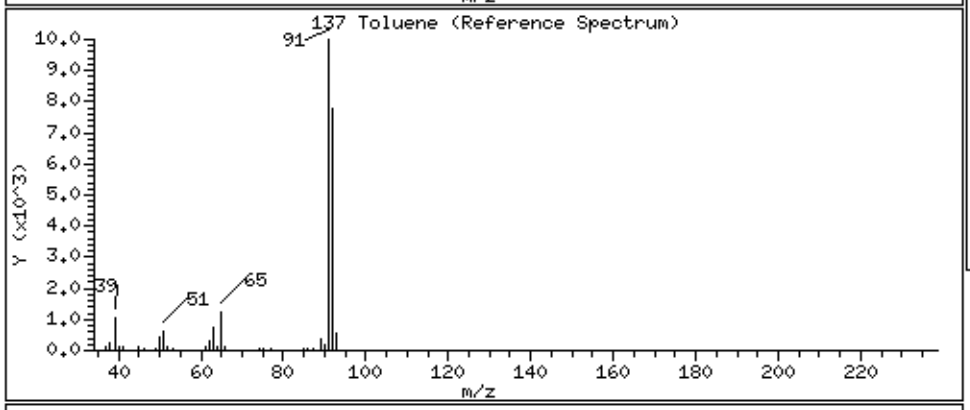
Concentration: 1.308 PPBV

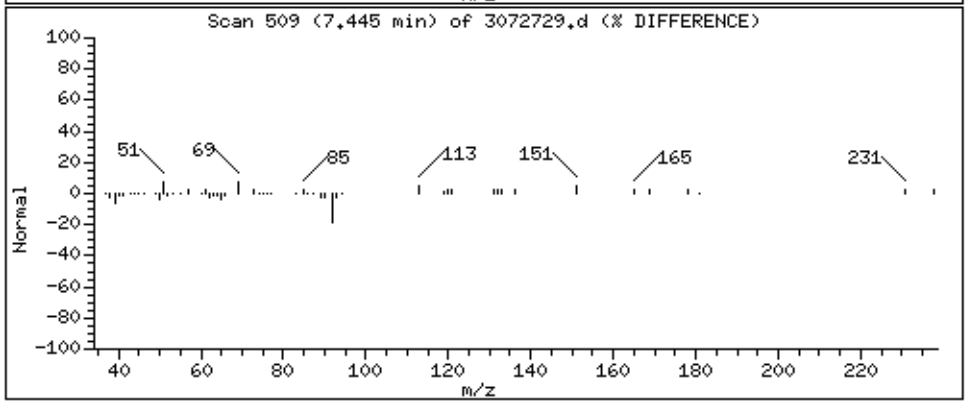












Data File: /chem/msd3.i/27JUL21.b/3072729.d

Date : 28-JUL-2021 03:40

Client ID:

Instrument: msd3.i

Sample Info: 200mL 1L2741

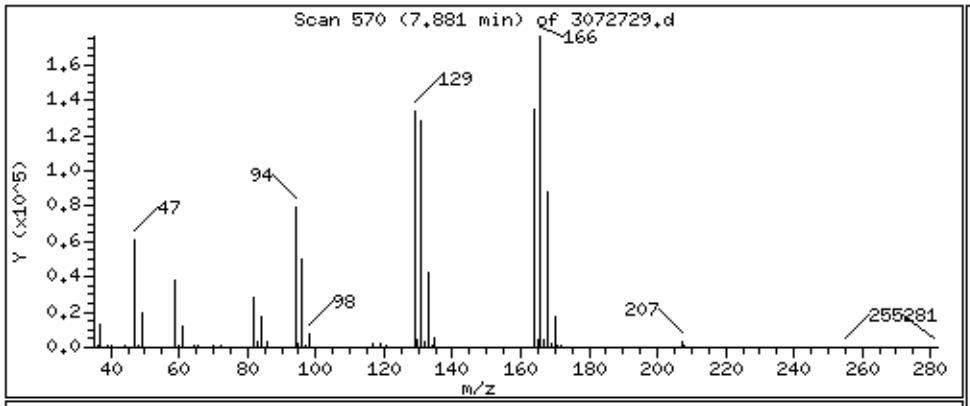
Operator: kk

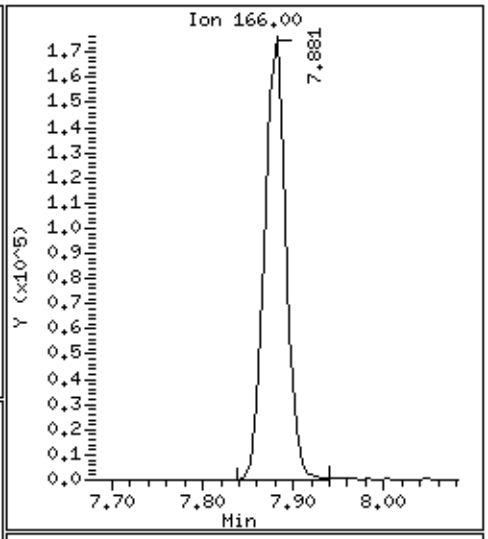
Column phase: RTX-624

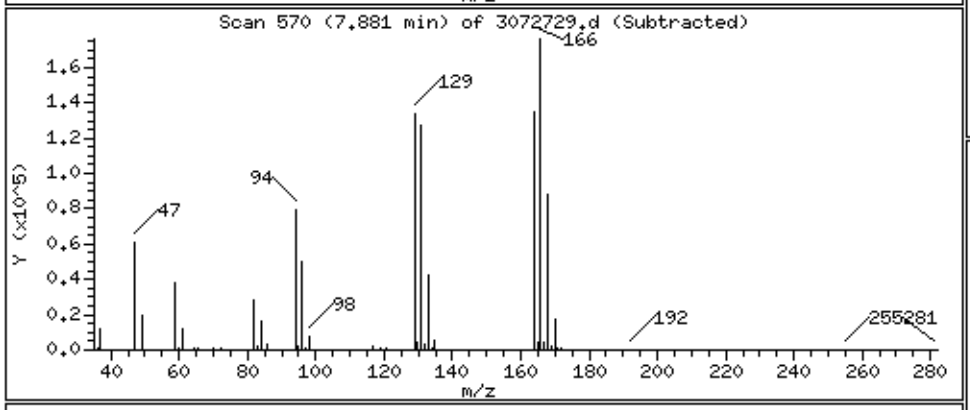
Column diameter: 0.25

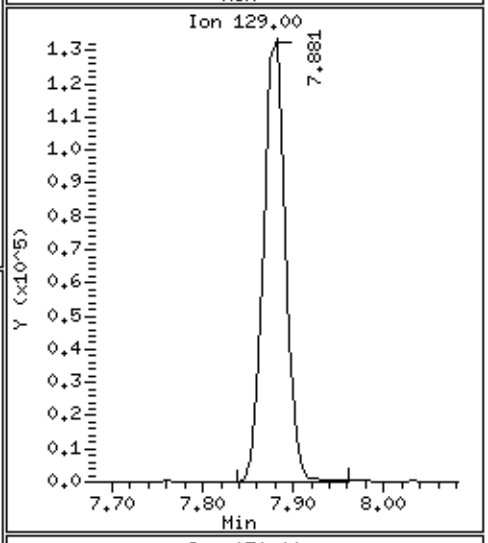
142 Tetrachloroethene

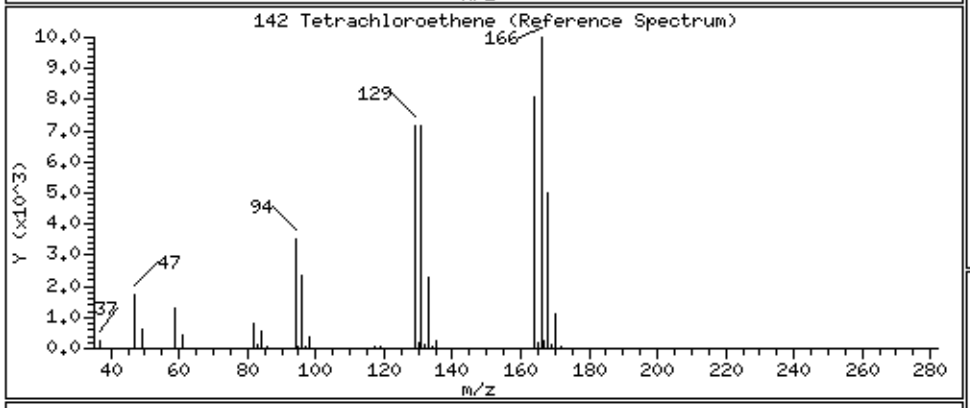
Concentration: 55.955 PPBV

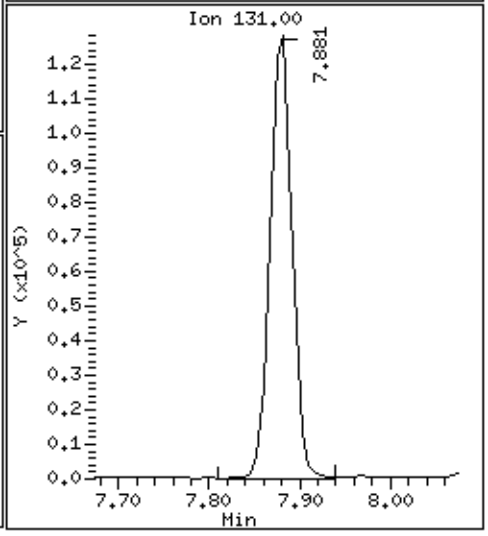


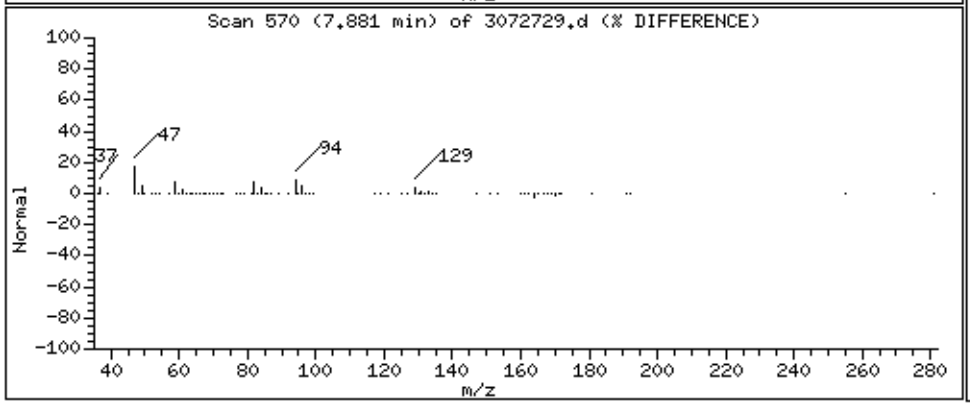












eurofins | Air Toxics

Client Sample ID: SG-VW28B-02

Lab ID#: 2107362A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072733**	**Date of Collection:**	**7/15/21 1:50:00 PM**
Dil. Factor:	**16.8**	**Date of Analysis:**	**7/28/21 08:20 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	34	Not Detected	230	Not Detected
1,1,1-Trichloroethane	8.4	Not Detected	46	Not Detected
1,1,2,2-Tetrachloroethane	8.4	Not Detected	58	Not Detected
1,1,2-Trichloroethane	8.4	Not Detected	46	Not Detected
1,1-Dichloroethane	8.4	Not Detected	34	Not Detected
1,1-Dichloroethene	8.4	Not Detected	33	Not Detected
1,1-Difluoroethane	34	2300	91	6300
1,2,3-Trichloropropane	34	Not Detected	200	Not Detected
1,2,4-Trichlorobenzene	34	Not Detected	250	Not Detected
1,2,4-Trimethylbenzene	8.4	Not Detected	41	Not Detected
1,2-Dibromo-3-chloropropane	34	Not Detected	320	Not Detected
1,2-Dibromoethane (EDB)	8.4	Not Detected	64	Not Detected
1,2-Dichlorobenzene	8.4	Not Detected	50	Not Detected
1,2-Dichloroethane	8.4	Not Detected	34	Not Detected
1,2-Dichloropropane	8.4	Not Detected	39	Not Detected
1,3,5-Trimethylbenzene	8.4	Not Detected	41	Not Detected
1,3-Butadiene	8.4	Not Detected	18	Not Detected
1,3-Dichlorobenzene	8.4	Not Detected	50	Not Detected
1,4-Dichlorobenzene	8.4	Not Detected	50	Not Detected
1,4-Dioxane	34	Not Detected	120	Not Detected
2,2,4-Trimethylpentane	8.4	Not Detected	39	Not Detected
2-Butanone (Methyl Ethyl Ketone)	34	Not Detected	99	Not Detected
2-Hexanone	34	Not Detected	140	Not Detected
2-Propanol	34	Not Detected	82	Not Detected
3-Chloropropene	34	Not Detected	100	Not Detected
4-Ethyltoluene	8.4	Not Detected	41	Not Detected
4-Methyl-2-pentanone	8.4	Not Detected	34	Not Detected
Acetone	84	Not Detected	200	Not Detected
Acrolein	34	Not Detected	77	Not Detected
Acrylonitrile	34	Not Detected	73	Not Detected
alpha-Chlorotoluene	8.4	Not Detected	43	Not Detected
Benzene	8.4	Not Detected	27	Not Detected
Bromodichloromethane	8.4	Not Detected	56	Not Detected
Bromoform	8.4	Not Detected	87	Not Detected
Bromomethane	84	Not Detected	330	Not Detected
Carbon Disulfide	34	Not Detected	100	Not Detected
Carbon Tetrachloride	8.4	Not Detected	53	Not Detected
Chlorobenzene	8.4	Not Detected	39	Not Detected
Chloroethane	34	Not Detected	89	Not Detected
Chloroform	8.4	Not Detected	41	Not Detected
Chloromethane	84	Not Detected	170	Not Detected
cis-1,2-Dichloroethene	8.4	Not Detected	33	Not Detected

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Client Sample ID: SG-VW28B-02

Lab ID#: 2107362A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072733**	**Date of Collection:**	**7/15/21 1:50:00 PM**
Dil. Factor:	**16.8**	**Date of Analysis:**	**7/28/21 08:20 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	8.4	Not Detected	38	Not Detected
Cumene	8.4	Not Detected	41	Not Detected
Cyclohexane	8.4	Not Detected	29	Not Detected
Dibromochloromethane	8.4	Not Detected	72	Not Detected
Dibromomethane	34	Not Detected	240	Not Detected
Ethanol	84	Not Detected	160	Not Detected
Ethyl Acetate	34	Not Detected	120	Not Detected
Ethyl Benzene	8.4	Not Detected	36	Not Detected
Ethyl-tert-butyl ether	34	Not Detected	140	Not Detected
Freon 11	8.4	Not Detected	47	Not Detected
Freon 12	8.4	Not Detected	42	Not Detected
Freon 113	8.4	Not Detected	64	Not Detected
Freon 114	8.4	Not Detected	59	Not Detected
Freon 134a	34	Not Detected	140	Not Detected
Heptane	8.4	Not Detected	34	Not Detected
Hexachlorobutadiene	34	Not Detected	360	Not Detected
Hexachloroethane	34	Not Detected	320	Not Detected
Hexane	8.4	Not Detected	30	Not Detected
Iodomethane	84	Not Detected	490	Not Detected
Isopropyl ether	34	Not Detected	140	Not Detected
m,p-Xylene	8.4	Not Detected	36	Not Detected
Methyl tert-butyl ether	34	Not Detected	120	Not Detected
Methylene Chloride	84	Not Detected	290	Not Detected
Naphthalene	17	Not Detected	88	Not Detected
o-Xylene	8.4	Not Detected	36	Not Detected
Propylbenzene	8.4	Not Detected	41	Not Detected
Propylene	34	Not Detected	58	Not Detected
Styrene	8.4	Not Detected	36	Not Detected
tert-Amyl methyl ether	34	Not Detected	140	Not Detected
tert-Butyl alcohol	34	Not Detected	100	Not Detected
Tetrachloroethene	8.4	17	57	110
Tetrahydrofuran	8.4	Not Detected	25	Not Detected
Toluene	8.4	Not Detected	32	Not Detected
TPH ref. to Gasoline (MW=100)	840	Not Detected	3400	Not Detected
trans-1,2-Dichloroethene	8.4	Not Detected	33	Not Detected
trans-1,3-Dichloropropene	8.4	Not Detected	38	Not Detected
Trichloroethene	8.4	Not Detected	45	Not Detected
Vinyl Acetate	34	Not Detected	120	Not Detected
Vinyl Bromide	34	Not Detected	150	Not Detected
Vinyl Chloride	8.4	Not Detected	21	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-VW28B-02

Lab ID#: 2107362A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072733**	**Date of Collection: 7/15/21 1:50:00 PM**	
Dil. Factor:	**16.8**	**Date of Analysis: 7/28/21 08:20 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	97	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072733.d
Lab Smp Id: 2107362A-12A
Inj Date : 28-JUL-2021 08:20
Operator : LD Inst ID: msd3.i
Smp Info : 25mL N5532
Misc Info : 6.1 Hg->9.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 lk8g Quant Type: ISTD
Cal Date : 23-JUN-2021 00:09 Cal File: 3062223.d
Als bottle: 2
Dil Factor: 16.80000
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	
5.270	5.284 (1.000)	130	250317	25.0000			80.00- 120.00	100.00
5.270	5.284 (1.000)	128	200109				48.46- 108.46	79.94
5.270	5.270 (1.000)	49	358755				120.39- 180.39	143.32
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.166	6.180 (1.000)	114	787258	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	113607				0.00- 45.52	14.43
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.612 (1.000)	117	701093	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	363900				25.46- 85.46	51.90
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.104)	65	343010	24.9005	24.900		80.00- 120.00	100.00(a)
5.816	5.816 (1.104)	67	162463				21.66- 81.66	47.36
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.380	7.387 (1.197)	98	778697	24.0147	24.015		80.00- 120.00	100.00(a)
7.380	7.387 (1.197)	70	87334				0.00- 41.47	11.22

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	507618			36.47- 96.47	65.19
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	450694	24.3037	24.304	80.00- 120.00	100.00(a)
9.601	9.601 (1.115)	95	496803			93.06- 153.06	110.23
9.601	9.601 (1.115)	176	410576			62.87- 122.87	91.10
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.273)	65	544828	138.234	2322.3	80.00- 120.00	100.00
1.437	1.479 (0.273)	51	1351213			321.86- 381.86	248.01
1.437	1.451 (0.273)	47	290806			45.34- 105.34	53.38
142 Tetrachloroethene					CAS #: 127-18-4		
7.874	7.881 (0.914)	166	11005	1.00196	16.833	80.00- 120.00	100.00
7.874	7.881 (0.914)	129	8947			48.71- 108.71	81.30
7.874	7.874 (0.914)	131	8251			46.55- 106.55	74.98

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: 3072733.d
Lab Smp Id: 2107362A-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 6.1 Hg->9.9 psi

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	250317	4.74
108 1,4-Difluorobenze	785289	471173	1099405	787258	0.25
153 Chlorobenzene-d5	683596	410158	957034	701093	2.56

		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	8.61	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: 29-Jul-2021 11:13

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362A-12A
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/27JUL21.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	24.900	99.60	70-130
$ 134 Toluene-d8	25.000	24.015	96.06	70-130
$ 170 4-Bromofluorobenz	25.000	24.304	97.21	70-130

Data File: /chem/msd3.i/27JUL21.b/3072733.d

Date : 28-JUL-2021 08:20

Client ID:

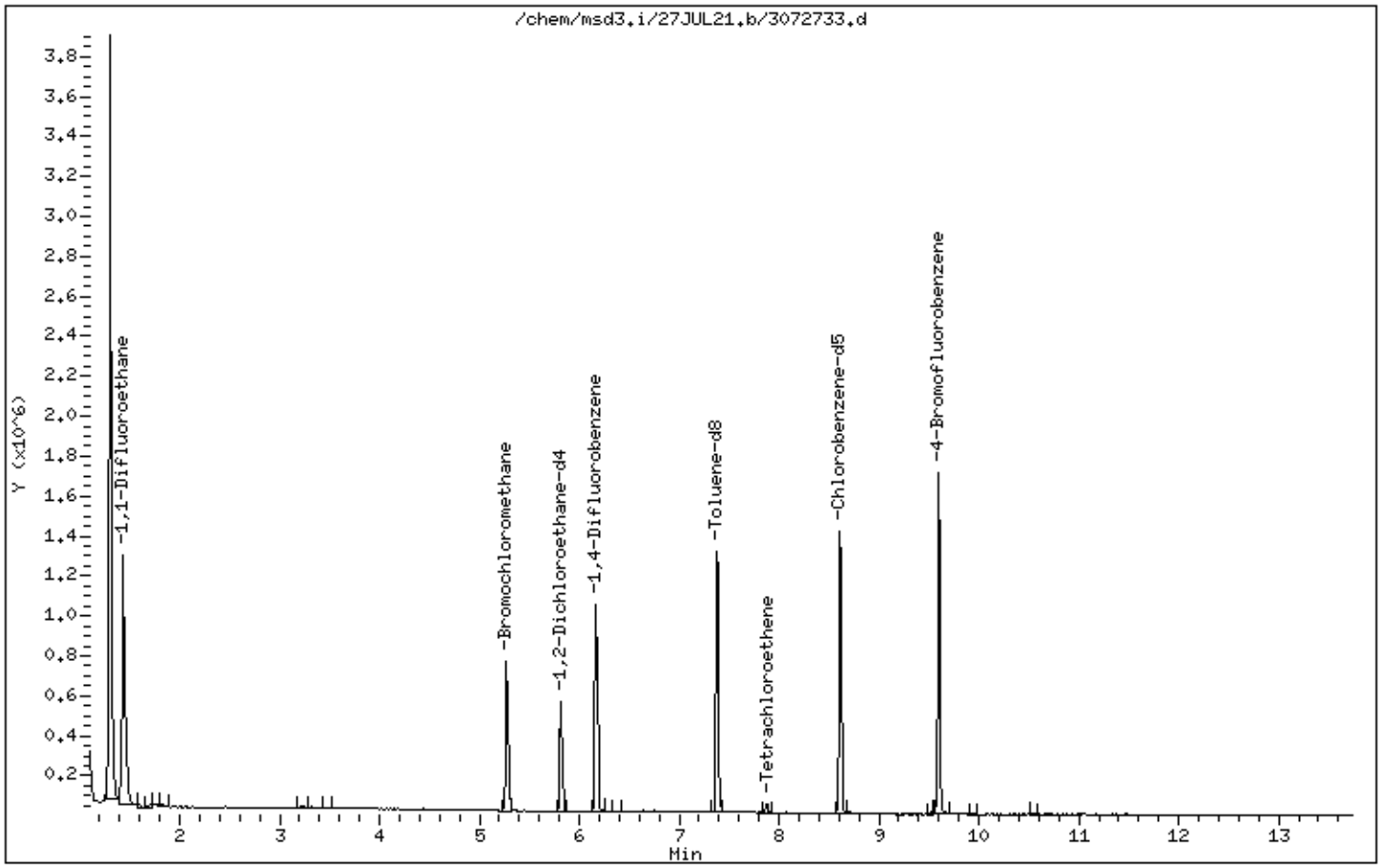
Instrument: msd3.i

Sample Info: 25mL N5532

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd3.i/27JUL21.b/3072733.d

Date : 28-JUL-2021 08:20

Client ID:

Instrument: msd3.i

Sample Info: 25mL N5532

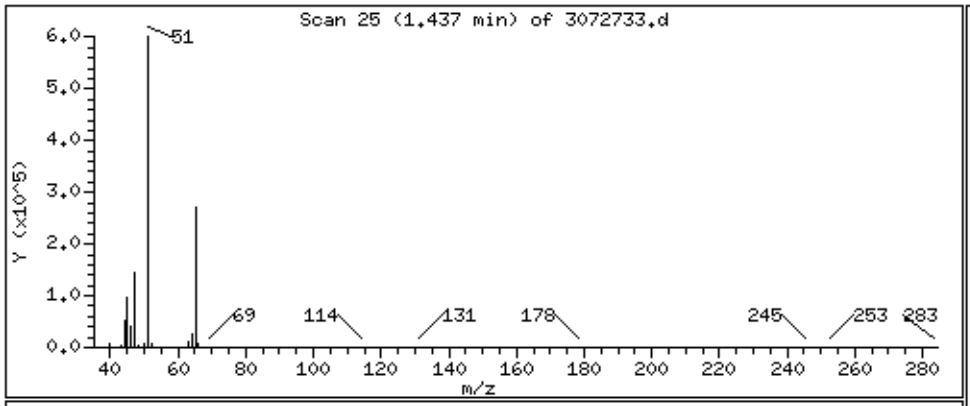
Operator: LD

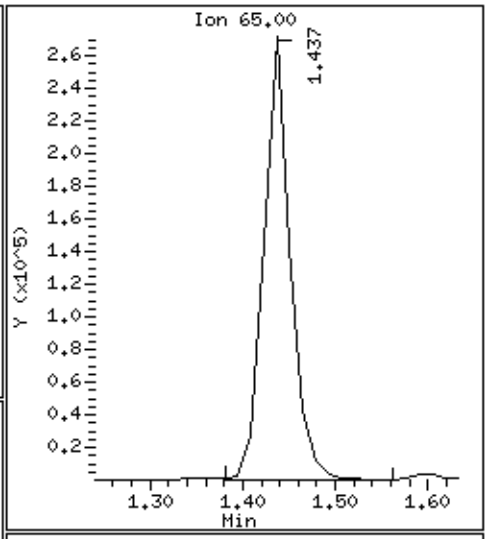
Column phase: RTX-624

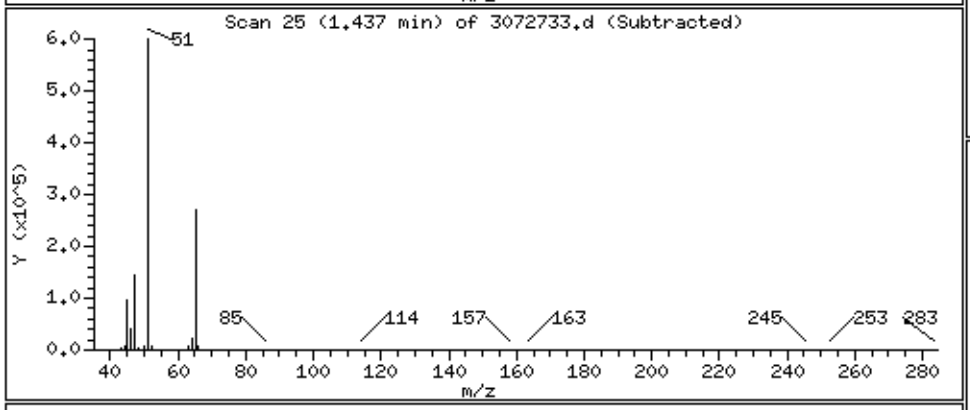
Column diameter: 0.25

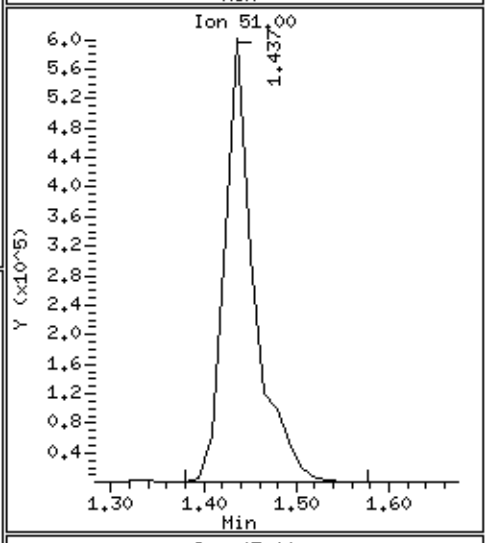
7 1,1-Difluoroethane

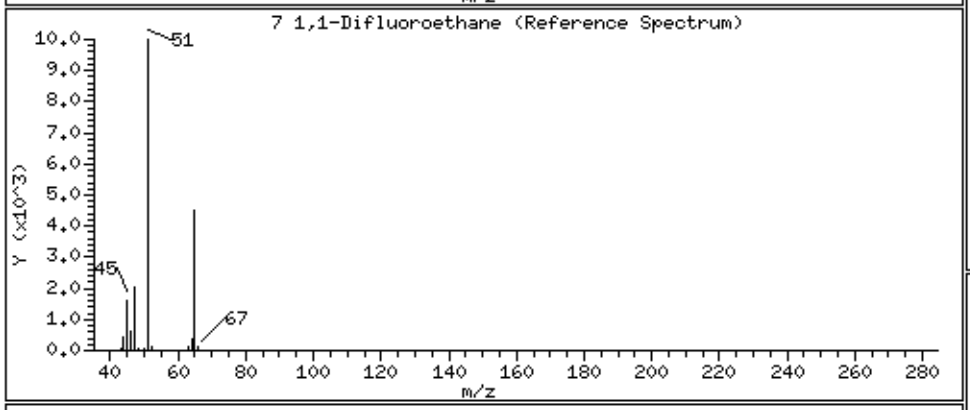
Concentration: 2322.3 PPBV

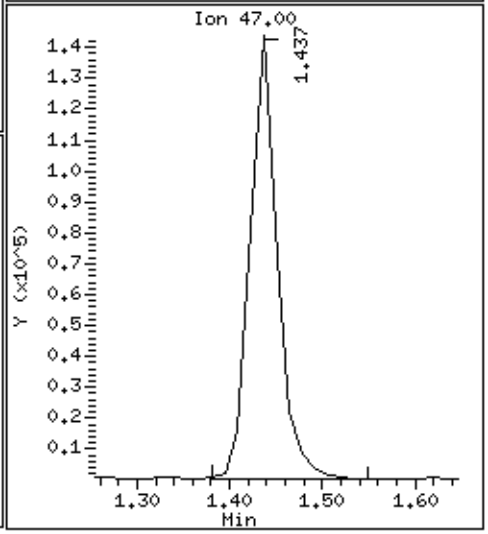


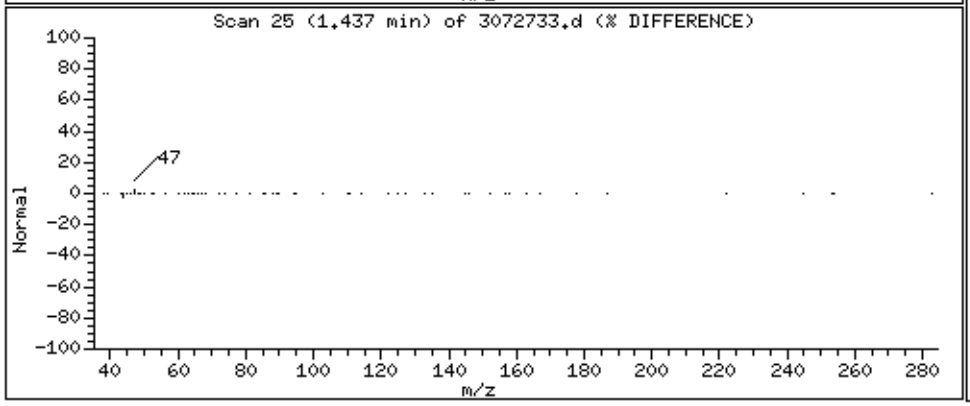












Data File: /chem/msd3.i/27JUL21.b/3072733.d

Date : 28-JUL-2021 08:20

Client ID:

Instrument: msd3.i

Sample Info: 25mL N5532

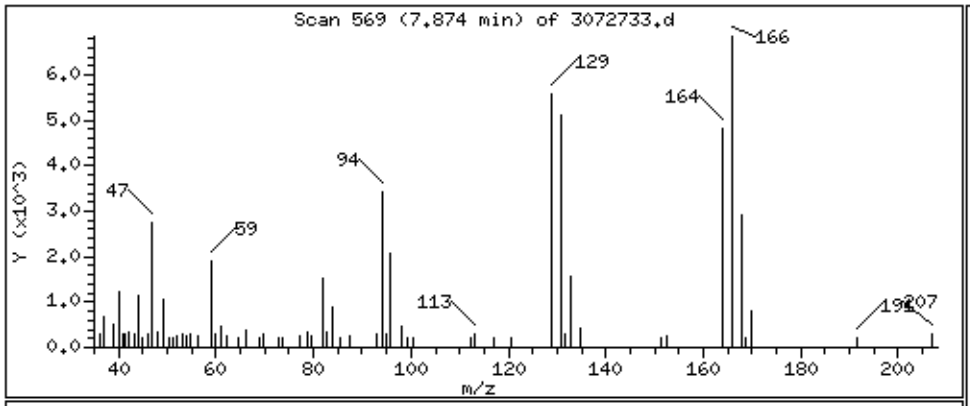
Operator: LD

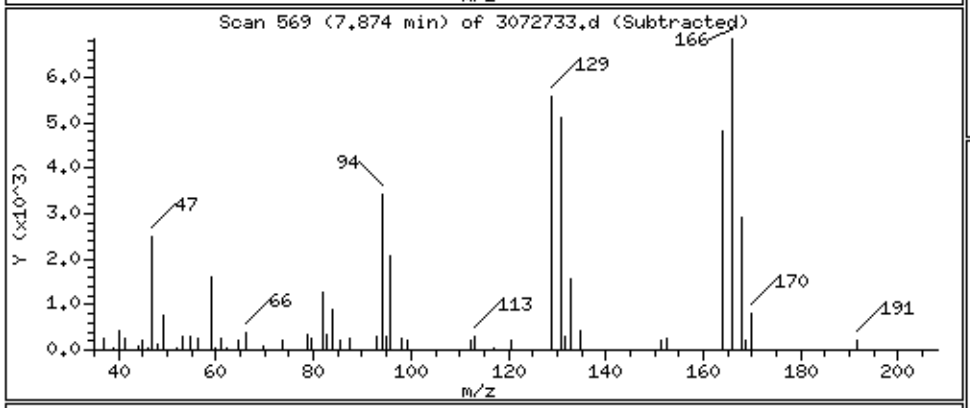
Column phase: RTX-624

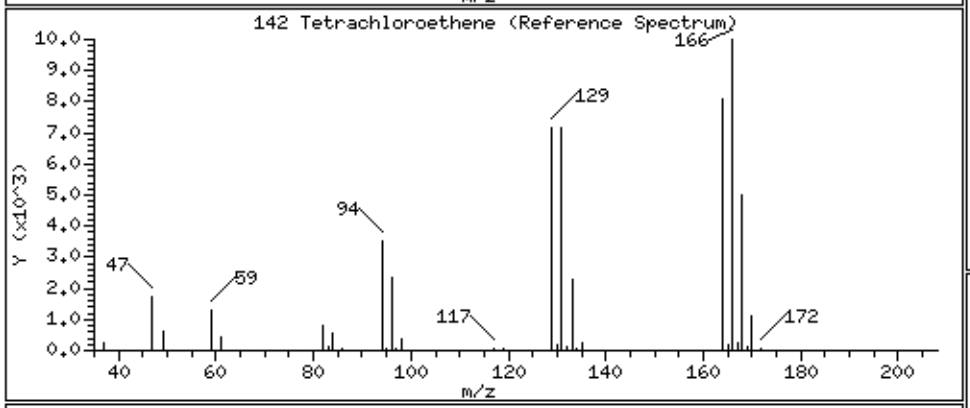
Column diameter: 0.25

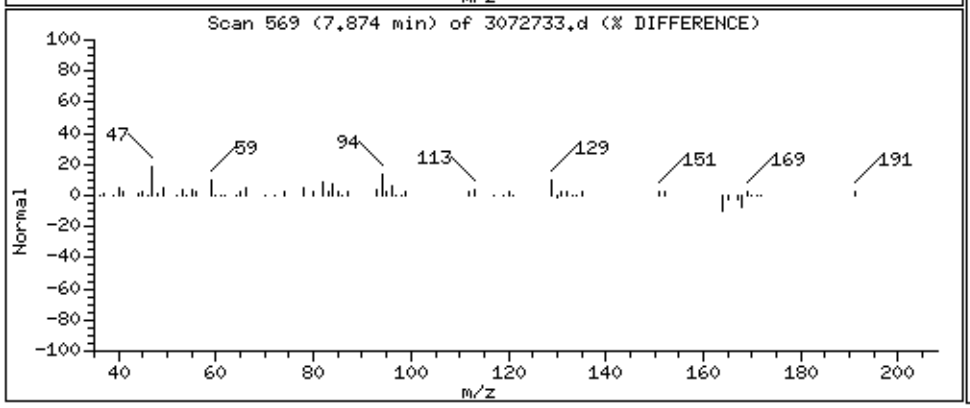
142 Tetrachloroethene

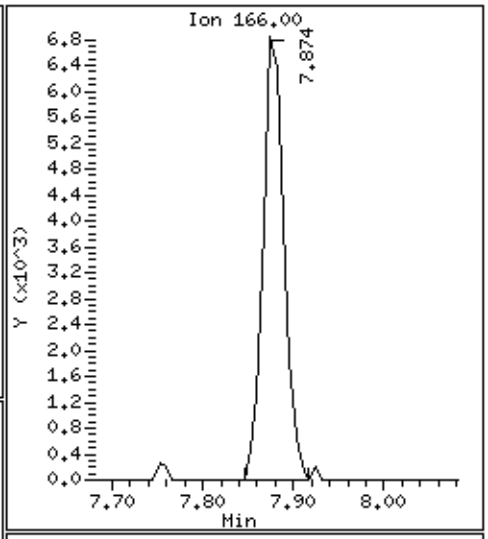
Concentration: 16.833 PPBV

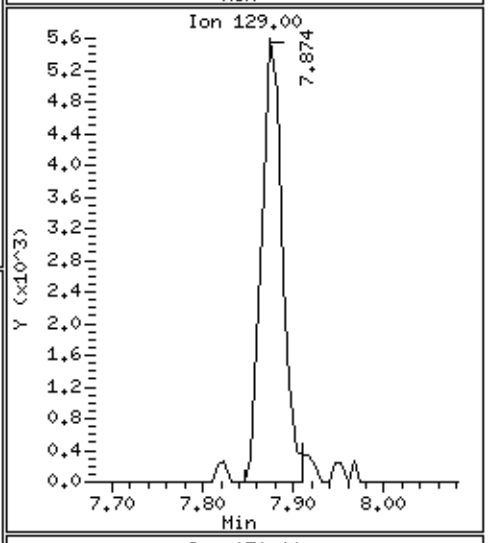


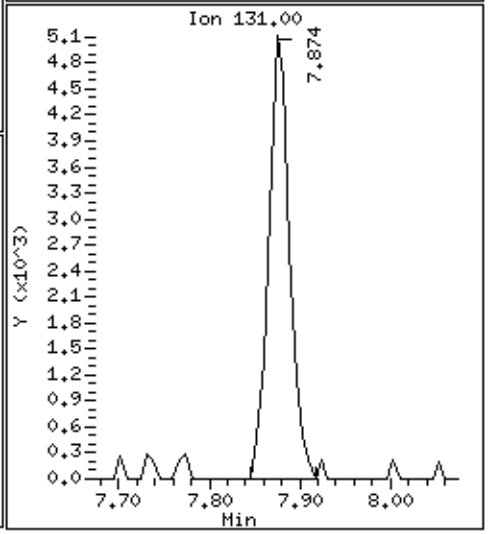












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 2107362A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072709a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 03:47 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#: 2107362A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072709a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 03:47 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

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2107362A-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072709a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 03:47 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	88	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	96	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072709a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 27-JUL-2021 15:47
Operator : LD Inst ID: msd3.i
Smp Info : 200mL 34353
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 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	272067	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	210963				48.46- 108.46	77.54
5.284	5.270 (1.000)	49	372693				120.39- 180.39	136.99
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	957155	25.0000			80.00- 120.00	100.00
6.166	6.180 (1.000)	88	142293				0.00- 45.52	14.87
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.612	8.612 (1.000)	117	785290	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	412756				25.46- 85.46	52.56
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	383698	25.6275	25.627		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	183449				21.66- 81.66	47.81
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	867753	22.0110	22.011		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	96428				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 (1.195)	100	575958			36.47- 96.47	66.37
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	500278	24.0851	24.085	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	563393			93.06- 153.06	112.62
9.601	9.601 (1.115)	176	459967			62.87- 122.87	91.94

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072709a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: Humid

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	272067	13.84
108 1,4-Difluorobenze	785289	471173	1099405	957155	21.89
153 Chlorobenzene-d5	683596	410158	957034	785290	14.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.28	4.95	5.61	5.28	-0.00
108 1,4-Difluorobenze	6.18	5.85	6.51	6.18	-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: 29-Jul-2021 13:24

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 27JUL21
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/27JUL21.b/321q0622a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.627	102.51	70-130
$ 134 Toluene-d8	25.000	22.011	88.04	70-130
$ 170 4-Bromofluorobenz	25.000	24.085	96.34	70-130

Data File: /chem/msd3.i/27JUL21.b/3072709a.d

Date : 27-JUL-2021 15:47

Client ID: Lab Blank

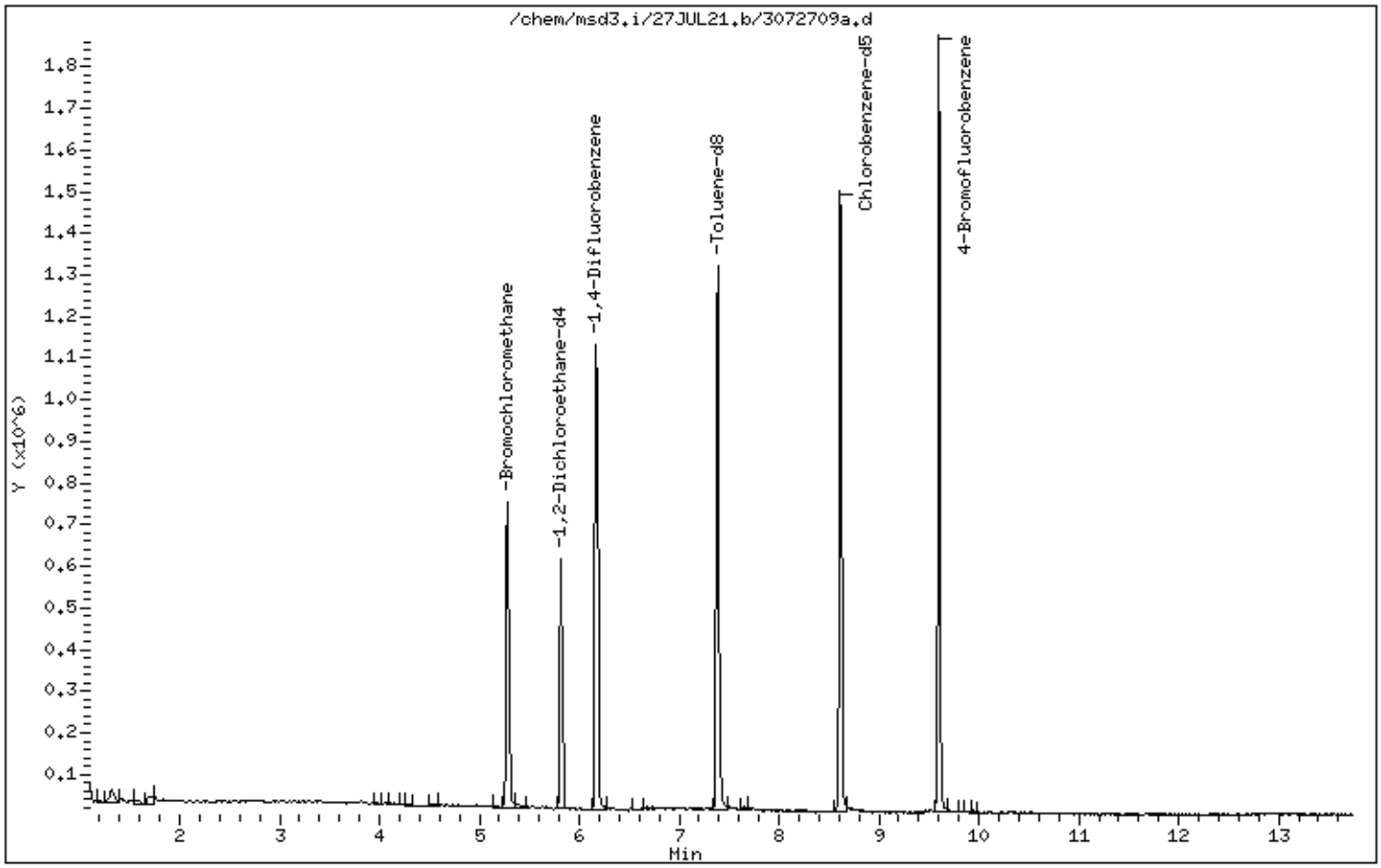
Instrument: msd3.i

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. :2107362A

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY						
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#	TOTAL OUT
1	SG-VW61A-01	101		93		99		
2	SG-VW61B-01	97		101		98		
3	SG-VW62-01	97		100		92		
4	SG-VW30A-03	96		96		95		
5	SG-VW30B-03	104		92		95		
6	SG-VW63A-01	104		89		98		
7	SG-VW63B-01	92		94		104		
8	SG-VW64A-01	96		96		98		
9	SG-VW64B-01	97		95		98		
10	SG-VW29A-02	97		94		100		
11	SG-VW29B-02	100		97		93		
12	SG-VW28B-02	100		96		97		
13	Lab Blank	102		88		96		
14	CCV	97		96		108		
15	LCS	100		92		101		
16	LCSD	99		93		99		

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: 3072703.d Date : 2021-07-27 11:36:00 SDG No. : 2107362A

		Bromochloromethane	RT	1,4-Difluorobenzene	RT	Chlorobenzene-d5	RT
	24-HOUR CCV	238986	5.28	785289	6.18	683596	8.61
	UPPER LIMIT	334580	5.61	1099404	6.51	957034	8.94
	LOWER LIMIT	143391	4.95	471173	5.85	410157	8.28
	CLIENT SAMPLE NO.						
1	SG-VW61A-01	223738	5.28	772958	6.18	682676	8.62
2	SG-VW61B-01	214821	5.28	702909	6.18	635784	8.62
3	SG-VW62-01	206957	5.28	667200	6.18	607603	8.62
4	SG-VW30A-03	276733	5.28	906043	6.17	802065	8.61
5	SG-VW30B-03	224023	5.28	756097	6.18	639967	8.62
6	SG-VW63A-01	240072	5.28	839032	6.18	710437	8.62
7	SG-VW63B-01	303209	5.28	945815	6.17	833699	8.61
8	SG-VW64A-01	248008	5.28	816510	6.17	729190	8.62
9	SG-VW64B-01	220973	5.28	712494	6.18	647937	8.62
10	SG-VW29A-02	256218	5.27	829292	6.17	730151	8.61
11	SG-VW29B-02	227166	5.28	750346	6.18	684522	8.62
12	SG-VW28B-02	250317	5.27	787258	6.17	701093	8.61
13	Lab Blank	272067	5.28	957155	6.18	785290	8.61
14	CCV	238986	5.28	785289	6.18	683596	8.61
15	LCS	250619	5.28	851577	6.18	720138	8.62
16	LCSD	243047	5.28	877445	6.18	719626	8.62

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: 3072704.d & 3072705.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	90	90	0	
79-34-5	1,1,2,2-Tetrachloroethane	99	97	2.0	
79-00-5	1,1,2-Trichloroethane	97	96	1.0	
75-34-3	1,1-Dichloroethane	92	95	3.2	
75-35-4	1,1-Dichloroethene	93	97	4.2	
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	101	114	12	
95-63-6	1,2,4-Trimethylbenzene	104	98	5.9	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	100	101	1.00	
95-50-1	1,2-Dichlorobenzene	107	103	3.8	
107-06-2	1,2-Dichloroethane	101	96	5.1	
78-87-5	1,2-Dichloropropane	84	74	13	
108-67-8	1,3,5-Trimethylbenzene	100	97	3.0	
106-99-0	1,3-Butadiene	92	96	4.3	
541-73-1	1,3-Dichlorobenzene	107	104	2.8	
106-46-7	1,4-Dichlorobenzene	104	101	2.9	
123-91-1	1,4-Dioxane	90	94	4.3	
540-84-1	2,2,4-Trimethylpentane	93	89	4.4	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	94	97	3.1	
591-78-6	2-Hexanone	92	94	2.2	
67-63-0	2-Propanol	98	102	4.0	
107-05-1	3-Chloropropene	93	96	3.2	
622-96-8	4-Ethyltoluene	100	98	2.0	
108-10-1	4-Methyl-2-pentanone	78	81	3.8	
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	96	94	2.1	
71-43-2	Benzene	103	94	9.1	
75-27-4	Bromodichloromethane	88	89	1.1	
75-25-2	Bromoform	104	105	0.96	
74-83-9	Bromomethane	100	102	2.0	
75-15-0	Carbon Disulfide	103	105	1.9	

56-23-5	Carbon Tetrachloride	98	99	1.0	
108-90-7	Chlorobenzene	97	98	1.0	
75-00-3	Chloroethane	100	104	3.9	
67-66-3	Chloroform	94	94	0	
74-87-3	Chloromethane	113	116	2.6	
156-59-2	cis-1,2-Dichloroethene	89	91	2.2	
10061-01-5	cis-1,3-Dichloropropene	86	89	3.4	
98-82-8	Cumene	95	96	1.0	
110-82-7	Cyclohexane	86	87	1.2	
124-48-1	Dibromochloromethane	104	105	0.96	
74-95-3	Dibromomethane	ND	ND	0	
64-17-5	Ethanol	71	74	4.1	
141-78-6	Ethyl Acetate	ND	ND	0	
100-41-4	Ethyl Benzene	98	99	1.0	
637-92-3	Ethyl-tert-butyl ether	ND	ND	0	
75-69-4	Freon 11	106	109	2.8	
76-13-1	Freon 113	101	104	2.9	
76-14-2	Freon 114	105	108	2.8	
75-71-8	Freon 12	100	104	3.9	
811-97-2	Freon 134a	ND	ND	0	
142-82-5	Heptane	88	84	4.7	
87-68-3	Hexachlorobutadiene	105	117	11	
110-54-3	Hexane	91	95	4.3	
74-88-4	Iodomethane	ND	ND	0	
108-20-3	Isopropyl ether	ND	ND	0	
108-38-3	m,p-Xylene	98	98	0	
1634-04-4	Methyl tert-butyl ether	91	96	5.3	
75-09-2	Methylene Chloride	96	99	3.1	
91-20-3	Naphthalene	78	86	9.8	Y
95-47-6	o-Xylene	95	95	0	
103-65-1	Propylbenzene	102	98	4.0	
115-07-1	Propylene	94	100	6.2	
100-42-5	Styrene	95	95	0	
994-05-8	tert-Amyl methyl ether	ND	ND	0	
75-65-0	tert-Butyl alcohol	ND	ND	0	
127-18-4	Tetrachloroethene	102	104	1.9	
109-99-9	Tetrahydrofuran	88	87	1.1	
108-88-3	Toluene	89	90	1.1	
156-60-5	trans-1,2-Dichloroethene	88	92	4.4	
10061-02-6	trans-1,3-Dichloropropene	95	96	1.0	
79-01-6	Trichloroethene	92	98	6.3	
108-05-4	Vinyl Acetate	93	96	3.2	

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	104	107	2.8

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
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Integrator : HP RTE
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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					
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	50.000 Level 9	100.000 Level 10	200.000 Level 11	___ RRF	% RSD
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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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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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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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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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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

US32TAR1

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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					
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

US32TAR1

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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					
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

US32TAR1

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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

US32TAR1

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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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	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

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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					
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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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					
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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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

US32TAR1

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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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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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

US32TAR1

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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

US32TAR1

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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

US32TAR1

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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

US32TAR1

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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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

US32TAR1

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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

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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	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++

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					
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

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

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.

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:

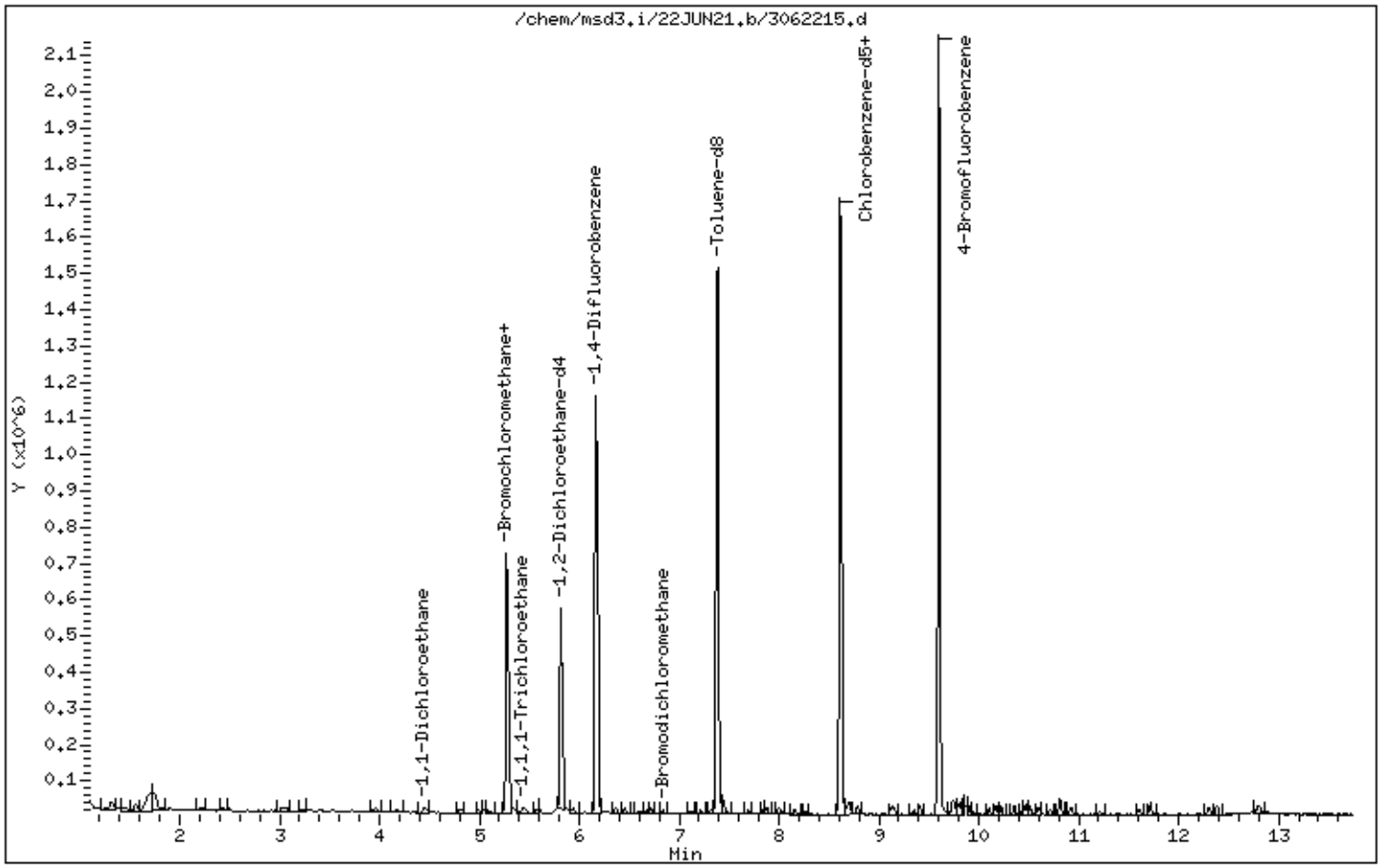
Instrument: msd3.i

Sample Info: 12mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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:

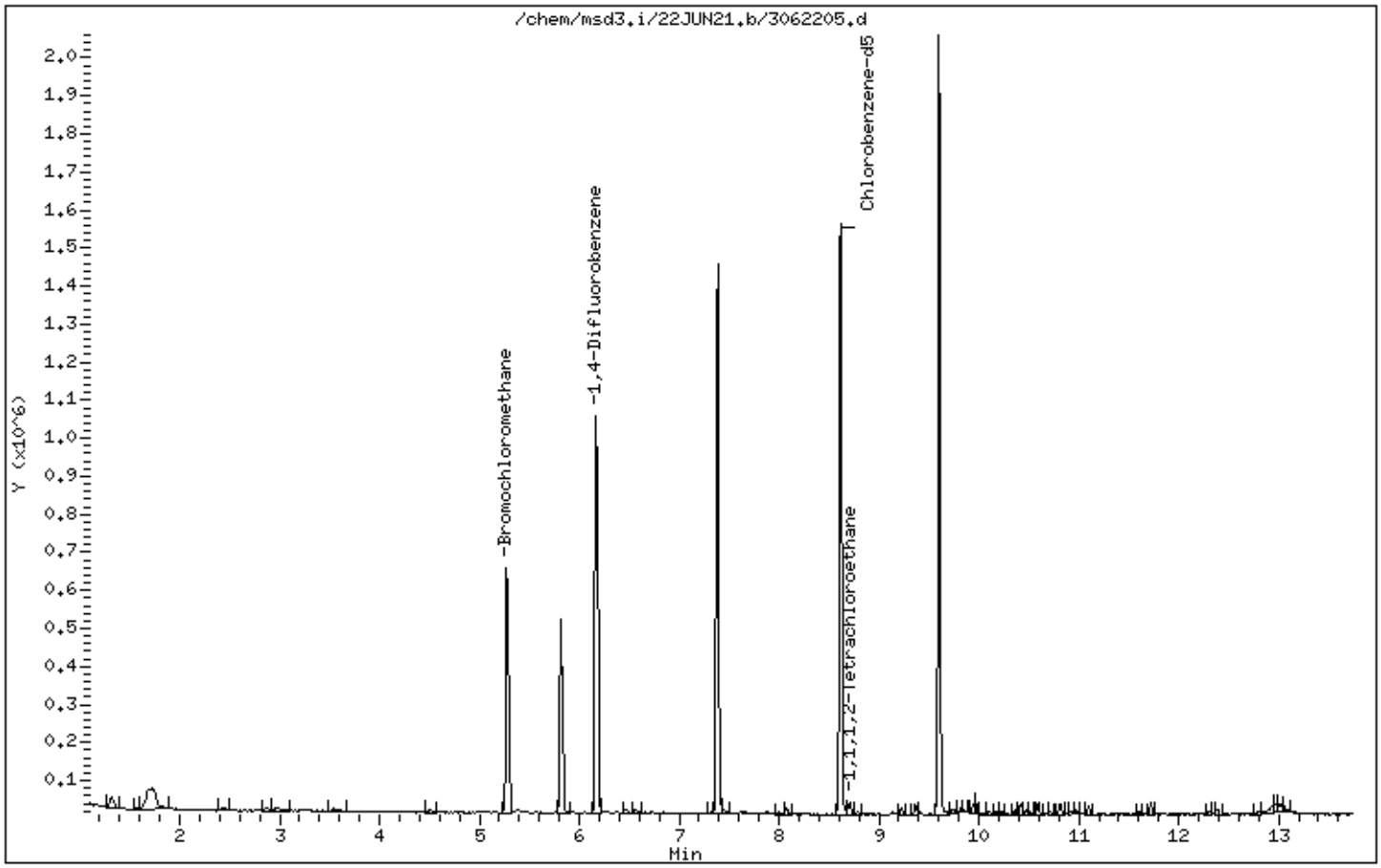
Instrument: msd3.i

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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
165 Styrene (continued)							
9.149	9.149 (1.062)	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:

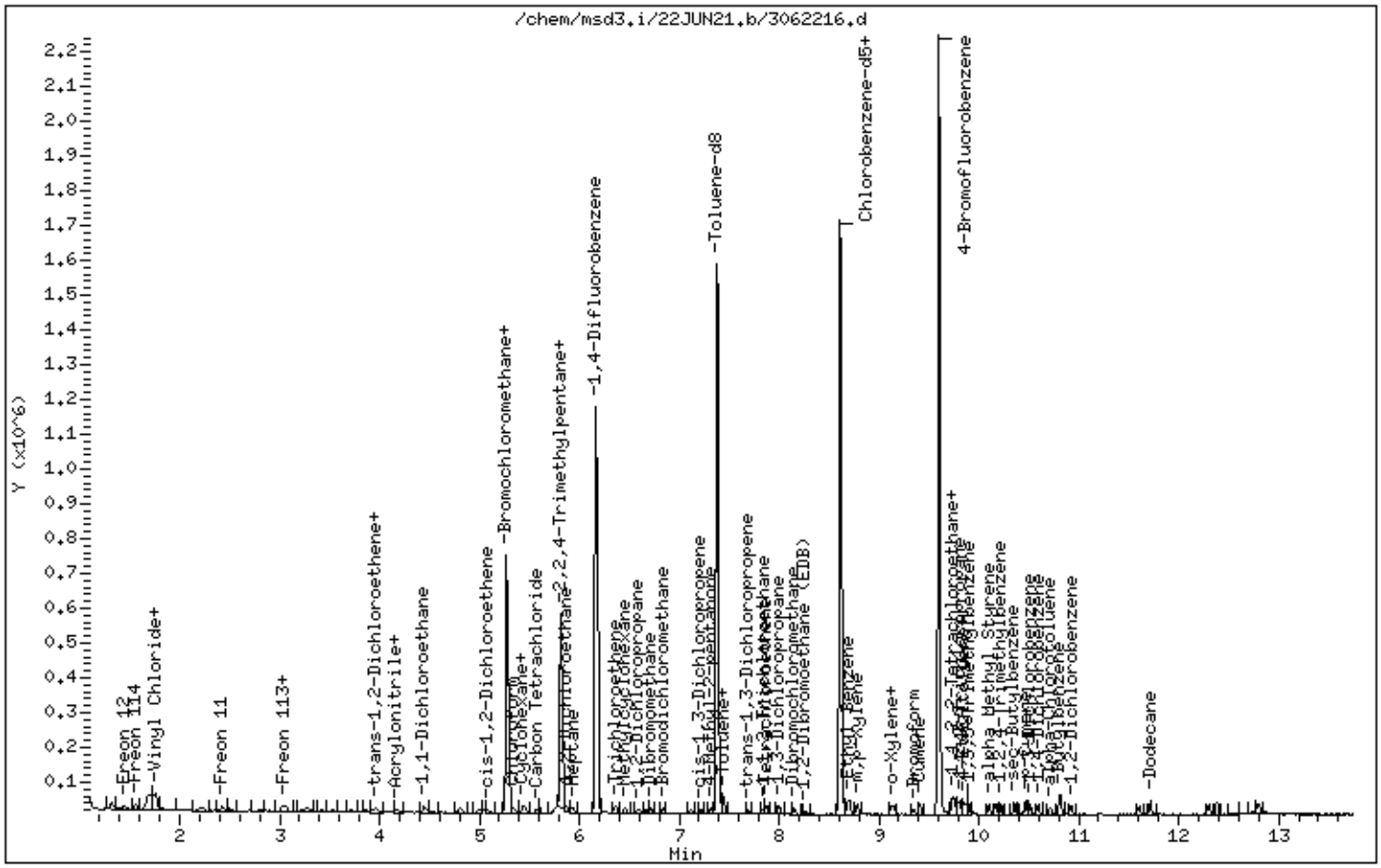
Instrument: msd3.i

Sample Info: 16mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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:

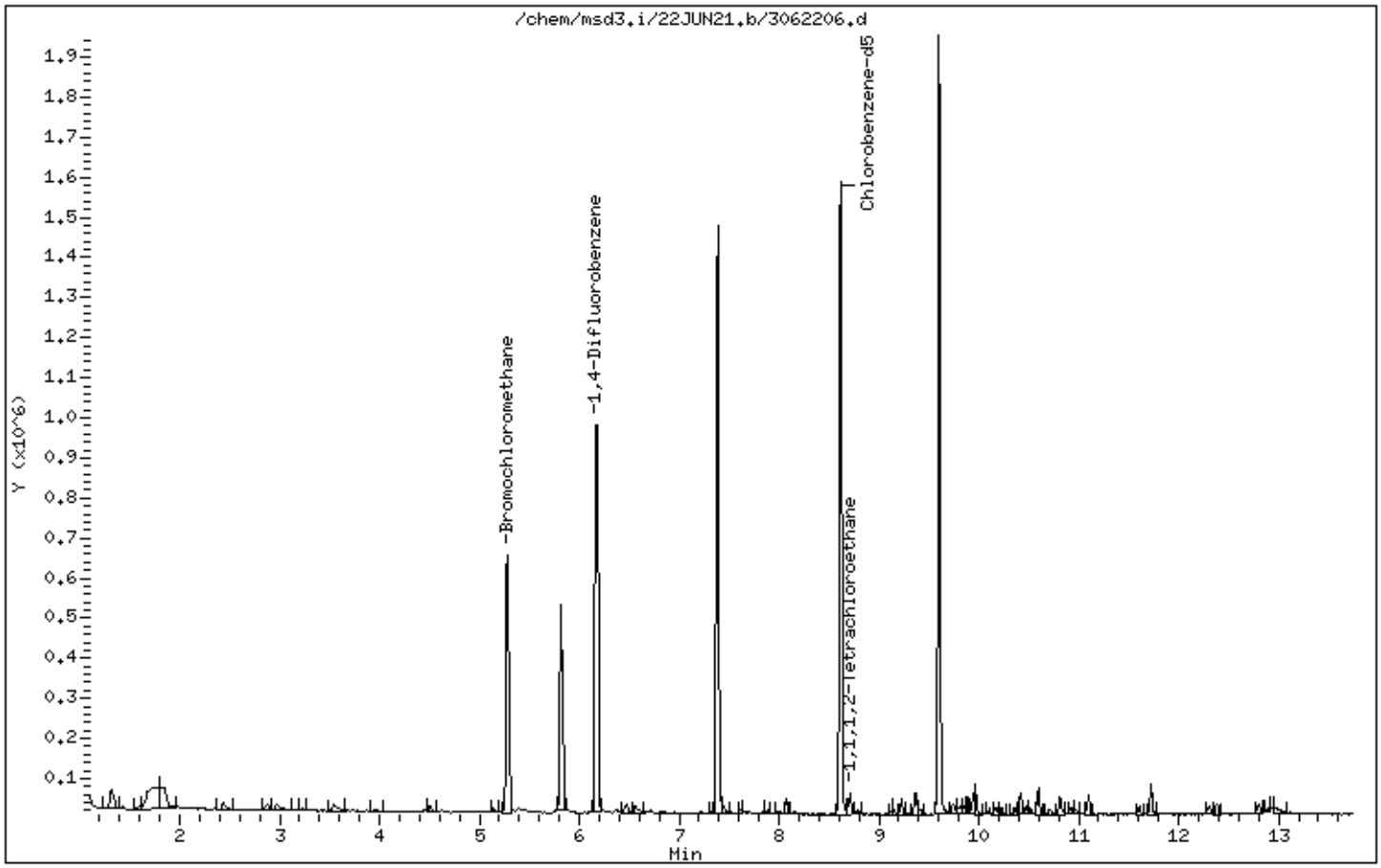
Instrument: msd3.i

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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
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
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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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

Date : 22-JUN-2021 21:22

Client ID:

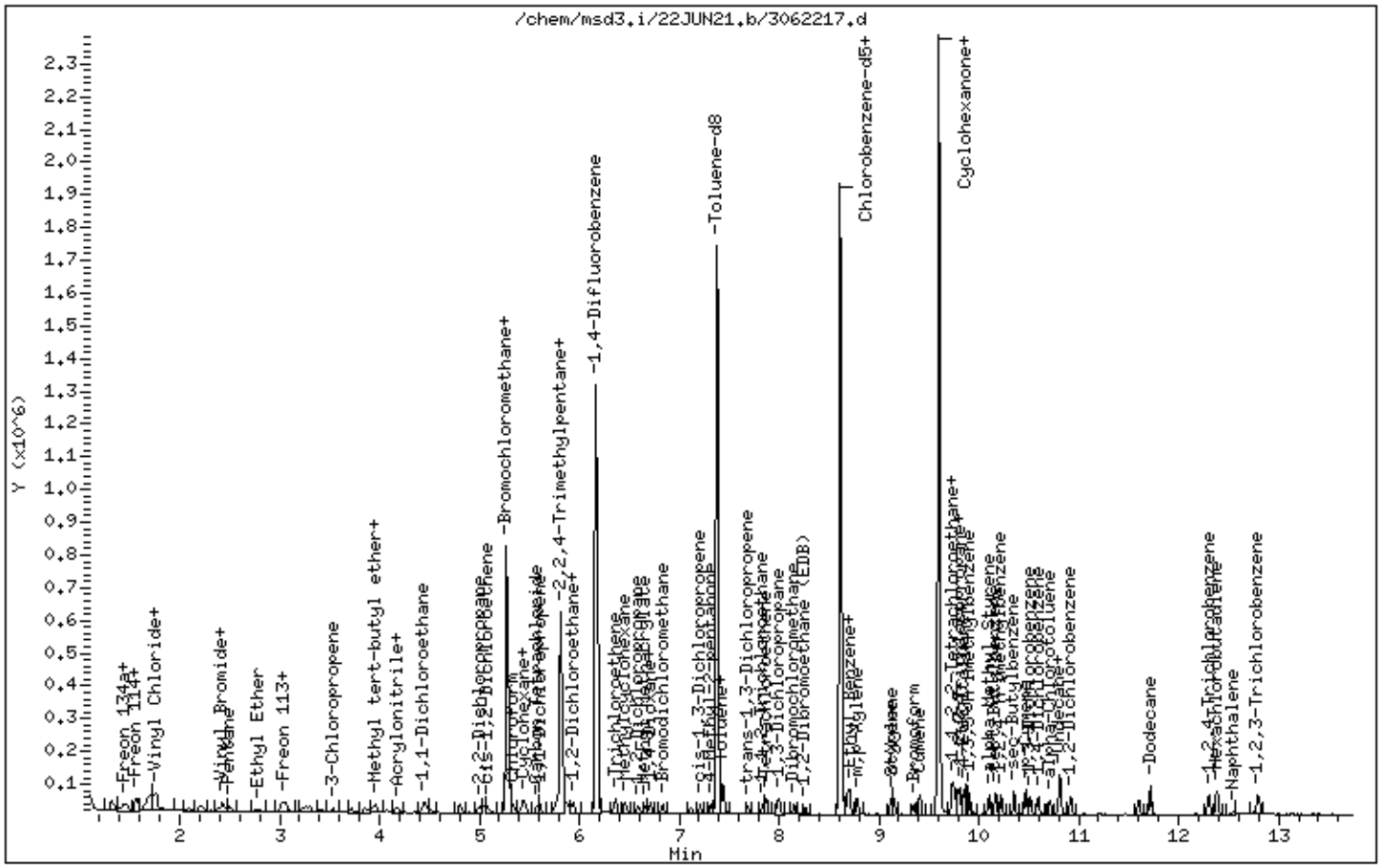
Instrument: msd3.i

Sample Info: 32mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
6 Propane (continued)							
1.423	1.422 (0.270)	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

Date : 22-JUN-2021 16:44

Client ID:

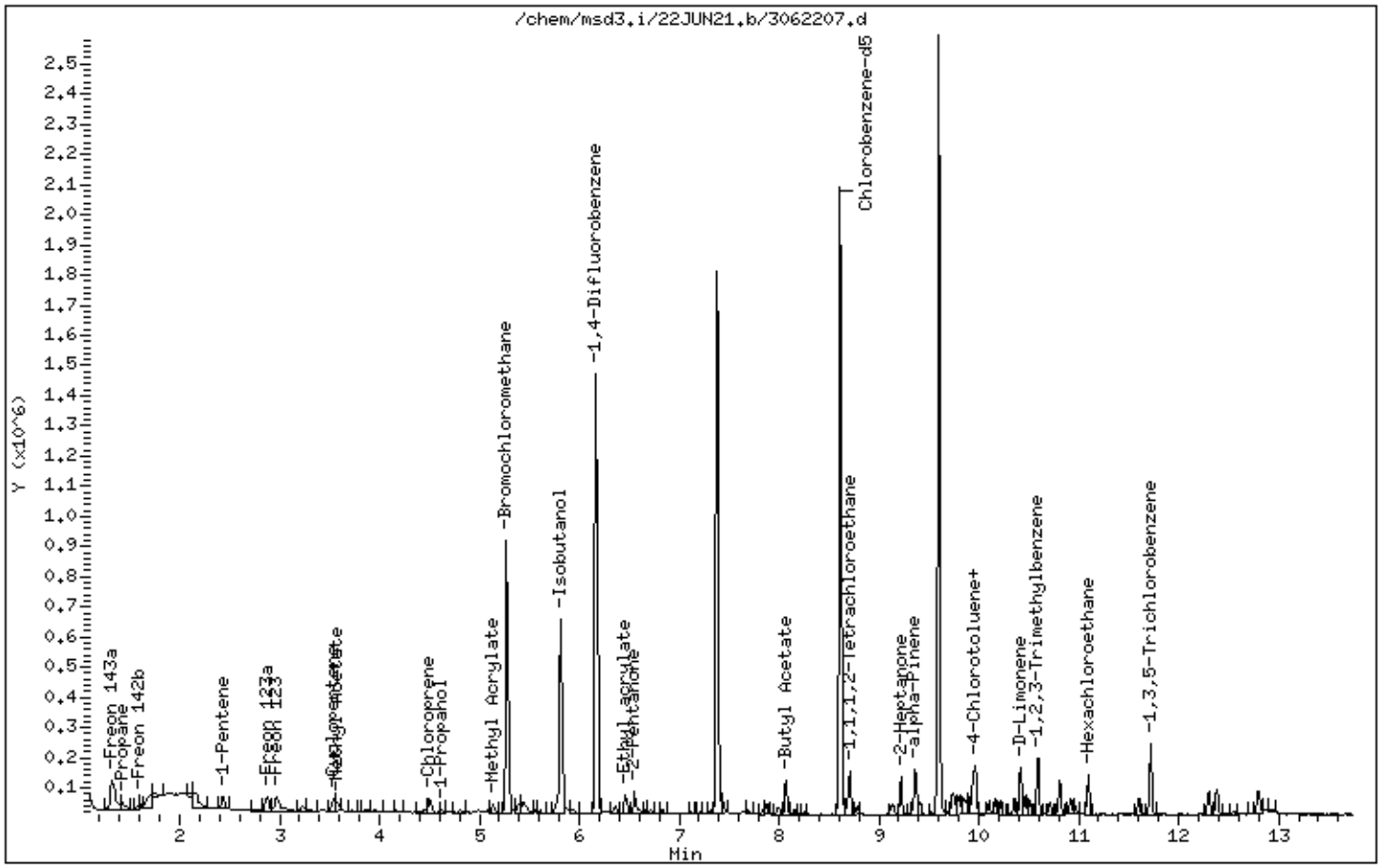
Instrument: msd3.i

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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (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

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	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
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* 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
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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
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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
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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

				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	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:

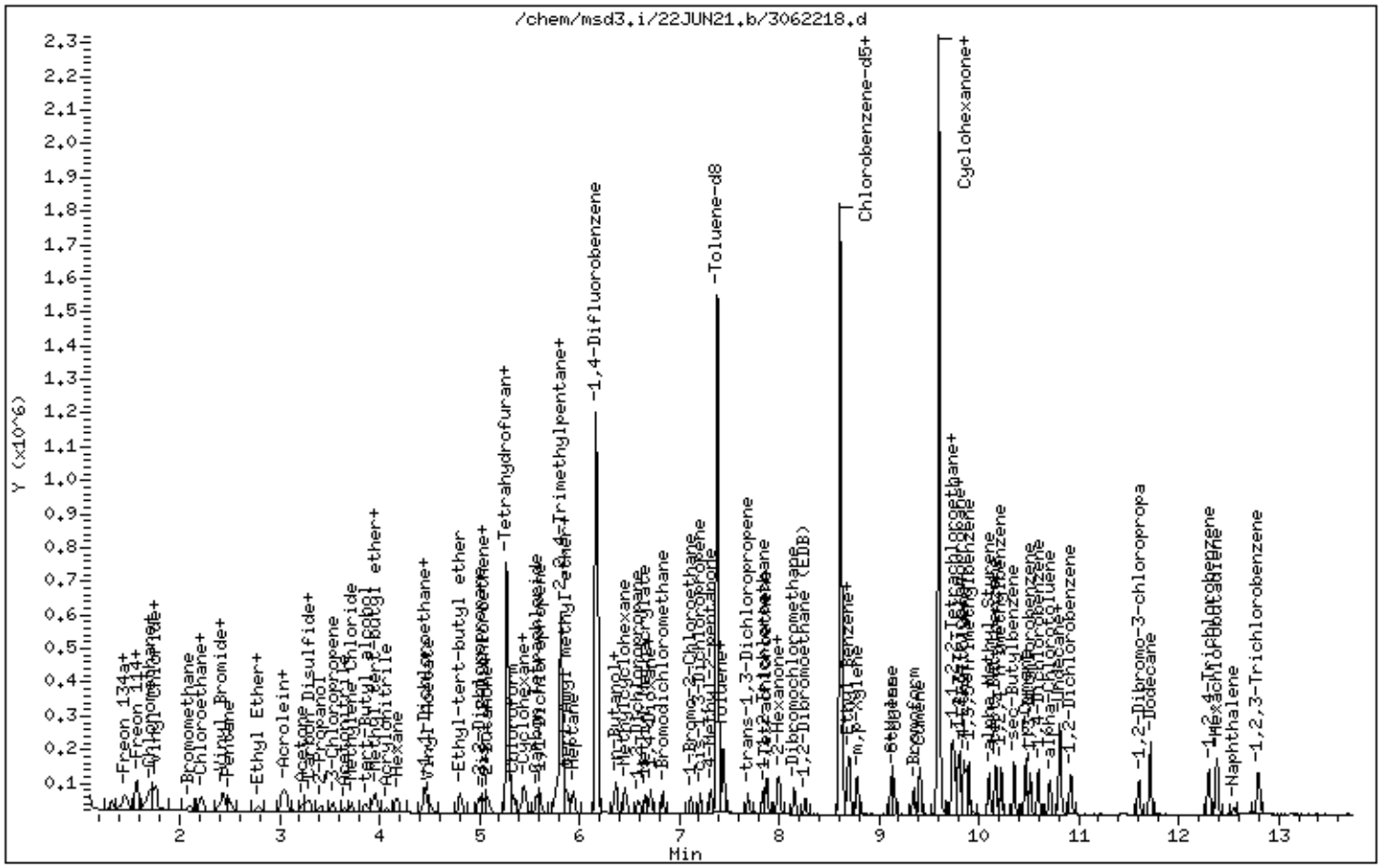
Instrument: msd3.i

Sample Info: 80mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

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

Page 1

Date : 22-JUN-2021 17:13

Client ID:

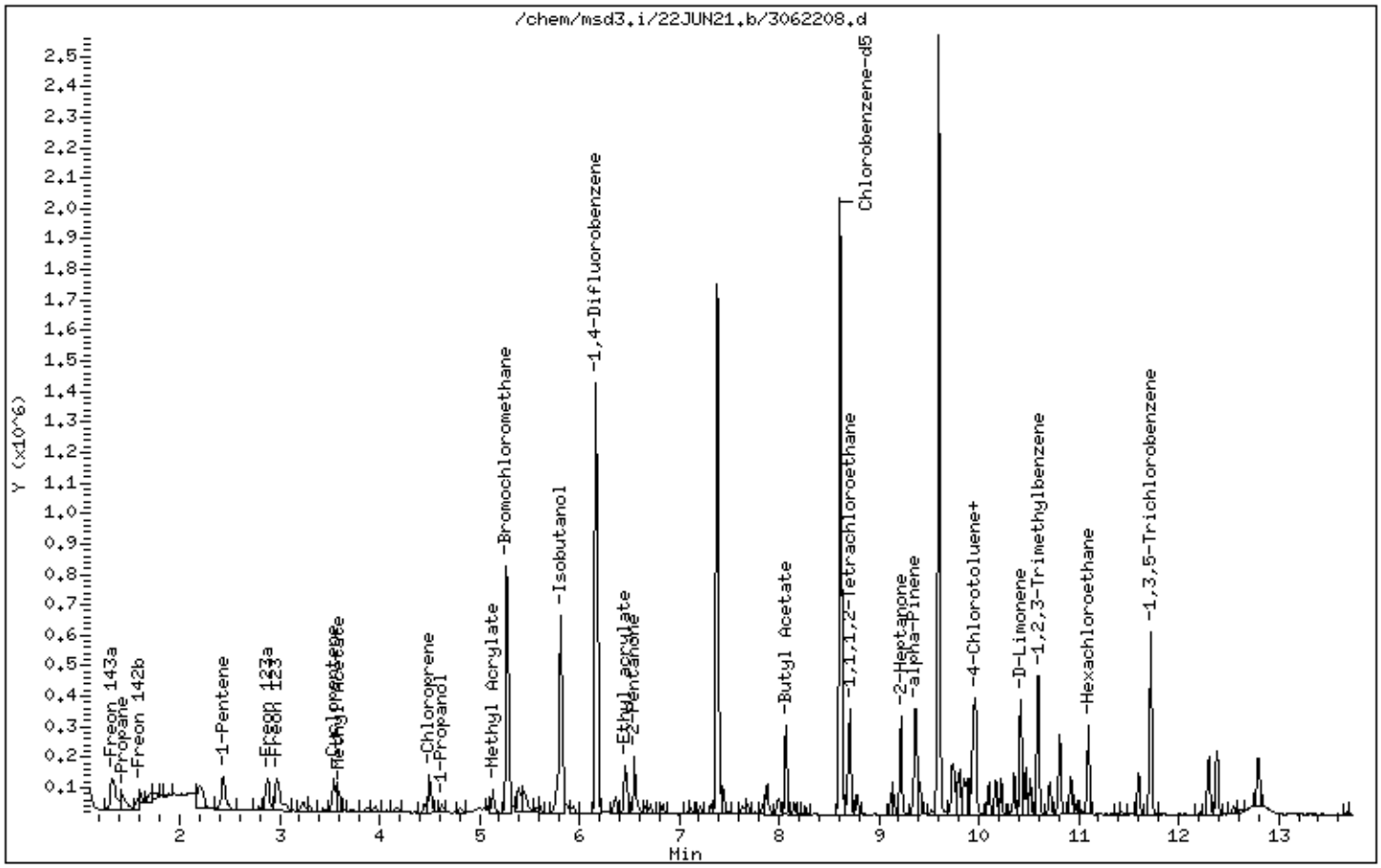
Instrument: msd3.i

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

				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	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

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	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

				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
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

Page 1

Date : 22-JUN-2021 22:18

Client ID:

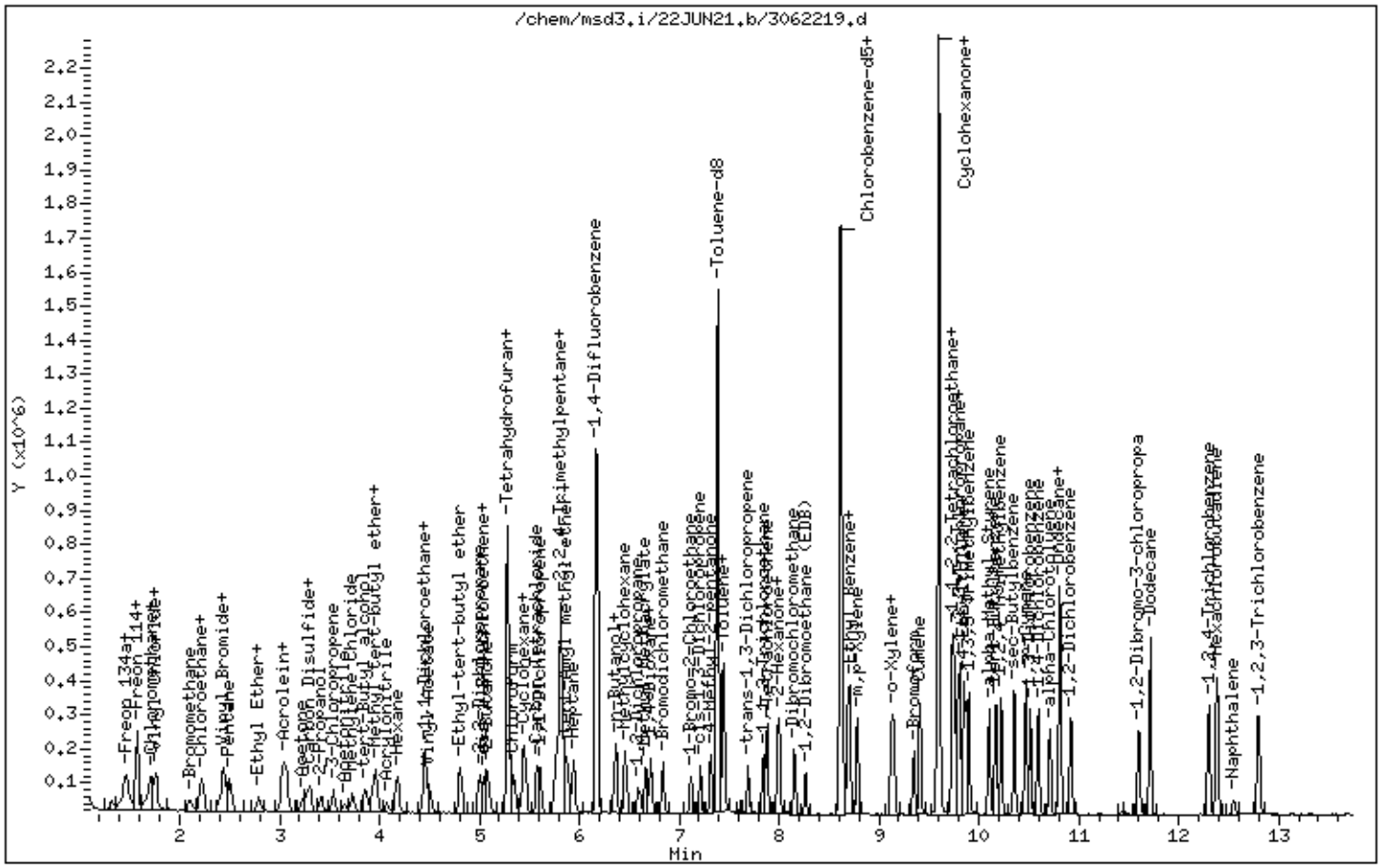
Instrument: msd3.i

Sample Info: 200mL 3018-2116

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

				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

				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	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:

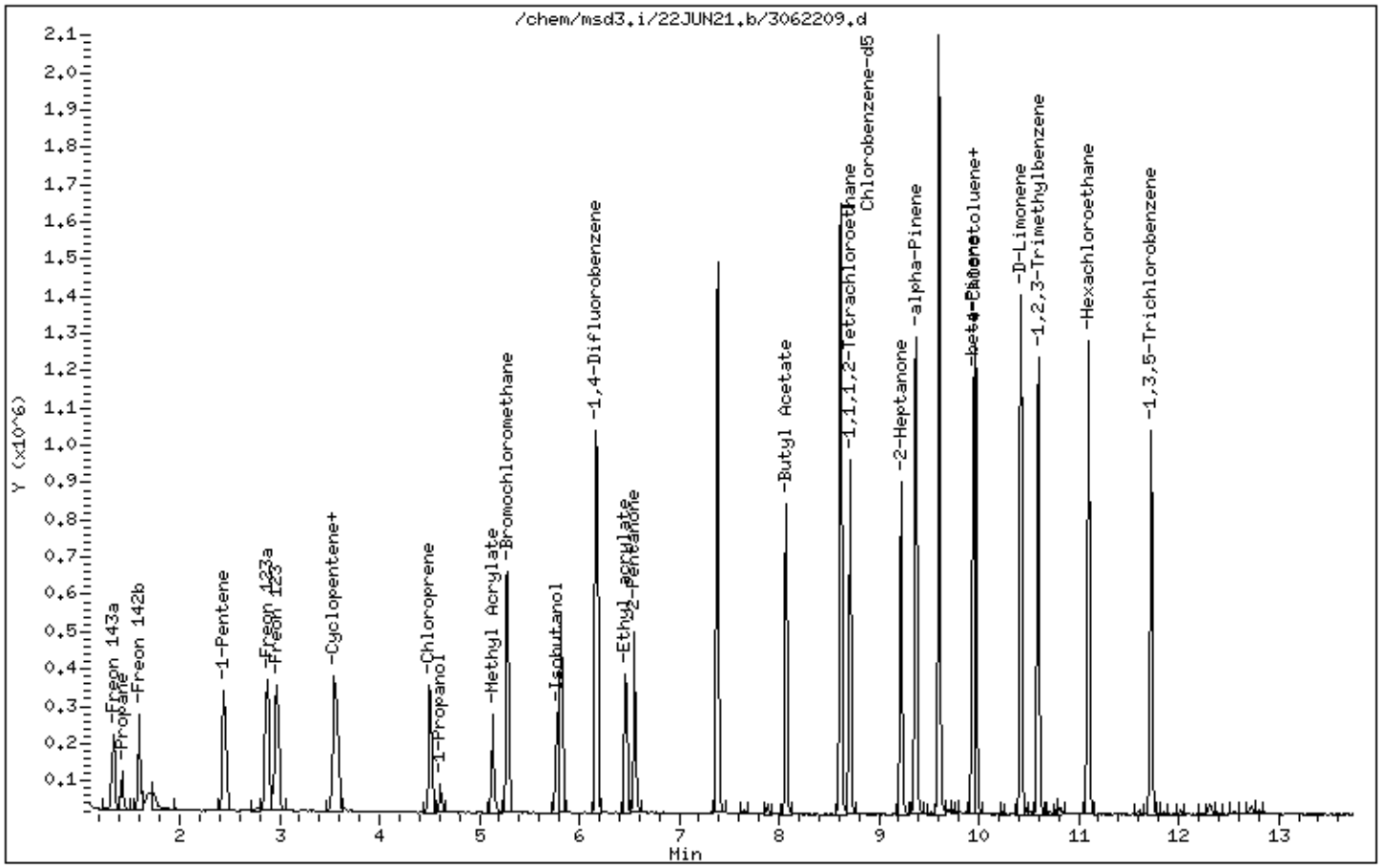
Instrument: msd3.i

Sample Info: 20mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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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

				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 (0.644)	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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 Chloroform (continued)							
5.340	5.340 (1.013)	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

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	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

				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	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:

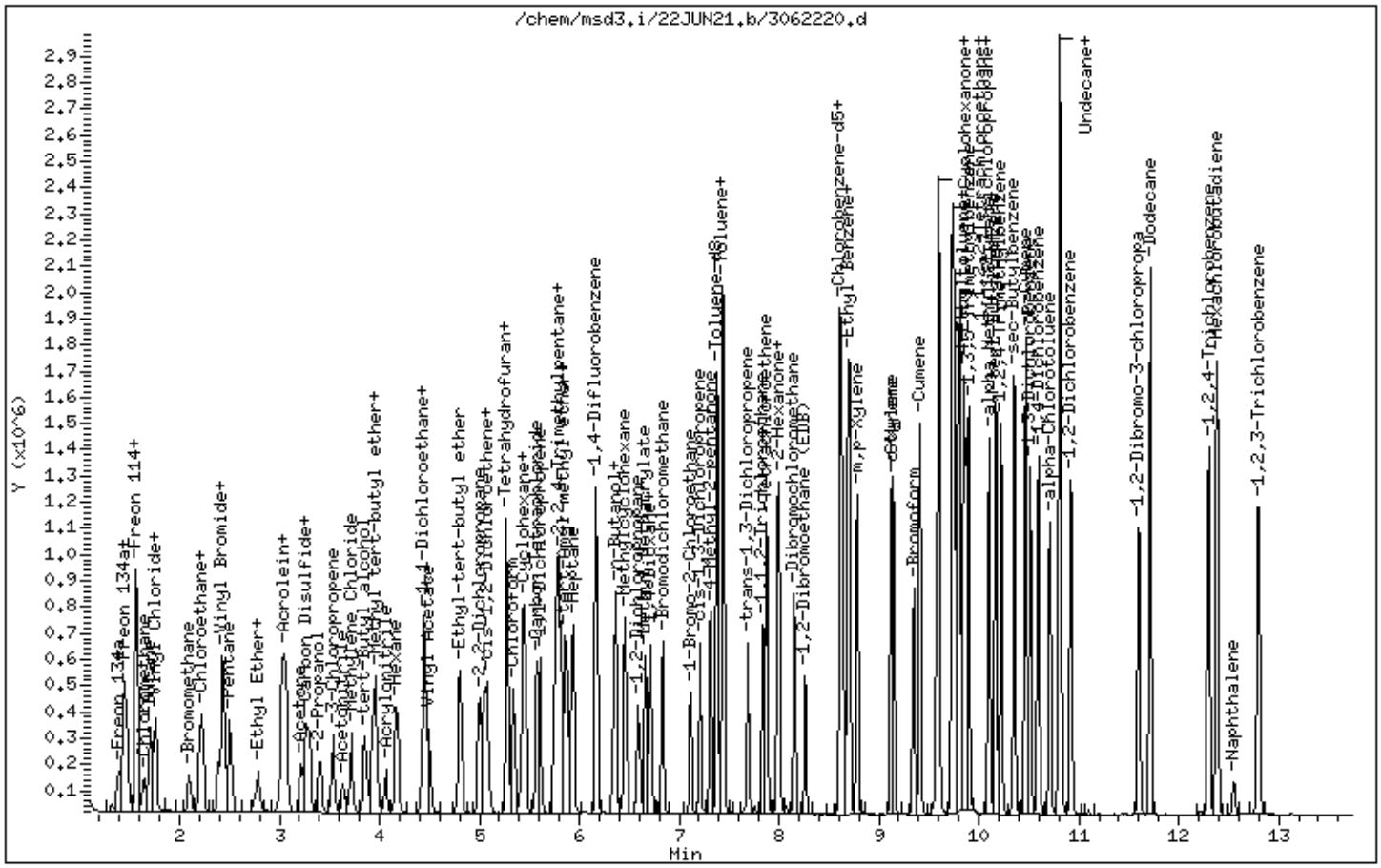
Instrument: msd3.i

Sample Info: 20mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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

				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	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:

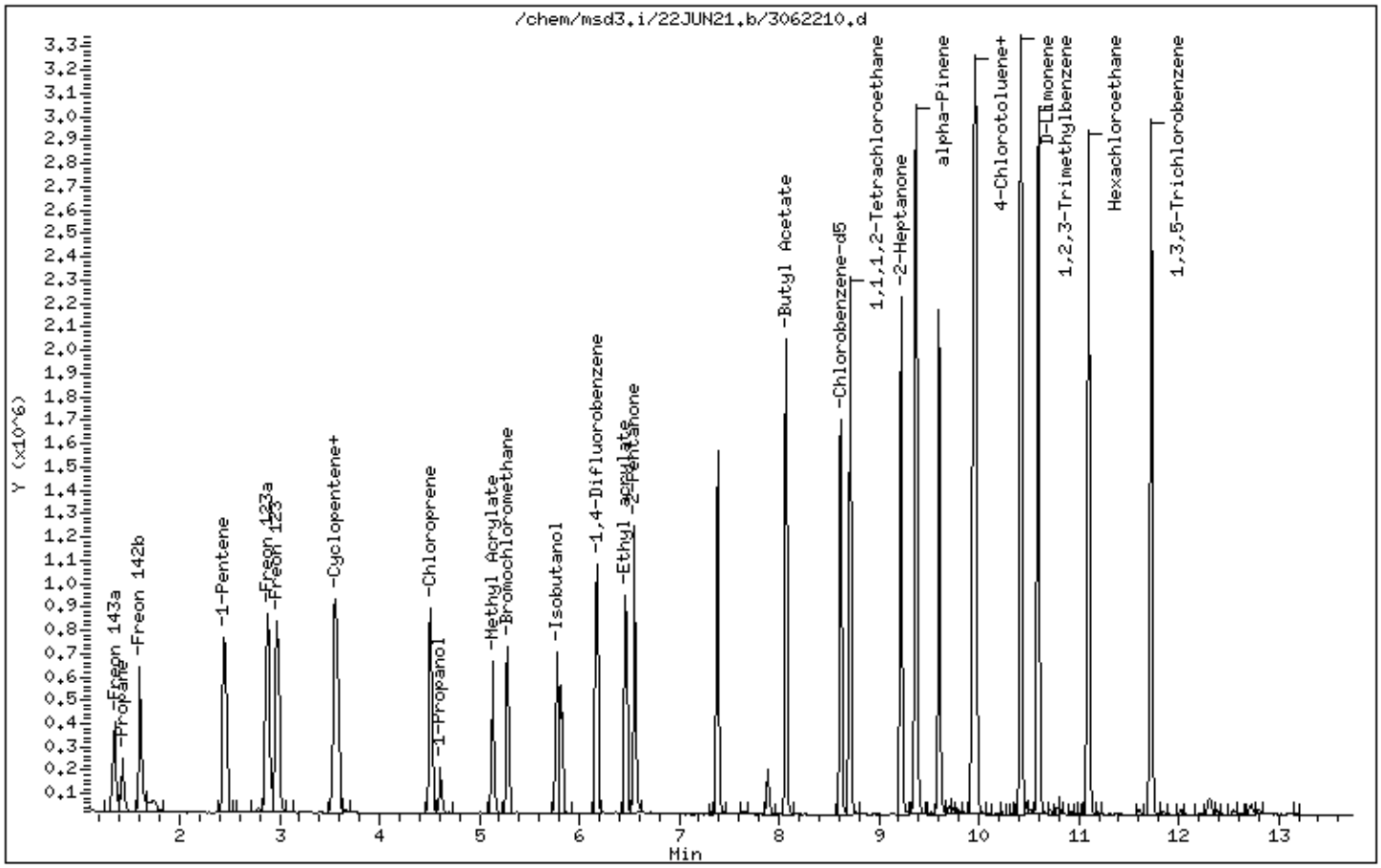
Instrument: msd3.i

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
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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

				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	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
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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
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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:

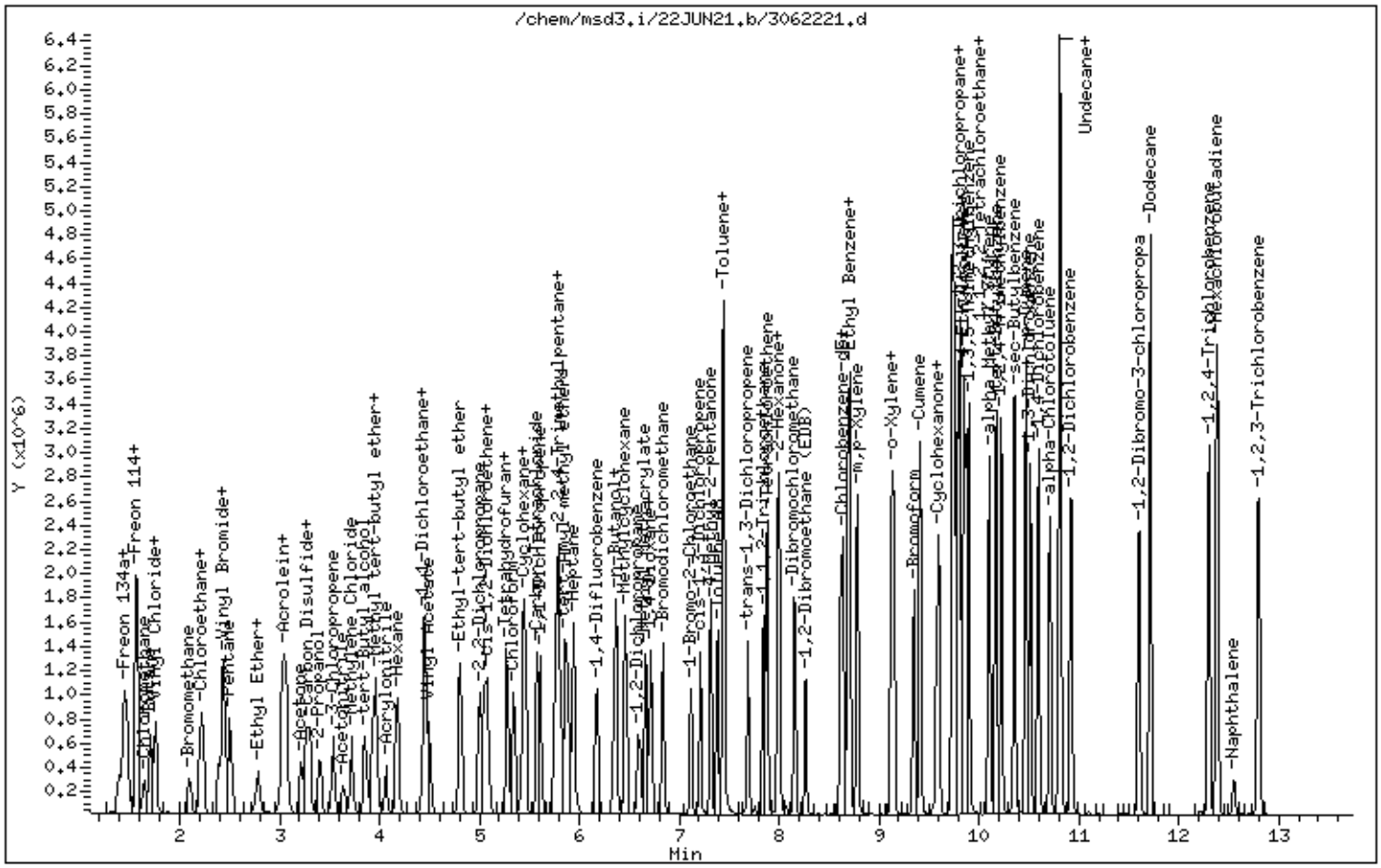
Instrument: msd3.i

Sample Info: 50mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

				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

Report Date: 23-Jun-2021 12:22

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:

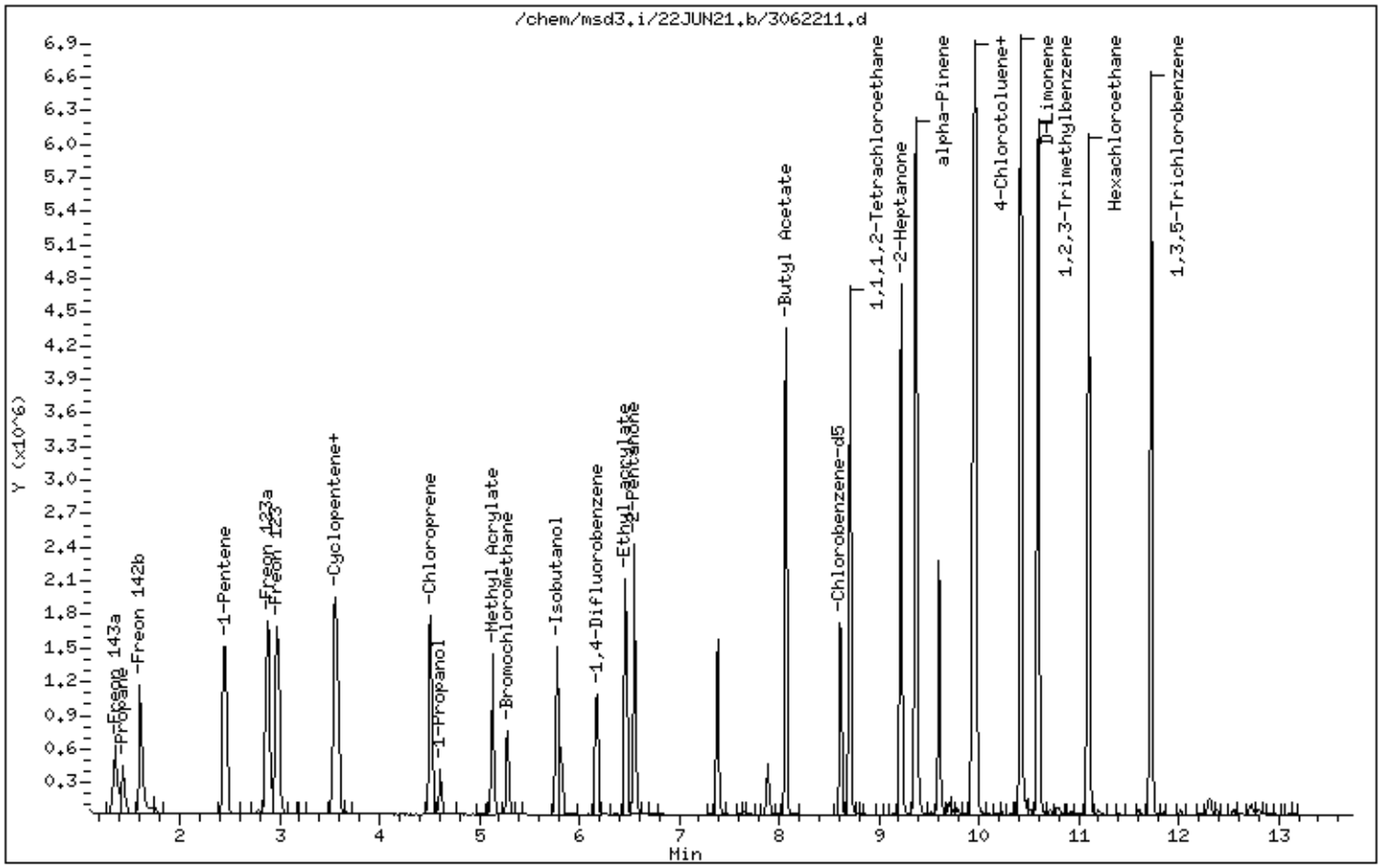
Instrument: msd3.i

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

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 (0.264)	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

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

Page 1

Date : 22-JUN-2021 23:39

Client ID:

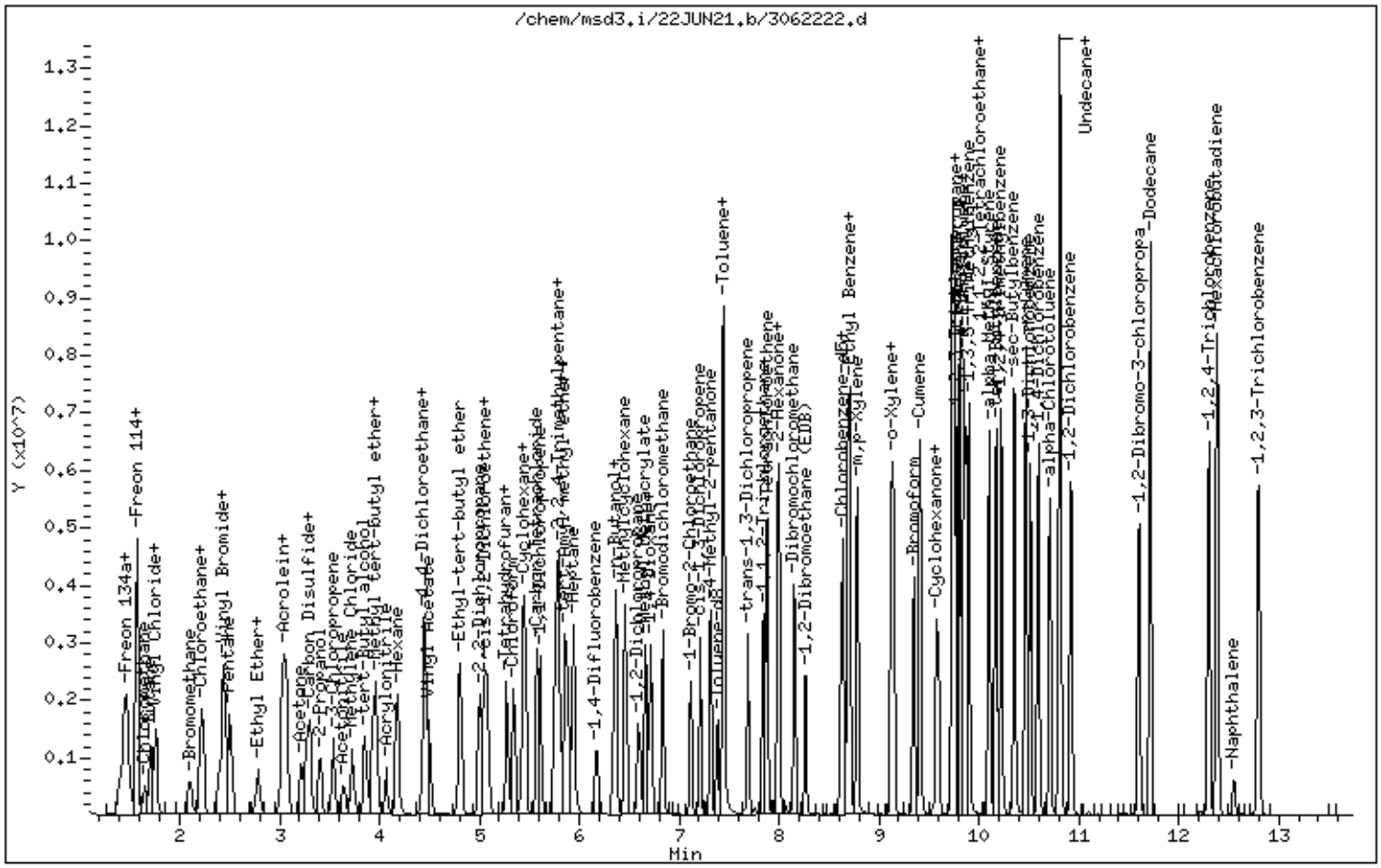
Instrument: msd3.i

Sample Info: 100mL 3018-2115

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

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	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:

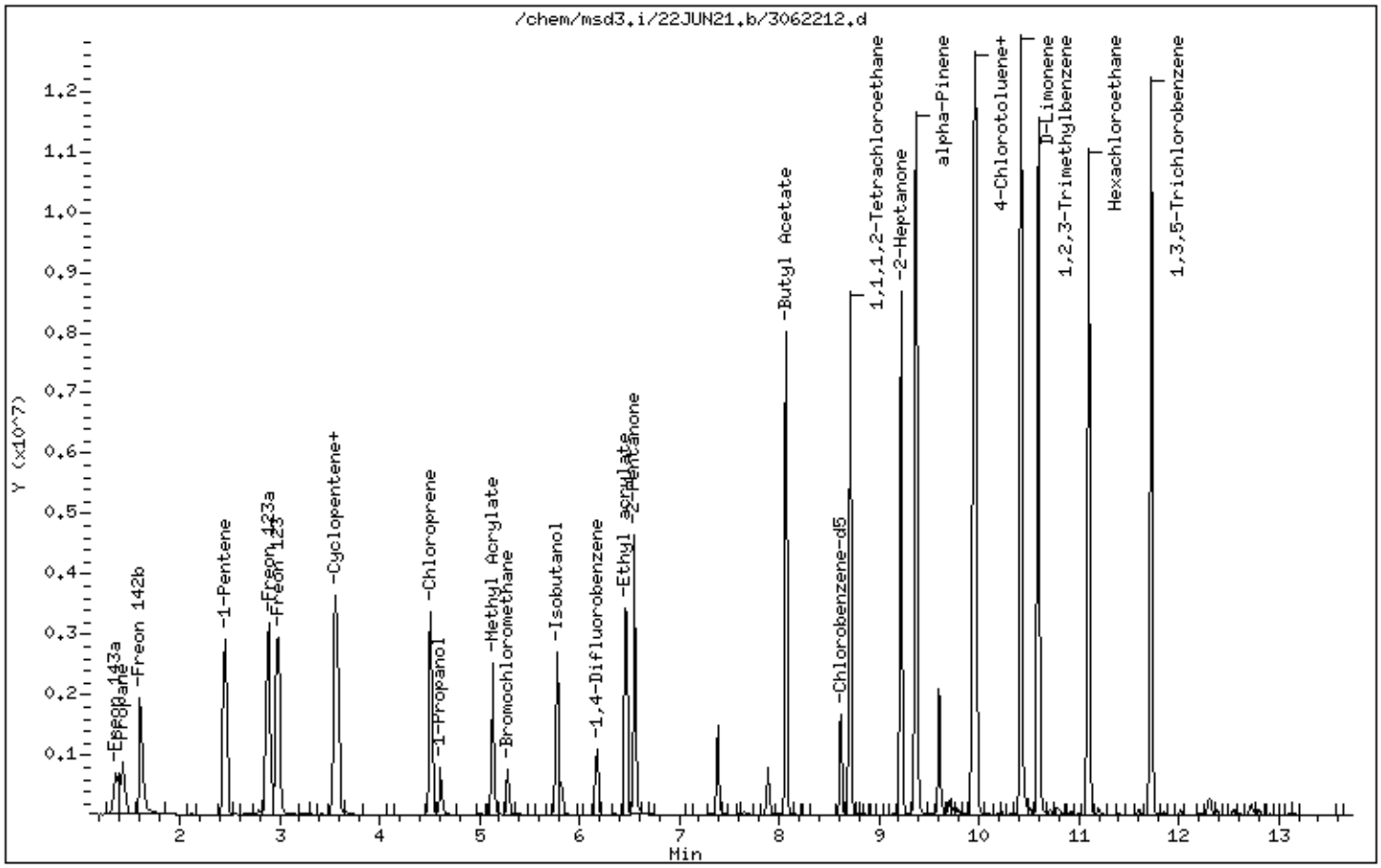
Instrument: msd3.i

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

				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

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	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

				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	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:

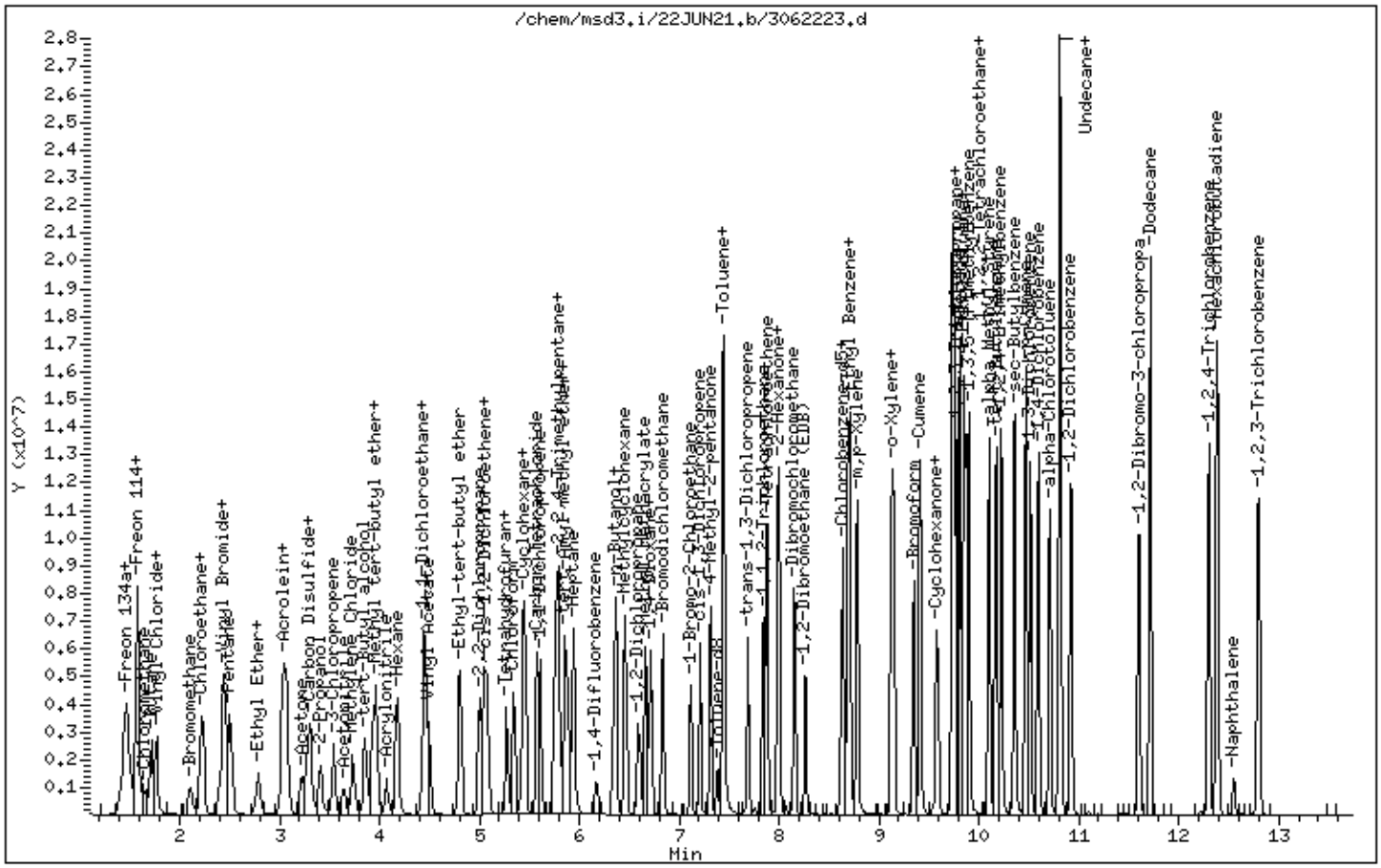
Instrument: msd3.i

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

					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	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.

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

Page 1

Date : 23-JUN-2021 09:45

Client ID: ICV

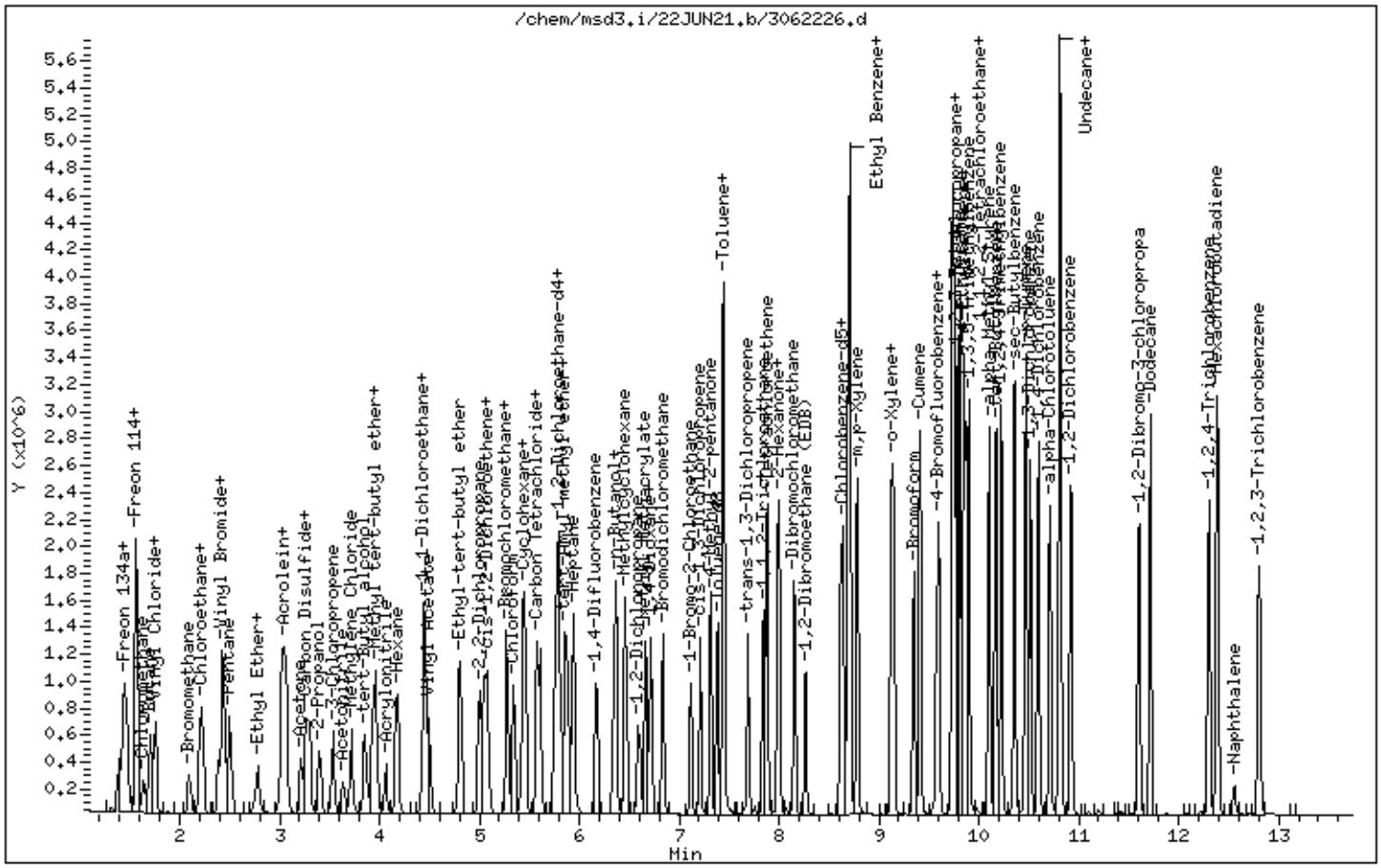
Instrument: msd3.i

Sample Info: 50mL 3018-2121

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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

01JUN21.0.4ppbv-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	500 800
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

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
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
12 mL 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)
10 mL 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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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 (PPTV)	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
Naph 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

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		
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

Method File: /chem/msd3.i/04JUN21.b/321q0317a.m
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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	98.67	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.~~ UG

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	PQTV 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

PPTV 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	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
478.69
469.09
112.66

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

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	
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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	Ratio
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	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

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
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/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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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
	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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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
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

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
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

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 2107362A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072703**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 11:36 AM**

Compound	%Recovery
1,1,1,2-Tetrachloroethane	104
1,1,1-Trichloroethane	89
1,1,2,2-Tetrachloroethane	106
1,1,2-Trichloroethane	98
1,1-Dichloroethane	96
1,1-Dichloroethene	91
1,1-Difluoroethane	101
1,2,3-Trichloropropane	109
1,2,4-Trichlorobenzene	85
1,2,4-Trimethylbenzene	102
1,2-Dibromo-3-chloropropane	100
1,2-Dibromoethane (EDB)	101
1,2-Dichlorobenzene	102
1,2-Dichloroethane	101
1,2-Dichloropropane	74
1,3,5-Trimethylbenzene	106
1,3-Butadiene	92
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	102
1,4-Dioxane	94
2,2,4-Trimethylpentane	85
2-Butanone (Methyl Ethyl Ketone)	96
2-Hexanone	95
2-Propanol	94
3-Chloropropene	89
4-Ethyltoluene	108
4-Methyl-2-pentanone	82
Acetone	96
Acrolein	94
Acrylonitrile	81
alpha-Chlorotoluene	92
Benzene	98
Bromodichloromethane	91
Bromoform	109
Bromomethane	100
Carbon Disulfide	100
Carbon Tetrachloride	98
Chlorobenzene	98
Chloroethane	97
Chloroform	93
Chloromethane	118
cis-1,2-Dichloroethene	92

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Client Sample ID: CCV

Lab ID#: 2107362A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072703**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 11:36 AM**

Compound	%Recovery
cis-1,3-Dichloropropene	90
Cumene	101
Cyclohexane	86
Dibromochloromethane	105
Dibromomethane	108
Ethanol	83
Ethyl Acetate	96
Ethyl Benzene	98
Ethyl-tert-butyl ether	90
Freon 11	105
Freon 12	100
Freon 113	99
Freon 114	103
Freon 134a	104
Heptane	86
Hexachlorobutadiene	86
Hexachloroethane	112
Hexane	89
Iodomethane	107
Isopropyl ether	92
m,p-Xylene	101
Methyl tert-butyl ether	89
Methylene Chloride	96
Naphthalene	63
o-Xylene	99
Propylbenzene	109
Propylene	95
Styrene	102
tert-Amyl methyl ether	93
tert-Butyl alcohol	88
Tetrachloroethene	104
Tetrahydrofuran	87
Toluene	93
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	87
trans-1,3-Dichloropropene	96
Trichloroethene	96
Vinyl Acetate	92
Vinyl Bromide	97
Vinyl Chloride	105

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107362A-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 11:36 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	108	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072703.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 27-JUL-2021 11:36
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2071A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 15:31 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	238986	25.0000		80.00- 120.00	100.00
5.284	5.284 (1.000)	128	187500			48.46- 108.46	78.46
5.270	5.270 (1.000)	49	338226			120.39- 180.39	141.53
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.180	6.180 (1.000)	114	785289	25.0000		80.00- 120.00	100.00
6.180	6.180 (1.000)	88	114138			0.00- 45.52	14.53
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	683596	25.0000		80.00- 120.00	100.00
8.612	8.612 (1.000)	82	366865			25.46- 85.46	53.67
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	318581	25.0000	24.224	80.00- 120.00	100.00
5.816	5.816 (1.101)	67	162161			21.66- 81.66	50.90
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.387	7.387 (1.195)	98	774218	25.0000	23.936	80.00- 120.00	100.00
7.387	7.387 (1.195)	70	82736			0.00- 41.47	10.69

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	511317			36.47- 96.47	66.04
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	490326	25.0000	27.118	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	562729			93.06- 153.06	114.77
9.601	9.601 (1.115)	176	454164			62.87- 122.87	92.62
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	297232	50.0000	52.269	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	236527			51.82- 111.82	79.58
1.479	1.479 (0.280)	51	727436			194.91- 254.91	244.74
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	275154	50.0000	47.665	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	183011			35.61- 95.61	66.51
1.423	1.423 (0.269)	39	207006			42.66- 102.66	75.23
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.437	1.437 (0.272)	65	189731	50.0000	50.421	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	727436			321.86- 381.86	383.40
1.451	1.451 (0.275)	47	145666			45.34- 105.34	76.78
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	834632	50.0000	50.134	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	271246			2.63- 62.63	32.50
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	94331	50.0000	51.556	80.00- 120.00	100.00
1.479	1.479 (0.280)	51	727436			719.76- 779.76	771.15
10 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.296)	135	634091	50.0000	51.403	80.00- 120.00	100.00
1.563	1.563 (0.296)	137	204445			2.12- 62.12	32.24
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	629387	50.0000	48.509	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	207244			2.44- 62.44	32.93
1.577	1.577 (0.298)	58	21931			0.00- 33.26	3.48
15 Chloromethane					CAS #: 74-87-3		
1.646	1.646 (0.312)	50	408963	50.0000	59.103	80.00- 120.00	100.00
1.646	1.646 (0.312)	52	132499			2.41- 62.41	32.40
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	85670	50.0000	52.427	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	652469			727.41- 787.41	761.60
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	387463	50.0000	52.328	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	116032			1.28- 61.28	29.95
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	313233	50.0000	46.159	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	304174			69.23- 129.23	97.11
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	293237	50.0000	50.074	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	274864			62.78- 122.78	93.73
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	169108	50.0000	48.653	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	50039			1.44- 61.44	29.59
2.206	2.206 (0.417)	49	57560			4.12- 64.12	34.04
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	412969	50.0000	46.462	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	295006			38.82- 98.82	71.44
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	308689	50.0000	48.482	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	295127			63.14- 123.14	95.61
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	927720	50.0000	52.668	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	601548			35.12- 95.12	64.84
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	737811	50.0000	52.397	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	224965			0.74- 60.74	30.49
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	668749	50.0000	47.225	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	109674			0.00- 45.97	16.40
2.500	2.500 (0.473)	72	55876			0.00- 38.10	8.36
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	144920	50.0000	45.645	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	254129			147.68- 207.68	175.36
2.780	2.780 (0.526)	45	336274			206.40- 266.40	232.04

				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	59181	50.0000	41.531	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	335667			523.01- 583.01	567.18
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	111458	50.0000	47.134	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	161637			110.33- 170.33	145.02
43 Freon 113					CAS #: 76-13-1		
3.032	3.032 (0.574)	151	597400	50.0000	49.612	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	383583			33.72- 93.72	64.21
3.032	3.032 (0.574)	101	725031			89.67- 149.67	121.36
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	330534	50.0000	45.573	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	206586			33.39- 93.39	62.50
3.074	3.074 (0.582)	61	655237			163.82- 223.82	198.24
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	192956	50.0000	48.151	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	645474			299.66- 359.66	334.52
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	906165	50.0000	50.216	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	831755	50.0000	53.304	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	385841			14.58- 74.58	46.39
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	674523	50.0000	46.804	80.00- 120.00	100.00
3.395	3.395 (0.643)	43	140813			0.00- 48.61	20.88
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	138248	50.0000	44.499	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	483332			338.06- 398.06	349.61
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	304244	50.0000	48.214	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	153674			21.81- 81.81	50.51
3.633	3.633 (0.688)	38	35542			0.00- 41.86	11.68
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	462560	50.0000	48.231	80.00- 120.00	100.00
3.717	3.717 (0.703)	84	278242			30.77- 90.77	60.15
3.717	3.717 (0.703)	51	142007			1.39- 61.39	30.70

				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	798528	50.0000	44.144	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	190448			0.00- 51.05	23.85
3.857	3.857 (0.730)	57	85814			0.00- 41.68	10.75
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	873227	50.0000	44.725	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	262612			0.00- 58.86	30.07
3.941	3.941 (0.746)	41	254934			0.00- 57.27	29.19
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	211590	50.0000	43.351	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	569856			244.59- 304.59	269.32
3.969	3.969 (0.751)	96	332803			129.84- 189.84	157.29
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	238041	50.0000	40.637	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	273286			88.50- 148.50	114.81
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	591878	50.0000	44.723	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	364332			32.99- 92.99	61.56
4.179	4.179 (0.791)	86	73183			0.00- 42.56	12.36
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	657093	50.0000	48.279	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	196947			0.76- 60.76	29.97
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1278897	50.0000	45.790	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	280799			0.00- 51.37	21.96
4.445	4.445 (0.841)	59	149703			0.00- 41.09	11.71
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	76999	50.0000	46.017	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1100470			1391.63-1451.63	1429.19
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1207137	50.0000	44.769	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	401818			3.22- 63.22	33.29
4.809	4.809 (0.910)	41	241786			0.00- 48.12	20.03
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	604837	50.0000	47.703	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	197596			2.00- 62.00	32.67
5.005	5.005 (0.947)	97	140567			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	222984	50.0000	46.086	80.00- 120.00	100.00
5.046	5.046 (0.955)	96	343187			127.22- 187.22	153.91
5.046	5.046 (0.955)	61	723962			283.85- 343.85	324.67
86 2-Butanone					CAS #: 78-93-3		
5.074	5.074 (0.960)	72	161700	50.0000	47.847	80.00- 120.00	100.00
5.074	5.074 (0.960)	43	1729666			1055.75-1115.75	1069.67
5.074	5.074 (0.960)	57	67340			10.59- 70.59	41.64
87 Ethyl Acetate					CAS #: 141-78-6		
5.088	5.088 (0.963)	45	134561	50.0000	48.298	80.00- 120.00	100.00
5.046	5.046 (0.955)	61	723962			450.31- 510.31	538.02
5.088	5.088 (0.963)	70	80201			30.42- 90.42	59.60
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	415892	50.0000	43.641	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	138664			2.92- 62.92	33.34
5.270	5.270 (0.997)	72	143107			3.54- 63.54	34.41
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	700237	50.0000	46.733	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	455445			34.71- 94.71	65.04
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	405831	50.0000	42.850	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	610004			120.40- 180.40	150.31
5.438	5.438 (1.029)	41	340033			54.20- 114.20	83.79
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	753632	50.0000	44.747	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	476946			33.76- 93.76	63.29
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	761651	50.0000	49.101	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	785502			73.68- 133.68	103.13
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	177408	50.0000	49.642	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	462822			231.09- 291.09	260.88
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1768312	50.0000	42.727	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	578102			1.12- 61.12	32.69
5.774	5.774 (1.093)	41	488487			0.00- 57.49	27.62

				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	881998	50.0000	49.218	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	213588			0.00- 53.80	24.22
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	222888	50.0000	46.647	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	876961			365.20- 425.20	393.45
5.858	5.858 (0.948)	55	303311			91.31- 151.31	136.08
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	519966	50.0000	50.398	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	163436			1.20- 61.20	31.43
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	304904	50.0000	43.198	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	614601			179.02- 239.02	201.57
5.942	5.942 (0.962)	57	373088			84.85- 144.85	122.36
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	269453	50.0000	46.911	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	180146			40.21- 100.21	66.86
6.348	6.348 (1.027)	43	142726			25.00- 85.00	52.97
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	429619	50.0000	47.788	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	457013			74.96- 134.96	106.38
6.362	6.362 (1.029)	97	273648			34.80- 94.80	63.70
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	153945	50.0000	37.061	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	135945			52.03- 112.03	88.31
6.586	6.586 (1.066)	41	154131			79.97- 139.97	100.12
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.774)	69	313820	50.0000	47.701	80.00- 120.00	100.00
6.664	6.664 (0.774)	41	481505			134.02- 194.02	153.43
6.664	6.664 (0.774)	100	122752			9.54- 69.54	39.12
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.084)	88	213388	50.0000	47.007	80.00- 120.00	100.00
6.700	6.700 (1.084)	58	176834			55.80- 115.80	82.87
6.700	6.700 (1.084)	57	65421			8.68- 68.68	30.66
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	396878	50.0000	54.168	80.00- 120.00	100.00
6.714	6.714 (0.780)	93	385416			67.27- 127.27	97.11

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	318875			50.92- 110.92	80.35
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	687162	50.0000	45.626	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	444173			34.31- 94.31	64.64
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	505501	50.0000	45.158	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	160396			1.42- 61.42	31.73
7.208	7.208 (1.166)	39	340190			38.56- 98.56	67.30
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	522573	50.0000	43.469	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	242516			15.60- 75.60	46.41
6.460	6.460 (1.045)	55	555370			78.53- 138.53	106.28
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	311803	50.0000	40.965	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	798684			231.30- 291.30	256.15
7.316	7.316 (1.184)	85	118302			8.94- 68.94	37.94
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1116802	50.0000	46.446	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	638244			28.30- 88.30	57.15
136 Octane					CAS #: 111-65-9		
7.444	7.444 (1.205)	57	345691	50.0000	43.212	80.00- 120.00	100.00
7.444	7.444 (1.205)	85	338333			67.11- 127.11	97.87
7.444	7.444 (1.205)	43	782458			214.21- 274.21	226.35
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.893)	75	484199	50.0000	48.092	80.00- 120.00	100.00
7.688	7.688 (0.893)	77	153043			2.15- 62.15	31.61
7.688	7.688 (0.893)	39	312182			36.09- 96.09	64.47
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.911)	97	377713	50.0000	48.781	80.00- 120.00	100.00
7.846	7.846 (0.911)	99	236082			31.62- 91.62	62.50
7.846	7.846 (0.911)	83	330363			56.35- 116.35	87.46
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.915)	166	556140	50.0000	51.930	80.00- 120.00	100.00
7.881	7.881 (0.915)	129	429650			48.71- 108.71	77.26
7.874	7.874 (0.914)	131	412771			46.55- 106.55	74.22

				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	424130	50.0000	47.687	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	775872			157.91- 217.91	182.93
8.003	8.003 (0.929)	100	77149			0.00- 47.86	18.19
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	512805	50.0000	44.700	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	544359			82.96- 142.96	106.15
7.989	7.989 (1.293)	78	167277			2.55- 62.55	32.62
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.947)	129	774405	50.0000	52.718	80.00- 120.00	100.00
8.154	8.154 (0.947)	127	603279			47.77- 107.77	77.90
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.261	8.261 (0.959)	107	607847	50.0000	50.550	80.00- 120.00	100.00
8.261	8.261 (0.959)	109	571076			64.60- 124.60	93.95
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	679997	50.0000	46.786	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	209990			0.95- 60.95	30.88
7.122	7.122 (1.152)	144	74752			0.00- 40.45	10.99
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.003)	112	913652	50.0000	48.902	80.00- 120.00	100.00
8.641	8.641 (1.003)	114	294174			2.13- 62.13	32.20
8.641	8.641 (1.003)	77	491665			26.35- 86.35	53.81
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.008)	106	459018	50.0000	49.132	80.00- 120.00	100.00
8.684	8.684 (1.008)	91	1439882			282.48- 342.48	313.69
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.011)	43	825944	50.0000	45.612	80.00- 120.00	100.00
8.705	8.705 (1.011)	57	758137			59.52- 119.52	91.79
8.705	8.705 (1.011)	85	260803			0.00- 59.76	31.58
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.020)	106	585551	50.0000	50.380	80.00- 120.00	100.00
8.784	8.784 (1.020)	91	1162462			171.36- 231.36	198.52
164 o-Xylene					CAS #: 95-47-6		
9.121	9.121 (1.059)	106	545303	50.0000	49.420	80.00- 120.00	100.00
9.121	9.121 (1.059)	91	1155970			179.99- 239.99	211.99
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.062)	104	975960	50.0000	51.053	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
165 Styrene (continued)							
9.142	9.142 (1.062)	78	460193			19.09- 79.09	47.15
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.086)	173	761363	50.0000	54.660	80.00- 120.00	100.00
9.350	9.350 (1.086)	171	392743			21.45- 81.45	51.58
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.093)	105	1768268	50.0000	50.688	80.00- 120.00	100.00
9.414	9.414 (1.093)	120	479459			0.00- 56.99	27.11
9.407	9.407 (1.092)	51	204153			0.00- 41.77	11.55
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.112)	55	532657	50.0000	48.519	80.00- 120.00	100.00
9.579	9.579 (1.112)	98	206505			9.22- 69.22	38.77
9.579	9.579 (1.112)	42	372034			42.60- 102.60	69.84
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.131)	83	921272	50.0000	53.265	80.00- 120.00	100.00
9.737	9.737 (1.131)	85	593860			34.35- 94.35	64.46
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.730 (1.130)	156	604980	50.0000	55.786	80.00- 120.00	100.00
9.737	9.737 (1.131)	158	590566			67.29- 127.29	97.62
9.730	9.730 (1.130)	77	930896			132.41- 192.41	153.87
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.133)	91	2219191	50.0000	54.519	80.00- 120.00	100.00
9.758	9.758 (1.133)	120	525592			0.00- 53.77	23.68
9.758	9.758 (1.133)	105	85289			0.00- 33.81	3.84
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.136)	110	284906	50.0000	54.683	80.00- 120.00	100.00
9.787	9.787 (1.136)	75	857877			285.00- 345.00	301.11
9.787	9.787 (1.136)	61	237150			54.06- 114.06	83.24
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.136)	53	211869	50.0000	51.390	80.00- 120.00	100.00
9.787	9.787 (1.136)	89	102773			21.19- 81.19	48.51
9.787	9.787 (1.136)	75	857877			372.45- 432.45	404.91
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.139)	57	1061558	50.0000	50.437	80.00- 120.00	100.00
9.808	9.808 (1.139)	71	360588			4.13- 64.13	33.97
9.808	9.808 (1.139)	142	51084			0.00- 34.73	4.81

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 (1.144)	120	567762	50.0000	53.812	80.00- 120.00	100.00
9.851	9.851 (1.144)	105	1841978			296.79- 356.79	324.43
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.146)	126	472225	50.0000	55.083	80.00- 120.00	100.00
9.873	9.873 (1.146)	91	1661050			336.29- 396.29	351.75
9.873	9.873 (1.146)	65	238533			38.83- 98.83	50.51
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.150)	120	786677	50.0000	53.084	80.00- 120.00	100.00
9.901	9.901 (1.150)	105	1594417			176.40- 236.40	202.68
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.173)	118	754867	50.0000	49.736	80.00- 120.00	100.00
10.102	10.102 (1.173)	103	425217			26.64- 86.64	56.33
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.181)	119	1399786	50.0000	51.337	80.00- 120.00	100.00
10.174	10.174 (1.181)	134	352018			0.00- 54.82	25.15
10.174	10.174 (1.181)	91	906931			36.92- 96.92	64.79
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.187)	105	1483125	50.0000	50.754	80.00- 120.00	100.00
10.224	10.224 (1.187)	120	698580			16.58- 76.58	47.10
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.203)	134	451515	50.0000	51.267	80.00- 120.00	100.00
10.353	10.353 (1.202)	105	2163387			451.53- 511.53	479.14
10.353	10.353 (1.202)	91	338394			46.48- 106.48	74.95
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.215)	119	1843828	50.0000	49.992	80.00- 120.00	100.00
10.467	10.467 (1.215)	134	492389			0.00- 56.79	26.70
10.467	10.467 (1.215)	91	426652			0.00- 54.04	23.14
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.517	10.517 (1.221)	146	1038447	50.0000	52.306	80.00- 120.00	100.00
10.517	10.517 (1.221)	148	656123			33.53- 93.53	63.18
10.517	10.517 (1.221)	111	409606			11.05- 71.05	39.44
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.596	10.596 (1.230)	146	1044420	50.0000	51.073	80.00- 120.00	100.00
10.596	10.596 (1.230)	148	656127			33.47- 93.47	62.82
10.596	10.596 (1.230)	111	390504			9.65- 69.65	37.39

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.244)	91	1300080	50.0000	46.239	80.00- 120.00	100.00
10.711	10.711 (1.244)	126	291725			0.00- 52.04	22.44
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.254)	57	1077012	50.0000	43.424	80.00- 120.00	100.00
10.804	10.804 (1.254)	43	915697			55.86- 115.86	85.02
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.256)	134	484536	50.0000	50.668	80.00- 120.00	100.00
10.818	10.818 (1.256)	91	1741696			331.99- 391.99	359.46
10.818	10.818 (1.256)	92	901366			161.01- 221.01	186.03
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.269)	146	980296	50.0000	51.097	80.00- 120.00	100.00
10.926	10.926 (1.269)	148	620331			33.23- 93.23	63.28
10.919	10.919 (1.268)	111	396843			12.36- 72.36	40.48
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.348)	157	557249	50.0000	50.094	80.00- 120.00	100.00
11.599	11.599 (1.347)	75	457438			58.96- 118.96	82.09
11.606	11.606 (1.348)	155	428351			47.82- 107.82	76.87
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.360)	57	829398	61.8000	39.547	80.00- 120.00	100.00
11.714	11.714 (1.360)	43	665605			50.85- 110.85	80.25
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.428)	180	726264	62.9500	53.298	80.00- 120.00	100.00
12.301	12.301 (1.428)	182	697634			65.40- 125.40	96.06
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.438)	225	572552	64.3500	55.624	80.00- 120.00	100.00
12.387	12.387 (1.438)	223	362494			33.70- 93.70	63.31
216 Naphthalene					CAS #: 91-20-3		
12.559	12.559 (1.458)	128	165849	6.35000	3.986	80.00- 120.00	100.00
12.559	12.559 (1.458)	127	21965			0.00- 43.10	13.24
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.810	12.810 (1.487)	180	629667	66.5500	50.497	80.00- 120.00	100.00
12.810	12.810 (1.487)	182	599674			65.67- 125.67	95.24
12.802	12.802 (1.487)	145	221171			6.02- 66.02	35.13

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	MIN %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37578	1.33305	0.010	3.10557	30.00000	Averaged
$ 134 Toluene-d8	1.02971	0.98590	0.010	4.25419	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.66126	0.71727	0.010	-8.47061	30.00000	Averaged
4 Freon 134a	0.59487	0.62186	0.010	-4.53813	30.00000	Averaged
5 Propylene	0.60387	0.57567	0.010	4.66933	30.00000	Averaged
7 1,1-Difluoroethane	0.39363	0.39695	0.010	-0.84252	30.00000	Averaged
8 Freon 12	1.74153	1.74619	0.010	-0.26744	30.00000	Averaged
9 Chlorodifluoromethane	0.19140	0.19736	0.010	-3.11100	30.00000	Averaged
10 Freon 114	1.29040	1.32663	0.010	-2.80694	30.00000	Averaged
12 Isobutane	1.35725	1.31678	0.010	2.98113	30.00000	Averaged
15 Chloromethane	0.72383	0.85562	0.010	-18.20663	30.00000	Averaged
18 Butane	0.17094	0.17924	0.010	-4.85348	30.00000	Averaged
19 Vinyl Chloride	0.77458	0.81064	0.010	-4.65588	30.00000	Averaged
20 1,3-Butadiene	0.70987	0.65534	0.010	7.68207	30.00000	Averaged
24 Bromomethane	0.61260	0.61350	0.010	-0.14794	30.00000	Averaged
30 Chloroethane	0.36360	0.35380	0.010	2.69410	30.00000	Averaged
31 Isopentane	0.92980	0.86400	0.010	7.07636	30.00000	Averaged
32 Vinyl Bromide	0.66605	0.64583	0.010	3.03523	30.00000	Averaged
33 Freon 11	1.84264	1.94095	0.010	-5.33520	30.00000	Averaged
34 Dichlorofluoromethane	1.47301	1.54363	0.010	-4.79430	30.00000	Averaged
35 Pentane	1.48134	1.39914	0.010	5.54945	30.00000	Averaged
38 Ethyl Ether	0.33213	0.30320	0.010	8.71070	30.00000	Averaged
39 Ethanol	0.14907	0.12382	0.010	16.93734	30.00000	Averaged
42 Acrolein	0.24737	0.23319	0.010	5.73210	30.00000	Averaged
43 Freon 113	1.25964	1.24986	0.010	0.77612	30.00000	Averaged
44 1,1-Dichloroethene	0.75871	0.69153	0.010	8.85400	30.00000	Averaged
47 Acetone	0.41920	0.40370	0.010	3.69752	30.00000	Averaged
48 Carbon Disulfide	1.88768	1.89585	0.010	-0.43310	30.00000	Averaged
49 Iodomethane	1.63230	1.74017	0.010	-6.60839	30.00000	Averaged
52 2-Propanol	1.50759	1.41122	0.010	6.39245	30.00000	Averaged
54 3-Chloropropene	0.32499	0.28924	0.010	11.00109	30.00000	Averaged
57 Acetonitrile	0.66010	0.63653	0.010	3.57082	30.00000	Averaged
59 Methylene Chloride	1.00325	0.96775	0.010	3.53792	30.00000	Averaged
62 tert-Butyl alcohol	1.89229	1.67066	0.010	11.71242	30.00000	Averaged
63 Methyl tert-butyl ether	2.04241	1.82694	0.010	10.54999	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.51058	0.44268	0.010	13.29796	30.00000	Averaged
66 Acrylonitrile	0.61277	0.49802	0.010	18.72571	30.00000	Averaged
67 Hexane	1.38442	1.23831	0.010	10.55372	30.00000	Averaged
71 1,1-Dichloroethane	1.42374	1.37475	0.010	3.44110	30.00000	Averaged
72 Isopropyl ether	2.92166	2.67567	0.010	8.41960	30.00000	Averaged
73 Vinyl Acetate	0.17504	0.16110	0.010	7.96673	30.00000	Averaged
79 Ethyl-tert-butyl ether	2.82061	2.52553	0.010	10.46149	30.00000	Averaged
84 2,2-Dichloropropane	1.32635	1.26542	0.010	4.59356	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.50614	0.46652	0.010	7.82695	30.00000	Averaged
86 2-Butanone	0.35353	0.33831	0.010	4.30589	30.00000	Averaged
87 Ethyl Acetate	0.29145	0.28153	0.010	3.40426	30.00000	Averaged
89 Tetrahydrofuran	0.99690	0.87012	0.010	12.71819	30.00000	Averaged
92 Chloroform	1.56743	1.46501	0.010	6.53424	30.00000	Averaged
94 Cyclohexane	0.99074	0.84907	0.010	14.29982	30.00000	Averaged
96 1,1,1-Trichloroethane	1.76184	1.57673	0.010	10.50670	30.00000	Averaged
97 Carbon Tetrachloride	1.62268	1.59350	0.010	1.79784	30.00000	Averaged
99 1,1-Dichloropropene	0.11377	0.11296	0.010	0.71612	30.00000	Averaged
101 2,2,4-Trimethylpentane	4.32938	3.69961	0.010	14.54644	30.00000	Averaged
102 Benzene	0.57049	0.56158	0.010	1.56337	30.00000	Averaged
105 tert-Amyl methyl ether	0.15212	0.14191	0.010	6.70559	30.00000	Averaged
106 1,2-Dichloroethane	0.32845	0.33107	0.010	-0.79695	30.00000	Averaged
107 Heptane	0.22471	0.19413	0.010	13.60480	30.00000	Averaged
110 n-Butanol	0.18286	0.17156	0.010	6.17726	30.00000	Averaged
111 Trichloroethene	0.28620	0.27354	0.010	4.42395	30.00000	Averaged
114 1,2-Dichloropropane	0.13224	0.09802	0.010	25.87856	30.00000	Averaged
116 Methyl Methacrylate	0.24060	0.22954	0.010	4.59770	30.00000	Averaged
117 1,4-Dioxane	0.14452	0.13587	0.010	5.98577	30.00000	Averaged
118 Dibromomethane	0.26795	0.29029	0.010	-8.33606	30.00000	Averaged
122 Bromodichloromethane	0.47947	0.43752	0.010	8.74855	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.35637	0.32186	0.010	9.68441	30.00000	Averaged
127 Methylcyclohexane	0.38272	0.33273	0.010	13.06221	30.00000	Averaged
131 4-Methyl-2-pentanone	0.24232	0.19853	0.010	18.07048	30.00000	Averaged
137 Toluene	0.76548	0.71108	0.010	7.10752	30.00000	Averaged
136 Octane	0.25468	0.22010	0.010	13.57674	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.36821	0.35416	0.010	3.81660	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.28317	0.27627	0.010	2.43865	30.00000	Averaged
142 Tetrachloroethene	0.39165	0.40678	0.010	-3.86105	30.00000	Averaged
143 2-Hexanone	0.32527	0.31022	0.010	4.62596	30.00000	Averaged
144 1,3-Dichloropropane	0.36522	0.32651	0.010	10.60026	30.00000	Averaged
146 Dibromochloromethane	0.53722	0.56642	0.010	-5.43611	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.43975	0.44460	0.010	-1.10085	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.46270	0.43296	0.010	6.42763	30.00000	Averaged
154 Chlorobenzene	0.68328	0.66827	0.010	2.19635	30.00000	Averaged
155 Ethyl Benzene	0.34167	0.33574	0.010	1.73489	30.00000	Averaged
156 Nonane	0.66223	0.60412	0.010	8.77579	30.00000	Averaged
158 m,p-Xylene	0.42506	0.42829	0.010	-0.75931	30.00000	Averaged
164 o-Xylene	0.40353	0.39885	0.010	1.15887	30.00000	Averaged
165 Styrene	0.69912	0.71384	0.010	-2.10563	30.00000	Averaged
167 Bromoform	0.50940	0.55688	0.010	-9.32104	30.00000	Averaged
168 Cumene	1.27581	1.29336	0.010	-1.37574	30.00000	Averaged
169 Cyclohexanone	0.40149	0.38960	0.010	2.96206	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.63254	0.67384	0.010	-6.52930	30.00000	Averaged
177 Bromobenzene	0.39660	0.44250	0.010	-11.57164	30.00000	Averaged
178 Propylbenzene	1.48863	1.62317	0.010	-9.03848	30.00000	Averaged
179 1,2,3-Trichloropropane	0.19054	0.20839	0.010	-9.36589	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.15077	0.15497	0.010	-2.78020	30.00000	Averaged
182 Decane	0.76973	0.77645	0.010	-0.87382	30.00000	Averaged
183 4-Ethyltoluene	0.38586	0.41528	0.010	-7.62316	30.00000	Averaged
184 2-Chlorotoluene	0.31353	0.34540	0.010	-10.16545	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.54196	0.57540	0.010	-6.16901	30.00000	Averaged
188 alpha Methyl Styrene	0.55506	0.55213	0.010	0.52770	30.00000	Averaged
189 tert-Butylbenzene	0.99718	1.02384	0.010	-2.67402	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.06868	1.08480	0.010	-1.50784	30.00000	Averaged
192 sec-Butylbenzene	0.32209	0.33025	0.010	-2.53484	30.00000	Averaged
194 p-Cymene	1.34882	1.34862	0.010	0.01488	30.00000	Averaged
195 1,3-Dichlorobenzene	0.72606	0.75955	0.010	-4.61229	30.00000	Averaged
196 1,4-Dichlorobenzene	0.74787	0.76392	0.010	-2.14568	30.00000	Averaged
199 alpha-Chlorotoluene	1.02827	0.95091	0.010	7.52272	30.00000	Averaged
201 Undecane	0.90704	0.78776	0.010	13.15089	30.00000	Averaged
202 Butylbenzene	0.34973	0.35440	0.010	-1.33616	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 11:36
Lab File ID: 3072703.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
204 1,2-Dichlorobenzene	0.70162	0.71701	0.010	-2.19455	30.00000	Averaged	
206 1,2-Dibromo-3-chloropropane	0.40682	0.40759	0.010	-0.18742	30.00000	Averaged	
207 Dodecane	0.76699	0.49081	0.010	36.00783	30.00000	Averaged	<-
213 1,2,4-Trichlorobenzene	0.49834	0.42193	0.010	15.33324	30.00000	Averaged	
215 Hexachlorobutadiene	0.37644	0.32539	0.010	13.56030	30.00000	Averaged	
216 Naphthalene	1.52174	0.95517	0.010	37.23167	30.00000	Averaged	<-
222 1,2,3-Trichlorobenzene	0.45602	0.34602	0.010	24.12104	30.00000	Averaged	

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072703.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 27-JUL-2021
Calibration Time: 13:07
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	270618	162371	378865	238986	-11.69
108 1,4-Difluorobenze	961738	577043	1346433	785289	-18.35
153 Chlorobenzene-d5	790057	474034	1106080	683596	-13.48

		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	8.61	-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/27JUL21.b/3072703.d

Page 1

Date : 27-JUL-2021 11:36

Client ID: CCV

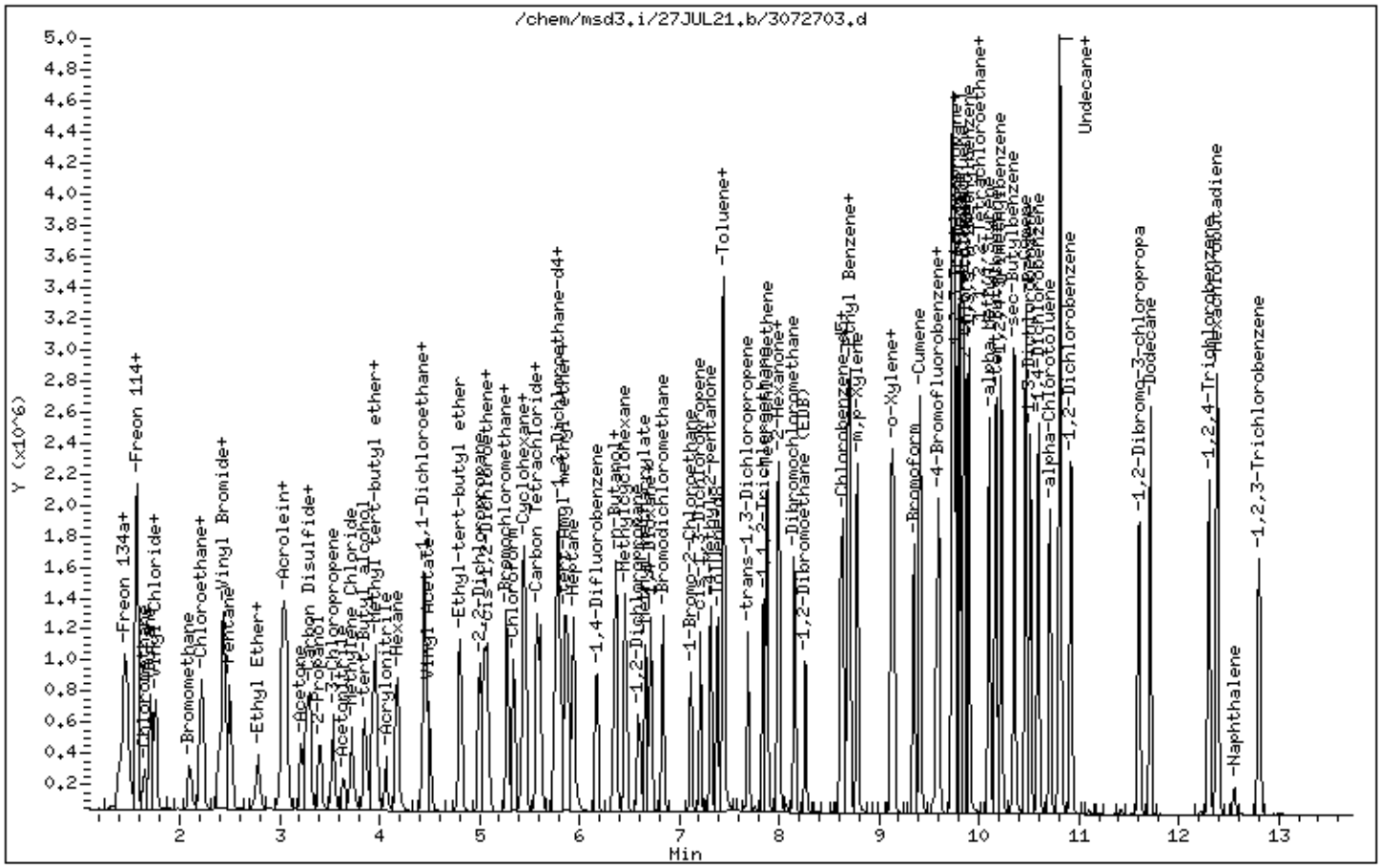
Instrument: msd3.i

Sample Info: 100mL 3018-2071A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107362A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:13 PM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	90	70-130
1,1,2,2-Tetrachloroethane	99	70-130
1,1,2-Trichloroethane	97	70-130
1,1-Dichloroethane	92	70-130
1,1-Dichloroethene	93	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	101	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	100	70-130
1,2-Dichlorobenzene	107	70-130
1,2-Dichloroethane	101	70-130
1,2-Dichloropropane	84	70-130
1,3,5-Trimethylbenzene	100	70-130
1,3-Butadiene	92	70-130
1,3-Dichlorobenzene	107	70-130
1,4-Dichlorobenzene	104	70-130
1,4-Dioxane	90	70-130
2,2,4-Trimethylpentane	93	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
2-Hexanone	92	70-130
2-Propanol	98	70-130
3-Chloropropene	93	70-130
4-Ethyltoluene	100	70-130
4-Methyl-2-pentanone	78	70-130
Acetone	96	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	96	70-130
Benzene	103	70-130
Bromodichloromethane	88	70-130
Bromoform	104	70-130
Bromomethane	100	70-130
Carbon Disulfide	103	70-130
Carbon Tetrachloride	98	70-130
Chlorobenzene	97	70-130
Chloroethane	100	70-130
Chloroform	94	70-130
Chloromethane	113	70-130
cis-1,2-Dichloroethene	89	70-130

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Client Sample ID: LCS

Lab ID#: 2107362A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:13 PM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	86	70-130
Cumene	95	70-130
Cyclohexane	86	70-130
Dibromochloromethane	104	70-130
Dibromomethane	Not Spiked	
Ethanol	71	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	98	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	106	70-130
Freon 12	100	70-130
Freon 113	101	70-130
Freon 114	105	70-130
Freon 134a	Not Spiked	
Heptane	88	70-130
Hexachlorobutadiene	105	70-130
Hexachloroethane	Not Spiked	
Hexane	91	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	98	70-130
Methyl tert-butyl ether	91	70-130
Methylene Chloride	96	70-130
Naphthalene	78	60-140
o-Xylene	95	70-130
Propylbenzene	102	70-130
Propylene	94	60-140
Styrene	95	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	102	70-130
Tetrahydrofuran	88	70-130
Toluene	89	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	88	70-130
trans-1,3-Dichloropropene	95	70-130
Trichloroethene	92	70-130
Vinyl Acetate	93	60-140
Vinyl Bromide	Not Spiked	
Vinyl Chloride	104	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2107362A-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:13 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072704.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 27-JUL-2021 12:13
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 14:03 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	250619	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	195621				48.46- 108.46	78.06
5.270	5.270 (1.000)	49	359605				120.39- 180.39	143.49
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	851577	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	126178				0.00- 45.52	14.82
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	720138	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	379169				25.46- 85.46	52.65
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	345267	25.0342	25.034		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	181038				21.66- 81.66	52.43
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	809153	23.0692	23.069		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	87521				0.00- 41.47	10.82

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	528003			36.47- 96.47	65.25
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	479657	25.1815	25.182	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	546665			93.06- 153.06	113.97
9.601	9.601 (1.114)	176	445781			62.87- 122.87	92.94
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	333763	55.9687	55.969	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	271190			51.82- 111.82	81.25
1.493	1.479 (0.282)	51	761789			194.91- 254.91	228.24
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	284461	46.9903	46.990	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	195283			35.61- 95.61	68.65
1.423	1.423 (0.269)	39	217182			42.66- 102.66	76.35
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	202290	51.2635	51.264	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	761789			321.86- 381.86	376.58
1.451	1.451 (0.275)	47	151587			45.34- 105.34	74.94
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	877175	50.2435	50.243	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	283337			2.63- 62.63	32.30
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	94454	49.2267	49.227	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	761789			719.76- 779.76	806.51
10 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.296)	135	679372	52.5178	52.518	80.00- 120.00	100.00
1.563	1.563 (0.296)	137	217509			2.12- 62.12	32.02
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	669710	49.2213	49.221	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	219671			2.44- 62.44	32.80
1.577	1.577 (0.298)	58	24026			0.00- 33.26	3.59
15 Chloromethane					CAS #: 74-87-3		
1.647	1.646 (0.312)	50	411656	56.7311	56.731	80.00- 120.00	100.00
1.647	1.646 (0.312)	52	133938			2.41- 62.41	32.54
18 Butane					CAS #: 106-97-8		
1.703	1.702 (0.322)	58	87919	51.3051	51.305	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)							
1.703	1.702 (0.322)	43	655806			727.41- 787.41	745.92
19 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.744 (0.330)	62	402342	51.8152	51.815	80.00- 120.00	100.00
1.745	1.744 (0.330)	64	121604			1.28- 61.28	30.22
20 1,3-Butadiene					CAS #: 106-99-0		
1.759	1.758 (0.333)	54	327848	46.0700	46.070	80.00- 120.00	100.00
1.759	1.758 (0.333)	39	319383			69.23- 129.23	97.42
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	308116	50.1726	50.172	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	287377			62.78- 122.78	93.27
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	182631	50.1045	50.104	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	55616			1.44- 61.44	30.45
2.206	2.206 (0.417)	49	59314			4.12- 64.12	32.48
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	444476	47.6854	47.685	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	313955			38.82- 98.82	70.63
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	323129	48.3948	48.395	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	296620			63.14- 123.14	91.80
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	981862	53.1539	53.154	80.00- 120.00	100.00
2.430	2.430 (0.460)	103	637774			35.12- 95.12	64.96
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	770674	52.1905	52.190	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	234886			0.74- 60.74	30.48
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	679095	45.7298	45.730	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	109100			0.00- 45.97	16.07
2.500	2.500 (0.473)	72	57191			0.00- 38.10	8.42
38 Ethyl Ether					CAS #: 60-29-7		
2.780	2.780 (0.526)	74	158257	47.5315	47.532	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	282183			147.68- 207.68	178.31
2.780	2.780 (0.526)	45	359126			206.40- 266.40	226.93

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	61594	41.2183	41.218	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	358264			523.01- 583.01	581.65
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	127869	51.5638	51.564	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	179602			110.33- 170.33	140.46
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	636654	50.4177	50.418	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	404040			33.72- 93.72	63.46
3.032	3.032 (0.574)	101	761755			89.67- 149.67	119.65
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	355249	46.7070	46.707	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	225794			33.39- 93.39	63.56
3.074	3.074 (0.582)	61	699044			163.82- 223.82	196.78
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	201139	47.8634	47.863	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	666128			299.66- 359.66	331.18
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	971801	51.3541	51.354	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	900572	55.0355	55.035	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	416889			14.58- 74.58	46.29
52 2-Propanol					CAS #: 67-63-0		
3.410	3.409 (0.645)	45	741924	49.0911	49.091	80.00- 120.00	100.00
3.396	3.395 (0.643)	43	152240			0.00- 48.61	20.52
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	152036	46.6658	46.666	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	516943			338.06- 398.06	340.01
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	316568	47.8390	47.839	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	160241			21.81- 81.81	50.62
3.633	3.633 (0.688)	38	36853			0.00- 41.86	11.64
59 Methylene Chloride					CAS #: 75-09-2		
3.717	3.717 (0.703)	49	482345	47.9595	47.959	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	293223			30.77- 90.77	60.79
3.717	3.717 (0.703)	51	146890			1.39- 61.39	30.45

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	856451	45.1482	45.148	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	194429			0.00- 51.05	22.70
3.857	3.857 (0.730)	57	92509			0.00- 41.68	10.80
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	932312	45.5347	45.535	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	277959			0.00- 58.86	29.81
3.941	3.941 (0.746)	41	266499			0.00- 57.27	28.58
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	224553	43.8712	43.871	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	601545			244.59- 304.59	267.89
3.969	3.969 (0.751)	96	353711			129.84- 189.84	157.52
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	249191	40.5659	40.566	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	297250			88.50- 148.50	119.29
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	634798	45.7397	45.740	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	389866			32.99- 92.99	61.42
4.179	4.179 (0.791)	86	75828			0.00- 42.56	11.95
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	655962	45.9592	45.959	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	200640			0.76- 60.76	30.59
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1277983	43.6335	43.634	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	285465			0.00- 51.37	22.34
4.445	4.445 (0.841)	59	146667			0.00- 41.09	11.48
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	81653	46.5331	46.533	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1137687			1391.63-1451.63	1393.30
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1228192	43.4358	43.436	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	408232			3.22- 63.22	33.24
4.809	4.809 (0.910)	41	238920			0.00- 48.12	19.45
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	615125	46.2627	46.263	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	194943			2.00- 62.00	31.69
5.005	5.005 (0.947)	97	142011			0.00- 53.36	23.09

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	225832	44.5086	44.508	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	349618			127.22- 187.22	154.81
5.047	5.046 (0.955)	61	691469			283.85- 343.85	306.19
86 2-Butanone					CAS #: 78-93-3		
5.075	5.074 (0.960)	72	165849	46.7968	46.797	80.00- 120.00	100.00
5.075	5.074 (0.960)	43	1714508			1055.75-1115.75	1033.77
5.075	5.074 (0.960)	57	67073			10.59- 70.59	40.44
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.088 (0.963)	45	136666	46.7764	46.776	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	691469			450.31- 510.31	505.95
5.089	5.088 (0.963)	70	80925			30.42- 90.42	59.21
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	442649	44.2926	44.292	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	145630			2.92- 62.92	32.90
5.270	5.270 (0.997)	72	152957			3.54- 63.54	34.55
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	737613	46.9423	46.942	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	476370			34.71- 94.71	64.58
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	424816	42.7727	42.773	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	629667			120.40- 180.40	148.22
5.438	5.438 (1.029)	41	349279			54.20- 114.20	82.22
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	791199	44.7966	44.797	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	508314			33.76- 93.76	64.25
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	796723	48.9779	48.978	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	834228			73.68- 133.68	104.71
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.606	5.606 (0.907)	110	195976	50.5689	50.569	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	508703			231.09- 291.09	259.57
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	2021866	46.5856	46.586	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	662324			1.12- 61.12	32.76
5.774	5.774 (1.093)	41	541320			0.00- 57.49	26.77

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	1000888	51.5051	51.505	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	239377			0.00- 53.80	23.92
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	246912	47.6525	47.652	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	977723			365.20- 425.20	395.98
5.858	5.858 (0.948)	55	326363			91.31- 151.31	132.18
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	566127	50.6013	50.601	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	174233			1.20- 61.20	30.78
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	338476	44.2211	44.221	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	687022			179.02- 239.02	202.98
5.942	5.942 (0.962)	57	410936			84.85- 144.85	121.41
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	279722	44.9084	44.908	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	194040			40.21- 100.21	69.37
6.348	6.348 (1.027)	43	151463			25.00- 85.00	54.15
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	450162	46.1753	46.175	80.00- 120.00	100.00
6.362	6.362 (1.029)	130	485023			74.96- 134.96	107.74
6.362	6.362 (1.029)	97	295455			34.80- 94.80	65.63
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	190051	42.1915	42.192	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	119178			52.03- 112.03	62.71
6.586	6.586 (1.066)	41	164632			79.97- 139.97	86.63
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	325857	47.0175	47.017	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	507113			134.02- 194.02	155.62
6.664	6.664 (0.773)	100	128238			9.54- 69.54	39.35
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.084)	88	222565	45.2122	45.212	80.00- 120.00	100.00
6.700	6.700 (1.084)	58	181412			55.80- 115.80	81.51
6.700	6.700 (1.084)	57	69378			8.68- 68.68	31.17
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	411033	53.2533	53.253	80.00- 120.00	100.00
6.714	6.714 (0.779)	93	405609			67.27- 127.27	98.68

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	334803			50.92- 110.92	81.45
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	720792	44.1333	44.133	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	459566			34.31- 94.31	63.76
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	525230	43.2679	43.268	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	167532			1.42- 61.42	31.90
7.208	7.208 (1.166)	39	360572			38.56- 98.56	68.65
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	555319	42.5971	42.597	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	255085			15.60- 75.60	45.93
6.460	6.460 (1.045)	55	603738			78.53- 138.53	108.72
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	321989	39.0101	39.010	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	834614			231.30- 291.30	259.21
7.316	7.316 (1.184)	85	125337			8.94- 68.94	38.93
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1161791	44.5562	44.556	80.00- 120.00	100.00
7.437	7.437 (1.203)	92	668781			28.30- 88.30	57.56
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.205)	57	346723	39.9670	39.967	80.00- 120.00	100.00
7.445	7.444 (1.205)	85	348914			67.11- 127.11	100.63
7.445	7.444 (1.205)	43	807438			214.21- 274.21	232.88
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	505722	47.6806	47.681	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	162540			2.15- 62.15	32.14
7.688	7.688 (0.892)	39	327248			36.09- 96.09	64.71
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	394652	48.3821	48.382	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	242609			31.62- 91.62	61.47
7.846	7.846 (0.910)	83	339110			56.35- 116.35	85.93
142 Tetrachloroethene					CAS #: 127-18-4		
7.882	7.881 (0.914)	166	575229	50.9874	50.987	80.00- 120.00	100.00
7.882	7.881 (0.914)	129	449621			48.71- 108.71	78.16
7.882	7.874 (0.914)	131	429966			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	431319	46.0345	46.034	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	793827			157.91- 217.91	184.05
8.003	8.003 (0.929)	100	79836			0.00- 47.86	18.51
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	519760	41.7794	41.779	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	544787			82.96- 142.96	104.82
7.989	7.989 (1.293)	78	168402			2.55- 62.55	32.40
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.946)	129	804899	52.0136	52.014	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	627520			47.77- 107.77	77.96
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.261 (0.959)	107	633264	49.9918	49.992	80.00- 120.00	100.00
8.268	8.261 (0.959)	109	595945			64.60- 124.60	94.11
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	699623	44.3895	44.389	80.00- 120.00	100.00
7.115	7.115 (1.151)	65	209271			0.95- 60.95	29.91
7.122	7.122 (1.152)	144	77308			0.00- 40.45	11.05
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	953549	48.4474	48.447	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	307504			2.13- 62.13	32.25
8.641	8.641 (1.002)	77	517993			26.35- 86.35	54.32
155 Ethyl Benzene					CAS #: 100-41-4		
8.684	8.684 (1.007)	106	483736	49.1509	49.151	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1495211			282.48- 342.48	309.10
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	825960	43.2984	43.298	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	764338			59.52- 119.52	92.54
8.705	8.705 (1.010)	85	265463			0.00- 59.76	32.14
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	485415	44.8125	44.812	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	324937			38.22- 98.22	66.94
8.712	8.712 (1.011)	95	181367			7.54- 67.54	37.36
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	598342	48.8679	48.868	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1189548			171.36- 231.36	198.81

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	9.121 (1.058)	106	552716	47.5506	47.551	80.00- 120.00	100.00
9.121	9.121 (1.058)	91	1152650			179.99- 239.99	208.54
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	957151	47.5282	47.528	80.00- 120.00	100.00
9.142	9.142 (1.061)	78	451784			19.09- 79.09	47.20
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	765859	52.1932	52.193	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	396505			21.45- 81.45	51.77
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	1746256	47.5168	47.517	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	472939			0.00- 56.99	27.08
9.407	9.407 (1.091)	51	197131			0.00- 41.77	11.29
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	486376	42.0551	42.055	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	193828			9.22- 69.22	39.85
9.579	9.579 (1.111)	42	340309			42.60- 102.60	69.97
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	905399	49.6906	49.691	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	589355			34.35- 94.35	65.09
177 Bromobenzene					CAS #: 108-86-1		
9.730	9.730 (1.129)	156	600045	52.5231	52.523	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	584368			67.29- 127.29	97.39
9.730	9.730 (1.129)	77	921497			132.41- 192.41	153.57
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2176651	50.7607	50.761	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	519859			0.00- 53.77	23.88
9.758	9.758 (1.132)	105	81006			0.00- 33.81	3.72
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	279553	50.9329	50.933	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	935004			285.00- 345.00	334.46
9.787	9.787 (1.135)	61	238650			54.06- 114.06	85.37
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	291463	67.1088	67.109	80.00- 120.00	100.00(R)
9.787	9.787 (1.135)	89	149224			21.19- 81.19	51.20
9.787	9.787 (1.135)	75	935004			372.45- 432.45	320.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
182 Decane					CAS #: 124-18-5		
9.808	9.808 (1.138)	57	1015228	45.7880	45.788	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	350411			4.13- 64.13	34.52
9.808	9.808 (1.138)	142	50583			0.00- 34.73	4.98
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	559056	50.2977	50.298	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1814024			296.79- 356.79	324.48
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	467902	51.8090	51.809	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1645842			336.29- 396.29	351.75
9.873	9.873 (1.145)	65	307454			38.83- 98.83	65.71
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.902	9.901 (1.149)	120	781289	50.0457	50.046	80.00- 120.00	100.00
9.902	9.901 (1.149)	105	1584548			176.40- 236.40	202.81
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	733138	45.8533	45.853	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	412922			26.64- 86.64	56.32
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1409650	49.0754	49.075	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	360368			0.00- 54.82	25.56
10.174	10.174 (1.180)	91	910061			36.92- 96.92	64.56
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1602255	52.0483	52.048	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	755361			16.58- 76.58	47.14
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	468284	50.4734	50.473	80.00- 120.00	100.00
10.360	10.353 (1.202)	105	2267313			451.53- 511.53	484.17
10.360	10.353 (1.202)	91	355423			46.48- 106.48	75.90
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	1978394	50.9192	50.919	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	536288			0.00- 56.79	27.11
10.467	10.467 (1.214)	91	456663			0.00- 54.04	23.08
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.220)	146	1116042	53.3620	53.362	80.00- 120.00	100.00
10.518	10.517 (1.220)	148	704699			33.53- 93.53	63.14
10.518	10.517 (1.220)	111	440917			11.05- 71.05	39.51

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	1118514	51.9206	51.920	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	711562			33.47- 93.47	63.62
10.596	10.596 (1.229)	111	433013			9.65- 69.65	38.71
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1419574	47.9266	47.927	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	317903			0.00- 52.04	22.39
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1193121	45.6649	45.665	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	1011813			55.86- 115.86	84.80
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	521333	51.7496	51.750	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	1866078			331.99- 391.99	357.94
10.818	10.818 (1.255)	92	961144			161.01- 221.01	184.36
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.919	10.926 (1.267)	146	1081781	53.5259	53.526	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	680448			33.23- 93.23	62.90
10.919	10.919 (1.267)	111	446007			12.36- 72.36	41.23
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	575609	49.1185	49.118	80.00- 120.00	100.00
11.599	11.599 (1.346)	75	464055			58.96- 118.96	80.62
11.606	11.606 (1.347)	155	446041			47.82- 107.82	77.49
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	976305	44.1897	44.190	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	769957			50.85- 110.85	78.86
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	843023	58.7269	58.727	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	812988			65.40- 125.40	96.44
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	658779	60.7533	60.753	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	419101			33.70- 93.70	63.62
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.456)	128	197443	4.50430	4.504	80.00- 120.00	100.00
12.552	12.559 (1.456)	127	27369			0.00- 43.10	13.86
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.810 (1.485)	180	778947	59.2993	59.299	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 (1.485)	182	737572			65.67- 125.67	94.69
12.803	12.802 (1.485)	145	267620			6.02- 66.02	34.36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072704.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	250619	4.87
108 1,4-Difluorobenze	785289	471173	1099405	851577	8.44
153 Chlorobenzene-d5	683596	410158	957034	720138	5.35

		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	8.61	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: 27JUL21
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/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	55.969	111.94	70-130
5 Propylene	50.000	46.990	93.98	70-130
7 1,1-Difluoroethan	50.000	51.264	102.53	70-130
8 Freon 12	50.000	50.243	100.49	70-130
9 Chlorodifluoromet	50.000	49.227	98.45	70-130
10 Freon 114	50.000	52.518	105.04	70-130
12 Isobutane	50.000	49.221	98.44	70-130
15 Chloromethane	50.000	56.731	113.46	70-130
18 Butane	50.000	51.305	102.61	70-130
19 Vinyl Chloride	50.000	51.815	103.63	70-130
20 1,3-Butadiene	50.000	46.070	92.14	70-130
24 Bromomethane	50.000	50.172	100.35	70-130
30 Chloroethane	50.000	50.104	100.21	70-130
31 Isopentane	50.000	47.685	95.37	70-130
32 Vinyl Bromide	50.000	48.395	96.79	70-130
33 Freon 11	50.000	53.154	106.31	70-130
34 Dichlorofluoromet	50.000	52.190	104.38	70-130
35 Pentane	50.000	45.730	91.46	70-130
38 Ethyl Ether	50.000	47.532	95.06	70-130
39 Ethanol	58.000	41.218	71.07	70-130
42 Acrolein	58.000	51.564	88.90	70-130
43 Freon 113	50.000	50.418	100.84	70-130
44 1,1-Dichloroethen	50.000	46.707	93.41	70-130
47 Acetone	50.000	47.863	95.73	70-130
48 Carbon Disulfide	50.000	51.354	102.71	70-130
49 Iodomethane	50.000	55.035	110.07	70-130
52 2-Propanol	50.000	49.091	98.18	70-130
54 3-Chloropropene	50.000	46.666	93.33	70-130
57 Acetonitrile	50.000	47.839	95.68	70-130
59 Methylene Chlorid	50.000	47.959	95.92	70-130
62 tert-Butyl alcoho	50.000	45.148	90.30	70-130
63 Methyl tert-butyl	50.000	45.535	91.07	70-130
64 trans-1,2-Dichlor	50.000	43.871	87.74	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	40.566	81.13	70-130
67	Hexane	50.000	45.740	91.48	70-130
71	1,1-Dichloroethan	50.000	45.959	91.92	70-130
72	Isopropyl ether	50.000	43.634	87.27	70-130
73	Vinyl Acetate	50.000	46.533	93.07	70-130
79	Ethyl-tert-butyl	50.000	43.436	86.87	70-130
84	2,2-Dichloropropa	50.000	46.263	92.53	70-130
85	cis-1,2-Dichloroe	50.000	44.508	89.02	70-130
86	2-Butanone	50.000	46.797	93.59	70-130
87	Ethyl Acetate	50.000	46.776	93.55	70-130
89	Tetrahydrofuran	50.000	44.292	88.59	70-130
92	Chloroform	50.000	46.942	93.88	70-130
94	Cyclohexane	50.000	42.773	85.55	70-130
96	1,1,1-Trichloroet	50.000	44.797	89.59	70-130
99	1,1-Dichloroprope	50.000	50.569	101.14	70-130
97	Carbon Tetrachlor	50.000	48.978	97.96	70-130
101	2,2,4-Trimethylpe	50.000	46.586	93.17	70-130
102	Benzene	50.000	51.505	103.01	70-130
105	tert-Amyl methyl	50.000	47.652	95.30	70-130
106	1,2-Dichloroethan	50.000	50.601	101.20	70-130
107	Heptane	50.000	44.221	88.44	70-130
110	n-Butanol	50.000	44.908	89.82	70-130
111	Trichloroethene	50.000	46.175	92.35	70-130
118	Dibromomethane	50.000	53.253	106.51	70-130
127	Methylcyclohexane	50.000	42.597	85.19	70-130
114	1,2-Dichloropropa	50.000	42.192	84.38	70-130
116	Methyl Methacryla	50.000	47.017	94.03	70-130
117	1,4-Dioxane	50.000	45.212	90.42	70-130
122	Bromodichlorometh	50.000	44.133	88.27	70-130
126	cis-1,3-Dichlorop	50.000	43.268	86.54	70-130
131	4-Methyl-2-pentan	50.000	39.010	78.02	70-130
136	Octane	50.000	39.967	79.93	70-130
137	Toluene	50.000	44.556	89.11	70-130
139	trans-1,3-Dichlor	50.000	47.681	95.36	70-130
141	1,1,2-Trichloroet	50.000	48.382	96.76	70-130
142	Tetrachloroethene	50.000	50.987	101.97	70-130
143	2-Hexanone	50.000	46.034	92.07	70-130
144	1,3-Dichloropropa	50.000	41.779	83.56	70-130
146	Dibromochlorometh	50.000	52.014	104.03	70-130
148	1,2-Dibromoethane	50.000	49.992	99.98	70-130
151	1-Bromo-2-Chloroe	50.000	44.389	88.78	70-130
154	Chlorobenzene	50.000	48.447	96.89	70-130
155	Ethyl Benzene	50.000	49.151	98.30	70-130
156	Nonane	50.000	43.298	86.60	70-130
157	1,1,1,2-Tetrachlo	50.000	44.812	89.62	70-130
158	m,p-Xylene	50.000	48.868	97.74	70-130
164	o-Xylene	50.000	47.551	95.10	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	47.528	95.06	70-130
167 Bromoform	50.000	52.193	104.39	70-130
168 Cumene	50.000	47.517	95.03	70-130
169 Cyclohexanone	50.000	42.055	84.11	70-130
175 1,1,2,2-Tetrachlo	50.000	49.691	99.38	70-130
177 Bromobenzene	50.000	52.523	105.05	70-130
178 Propylbenzene	50.000	50.761	101.52	70-130
179 1,2,3-Trichloropr	50.000	50.933	101.87	70-130
181 trans-1,4-Dichlor	50.000	67.109	134.22*	70-130
182 Decane	50.000	45.788	91.58	70-130
183 4-Ethyltoluene	50.000	50.298	100.60	70-130
184 2-Chlorotoluene	50.000	51.809	103.62	70-130
185 1,3,5-Trimethylbe	50.000	50.046	100.09	70-130
188 alpha Methyl Styr	50.000	45.853	91.71	70-130
189 tert-Butylbenzene	50.000	49.075	98.15	70-130
190 1,2,4-Trimethylbe	50.000	52.048	104.10	70-130
192 sec-Butylbenzene	50.000	50.473	100.95	70-130
194 p-Cymene	50.000	50.919	101.84	70-130
195 1,3-Dichlorobenze	50.000	53.362	106.72	70-130
196 1,4-Dichlorobenze	50.000	51.920	103.84	70-130
199 alpha-Chlorotolue	50.000	47.927	95.85	70-130
201 Undecane	50.000	45.665	91.33	70-130
202 Butylbenzene	50.000	51.750	103.50	70-130
204 1,2-Dichlorobenze	50.000	53.526	107.05	70-130
206 1,2-Dibromo-3-chl	50.000	49.118	98.24	70-130
207 Dodecane	50.000	44.190	88.38	70-130
213 1,2,4-Trichlorobe	58.000	58.727	101.25	70-130
215 Hexachlorobutadie	58.000	60.753	104.75	70-130
216 Naphthalene	5.800	4.504	77.66	60-140
222 1,2,3-Trichlorobe	58.000	59.299	102.24	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.034	100.14	70-130
$ 134 Toluene-d8	25.000	23.069	92.28	70-130
$ 170 4-Bromofluorobenz	25.000	25.182	100.73	70-130

Data File: /chem/msd3.i/27JUL21.b/3072704.d

Page 1

Date : 27-JUL-2021 12:13

Client ID: LCS

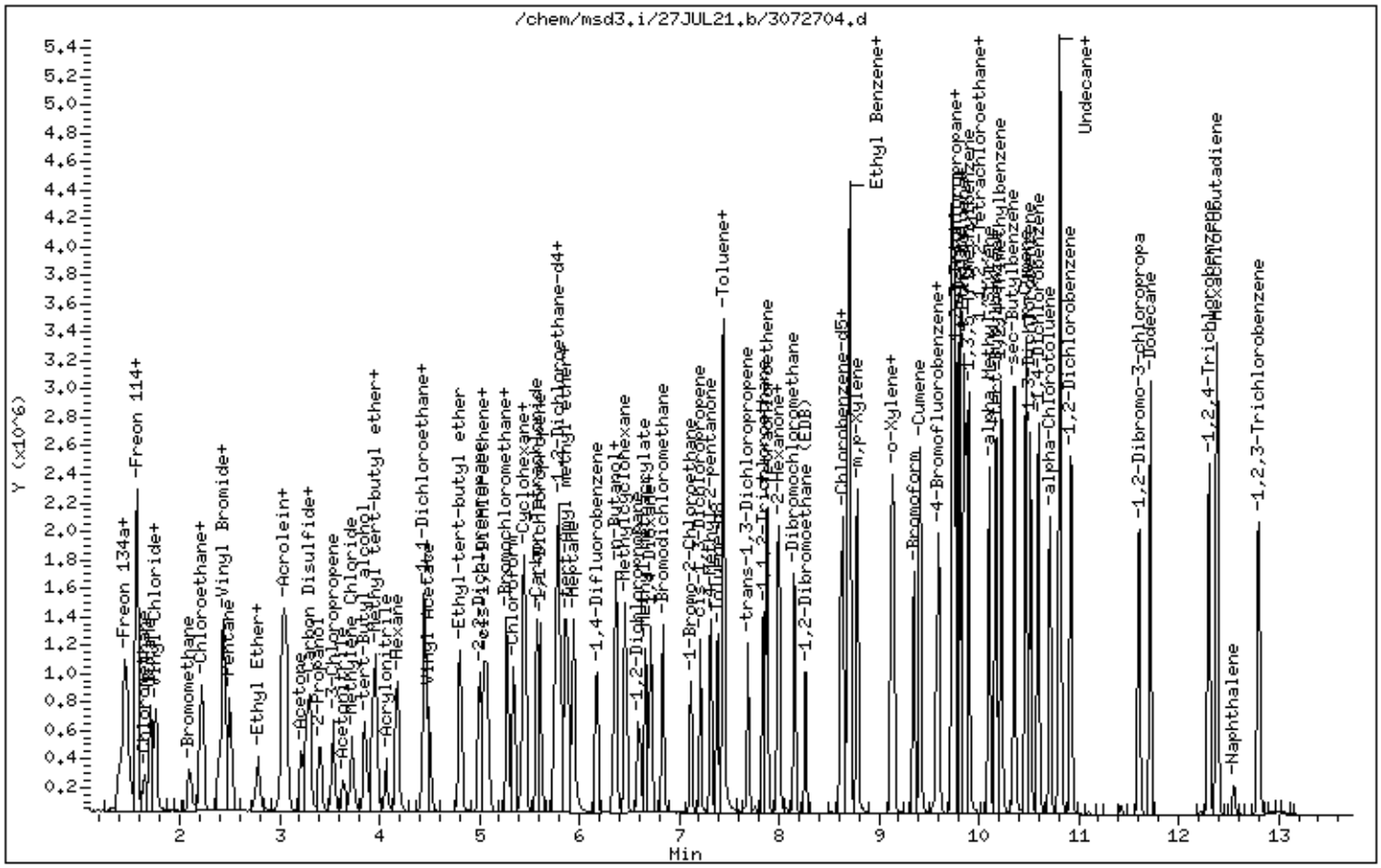
Instrument: msd3.i

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#: 2107362A-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:40 PM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	90	70-130
1,1,2,2-Tetrachloroethane	97	70-130
1,1,2-Trichloroethane	96	70-130
1,1-Dichloroethane	95	70-130
1,1-Dichloroethene	97	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	114	70-130
1,2,4-Trimethylbenzene	98	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	101	70-130
1,2-Dichlorobenzene	103	70-130
1,2-Dichloroethane	96	70-130
1,2-Dichloropropane	74	70-130
1,3,5-Trimethylbenzene	97	70-130
1,3-Butadiene	96	70-130
1,3-Dichlorobenzene	104	70-130
1,4-Dichlorobenzene	101	70-130
1,4-Dioxane	94	70-130
2,2,4-Trimethylpentane	89	70-130
2-Butanone (Methyl Ethyl Ketone)	97	70-130
2-Hexanone	94	70-130
2-Propanol	102	70-130
3-Chloropropene	96	70-130
4-Ethyltoluene	98	70-130
4-Methyl-2-pentanone	81	70-130
Acetone	100	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	94	70-130
Benzene	94	70-130
Bromodichloromethane	89	70-130
Bromoform	105	70-130
Bromomethane	102	70-130
Carbon Disulfide	105	70-130
Carbon Tetrachloride	99	70-130
Chlorobenzene	98	70-130
Chloroethane	104	70-130
Chloroform	94	70-130
Chloromethane	116	70-130
cis-1,2-Dichloroethene	91	70-130

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Client Sample ID: LCSD

Lab ID#: 2107362A-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:40 PM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	89	70-130
Cumene	96	70-130
Cyclohexane	87	70-130
Dibromochloromethane	105	70-130
Dibromomethane	Not Spiked	
Ethanol	74	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	99	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	109	70-130
Freon 12	104	70-130
Freon 113	104	70-130
Freon 114	108	70-130
Freon 134a	Not Spiked	
Heptane	84	70-130
Hexachlorobutadiene	117	70-130
Hexachloroethane	Not Spiked	
Hexane	95	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	98	70-130
Methyl tert-butyl ether	96	70-130
Methylene Chloride	99	70-130
Naphthalene	86	60-140
o-Xylene	95	70-130
Propylbenzene	98	70-130
Propylene	100	60-140
Styrene	95	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	104	70-130
Tetrahydrofuran	87	70-130
Toluene	90	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	92	70-130
trans-1,3-Dichloropropene	96	70-130
Trichloroethene	98	70-130
Vinyl Acetate	96	60-140
Vinyl Bromide	Not Spiked	
Vinyl Chloride	107	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2107362A-15AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3072705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/27/21 12:40 PM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	93	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/27JUL21.b/3072705.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 27-JUL-2021 12:40
Operator : LD Inst ID: msd3.i
Smp Info : 100mL 3018-2121A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 14:03 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 (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
==	====== ========	====	========		=======	=======	==========	=====
* 90 Bromochloromethane							CAS #: 74-97-5	
5.284	5.284 (1.000)	130	243047	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	189928				48.46- 108.46	78.14
5.284	5.270 (1.000)	49	338027				120.39- 180.39	139.08
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.180	6.180 (1.000)	114	877445	25.0000			80.00- 120.00	100.00
6.180	6.180 (1.000)	88	129432				0.00- 45.52	14.75
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
8.619	8.612 (1.000)	117	719626	25.0000			80.00- 120.00	100.00
8.619	8.612 (1.000)	82	385622				25.46- 85.46	53.59
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.816	5.816 (1.101)	65	332394	24.8516	24.852		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	173528				21.66- 81.66	52.21
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.387	7.387 (1.195)	98	837339	23.1690	23.169		80.00- 120.00	100.00
7.387	7.387 (1.195)	70	91942				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 (1.195)	100	553973			36.47- 96.47	66.16
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.114)	174	472828	24.8407	24.841	80.00- 120.00	100.00
9.601	9.601 (1.114)	95	538908			93.06- 153.06	113.98
9.601	9.601 (1.114)	176	438110			62.87- 122.87	92.66
4 Freon 134a					CAS #: 811-97-2		
1.395	1.395 (0.264)	83	332500	57.4940	57.494	80.00- 120.00	100.00
1.395	1.395 (0.264)	69	269063			51.82- 111.82	80.92
1.493	1.479 (0.282)	51	769087			194.91- 254.91	231.30
5 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.269)	41	292192	49.7710	49.771	80.00- 120.00	100.00
1.423	1.423 (0.269)	42	197311			35.61- 95.61	67.53
1.423	1.423 (0.269)	39	216909			42.66- 102.66	74.24
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.451	1.437 (0.275)	65	197655	51.6495	51.650	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	769087			321.86- 381.86	389.10
1.451	1.451 (0.275)	47	154211			45.34- 105.34	78.02
8 Freon 12					CAS #: 75-71-8		
1.465	1.465 (0.277)	85	883553	52.1855	52.186	80.00- 120.00	100.00
1.465	1.465 (0.277)	87	292822			2.63- 62.63	33.14
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.493	1.493 (0.282)	67	99099	53.2568	53.257	80.00- 120.00	100.00
1.493	1.479 (0.282)	51	769087			719.76- 779.76	776.07
10 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.296)	135	674909	53.7983	53.798	80.00- 120.00	100.00
1.563	1.563 (0.296)	137	215383			2.12- 62.12	31.91
12 Isobutane					CAS #: 75-28-5		
1.577	1.577 (0.298)	43	668806	50.6864	50.686	80.00- 120.00	100.00
1.577	1.577 (0.298)	42	214869			2.44- 62.44	32.13
1.577	1.577 (0.298)	58	24794			0.00- 33.26	3.71
15 Chloromethane					CAS #: 74-87-3		
1.647	1.646 (0.312)	50	408064	57.9881	57.988	80.00- 120.00	100.00
1.647	1.646 (0.312)	52	133352			2.41- 62.41	32.68
18 Butane					CAS #: 106-97-8		
1.702	1.702 (0.322)	58	89189	53.6679	53.668	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	655719			727.41- 787.41	735.20
19 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.330)	62	404277	53.6864	53.686	80.00- 120.00	100.00
1.744	1.744 (0.330)	64	121176			1.28- 61.28	29.97
20 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.333)	54	333078	48.2633	48.263	80.00- 120.00	100.00
1.758	1.758 (0.333)	39	315738			69.23- 129.23	94.79
24 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.396)	94	305482	51.2935	51.293	80.00- 120.00	100.00
2.094	2.094 (0.396)	96	288033			62.78- 122.78	94.29
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.417)	64	183146	51.8113	51.811	80.00- 120.00	100.00
2.206	2.206 (0.417)	66	55828			1.44- 61.44	30.48
2.206	2.206 (0.417)	49	59246			4.12- 64.12	32.35
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.420)	43	442460	48.9480	48.948	80.00- 120.00	100.00
2.220	2.220 (0.420)	57	316744			38.82- 98.82	71.59
32 Vinyl Bromide					CAS #: 593-60-2		
2.388	2.388 (0.452)	106	327273	50.5424	50.542	80.00- 120.00	100.00
2.388	2.388 (0.452)	108	302525			63.14- 123.14	92.44
33 Freon 11					CAS #: 75-69-4		
2.430	2.430 (0.460)	101	980329	54.7244	54.724	80.00- 120.00	100.00
2.444	2.430 (0.463)	103	643045			35.12- 95.12	65.59
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.444	2.444 (0.463)	67	770452	53.8011	53.801	80.00- 120.00	100.00
2.444	2.444 (0.463)	69	235734			0.74- 60.74	30.60
35 Pentane					CAS #: 109-66-0		
2.500	2.500 (0.473)	43	678892	47.1405	47.140	80.00- 120.00	100.00
2.500	2.500 (0.473)	57	112196			0.00- 45.97	16.53
2.500	2.500 (0.473)	72	57328			0.00- 38.10	8.44
38 Ethyl Ether					CAS #: 60-29-7		
2.794	2.780 (0.529)	74	160226	49.6223	49.622	80.00- 120.00	100.00
2.780	2.780 (0.526)	59	282989			147.68- 207.68	176.62
2.780	2.780 (0.526)	45	363562			206.40- 266.40	226.90

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	62412	43.0673	43.067	80.00- 120.00	100.00
2.780	2.780 (0.526)	45	362071			523.01- 583.01	580.12
42 Acrolein					CAS #: 107-02-8		
3.032	3.032 (0.574)	55	129199	53.7233	53.723	80.00- 120.00	100.00
3.032	3.032 (0.574)	56	178279			110.33- 170.33	137.99
43 Freon 113					CAS #: 76-13-1		
3.046	3.032 (0.576)	151	637959	52.0951	52.095	80.00- 120.00	100.00
3.046	3.046 (0.576)	153	407364			33.72- 93.72	63.85
3.032	3.032 (0.574)	101	774340			89.67- 149.67	121.38
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.074	3.074 (0.582)	96	359541	48.7442	48.744	80.00- 120.00	100.00
3.074	3.074 (0.582)	98	230520			33.39- 93.39	64.12
3.074	3.074 (0.582)	61	706879			163.82- 223.82	196.61
47 Acetone					CAS #: 67-64-1		
3.214	3.214 (0.608)	58	203055	49.8249	49.825	80.00- 120.00	100.00
3.214	3.214 (0.608)	43	674244			299.66- 359.66	332.05
48 Carbon Disulfide					CAS #: 75-15-0		
3.298	3.298 (0.624)	76	965474	52.6093	52.609	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.270	3.270 (0.619)	142	919579	57.9479	57.948	80.00- 120.00	100.00
3.270	3.270 (0.619)	127	427407			14.58- 74.58	46.48
52 2-Propanol					CAS #: 67-63-0		
3.409	3.409 (0.645)	45	748810	51.0903	51.090	80.00- 120.00	100.00
3.409	3.395 (0.645)	43	153434			0.00- 48.61	20.49
54 3-Chloropropene					CAS #: 107-05-1		
3.535	3.535 (0.669)	76	151228	47.8640	47.864	80.00- 120.00	100.00
3.535	3.535 (0.669)	41	518662			338.06- 398.06	342.97
57 Acetonitrile					CAS #: 75-05-8		
3.633	3.633 (0.688)	41	298477	46.5104	46.510	80.00- 120.00	100.00
3.633	3.633 (0.688)	40	165439			21.81- 81.81	55.43
3.633	3.633 (0.688)	38	36271			0.00- 41.86	12.15
59 Methylene Chloride					CAS #: 75-09-2		
3.731	3.717 (0.706)	49	484218	49.6457	49.646	80.00- 120.00	100.00
3.731	3.717 (0.706)	84	294045			30.77- 90.77	60.73
3.717	3.717 (0.703)	51	147945			1.39- 61.39	30.55

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	862080	46.8608	46.861	80.00- 120.00	100.00
3.857	3.857 (0.730)	41	196834			0.00- 51.05	22.83
3.857	3.857 (0.730)	57	93898			0.00- 41.68	10.89
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.941	3.941 (0.746)	73	952644	47.9774	47.977	80.00- 120.00	100.00
3.941	3.941 (0.746)	57	280946			0.00- 58.86	29.49
3.941	3.941 (0.746)	41	267333			0.00- 57.27	28.06
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.969	3.969 (0.751)	98	228110	45.9547	45.955	80.00- 120.00	100.00
3.969	3.969 (0.751)	61	606867			244.59- 304.59	266.04
3.969	3.969 (0.751)	96	360026			129.84- 189.84	157.83
66 Acrylonitrile					CAS #: 107-13-1		
4.067	4.067 (0.770)	52	252748	42.4269	42.427	80.00- 120.00	100.00
4.067	4.067 (0.770)	53	298572			88.50- 148.50	118.13
67 Hexane					CAS #: 110-54-3		
4.179	4.179 (0.791)	57	639618	47.5229	47.523	80.00- 120.00	100.00
4.179	4.179 (0.791)	43	393822			32.99- 92.99	61.57
4.179	4.179 (0.791)	86	82046			0.00- 42.56	12.83
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.459	4.459 (0.844)	63	657313	47.4887	47.489	80.00- 120.00	100.00
4.459	4.459 (0.844)	65	202113			0.76- 60.76	30.75
72 Isopropyl ether					CAS #: 108-20-3		
4.445	4.445 (0.841)	45	1291178	45.4575	45.458	80.00- 120.00	100.00
4.445	4.445 (0.841)	87	291872			0.00- 51.37	22.61
4.445	4.445 (0.841)	59	147939			0.00- 41.09	11.46
73 Vinyl Acetate					CAS #: 108-05-4		
4.501	4.501 (0.852)	86	81281	47.7641	47.764	80.00- 120.00	100.00
4.501	4.501 (0.852)	43	1149311			1391.63-1451.63	1413.99
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.809	4.809 (0.910)	59	1236835	45.1043	45.104	80.00- 120.00	100.00
4.809	4.809 (0.910)	87	417187			3.22- 63.22	33.73
4.809	4.809 (0.910)	41	238976			0.00- 48.12	19.32
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.005	5.005 (0.947)	77	593355	46.0157	46.016	80.00- 120.00	100.00
5.005	5.005 (0.947)	79	190376			2.00- 62.00	32.08
5.005	5.005 (0.947)	97	139027			0.00- 53.36	23.43

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	223025	45.3249	45.325	80.00- 120.00	100.00
5.047	5.046 (0.955)	96	344352			127.22- 187.22	154.40
5.047	5.046 (0.955)	61	670853			283.85- 343.85	300.80
86 2-Butanone					CAS #: 78-93-3		
5.075	5.074 (0.960)	72	166077	48.3211	48.321	80.00- 120.00	100.00
5.075	5.074 (0.960)	43	1669843			1055.75-1115.75	1005.46
5.075	5.074 (0.960)	57	65345			10.59- 70.59	39.35
87 Ethyl Acetate					CAS #: 141-78-6		
5.089	5.088 (0.963)	45	132907	46.9072	46.907	80.00- 120.00	100.00
5.047	5.046 (0.955)	61	670722			450.31- 510.31	504.65
5.089	5.088 (0.963)	70	79981			30.42- 90.42	60.18
89 Tetrahydrofuran					CAS #: 109-99-9		
5.270	5.270 (0.997)	42	420429	43.3799	43.380	80.00- 120.00	100.00
5.270	5.270 (0.997)	71	140129			2.92- 62.92	33.33
5.270	5.270 (0.997)	72	148745			3.54- 63.54	35.38
92 Chloroform					CAS #: 67-66-3		
5.340	5.340 (1.011)	83	713906	46.8491	46.849	80.00- 120.00	100.00
5.340	5.340 (1.011)	85	462280			34.71- 94.71	64.75
94 Cyclohexane					CAS #: 110-82-7		
5.438	5.438 (1.029)	84	417782	43.3749	43.375	80.00- 120.00	100.00
5.438	5.438 (1.029)	56	614589			120.40- 180.40	147.11
5.438	5.438 (1.029)	41	340291			54.20- 114.20	81.45
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.466	5.466 (1.034)	97	771052	45.0160	45.016	80.00- 120.00	100.00
5.466	5.466 (1.034)	99	494729			33.76- 93.76	64.16
97 Carbon Tetrachloride					CAS #: 56-23-5		
5.578	5.578 (1.056)	119	784256	49.7136	49.714	80.00- 120.00	100.00
5.578	5.578 (1.056)	117	819986			73.68- 133.68	104.56
99 1,1-Dichloropropene					CAS #: 563-58-6		
5.620	5.606 (0.909)	110	186609	46.7321	46.732	80.00- 120.00	100.00
5.606	5.606 (0.907)	75	476360			231.09- 291.09	255.27
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.774	5.774 (1.093)	57	1872661	44.4921	44.492	80.00- 120.00	100.00
5.774	5.774 (1.093)	56	577627			1.12- 61.12	30.85
5.774	5.774 (1.093)	41	513022			0.00- 57.49	27.40

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	941107	47.0011	47.001	80.00- 120.00	100.00
5.788	5.788 (0.937)	77	222815			0.00- 53.80	23.68
105 tert-Amyl methyl ether					CAS #: 994-05-8		
5.858	5.858 (0.948)	87	239431	44.8465	44.846	80.00- 120.00	100.00
5.858	5.858 (0.948)	73	939520			365.20- 425.20	392.40
5.858	5.858 (0.948)	55	305804			91.31- 151.31	127.72
106 1,2-Dichloroethane					CAS #: 107-06-2		
5.886	5.886 (0.952)	62	554290	48.0827	48.083	80.00- 120.00	100.00
5.886	5.886 (0.952)	64	171495			1.20- 61.20	30.94
107 Heptane					CAS #: 142-82-5		
5.942	5.942 (0.962)	71	329899	41.8300	41.830	80.00- 120.00	100.00
5.942	5.942 (0.962)	43	650971			179.02- 239.02	197.32
5.942	5.942 (0.962)	57	389374			84.85- 144.85	118.03
110 n-Butanol					CAS #: 71-36-3		
6.348	6.348 (1.027)	56	302937	47.2017	47.202	80.00- 120.00	100.00
6.348	6.348 (1.027)	41	201509			40.21- 100.21	66.52
6.348	6.348 (1.027)	43	163424			25.00- 85.00	53.95
111 Trichloroethene					CAS #: 79-01-6		
6.362	6.362 (1.029)	95	491685	48.9477	48.948	80.00- 120.00	100.00
6.376	6.362 (1.032)	130	519849			74.96- 134.96	105.73
6.376	6.362 (1.032)	97	314369			34.80- 94.80	63.94
114 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.066)	63	171037	36.8509	36.851	80.00- 120.00	100.00
6.586	6.586 (1.066)	62	129148			52.03- 112.03	75.51
6.586	6.586 (1.066)	41	171194			79.97- 139.97	100.09
116 Methyl Methacrylate					CAS #: 80-62-6		
6.664	6.664 (0.773)	69	347624	50.1939	50.194	80.00- 120.00	100.00
6.664	6.664 (0.773)	41	550212			134.02- 194.02	158.28
6.664	6.664 (0.773)	100	139260			9.54- 69.54	40.06
117 1,4-Dioxane					CAS #: 123-91-1		
6.700	6.700 (1.084)	88	237725	46.8681	46.868	80.00- 120.00	100.00
6.700	6.700 (1.084)	58	233076			55.80- 115.80	98.04
6.700	6.700 (1.084)	57	88815			8.68- 68.68	37.36
118 Dibromomethane					CAS #: 74-95-3		
6.721	6.721 (0.780)	174	436660	56.6138	56.614	80.00- 120.00	100.00
6.721	6.714 (0.780)	93	426214			67.27- 127.27	97.61

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	355021			50.92- 110.92	81.30
122 Bromodichloromethane					CAS #: 75-27-4		
6.836	6.836 (1.106)	83	748581	44.4835	44.484	80.00- 120.00	100.00
6.836	6.836 (1.106)	85	482558			34.31- 94.31	64.46
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.208	7.208 (1.166)	75	558857	44.6808	44.681	80.00- 120.00	100.00
7.208	7.208 (1.166)	77	178131			1.42- 61.42	31.87
7.208	7.208 (1.166)	39	376274			38.56- 98.56	67.33
127 Methylcyclohexane					CAS #: 108-87-2		
6.460	6.460 (1.045)	83	588823	43.8355	43.836	80.00- 120.00	100.00
6.460	6.460 (1.045)	98	273498			15.60- 75.60	46.45
6.460	6.460 (1.045)	55	592527			78.53- 138.53	100.63
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.316	7.316 (1.184)	58	346326	40.7216	40.722	80.00- 120.00	100.00
7.316	7.316 (1.184)	43	885034			231.30- 291.30	255.55
7.316	7.316 (1.184)	85	133956			8.94- 68.94	38.68
137 Toluene					CAS #: 108-88-3		
7.437	7.437 (1.203)	91	1216479	45.2782	45.278	80.00- 120.00	100.00
7.445	7.437 (1.205)	92	698293			28.30- 88.30	57.40
136 Octane					CAS #: 111-65-9		
7.445	7.444 (1.205)	57	367969	41.1656	41.166	80.00- 120.00	100.00
7.445	7.444 (1.205)	85	365301			67.11- 127.11	99.27
7.445	7.444 (1.205)	43	847745			214.21- 274.21	230.38
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.688	7.688 (0.892)	75	511898	48.2973	48.297	80.00- 120.00	100.00
7.688	7.688 (0.892)	77	163426			2.15- 62.15	31.93
7.688	7.688 (0.892)	39	334027			36.09- 96.09	65.25
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.846	7.846 (0.910)	97	393681	48.2974	48.297	80.00- 120.00	100.00
7.846	7.846 (0.910)	99	245912			31.62- 91.62	62.46
7.846	7.846 (0.910)	83	342339			56.35- 116.35	86.96
142 Tetrachloroethene					CAS #: 127-18-4		
7.881	7.881 (0.914)	166	583842	51.7877	51.788	80.00- 120.00	100.00
7.881	7.881 (0.914)	129	448400			48.71- 108.71	76.80
7.881	7.874 (0.914)	131	433649			46.55- 106.55	74.28

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	441646	47.1702	47.170	80.00- 120.00	100.00
8.003	8.003 (0.929)	43	800916			157.91- 217.91	181.35
8.003	8.003 (0.929)	100	83430			0.00- 47.86	18.89
144 1,3-Dichloropropane					CAS #: 142-28-9		
7.989	7.989 (1.293)	76	521974	40.7205	40.720	80.00- 120.00	100.00
7.989	7.989 (1.293)	41	548267			82.96- 142.96	105.04
7.989	7.989 (1.293)	78	170187			2.55- 62.55	32.60
146 Dibromochloromethane					CAS #: 124-48-1		
8.154	8.154 (0.946)	129	813244	52.5902	52.590	80.00- 120.00	100.00
8.154	8.154 (0.946)	127	630984			47.77- 107.77	77.59
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.268	8.261 (0.959)	107	637605	50.3703	50.370	80.00- 120.00	100.00
8.268	8.261 (0.959)	109	602701			64.60- 124.60	94.53
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.115	7.115 (1.151)	63	745772	45.9226	45.922	80.00- 120.00	100.00
7.122	7.115 (1.152)	65	232876			0.95- 60.95	31.23
7.122	7.122 (1.152)	144	80852			0.00- 40.45	10.84
154 Chlorobenzene					CAS #: 108-90-7		
8.641	8.641 (1.002)	112	964821	49.0550	49.055	80.00- 120.00	100.00
8.641	8.641 (1.002)	114	310196			2.13- 62.13	32.15
8.641	8.641 (1.002)	77	512157			26.35- 86.35	53.08
155 Ethyl Benzene					CAS #: 100-41-4		
8.691	8.684 (1.008)	106	487590	49.5777	49.578	80.00- 120.00	100.00
8.684	8.684 (1.007)	91	1509744			282.48- 342.48	309.63
156 Nonane					CAS #: 111-84-2		
8.705	8.705 (1.010)	43	824864	43.2718	43.272	80.00- 120.00	100.00
8.705	8.705 (1.010)	57	785976			59.52- 119.52	95.29
8.705	8.705 (1.010)	85	269379			0.00- 59.76	32.66
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.011)	131	489317	45.2049	45.205	80.00- 120.00	100.00
8.712	8.712 (1.011)	117	333273			38.22- 98.22	68.11
8.712	8.712 (1.011)	95	181504			7.54- 67.54	37.09
158 m,p-Xylene					CAS #: 108-38-3		
8.784	8.784 (1.019)	106	596573	48.7581	48.758	80.00- 120.00	100.00
8.784	8.784 (1.019)	91	1193910			171.36- 231.36	200.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
9.128	9.121 (1.059)	106	552333	47.5514	47.551	80.00- 120.00	100.00
9.121	9.121 (1.058)	91	1168785			179.99- 239.99	211.61
165 Styrene					CAS #: 100-42-5		
9.149	9.149 (1.061)	104	959229	47.6653	47.665	80.00- 120.00	100.00
9.149	9.142 (1.061)	78	456053			19.09- 79.09	47.54
167 Bromoform					CAS #: 75-25-2		
9.350	9.350 (1.085)	173	767077	52.3135	52.313	80.00- 120.00	100.00
9.350	9.350 (1.085)	171	396410			21.45- 81.45	51.68
168 Cumene					CAS #: 98-82-8		
9.414	9.414 (1.092)	105	1762729	47.9992	47.999	80.00- 120.00	100.00
9.414	9.414 (1.092)	120	483117			0.00- 56.99	27.41
9.407	9.407 (1.091)	51	199495			0.00- 41.77	11.32
169 Cyclohexanone					CAS #: 108-94-1		
9.579	9.579 (1.111)	55	482447	41.7452	41.745	80.00- 120.00	100.00
9.579	9.579 (1.111)	98	193707			9.22- 69.22	40.15
9.579	9.579 (1.111)	42	335390			42.60- 102.60	69.52
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.737	9.737 (1.130)	83	879560	48.3069	48.307	80.00- 120.00	100.00
9.737	9.737 (1.130)	85	575212			34.35- 94.35	65.40
177 Bromobenzene					CAS #: 108-86-1		
9.737	9.730 (1.130)	156	584952	51.2384	51.238	80.00- 120.00	100.00
9.737	9.737 (1.130)	158	567706			67.29- 127.29	97.05
9.730	9.730 (1.129)	77	890773			132.41- 192.41	152.28
178 Propylbenzene					CAS #: 103-65-1		
9.758	9.758 (1.132)	91	2108947	49.2168	49.217	80.00- 120.00	100.00
9.758	9.758 (1.132)	120	504184			0.00- 53.77	23.91
9.758	9.758 (1.132)	105	77910			0.00- 33.81	3.69
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.787	9.787 (1.135)	110	270389	49.2983	49.298	80.00- 120.00	100.00
9.787	9.787 (1.135)	75	905727			285.00- 345.00	334.97
9.787	9.787 (1.135)	61	231047			54.06- 114.06	85.45
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
9.787	9.787 (1.135)	53	282527	65.0975	65.098	80.00- 120.00	100.00(R)
9.787	9.787 (1.135)	89	146003			21.19- 81.19	51.68
9.787	9.787 (1.135)	75	905727			372.45- 432.45	320.58

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	990780	44.7172	44.717	80.00- 120.00	100.00
9.808	9.808 (1.138)	71	348342			4.13- 64.13	35.16
9.816	9.808 (1.139)	142	49590			0.00- 34.73	5.01
183 4-Ethyltoluene					CAS #: 622-96-8		
9.851	9.851 (1.143)	120	546566	49.2090	49.209	80.00- 120.00	100.00
9.851	9.851 (1.143)	105	1779863			296.79- 356.79	325.64
184 2-Chlorotoluene					CAS #: 95-49-8		
9.873	9.873 (1.145)	126	453886	50.2929	50.293	80.00- 120.00	100.00
9.873	9.873 (1.145)	91	1599401			336.29- 396.29	352.38
9.873	9.873 (1.145)	65	295847			38.83- 98.83	65.18
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
9.901	9.901 (1.149)	120	757607	48.5633	48.563	80.00- 120.00	100.00
9.901	9.901 (1.149)	105	1526556			176.40- 236.40	201.50
188 alpha Methyl Styrene					CAS #: 98-83-9		
10.102	10.102 (1.172)	118	725874	45.4313	45.431	80.00- 120.00	100.00
10.102	10.102 (1.172)	103	407059			26.64- 86.64	56.08
189 tert-Butylbenzene					CAS #: 98-06-6		
10.174	10.174 (1.180)	119	1364736	47.5456	47.546	80.00- 120.00	100.00
10.174	10.174 (1.180)	134	351786			0.00- 54.82	25.78
10.174	10.174 (1.180)	91	885899			36.92- 96.92	64.91
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.224	10.224 (1.186)	105	1514245	49.2244	49.224	80.00- 120.00	100.00
10.224	10.224 (1.186)	120	720286			16.58- 76.58	47.57
192 sec-Butylbenzene					CAS #: 135-98-8		
10.360	10.360 (1.202)	134	456416	49.2292	49.229	80.00- 120.00	100.00
10.360	10.353 (1.202)	105	2189121			451.53- 511.53	479.63
10.360	10.353 (1.202)	91	342617			46.48- 106.48	75.07
194 p-Cymene					CAS #: 99-87-6		
10.467	10.467 (1.214)	119	1948184	50.1773	50.177	80.00- 120.00	100.00
10.467	10.467 (1.214)	134	520411			0.00- 56.79	26.71
10.467	10.467 (1.214)	91	450003			0.00- 54.04	23.10
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.518	10.517 (1.220)	146	1082245	51.7829	51.783	80.00- 120.00	100.00
10.518	10.517 (1.220)	148	690215			33.53- 93.53	63.78
10.518	10.517 (1.220)	111	426236			11.05- 71.05	39.38

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	1086417	50.4666	50.466	80.00- 120.00	100.00
10.596	10.596 (1.229)	148	694528			33.47- 93.47	63.93
10.596	10.596 (1.229)	111	416148			9.65- 69.65	38.30
199 alpha-Chlorotoluene					CAS #: 100-44-7		
10.711	10.711 (1.243)	91	1396522	47.1819	47.182	80.00- 120.00	100.00
10.711	10.711 (1.243)	126	315762			0.00- 52.04	22.61
201 Undecane					CAS #: 1120-21-4		
10.804	10.804 (1.253)	57	1188679	45.5273	45.527	80.00- 120.00	100.00
10.804	10.804 (1.253)	43	999871			55.86- 115.86	84.12
202 Butylbenzene					CAS #: 104-51-8		
10.818	10.818 (1.255)	134	511967	50.8561	50.856	80.00- 120.00	100.00
10.818	10.818 (1.255)	91	1825523			331.99- 391.99	356.57
10.818	10.818 (1.255)	92	938161			161.01- 221.01	183.25
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
10.926	10.926 (1.268)	146	1043847	51.6857	51.686	80.00- 120.00	100.00
10.926	10.926 (1.268)	148	662012			33.23- 93.23	63.42
10.919	10.919 (1.267)	111	421427			12.36- 72.36	40.37
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.606	11.606 (1.347)	157	622835	53.1862	53.186	80.00- 120.00	100.00
11.606	11.599 (1.347)	75	515889			58.96- 118.96	82.83
11.606	11.606 (1.347)	155	482139			47.82- 107.82	77.41
207 Dodecane					CAS #: 112-40-3		
11.714	11.714 (1.359)	57	1279263	57.9435	57.943	80.00- 120.00	100.00
11.714	11.714 (1.359)	43	1015447			50.85- 110.85	79.38
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.301	12.301 (1.427)	180	949246	66.1737	66.174	80.00- 120.00	100.00
12.301	12.301 (1.427)	182	905084			65.40- 125.40	95.35
215 Hexachlorobutadiene					CAS #: 87-68-3		
12.387	12.387 (1.437)	225	734886	67.8202	67.820	80.00- 120.00	100.00
12.387	12.387 (1.437)	223	463511			33.70- 93.70	63.07
216 Naphthalene					CAS #: 91-20-3		
12.552	12.559 (1.456)	128	218647	4.99157	4.992	80.00- 120.00	100.00
12.552	12.559 (1.456)	127	28980			0.00- 43.10	13.25
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
12.803	12.810 (1.485)	180	895119	68.1917	68.192	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 (1.485)	182	853575			65.67- 125.67	95.36
12.803	12.802 (1.485)	145	311081			6.02- 66.02	34.75

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072705.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	243047	1.70
108 1,4-Difluorobenze	785289	471173	1099405	877445	11.74
153 Chlorobenzene-d5	683596	410158	957034	719626	5.27

		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	8.61	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: 27JUL21
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/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	57.494	114.99	70-130
5 Propylene	50.000	49.771	99.54	70-130
7 1,1-Difluoroethan	50.000	51.650	103.30	70-130
8 Freon 12	50.000	52.186	104.37	70-130
9 Chlorodifluoromet	50.000	53.257	106.51	70-130
10 Freon 114	50.000	53.798	107.60	70-130
12 Isobutane	50.000	50.686	101.37	70-130
15 Chloromethane	50.000	57.988	115.98	70-130
18 Butane	50.000	53.668	107.34	70-130
19 Vinyl Chloride	50.000	53.686	107.37	70-130
20 1,3-Butadiene	50.000	48.263	96.53	70-130
24 Bromomethane	50.000	51.293	102.59	70-130
30 Chloroethane	50.000	51.811	103.62	70-130
31 Isopentane	50.000	48.948	97.90	70-130
32 Vinyl Bromide	50.000	50.542	101.08	70-130
33 Freon 11	50.000	54.724	109.45	70-130
34 Dichlorofluoromet	50.000	53.801	107.60	70-130
35 Pentane	50.000	47.140	94.28	70-130
38 Ethyl Ether	50.000	49.622	99.24	70-130
39 Ethanol	58.000	43.067	74.25	70-130
42 Acrolein	58.000	53.723	92.63	70-130
43 Freon 113	50.000	52.095	104.19	70-130
44 1,1-Dichloroethen	50.000	48.744	97.49	70-130
47 Acetone	50.000	49.825	99.65	70-130
48 Carbon Disulfide	50.000	52.609	105.22	70-130
49 Iodomethane	50.000	57.948	115.90	70-130
52 2-Propanol	50.000	51.090	102.18	70-130
54 3-Chloropropene	50.000	47.864	95.73	70-130
57 Acetonitrile	50.000	46.510	93.02	70-130
59 Methylene Chlorid	50.000	49.646	99.29	70-130
62 tert-Butyl alcoho	50.000	46.861	93.72	70-130
63 Methyl tert-butyl	50.000	47.977	95.95	70-130
64 trans-1,2-Dichlor	50.000	45.955	91.91	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	42.427	84.85	70-130
67	Hexane	50.000	47.523	95.05	70-130
71	1,1-Dichloroethan	50.000	47.489	94.98	70-130
72	Isopropyl ether	50.000	45.458	90.92	70-130
73	Vinyl Acetate	50.000	47.764	95.53	70-130
79	Ethyl-tert-butyl	50.000	45.104	90.21	70-130
84	2,2-Dichloropropa	50.000	46.016	92.03	70-130
85	cis-1,2-Dichloroe	50.000	45.325	90.65	70-130
86	2-Butanone	50.000	48.321	96.64	70-130
87	Ethyl Acetate	50.000	46.907	93.81	70-130
89	Tetrahydrofuran	50.000	43.380	86.76	70-130
92	Chloroform	50.000	46.849	93.70	70-130
94	Cyclohexane	50.000	43.375	86.75	70-130
96	1,1,1-Trichloroet	50.000	45.016	90.03	70-130
99	1,1-Dichloroprope	50.000	46.732	93.46	70-130
97	Carbon Tetrachlor	50.000	49.714	99.43	70-130
101	2,2,4-Trimethylpe	50.000	44.492	88.98	70-130
102	Benzene	50.000	47.001	94.00	70-130
105	tert-Amyl methyl	50.000	44.846	89.69	70-130
106	1,2-Dichloroethan	50.000	48.083	96.17	70-130
107	Heptane	50.000	41.830	83.66	70-130
110	n-Butanol	50.000	47.202	94.40	70-130
111	Trichloroethene	50.000	48.948	97.90	70-130
118	Dibromomethane	50.000	56.614	113.23	70-130
127	Methylcyclohexane	50.000	43.836	87.67	70-130
114	1,2-Dichloropropa	50.000	36.851	73.70	70-130
116	Methyl Methacryla	50.000	50.194	100.39	70-130
117	1,4-Dioxane	50.000	46.868	93.74	70-130
122	Bromodichlorometh	50.000	44.484	88.97	70-130
126	cis-1,3-Dichlorop	50.000	44.681	89.36	70-130
131	4-Methyl-2-pentan	50.000	40.722	81.44	70-130
136	Octane	50.000	41.166	82.33	70-130
137	Toluene	50.000	45.278	90.56	70-130
139	trans-1,3-Dichlor	50.000	48.297	96.59	70-130
141	1,1,2-Trichloroet	50.000	48.297	96.59	70-130
142	Tetrachloroethene	50.000	51.788	103.58	70-130
143	2-Hexanone	50.000	47.170	94.34	70-130
144	1,3-Dichloropropa	50.000	40.720	81.44	70-130
146	Dibromochlorometh	50.000	52.590	105.18	70-130
148	1,2-Dibromoethane	50.000	50.370	100.74	70-130
151	1-Bromo-2-Chloroe	50.000	45.922	91.85	70-130
154	Chlorobenzene	50.000	49.055	98.11	70-130
155	Ethyl Benzene	50.000	49.578	99.16	70-130
156	Nonane	50.000	43.272	86.54	70-130
157	1,1,1,2-Tetrachlo	50.000	45.205	90.41	70-130
158	m,p-Xylene	50.000	48.758	97.52	70-130
164	o-Xylene	50.000	47.551	95.10	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165 Styrene	50.000	47.665	95.33	70-130
167 Bromoform	50.000	52.313	104.63	70-130
168 Cumene	50.000	47.999	96.00	70-130
169 Cyclohexanone	50.000	41.745	83.49	70-130
175 1,1,2,2-Tetrachlo	50.000	48.307	96.61	70-130
177 Bromobenzene	50.000	51.238	102.48	70-130
178 Propylbenzene	50.000	49.217	98.43	70-130
179 1,2,3-Trichloropr	50.000	49.298	98.60	70-130
181 trans-1,4-Dichlor	50.000	65.098	130.20*	70-130
182 Decane	50.000	44.717	89.43	70-130
183 4-Ethyltoluene	50.000	49.209	98.42	70-130
184 2-Chlorotoluene	50.000	50.293	100.59	70-130
185 1,3,5-Trimethylbe	50.000	48.563	97.13	70-130
188 alpha Methyl Styr	50.000	45.431	90.86	70-130
189 tert-Butylbenzene	50.000	47.546	95.09	70-130
190 1,2,4-Trimethylbe	50.000	49.224	98.45	70-130
192 sec-Butylbenzene	50.000	49.229	98.46	70-130
194 p-Cymene	50.000	50.177	100.35	70-130
195 1,3-Dichlorobenze	50.000	51.783	103.57	70-130
196 1,4-Dichlorobenze	50.000	50.466	100.93	70-130
199 alpha-Chlorotolue	50.000	47.182	94.36	70-130
201 Undecane	50.000	45.527	91.05	70-130
202 Butylbenzene	50.000	50.856	101.71	70-130
204 1,2-Dichlorobenze	50.000	51.686	103.37	70-130
206 1,2-Dibromo-3-chl	50.000	53.186	106.37	70-130
207 Dodecane	50.000	57.943	115.89	70-130
213 1,2,4-Trichlorobe	58.000	66.174	114.09	70-130
215 Hexachlorobutadie	58.000	67.820	116.93	70-130
216 Naphthalene	5.800	4.992	86.06	60-140
222 1,2,3-Trichlorobe	58.000	68.192	117.57	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.852	99.41	70-130
$ 134 Toluene-d8	25.000	23.169	92.68	70-130
$ 170 4-Bromofluorobenz	25.000	24.841	99.36	70-130

Data File: /chem/msd3.i/27JUL21.b/3072705.d

Page 1

Date : 27-JUL-2021 12:40

Client ID: LCSD

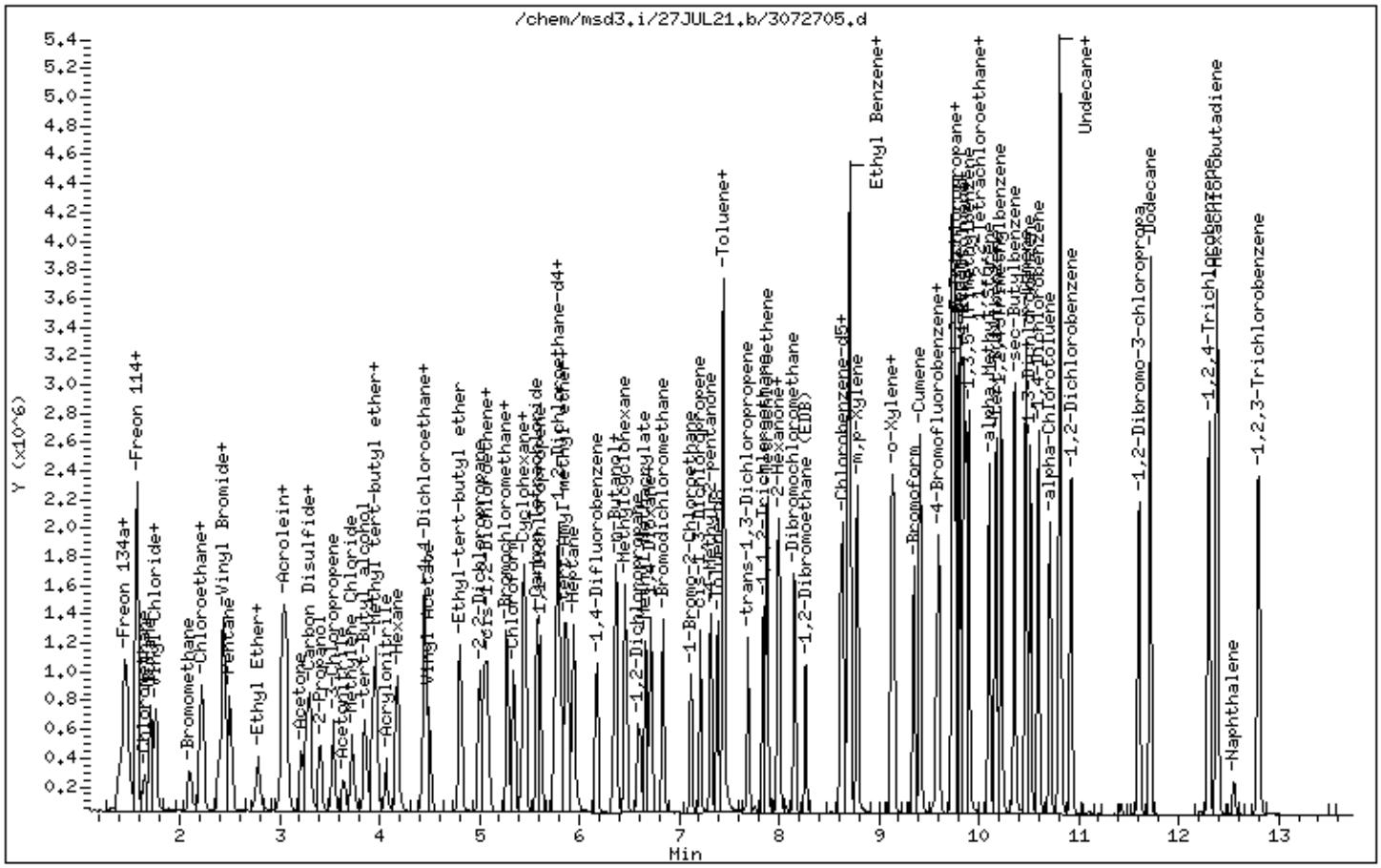
Instrument: msd3.i

Sample Info: 100mL 3018-2121A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



MSD3

Method TO-15/TO-14

SOP# 6

BFB Tune Verification: (204544/218304) * 100 =93.70%

	3234-42	Exp. Date:	9/22/2021			Vacuum:	NA				
BCM	238986			Surrogate # 3234-42		Exp Date:	9/22/2021			Exp Date	
1,4-DFB	785289			CCV	3018-2071A	Exp Date:	9/2/2021	LCS	3018-2121A	Exp Date	9/22/2021
CB-d5	683596			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
√	3072702	BFB Tune Check	3234-42	8	36ng	200mL	1.00	LD	LD	07/27/21	1102	LD	Exp. 9/22/21;
√	3072703	CCV	3018-2071A	13	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/27/21	1136	LD	Exp. 9/2/21; 1 out AT-20. Naph @ 37%
√	3072704	LCS	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/27/21	1213	LD	Exp. 9/22/21; 1 out AT-20
√	3072705	LCSD	3018-2121A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	07/27/21	1240	LD	Exp. 9/22/21; 1 out AT-20 RPD
√	3072706	CCVsp	3018-2013	12	50ppbv (200ppbv)	50mL	1.00	LD	LD	07/27/21	1307	LD	Exp. 8/04/21; 0 out
X	3072707	System Blank	34353	12	Humid	200mL	1.00	LD	LD	07/27/21	1433	LD	Chemstation froze after loading TPHg Calib, double IS
√	3072708	TPHg Calib	3234-26A	11	500ppbv (625ppbv)	160mL	1.00	LD	LD	07/27/21	1501	LD	Exp. 9/3/21
√	3072709	Lab Blank	34353	11	Humid	200mL	1.00	LD	LD	07/27/21	1547	LD	
√	3072710	2107284-21A	O0853	1	7.1 Hg->10 psi	200mL	2.20	kk	LD	07/27/21	1701	kk	
√	3072711	2107284-22A	O0775	2	7.3 Hg->9.9 psi	200mL	2.21	kk	LD	07/27/21	1730	kk	E" 1,1-DFA >400ppbv
√	3072712	2107284-23A	34001086cl	3	6.3 Hg->10 psi	200mL	2.13	kk	LD	07/27/21	1800	kk	confirmation needed
√	3072713	2107284-24A	N2619	4	6.9 Hg->10 psi	200mL	2.18	kk	LD	07/27/21	1829	kk	
√	3072714	2107284-25A	O0732	5	6.7 Hg->9.9 psi	200mL	2.15	kk	LD	07/27/21	1858	kk	
√	3072715	2107284-26A	S1120	6	6.5 Hg->10.1 psi	200mL	2.15	kk	LD	07/27/21	1927	kk	
√	3072716	2107362-04A	1028	7	6.5 Hg->10.1 psi	140mL	3.08	kk	LD	07/27/21	1955	kk	dil tc
√	3072717	2107362-03A	S0605	8	6.5 Hg->10.1 psi	100mL	8620	kk	LD	07/27/21	2022	kk	Can dil #AT9302 2000X, DF=8620, dil tc. "E"1,1-DFA <400ppbv
√	3072718	2107470-01A	O0887	10	5.5 Hg->10 psi	200mL	2.06	kk	LD	07/27/21	2052	kk	high matrix
X	3072719	System Blank	34353	2	Humid	200mL	1.00	kk	kk	07/27/21	2138	kk	leg validation.Matrix Carryover. 1,1-DFA ND
√	3072720	System Blank	34353	1	Humid	200mL	1.00	kk	kk	07/27/21	2236	kk	
C	3072721	2107284-23AX	34001086cl	3	6.3 Hg->10 psi	200mL	2.13	LD	kk	07/27/21	2347	LD	confirmation
√	3072722	2107361-01A	O0252	1	5.0 Hg->10 psi	200mL	2.02	LD	kk	07/28/21	0016	LD	Green dot, Pi: 7.3 psi-> Pf: 3.9 psi
√	3072723	2107362A-01A	1L3927	2	5.1 Hg->10 psi	200mL	2.02	LD	kk	07/28/21	0045	LD	
√	3072724	2107362A-02A	N2650	4	1.8 Hg->10.1 psi	200mL	1.79	LD	kk	07/28/21	0114	LD	
√	3072725	2107362A-06A	O0476	5	5.5 Hg->9.8 psi	200mL	2.04	LD	kk	07/28/21	0143	LD	
√	3072726	2107362A-07A	N6064	6	5.9 Hg->10 psi	200mL	2.09	LD	kk	07/28/21	0212	LD	
√	3072727	2107362A-08A	S1437	7	6.3 Hg->9.7 psi	200mL	2.10	LD	kk	07/28/21	0242	LD	
√	3072728	2107362A-09A	1L3957	8	8.4 Hg->9.9 psi	200mL	2.32	LD	kk	07/28/21	0311	LD	
√	3072729	2107362A-11A	1L2741	9	5.9 Hg->9.8 psi	200mL	2.07	LD	kk	07/28/21	0340	LD	
√	3072730	2107362A-05A	N5581	11	7.6 Hg->9.9 psi	20mL	22.4	LD	kk	07/28/21	0406	LD	dil TC
√	3072731	System Blank	34353	12	Humid	200mL	1.00	LD	kk	07/28/21	0435	LD	leg validation

7/29/21

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init.	Date Analyzed	Time	Review Init	Comments
√	3072732	2107362-10A	O0801	1	5.9 Hg->10.1 psi	30mL	14.0	LD	LD	07/28/21	0753	LD	dil TC
√	3072733	2107362-12A	N5532	2	6.1 Hg->9.9 psi	25mL	16.8	LD	LD	07/28/21	0820	LD	dil TC

7/29/21

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

					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		
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

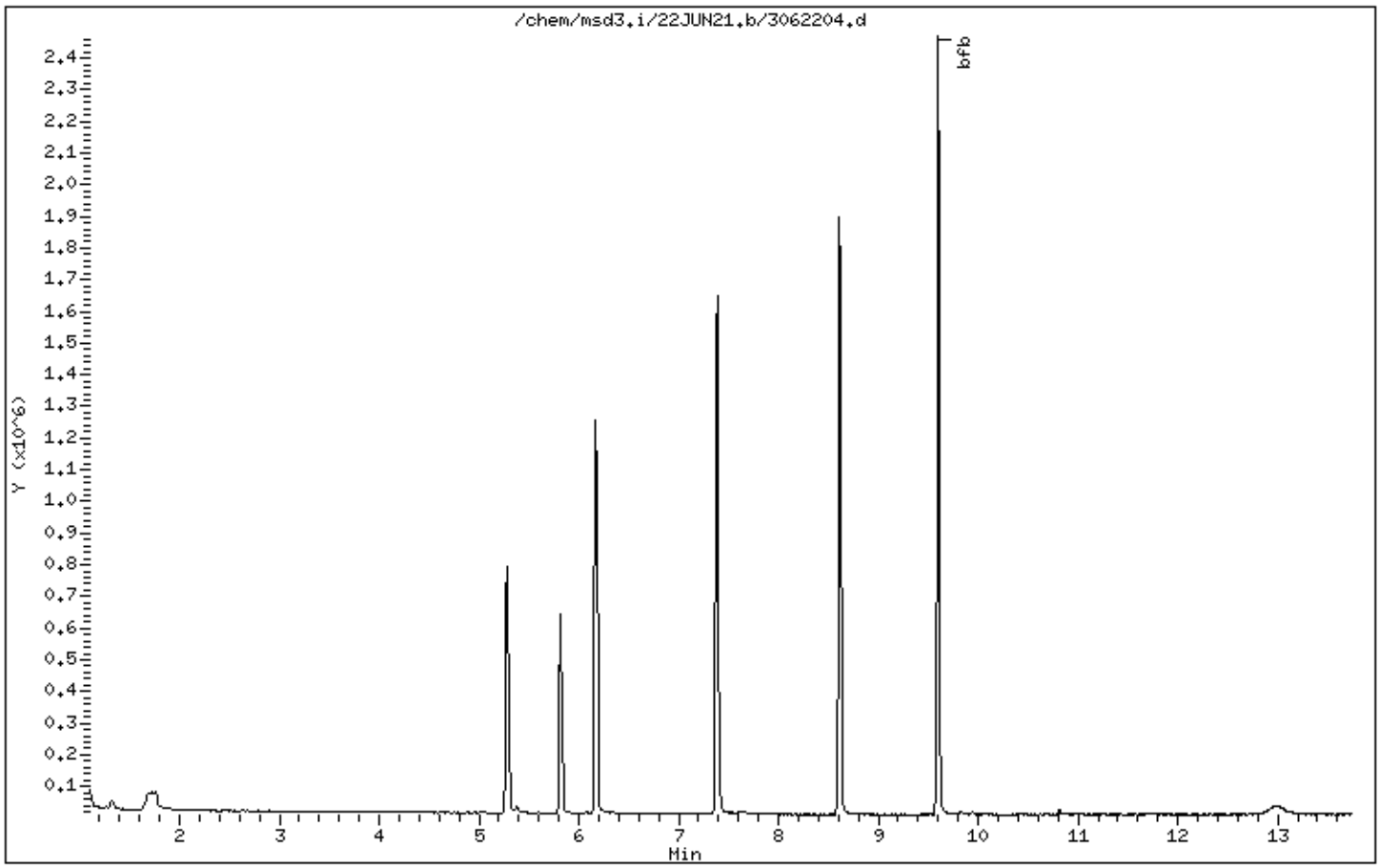
Sample Info: 200mL #3234-42;BFB;BFB

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

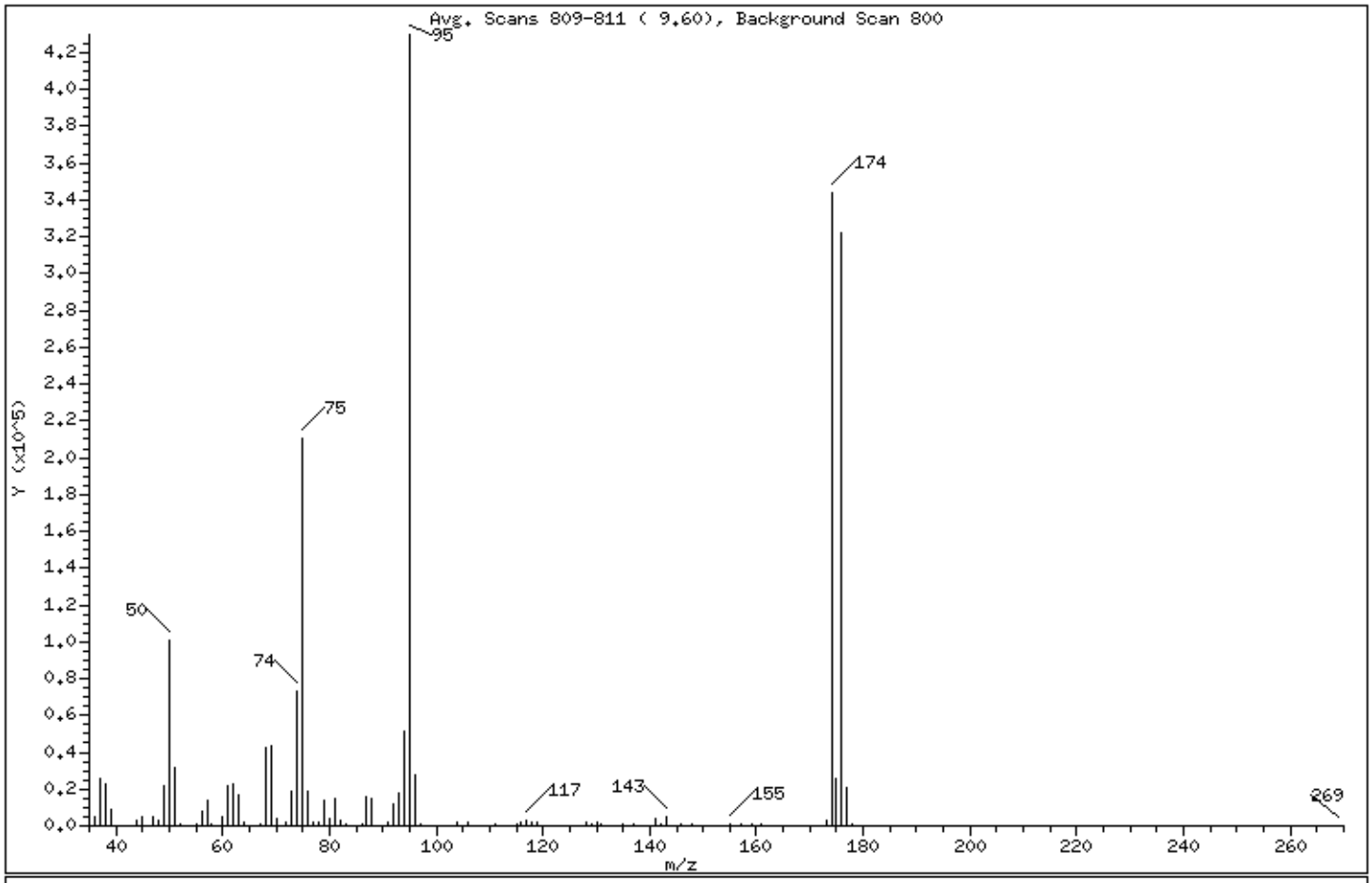
Volume Injected (uL): 1.0

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/27JUL21.b/3072702.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 27-JUL-2021 11:02
Operator : LD Inst ID: msd3.i
Smp Info : 200mL #3234-42;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msd3.i/27JUL21.b/bfb30.m
Meth Date : 03-Sep-2019 11:54 u7js Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 8 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	251099			100.00- 100.00	100.00
9.600	9.729	-0.129	50	63072			8.00- 40.00	25.12
9.600	9.729	-0.129	75	130070			30.00- 66.00	51.80
9.600	9.729	-0.129	96	16687			5.00- 9.00	6.65
9.600	9.729	-0.129	173	3007			0.00- 1.99	1.38
9.600	9.729	-0.129	174	218304			50.01- 120.00	86.94
9.600	9.729	-0.129	175	15960			4.00- 9.00	7.31
9.600	9.729	-0.129	176	204565			93.00- 101.00	93.71
9.600	9.729	-0.129	177	12914			5.00- 9.00	6.31

Data File: /chem/msd3.i/27JUL21.b/3072702.d

Date : 27-JUL-2021 11:02

Client ID: BFB

Instrument: msd3.i

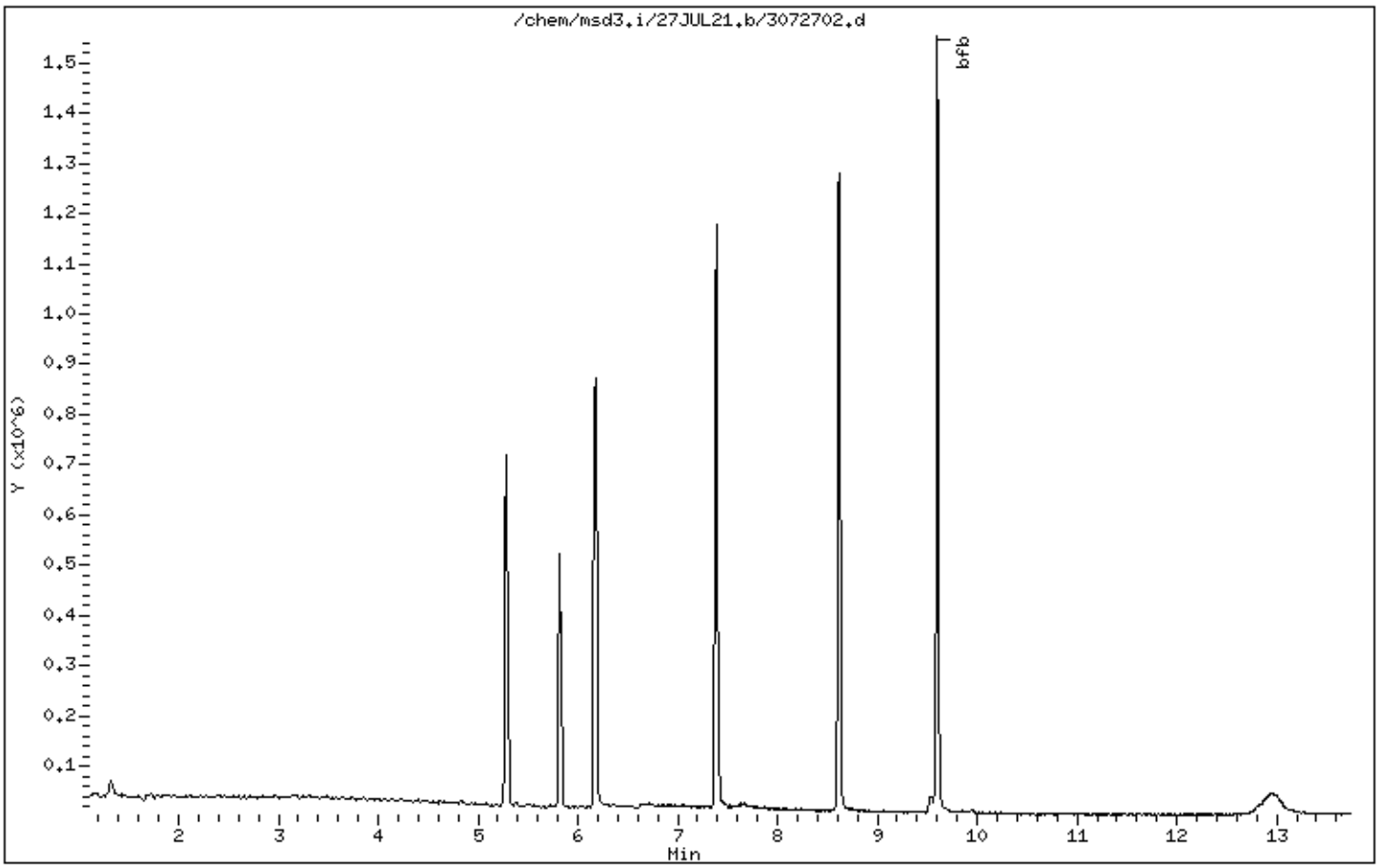
Sample Info: 200mL #3234-42;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msd3.i/27JUL21.b/3072702.d

Date : 27-JUL-2021 11:02

Client ID: BFB

Instrument: msd3.i

Sample Info: 200mL #3234-42;BFB;BFB

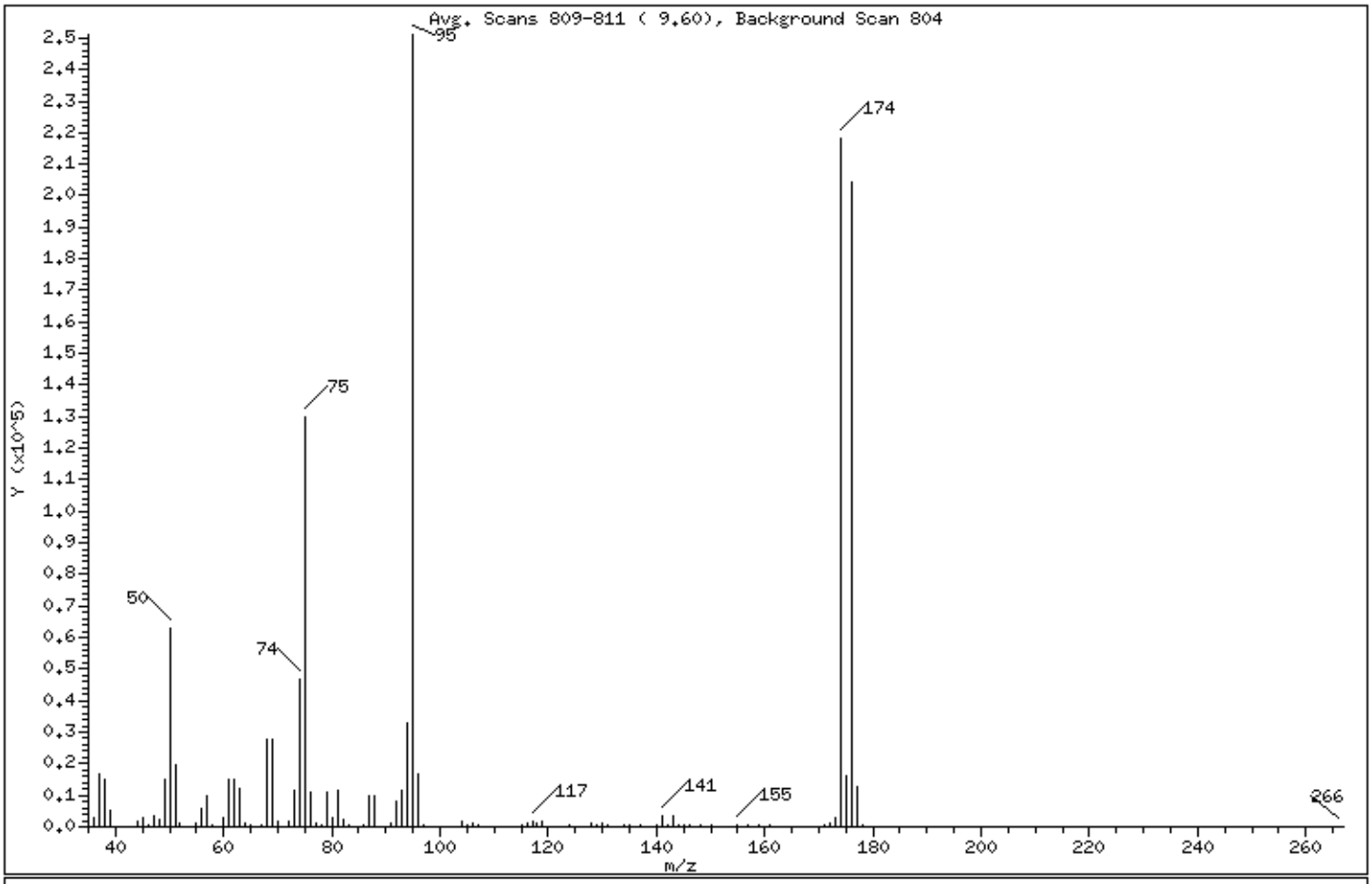
Volume Injected (uL): 1.0

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	25.12
75	30.00 - 66.00% of mass 95	51.80
96	5.00 - 9.00% of mass 95	6.65
173	Less than 1.99% of mass 174	1.20 (1.38)
174	50.01 - 120.00% of mass 95	86.94
175	4.00 - 9.00% of mass 174	6.36 (7.31)
176	93.00 - 101.00% of mass 174	81.47 (93.71)
177	5.00 - 9.00% of mass 176	5.14 (6.31)

Date : 27-JUL-2021 11:02

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: 3072702.d
Spectrum: Avg. Scans 809-811 (9.60), Background Scan 804
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2599	70.00	1941	106.00	1407	145.00	460
37.00	16864	71.00	199	107.00	382	146.00	465
38.00	14977	72.00	1521	110.00	34	148.00	653
39.00	5406	73.00	11540	112.00	145	149.00	259
42.00	49	74.00	46712	113.00	171	150.00	349
44.00	1866	75.00	130064	115.00	497	152.00	265
45.00	2988	76.00	10901	116.00	1171	153.00	179
46.00	476	77.00	1314	117.00	1933	154.00	265
47.00	3379	78.00	823	118.00	1426	155.00	818
48.00	2284	79.00	11168	119.00	1783	156.00	79
49.00	15224	80.00	3109	120.00	187	157.00	515
50.00	63072	81.00	11364	123.00	86	158.00	93
51.00	19656	82.00	2176	124.00	353	159.00	460
52.00	943	83.00	511	126.00	177	161.00	427
53.00	109	85.00	69	128.00	1013	165.00	76
55.00	1192	86.00	337	129.00	609	167.00	73
56.00	5724	87.00	9922	130.00	1185	169.00	141
57.00	9801	88.00	9842	131.00	488	170.00	213
58.00	556	90.00	78	134.00	337	171.00	314
60.00	3004	91.00	1164	135.00	378	172.00	1109
61.00	15198	92.00	8131	136.00	262	173.00	3007
62.00	15221	93.00	11360	137.00	675	174.00	218304
63.00	12305	94.00	32960	139.00	188	175.00	15960
64.00	1337	95.00	251072	140.00	414	176.00	204544
65.00	408	96.00	16680	141.00	3454	177.00	12914
67.00	861	97.00	554	142.00	464	178.00	537
68.00	27744	104.00	1509	143.00	3373	266.00	76
69.00	27896	105.00	472	144.00	337		

Canister Dilution Form

Workorder #: 2107362A

Date Prepared: 7/27/21 **Expiration Date:** 8/14/21 **Initials:** LD

Pressurized By: [illegible] **1L pressurized to 15psi = 2000mL**

Sample ID	Sample Can #	Transfer Can #	Volume Sample Added (mL)	Final Volume	Final Dilution Factor	*Syringe ID	Time dilution was made (military)
03A	LC1134	AT 9302	1	2000	2000X	170505	1135

**All syringes used must be labeled with IDs generated by QA.*

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd3.i/27JUL21.b/3072706.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 27-JUL-2021 13:07
Operator : LD Inst ID: msd3.i
Smp Info : 50mL 3018-2013
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msd3.i/27JUL21.b/321q0622a.m
Meth Date : 27-Jul-2021 13:47 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	270618	25.0000			80.00- 120.00	100.00
5.284	5.284 (1.000)	128	211488				48.46- 108.46	78.15
5.270	5.270 (1.000)	49	377651				120.39- 180.39	139.55
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.166	6.166 (1.000)	114	961738	25.0000			80.00- 120.00	100.00
6.166	6.166 (1.000)	88	142765				0.00- 45.52	14.84
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
8.612	8.612 (1.000)	117	790057	25.0000			80.00- 120.00	100.00
8.612	8.612 (1.000)	82	419004				25.46- 85.46	53.03
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.816	5.816 (1.101)	65	378262	25.0000	25.400		80.00- 120.00	100.00
5.816	5.816 (1.101)	67	189510				21.66- 81.66	50.10
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.380	7.380 (1.197)	98	888722	25.0000	22.435		80.00- 120.00	100.00
7.380	7.380 (1.197)	70	98626				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)							
7.380	7.380 (1.197)	100	579993			36.47- 96.47	65.26
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
9.601	9.601 (1.115)	174	518838	25.0000	24.828	80.00- 120.00	100.00
9.601	9.601 (1.115)	95	585027			93.06- 153.06	112.76
9.601	9.601 (1.115)	176	477632			62.87- 122.87	92.06
3 Freon 143a					CAS #: 420-46-2		
1.353	1.353 (0.256)	65	261998	50.0000	57.877	80.00- 120.00	100.00
1.353	1.353 (0.256)	69	620222			217.09- 277.09	236.73
1.353	1.353 (0.256)	64	64691			0.00- 55.87	24.69
6 Propane					CAS #: 74-98-6		
1.423	1.423 (0.269)	43	121599	50.0000	49.308	80.00- 120.00	100.00
1.423	1.423 (0.269)	39	89939			41.62- 101.62	73.96
1.423	1.423 (0.269)	41	67116			22.97- 82.97	55.19
13 Freon 142b					CAS #: 75-68-3		
1.605	1.605 (0.304)	65	855659	50.0000	59.440	80.00- 120.00	100.00
1.605	1.605 (0.304)	45	232890			0.00- 58.17	27.22
36 1-Pentene					CAS #: 109-67-1		
2.444	2.444 (0.463)	55	493001	50.0000	53.928	80.00- 120.00	100.00
2.444	2.444 (0.463)	42	607826			99.17- 159.17	123.29
40 Freon 123a					CAS #: 354-23-4		
2.878	2.878 (0.545)	117	599753	50.0000	56.341	80.00- 120.00	100.00
2.878	2.878 (0.545)	67	796573			103.13- 163.13	132.82
41 Freon 123					CAS #: 306-83-2		
2.976	2.976 (0.563)	83	866622	50.0000	55.507	80.00- 120.00	100.00
2.976	2.976 (0.563)	133	195281			0.00- 51.81	22.53
2.976	2.976 (0.563)	85	582566			37.13- 97.13	67.22
55 Cyclopentene					CAS #: 142-29-0		
3.549	3.549 (0.672)	67	867299	50.0000	52.187	80.00- 120.00	100.00
3.549	3.549 (0.672)	68	324944			7.90- 67.90	37.47
3.549	3.549 (0.672)	53	216793			0.00- 54.87	25.00
56 Methyl Acetate					CAS #: 79-20-9		
3.577	3.577 (0.677)	43	875994	50.0000	51.147	80.00- 120.00	100.00
3.577	3.577 (0.677)	74	152828			0.00- 47.15	17.45
74 Chloroprene					CAS #: 126-99-8		
4.501	4.501 (0.852)	53	717616	50.0000	49.480	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	295977			12.33- 72.33	41.24
4.501	4.501 (0.852)	50	205775			0.00- 57.62	28.67
75 1-Propanol					CAS #: 71-23-8		
4.613	4.613 (0.873)	59	91090	50.0000	40.626	80.00- 120.00	100.00
4.613	4.613 (0.873)	42	73783			53.89- 113.89	81.00
4.613	4.613 (0.873)	41	49070			24.09- 84.09	53.87
88 Methyl Acrylate					CAS #: 96-33-3		
5.130	5.130 (0.971)	55	785683	50.0000	45.076	80.00- 120.00	100.00
5.130	5.130 (0.971)	85	108043			0.00- 43.24	13.75
5.130	5.130 (0.971)	58	66026			0.00- 38.83	8.40
103 Isobutanol					CAS #: 78-83-1		
5.774	5.774 (1.093)	39	124670	50.0000	38.922	80.00- 120.00	100.00
5.774	5.774 (1.093)	43	374550			327.69- 387.69	300.43
5.774	5.774 (1.093)	41	290965			237.56- 297.56	233.39
113 Ethyl acrylate					CAS #: 140-88-5		
6.460	6.460 (0.750)	99	65817	50.0000	52.131	80.00- 120.00	100.00
6.460	6.460 (0.750)	45	90890			124.67- 184.67	138.10
6.460	6.460 (0.750)	55	1043767			1601.30-1661.30	1585.85
115 2-Pentanone					CAS #: 107-87-9		
6.558	6.558 (0.761)	43	1313251	50.0000	44.470	80.00- 120.00	100.00
6.558	6.558 (0.761)	58	108046			0.00- 37.25	8.23
6.558	6.558 (0.761)	86	214148			0.00- 45.08	16.31
145 Butyl Acetate					CAS #: 123-86-4		
8.068	8.068 (1.308)	56	476102	50.0000	37.553	80.00- 120.00	100.00
8.068	8.068 (1.308)	73	173962			5.16- 65.16	36.54
8.068	8.068 (1.308)	43	1120931			214.00- 274.00	235.44
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.712	8.712 (1.012)	131	617310	50.0000	51.945	80.00- 120.00	100.00
8.712	8.712 (1.012)	117	416955			38.22- 98.22	67.54
8.712	8.712 (1.012)	95	225934			7.54- 67.54	36.60
166 2-Heptanone					CAS #: 110-43-0		
9.221	9.221 (1.745)	58	730801	50.0000	36.789	80.00- 120.00	100.00
9.221	9.221 (1.745)	43	1120887			133.36- 193.36	153.38
172 D-Limonene					CAS #: 5989-27-5		
10.417	10.417 (1.210)	68	686838	50.0000	47.850	80.00- 120.00	100.00
10.417	10.417 (1.210)	93	508623			42.08- 102.08	74.05

				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 (1.157)	126	519670	50.0000	50.235	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	1691039			305.94- 365.94	325.41
9.966	9.966 (1.157)	63	237912			15.44- 75.44	45.78
197 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.596	10.596 (1.230)	120	702984	50.0000	49.575	80.00- 120.00	100.00
10.596	10.596 (1.230)	105	1629772			206.43- 266.43	231.84
10.589	10.589 (1.230)	77	193222			0.00- 58.29	27.49
205 Hexachloroethane					CAS #: 67-72-1		
11.098	11.098 (1.289)	201	483599	50.0000	55.864	80.00- 120.00	100.00
11.098	11.098 (1.289)	117	669004			109.77- 169.77	138.34
208 1,3,5-Trichlorobenzene					CAS #: 108-70-3		
11.721	11.721 (1.361)	180	815068	50.0000	43.181	80.00- 120.00	100.00
11.721	11.721 (1.361)	182	780346			65.79- 125.79	95.74
210 alpha-Pinene					CAS #: 80-56-8		
9.371	9.371 (1.088)	93	1194687	50.0000	48.902	80.00- 120.00	100.00
9.371	9.371 (1.088)	77	361218			0.13- 60.13	30.24
214 beta-Pinene					CAS #: 127-91-3		
9.944	9.944 (1.155)	93	917309	50.0000	47.814	80.00- 120.00	100.00
9.966	9.966 (1.157)	91	1691039			145.95- 205.95	184.35

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 27-JUL-2021 13:07
Lab File ID: 3072706.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/27JUL21.b/321q0622a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37578	1.39777	0.010	-1.59888	30.00000	Averaged
$ 134 Toluene-d8	1.02971	0.92408	0.010	10.25813	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.66126	0.65671	0.010	0.68823	30.00000	Averaged
3 Freon 143a	0.41819	0.48407	0.010	-15.75363	30.00000	Averaged
6 Propane	0.22783	0.22467	0.010	1.38481	30.00000	Averaged
13 Freon 142b	1.32985	1.58094	0.010	-18.88065	30.00000	Averaged
36 1-Pentene	0.84453	0.91088	0.010	-7.85594	30.00000	Averaged
40 Freon 123a	0.98340	1.10812	0.010	-12.68200	30.00000	Averaged
41 Freon 123	1.44234	1.60119	0.010	-11.01374	30.00000	Averaged
55 Cyclopentene	1.53527	1.60244	0.010	-4.37493	30.00000	Averaged
56 Methyl Acetate	1.58221	1.61851	0.010	-2.29397	30.00000	Averaged
74 Chloroprene	1.33982	1.32588	0.010	1.04044	30.00000	Averaged
75 1-Propanol	0.20714	0.16830	0.010	18.74818	30.00000	Averaged
88 Methyl Acrylate	1.61021	1.45165	0.010	9.84736	30.00000	Averaged
103 Isobutanol	0.29591	0.23034	0.010	22.15676	30.00000	Averaged
113 Ethyl acrylate	0.03995	0.04165	0.010	-4.26188	30.00000	Averaged
115 2-Pentanone	0.93447	0.83111	0.010	11.06057	30.00000	Averaged
145 Butyl Acetate	0.32956	0.24752	0.010	24.89374	30.00000	Averaged
157 1,1,1,2-Tetrachloroethane	0.37604	0.39067	0.010	-3.89055	30.00000	Averaged
166 2-Heptanone	1.83512	1.35024	0.010	26.42188	30.00000	Averaged
172 D-Limonene	0.45421	0.43468	0.010	4.29967	30.00000	Averaged
186 4-Chlorotoluene	0.32734	0.32888	0.010	-0.46950	30.00000	Averaged
197 1,2,3-Trimethylbenzene	0.44871	0.44489	0.010	0.85005	30.00000	Averaged
205 Hexachloroethane	0.27393	0.30605	0.010	-11.72714	30.00000	Averaged
208 1,3,5-Trichlorobenzene	0.59728	0.51583	0.010	13.63731	30.00000	Averaged
210 alpha-Pinene	0.77304	0.75608	0.010	2.19496	30.00000	Averaged
214 beta-Pinene	0.60708	0.58053	0.010	4.37218	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: 3072706.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msd3.i/27JUL21.b/321q0622a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 27-JUL-2021
Calibration Time: 11:36
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	238986	143392	334580	270618	13.24
108 1,4-Difluorobenze	785289	471173	1099405	961738	22.47
153 Chlorobenzene-d5	683596	410158	957034	790057	15.57

		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	6.17	-0.23
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/27JUL21.b/3072706.d

Page 1

Date : 27-JUL-2021 13:07

Client ID: CCV

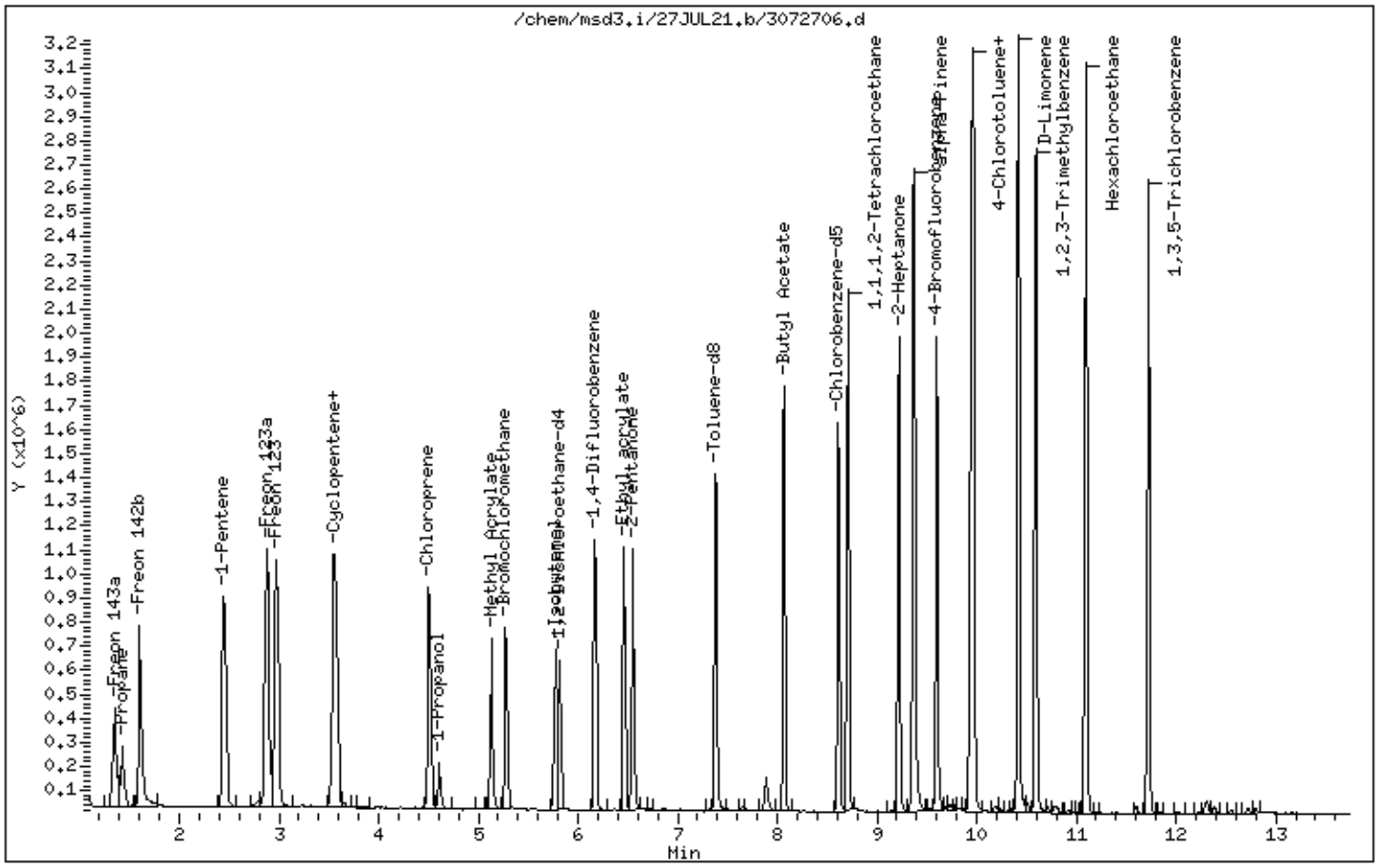
Instrument: msd3.i

Sample Info: 50mL 3018-2013

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Shipping/Receiving Documents

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 SSV-JSS01-01, SSV-HSS01-01, SSV-HMBSS01-01, SSV-GSS01-01, SSV-GSS02-01, SSV-FSS02-01 and SSV-FSS01-01 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 #: 2107362

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

page--of ---

Client: AECOM
Project Name: SMUD 59th St
Project Manager: Robert Kohlhardt Project # 60632793.6
Sampler: T. Headrick
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-VW61A-01	IL3927	21473	7/15/21	0625	7/15/21	0632	-26.5	-5			X			
02A	SG-VW61B-01	IL2913	25444	7/15/21	0653	7/15/21	0658	-27	-1			X			
03A	SG-VW62-01	LC1134	24649	7/15/21	0729	7/15/21	0734	-26	-5			X			
04A	SG-VW30A-03	1028	22504	7/15/21	0811	7/15/21	0817	-27	-5			X			
05A	SG-VW30B-03	IL3365	21418	7/15/21	0855	7/15/21	0901	-27	-5			X			
06A	SG-VW63A-01	IL1839	21412	7/15/21	0946	7/15/21	0954	-26.5	-5			X			
07A	SG-VW63B-01	IL2038	20557	7/15/21	1014	7/15/21	1022	-27	-5			X			
08A	SG-VW64A-01	IL2201	100503	7/15/21	1059	7/15/21	1109	-27	-5			X			
09A	SG-VW64B-01	IL3957	25035	7/15/21	1136	7/15/21	1141	-26.5	-5			X			
10A	SG-VW29A-02	IL2315	25303	7/15/21	1233	7/15/21	1238	-27.5	-4			X			
11A	SG-VW29B-02	IL2741	20283	7/15/21	1257	7/15/21	1305	-28	-5			X			
12A	SG-VW28B-02	IL3231	25472	7/15/21	1345	7/15/21	1350	-25.5	-5			X			
~~13A~~	SSV-JSS01-01	IL3079	21427	7/15/21	1448	7/15/21	1454	-28	-5			X			
14A	SSV-HSS01-01	LC662	21416	7/15/21	1505	7/15/21	1513	-27.5	-5			X			
15A	SSV-HMBSS01-01	IL3375	25462	7/15/21	1525	7/15/21	1530	-26.5	-5			X			
16A	SSV-GSS01-01	IL3868	21476	7/15/21	1546	7/15/21	1553	-27	-5			X			

	Date	Time		Date	Time
Relinquished by: (Signature/Affiliation)	7/15/21	1815	Received by: (Signature/Affiliation)	7/15/21	1815
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		

Lab Use Only

Shipper Name: FD | Custody Seals Intact? Yes No None | Good

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 2107362A

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: 07/29/21
Date Completed:
Date Received: 7/15/21
PO#:
Project#: 60632793.6 SMUD 59th St

Total $: $ 2,667.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Amount$
01A	SG-VW61A-01	TO-15	7/15/2021	$150.00
02A	SG-VW61B-01	TO-15	7/15/2021	$150.00
03A	SG-VW62-01	TO-15	7/15/2021	$150.00
04A	SG-VW30A-03	TO-15	7/15/2021	$150.00
05A	SG-VW30B-03	TO-15	7/15/2021	$150.00
06A	SG-VW63A-01	TO-15	7/15/2021	$150.00
07A	SG-VW63B-01	TO-15	7/15/2021	$150.00
08A	SG-VW64A-01	TO-15	7/15/2021	$150.00
09A	SG-VW64B-01	TO-15	7/15/2021	$150.00
10A	SG-VW29A-02	TO-15	7/15/2021	$150.00
11A	SG-VW29B-02	TO-15	7/15/2021	$150.00
12A	SG-VW28B-02	TO-15	7/15/2021	$150.00

Misc. Charges	1 Liter Summa Canister (2) @ $20.00 each., Shipment 139981	$40.00
	1 Liter Summa Canister (20) @ $20.00 each., Shipment 140023	$400.00
	Soil Gas Manifold (11) @ $15.00 each., Shipment 139981	$165.00
	Soil Gas Manifold (14) @ $15.00 each., Shipment 140023	$210.00
	eCVP (12) @ $3.00 each.	$36.00
	Duplicate Sampling T (2) @ $8.00 each.	$16.00

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
3072708.d

Compound	Ave. RF	% RSD
TPH	57499	0.00014

UD 7/27/14

Air Toxics Ltd.

List of Selected Compounds

Data File: 3072708.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
☑	Unknown Peak 1.3247	0.31	1.325	127628	
☑	Unknown Peak 1.5766	0.08	1.577	32671	
☑	Butane	0.89	1.717	368957	
☑	Unknown Peak 1.7725	0.12	1.773	51676	
☑	Unknown Peak 1.8984	0.08	1.898	35001	
☑	Unknown Peak 2.0943	0.04	2.094	18238	
☑	Isopentane	3.53	2.220	1463793	
☑	Unknown Peak 2.5001	1.21	2.500	501013	
☑	Unknown Peak 2.668	0.24	2.668	99456	
☑	Ethanol	1.44	2.766	595766	
☑	Unknown Peak 2.8778	0.41	2.878	170322	
☑	Unknown Peak 3.0177	0.11	3.018	46768	
☑	Unknown Peak 3.2276	0.06	3.228	24594	
☑	Unknown Peak 3.5494	1.57	3.549	652423	
☑	Unknown Peak 3.5914	1.13	3.591	467709	
☑	Unknown Peak 3.8713	0.72	3.871	297754	
☑	Unknown Peak 4.0951	0.13	4.095	52892	
☑	Hexane	0.81	4.179	337001	
☑	Unknown Peak 4.361	0.13	4.361	54946	
☑	Unknown Peak 4.4029	0.12	4.403	50038	
☑	Unknown Peak 4.4869	0.09	4.487	37579	
☑	Unknown Peak 4.5569	0.09	4.557	35378	
☑	Unknown Peak 4.7108	1.25	4.711	516200	
☑	Unknown Peak 4.7947	0.59	4.795	244966	
☑	Unknown Peak 4.8647	0.12	4.865	51341	
☑	Bromochloromethane	4.03	5.284	1671004	
☑	Tetrahydrofuran	0.57	5.382	238134	
☑	Cyclohexane	1.41	5.438	583467	
☑	Unknown Peak 5.5503	0.69	5.550	285727	
☑	2,2,4-Trimethylpentane	12.16	5.760	5041726	
☐	Benzene	0.10	5.788	39815	
☑	1,2-Dichloroethane-d4	5.78	5.816	2397489	
☑	Heptane	0.86	5.942	355898	
☑	Unknown Peak 6.082	0.22	6.082	92310	
☑	1,4-Difluorobenzene	6.16	6.166	2554203	
☑	Unknown Peak 6.3058	0.14	6.306	58101	
☑	Methylcyclohexane	1.88	6.460	781223	
☑	Unknown Peak 6.5437	0.76	6.544	315544	
☑	Unknown Peak 6.6208	0.16	6.621	66293	
☑	Unknown Peak 6.671	0.04	6.671	14910	
☑	Unknown Peak 6.7999	3.61	6.800	1496635	
☑	Unknown Peak 6.9073	5.75	6.907	2381812	
☑	Unknown Peak 7.0792	0.51	7.079	212406	
☑	Unknown Peak 7.2153	1.20	7.215	496977	
☑	Unknown Peak 7.2870	0.20	7.287	82672	
☑	Toluene-d8	6.44	7.380	2669096	
☐	4-Methyl-2-pentanone	0.02	7.380	8992	
☑	Toluene	4.03	7.437	1669426	
☑	Unknown Peak 7.5162	0.05	7.516	20501	
☑	Unknown Peak 7.6451	0.05	7.645	21336	
☑	Unknown Peak 7.6953	0.17	7.695	72091	
☑	Unknown Peak 7.8314	0.03	7.831	12035	

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List of Selected Compounds

Data File: 3072708.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 7.9245	0.11	7.925	43707	
✓	Unknown Peak 8.0821	0.09	8.082	36169	
✓	Unknown Peak 8.2182	0.05	8.218	21528	
✓	Unknown Peak 8.2826	0.14	8.283	57121	
✓	Unknown Peak 8.3829	0.07	8.383	30029	
✓	Unknown Peak 8.4617	0.06	8.462	26096	
✓	Unknown Peak 8.5477	0.07	8.548	30513	
✓	Chlorobenzene-d5	6.78	8.612	2809510	
✓	Ethyl Benzene	0.87	8.684	361921	
✓	m,p-Xylene	2.56	8.784	1061671	
✓	Unknown Peak 8.9345	0.03	8.935	12971	
✓	Unknown Peak 8.9989	0.03	8.999	11746	
✓	o-Xylene	0.93	9.121	385902	
✓	Unknown Peak 9.3213	0.03	9.321	13426	
✓	Cumene	0.24	9.407	99352	
✓	Unknown Peak 9.4502	0.34	9.450	139960	
✓	Unknown Peak 9.5218	0.16	9.522	65133	
✓	4-Bromofluorobenzene	8.34	9.601	3456495	
✓	Propylbenzene	0.20	9.751	81994	
✓	4-Ethyltoluene	1.12	9.830	465238	
✓	1,3,5-Trimethylbenzene	0.35	9.902	143482	
✓	Unknown Peak 10.080	0.54	10.081	222701	
✓	1,2,4-Trimethylbenzene	1.09	10.224	451628	
✓	Unknown Peak 10.302	0.50	10.303	207092	
✓	Unknown Peak 10.424	0.16	10.424	65882	
✓	Unknown Peak 10.510	0.57	10.510	237396	
✓	Unknown Peak 10.596	0.26	10.596	108146	
✓	Unknown Peak 10.689	0.25	10.689	103462	
✓	Unknown Peak 10.746	0.15	10.747	63465	
✓	Unknown Peak 10.782	0.44	10.783	182433	
✓	Unknown Peak 10.897	0.08	10.897	31112	
✓	Unknown Peak 10.968	0.05	10.969	21242	
✓	Unknown Peak 11.040	0.21	11.040	86898	
✓	Unknown Peak 11.119	0.11	11.119	46207	
✓	Unknown Peak 11.248	0.10	11.248	41145	
✓	Unknown Peak 11.391	0.04	11.391	17032	
✓	Unknown Peak 11.470	0.15	11.470	60633	
✓	Unknown Peak 11.513	0.07	11.513	26942	
✓	Unknown Peak 11.763	0.06	11.764	23220	
✓	Unknown Peak 11.828	0.03	11.828	13538	
✓	Unknown Peak 11.914	0.10	11.914	41880	
✓	Unknown Peak 12.186	0.03	12.187	10547	
✓	Unknown Peak 12.229	0.03	12.230	11884	
✓	Unknown Peak 12.315	0.06	12.315	25880	
✓	Unknown Peak 12.559	0.05	12.559	19751	

Air Toxics Ltd.

File Results

Data File: File Information: 3072723.d
Sample #: 2107362A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	810	(35596308.4461986 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072723.d
Sample #: 2107362A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
	Unknown Peak 1.3107	1.311	2954539	
	Propylene	1.437	228604	
	1,1-Difluoroethane	1.451	24187	
✓	Freon 12	1.465	8203	
✓	Unknown Peak 1.5766	1.577	45362	
✓	Unknown Peak 1.7025	1.703	612950	
	Unknown Peak 1.8984	1.898	46556	
✓	Unknown Peak 2.2342	2.234	49546	
✓	Unknown Peak 2.4441	2.444	29101	
✓	Unknown Peak 2.5140	2.514	85090	
✓	Unknown Peak 2.5420	2.542	64642	
✓	Unknown Peak 2.6679	2.668	29599	
✓	Unknown Peak 2.8079	2.808	54003	
✓	Unknown Peak 2.8638	2.864	70569	
	Unknown Peak 3.0317	3.032	32668	
	Acetone	3.228	252738	
	Carbon Disulfide	3.312	293780	
	2-Propanol	3.424	57810	
✓	Unknown Peak 3.6054	3.605	207403	
✓	Unknown Peak 3.8712	3.871	196708	
✓	Unknown Peak 4.0951	4.095	67690	
✓	Hexane	4.179	876012	
✓	Unknown Peak 4.4169	4.417	51756	
✓	Unknown Peak 4.7108	4.711	98216	
✓	Unknown Peak 4.8087	4.809	159698	
✓	Unknown Peak 4.9066	4.907	51319	
	Unknown Peak 5.0186	5.019	71072	
✓	Tetrahydrofuran	5.284	5264	
✓	Bromochloromethane	5.284	1247086	
	Chloroform	5.354	1438108	
✓	Cyclohexane	5.438	227538	
✓	Unknown Peak 5.5503	5.550	309754	
✓	2,2,4-Trimethylpentane	5.774	254058	
✓	Benzene	5.788	121892	
✓	1,2-Dichloroethane-d4	5.816	1912556	
✓	Heptane	5.942	151512	
✓	Unknown Peak 6.1099	6.110	35652	
✓	1,4-Difluorobenzene	6.180	1809018	
✓	Unknown Peak 6.4597	6.460	449368	
✓	Unknown Peak 6.5437	6.544	44731	
✓	Unknown Peak 6.6280	6.628	62621	
✓	Unknown Peak 6.6781	6.678	72176	
✓	Bromodichloromethane	6.843	597710	
✓	Unknown Peak 6.9145	6.915	860502	
✓	Unknown Peak 6.9933	6.993	63093	
✓	Unknown Peak 7.0864	7.086	151603	
✓	Unknown Peak 7.2153	7.215	356379	
✓	Unknown Peak 7.2941	7.294	272798	
✓	Toluene-d8	7.387	2073260	
✓	Toluene	7.445	3753840	
✓	Unknown Peak 7.5520	7.552	36576	
✓	Unknown Peak 7.6021	7.602	82807	

List of Selected Compounds

Data File: File Information: 3072723.d
Sample #: 2107362A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compounds	RT	Peak Area	10
Unknown Peak 7.6523	7.652	190417	
Unknown Peak 7.6953	7.695	265966	
Unknown Peak 7.7597	7.760	90604	
Tetrachloroethene	7.882	451345	
Unknown Peak 7.9460	7.946	76885	
Unknown Peak 8.0176	8.018	119485	
Unknown Peak 8.0892	8.089	164838	
Unknown Peak 8.1179	8.118	392113	
Unknown Peak 8.2253	8.225	136723	
Unknown Peak 8.3113	8.311	274836	
Unknown Peak 8.3829	8.383	172369	
Unknown Peak 8.4617	8.462	86233	
Unknown Peak 8.5620	8.562	109034	
Chlorobenzene-d5	8.619	2442211	
Ethyl Benzene	8.691	1279810	
m,p-Xylene	8.784	3387269	
Unknown Peak 8.8342	8.834	62815	
Unknown Peak 8.9345	8.935	29077	
Unknown Peak 9.0133	9.013	256033	
o-Xylene	9.128	1039445	
Unknown Peak 9.1852	9.185	57255	
Unknown Peak 9.2282	9.228	201383	
Unknown Peak 9.2640	9.264	152065	
Unknown Peak 9.2998	9.300	95501	
Unknown Peak 9.3714	9.371	1617950	
Cumene	9.414	149570	
Unknown Peak 9.5218	9.522	2186141	
4-Bromofluorobenzene	9.601	3002200	
Unknown Peak 9.6579	9.658	231782	
Unknown Peak 9.7511	9.751	131295	
4-Ethyltoluene	9.830	730320	
1,3,5-Trimethylbenzene	9.902	201159	
Unknown Peak 9.9445	9.944	200231	
Unknown Peak 10.023	10.023	55933	
Unknown Peak 10.080	10.081	339144	
1,2,4-Trimethylbenzene	10.224	317924	
Unknown Peak 10.302	10.303	305672	
Unknown Peak 10.352	10.353	173375	
Unknown Peak 10.424	10.424	219849	
Unknown Peak 10.467	10.467	94845	
Unknown Peak 10.517	10.518	252877	
Unknown Peak 10.560	10.561	107318	
Unknown Peak 10.610	10.611	133367	
Unknown Peak 10.689	10.689	138461	
Unknown Peak 10.818	10.818	286186	
Unknown Peak 10.890	10.890	77154	
Unknown Peak 11.047	11.048	1020841	
Unknown Peak 11.119	11.119	57667	
Unknown Peak 11.355	11.356	35385	
Unknown Peak 11.470	11.470	40118	
Unknown Peak 11.592	11.592	35188	
Unknown Peak 11.713	11.714	97755	

List of Selected Compounds

Data File: File Information: 3072723.d
Sample #: 2107362A-01A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compounds	RT	Peak Area	10
Unknown Peak 12.601	12.602	42705	

Air Toxics Ltd.

File Results

Data File: File Information: 3072724.d
Sample #: 2107362A-02A
Client ID:
Spike Level: 0
Dilution Factor: 1.79

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(10851002.7064001 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072724.d
Sample #: 2107362A-02A
Client ID:
Spike Level: 0
Dilution Factor: 1.79

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2967	1.297	7016633	
	1,1-Difluoroethane	1.451	74747	
	Freon 12	1.465	9043	
	Unknown Peak 1.5905	1.591	25710	
✓	Unknown Peak 1.7024	1.702	115159	
	Unknown Peak 1.7864	1.786	29554	
	Unknown Peak 1.9123	1.912	89163	
	Unknown Peak 2.0942	2.094	25981	
	Unknown Peak 2.2201	2.220	19230	
	Unknown Peak 2.8917	2.892	20322	
	Unknown Peak 3.2415	3.242	61068	
	Unknown Peak 3.2975	3.298	25418	
	2-Propanol	3.423	55376	
	Unknown Peak 3.5913	3.591	29068	
✓	Unknown Peak 3.8712	3.871	36412	
	Unknown Peak 4.0251	4.025	23765	
✓	Hexane	4.179	135405	
✓	Unknown Peak 4.8086	4.809	33865	
	Unknown Peak 4.9066	4.907	15261	
	Unknown Peak 5.0185	5.019	203979	
✓	Bromochloromethane	5.284	1149351	
	Chloroform	5.354	765561	
✓	1,2-Dichloroethane-d4	5.816	780760	
✓	1,4-Difluorobenzene	6.180	1669666	
	Unknown Peak 6.6207	6.621	19461	
	Bromodichloromethane	6.843	50741	
✓	Toluene-d8	7.387	1996019	
✓	Toluene	7.445	56195	
	Unknown Peak 7.6594	7.659	85254	
	Tetrachloroethene	7.881	627784	
✓	Chlorobenzene-d5	8.619	2053058	
✓	Unknown Peak 8.7840	8.784	25620	
✓	Unknown Peak 9.1206	9.121	17672	
	Unknown Peak 9.5218	9.522	2808132	
✓	4-Bromofluorobenzene	9.608	2513757	
✓	Unknown Peak 9.8155	9.816	54471	
	Unknown Peak 9.9444	9.944	11974	
	Unknown Peak 10.209	10.209	43480	
✓	Unknown Peak 10.309	10.310	66567	
	Unknown Peak 10.424	10.424	30045	
✓	Unknown Peak 10.524	10.525	46213	
	Unknown Peak 10.675	10.675	11462	
	Unknown Peak 10.696	10.697	14089	
✓	Unknown Peak 10.811	10.811	15642	
	Unknown Peak 11.047	11.048	591998	
✓	Unknown Peak 11.477	11.477	19355	
✓	Unknown Peak 11.720	11.721	65816	
	Unknown Peak 12.609	12.609	10698	
	Unknown Peak 13.146	13.146	13018	

Air Toxics Ltd.

File Results

Data File: File Information: 3072717.d
Sample #: 2107362A-03A
Client ID:
Spike Level: 0
Dilution Factor: 8620

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9540782.23367233 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072717.d
Sample #: 2107362A-03A
Client ID:
Spike Level: 0
Dilution Factor: 8620

	Compounds	RT	Peak Area	10
☐	Unknown Peak 1.3108	1.311	120268	☐
☐	1,1-Difluoroethane	1.437	3388632	☐
☐	Unknown Peak 1.5766	1.577	30915	☐
☐	Unknown Peak 1.7025	1.703	51561	☐
☑	Bromochloromethane	5.285	1134159	☐
☑	1,2-Dichloroethane-d4	5.816	755799	☐
☑	1,4-Difluorobenzene	6.180	1594163	☐
☐	Unknown Peak 6.6280	6.628	21479	☐
☑	Toluene-d8	7.387	1867594	☐
☑	Chlorobenzene-d5	8.619	1948207	☐
☑	Unknown Peak 8.7912	8.791	14850	☐
☑	4-Bromofluorobenzene	9.601	2226009	☐
☐	Unknown Peak 9.9445	9.945	14322	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072716.d
Sample #: 2107362A-04A
Client ID:
Spike Level: 0
Dilution Factor: 3.08

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	64	(13852454.2939976 - 12649746.8507207 / 57499

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072716.d
Sample #: 2107362A-04A
Client ID:
Spike Level: 0
Dilution Factor: 3.08

Compounds	RT	Peak Area	10
Unknown Peak 1.3107	1.311	13487289	
Freon 12	1.465	132912	
Unknown Peak 1.5765	1.577	78652	
☑ Unknown Peak 1.6885	1.688	998438	
Unknown Peak 1.8843	1.884	89289	
Unknown Peak 2.1502	2.150	16417	
Unknown Peak 2.2062	2.206	18056	
Unknown Peak 2.4160	2.416	36921	
Unknown Peak 3.0037	3.004	29071	
Unknown Peak 3.1296	3.130	20350	
Acetone	3.242	151340	
Unknown Peak 3.3395	3.340	18634	
Unknown Peak 3.4374	3.437	39162	
☑ Unknown Peak 4.9486	4.949	32195	
☑ Bromochloromethane	5.284	1469350	
Chloroform	5.340	4550353	
☑ 1,2-Dichloroethane-d4	5.816	997083	
☑ 1,4-Difluorobenzene	6.166	2205321	
Unknown Peak 6.6351	6.635	22654	
Unknown Peak 6.7927	6.793	16946	
Bromodichloromethane	6.836	116185	
☑ Toluene-d8	7.380	2465229	
Unknown Peak 7.4731	7.473	14250	
Unknown Peak 7.6379	7.638	32147	
Tetrachloroethene	7.874	961237	
Unknown Peak 8.0820	8.082	22921	
Unknown Peak 8.1465	8.147	27269	
Unknown Peak 8.2682	8.268	18200	
Unknown Peak 8.4831	8.483	21244	
☑ Chlorobenzene-d5	8.612	2604083	
Unknown Peak 9.3713	9.371	19969	
Unknown Peak 9.5289	9.529	65171	
☑ 4-Bromofluorobenzene	9.601	3049267	
Unknown Peak 9.9444	9.944	16692	
Unknown Peak 10.094	10.095	12756	
Unknown Peak 10.324	10.324	27780	
Unknown Peak 10.402	10.403	20192	
Unknown Peak 10.596	10.596	11728	
Unknown Peak 10.682	10.682	12242	
Unknown Peak 10.975	10.976	13530	
☑ Unknown Peak 11.384	11.384	31486	

Air Toxics Ltd.

File Results

Data File: File Information: 3072730.d
Sample #: 2107362A-05A
Client ID:
Spike Level: 0
Dilution Factor: 22.4

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(10480213.887061 - 12649746.8507207 / 57499)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072730.d
Sample #: 2107362A-05A
Client ID:
Spike Level: 0
Dilution Factor: 22.4

	Compounds	RT	Peak Area	10
	Unknown Peak 1.3106	1.311	8413672	
	1,1-Difluoroethane	1.437	2724389	
	Unknown Peak 1.5904	1.590	24186	
	Unknown Peak 1.6884	1.688	41030	
	Unknown Peak 1.7304	1.730	37678	
✓	Bromochloromethane	5.284	1242291	
	Chloroform	5.340	295434	
✓	1,2-Dichloroethane-d4	5.816	867995	
✓	1,4-Difluorobenzene	6.180	1830098	
	Unknown Peak 6.8427	6.843	11638	
✓	Toluene-d8	7.387	1927803	
✓	Unknown Peak 7.4444	7.444	27971	
	Unknown Peak 7.6521	7.652	10715	
	Tetrachloroethene	7.881	98807	
	Unknown Peak 7.9816	7.982	12696	
	Unknown Peak 8.1536	8.154	11959	
✓	Chlorobenzene-d5	8.619	2091653	
	Unknown Peak 9.5432	9.543	175123	
✓	4-Bromofluorobenzene	9.608	2492403	
	Unknown Peak 9.9586	9.959	16695	
	Unknown Peak 11.061	11.062	16337	

Air Toxics Ltd.

File Results

Data File: File Information: 3072725.d
Sample #: 2107362A-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.04

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	290	(20863170.6217279 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072725.d
Sample #: 2107362A-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.04

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2407	1.241	47795	
	Unknown Peak 1.2967	1.297	500586	
	1,1-Difluoroethane	1.451	162172	
✓	Unknown Peak 1.5765	1.577	47709	
✓	Unknown Peak 1.6885	1.688	2699461	
✓	Unknown Peak 1.7864	1.786	71146	
	Unknown Peak 1.8843	1.884	160706	
	Unknown Peak 2.2062	2.206	20049	
✓	Unknown Peak 2.4860	2.486	37915	
	Acetone	3.228	138087	
	Carbon Disulfide	3.298	133290	
	2-Propanol	3.410	97947	
✓	Unknown Peak 3.5913	3.591	41179	
✓	Unknown Peak 3.8852	3.885	45860	
✓	Hexane	4.179	327299	
✓	Unknown Peak 4.6967	4.697	23728	
✓	Unknown Peak 4.7946	4.795	47753	
✓	Unknown Peak 4.9206	4.921	54972	
	Unknown Peak 5.0185	5.019	569666	
✓	Tetrahydrofuran	5.284	6997	
✓	Bromochloromethane	5.284	1364501	
	Chloroform	5.340	117997	
✓	Unknown Peak 5.4523	5.452	65268	
✓	Unknown Peak 5.5502	5.550	67238	
	Unknown Peak 5.6481	5.648	20896	
✓	2,2,4-Trimethylpentane	5.760	96889	
✓	Benzene	5.788	41258	
✓	1,2-Dichloroethane-d4	5.816	1305085	
✓	Heptane	5.942	54751	
✓	Unknown Peak 6.1099	6.110	14808	
✓	1,4-Difluorobenzene	6.180	1984839	
	Unknown Peak 6.2498	6.250	21872	
✓	Unknown Peak 6.4597	6.460	89083	
	Unknown Peak 6.6637	6.664	24452	
✓	Unknown Peak 6.8070	6.807	109982	
✓	Unknown Peak 6.9144	6.914	126800	
	Unknown Peak 6.9861	6.986	19169	
✓	Unknown Peak 7.0863	7.086	34131	
✓	Unknown Peak 7.2224	7.222	59327	
✓	Unknown Peak 7.2941	7.294	28163	
✓	Unknown Peak 7.3084	7.308	24319	
✓	Toluene-d8	7.387	2062909	
✓	Toluene	7.445	1081168	
	Unknown Peak 7.5949	7.595	33929	
	Unknown Peak 7.6522	7.652	1350830	
	Unknown Peak 7.8743	7.874	17282	
	Unknown Peak 7.9316	7.932	18211	
	Unknown Peak 8.0175	8.018	17469	
	Unknown Peak 8.0677	8.068	22597	
✓	Unknown Peak 8.1178	8.118	110078	
✓	Unknown Peak 8.2253	8.225	21096	
✓	Unknown Peak 8.3112	8.311	77404	

List of Selected Compounds

Data File: File Information: 3072725.d
Sample #: 2107362A-06A
Client ID:
Spike Level: 0
Dilution Factor: 2.04

	Compounds	RT	Peak Area	10
☑	Unknown Peak 8.3829	8.383	27373	
☑	Unknown Peak 8.5619	8.562	14803	
☑	Chlorobenzene-d5	8.619	2339585	
☑	Ethyl Benzene	8.684	349379	
☑	m,p-Xylene	8.784	841904	
☐	Unknown Peak 8.8413	8.841	28361	
☐	Unknown Peak 8.9344	8.934	12782	
☑	Unknown Peak 9.0132	9.013	57605	
☑	o-Xylene	9.128	275912	
☑	Unknown Peak 9.2281	9.228	19934	
☑	Unknown Peak 9.2567	9.257	17453	
☑	Unknown Peak 9.3212	9.321	16018	
☐	Unknown Peak 9.3714	9.371	1915744	
☑	Unknown Peak 9.4501	9.450	29509	
☐	Unknown Peak 9.5218	9.522	7176700	
☑	4-Bromofluorobenzene	9.601	3195837	
☑	Unknown Peak 9.7582	9.758	48164	
☑	4-Ethyltoluene	9.830	393041	
☑	1,3,5-Trimethylbenzene	9.901	93048	
☐	Unknown Peak 9.9444	9.944	406119	
☑	Unknown Peak 10.087	10.088	143670	
☑	1,2,4-Trimethylbenzene	10.224	172975	
☐	Unknown Peak 10.302	10.303	154811	
☑	Unknown Peak 10.359	10.360	35909	
☐	Unknown Peak 10.417	10.417	127870	
☑	Unknown Peak 10.467	10.467	30966	
☑	Unknown Peak 10.517	10.517	102781	
☑	Unknown Peak 10.596	10.596	65479	
☑	Unknown Peak 10.682	10.682	71512	
☑	Unknown Peak 10.804	10.804	143939	
☐	Unknown Peak 10.961	10.962	14600	
☐	Unknown Peak 11.047	11.048	1936628	
☑	Unknown Peak 11.119	11.119	27148	
☐	Unknown Peak 11.233	11.234	20907	
☐	Unknown Peak 11.291	11.291	14146	
☐	Unknown Peak 11.355	11.356	35178	
☑	Unknown Peak 11.384	11.384	34364	
☑	Unknown Peak 11.477	11.477	21449	
☑	Unknown Peak 11.534	11.535	25282	
☑	Unknown Peak 11.713	11.714	45017	
☐	Unknown Peak 12.315	12.315	10593	
☐	Unknown Peak 12.601	12.602	42617	

Air Toxics Ltd.

File Results

Data File: File Information: 3072726.d
Sample #: 2107362A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.09

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	140	(16420430.923077 - 12649746.8507207 / 57499)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072726.d
Sample #: 2107362A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.09

	Compounds	RT	Peak Area	10
	Unknown Peak 1.3106	1.311	12446160	
	1,1-Difluoroethane	1.465	895731	
	Freon 12	1.465	36381	
✓	Unknown Peak 1.7024	1.702	130912	
	Unknown Peak 1.7723	1.772	64945	
	Unknown Peak 1.8983	1.898	169227	
	Unknown Peak 2.0382	2.038	18385	
	Unknown Peak 2.3180	2.318	15555	
	Unknown Peak 2.43	2.430	25489	
✓	Unknown Peak 3.1156	3.116	40195	
	Acetone	3.228	216552	
	Unknown Peak 3.3114	3.311	35053	
	2-Propanol	3.423	140439	
✓	Unknown Peak 3.8571	3.857	16187	
	Unknown Peak 4.6966	4.697	17784	
✓	Unknown Peak 4.8925	4.893	70276	
✓	Unknown Peak 4.9485	4.949	52910	
	Unknown Peak 5.0184	5.018	968796	
✓	Bromochloromethane	5.284	1588219	
	Chloroform	5.340	849636	
✓	Unknown Peak 5.4522	5.452	26451	
	Unknown Peak 5.6341	5.634	28988	
✓	1,2-Dichloroethane-d4	5.816	1072092	
✓	Unknown Peak 5.9559	5.956	18986	
	Unknown Peak 6.0818	6.082	30089	
✓	1,4-Difluorobenzene	6.166	2223971	
✓	Unknown Peak 6.3617	6.362	35079	
✓	Unknown Peak 6.5575	6.558	27530	
✓	Unknown Peak 6.6493	6.649	95090	
	Bromodichloromethane	6.836	53155	
	Unknown Peak 7.3227	7.323	10843	
✓	Toluene-d8	7.387	2503311	
	Unknown Peak 7.6522	7.652	2422691	
	Tetrachloroethene	7.881	702027	
✓	Unknown Peak 8.0031	8.003	35672	
✓	Unknown Peak 8.0891	8.089	119230	
	Unknown Peak 8.2682	8.268	14921	
✓	Chlorobenzene-d5	8.612	2766366	
✓	Unknown Peak 8.7839	8.784	41422	
✓	Unknown Peak 8.8269	8.827	24702	
✓	Unknown Peak 8.9128	8.913	10305	
✓	Unknown Peak 9.1277	9.128	10522	
	Unknown Peak 9.1779	9.178	33677	
✓	Unknown Peak 9.2209	9.221	22878	
✓	Unknown Peak 9.3140	9.314	64861	
	Unknown Peak 9.5217	9.522	10823445	
✓	4-Bromofluorobenzene	9.601	3937788	
✓	Unknown Peak 9.7796	9.780	157467	
✓	Unknown Peak 9.8082	9.808	180659	
✓	Unknown Peak 9.8942	9.894	105808	
✓	Unknown Peak 9.9228	9.923	81556	
✓	Unknown Peak 10.030	10.030	25473	

List of Selected Compounds

Data File: File Information: 3072726.d
Sample #: 2107362A-07A
Client ID:
Spike Level: 0
Dilution Factor: 2.09

	Compounds	RT	Peak Area	10
☑	Unknown Peak 10.087	10.088	46358	
☐	Unknown Peak 10.209	10.209	107233	
☐	Unknown Peak 10.295	10.295	153586	
☑	Unknown Peak 10.402	10.403	154053	
☑	Unknown Peak 10.524	10.525	55671	
☑	Unknown Peak 10.596	10.596	23222	
☑	Unknown Peak 10.675	10.675	63497	
☑	Unknown Peak 10.746	10.747	30393	
☑	Unknown Peak 10.803	10.804	56418	
☐	Unknown Peak 10.961	10.962	26443	
☐	Unknown Peak 11.047	11.047	3198354	
☑	Unknown Peak 11.119	11.119	21294	
☑	Unknown Peak 11.283	11.284	15293	
☑	Unknown Peak 11.384	11.384	88298	
☑	Unknown Peak 11.470	11.470	16211	
☑	Unknown Peak 11.713	11.714	157062	
☑	Unknown Peak 12.114	12.115	13734	
☑	Unknown Peak 12.207	12.208	133738	
☑	Unknown Peak 12.322	12.322	43150	
☑	Unknown Peak 12.465	12.466	16120	
☐	Unknown Peak 12.601	12.602	147978	

Air Toxics Ltd.

File Results

Data File: File Information: 3072727.d
Sample #: 2107362A-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	360	(22419903.2311299 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072727.d
Sample #: 2107362A-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2546	1.255	46113	
	Unknown Peak 1.2965	1.297	1674300	
	1,1-Difluoroethane	1.437	1373203	
✓	Freon 12	1.450	22243	
✓	Unknown Peak 1.6883	1.688	1410122	
✓	Unknown Peak 1.7863	1.786	48641	
✓	Unknown Peak 1.8842	1.884	135700	
✓	Unknown Peak 2.2060	2.206	40900	
	Unknown Peak 2.4439	2.444	31633	
✓	Unknown Peak 2.4859	2.486	101742	
✓	Unknown Peak 2.6538	2.654	52816	
✓	Unknown Peak 2.7797	2.780	55795	
✓	Unknown Peak 2.8496	2.850	35391	
	Acetone	3.241	630788	
	Carbon Disulfide	3.283	83160	
	2-Propanol	3.451	162243	
✓	Unknown Peak 3.5772	3.577	112361	
✓	Unknown Peak 3.8571	3.857	98965	
✓	Hexane	4.165	594674	
✓	Unknown Peak 4.2768	4.277	18051	
✓	Unknown Peak 4.6966	4.697	70929	
✓	Unknown Peak 4.7945	4.795	89374	
✓	Unknown Peak 4.9204	4.920	19716	
	2-Butanone (Methyl Ethyl Ketone)	5.088	686974	
✓	Tetrahydrofuran	5.284	7028	
✓	Bromochloromethane	5.284	1357832	
	Chloroform	5.340	982325	
	Unknown Peak 5.4101	5.410	222892	
✓	Unknown Peak 5.4521	5.452	171317	
✓	Unknown Peak 5.5361	5.536	201465	
	Unknown Peak 5.6200	5.620	30777	
✓	2,2,4-Trimethylpentane	5.760	470173	
✓	Benzene	5.788	31833	
✓	1,2-Dichloroethane-d4	5.816	1099551	
✓	Heptane	5.942	74762	
✓	Unknown Peak 6.1097	6.110	27210	
✓	1,4-Difluorobenzene	6.166	1887431	
	Unknown Peak 6.2497	6.250	40492	
✓	Unknown Peak 6.4595	6.460	173493	
✓	Unknown Peak 6.5575	6.558	22177	
✓	Unknown Peak 6.6708	6.671	36726	
✓	Bromodichloromethane	6.836	264481	
✓	Unknown Peak 6.9071	6.907	258413	
	Unknown Peak 6.9859	6.986	20279	
✓	Unknown Peak 7.0862	7.086	63268	
✓	Unknown Peak 7.2151	7.215	80618	
✓	Unknown Peak 7.2939	7.294	96220	
✓	4-Methyl-2-pentanone	7.323	86912	
✓	Toluene-d8	7.387	2198008	
✓	Toluene	7.437	989759	
✓	Unknown Peak 7.5446	7.545	17951	
	Unknown Peak 7.6521	7.652	2749049	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072727.d
Sample #: 2107362A-08A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
☐	Tetrachloroethene	7.881	1772959	☐
☑	Unknown Peak 8.0174	8.017	82472	☐
☐	Unknown Peak 8.0675	8.068	366490	☐
☑	Unknown Peak 8.1248	8.125	170337	☐
☑	Unknown Peak 8.2251	8.225	54881	☐
☑	Unknown Peak 8.3111	8.311	115228	☐
☑	Unknown Peak 8.3827	8.383	27655	☐
☑	Unknown Peak 8.5618	8.562	24513	☐
☑	Chlorobenzene-d5	8.619	2441745	☐
☑	Ethyl Benzene	8.684	354495	☐
☑	m,p-Xylene	8.784	739052	☐
☑	Unknown Peak 8.8483	8.848	26445	☐
☑	Unknown Peak 9.0202	9.020	79154	☐
☑	o-Xylene	9.128	199751	☐
☐	Unknown Peak 9.1778	9.178	72914	☐
☑	Unknown Peak 9.228	9.228	57437	☐
☑	Unknown Peak 9.2566	9.257	45658	☐
☑	Unknown Peak 9.3139	9.314	29503	☐
☐	Unknown Peak 9.3712	9.371	375869	☐
☑	Unknown Peak 9.4500	9.450	33586	☐
☐	Unknown Peak 9.5216	9.522	11970302	☐
☑	4-Bromofluorobenzene	9.600	3608125	☐
☑	Unknown Peak 9.7580	9.758	85273	☐
☑	4-Ethyltoluene	9.830	417753	☐
☑	1,3,5-Trimethylbenzene	9.901	173628	☐
☑	Unknown Peak 10.087	10.088	120134	☐
☑	1,2,4-Trimethylbenzene	10.224	184354	☐
☐	Unknown Peak 10.302	10.302	195426	☐
☑	Unknown Peak 10.345	10.345	46567	☐
☐	Unknown Peak 10.417	10.417	110654	☐
☑	Unknown Peak 10.467	10.467	27998	☐
☑	Unknown Peak 10.517	10.517	68028	☐
☑	Unknown Peak 10.560	10.560	65997	☐
☑	Unknown Peak 10.603	10.603	52386	☐
☑	Unknown Peak 10.682	10.682	78400	☐
☑	Unknown Peak 10.803	10.804	155250	☐
☐	Unknown Peak 11.047	11.047	4932629	☐
☑	Unknown Peak 11.111	11.112	103327	☐
☑	Unknown Peak 11.384	11.384	69644	☐
☑	Unknown Peak 11.477	11.477	23275	☐
☐	Unknown Peak 11.534	11.534	20949	☐
☐	Unknown Peak 11.591	11.592	13268	☐
☑	Unknown Peak 11.713	11.714	118050	☐
☐	Unknown Peak 12.207	12.208	11879	☐
☑	Unknown Peak 12.322	12.322	15750	☐
☐	Unknown Peak 12.480	12.480	11885	☐
☐	Unknown Peak 12.601	12.602	243781	☐
☐	Unknown Peak 13.375	13.375	13265	☐
☐	Unknown Peak 13.676	13.676	13948	☐

Air Toxics Ltd.

File Results

Data File: File Information: 3072728.d
Sample #: 2107362A-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.32

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(11490707.8950122 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072728.d
Sample #: 2107362A-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.32

Compounds	RT	Peak Area	10
Unknown Peak 1.2967	1.297	8189958	
1,1-Difluoroethane	1.451	438010	
Freon 12	1.465	23655	
Unknown Peak 1.7025	1.703	84975	
Unknown Peak 1.8984	1.898	86278	
Unknown Peak 2.3601	2.360	16019	
Unknown Peak 2.4440	2.444	32261	
Unknown Peak 2.7099	2.710	19396	
Acetone	3.242	122117	
2-Propanol	3.424	98008	
Unknown Peak 4.1930	4.193	21024	
Unknown Peak 5.0185	5.019	245171	
Unknown Peak 5.0745	5.075	42146	
Bromochloromethane	5.284	1165893	
Chloroform	5.354	843671	
1,2-Dichloroethane-d4	5.816	805420	
1,4-Difluorobenzene	6.180	1692527	
Unknown Peak 6.3618	6.362	19771	
Unknown Peak 6.6638	6.664	20353	
Bromodichloromethane	6.843	58351	
Toluene-d8	7.387	1927341	
Unknown Peak 7.595	7.595	23811	
Unknown Peak 7.6523	7.652	1252749	
Tetrachloroethene	7.882	1033462	
Unknown Peak 8.0677	8.068	146785	
Unknown Peak 8.3184	8.318	27033	
Chlorobenzene-d5	8.619	2137484	
Unknown Peak 8.7124	8.712	16605	
Unknown Peak 8.7912	8.791	30611	
Unknown Peak 9.1278	9.128	11094	
Unknown Peak 9.1780	9.178	31194	
Unknown Peak 9.3212	9.321	21601	
Unknown Peak 9.5218	9.522	7286507	
4-Bromofluorobenzene	9.608	2921848	
Unknown Peak 9.6722	9.672	52445	
Unknown Peak 9.7152	9.715	21892	
Unknown Peak 9.8083	9.808	135878	
Unknown Peak 9.9229	9.923	108923	
Unknown Peak 10.087	10.088	14446	
Unknown Peak 10.209	10.210	174333	
Unknown Peak 10.295	10.295	119883	
Unknown Peak 10.410	10.410	50862	
Unknown Peak 10.524	10.525	40037	
Unknown Peak 10.589	10.589	16895	
Unknown Peak 10.675	10.675	64175	
Unknown Peak 10.753	10.754	19869	
Unknown Peak 11.047	11.048	3447018	
Unknown Peak 11.126	11.126	20414	
Unknown Peak 11.384	11.384	55371	
Unknown Peak 11.470	11.470	18790	
Unknown Peak 11.720	11.721	219559	
Unknown Peak 12.215	12.215	17060	

List of Selected Compounds

Data File: File Information: 3072728.d
Sample #: 2107362A-09A
Client ID:
Spike Level: 0
Dilution Factor: 2.32

	Compounds	RT	Peak Area	10
☑	Unknown Peak 12.322	12.323	13341	
☐	Unknown Peak 12.601	12.602	261523	

Air Toxics Ltd.

File Results

Data File: File Information: 3072732.d
Sample #: 2107362A-10A
Client ID:
Spike Level: 0
Dilution Factor: 14

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(11846178.5402285 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072732.d
Sample #: 2107362A-10A
Client ID:
Spike Level: 0
Dilution Factor: 14

	Compounds	RT	Peak Area	10
	Unknown Peak 1.3107	1.311	3684050	
	1,1-Difluoroethane	1.437	2019974	
	Unknown Peak 1.5765	1.577	34242	
	Unknown Peak 1.7024	1.702	71936	
	Unknown Peak 1.8983	1.898	30829	
	Unknown Peak 2.6959	2.696	18702	
	Unknown Peak 3.2136	3.214	23676	
	Unknown Peak 3.8572	3.857	23952	
	Unknown Peak 4.249	4.249	16968	
	Unknown Peak 4.4588	4.459	70405	
	Unknown Peak 4.7247	4.725	17411	
✓	Bromochloromethane	5.270	1455654	
	Unknown Peak 5.5782	5.578	16735	
	Unknown Peak 5.7041	5.704	16126	
✓	1,2-Dichloroethane-d4	5.816	919469	
✓	1,4-Difluorobenzene	6.166	1952365	
	Unknown Peak 6.6279	6.628	18281	
✓	Toluene-d8	7.380	2213361	
	Unknown Peak 7.6522	7.652	10381	
	Tetrachloroethene	7.874	135431	
✓	Chlorobenzene-d5	8.612	2346072	
	Unknown Peak 8.6694	8.669	16057	
	Unknown Peak 8.7840	8.784	16348	
	Unknown Peak 9.5361	9.536	64132	
✓	4-Bromofluorobenzene	9.601	2946863	
	Unknown Peak 10.302	10.303	10877	
	Unknown Peak 10.417	10.417	10457	
✓	Unknown Peak 10.524	10.525	12395	

Air Toxics Ltd.

File Results

Data File: File Information: 3072729.d
Sample #: 2107362A-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.07

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(11295077.4712228 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072729.d
Sample #: 2107362A-11A
Client ID:
Spike Level: 0
Dilution Factor: 2.07

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2967	1.297	8786401	
	1,1-Difluoroethane	1.437	591946	
	Freon 12	1.465	20395	
✓	Unknown Peak 1.6885	1.688	78858	
	Unknown Peak 1.8843	1.884	126635	
	Unknown Peak 2.2062	2.206	36411	
	Unknown Peak 2.4020	2.402	26092	
	Unknown Peak 2.7938	2.794	15818	
	Unknown Peak 3.1016	3.102	21462	
	Acetone	3.242	178108	
	2-Propanol	3.437	62529	
	Unknown Peak 4.2350	4.235	34905	
	Unknown Peak 4.3329	4.333	16307	
✓	Unknown Peak 4.8926	4.893	28864	
✓	Unknown Peak 4.9626	4.963	39930	
✓	Unknown Peak 5.0885	5.089	34639	
✓	Bromochloromethane	5.284	1228610	
	Chloroform	5.340	88538	
	Unknown Peak 5.3963	5.396	170916	
✓	1,2-Dichloroethane-d4	5.816	831684	
✓	1,4-Difluorobenzene	6.180	1820296	
✓	Unknown Peak 6.3617	6.362	20430	
	Unknown Peak 6.6637	6.664	45637	
✓	Unknown Peak 6.7067	6.707	27893	
	Unknown Peak 6.7855	6.786	14043	
✓	Toluene-d8	7.387	2104128	
✓	Toluene	7.445	14516	
	Unknown Peak 7.6522	7.652	281216	
	Tetrachloroethene	7.881	1866317	
	Unknown Peak 8.0892	8.089	38275	
	Unknown Peak 8.1536	8.154	32965	
	Unknown Peak 8.2109	8.211	11856	
	Unknown Peak 8.2754	8.275	48858	
	Unknown Peak 8.4760	8.476	53803	
✓	Chlorobenzene-d5	8.619	2221409	
	Unknown Peak 9.2281	9.228	16340	
	Unknown Peak 9.2997	9.300	15413	
✓	Unknown Peak 9.3141	9.314	18412	
	Unknown Peak 9.5361	9.536	429618	
✓	4-Bromofluorobenzene	9.601	2726858	
	Unknown Peak 9.9444	9.944	22547	
	Unknown Peak 10.331	10.331	26928	
✓	Unknown Peak 10.402	10.403	40899	
✓	Unknown Peak 10.682	10.682	16887	
	Unknown Peak 11.047	11.048	18470	
✓	Unknown Peak 11.312	11.313	17234	
✓	Unknown Peak 11.391	11.391	12649	
✓	Unknown Peak 13.132	13.132	10882	

Air Toxics Ltd.

File Results

Data File: File Information: 3072733.d
Sample #: 2107362A-12A
Client ID:
Spike Level: 0
Dilution Factor: 16.8

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(11288140.3635543 - 12649746.8507207 / 5749

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: 3072733.d
Sample #: 2107362A-12A
Client ID:
Spike Level: 0
Dilution Factor: 16.8

	Compounds	RT	Peak Area	10
	Unknown Peak 1.3106	1.311	6824274	
	1,1-Difluoroethane	1.437	2757559	
	Unknown Peak 1.5904	1.590	49832	
	Unknown Peak 1.7024	1.702	43744	
	Unknown Peak 1.8283	1.828	22762	
	Unknown Peak 3.2275	3.228	24838	
	Unknown Peak 3.4514	3.451	23681	
✓	Bromochloromethane	5.270	1394680	
✓	1,2-Dichloroethane-d4	5.816	910607	
✓	1,4-Difluorobenzene	6.166	1901701	
	Unknown Peak 6.3617	6.362	17387	
✓	Toluene-d8	7.380	2108730	
	Tetrachloroethene	7.874	78780	
✓	Chlorobenzene-d5	8.612	2248143	
	Unknown Peak 9.5360	9.536	27595	
✓	4-Bromofluorobenzene	9.601	2708926	
	Unknown Peak 9.9443	9.944	12208	
✓	Unknown Peak 10.524	10.525	15353	

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 # 2107362A	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: UD MSD3 7/27/21	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: QC Out ICAL. Q out daily, UB-09a

A1	A2	A3	A4	D	*Section 2* – Sample Analysis				
					Initials/Date	A1: KH 7/27/21	A2: UD 7/28/21	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				
✓	✓			✓	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: A1: 05A, 10A dilute. A2: 01A-02A; 06A-09A, 11A Full loads, 05A, 10A, 12A-D1, TC.

D1	D2	D3	D4	T	3T	*Section 3* – Target Data Reduction	Technical Review Needed? Circle one: Yes/No	T:		
						Initials/Instrument/ Date	D1: 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: 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		
NA		Appropriate data qualifier flags are applied		
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

7/29/21

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 08-06-2021

eurofins | Air Toxics

WORK ORDER #: 2107362B

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:	07/15/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	08/05/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
13A	SSV-JSS01-01	TO-15	7.0 "Hg	10 psi
14A	SSV-HSS01-01	TO-15	5.0 "Hg	10 psi
15A	SSV-HMBSS01-01	TO-15	6.0 "Hg	10 psi
16A	SSV-GSS01-01	TO-15	6.5 "Hg	10 psi
17A	SSV-GSS02-01	TO-15	5.0 "Hg	10 psi
18A	SSV-FSS02-01	TO-15	5.0 "Hg	10 psi
19A	SSV-FSS01-01	TO-15	6.0 "Hg	10 psi
20A	Lab Blank	TO-15	NA	NA
21A	CCV	TO-15	NA	NA
22A	LCS	TO-15	NA	NA
22AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 08/05/21

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

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LABORATORY NARRATIVE
EPA Method TO-15
AECOM
Workorder# 2107362B

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

Receiving Notes

Samples SSV-JSS01-01, SSV-HSS01-01, SSV-HMBSS01-01, SSV-GSS01-01, SSV-GSS02-01, SSV-FSS02-01 and SSV-FSS01-01 were placed on hold per the client's request.

Samples SSV-JSS01-01, SSV-HSS01-01, SSV-HMBSS01-01, SSV-GSS01-01, SSV-GSS02-01, SSV-FSS02-01 and SSV-FSS01-01 were removed from "Hold" and placed on "Active" status per client request on 7/23/21.

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.

Dilution was performed on samples SSV-HMBSS01-01, SSV-GSS01-01 and SSV-GSS02-01 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
SSV-JSS01-01	2107362B-13A	07/15/2021	07/15/2021	NA	18	08/02/2021	NA	GOOD
SSV-HSS01-01	2107362B-14A	07/15/2021	07/15/2021	NA	18	08/02/2021	NA	GOOD
SSV-HMBSS01-01	2107362B-15A	07/15/2021	07/15/2021	NA	18	08/02/2021	NA	GOOD
SSV-GSS01-01	2107362B-16A	07/15/2021	07/15/2021	NA	18	08/02/2021	NA	GOOD
SSV-GSS02-01	2107362B-17A	07/15/2021	07/15/2021	NA	18	08/02/2021	NA	GOOD
SSV-FSS02-01	2107362B-18A	07/15/2021	07/15/2021	NA	18	08/02/2021	NA	GOOD
SSV-FSS01-01	2107362B-19A	07/15/2021	07/15/2021	NA	18	08/02/2021	NA	GOOD
Lab Blank	2107362B-20A	NA	NA	NA	NA	08/02/2021	NA	GOOD
CCV	2107362B-21A	NA	NA	NA	NA	08/02/2021	NA	GOOD
LCS	2107362B-22A	NA	NA	NA	NA	08/02/2021	NA	GOOD
LCSD	2107362B-22AA	NA	NA	NA	NA	08/02/2021	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: SSV-JSS01-01

Lab ID#: 2107362B-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.4	38	12	100
2-Propanol	4.4	12	11	30
Acetone	11	14	26	32
Ethanol	11	72	21	130
Tetrachloroethene	1.1	2.5	7.4	17

Client Sample ID: SSV-HSS01-01

Lab ID#: 2107362B-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.0	6.6	11	18
2-Propanol	4.0	11	9.9	26
Acetone	10	24	24	56
Freon 11	1.0	5.9	5.7	33
m,p-Xylene	1.0	1.3	4.4	5.8
Propylene	4.0	4.0 J	7.0	6.8 J
Tetrachloroethene	1.0	110	6.8	750
Toluene	1.0	1.1	3.8	4.2
Trichloroethene	1.0	3.9	5.4	21

Client Sample ID: SSV-HMBSS01-01

Lab ID#: 2107362B-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	26	1300	71	3500
Tetrachloroethene	6.6	9.5	44	64

Client Sample ID: SSV-GSS01-01

Lab ID#: 2107362B-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	9.5	760	26	2000

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

Client Sample ID: SSV-GSS01-01

Lab ID#: 2107362B-16A

2-Propanol	9.5	14	23	34

Client Sample ID: SSV-GSS02-01

Lab ID#: 2107362B-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	16	1100	44	3000

Client Sample ID: SSV-FSS02-01

Lab ID#: 2107362B-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.0	150	11	410
1,2,4-Trimethylbenzene	1.0	3.5	5.0	17
1,3,5-Trimethylbenzene	1.0	1.4	5.0	6.9
2-Propanol	4.0	12	9.9	29
4-Ethyltoluene	1.0	2.9	5.0	14
Acetone	10	14	24	33
Carbon Disulfide	4.0	4.0	12	12
Ethyl Benzene	1.0	1.0	4.4	4.4
m,p-Xylene	1.0	4.1	4.4	18
o-Xylene	1.0	2.2	4.4	9.3
Propylene	4.0	6.6	7.0	11
Tetrachloroethene	1.0	11	6.8	76
Toluene	1.0	2.2	3.8	8.1

Client Sample ID: SSV-FSS01-01

Lab ID#: 2107362B-19A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	4.2	340	11	920
2-Propanol	4.2	15	10	38
Acetone	10	17	25	40

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Client Sample ID: SSV-JSS01-01

Lab ID#: 2107362B-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080211**	**Date of Collection:**	**7/15/21 2:54:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**8/2/21 04:22 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	7.5	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	38	12	100
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	Not Detected	13	Not Detected
2-Hexanone	4.4	Not Detected	18	Not Detected
2-Propanol	4.4	12	11	30
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	32
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	7.3	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: SSV-JSS01-01

Lab ID#: 2107362B-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080211**	**Date of Collection:**	**7/15/21 2:54:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**8/2/21 04:22 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	9.3	Not Detected
Dibromomethane	4.4	Not Detected	31	Not Detected
Ethanol	11	72	21	130
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	7.6	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	Not Detected	13	Not Detected
Tetrachloroethene	1.1	2.5	7.4	17
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: SSV-JSS01-01

Lab ID#: 2107362B-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080211**	**Date of Collection:**	**7/15/21 2:54:00 PM**
Dil. Factor:	**2.19**	**Date of Analysis:**	**8/2/21 04:22 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080211.d
Lab Smp Id: 2107362B-13A
Inj Date : 02-AUG-2021 16:22
Operator : LD Inst ID: msdp.i
Smp Info : 200ml N3113
Misc Info : 7.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 4
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	160720	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	122931				48.23- 108.23	76.49
5.785	5.778 (1.000)	49	324324				150.57- 210.57	201.79
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	597268	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	89446				0.00- 45.71	14.98
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	585655	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	305403				23.78- 83.78	52.15
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	220988	24.9149	24.915		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	108428				27.21- 87.21	49.07
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	651364	25.1145	25.114		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	69256				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	423102			34.95- 94.95	64.96
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	382506	25.4344	25.434	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	458999			95.92- 155.92	120.00
10.921	10.921 (1.154)	176	377303			66.89- 126.89	98.64
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.702 (0.297)	65	64173	17.6153	38.578	80.00- 120.00	100.00
1.716	1.744 (0.297)	51	184102			597.63- 657.63	286.88
1.716	1.702 (0.297)	47	32299			33.72- 93.72	50.33
39 Ethanol					CAS #: 64-17-5		
3.257	3.242 (0.563)	46	52136	32.7107	71.636	80.00- 120.00	100.00
3.257	3.242 (0.563)	45	130564			511.19- 571.19	250.43
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	26279	6.23693	13.659	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	101774			302.95- 362.95	387.28
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	93077	5.48108	12.004	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	19196			0.00- 47.19	20.62
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	15453	1.15774	2.535	80.00- 120.00	100.00
8.471	8.464 (0.895)	129	12922			47.84- 107.84	83.62
8.471	8.464 (0.895)	131	12173			45.29- 105.29	78.77

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080211.d
Lab Smp Id: 2107362B-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 7.0 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	160720	7.65
108 1,4-Difluorobenze	558135	334881	781389	597268	7.01
153 Chlorobenzene-d5	542388	325433	759343	585655	7.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	5.78	5.45	6.11	5.79	0.12
108 1,4-Difluorobenze	6.66	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.

Report Date: 05-Aug-2021 09:24

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362B-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/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 7.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.915	99.66	70-130
$ 134 Toluene-d8	25.000	25.114	100.46	70-130
$ 170 4-Bromofluorobenz	25.000	25.434	101.74	70-130

Data File: /chem/msdp.i/02AUG21.b/p080211.d

Date : 02-AUG-2021 16:22

Client ID:

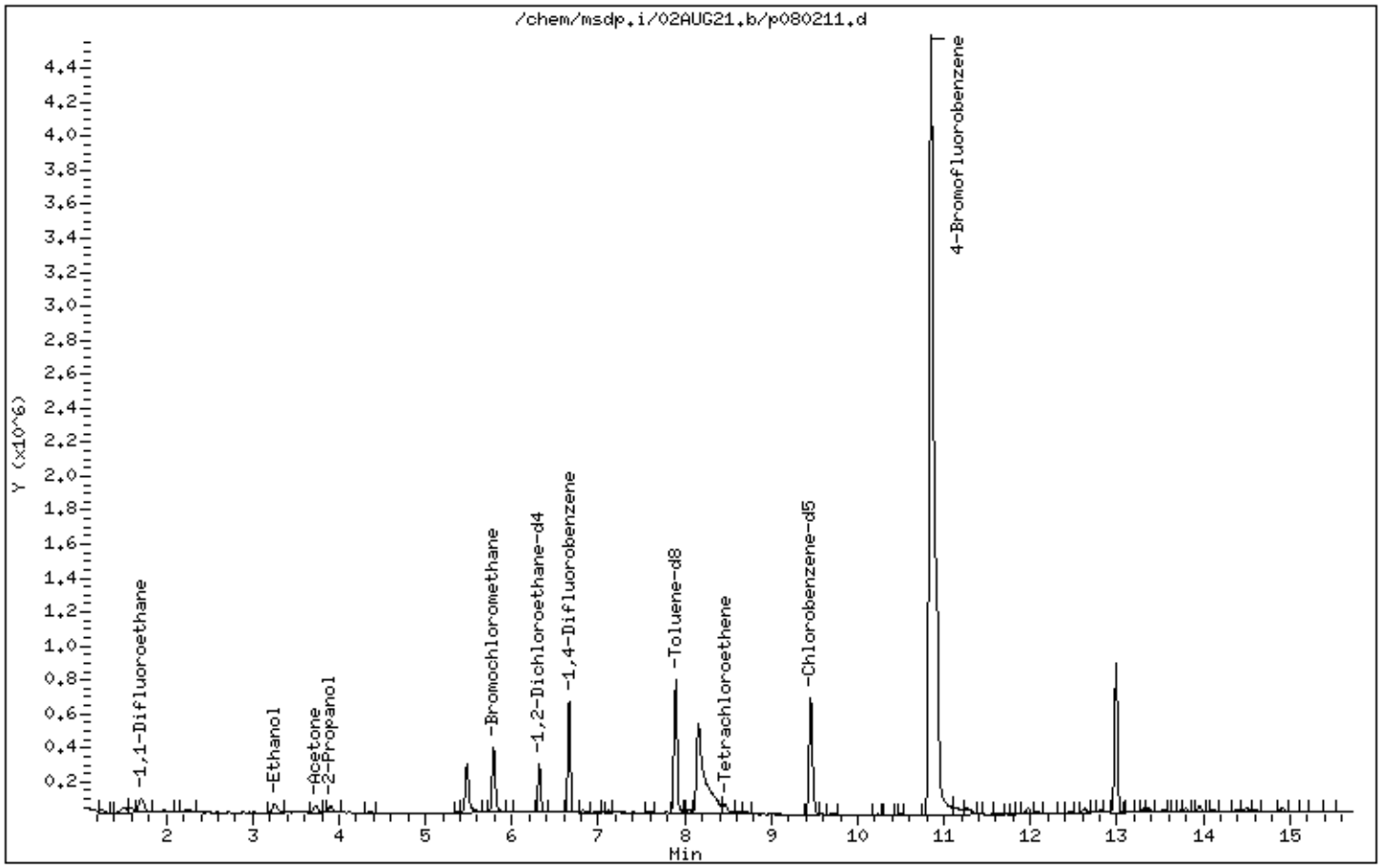
Instrument: msdp.i

Sample Info: 200ml N3113

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080211.d

Date : 02-AUG-2021 16:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3113

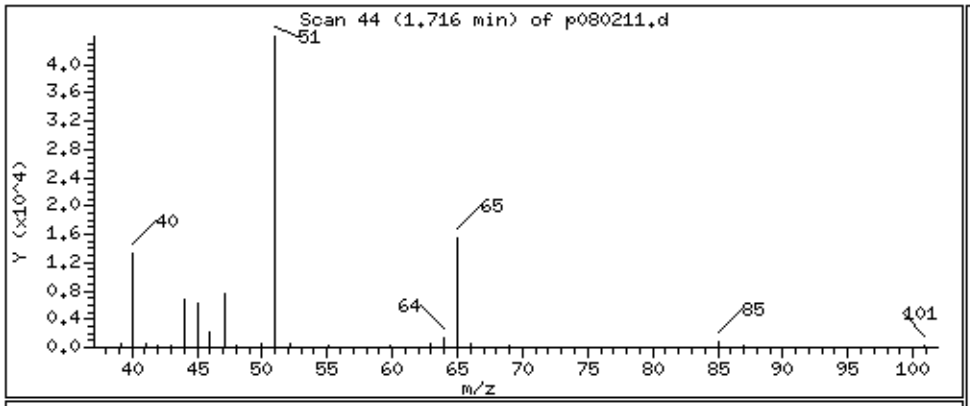
Operator: LD

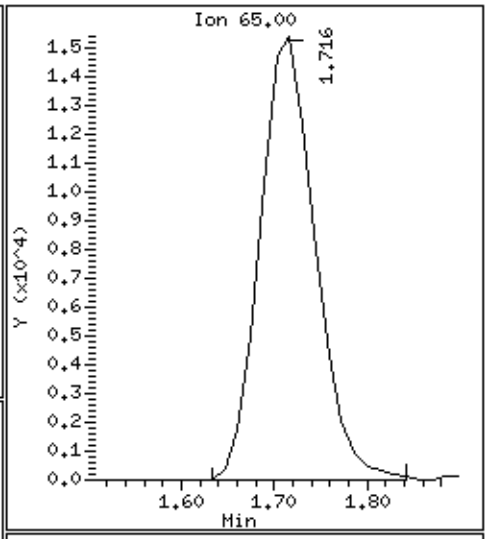
Column phase: RTX-624

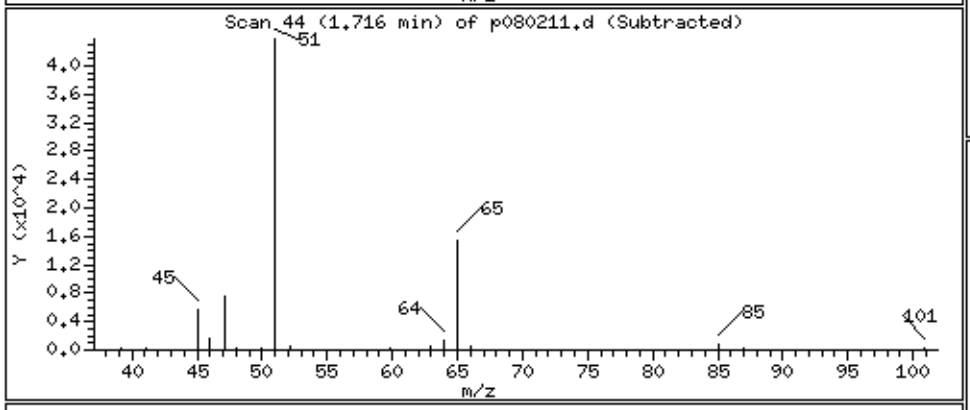
Column diameter: 0.25

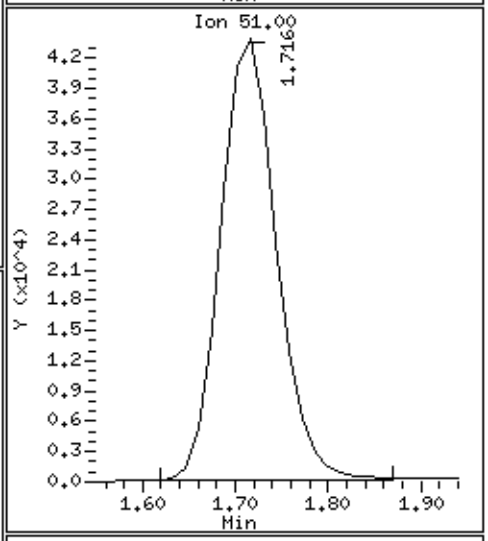
7 1,1-Difluoroethane

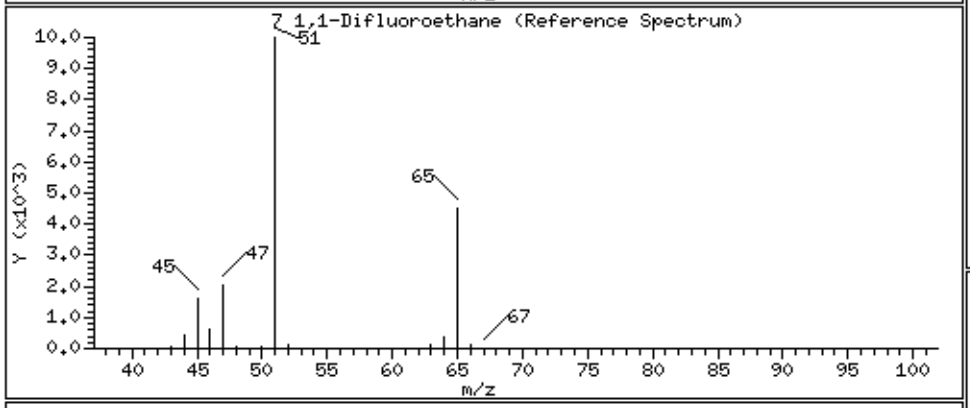
Concentration: 38.578 PPBV

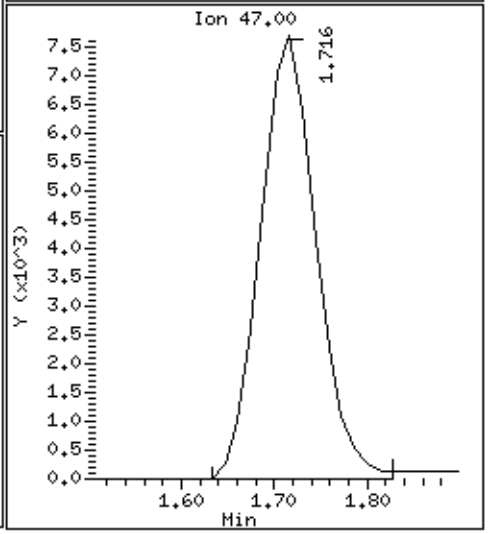


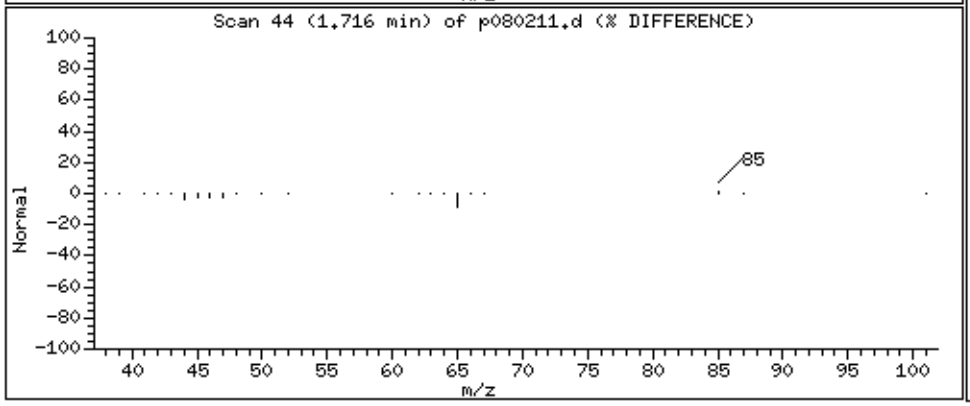












Data File: /chem/msdp.i/02AUG21.b/p080211.d

Date : 02-AUG-2021 16:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3113

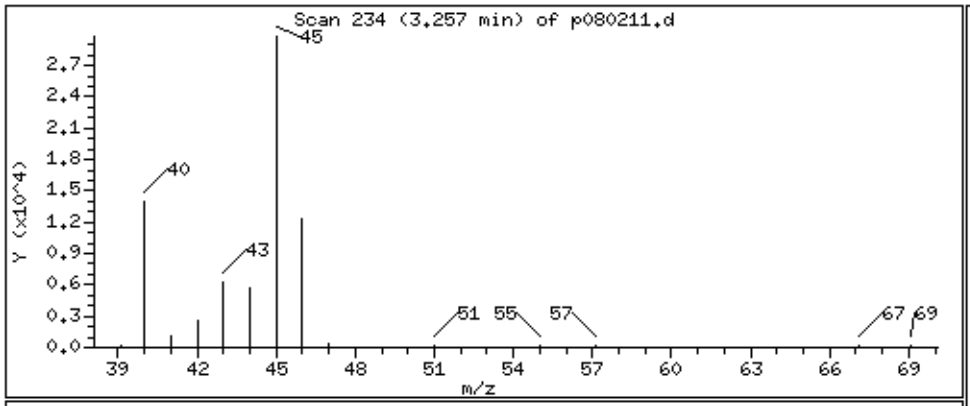
Operator: LD

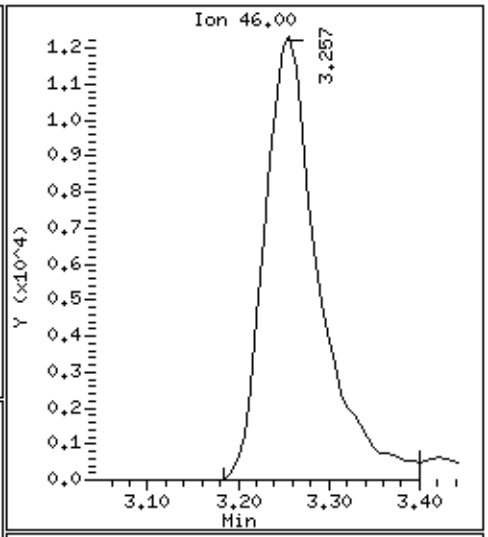
Column phase: RTX-624

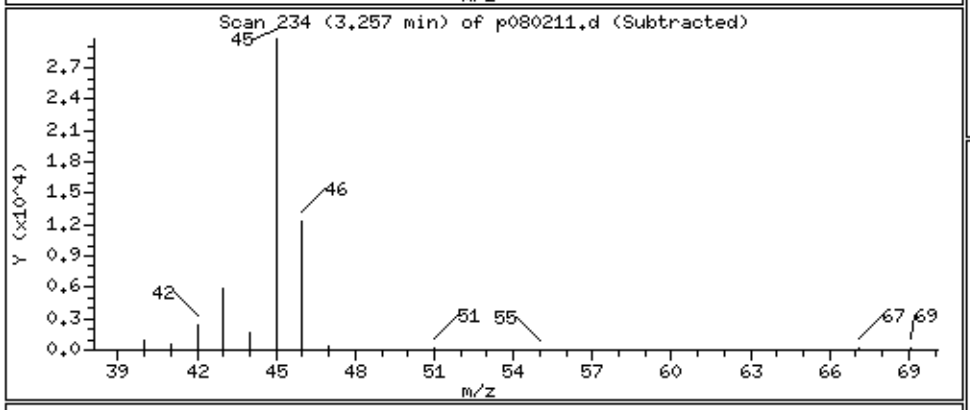
Column diameter: 0.25

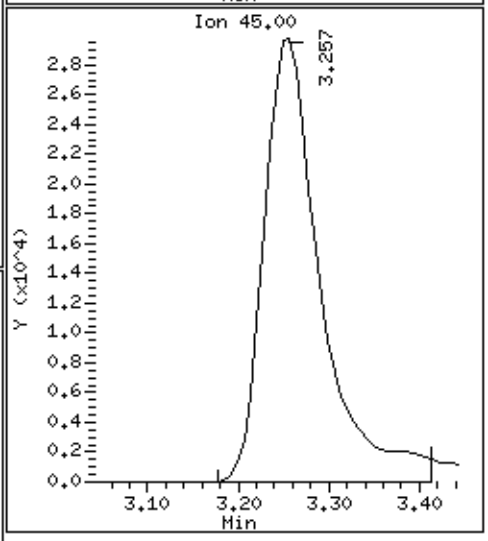
39 Ethanol

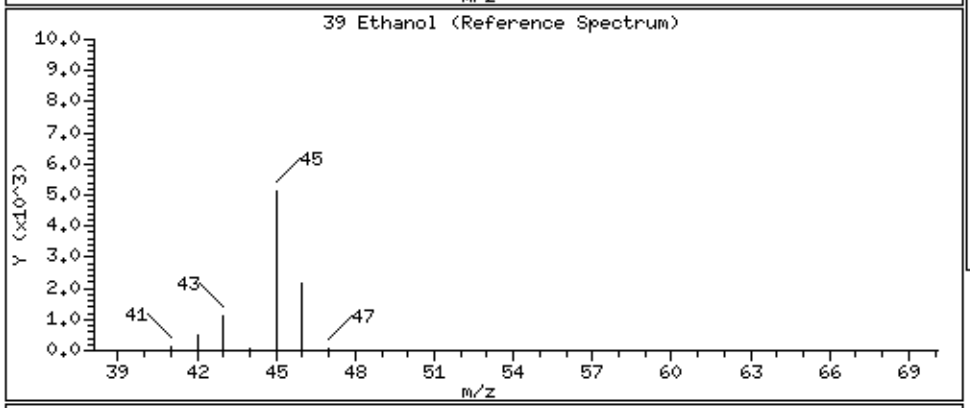
Concentration: 71.636 PPBV

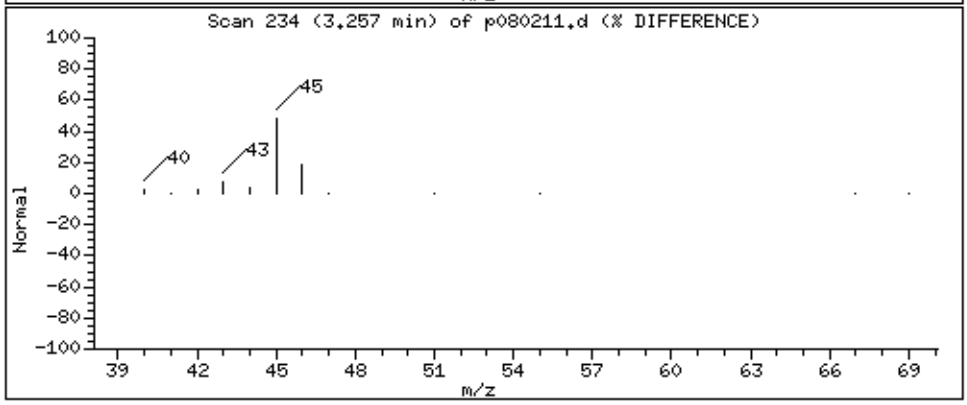












Data File: /chem/msdp.i/02AUG21.b/p080211.d

Date : 02-AUG-2021 16:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3113

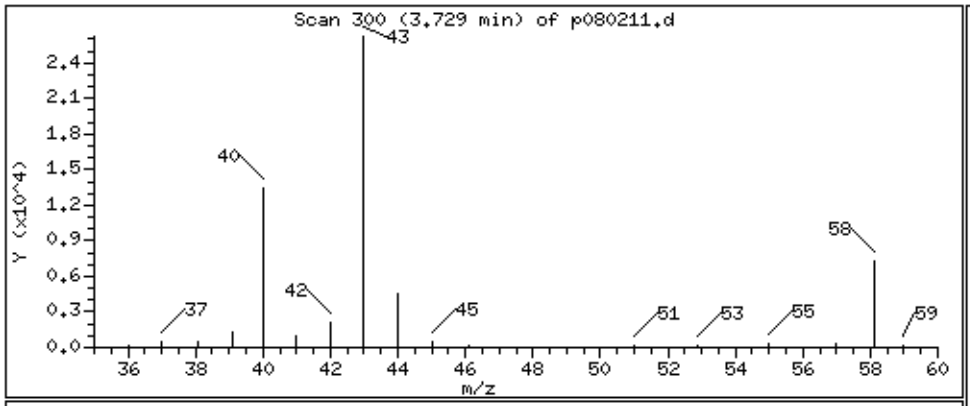
Operator: LD

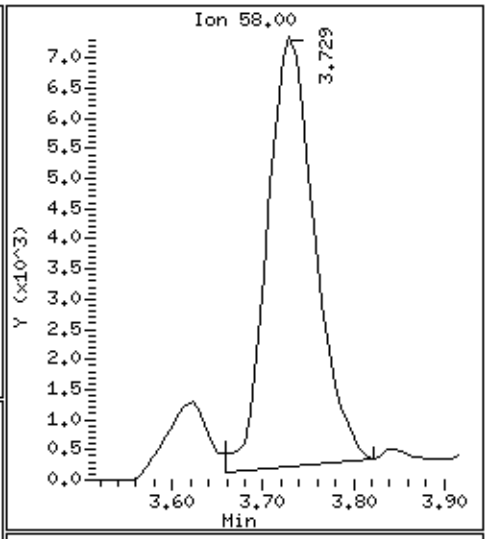
Column phase: RTX-624

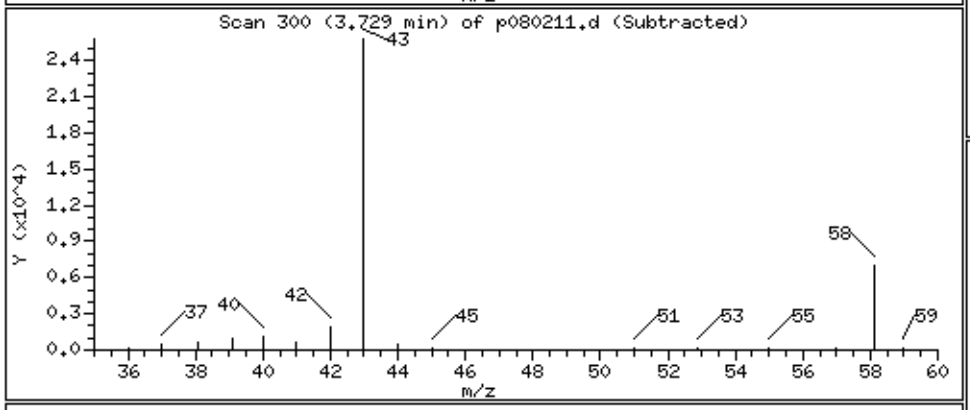
Column diameter: 0.25

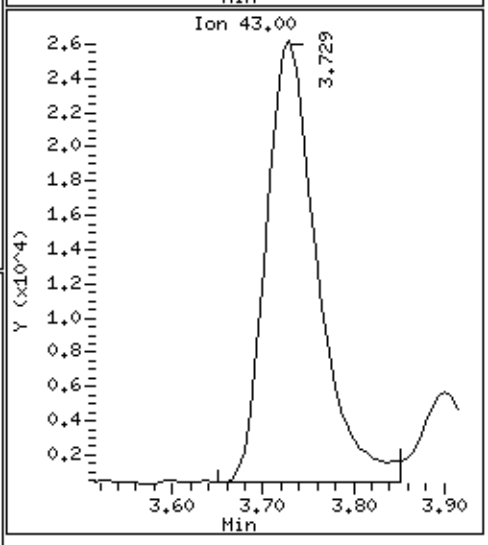
47 Acetone

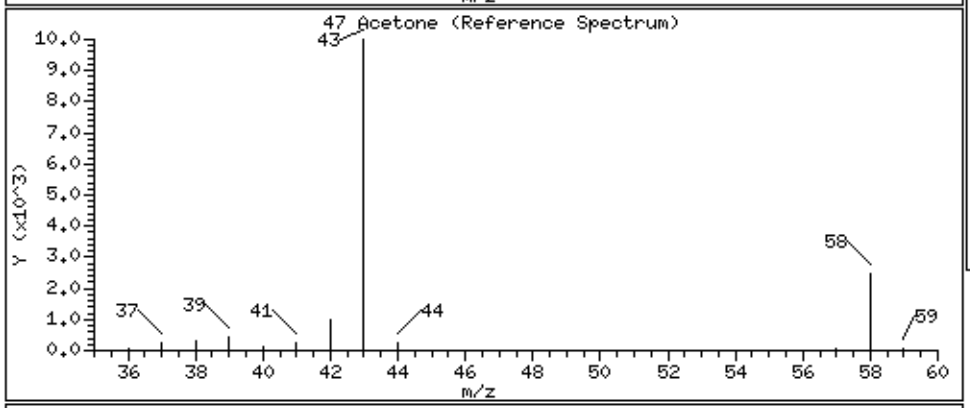
Concentration: 13.659 PPBV

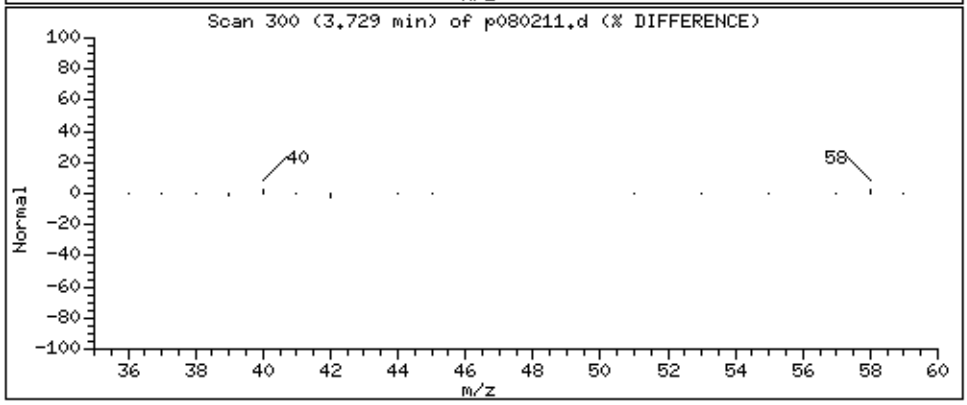












Data File: /chem/msdp.i/02AUG21.b/p080211.d

Date : 02-AUG-2021 16:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3113

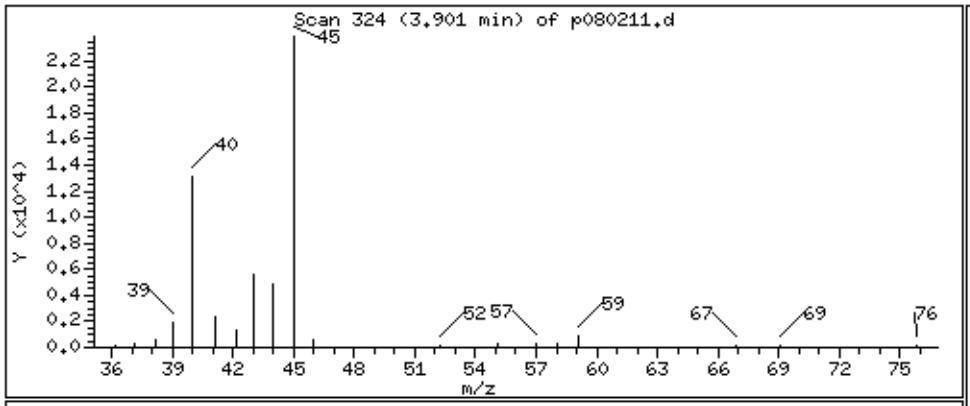
Operator: LD

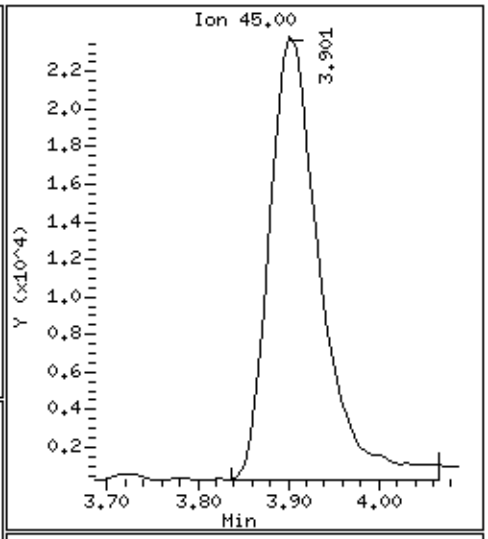
Column phase: RTX-624

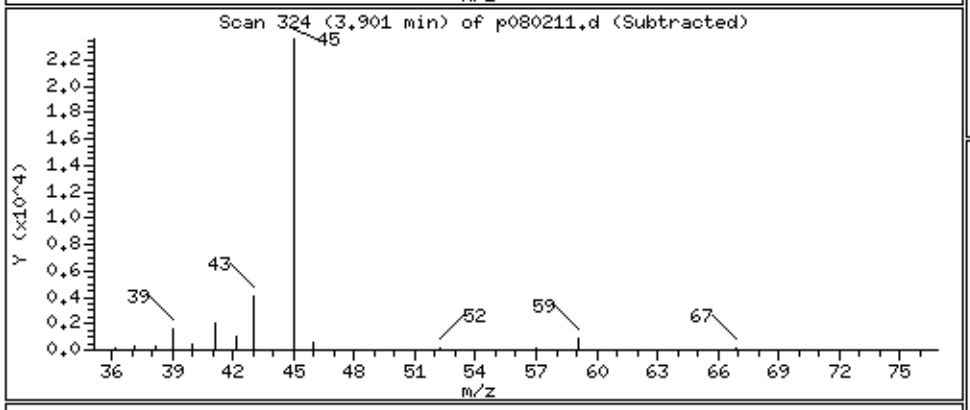
Column diameter: 0.25

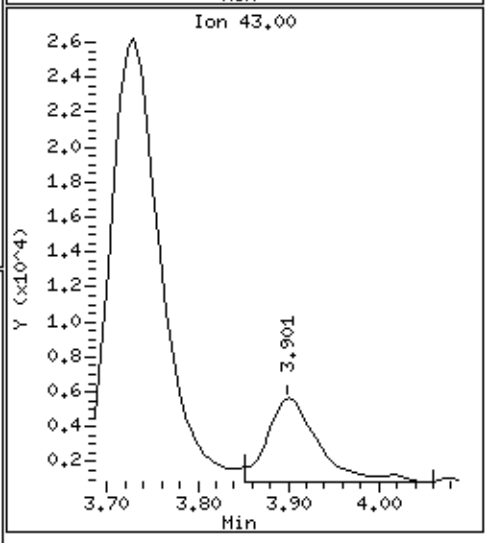
52 2-Propanol

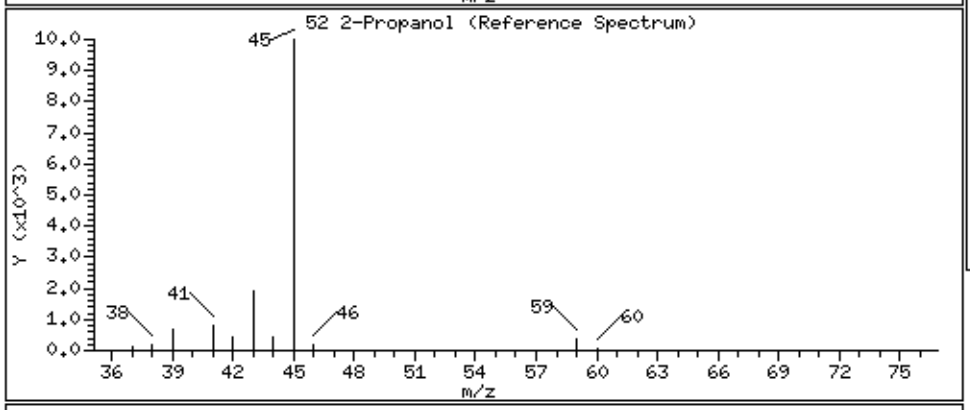
Concentration: 12.004 PPBV

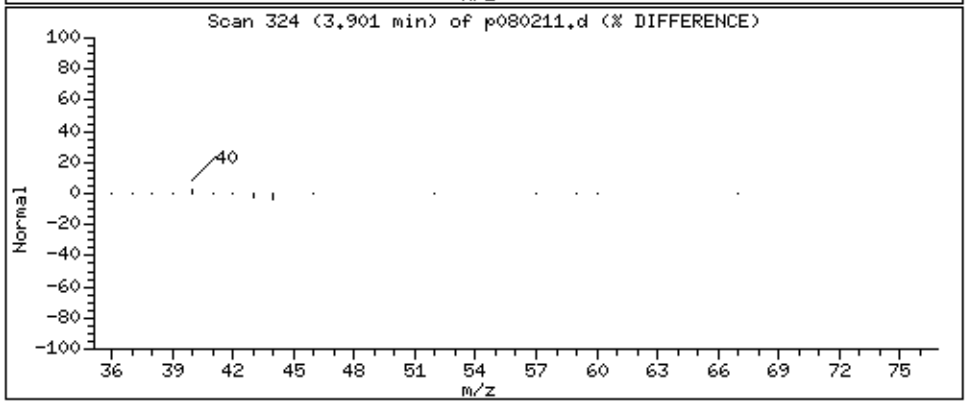












Data File: /chem/msdp.i/02AUG21.b/p080211.d

Date : 02-AUG-2021 16:22

Client ID:

Instrument: msdp.i

Sample Info: 200ml N3113

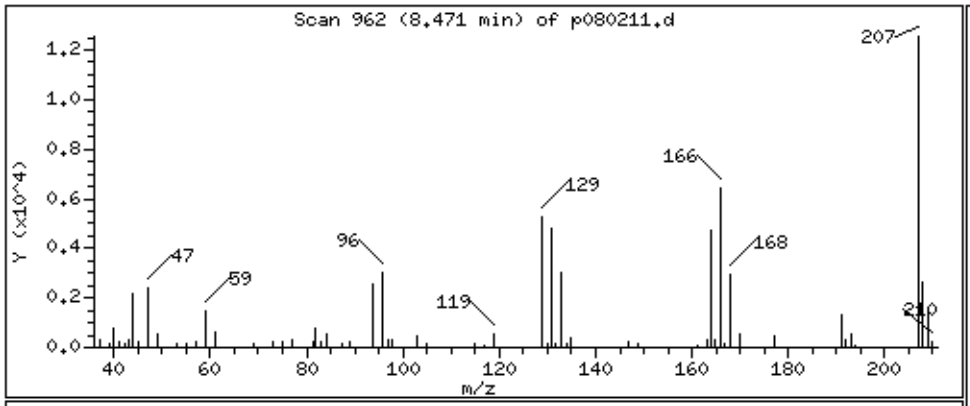
Operator: LD

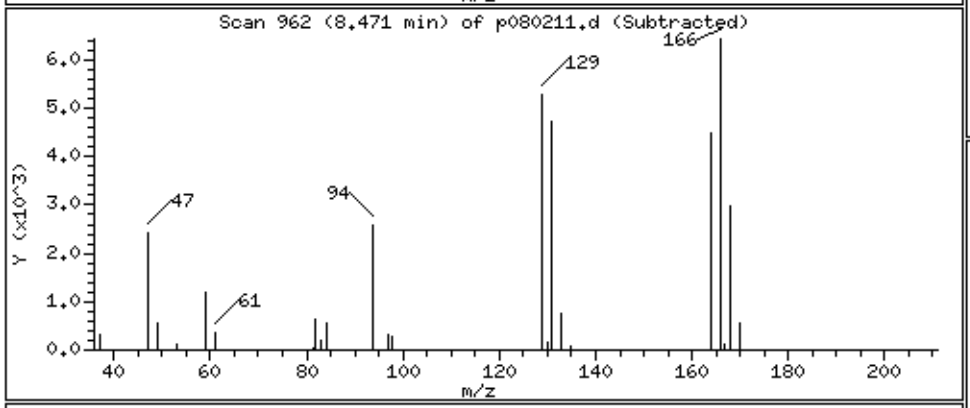
Column phase: RTX-624

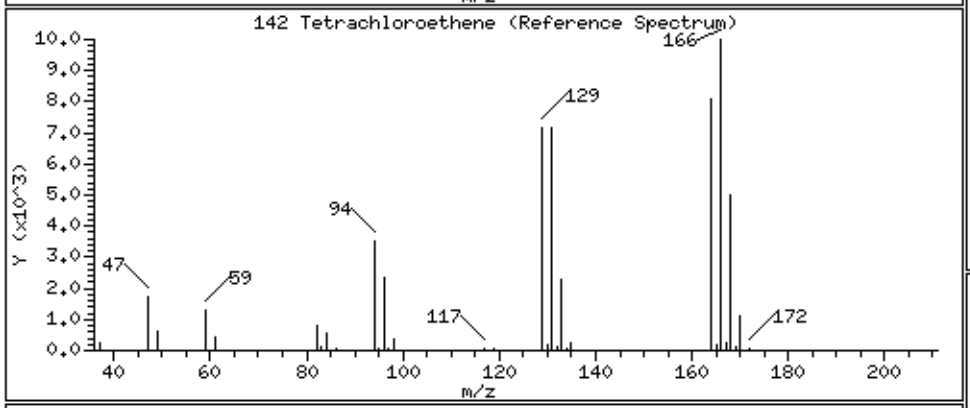
Column diameter: 0.25

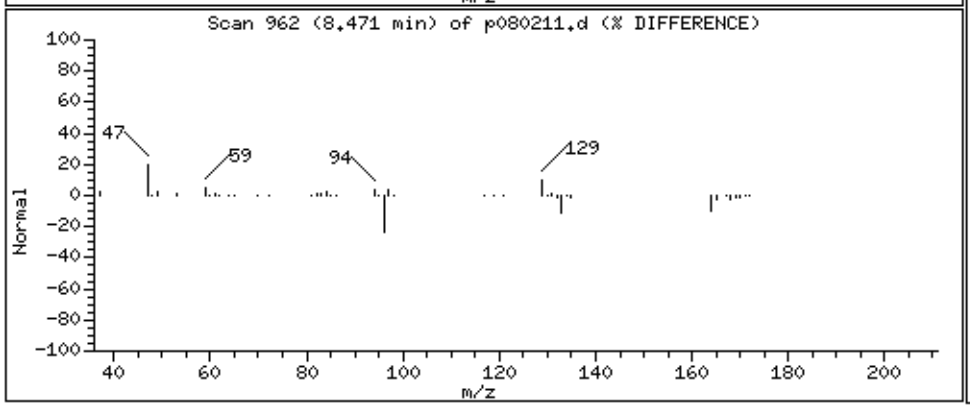
142 Tetrachloroethene

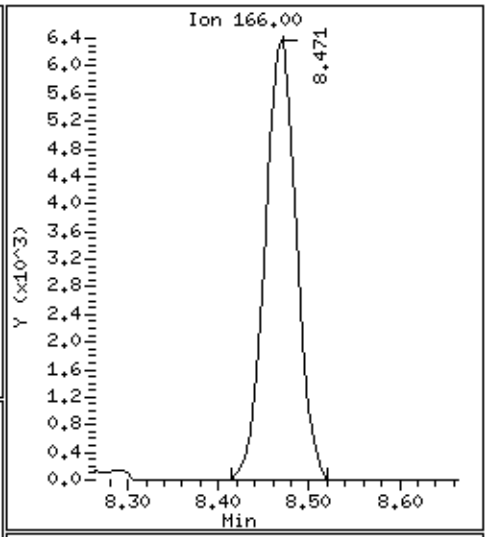
Concentration: 2.535 PPBV

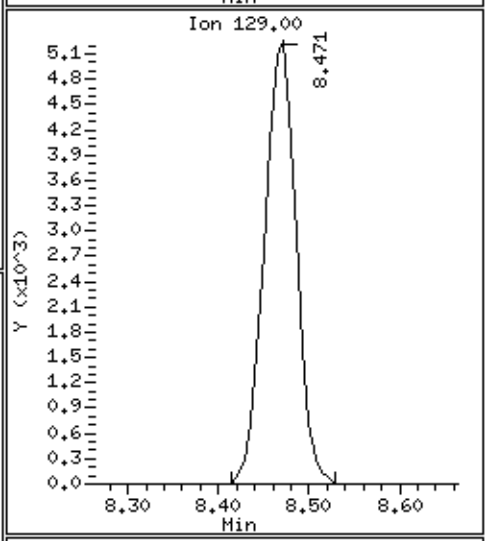


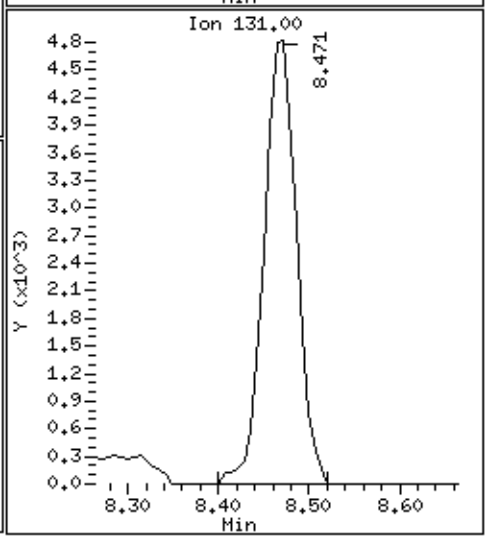












eurofins | Air Toxics

Client Sample ID: SSV-HSS01-01

Lab ID#: 2107362B-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080208**	**Date of Collection:**	**7/15/21 3:13:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 02:54 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	6.6	11	18
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	11	9.9	26
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	24	24	56
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: SSV-HSS01-01

Lab ID#: 2107362B-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080208**	**Date of Collection:**	**7/15/21 3:13:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 02:54 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	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	5.9	5.7	33
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	1.3	4.4	5.8
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	4.0 J	7.0	6.8 J
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	110	6.8	750
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	1.1	3.8	4.2
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	3.9	5.4	21
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

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Client Sample ID: SSV-HSS01-01

Lab ID#: 2107362B-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080208**	**Date of Collection: 7/15/21 3:13:00 PM**	
Dil. Factor:	**2.02**	**Date of Analysis: 8/2/21 02:54 PM**	

J = Estimated value.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	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/02AUG21.b/p080208.d
Lab Smp Id: 2107362B-14A
Inj Date : 02-AUG-2021 14:54
Operator : LD Inst ID: msdp.i
Smp Info : 200ml B2103
Misc Info : 5.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 1
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	160235	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	127702				48.23- 108.23	79.70
5.785	5.778 (1.000)	49	332262				150.57- 210.57	207.36
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	627230	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	92564				0.00- 45.71	14.76
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	608300	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	319108				23.78- 83.78	52.46
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	229101	25.9078	25.908		80.00- 120.00	100.00
6.308	6.308 (1.090)	67	114288				27.21- 87.21	49.89
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	678376	24.9066	24.907		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	70658				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 (1.185)	100	441094			34.95- 94.95	65.02
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	400199	25.6202	25.620	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	488453			95.92- 155.92	122.05
10.921	10.921 (1.154)	176	394386			66.89- 126.89	98.55
5 Propylene					CAS #: 115-07-1		
1.689	1.674 (0.292)	41	14439	1.96919	3.978	80.00- 120.00	100.00(a)
1.689	1.674 (0.292)	42	8958			35.28- 95.28	62.04
1.689	1.674 (0.292)	39	11771			38.35- 98.35	81.53
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.717	1.702 (0.297)	65	11781	3.24364	6.552	80.00- 120.00	100.00
1.717	1.744 (0.297)	51	37226			597.63- 657.63	315.98
1.703	1.702 (0.294)	47	5739			33.72- 93.72	48.71
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	44793	2.93302	5.925	80.00- 120.00	100.00
2.891	2.884 (0.500)	103	30037			34.72- 94.72	67.06
47 Acetone					CAS #: 67-64-1		
3.722	3.715 (0.643)	58	49014	11.6680	23.569	80.00- 120.00	100.00
3.722	3.715 (0.643)	43	179931			302.95- 362.95	367.10
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	90178	5.32643	10.759	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	18609			0.00- 47.19	20.64
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	19308	1.92240	3.883	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	18777			76.29- 136.29	97.25
6.867	6.867 (1.031)	97	11353			33.63- 93.63	58.80
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.195)	91	15597	0.54618	1.103	80.00- 120.00	100.00
7.956	7.948 (1.195)	92	8968			28.38- 88.38	57.50
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	759301	54.7692	110.63	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	584251			47.84- 107.84	76.95
8.464	8.464 (0.895)	131	568747			45.29- 105.29	74.90
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	10481	0.66256	1.338	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)							
9.711	9.718 (1.026)	91	20134			163.73- 223.73	192.09

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: p080208.d
Lab Smp Id: 2107362B-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 5.0 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	160235	7.33
108 1,4-Difluorobenze	558135	334881	781389	627230	12.38
153 Chlorobenzene-d5	542388	325433	759343	608300	12.15

		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	6.66	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: 05-Aug-2021 07:31

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362B-14A
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/02AUG21.b/p21q0519a.m
Misc Info: 5.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.908	103.63	70-130
$ 134 Toluene-d8	25.000	24.907	99.63	70-130
$ 170 4-Bromofluorobenz	25.000	25.620	102.48	70-130

Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

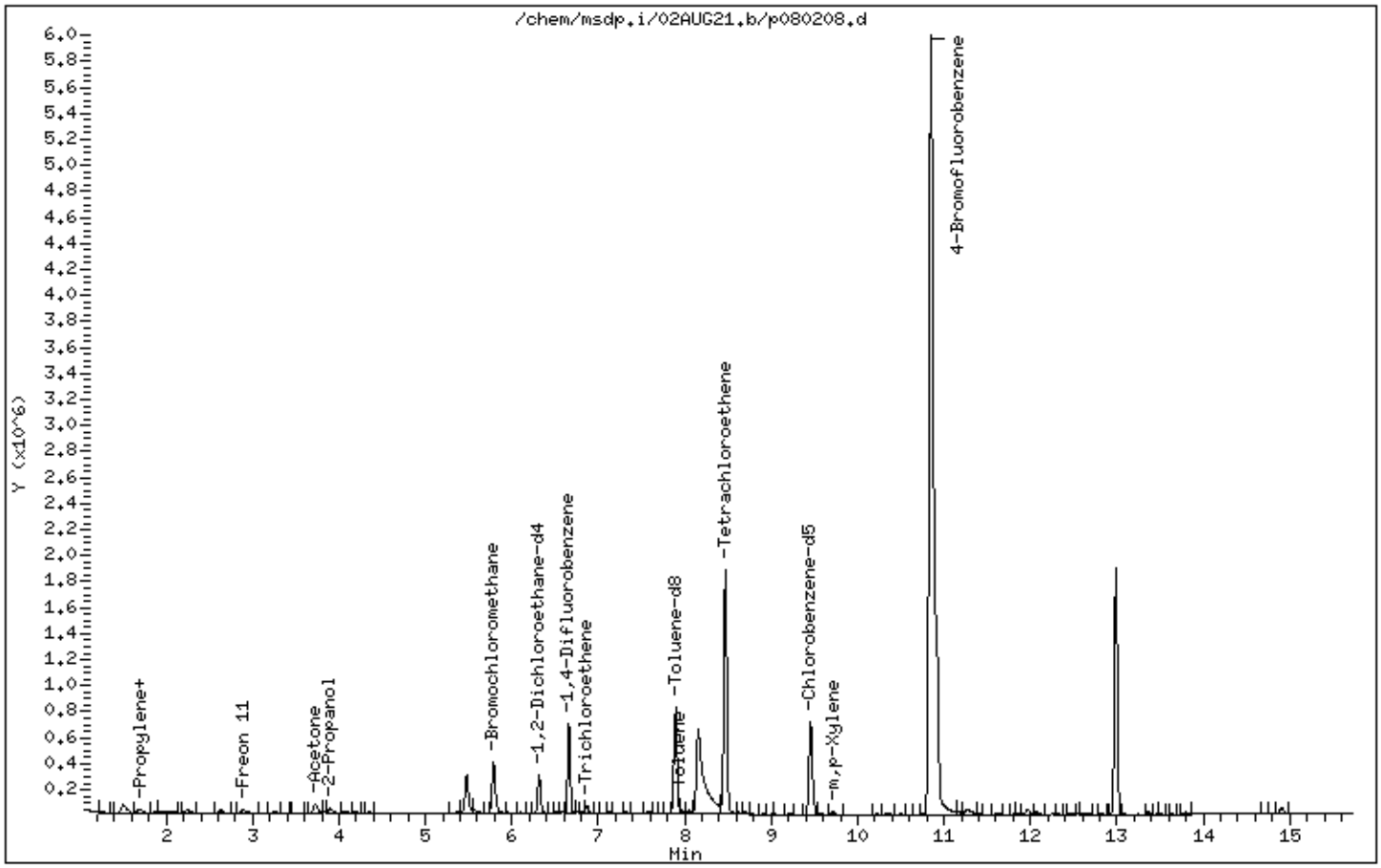
Instrument: msdp.i

Sample Info: 200ml B2103

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

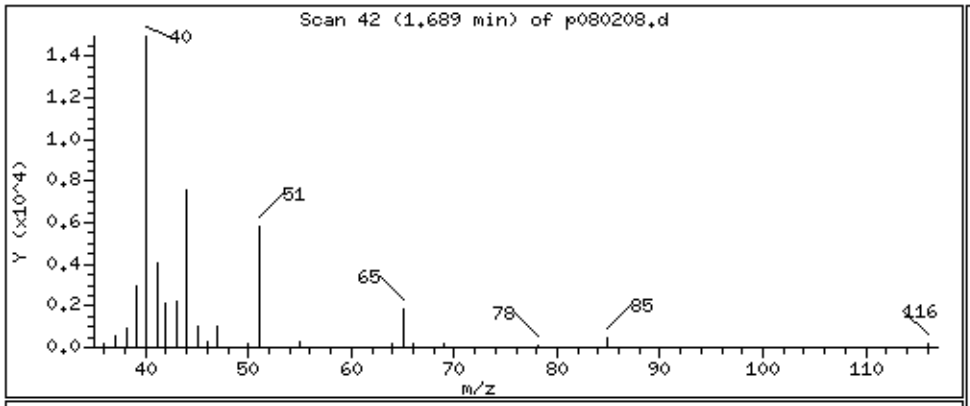
Operator: LD

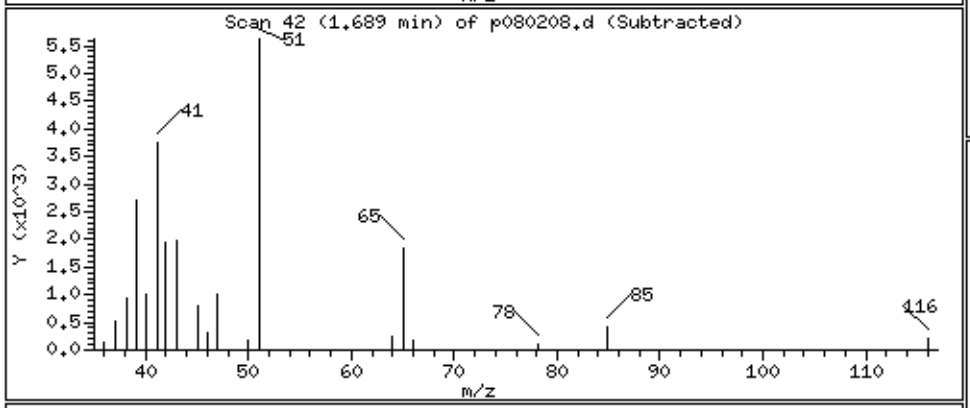
Column phase: RTX-624

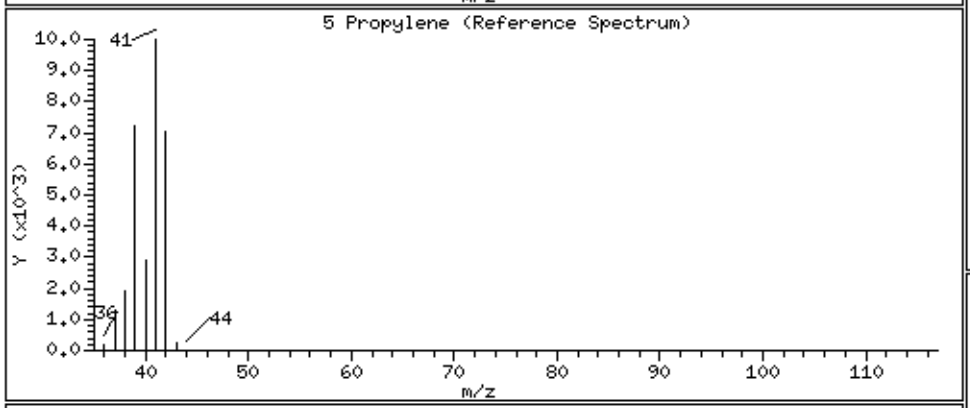
Column diameter: 0.25

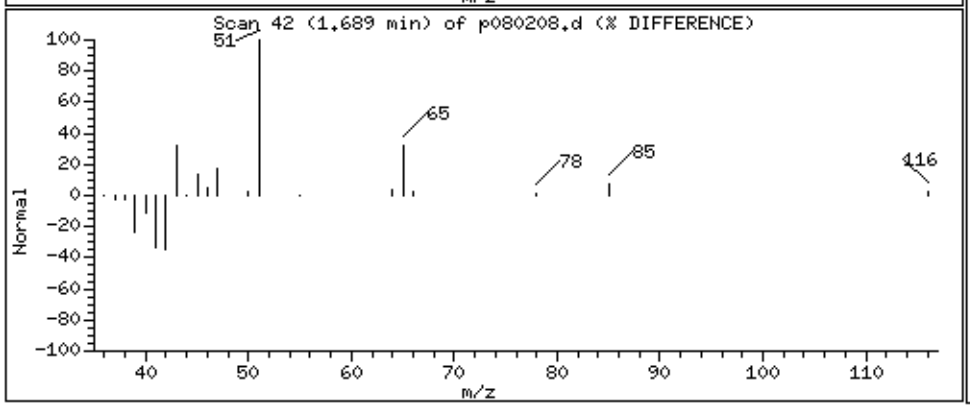
5 Propylene

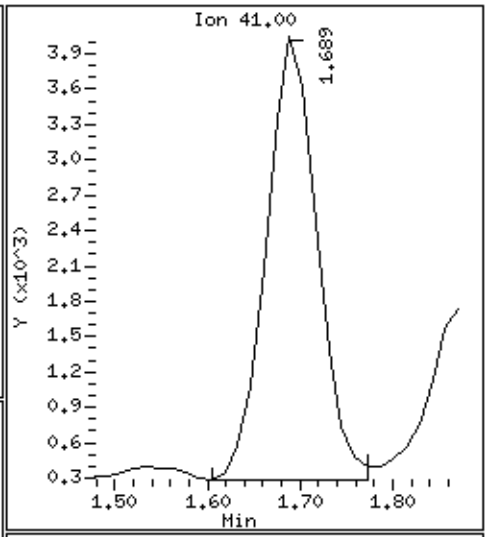
Concentration: 3.978 PPBV

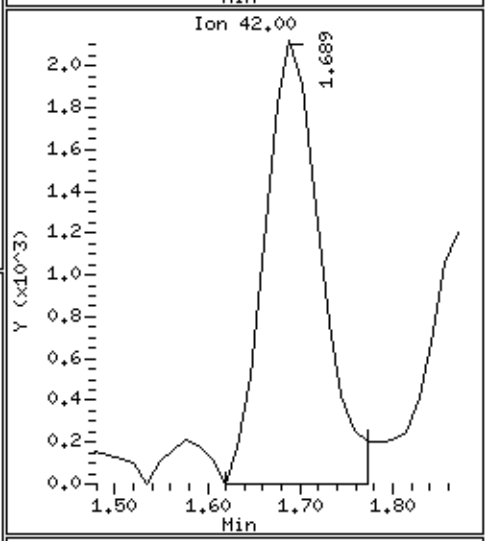


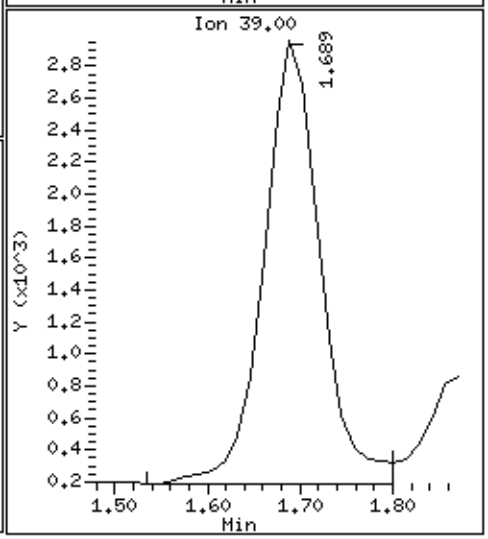












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

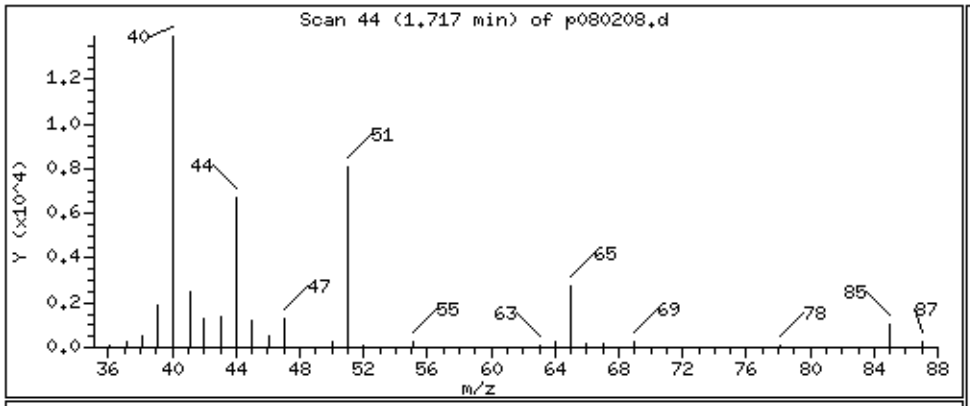
Operator: LD

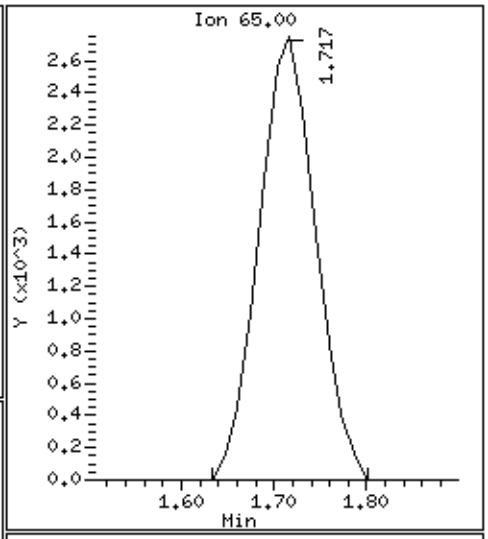
Column phase: RTX-624

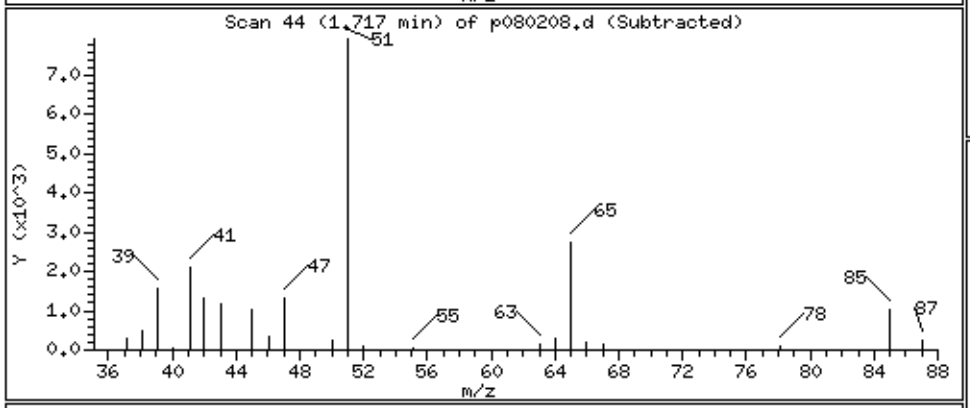
Column diameter: 0.25

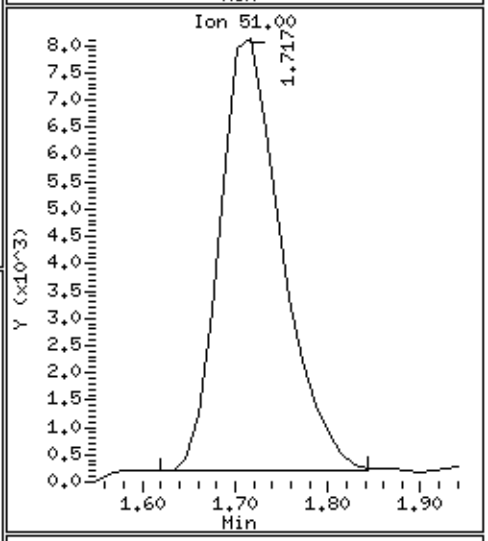
7 1,1-Difluoroethane

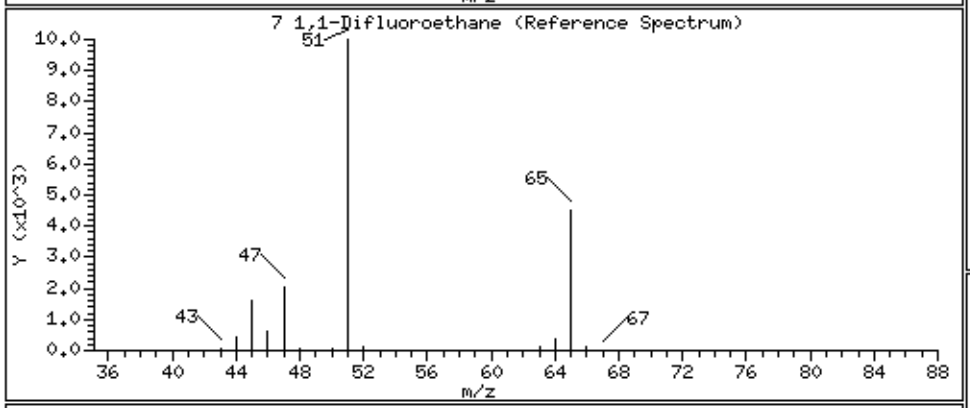
Concentration: 6.552 PPBV

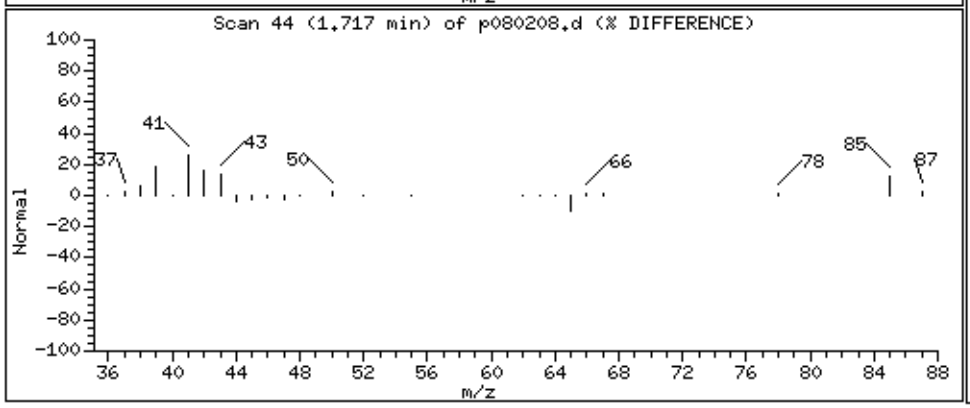


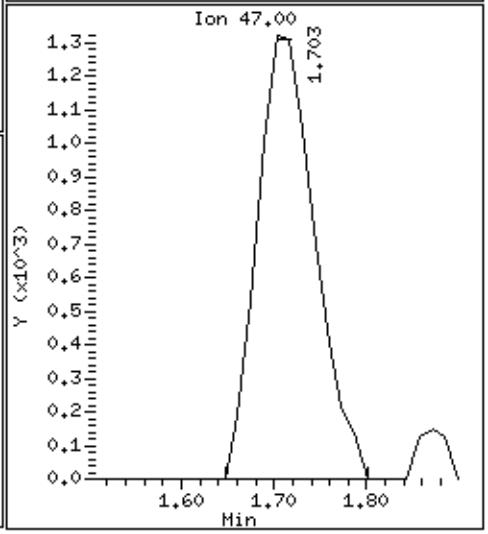












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

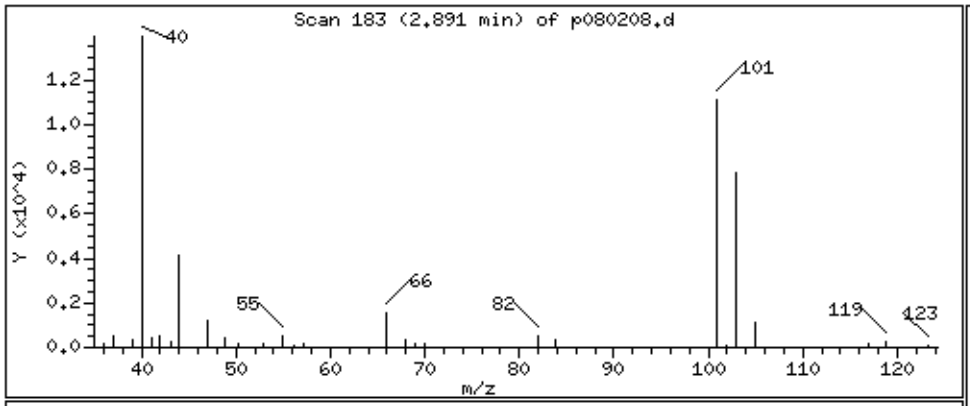
Operator: LD

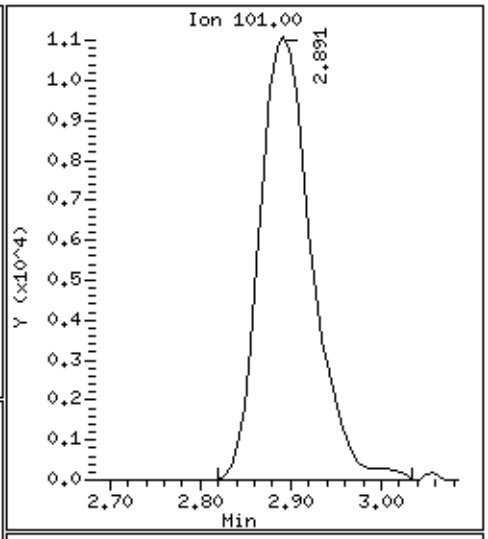
Column phase: RTX-624

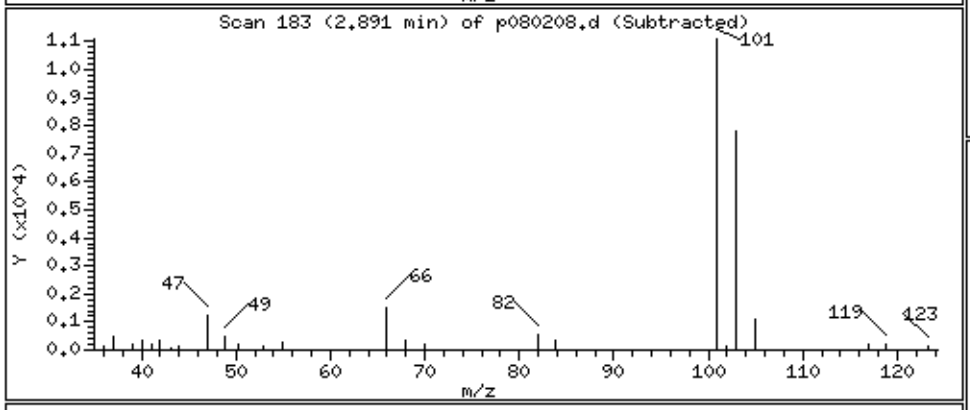
Column diameter: 0.25

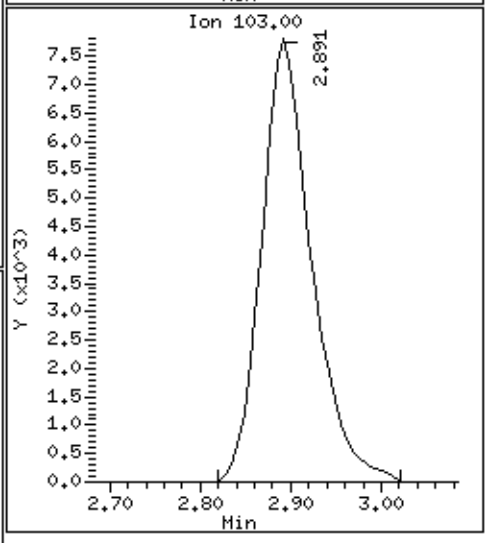
33 Freon 11

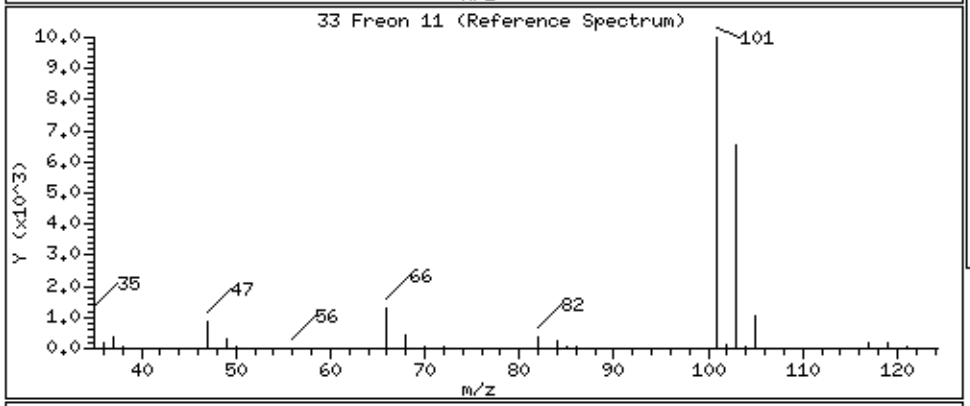
Concentration: 5.925 PPBV

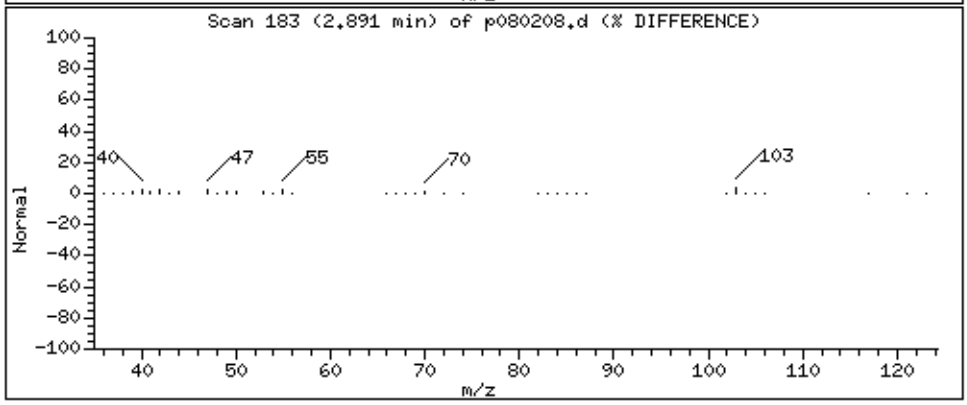












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

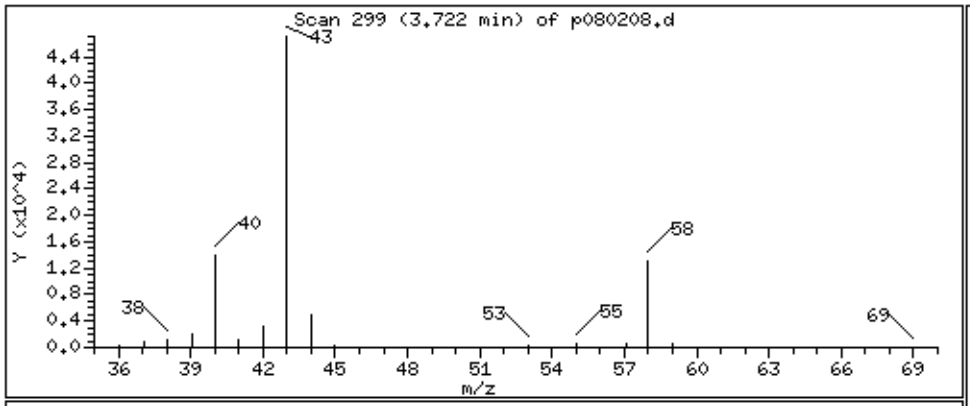
Operator: LD

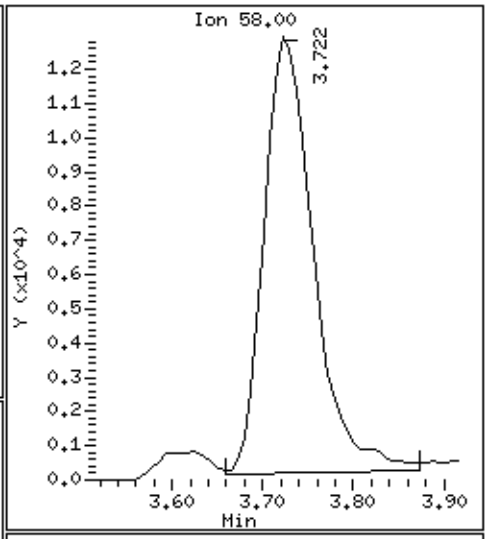
Column phase: RTX-624

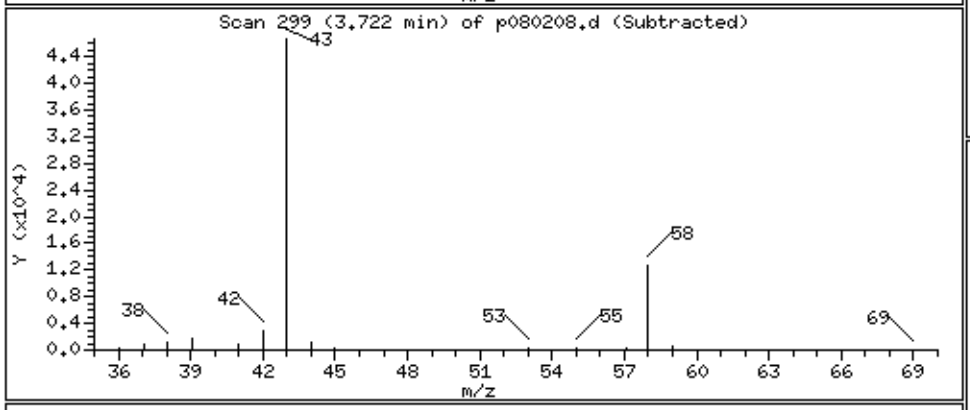
Column diameter: 0.25

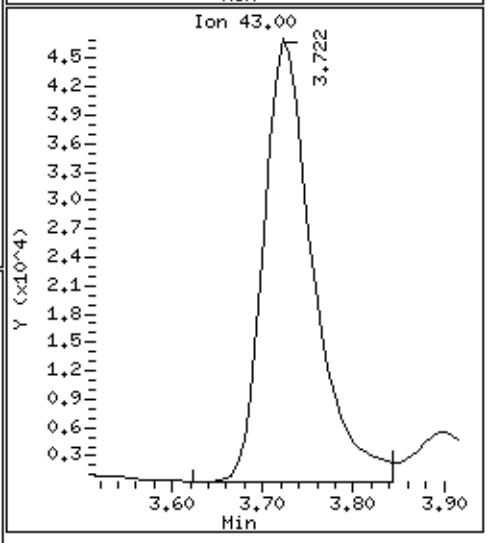
47 Acetone

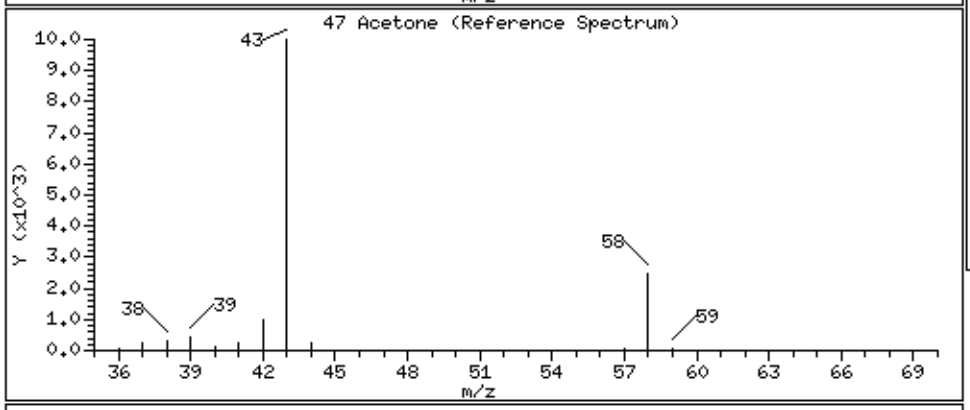
Concentration: 23.569 PPBV

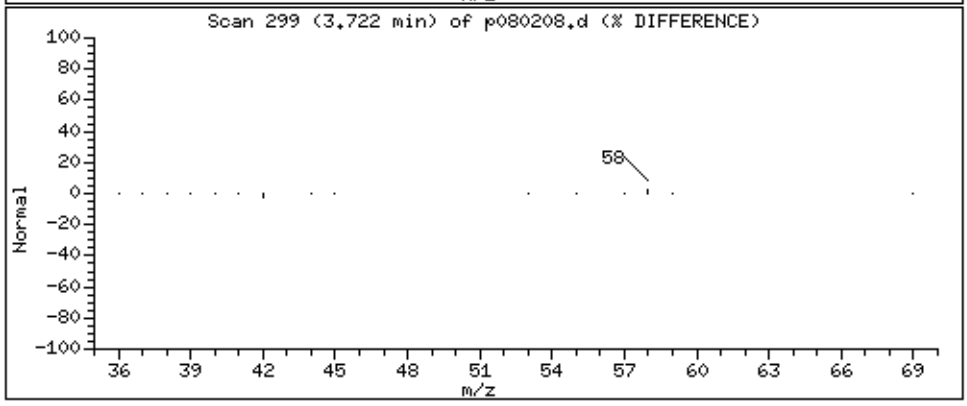












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

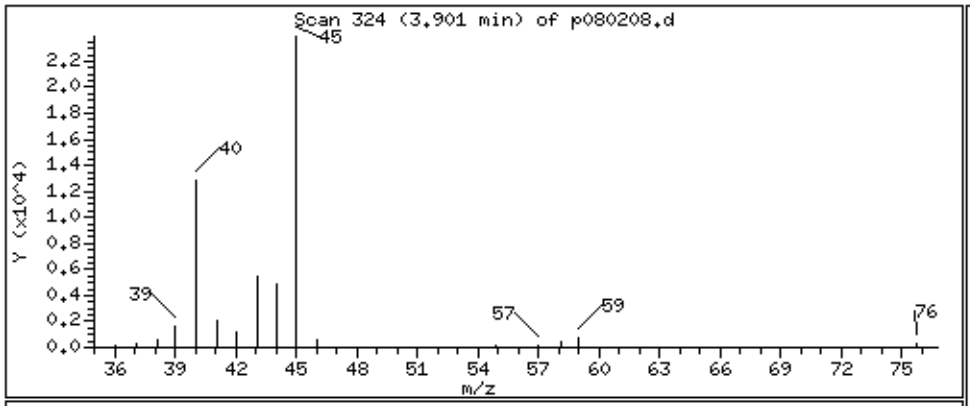
Operator: LD

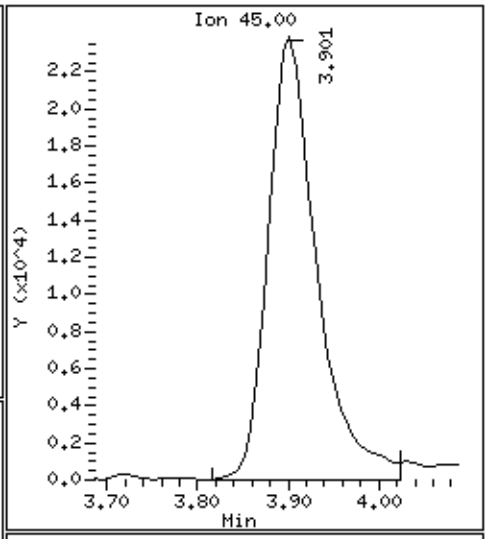
Column phase: RTX-624

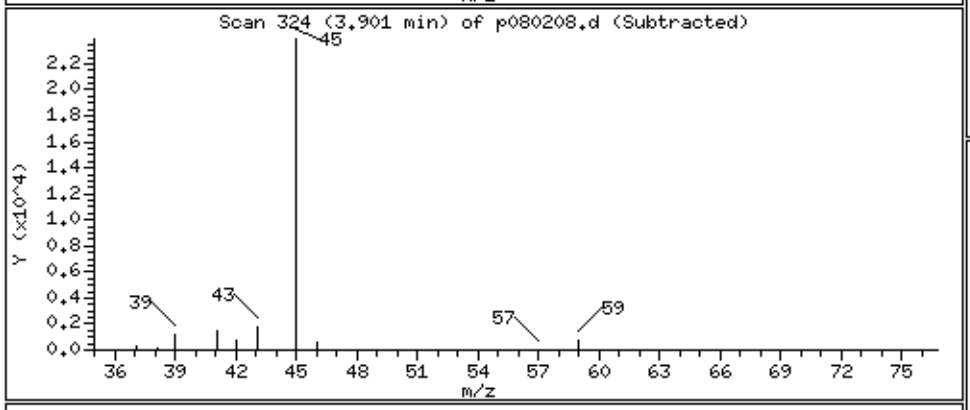
Column diameter: 0.25

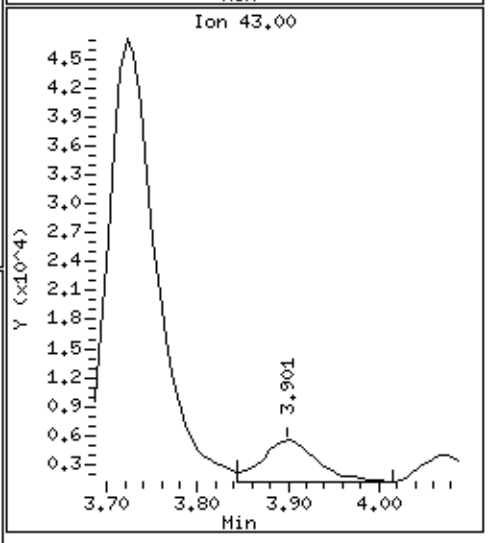
52 2-Propanol

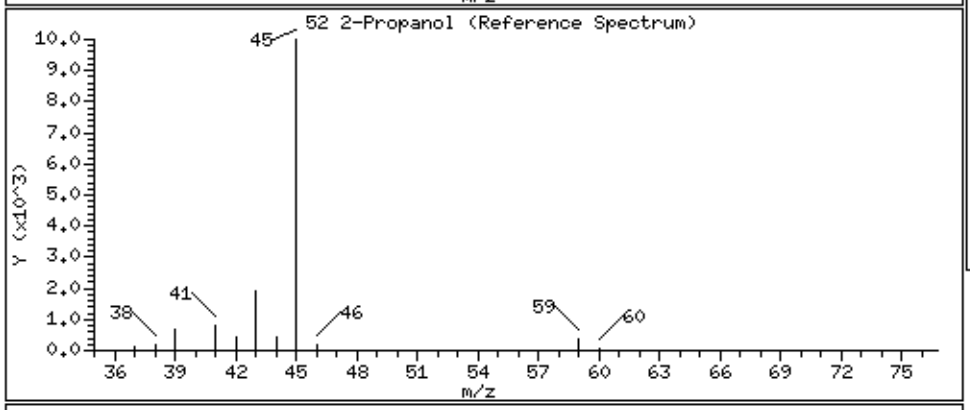
Concentration: 10.759 PPBV

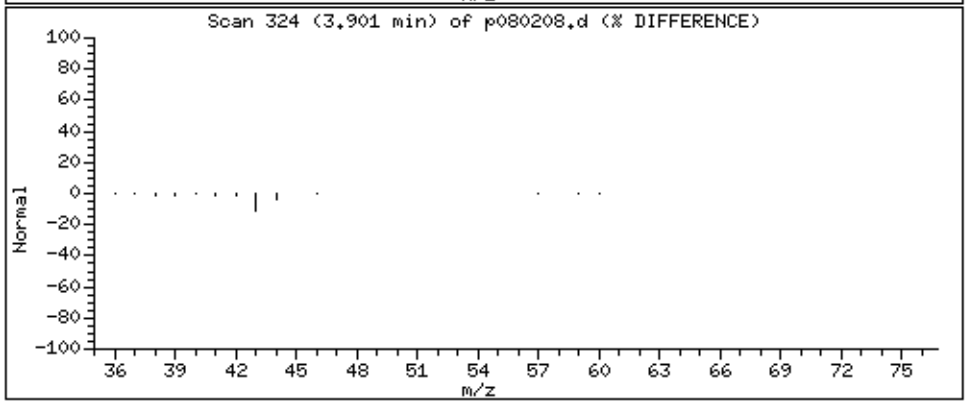












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

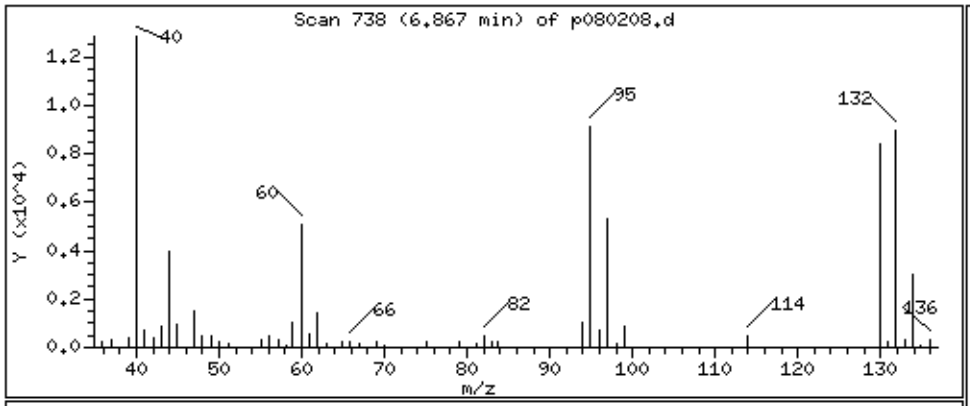
Operator: LD

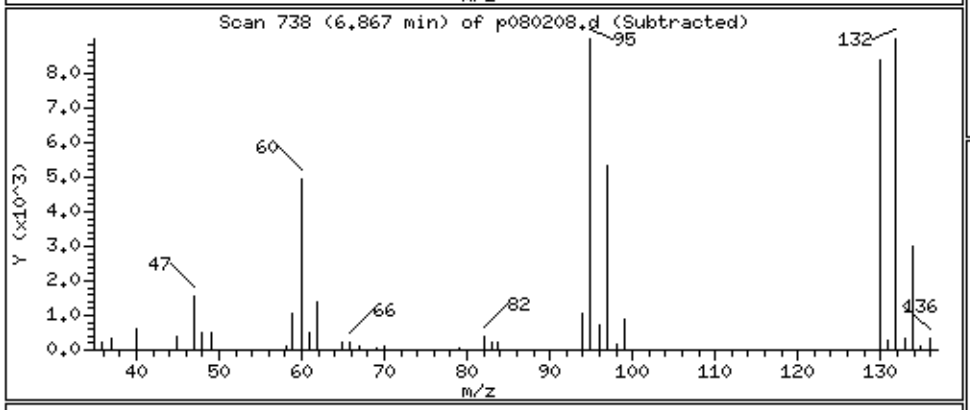
Column phase: RTX-624

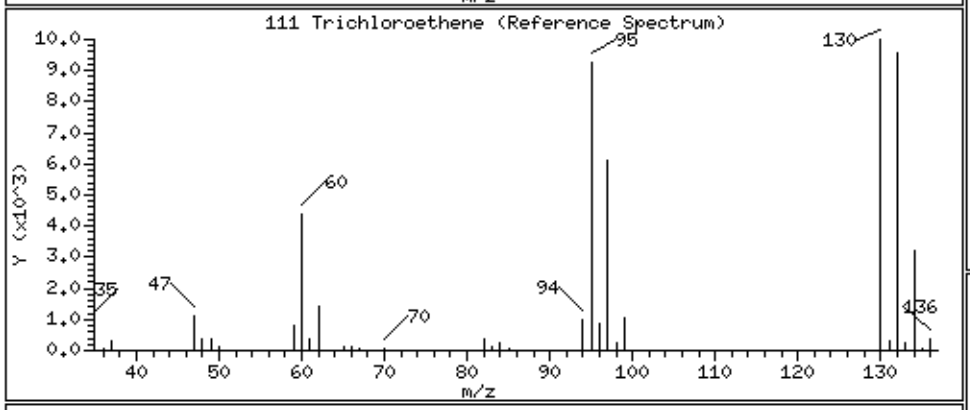
Column diameter: 0.25

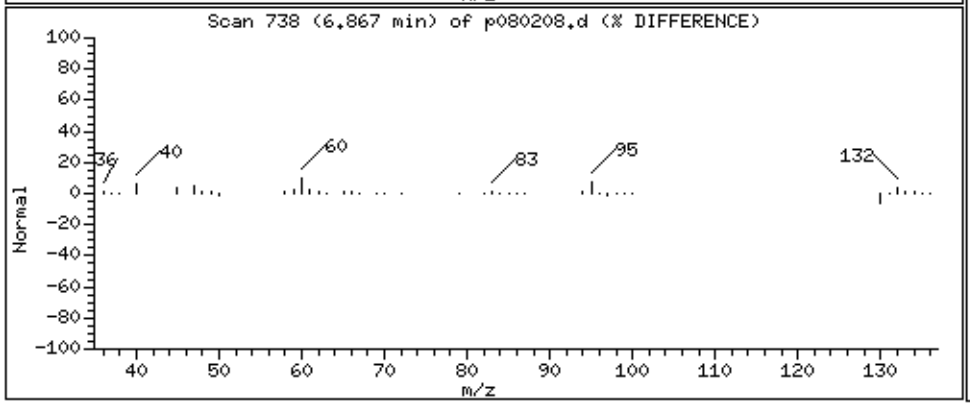
111 Trichloroethene

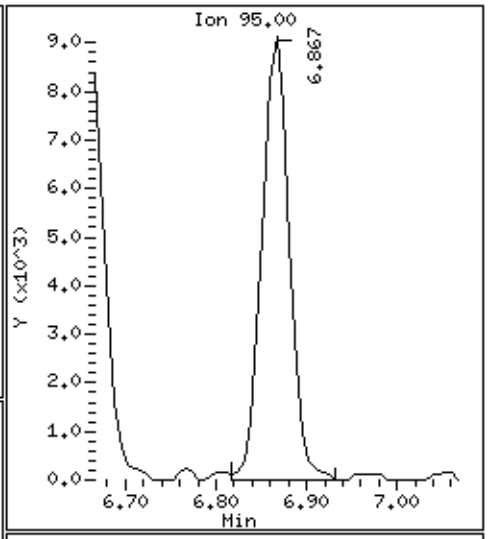
Concentration: 3.883 PPBV

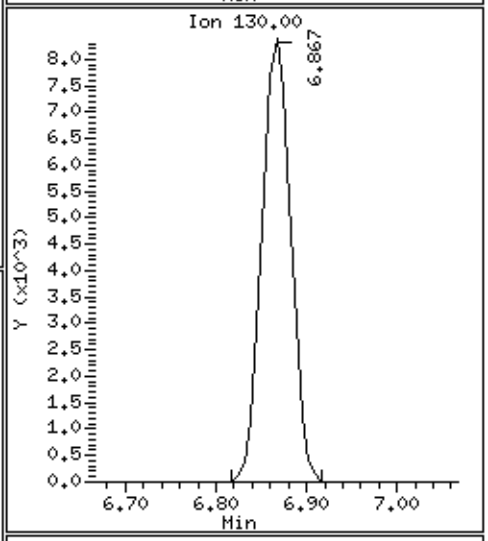


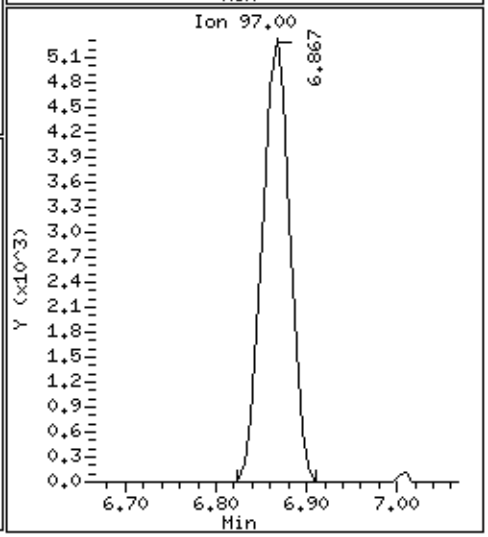












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

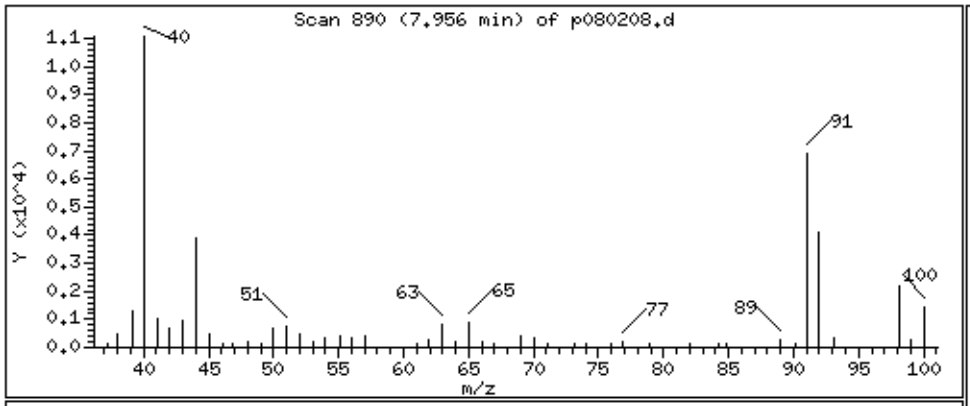
Operator: LD

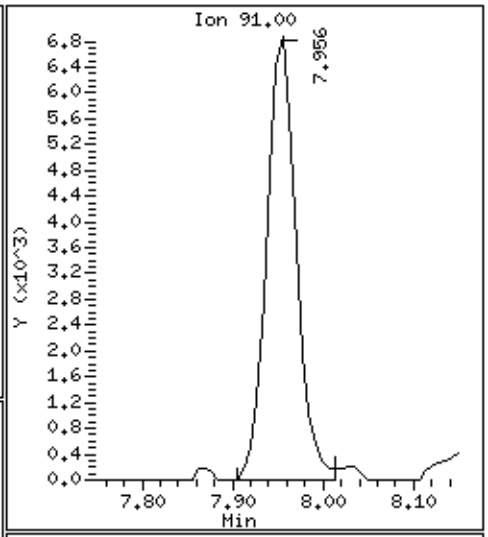
Column phase: RTX-624

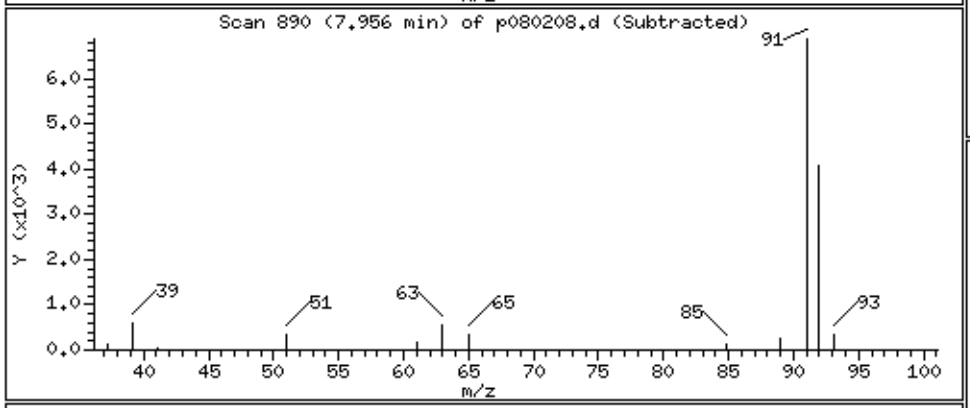
Column diameter: 0.25

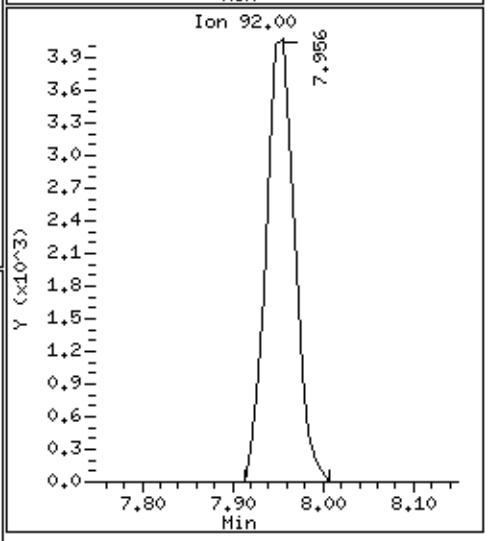
137 Toluene

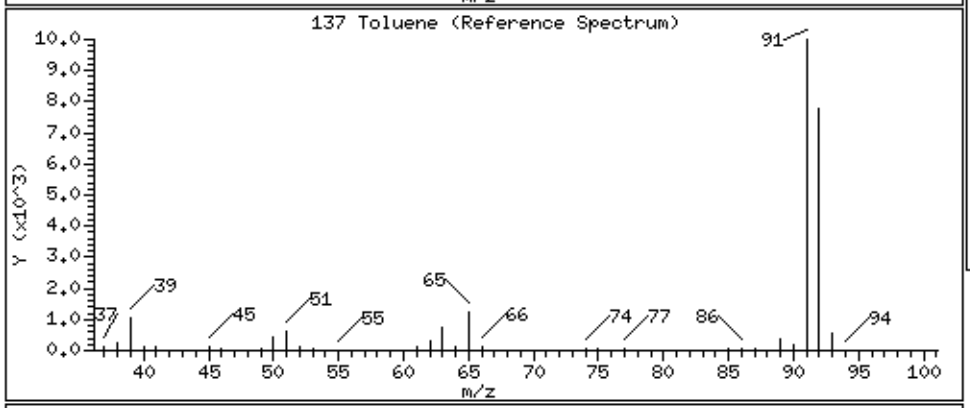
Concentration: 1.103 PPBV

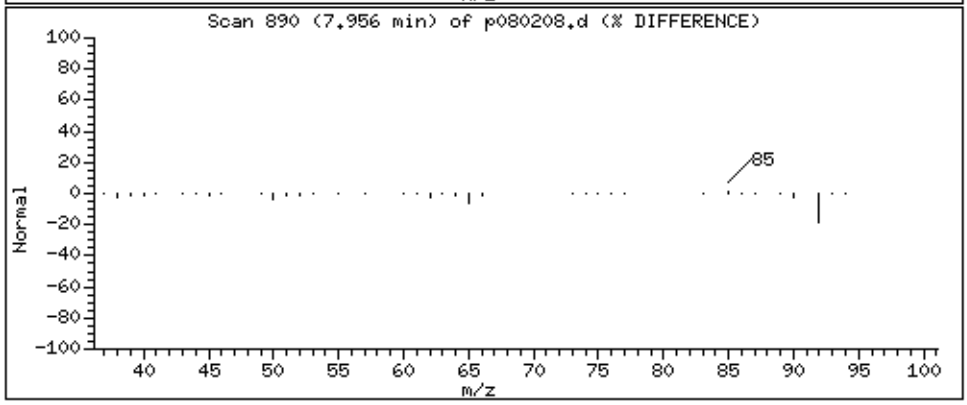












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

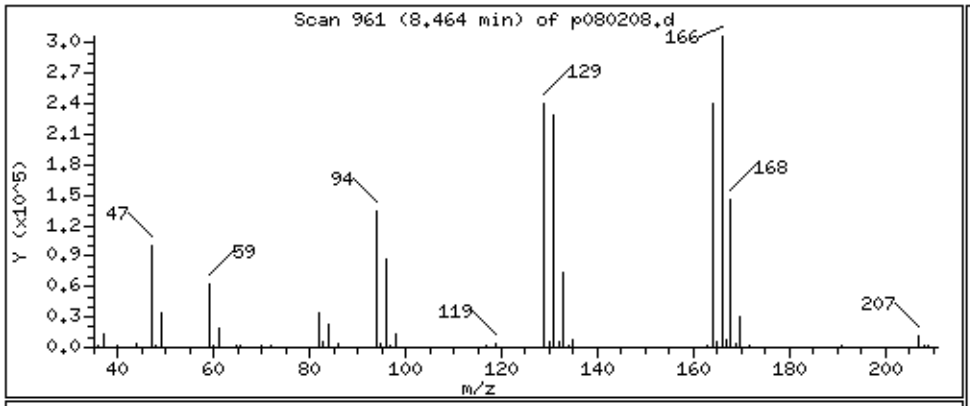
Operator: LD

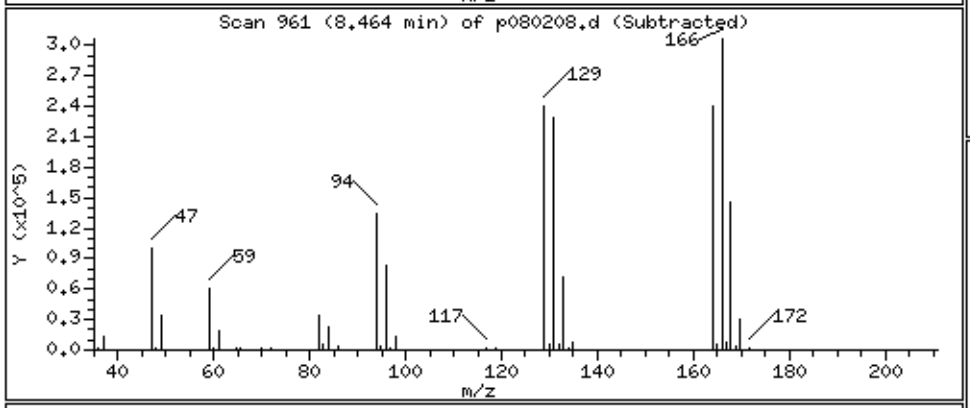
Column phase: RTX-624

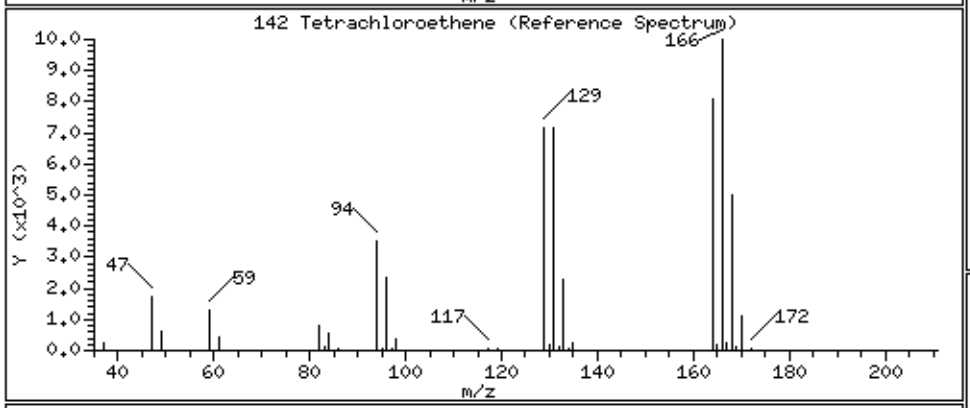
Column diameter: 0.25

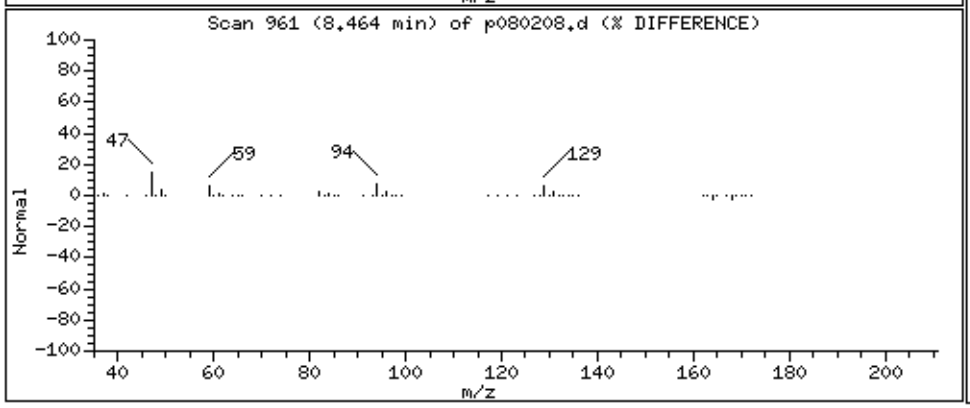
142 Tetrachloroethene

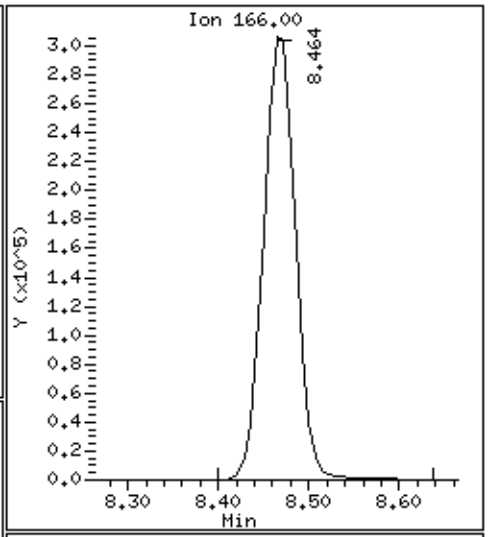
Concentration: 110.63 PPBV

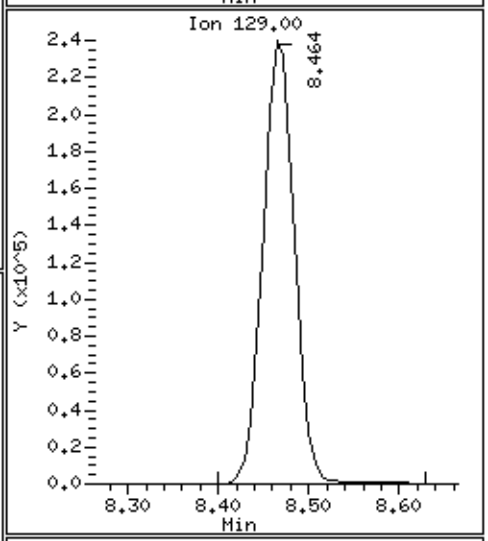


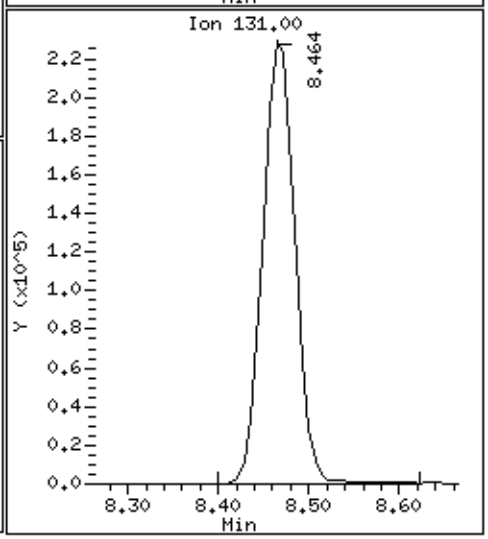












Data File: /chem/msdp.i/02AUG21.b/p080208.d

Date : 02-AUG-2021 14:54

Client ID:

Instrument: msdp.i

Sample Info: 200ml B2103

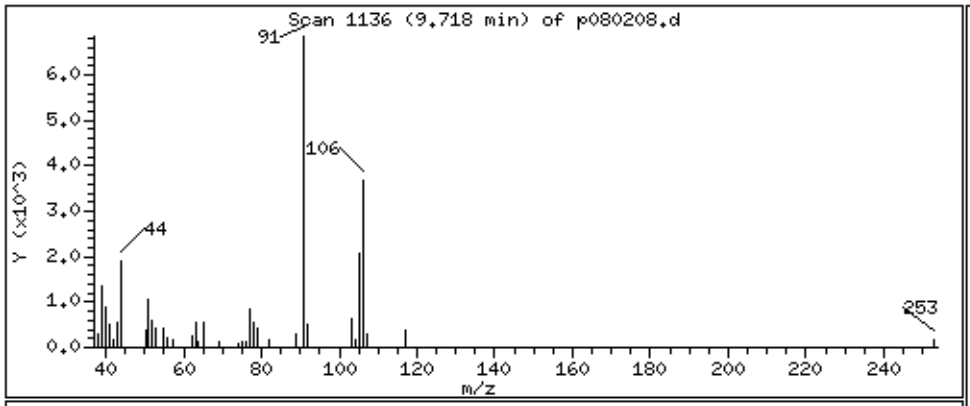
Operator: LD

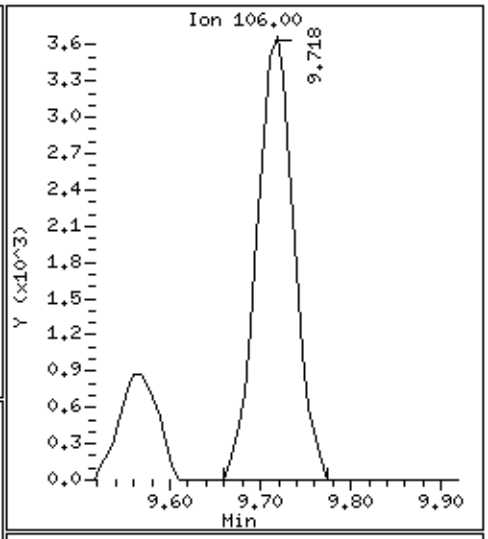
Column phase: RTX-624

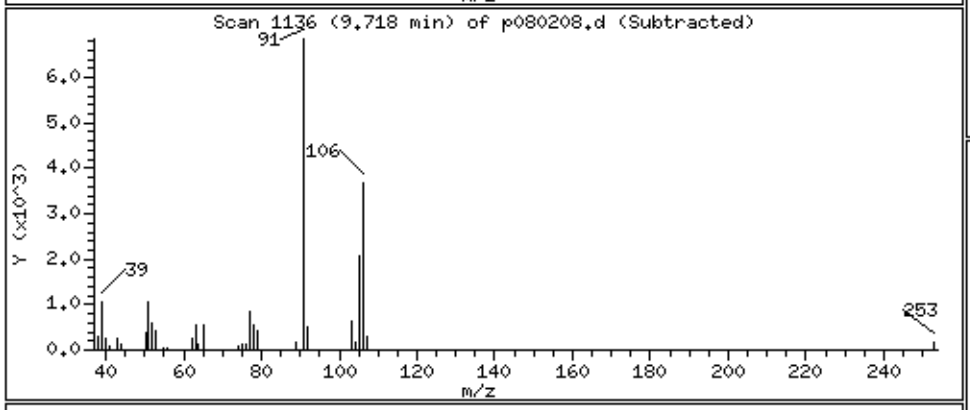
Column diameter: 0.25

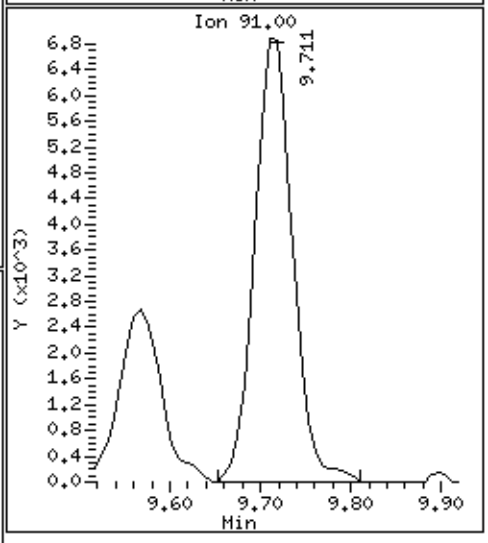
158 m,p-Xylene

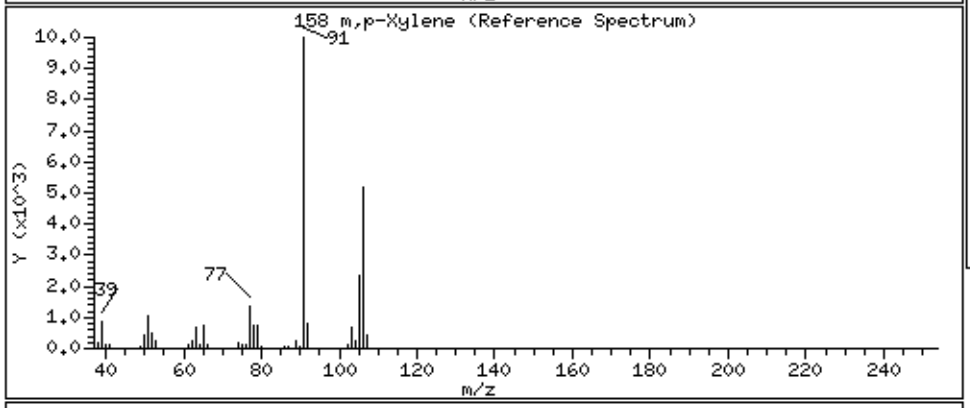
Concentration: 1.338 PPBV

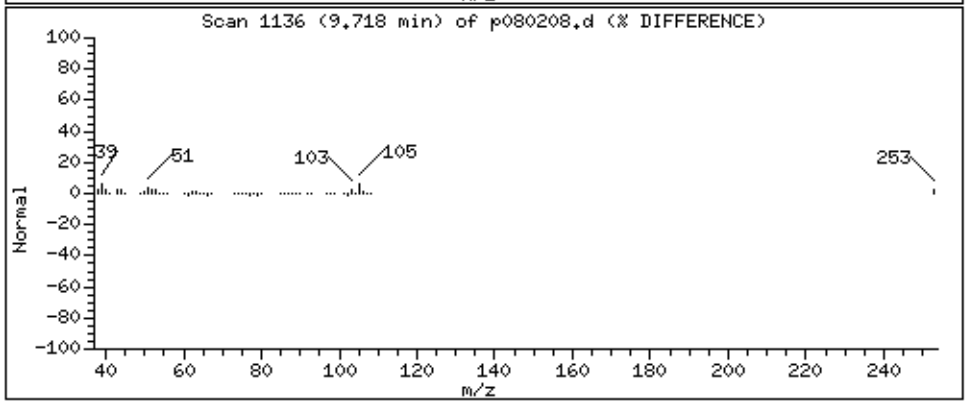












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Client Sample ID: SSV-HMBSS01-01

Lab ID#: 2107362B-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080214**	**Date of Collection:**	**7/15/21 3:30:00 PM**
Dil. Factor:	**13.1**	**Date of Analysis:**	**8/2/21 05:46 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	26	Not Detected	180	Not Detected
1,1,1-Trichloroethane	6.6	Not Detected	36	Not Detected
1,1,2,2-Tetrachloroethane	6.6	Not Detected	45	Not Detected
1,1,2-Trichloroethane	6.6	Not Detected	36	Not Detected
1,1-Dichloroethane	6.6	Not Detected	26	Not Detected
1,1-Dichloroethene	6.6	Not Detected	26	Not Detected
1,1-Difluoroethane	26	1300	71	3500
1,2,3-Trichloropropane	26	Not Detected	160	Not Detected
1,2,4-Trichlorobenzene	26	Not Detected	190	Not Detected
1,2,4-Trimethylbenzene	6.6	Not Detected	32	Not Detected
1,2-Dibromo-3-chloropropane	26	Not Detected	250	Not Detected
1,2-Dibromoethane (EDB)	6.6	Not Detected	50	Not Detected
1,2-Dichlorobenzene	6.6	Not Detected	39	Not Detected
1,2-Dichloroethane	6.6	Not Detected	26	Not Detected
1,2-Dichloropropane	6.6	Not Detected	30	Not Detected
1,3,5-Trimethylbenzene	6.6	Not Detected	32	Not Detected
1,3-Butadiene	6.6	Not Detected	14	Not Detected
1,3-Dichlorobenzene	6.6	Not Detected	39	Not Detected
1,4-Dichlorobenzene	6.6	Not Detected	39	Not Detected
1,4-Dioxane	26	Not Detected	94	Not Detected
2,2,4-Trimethylpentane	6.6	Not Detected	30	Not Detected
2-Butanone (Methyl Ethyl Ketone)	26	Not Detected	77	Not Detected
2-Hexanone	26	Not Detected	110	Not Detected
2-Propanol	26	Not Detected	64	Not Detected
3-Chloropropene	26	Not Detected	82	Not Detected
4-Ethyltoluene	6.6	Not Detected	32	Not Detected
4-Methyl-2-pentanone	6.6	Not Detected	27	Not Detected
Acetone	66	Not Detected	160	Not Detected
Acrolein	26	Not Detected	60	Not Detected
Acrylonitrile	26	Not Detected	57	Not Detected
alpha-Chlorotoluene	6.6	Not Detected	34	Not Detected
Benzene	6.6	Not Detected	21	Not Detected
Bromodichloromethane	6.6	Not Detected	44	Not Detected
Bromoform	6.6	Not Detected	68	Not Detected
Bromomethane	66	Not Detected	250	Not Detected
Carbon Disulfide	26	Not Detected	82	Not Detected
Carbon Tetrachloride	6.6	Not Detected	41	Not Detected
Chlorobenzene	6.6	Not Detected	30	Not Detected
Chloroethane	26	Not Detected	69	Not Detected
Chloroform	6.6	Not Detected	32	Not Detected
Chloromethane	66	Not Detected	140	Not Detected
cis-1,2-Dichloroethene	6.6	Not Detected	26	Not Detected

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Client Sample ID: SSV-HMBSS01-01

Lab ID#: 2107362B-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080214**	**Date of Collection:**	**7/15/21 3:30:00 PM**
Dil. Factor:	**13.1**	**Date of Analysis:**	**8/2/21 05:46 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	6.6	Not Detected	30	Not Detected
Cumene	6.6	Not Detected	32	Not Detected
Cyclohexane	6.6	Not Detected	22	Not Detected
Dibromochloromethane	6.6	Not Detected	56	Not Detected
Dibromomethane	26	Not Detected	190	Not Detected
Ethanol	66	Not Detected	120	Not Detected
Ethyl Acetate	26	Not Detected	94	Not Detected
Ethyl Benzene	6.6	Not Detected	28	Not Detected
Ethyl-tert-butyl ether	26	Not Detected	110	Not Detected
Freon 11	6.6	Not Detected	37	Not Detected
Freon 12	6.6	Not Detected	32	Not Detected
Freon 113	6.6	Not Detected	50	Not Detected
Freon 114	6.6	Not Detected	46	Not Detected
Freon 134a	26	Not Detected	110	Not Detected
Heptane	6.6	Not Detected	27	Not Detected
Hexachlorobutadiene	26	Not Detected	280	Not Detected
Hexachloroethane	26	Not Detected	250	Not Detected
Hexane	6.6	Not Detected	23	Not Detected
Iodomethane	66	Not Detected	380	Not Detected
Isopropyl ether	26	Not Detected	110	Not Detected
m,p-Xylene	6.6	Not Detected	28	Not Detected
Methyl tert-butyl ether	26	Not Detected	94	Not Detected
Methylene Chloride	66	Not Detected	230	Not Detected
Naphthalene	13	Not Detected	69	Not Detected
o-Xylene	6.6	Not Detected	28	Not Detected
Propylbenzene	6.6	Not Detected	32	Not Detected
Propylene	26	Not Detected	45	Not Detected
Styrene	6.6	Not Detected	28	Not Detected
tert-Amyl methyl ether	26	Not Detected	110	Not Detected
tert-Butyl alcohol	26	Not Detected	79	Not Detected
Tetrachloroethene	6.6	9.5	44	64
Tetrahydrofuran	6.6	Not Detected	19	Not Detected
Toluene	6.6	Not Detected	25	Not Detected
TPH ref. to Gasoline (MW=100)	660	Not Detected	2700	Not Detected
trans-1,2-Dichloroethene	6.6	Not Detected	26	Not Detected
trans-1,3-Dichloropropene	6.6	Not Detected	30	Not Detected
Trichloroethene	6.6	Not Detected	35	Not Detected
Vinyl Acetate	26	Not Detected	92	Not Detected
Vinyl Bromide	26	Not Detected	110	Not Detected
Vinyl Chloride	6.6	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SSV-HMBSS01-01

Lab ID#: 2107362B-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080214**	**Date of Collection:**	**7/15/21 3:30:00 PM**
Dil. Factor:	**13.1**	**Date of Analysis:**	**8/2/21 05:46 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	100	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080214.d
Lab Smp Id: 2107362B-15A
Inj Date : 02-AUG-2021 17:46
Operator : LD Inst ID: msdp.i
Smp Info : 32mL N5570
Misc Info : 6.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 7
Dil Factor: 13.10000
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		
5.778	5.778 (1.000)	130	166281	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126891				48.23- 108.23	76.31
5.778	5.778 (1.000)	49	337776				150.57- 210.57	203.14
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	576649	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	86642				0.00- 45.71	15.03
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	576091	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	299524				23.78- 83.78	51.99
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	221770	24.1669	24.167		80.00- 120.00	100.00(a)
6.308	6.308 (1.092)	67	111608				27.21- 87.21	50.33
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	623604	24.9039	24.904		80.00- 120.00	100.00(a)
7.891	7.891 (1.184)	70	64479				0.00- 40.44	10.34

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	409765			34.95- 94.95	65.71
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	369289	24.9632	24.963	80.00- 120.00	100.00(a)
10.914	10.921 (1.154)	95	444110			95.92- 155.92	120.26
10.921	10.921 (1.154)	176	350074			66.89- 126.89	94.80
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.703	1.702 (0.295)	65	371555	98.5800	1291.4	80.00- 120.00	100.00
1.689	1.744 (0.292)	51	1108706			597.63- 657.63	298.40
1.689	1.702 (0.292)	47	194722			33.72- 93.72	52.41
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	9494	0.72310	9.473	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	7399			47.84- 107.84	77.94
8.464	8.464 (0.895)	131	7840			45.29- 105.29	82.58

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: p080214.d
Lab Smp Id: 2107362B-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	166281	11.38
108 1,4-Difluorobenze	558135	334881	781389	576649	3.32
153 Chlorobenzene-d5	542388	325433	759343	576091	6.21

		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	6.67	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.

Report Date: 05-Aug-2021 09:27

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362B-15A
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/02AUG21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	24.167	96.67	70-130
$ 134 Toluene-d8	25.000	24.904	99.62	70-130
$ 170 4-Bromofluorobenz	25.000	24.963	99.85	70-130

Data File: /chem/msdp.i/02AUG21.b/p080214.d

Date : 02-AUG-2021 17:46

Client ID:

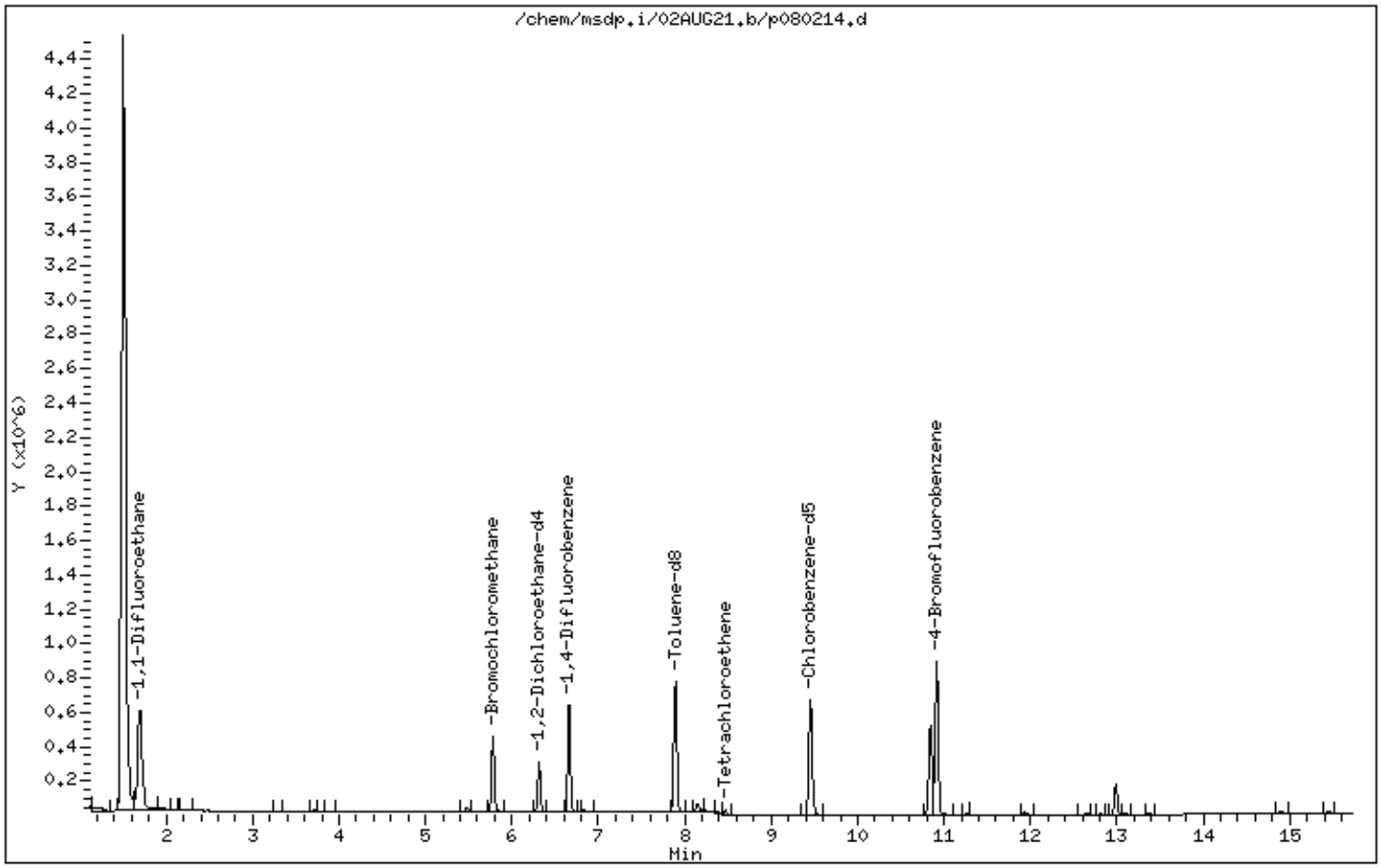
Instrument: msdp.i

Sample Info: 32mL N5570

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080214.d

Date : 02-AUG-2021 17:46

Client ID:

Instrument: msdp.i

Sample Info: 32mL N5570

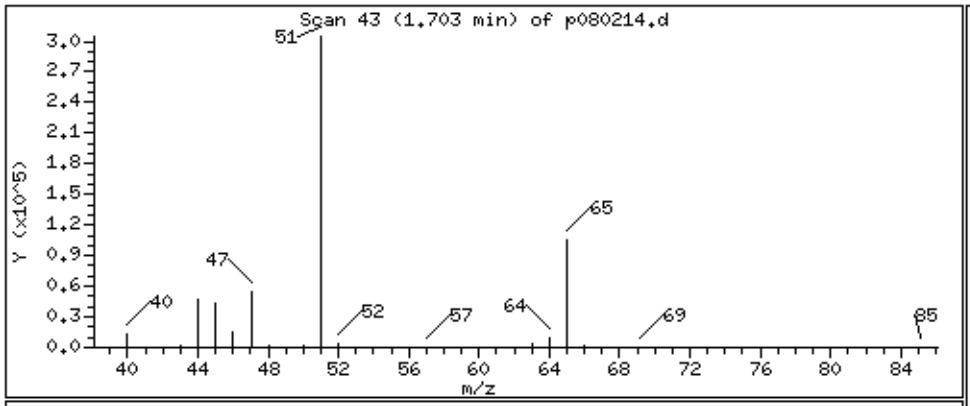
Operator: LD

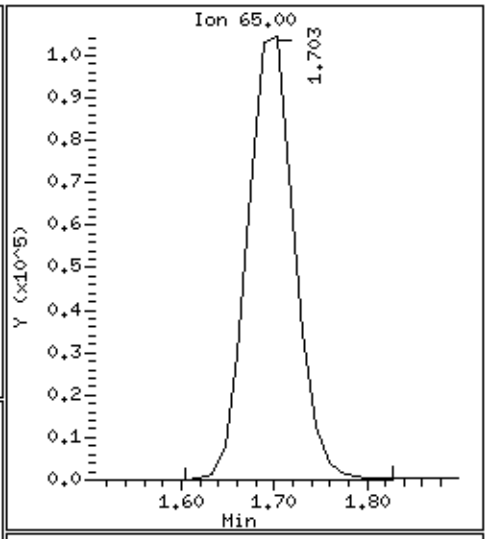
Column phase: RTX-624

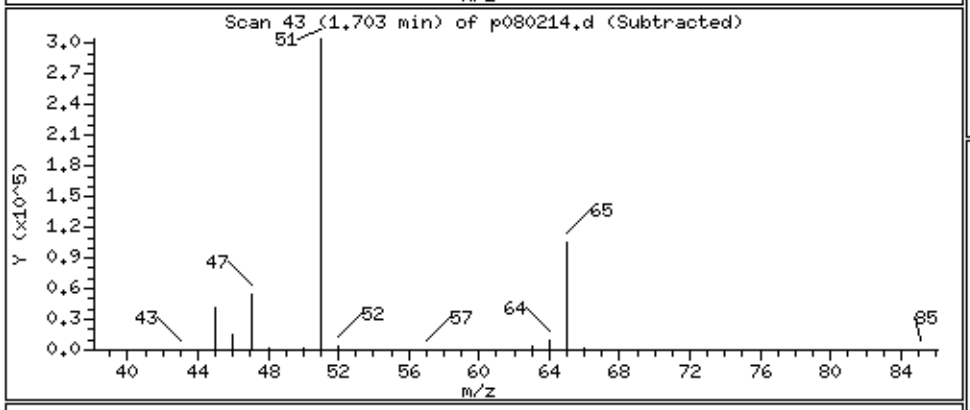
Column diameter: 0.25

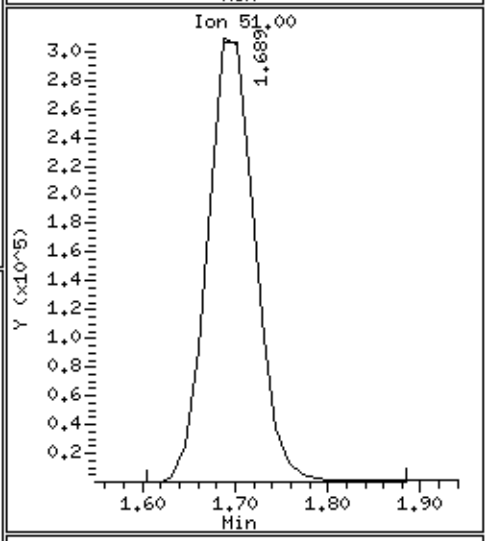
7 1,1-Difluoroethane

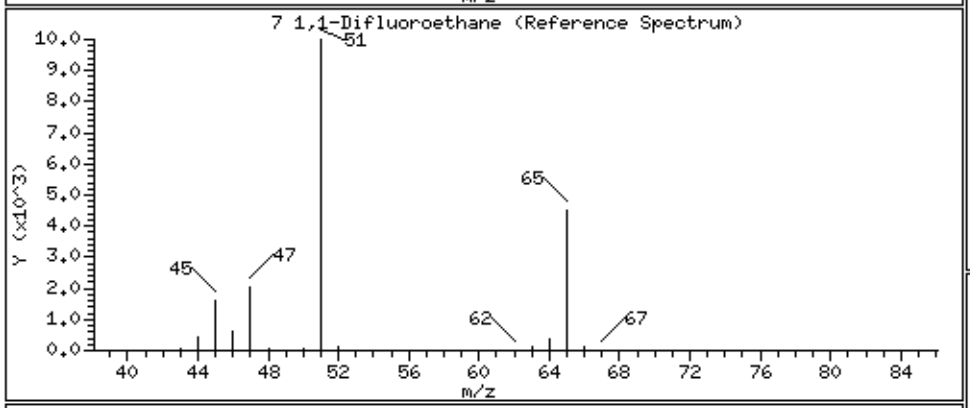
Concentration: 1291.4 PPBV

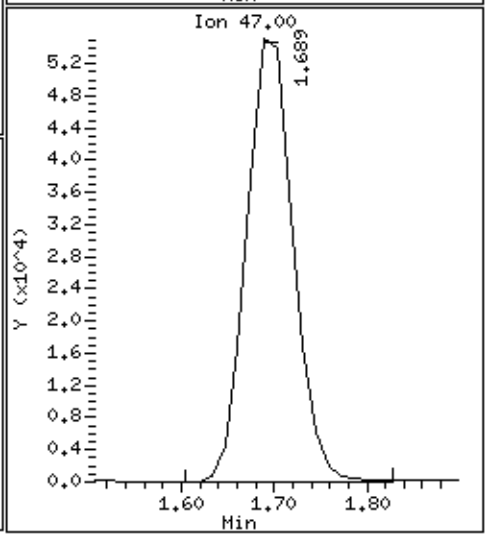


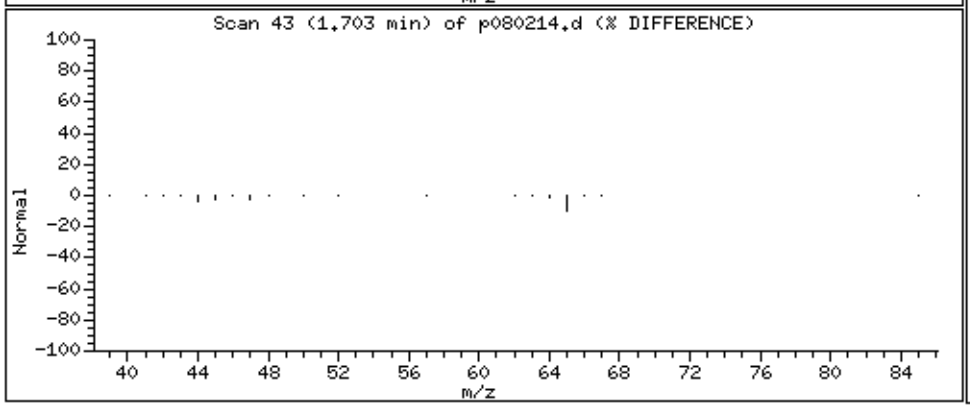












Data File: /chem/msdp.i/02AUG21.b/p080214.d

Date : 02-AUG-2021 17:46

Client ID:

Instrument: msdp.i

Sample Info: 32mL N5570

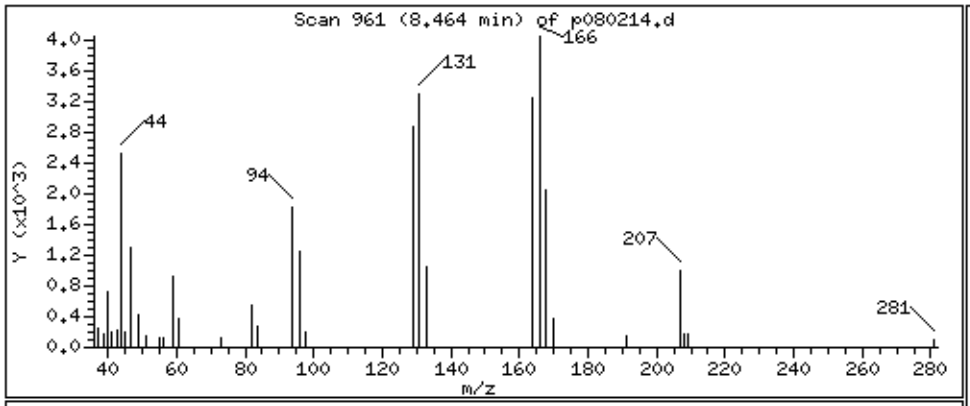
Operator: LD

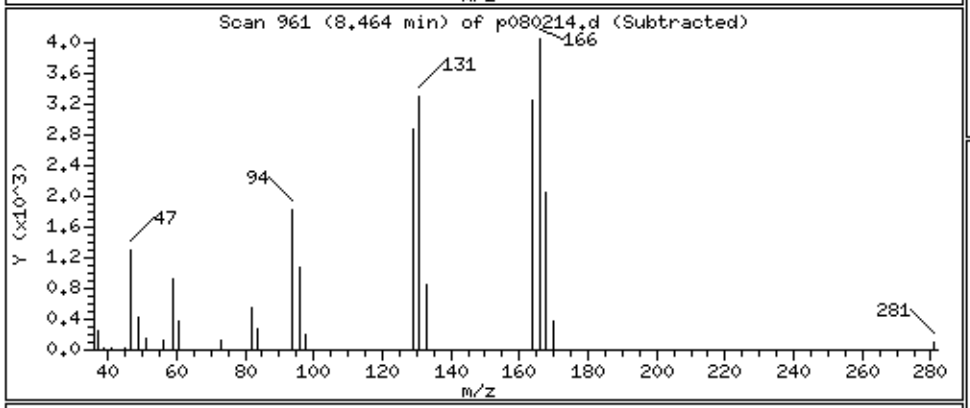
Column phase: RTX-624

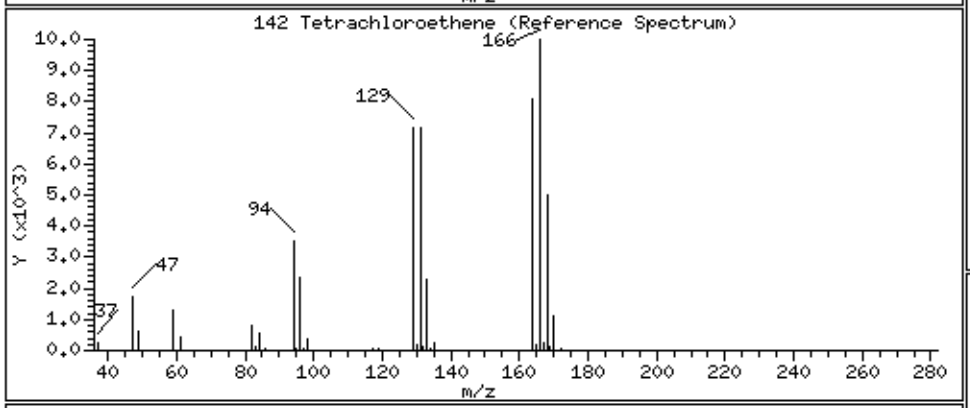
Column diameter: 0.25

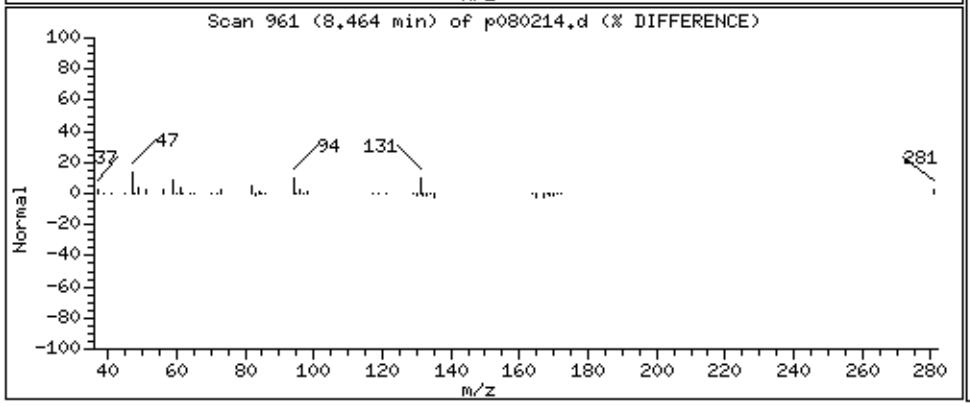
142 Tetrachloroethene

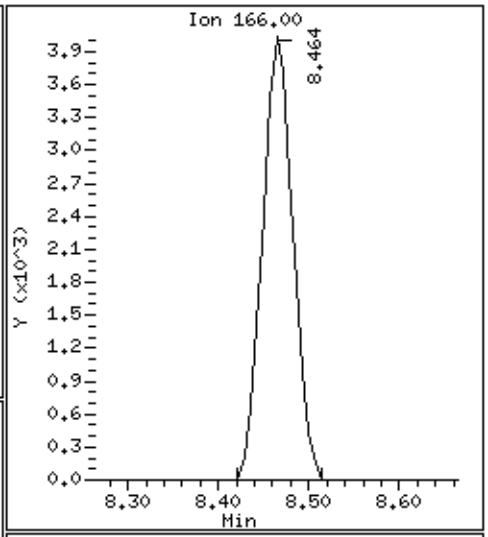
Concentration: 9.473 PPBV

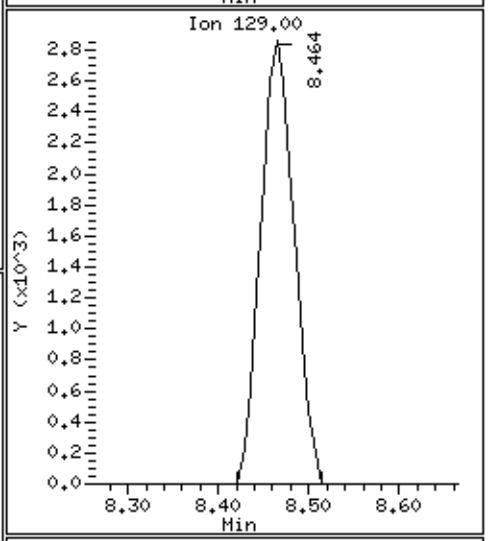


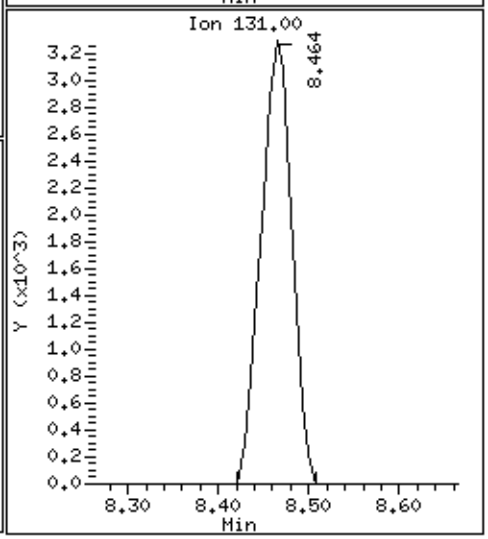












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Client Sample ID: SSV-GSS01-01

Lab ID#: 2107362B-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080212**	**Date of Collection:**	**7/15/21 3:53:00 PM**
Dil. Factor:	**4.77**	**Date of Analysis:**	**8/2/21 04:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	9.5	Not Detected	65	Not Detected
1,1,1-Trichloroethane	2.4	Not Detected	13	Not Detected
1,1,2,2-Tetrachloroethane	2.4	Not Detected	16	Not Detected
1,1,2-Trichloroethane	2.4	Not Detected	13	Not Detected
1,1-Dichloroethane	2.4	Not Detected	9.6	Not Detected
1,1-Dichloroethene	2.4	Not Detected	9.4	Not Detected
1,1-Difluoroethane	9.5	760	26	2000
1,2,3-Trichloropropane	9.5	Not Detected	58	Not Detected
1,2,4-Trichlorobenzene	9.5	Not Detected	71	Not Detected
1,2,4-Trimethylbenzene	2.4	Not Detected	12	Not Detected
1,2-Dibromo-3-chloropropane	9.5	Not Detected	92	Not Detected
1,2-Dibromoethane (EDB)	2.4	Not Detected	18	Not Detected
1,2-Dichlorobenzene	2.4	Not Detected	14	Not Detected
1,2-Dichloroethane	2.4	Not Detected	9.6	Not Detected
1,2-Dichloropropane	2.4	Not Detected	11	Not Detected
1,3,5-Trimethylbenzene	2.4	Not Detected	12	Not Detected
1,3-Butadiene	2.4	Not Detected	5.3	Not Detected
1,3-Dichlorobenzene	2.4	Not Detected	14	Not Detected
1,4-Dichlorobenzene	2.4	Not Detected	14	Not Detected
1,4-Dioxane	9.5	Not Detected	34	Not Detected
2,2,4-Trimethylpentane	2.4	Not Detected	11	Not Detected
2-Butanone (Methyl Ethyl Ketone)	9.5	Not Detected	28	Not Detected
2-Hexanone	9.5	Not Detected	39	Not Detected
2-Propanol	9.5	14	23	34
3-Chloropropene	9.5	Not Detected	30	Not Detected
4-Ethyltoluene	2.4	Not Detected	12	Not Detected
4-Methyl-2-pentanone	2.4	Not Detected	9.8	Not Detected
Acetone	24	Not Detected	57	Not Detected
Acrolein	9.5	Not Detected	22	Not Detected
Acrylonitrile	9.5	Not Detected	21	Not Detected
alpha-Chlorotoluene	2.4	Not Detected	12	Not Detected
Benzene	2.4	Not Detected	7.6	Not Detected
Bromodichloromethane	2.4	Not Detected	16	Not Detected
Bromoform	2.4	Not Detected	25	Not Detected
Bromomethane	24	Not Detected	93	Not Detected
Carbon Disulfide	9.5	Not Detected	30	Not Detected
Carbon Tetrachloride	2.4	Not Detected	15	Not Detected
Chlorobenzene	2.4	Not Detected	11	Not Detected
Chloroethane	9.5	Not Detected	25	Not Detected
Chloroform	2.4	Not Detected	12	Not Detected
Chloromethane	24	Not Detected	49	Not Detected
cis-1,2-Dichloroethene	2.4	Not Detected	9.4	Not Detected

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Client Sample ID: SSV-GSS01-01

Lab ID#: 2107362B-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080212**	**Date of Collection:**	**7/15/21 3:53:00 PM**
Dil. Factor:	**4.77**	**Date of Analysis:**	**8/2/21 04:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	2.4	Not Detected	11	Not Detected
Cumene	2.4	Not Detected	12	Not Detected
Cyclohexane	2.4	Not Detected	8.2	Not Detected
Dibromochloromethane	2.4	Not Detected	20	Not Detected
Dibromomethane	9.5	Not Detected	68	Not Detected
Ethanol	24	Not Detected	45	Not Detected
Ethyl Acetate	9.5	Not Detected	34	Not Detected
Ethyl Benzene	2.4	Not Detected	10	Not Detected
Ethyl-tert-butyl ether	9.5	Not Detected	40	Not Detected
Freon 11	2.4	Not Detected	13	Not Detected
Freon 12	2.4	Not Detected	12	Not Detected
Freon 113	2.4	Not Detected	18	Not Detected
Freon 114	2.4	Not Detected	17	Not Detected
Freon 134a	9.5	Not Detected	40	Not Detected
Heptane	2.4	Not Detected	9.8	Not Detected
Hexachlorobutadiene	9.5	Not Detected	100	Not Detected
Hexachloroethane	9.5	Not Detected	92	Not Detected
Hexane	2.4	Not Detected	8.4	Not Detected
Iodomethane	24	Not Detected	140	Not Detected
Isopropyl ether	9.5	Not Detected	40	Not Detected
m,p-Xylene	2.4	Not Detected	10	Not Detected
Methyl tert-butyl ether	9.5	Not Detected	34	Not Detected
Methylene Chloride	24	Not Detected	83	Not Detected
Naphthalene	4.8	Not Detected	25	Not Detected
o-Xylene	2.4	Not Detected	10	Not Detected
Propylbenzene	2.4	Not Detected	12	Not Detected
Propylene	9.5	Not Detected	16	Not Detected
Styrene	2.4	Not Detected	10	Not Detected
tert-Amyl methyl ether	9.5	Not Detected	40	Not Detected
tert-Butyl alcohol	9.5	Not Detected	29	Not Detected
Tetrachloroethene	2.4	Not Detected	16	Not Detected
Tetrahydrofuran	2.4	Not Detected	7.0	Not Detected
Toluene	2.4	Not Detected	9.0	Not Detected
TPH ref. to Gasoline (MW=100)	240	Not Detected	980	Not Detected
trans-1,2-Dichloroethene	2.4	Not Detected	9.4	Not Detected
trans-1,3-Dichloropropene	2.4	Not Detected	11	Not Detected
Trichloroethene	2.4	Not Detected	13	Not Detected
Vinyl Acetate	9.5	Not Detected	34	Not Detected
Vinyl Bromide	9.5	Not Detected	42	Not Detected
Vinyl Chloride	2.4	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SSV-GSS01-01

Lab ID#: 2107362B-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080212**	**Date of Collection:**	**7/15/21 3:53:00 PM**
Dil. Factor:	**4.77**	**Date of Analysis:**	**8/2/21 04:50 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080212.d
Lab Smp Id: 2107362B-16A
Inj Date : 02-AUG-2021 16:50
Operator : LD Inst ID: msdp.i
Smp Info : 90mL N3870
Misc Info : 6.5 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 5
Dil Factor: 4.77000
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	158761	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123760				48.23- 108.23	77.95
5.778	5.778 (1.000)	49	328557				150.57- 210.57	206.95
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	589026	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	87441				0.00- 45.71	14.85
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	576526	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	297936				23.78- 83.78	51.68
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	219515	25.0542	25.054		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	110082				27.21- 87.21	50.15
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	633644	24.7732	24.773		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	65720				0.00- 40.44	10.37

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	416102			34.95- 94.95	65.67
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	373557	25.2326	25.233	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	452606			95.92- 155.92	121.16
10.921	10.921 (1.154)	176	366939			66.89- 126.89	98.23
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	571308	158.758	757.27	80.00- 120.00	100.00
1.702	1.744 (0.295)	51	1708981			597.63- 657.63	299.13
1.702	1.702 (0.295)	47	303703			33.72- 93.72	53.16
52 2-Propanol					CAS #: 67-63-0		
3.894	3.887 (0.674)	45	49159	2.93057	13.979	80.00- 120.00	100.00
3.894	3.887 (0.674)	43	9285			0.00- 47.19	18.89

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080212.d
Lab Smp Id: 2107362B-16A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	158761	6.34
108 1,4-Difluorobenze	558135	334881	781389	589026	5.53
153 Chlorobenzene-d5	542388	325433	759343	576526	6.29

		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	6.67	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.

Report Date: 05-Aug-2021 09:26

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362B-16A
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/02AUG21.b/p21q0519a.m
Misc Info: 6.5 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.054	100.22	70-130
$ 134 Toluene-d8	25.000	24.773	99.09	70-130
$ 170 4-Bromofluorobenz	25.000	25.233	100.93	70-130

Data File: /chem/msdp.i/02AUG21.b/p080212.d

Date : 02-AUG-2021 16:50

Client ID:

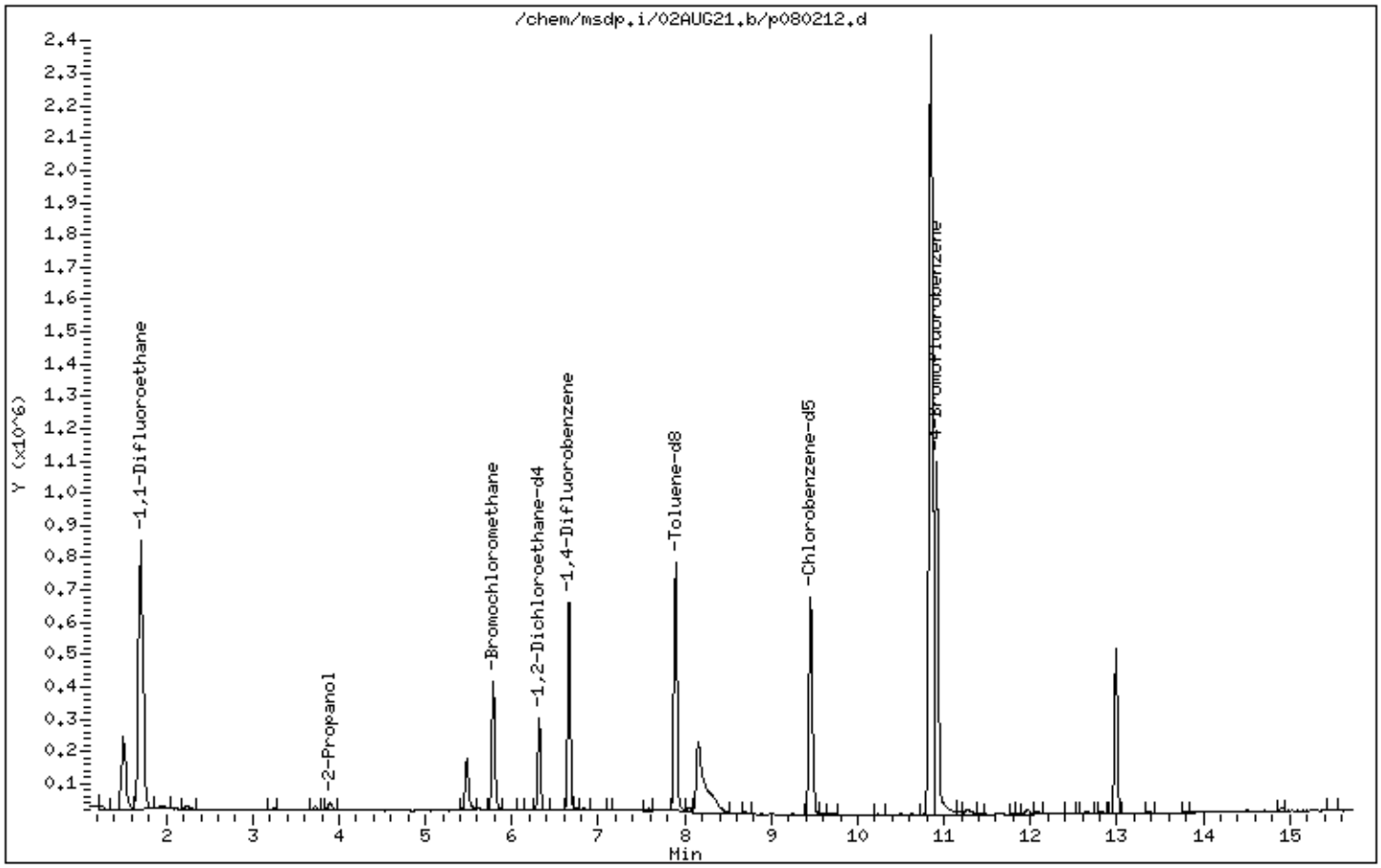
Instrument: msdp.i

Sample Info: 90mL N3870

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080212.d

Date : 02-AUG-2021 16:50

Client ID:

Instrument: msdp.i

Sample Info: 90mL N3870

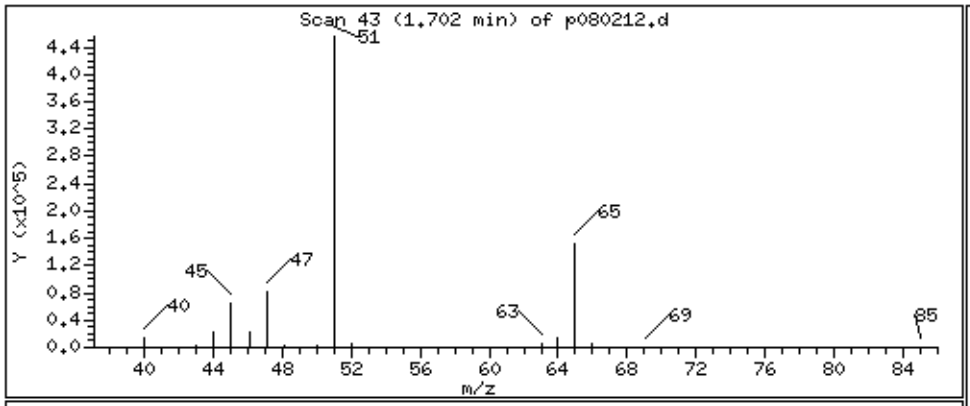
Operator: LD

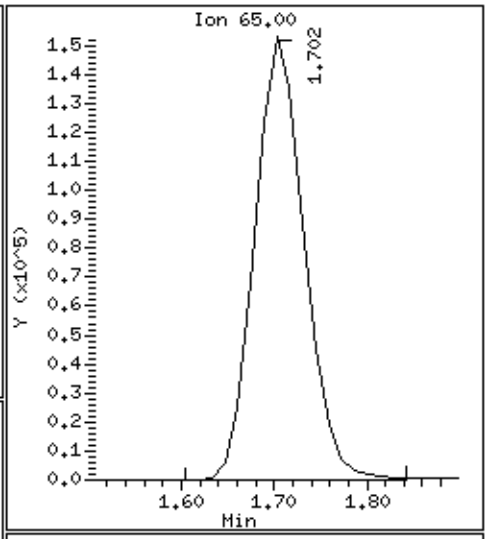
Column phase: RTX-624

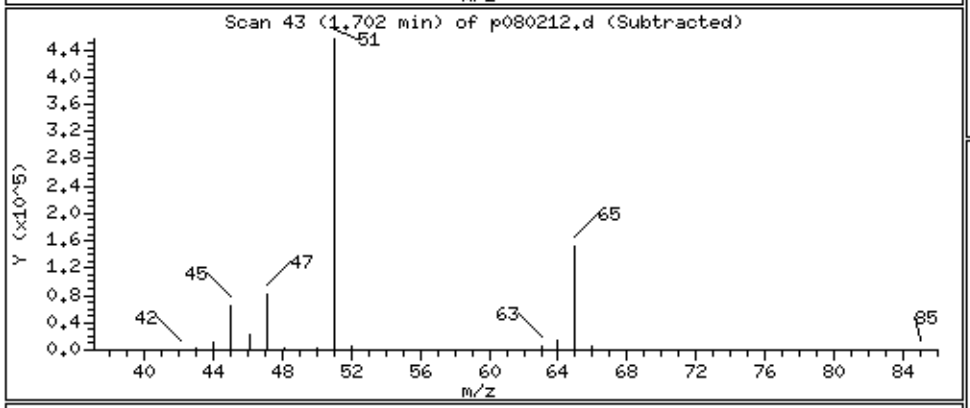
Column diameter: 0.25

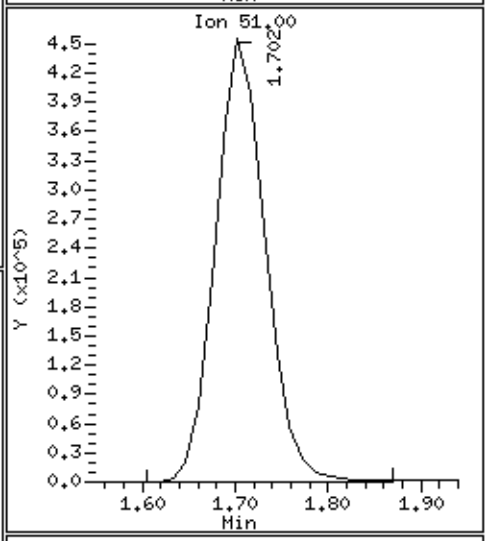
7 1,1-Difluoroethane

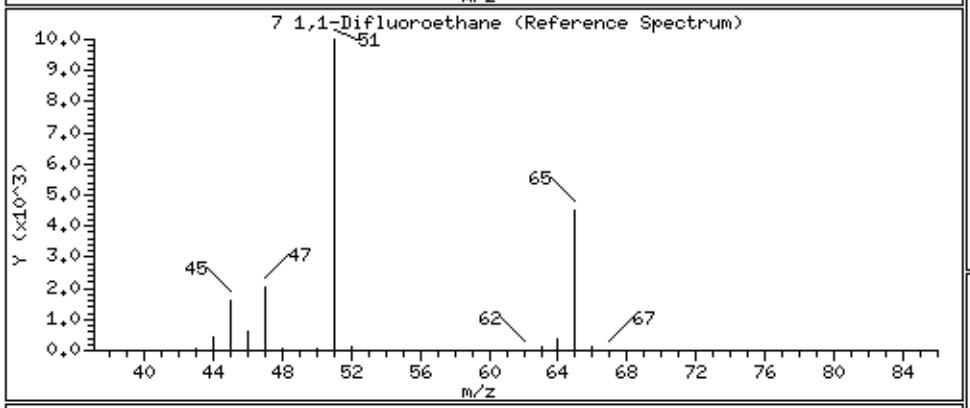
Concentration: 757.27 PPBV

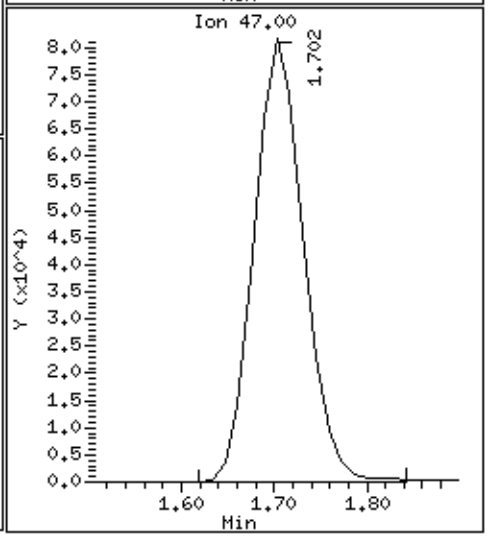


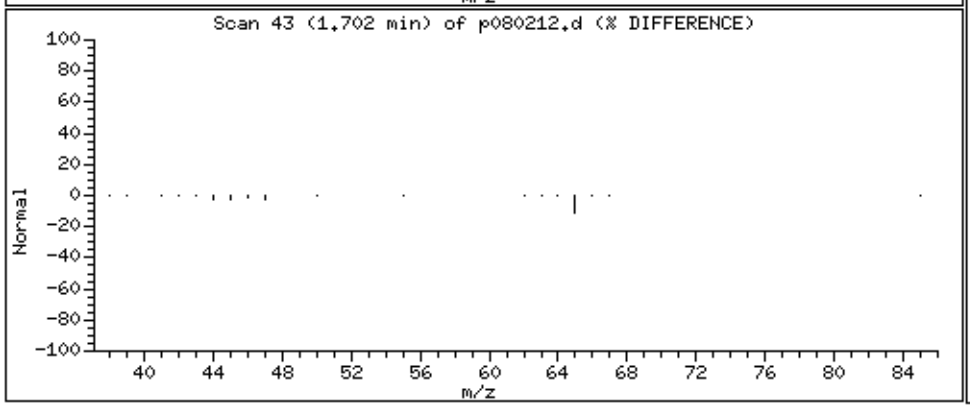












Data File: /chem/msdp.i/02AUG21.b/p080212.d

Page 3

Date : 02-AUG-2021 16:50

Client ID:

Instrument: msdp.i

Sample Info: 90mL N3870

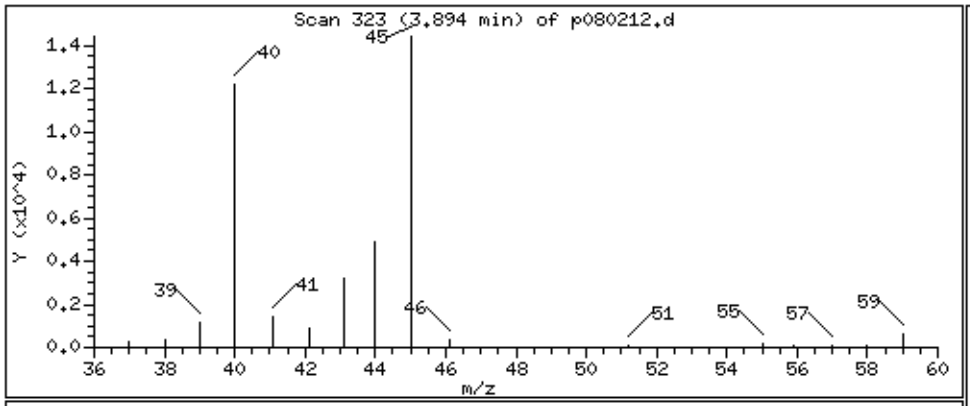
Operator: LD

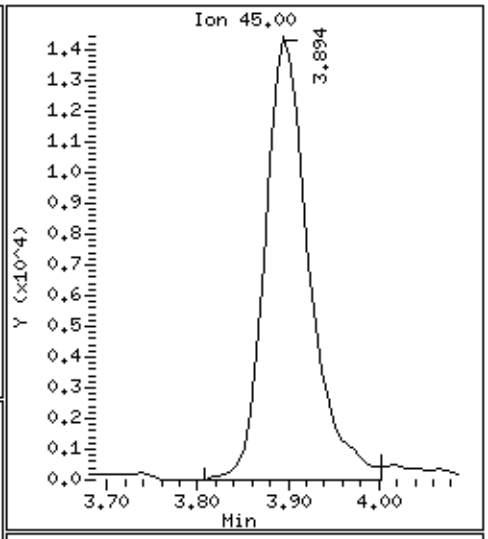
Column phase: RTX-624

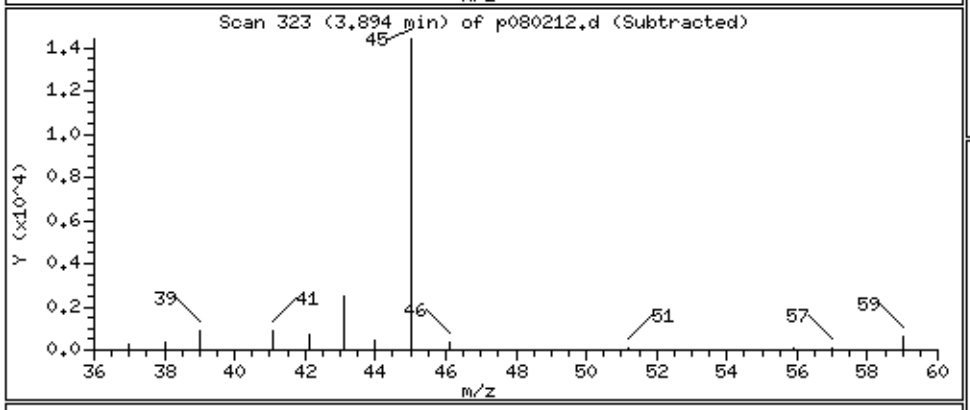
Column diameter: 0.25

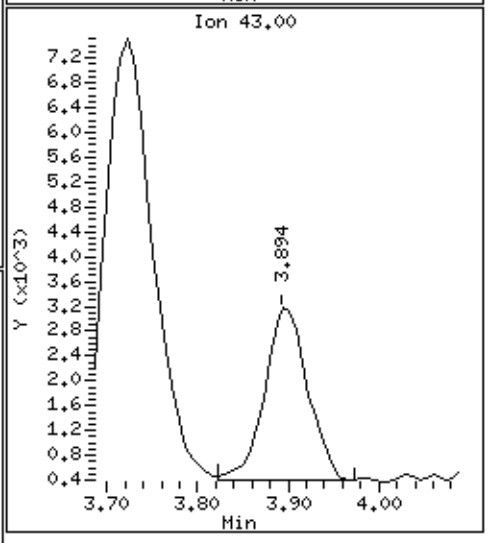
52 2-Propanol

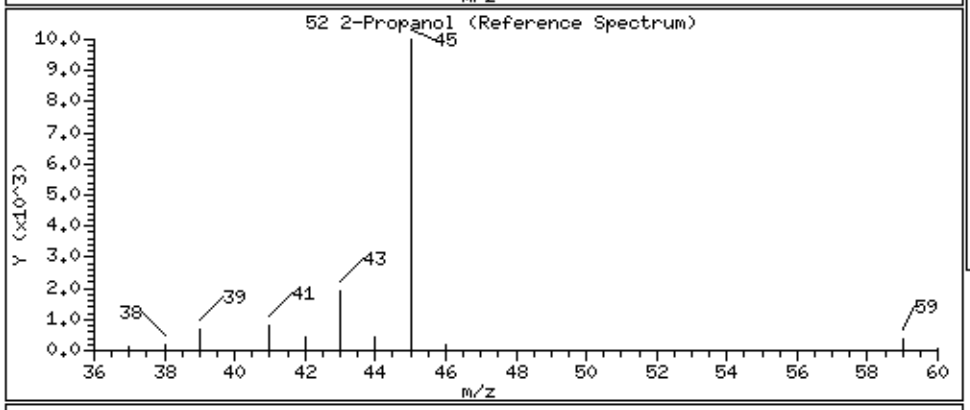
Concentration: 13.979 PPBV

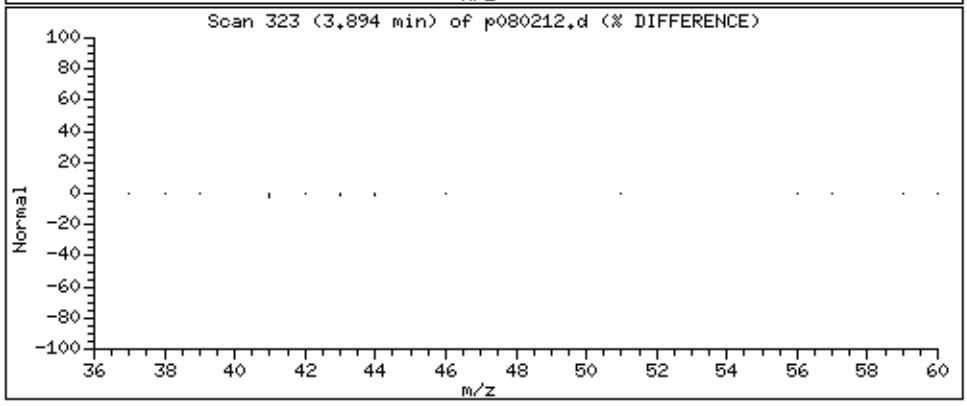












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Client Sample ID: SSV-GSS02-01

Lab ID#: 2107362B-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080213**	**Date of Collection:**	**7/15/21 4:09:00 PM**
Dil. Factor:	**8.06**	**Date of Analysis:**	**8/2/21 05:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1,2-Tetrachloroethane	16	Not Detected	110	Not Detected
1,1,1-Trichloroethane	4.0	Not Detected	22	Not Detected
1,1,2,2-Tetrachloroethane	4.0	Not Detected	28	Not Detected
1,1,2-Trichloroethane	4.0	Not Detected	22	Not Detected
1,1-Dichloroethane	4.0	Not Detected	16	Not Detected
1,1-Dichloroethene	4.0	Not Detected	16	Not Detected
1,1-Difluoroethane	16	1100	44	3000
1,2,3-Trichloropropane	16	Not Detected	97	Not Detected
1,2,4-Trichlorobenzene	16	Not Detected	120	Not Detected
1,2,4-Trimethylbenzene	4.0	Not Detected	20	Not Detected
1,2-Dibromo-3-chloropropane	16	Not Detected	160	Not Detected
1,2-Dibromoethane (EDB)	4.0	Not Detected	31	Not Detected
1,2-Dichlorobenzene	4.0	Not Detected	24	Not Detected
1,2-Dichloroethane	4.0	Not Detected	16	Not Detected
1,2-Dichloropropane	4.0	Not Detected	19	Not Detected
1,3,5-Trimethylbenzene	4.0	Not Detected	20	Not Detected
1,3-Butadiene	4.0	Not Detected	8.9	Not Detected
1,3-Dichlorobenzene	4.0	Not Detected	24	Not Detected
1,4-Dichlorobenzene	4.0	Not Detected	24	Not Detected
1,4-Dioxane	16	Not Detected	58	Not Detected
2,2,4-Trimethylpentane	4.0	Not Detected	19	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	Not Detected	48	Not Detected
2-Hexanone	16	Not Detected	66	Not Detected
2-Propanol	16	Not Detected	40	Not Detected
3-Chloropropene	16	Not Detected	50	Not Detected
4-Ethyltoluene	4.0	Not Detected	20	Not Detected
4-Methyl-2-pentanone	4.0	Not Detected	16	Not Detected
Acetone	40	Not Detected	96	Not Detected
Acrolein	16	Not Detected	37	Not Detected
Acrylonitrile	16	Not Detected	35	Not Detected
alpha-Chlorotoluene	4.0	Not Detected	21	Not Detected
Benzene	4.0	Not Detected	13	Not Detected
Bromodichloromethane	4.0	Not Detected	27	Not Detected
Bromoform	4.0	Not Detected	42	Not Detected
Bromomethane	40	Not Detected	160	Not Detected
Carbon Disulfide	16	Not Detected	50	Not Detected
Carbon Tetrachloride	4.0	Not Detected	25	Not Detected
Chlorobenzene	4.0	Not Detected	18	Not Detected
Chloroethane	16	Not Detected	42	Not Detected
Chloroform	4.0	Not Detected	20	Not Detected
Chloromethane	40	Not Detected	83	Not Detected
cis-1,2-Dichloroethene	4.0	Not Detected	16	Not Detected

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Client Sample ID: SSV-GSS02-01

Lab ID#: 2107362B-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080213**	**Date of Collection:**	**7/15/21 4:09:00 PM**
Dil. Factor:	**8.06**	**Date of Analysis:**	**8/2/21 05:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,3-Dichloropropene	4.0	Not Detected	18	Not Detected
Cumene	4.0	Not Detected	20	Not Detected
Cyclohexane	4.0	Not Detected	14	Not Detected
Dibromochloromethane	4.0	Not Detected	34	Not Detected
Dibromomethane	16	Not Detected	110	Not Detected
Ethanol	40	Not Detected	76	Not Detected
Ethyl Acetate	16	Not Detected	58	Not Detected
Ethyl Benzene	4.0	Not Detected	17	Not Detected
Ethyl-tert-butyl ether	16	Not Detected	67	Not Detected
Freon 11	4.0	Not Detected	23	Not Detected
Freon 12	4.0	Not Detected	20	Not Detected
Freon 113	4.0	Not Detected	31	Not Detected
Freon 114	4.0	Not Detected	28	Not Detected
Freon 134a	16	Not Detected	67	Not Detected
Heptane	4.0	Not Detected	16	Not Detected
Hexachlorobutadiene	16	Not Detected	170	Not Detected
Hexachloroethane	16	Not Detected	160	Not Detected
Hexane	4.0	Not Detected	14	Not Detected
Iodomethane	40	Not Detected	230	Not Detected
Isopropyl ether	16	Not Detected	67	Not Detected
m,p-Xylene	4.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	16	Not Detected	58	Not Detected
Methylene Chloride	40	Not Detected	140	Not Detected
Naphthalene	8.1	Not Detected	42	Not Detected
o-Xylene	4.0	Not Detected	17	Not Detected
Propylbenzene	4.0	Not Detected	20	Not Detected
Propylene	16	Not Detected	28	Not Detected
Styrene	4.0	Not Detected	17	Not Detected
tert-Amyl methyl ether	16	Not Detected	67	Not Detected
tert-Butyl alcohol	16	Not Detected	49	Not Detected
Tetrachloroethene	4.0	Not Detected	27	Not Detected
Tetrahydrofuran	4.0	Not Detected	12	Not Detected
Toluene	4.0	Not Detected	15	Not Detected
TPH ref. to Gasoline (MW=100)	400	Not Detected	1600	Not Detected
trans-1,2-Dichloroethene	4.0	Not Detected	16	Not Detected
trans-1,3-Dichloropropene	4.0	Not Detected	18	Not Detected
Trichloroethene	4.0	Not Detected	22	Not Detected
Vinyl Acetate	16	Not Detected	57	Not Detected
Vinyl Bromide	16	Not Detected	70	Not Detected
Vinyl Chloride	4.0	Not Detected	10	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SSV-GSS02-01

Lab ID#: 2107362B-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080213**	**Date of Collection:**	**7/15/21 4:09:00 PM**
Dil. Factor:	**8.06**	**Date of Analysis:**	**8/2/21 05:18 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080213.d
Lab Smp Id: 2107362B-17A
Inj Date : 02-AUG-2021 17:18
Operator : LD Inst ID: msdp.i
Smp Info : 50mL N6045
Misc Info : 5.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 6
Dil Factor: 8.06000
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		
5.778	5.778 (1.000)	130	160135	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	126229				48.23- 108.23	78.83
5.778	5.778 (1.000)	49	336668				150.57- 210.57	210.24
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	579689	25.0000			80.00- 120.00	100.00
6.666	6.659 (1.000)	88	85315				0.00- 45.71	14.72
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	569916	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	298726				23.78- 83.78	52.42
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	221877	25.1065	25.106		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	110750				27.21- 87.21	49.92
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	624479	24.8081	24.808		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	67398				0.00- 40.44	10.79

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	411033			34.95- 94.95	65.82
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	368495	25.1794	25.179	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	441854			95.92- 155.92	119.91
10.921	10.921 (1.154)	176	351275			66.89- 126.89	95.33
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	496718	136.846	1103.0	80.00- 120.00	100.00
1.702	1.744 (0.295)	51	1471492			597.63- 657.63	296.24
1.702	1.702 (0.295)	47	264108			33.72- 93.72	53.17

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080213.d
Lab Smp Id: 2107362B-17A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 5.0 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	160135	7.26
108 1,4-Difluorobenze	558135	334881	781389	579689	3.86
153 Chlorobenzene-d5	542388	325433	759343	569916	5.08

		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	6.67	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.

Report Date: 05-Aug-2021 09:27

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362B-17A
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/02AUG21.b/p21q0519a.m
Misc Info: 5.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.106	100.43	70-130
$ 134 Toluene-d8	25.000	24.808	99.23	70-130
$ 170 4-Bromofluorobenz	25.000	25.179	100.72	70-130

Data File: /chem/msdp.i/02AUG21.b/p080213.d

Date : 02-AUG-2021 17:18

Client ID:

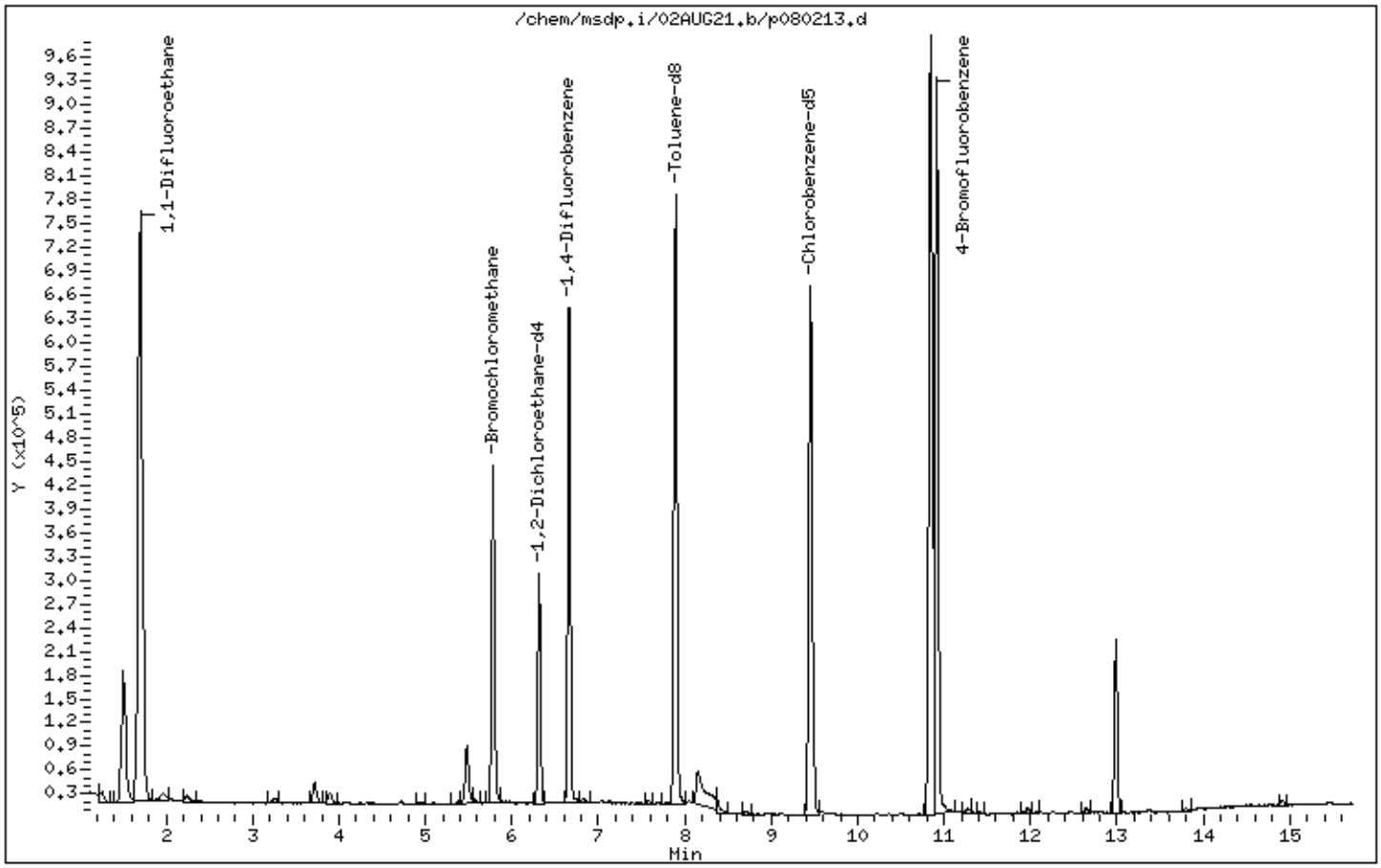
Instrument: msdp.i

Sample Info: 50mL N6045

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080213.d

Date : 02-AUG-2021 17:18

Client ID:

Instrument: msdp.i

Sample Info: 50mL N6045

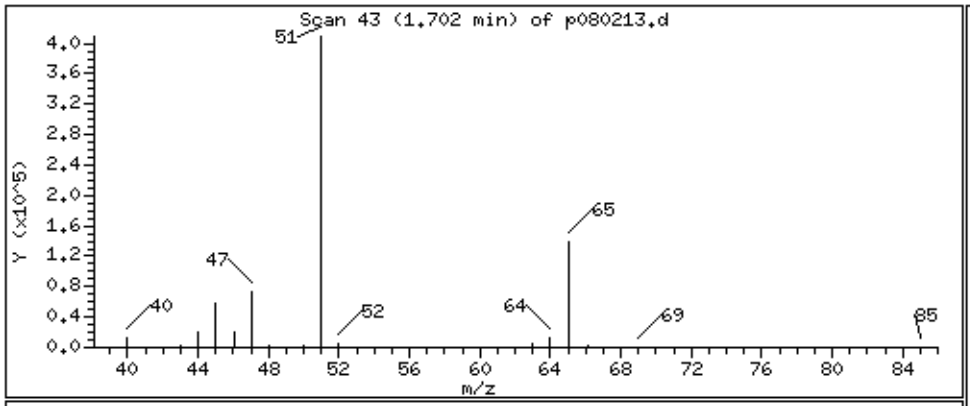
Operator: LD

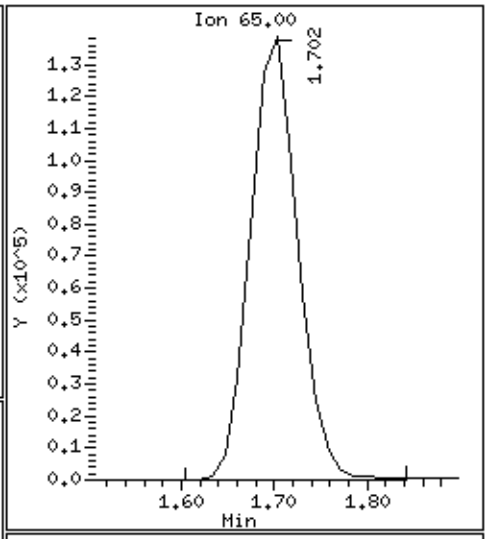
Column phase: RTX-624

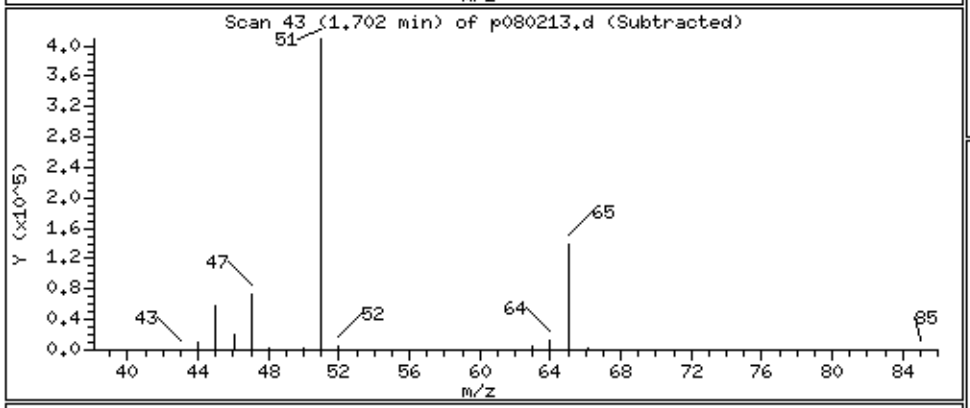
Column diameter: 0.25

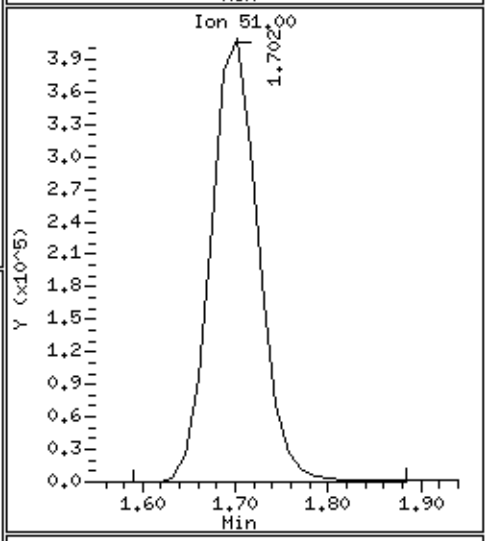
7 1,1-Difluoroethane

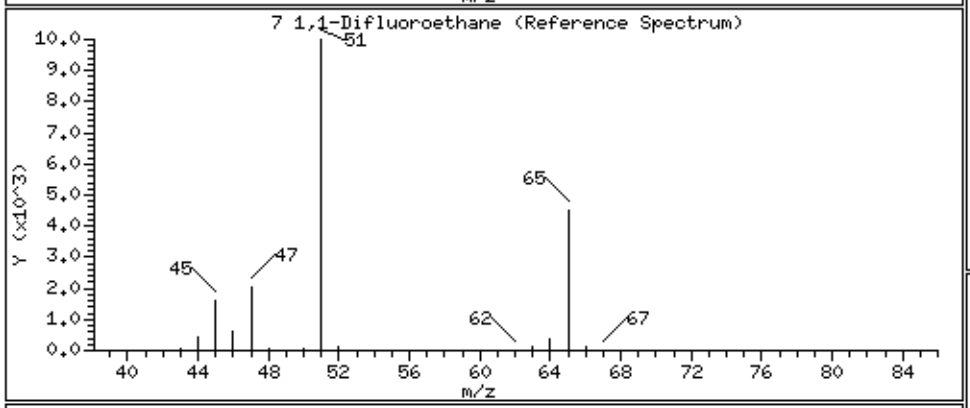
Concentration: 1103.0 PPBV

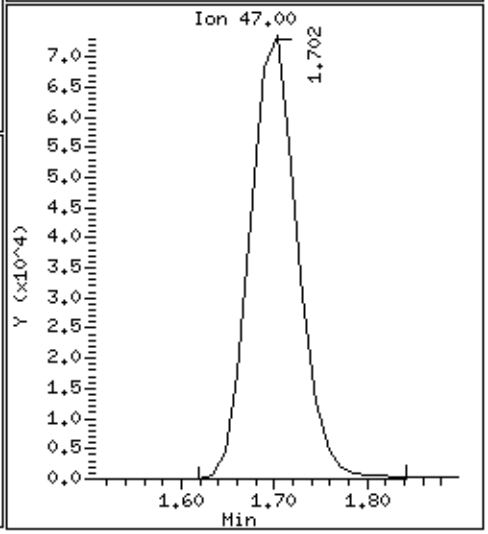


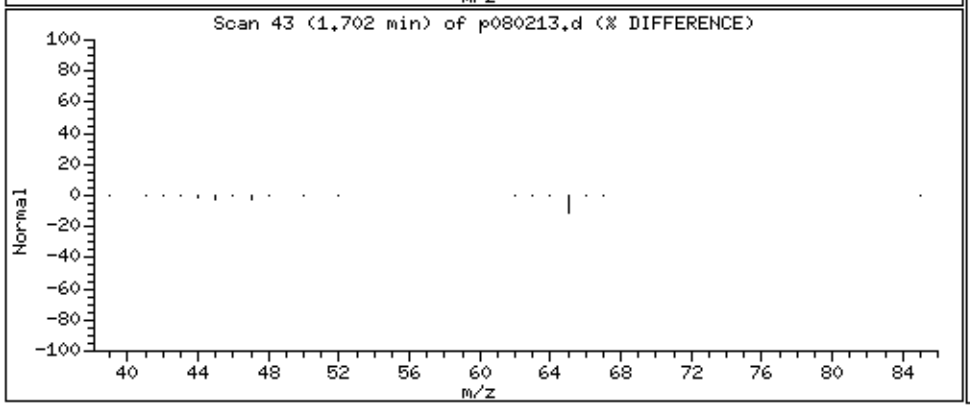












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Client Sample ID: SSV-FSS02-01

Lab ID#: 2107362B-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080209**	**Date of Collection:**	**7/15/21 4:33:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 03:23 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	150	11	410
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	3.5	5.0	17
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	1.4	5.0	6.9
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	12	9.9	29
3-Chloropropene	4.0	Not Detected	13	Not Detected
4-Ethyltoluene	1.0	2.9	5.0	14
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Acetone	10	14	24	33
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	4.0	12	12
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: SSV-FSS02-01

Lab ID#: 2107362B-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080209**	**Date of Collection:**	**7/15/21 4:33:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 03:23 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	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	1.0	4.4	4.4
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	4.1	4.4	18
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	2.2	4.4	9.3
Propylbenzene	1.0	Not Detected	5.0	Not Detected
Propylene	4.0	6.6	7.0	11
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	11	6.8	76
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Toluene	1.0	2.2	3.8	8.1
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: SSV-FSS02-01

Lab ID#: 2107362B-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080209**	**Date of Collection:**	**7/15/21 4:33:00 PM**
Dil. Factor:	**2.02**	**Date of Analysis:**	**8/2/21 03:23 PM**

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080209.d
Lab Smp Id: 2107362B-18A
Inj Date : 02-AUG-2021 15:23
Operator : LD Inst ID: msdp.i
Smp Info : 200ml N2012
Misc Info : 5.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 2
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	162725	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	127480				48.23- 108.23	78.34
5.785	5.778 (1.000)	49	328483				150.57- 210.57	201.86
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	621882	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93221				0.00- 45.71	14.99
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	612998	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	326668				23.78- 83.78	53.29
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	228851	25.4835	25.484		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	114654				27.21- 87.21	50.10
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	667648	24.7235	24.724		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	71298				0.00- 40.44	10.68

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	438561			34.95- 94.95	65.69
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	395972	25.1553	25.155	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	484913			95.92- 155.92	122.46
10.921	10.921 (1.154)	176	391830			66.89- 126.89	98.95
5 Propylene					CAS #: 115-07-1		
1.689	1.674 (0.292)	41	24215	3.25190	6.569	80.00- 120.00	100.00
1.689	1.674 (0.292)	42	13825			35.28- 95.28	57.10
1.689	1.674 (0.292)	39	21682			38.35- 98.35	89.54
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.717	1.702 (0.297)	65	275754	74.7612	151.02	80.00- 120.00	100.00
1.717	1.744 (0.297)	51	797306			597.63- 657.63	289.14
1.717	1.702 (0.297)	47	141345			33.72- 93.72	51.26
47 Acetone					CAS #: 67-64-1		
3.730	3.715 (0.645)	58	29376	6.88605	13.910	80.00- 120.00	100.00
3.730	3.715 (0.645)	43	109301			302.95- 362.95	372.07
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.822 (0.662)	76	36252	1.99896	4.038	80.00- 120.00	100.00(a)
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	100815	5.86360	11.844	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	15839			0.00- 47.19	15.71
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.193)	91	30189	1.06625	2.154	80.00- 120.00	100.00
7.956	7.948 (1.193)	92	17002			28.38- 88.38	56.32
142 Tetrachloroethene					CAS #: 127-18-4		
8.471	8.464 (0.895)	166	77612	5.55533	11.222	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	62070			47.84- 107.84	79.97
8.464	8.464 (0.895)	131	58345			45.29- 105.29	75.18
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	6323	0.49678	1.003	80.00- 120.00	100.00(a)
9.567	9.567 (1.011)	91	20306			273.74- 333.74	321.15
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	32139	2.01611	4.072	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	63632			163.73- 223.73	197.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
164 o-Xylene					CAS #: 95-47-6		
10.226	10.226 (1.081)	106	16278	1.06577	2.153	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	33594			177.45- 237.45	206.38
183 4-Ethyltoluene					CAS #: 622-96-8		
11.258	11.286 (1.190)	120	22449	1.45103	2.931	80.00- 120.00	100.00
11.258	11.286 (1.190)	105	65334			284.55- 344.55	291.03
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	14791	0.69439	1.403	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	27830			164.93- 224.93	188.15
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.817	11.816 (1.249)	105	70396	1.75093	3.537	80.00- 120.00	100.00
11.817	11.816 (1.249)	120	35911			19.05- 79.05	51.01

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: p080209.d
Lab Smp Id: 2107362B-18A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 5.0 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	162725	9.00
108 1,4-Difluorobenze	558135	334881	781389	621882	11.42
153 Chlorobenzene-d5	542388	325433	759343	612998	13.02

		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.

Report Date: 05-Aug-2021 07:32

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362B-18A
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/02AUG21.b/p21q0519a.m
Misc Info: 5.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.484	101.93	70-130
$ 134 Toluene-d8	25.000	24.724	98.89	70-130
$ 170 4-Bromofluorobenz	25.000	25.155	100.62	70-130

Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

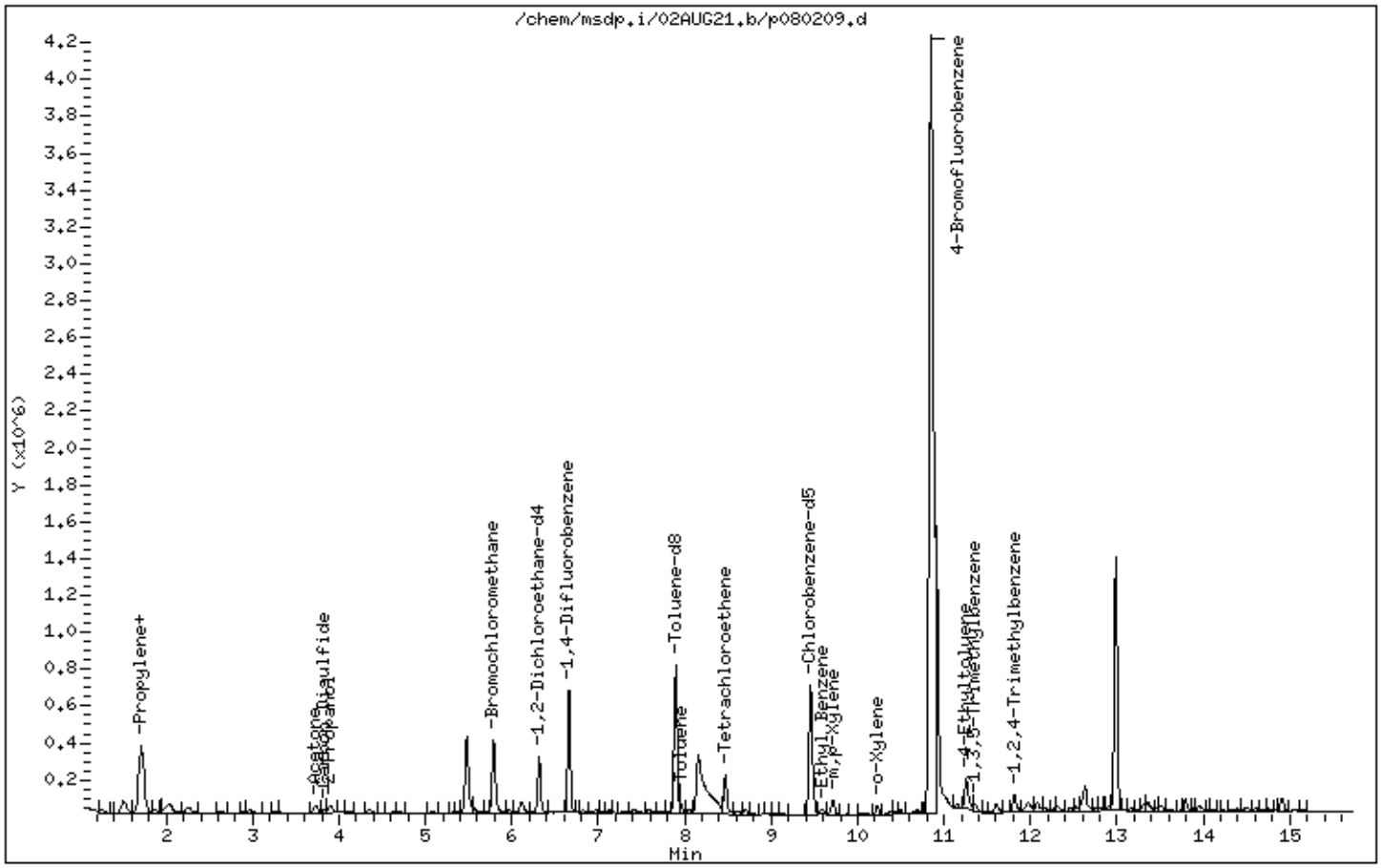
Instrument: msdp.i

Sample Info: 200ml N2012

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

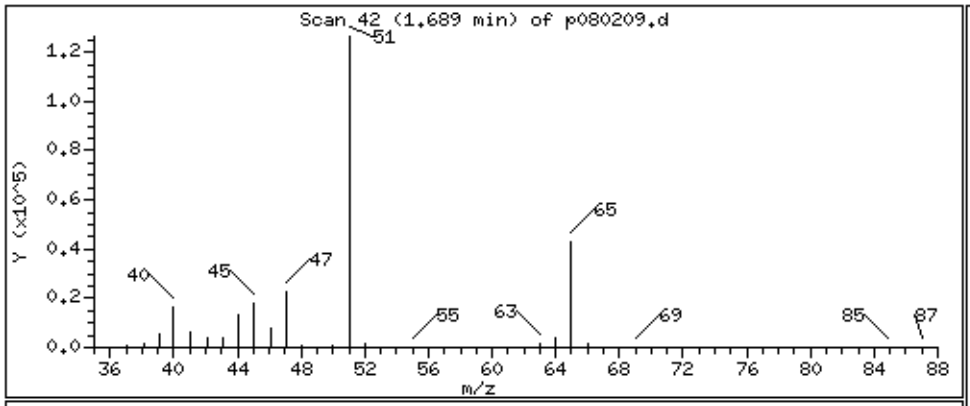
Operator: LD

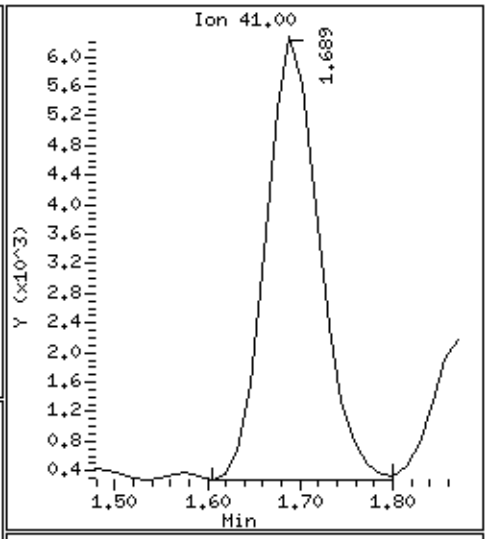
Column phase: RTX-624

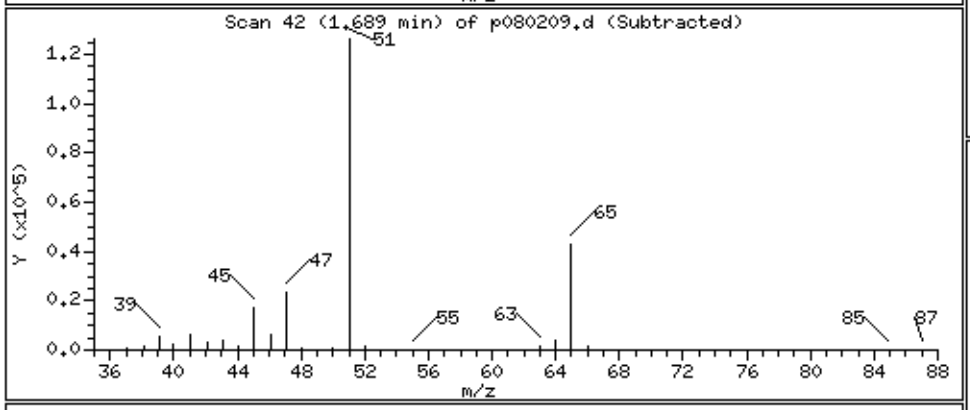
Column diameter: 0.25

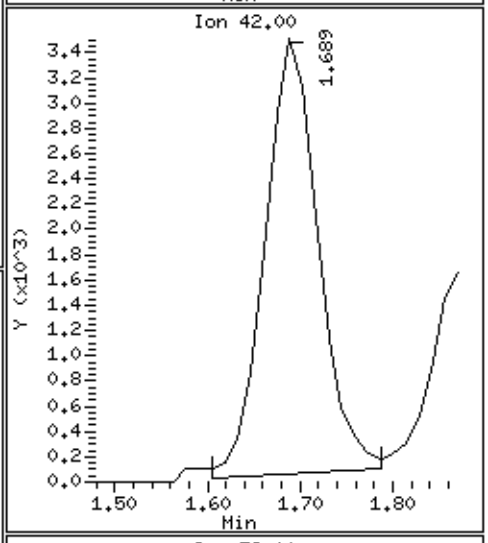
5 Propylene

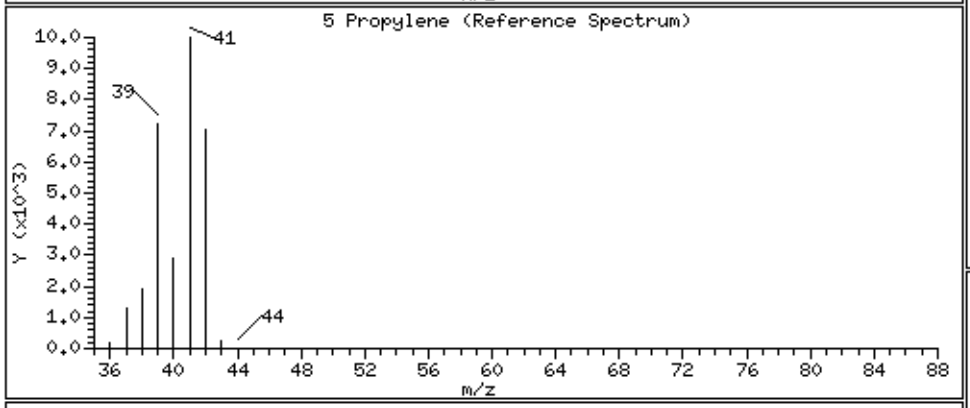
Concentration: 6.569 PPBV

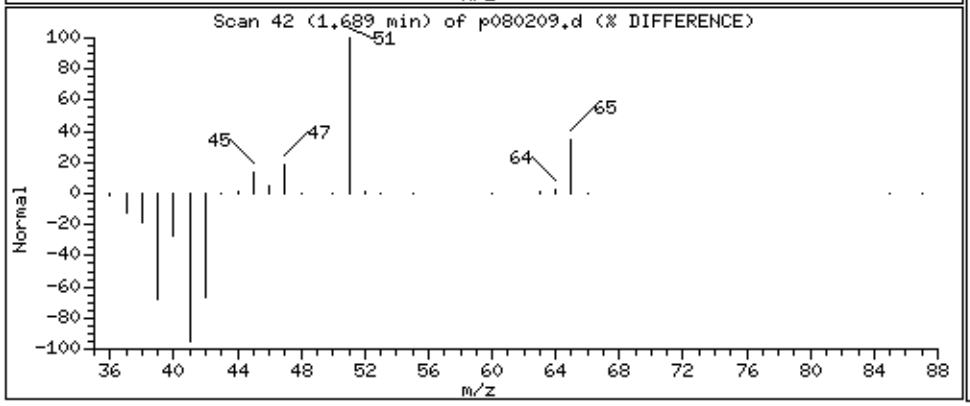


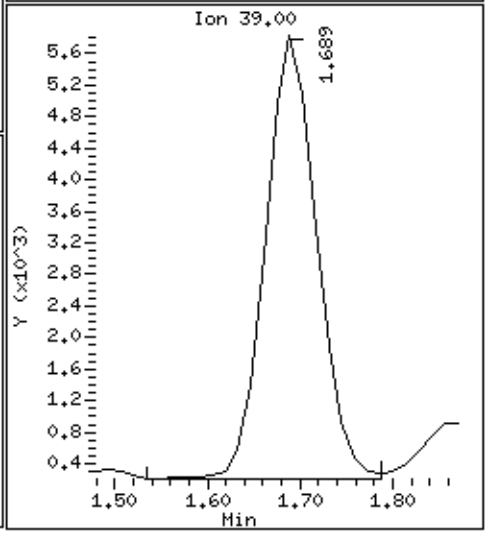












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

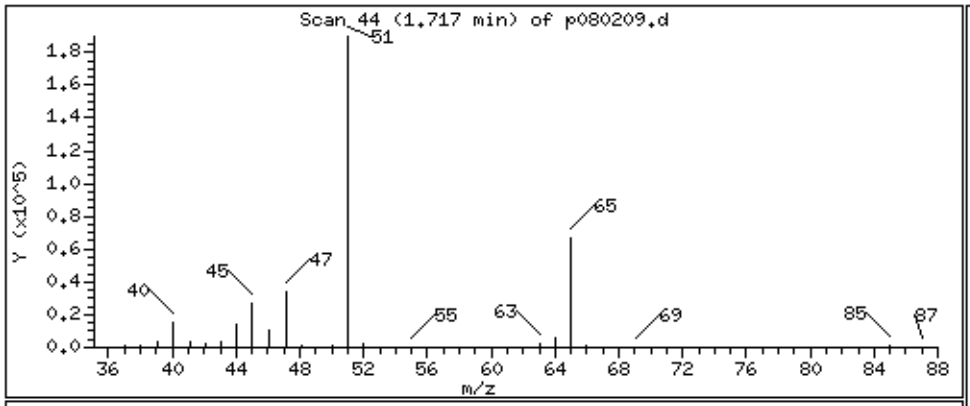
Operator: LD

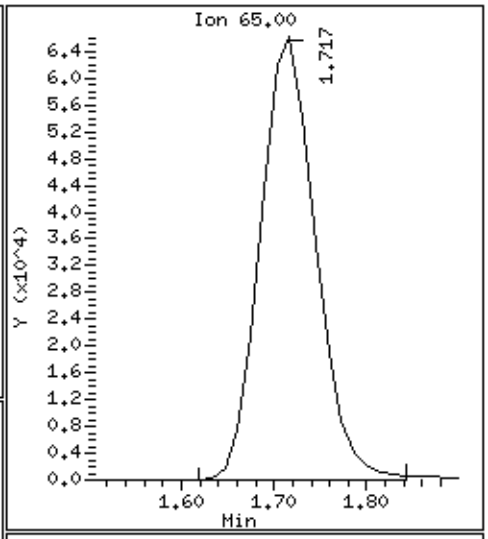
Column phase: RTX-624

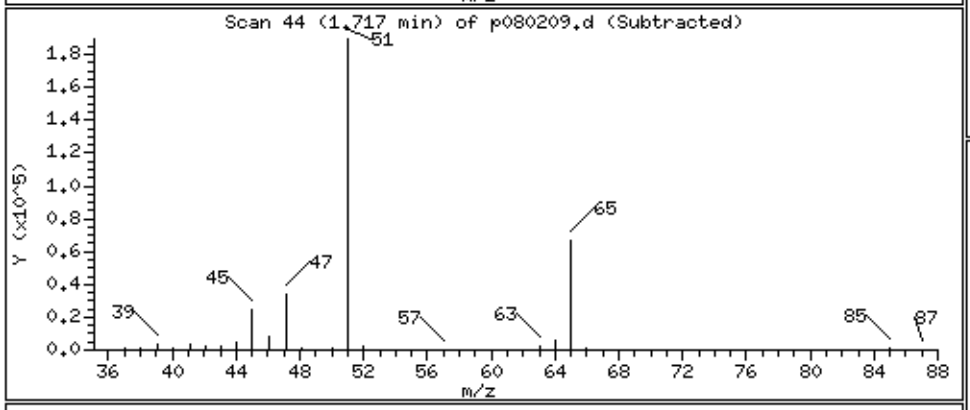
Column diameter: 0.25

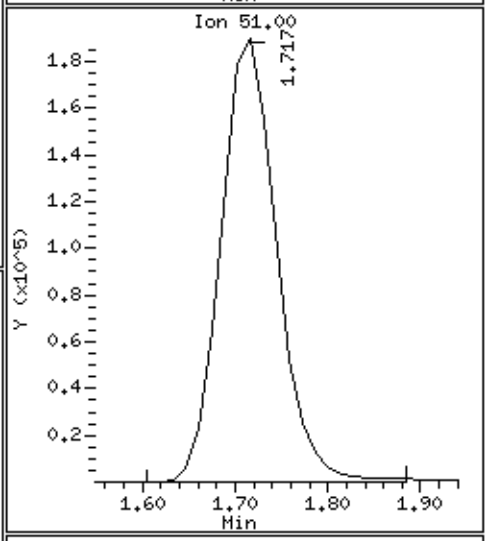
7 1,1-Difluoroethane

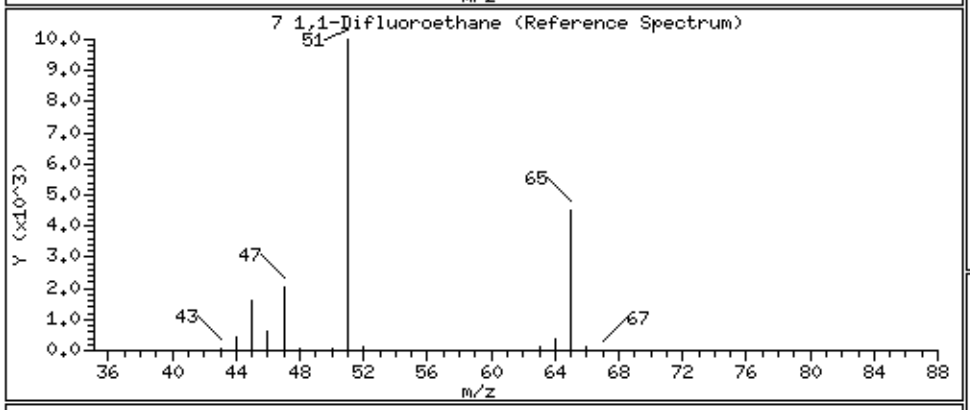
Concentration: 151.02 PPBV

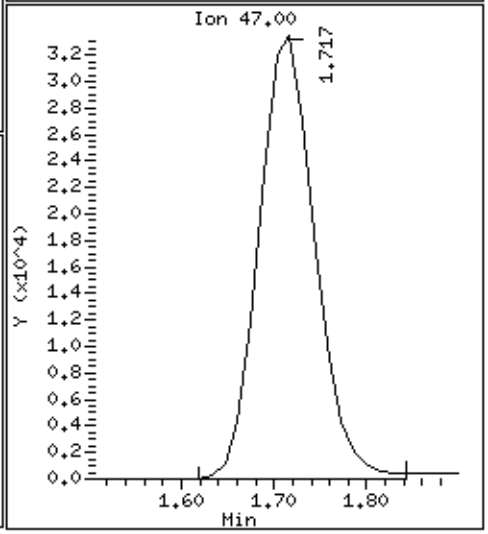


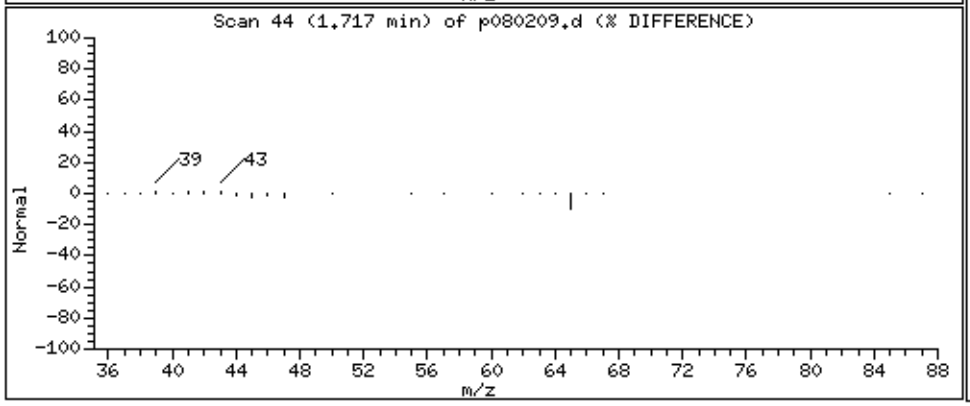












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

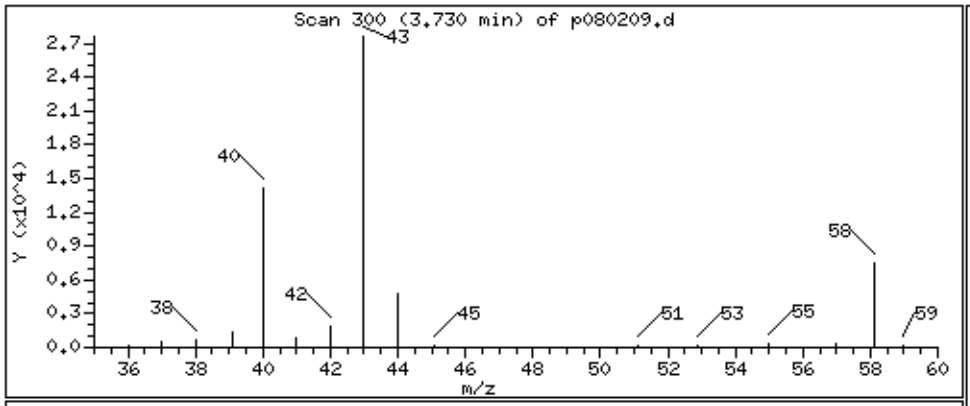
Operator: LD

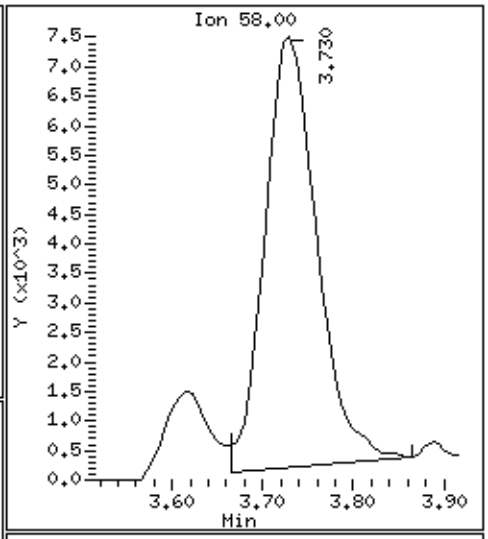
Column phase: RTX-624

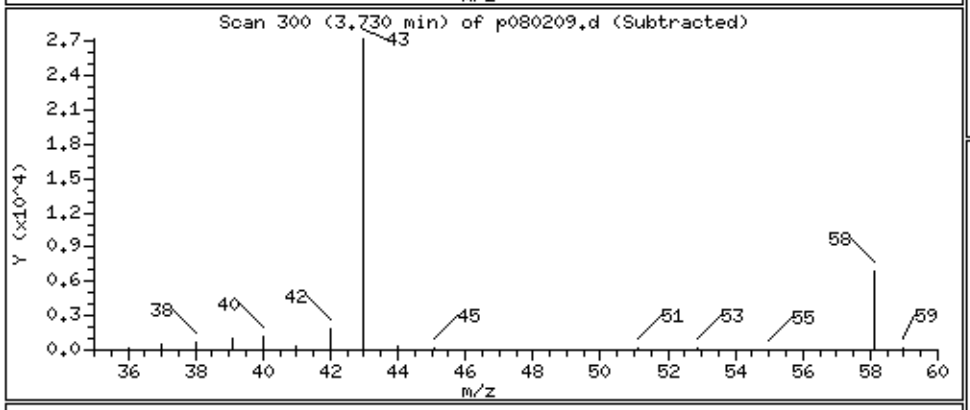
Column diameter: 0.25

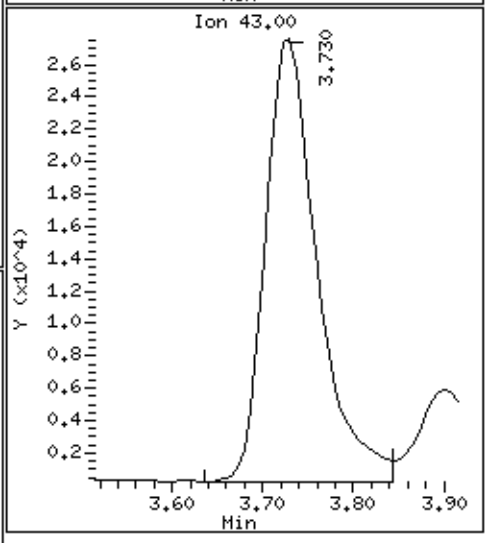
47 Acetone

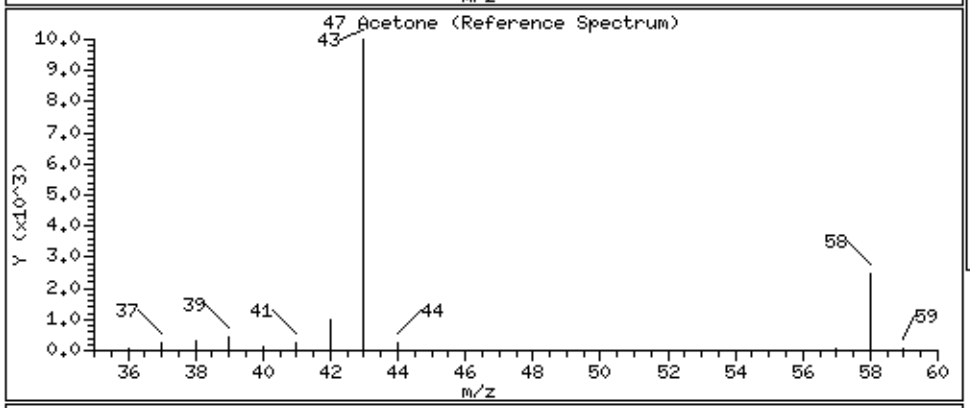
Concentration: 13.910 PPBV

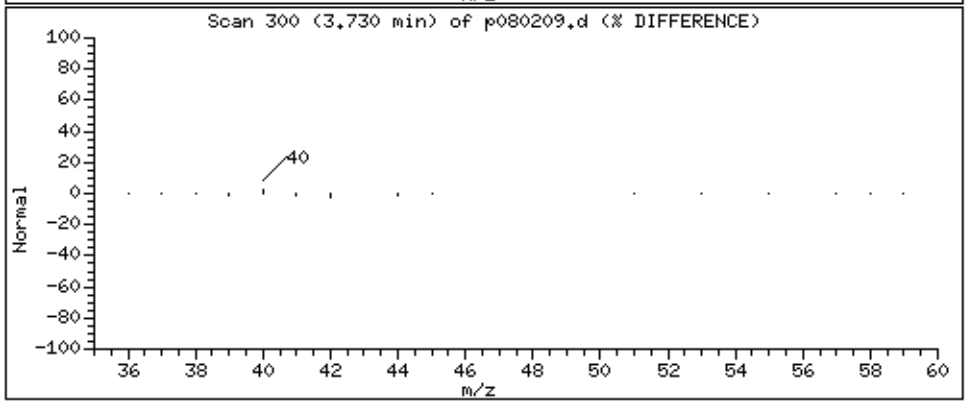












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

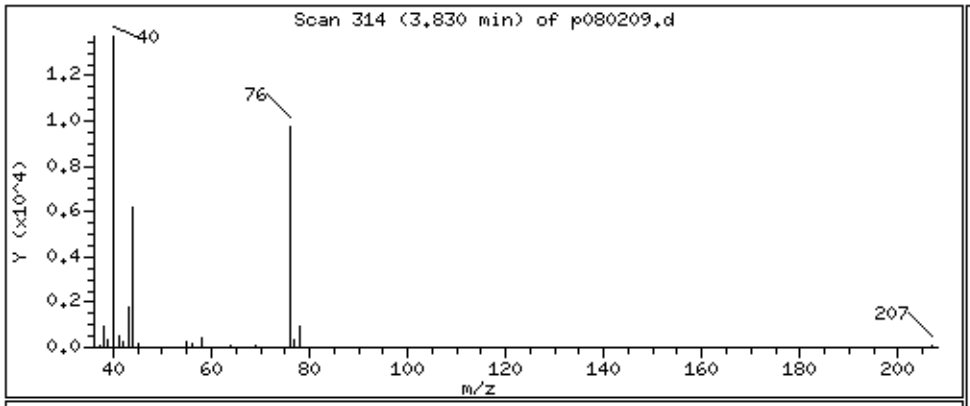
Operator: LD

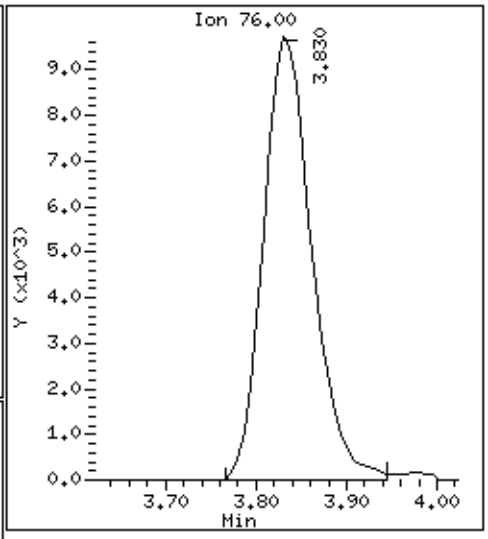
Column phase: RTX-624

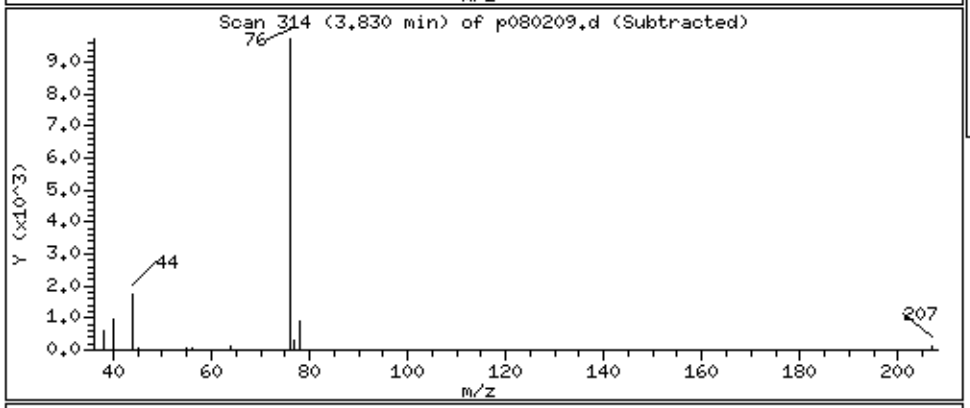
Column diameter: 0.25

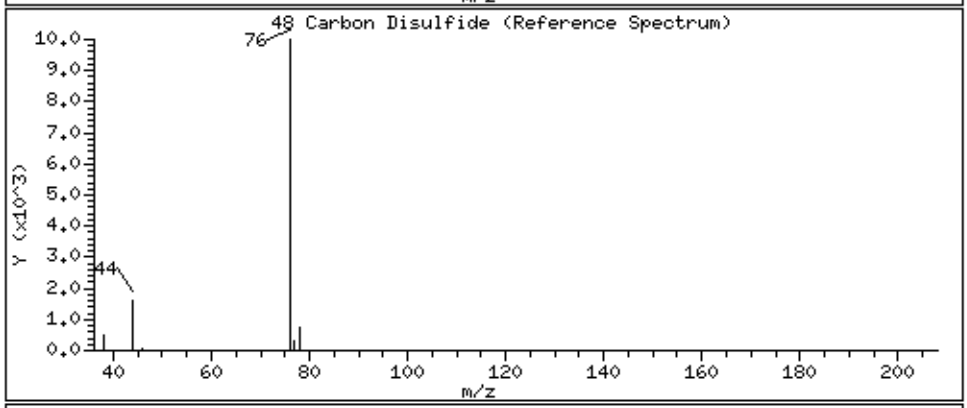
48 Carbon Disulfide

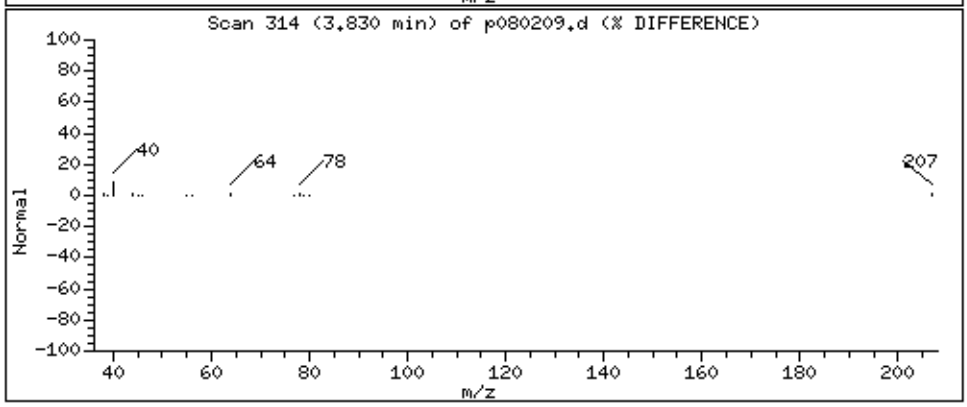
Concentration: 4.038 PPBV











Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

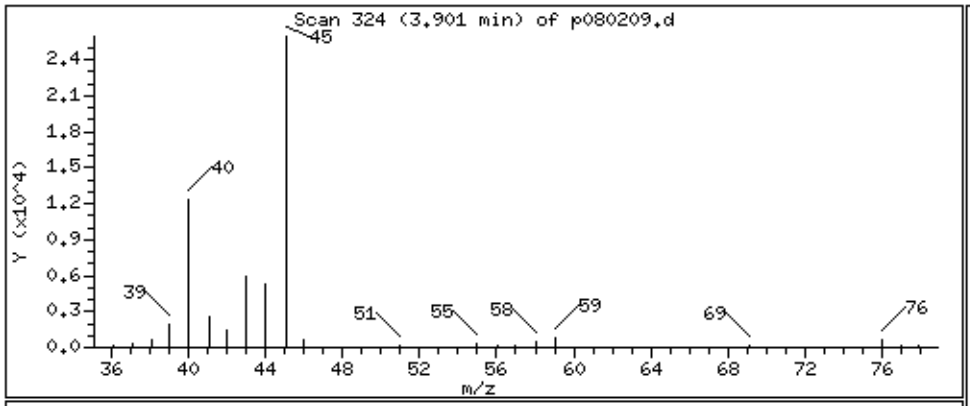
Operator: LD

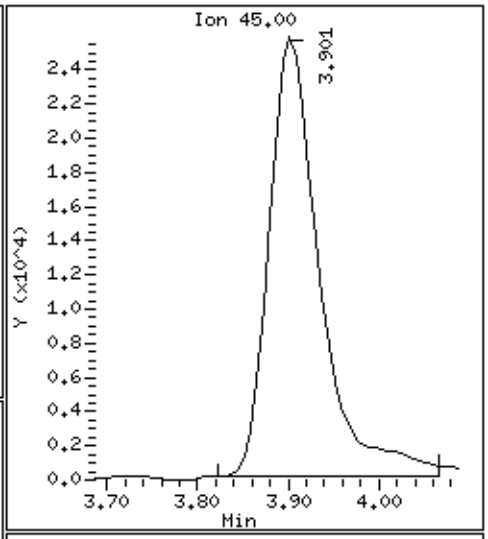
Column phase: RTX-624

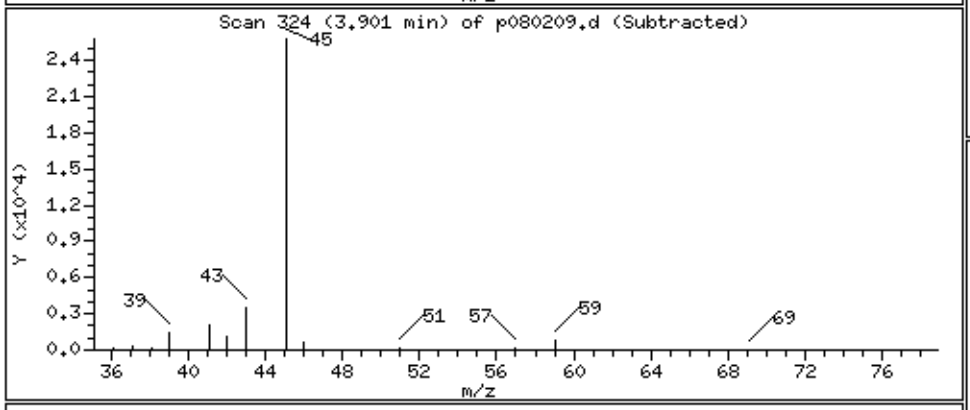
Column diameter: 0.25

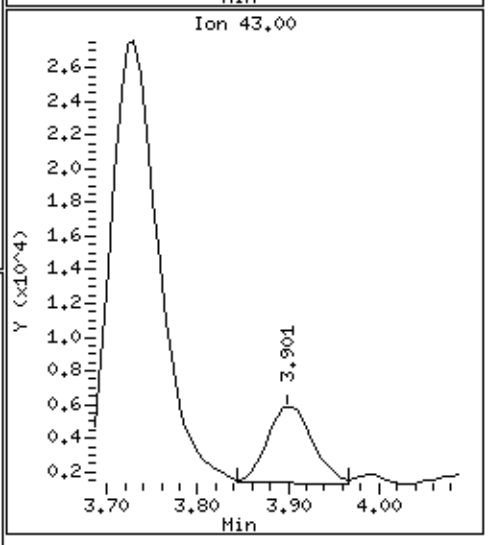
52 2-Propanol

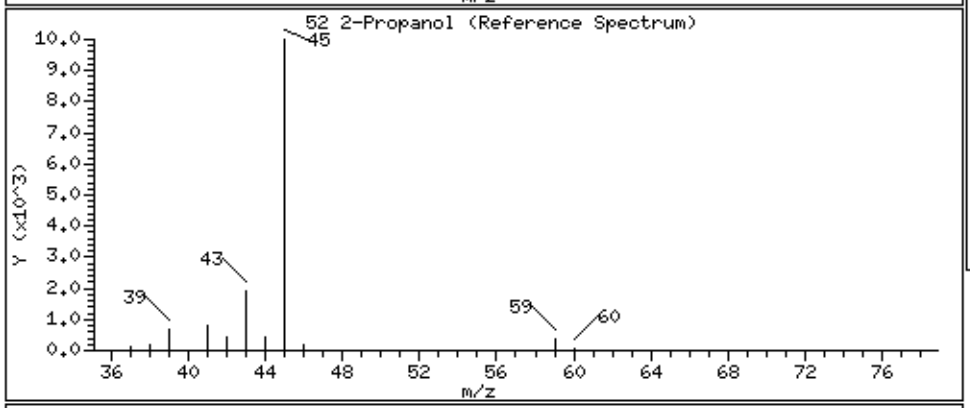
Concentration: 11.844 PPBV

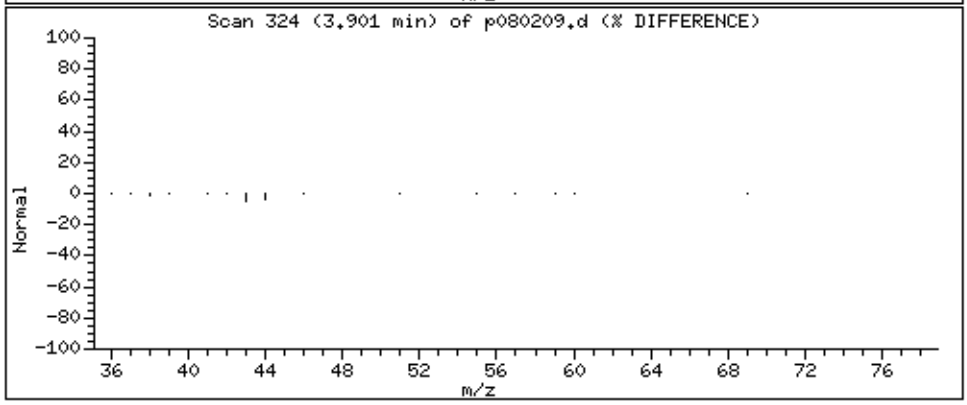












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

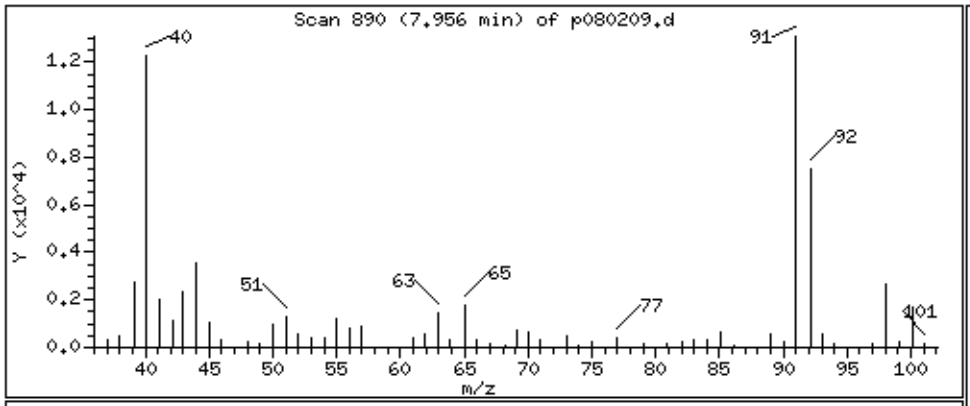
Operator: LD

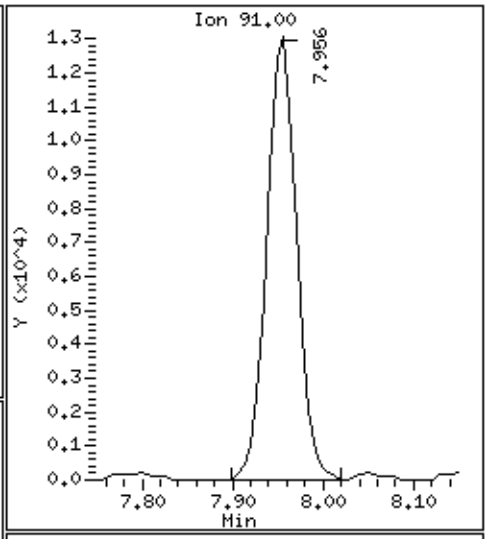
Column phase: RTX-624

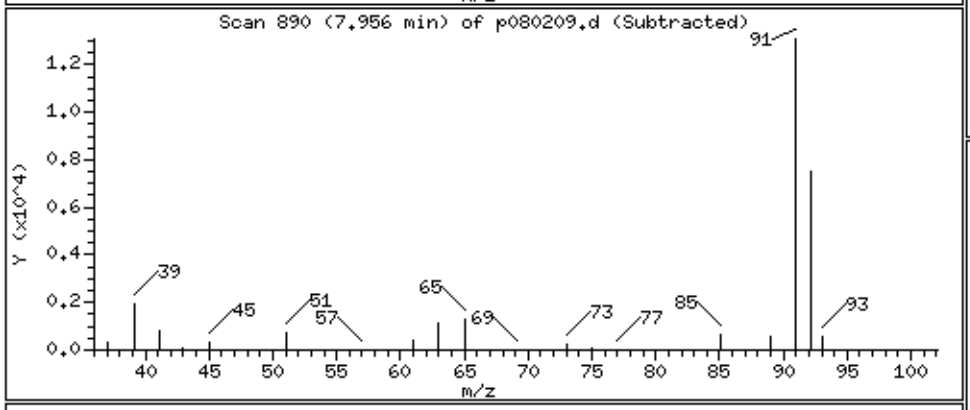
Column diameter: 0.25

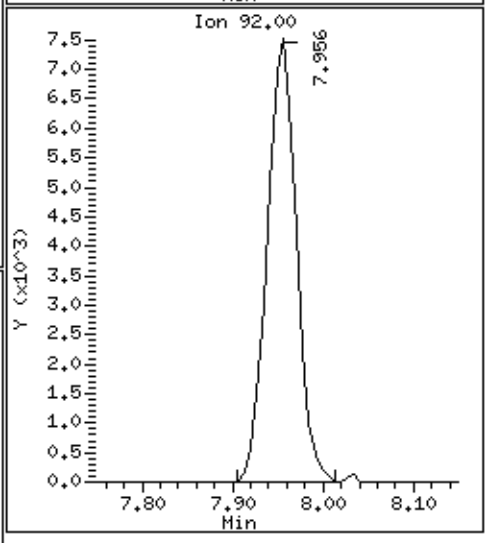
137 Toluene

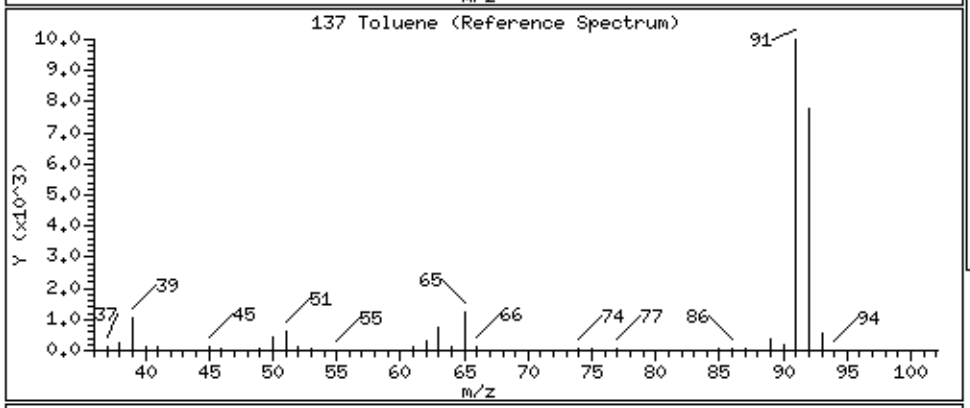
Concentration: 2.154 PPBV

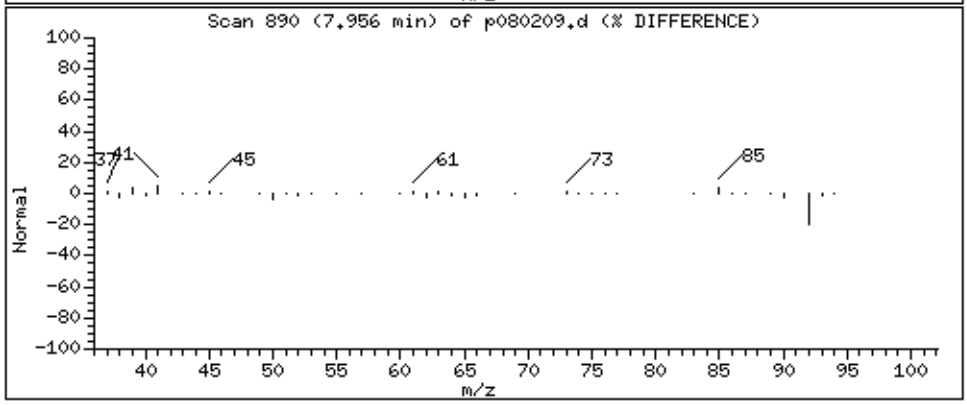












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

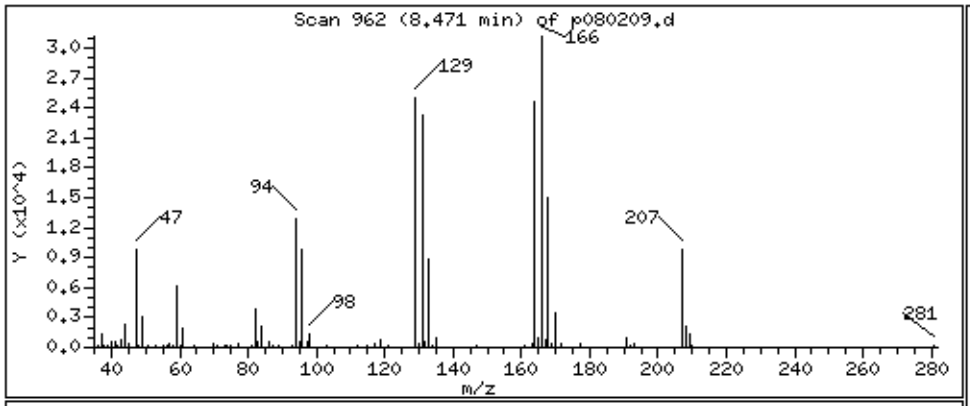
Operator: LD

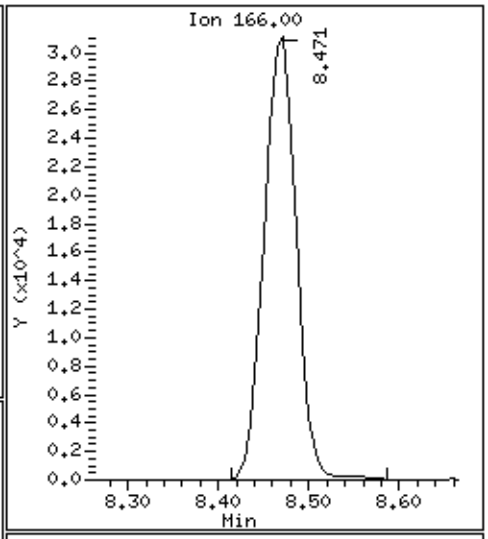
Column phase: RTX-624

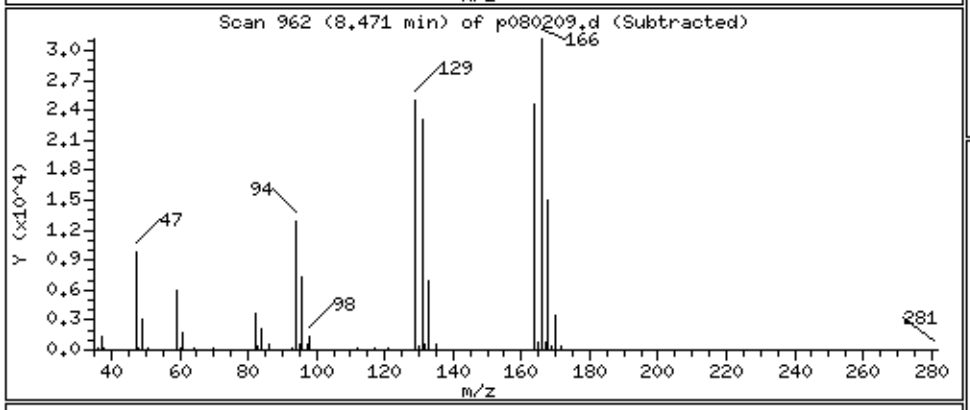
Column diameter: 0.25

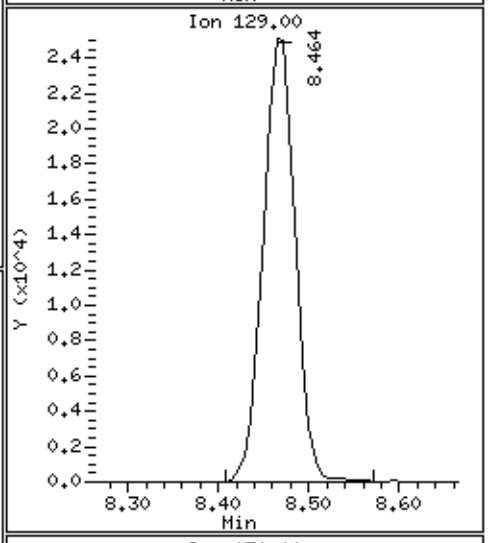
142 Tetrachloroethene

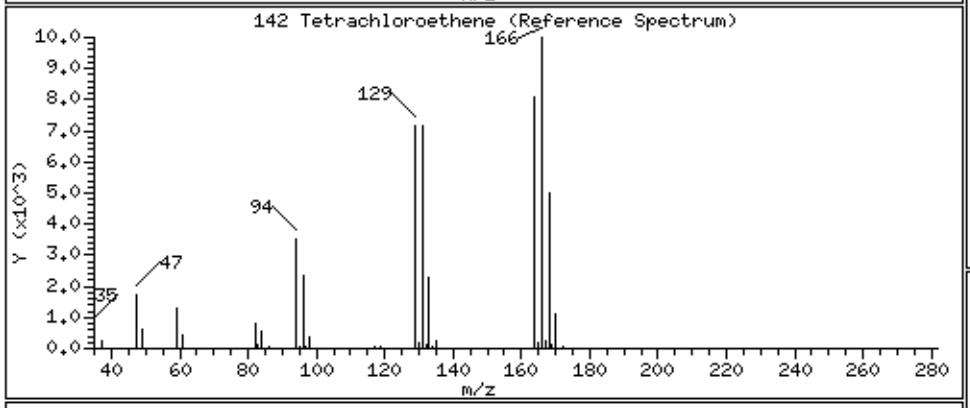
Concentration: 11.222 PPBV

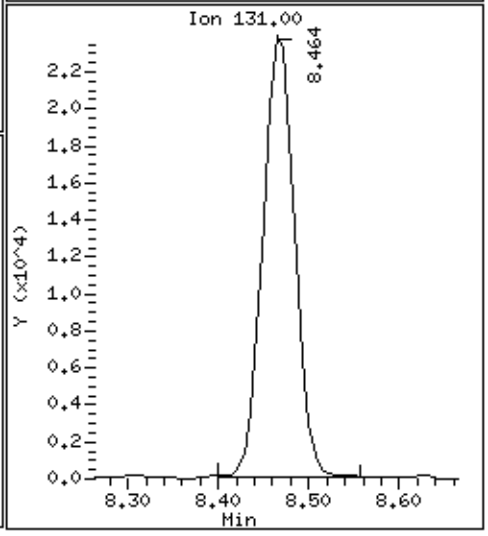


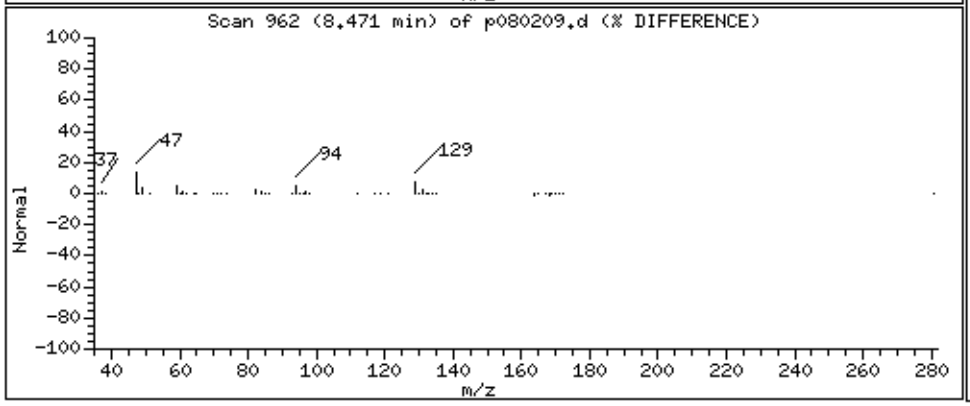












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

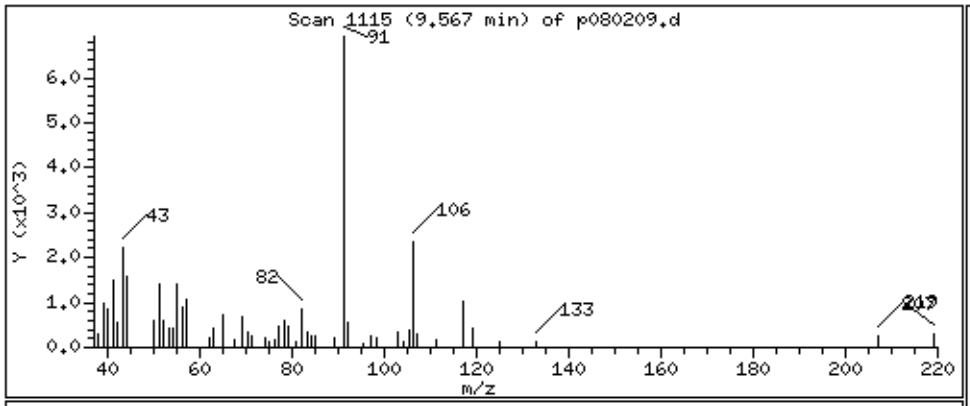
Operator: LD

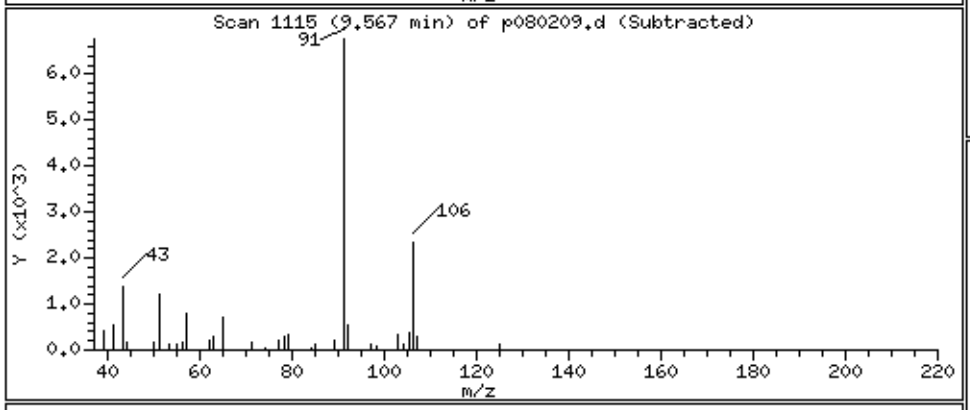
Column phase: RTX-624

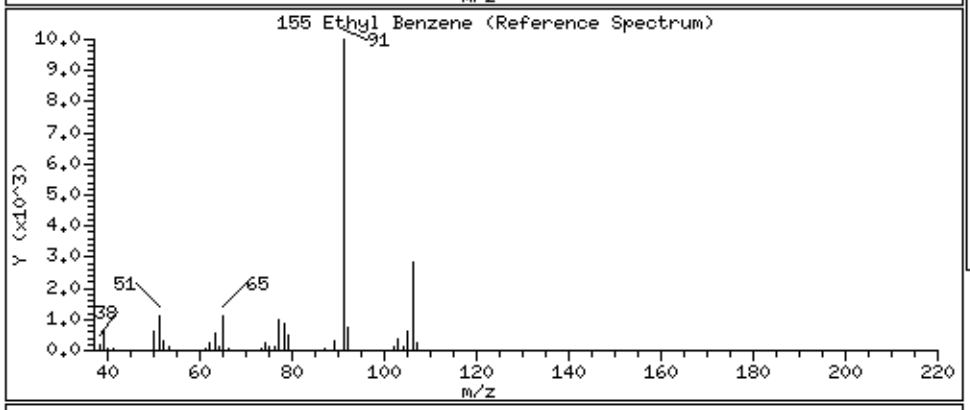
Column diameter: 0.25

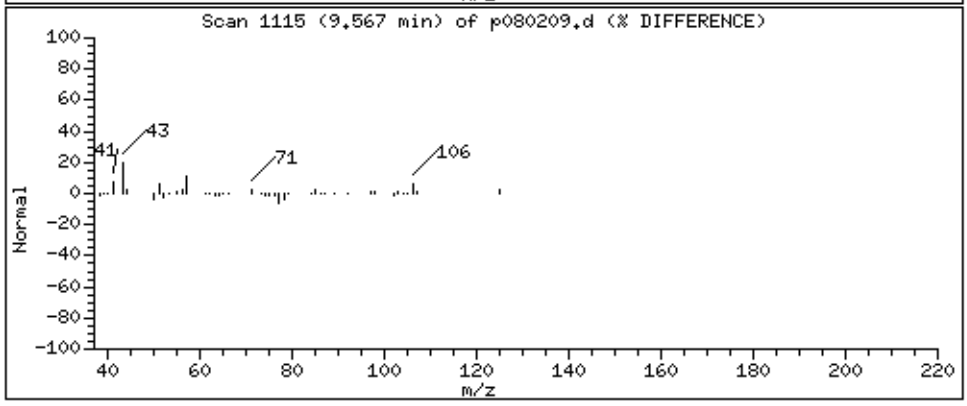
155 Ethyl Benzene

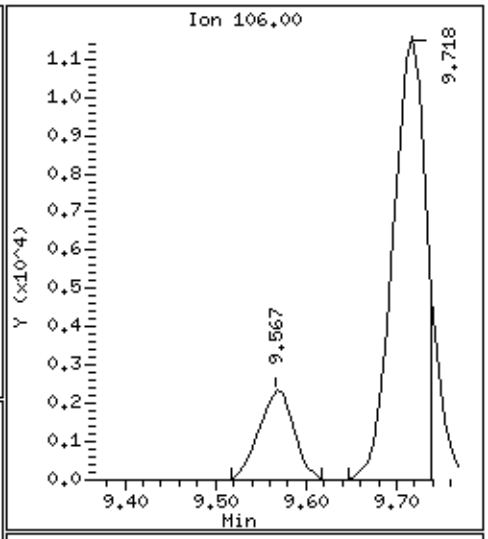
Concentration: 1.003 PPBV

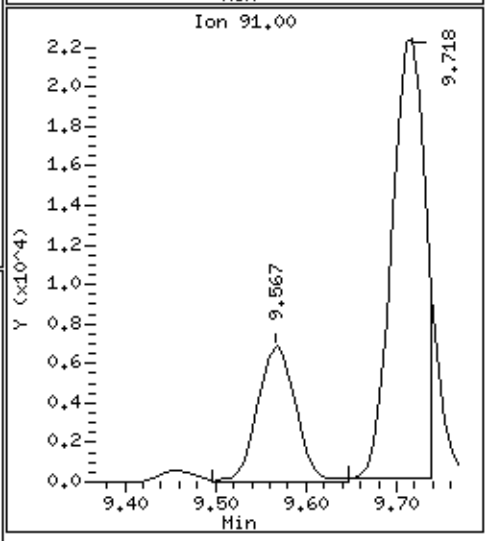












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

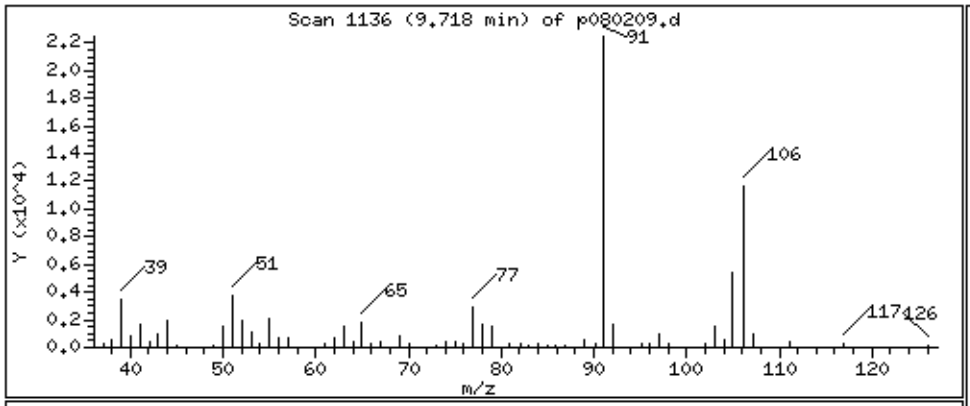
Operator: LD

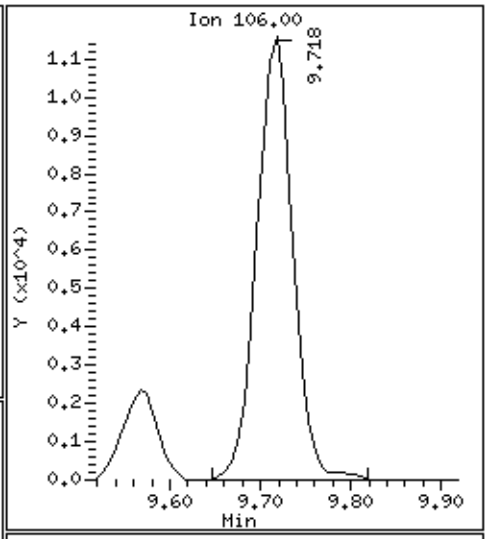
Column phase: RTX-624

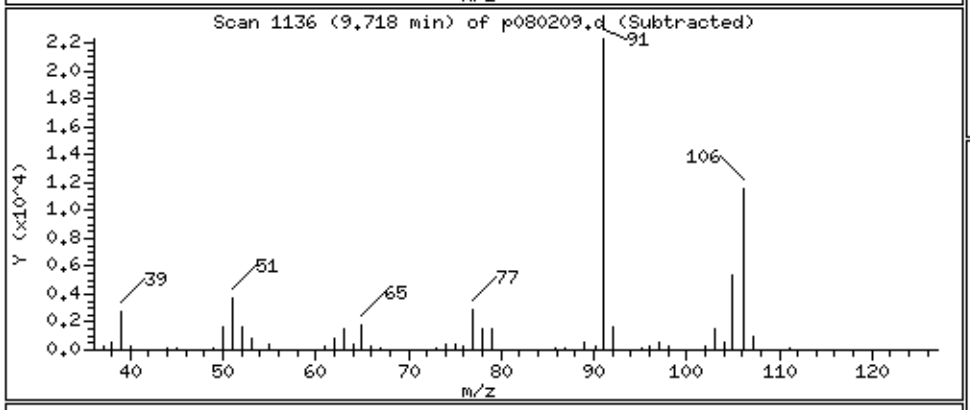
Column diameter: 0.25

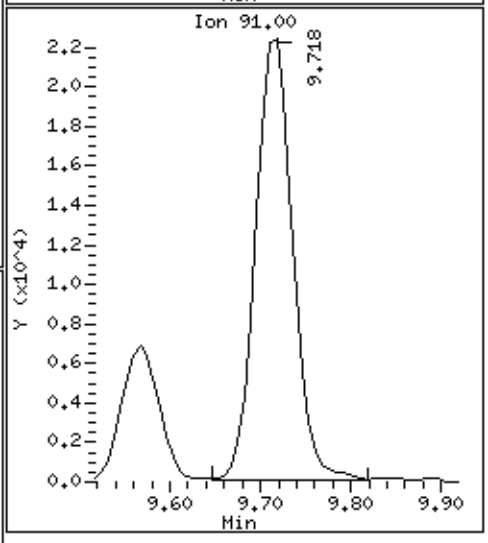
158 m,p-Xylene

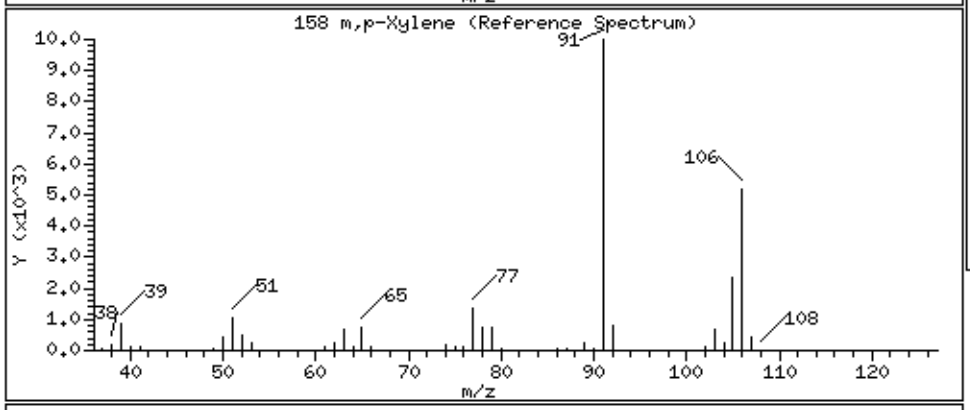
Concentration: 4.072 PPBV

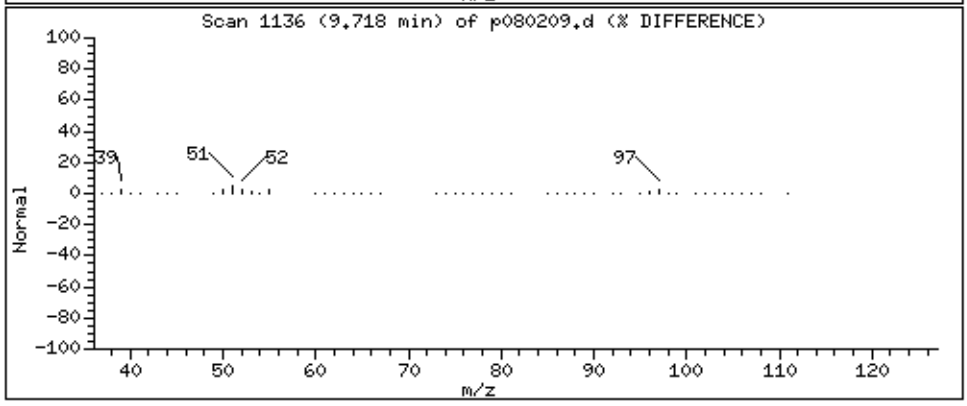












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

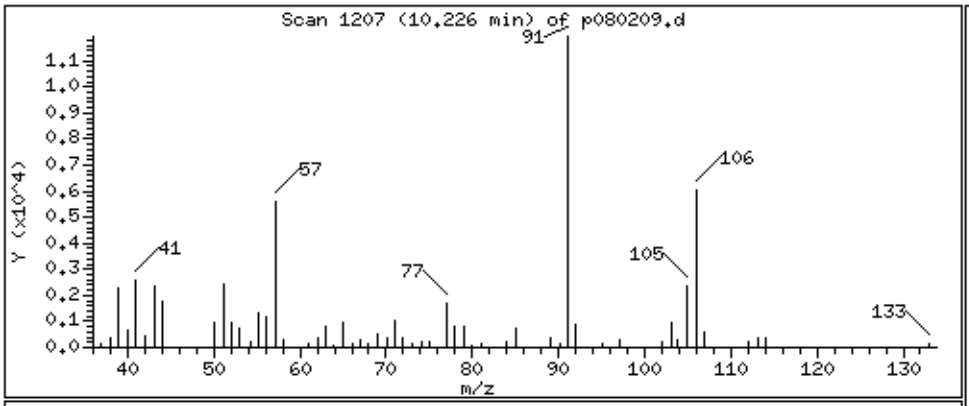
Operator: LD

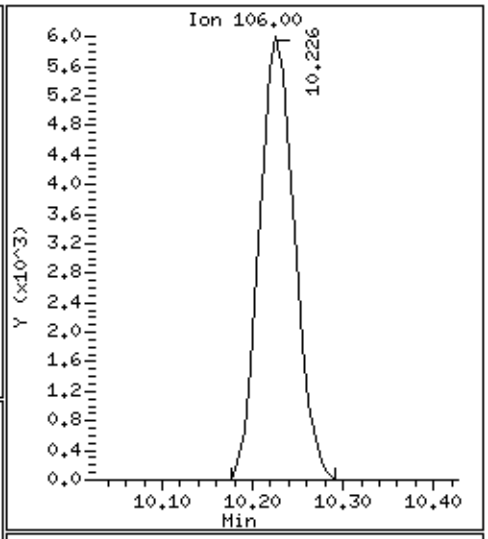
Column phase: RTX-624

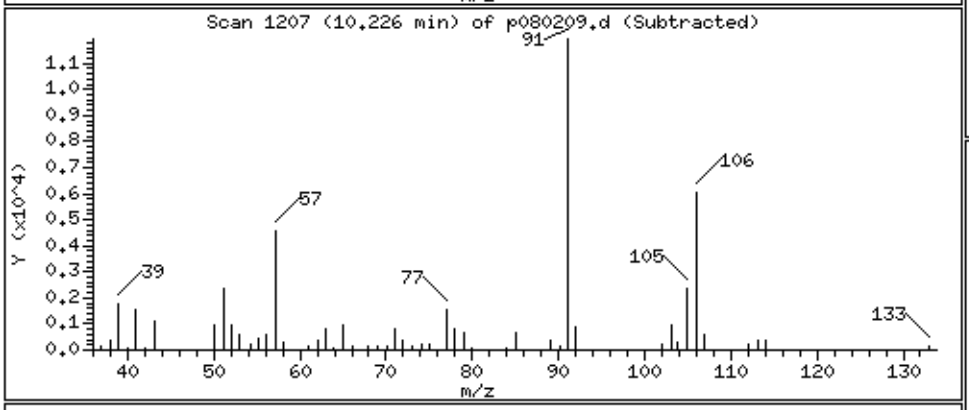
Column diameter: 0.25

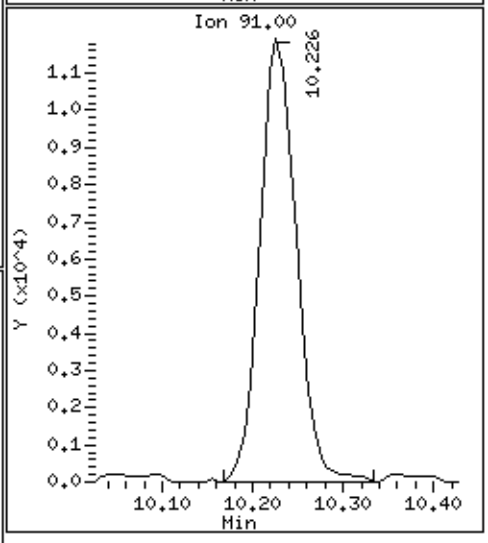
164 o-Xylene

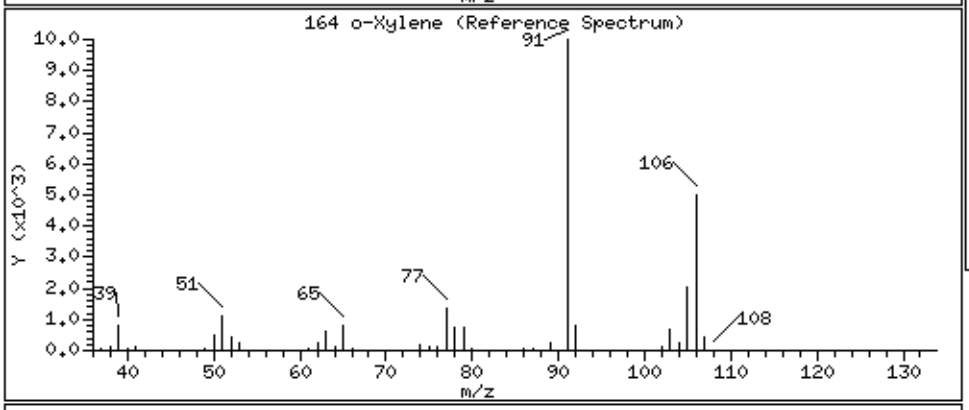
Concentration: 2.153 PPBV

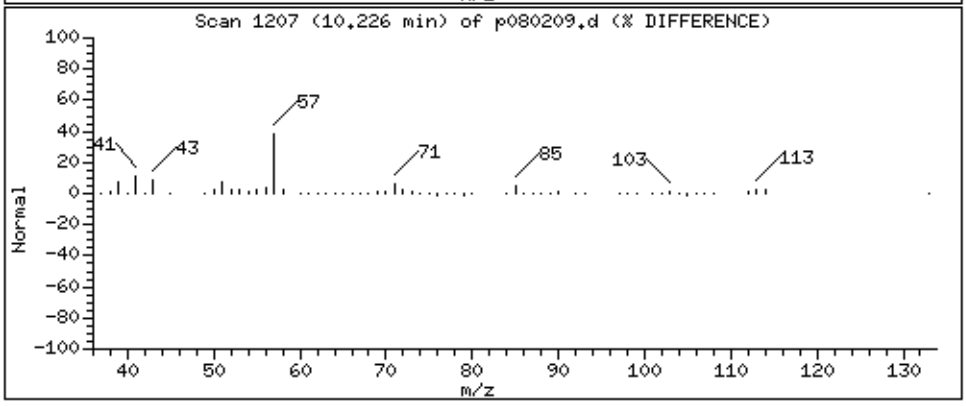












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

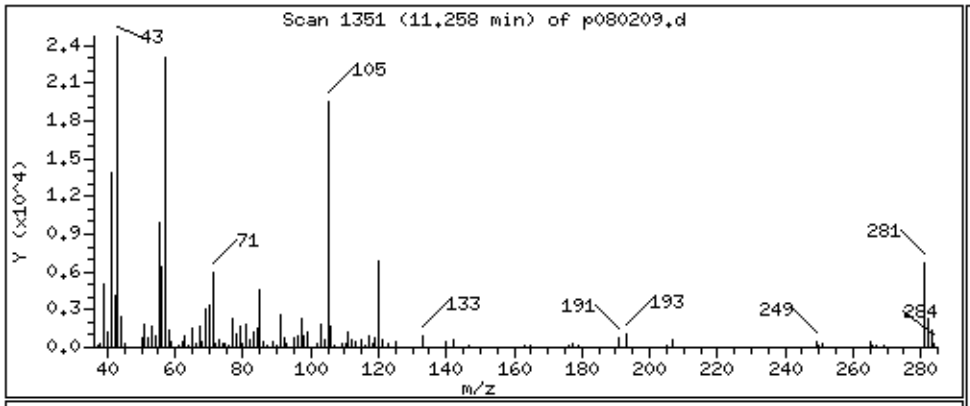
Operator: LD

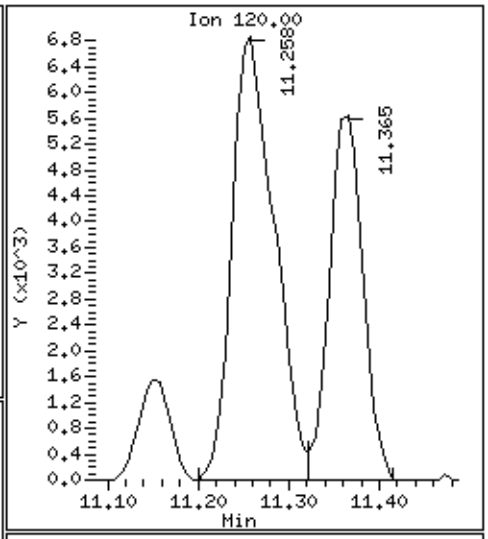
Column phase: RTX-624

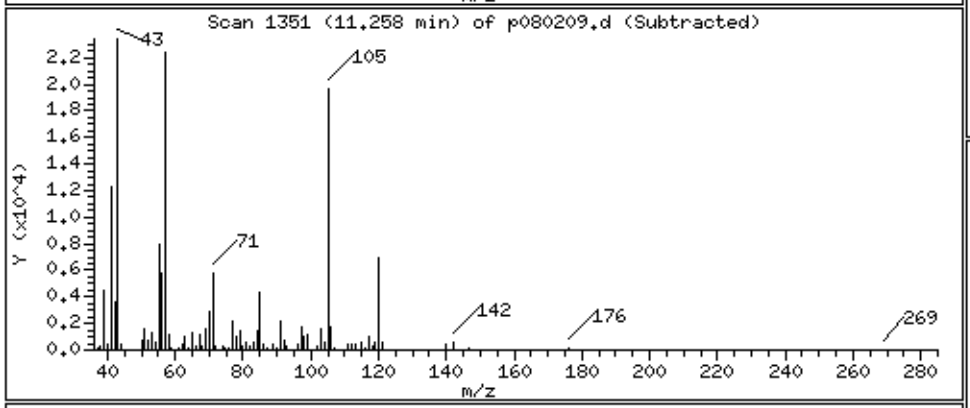
Column diameter: 0.25

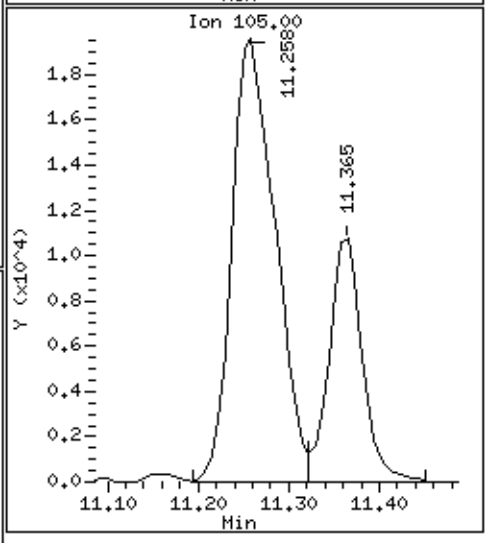
183 4-Ethyltoluene

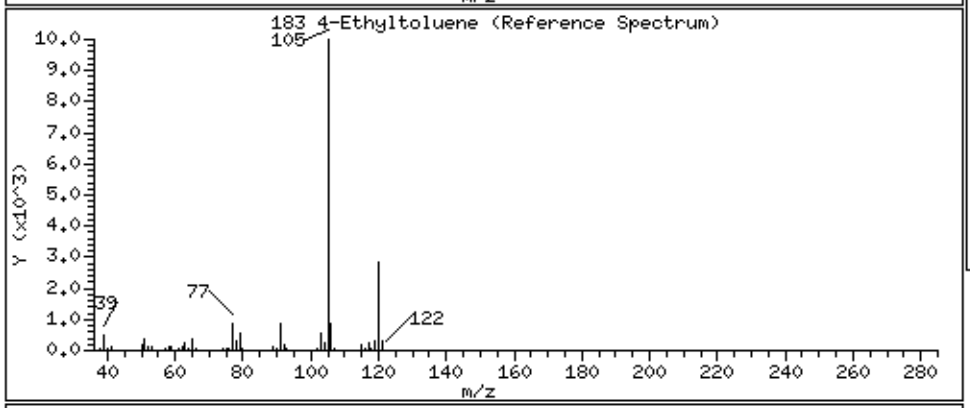
Concentration: 2.931 PPBV

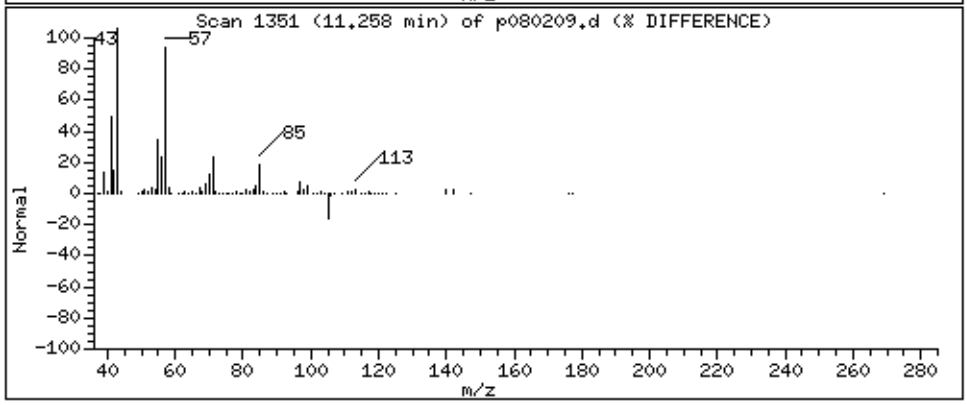












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

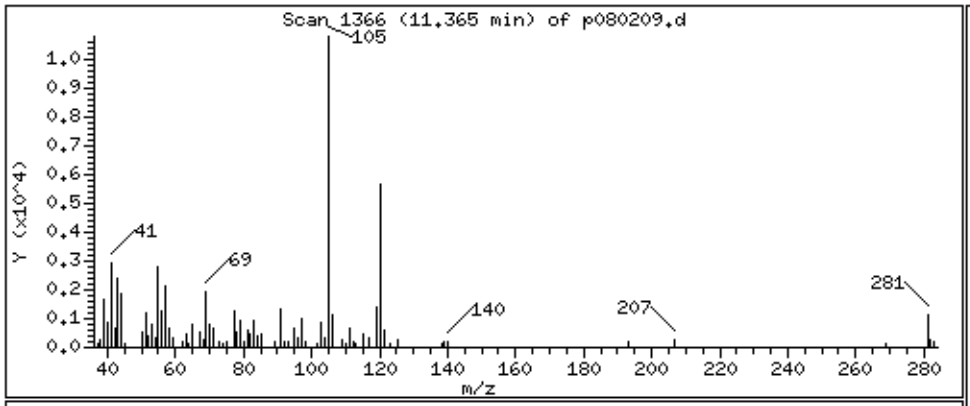
Operator: LD

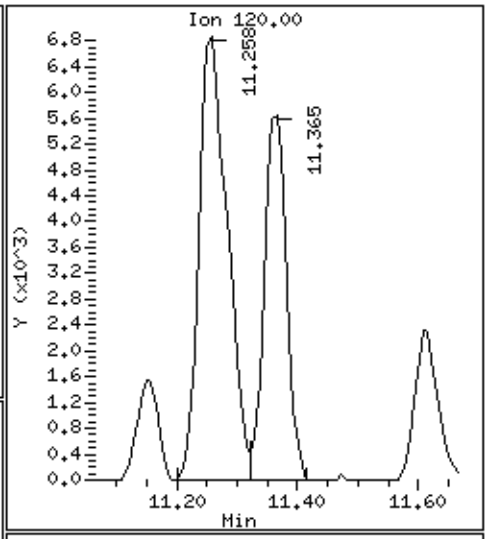
Column phase: RTX-624

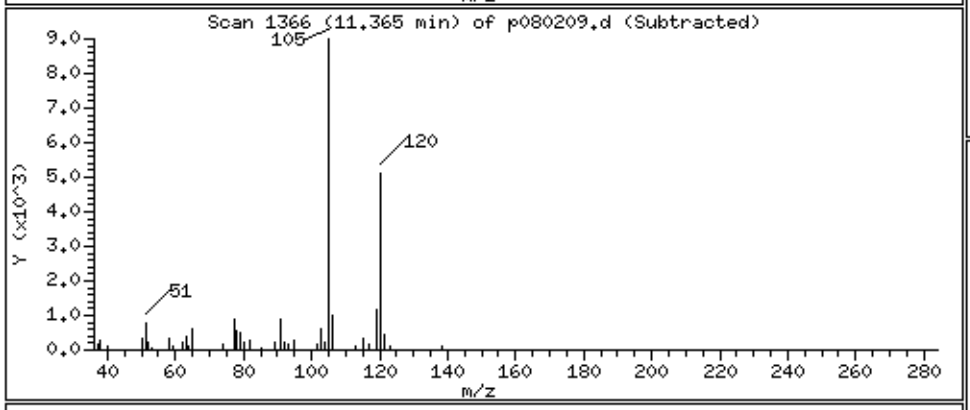
Column diameter: 0.25

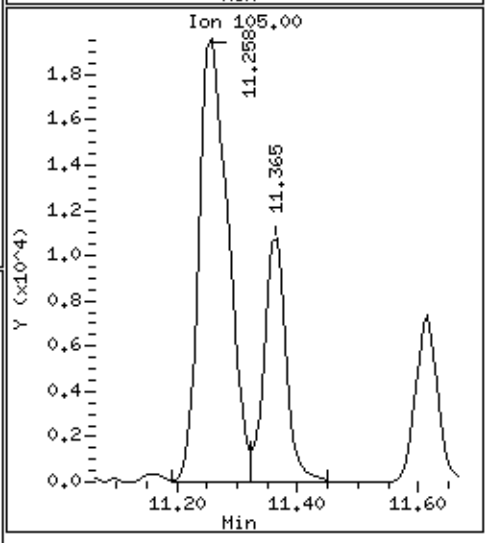
185 1,3,5-Trimethylbenzene

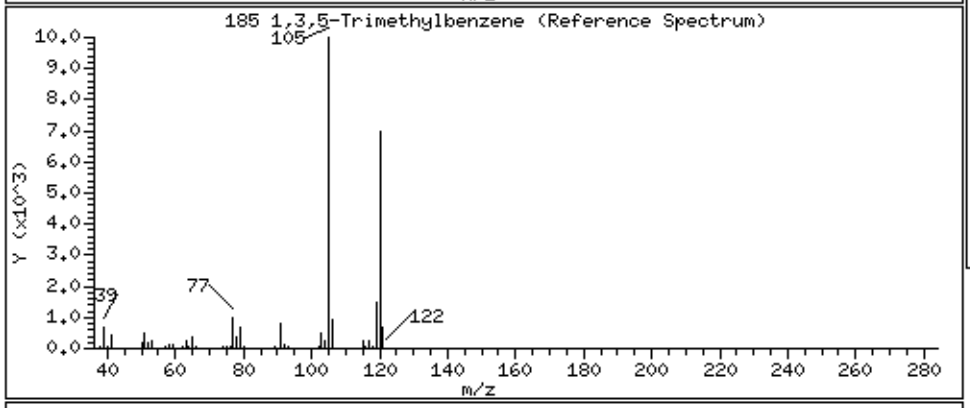
Concentration: 1.403 PPBV

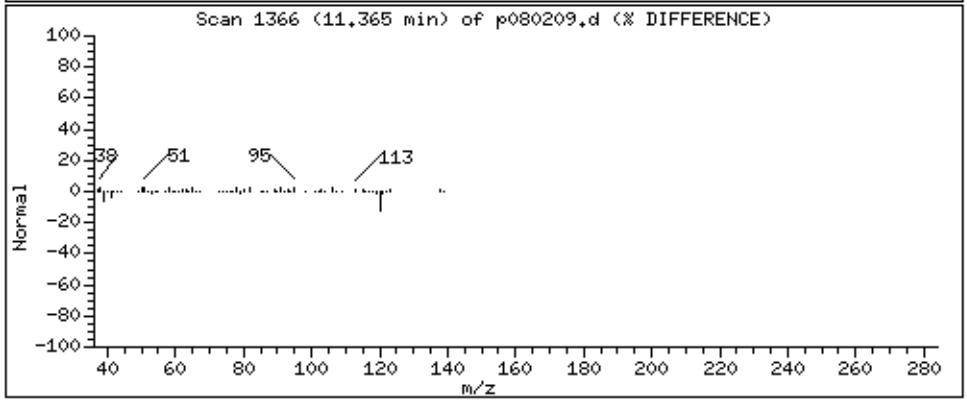












Data File: /chem/msdp.i/02AUG21.b/p080209.d

Date : 02-AUG-2021 15:23

Client ID:

Instrument: msdp.i

Sample Info: 200ml N2012

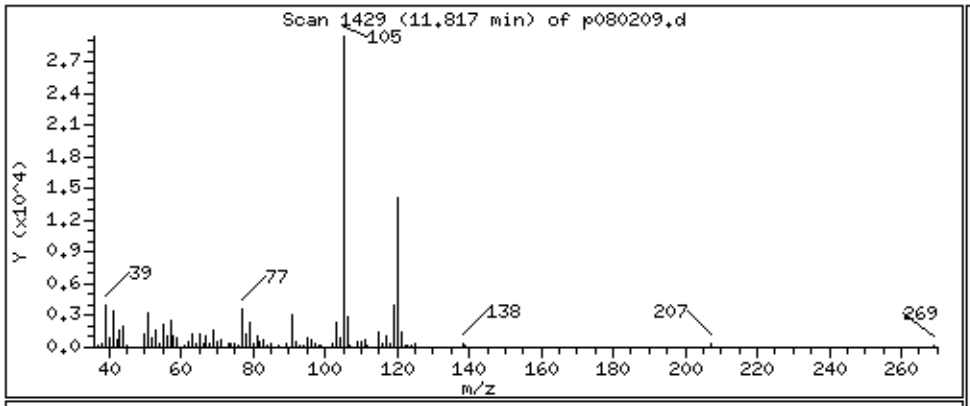
Operator: LD

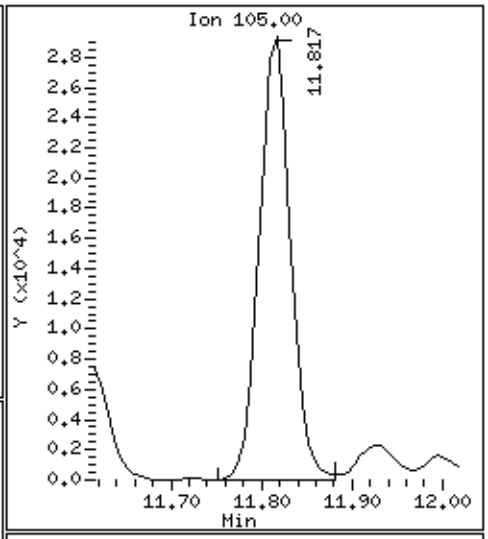
Column phase: RTX-624

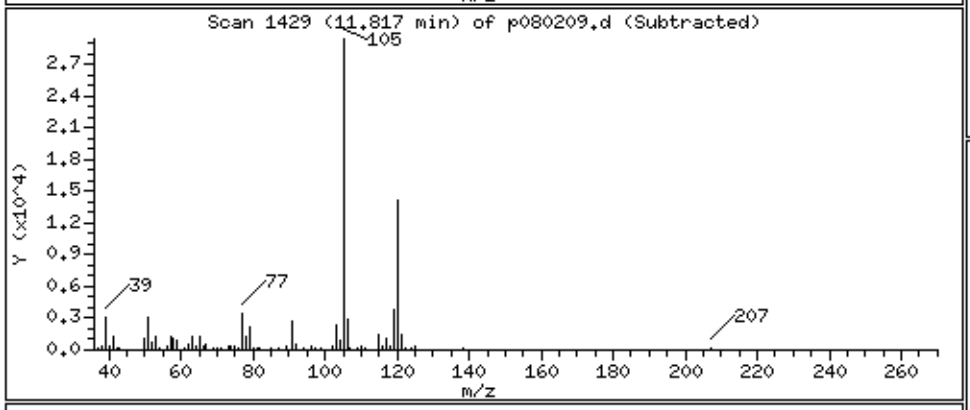
Column diameter: 0.25

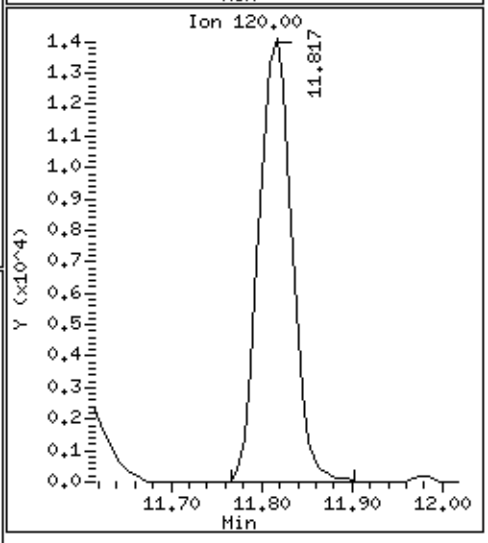
190 1,2,4-Trimethylbenzene

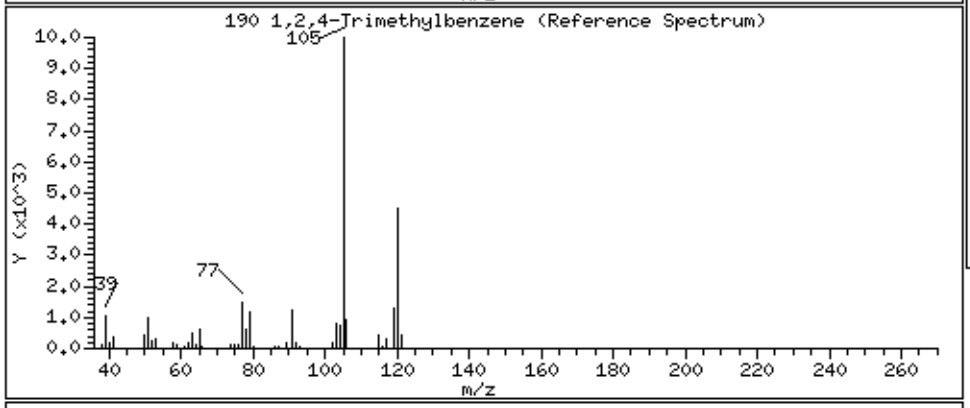
Concentration: 3.537 PPBV

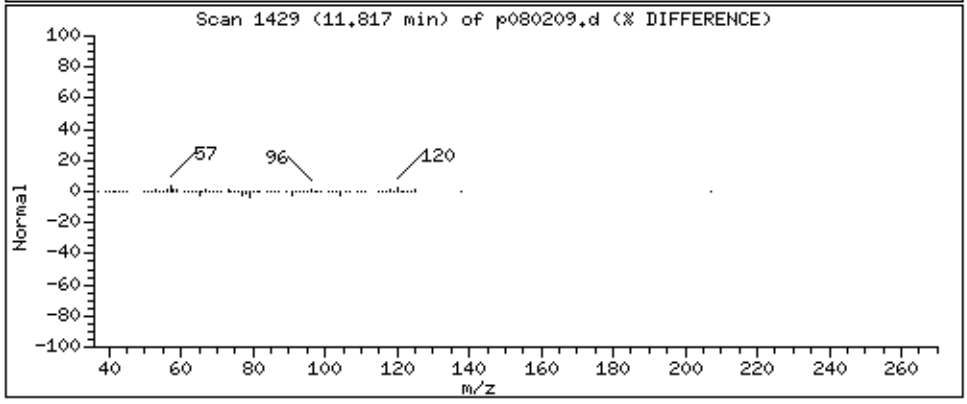












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Client Sample ID: SSV-FSS01-01

Lab ID#: 2107362B-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080210**	**Date of Collection:**	**7/15/21 4:49:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**8/2/21 03:52 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	340	11	920
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	15	10	38
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	17	25	40
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: SSV-FSS01-01

Lab ID#: 2107362B-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080210**	**Date of Collection:**	**7/15/21 4:49:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**8/2/21 03:52 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: SSV-FSS01-01

Lab ID#: 2107362B-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080210**	**Date of Collection:**	**7/15/21 4:49:00 PM**
Dil. Factor:	**2.10**	**Date of Analysis:**	**8/2/21 03:52 PM**

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080210.d
Lab Smp Id: 2107362B-19A
Inj Date : 02-AUG-2021 15:52
Operator : LD Inst ID: msdp.i
Smp Info : 200ml 3344
Misc Info : 6.0 Hg->10 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 15:32 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.d
Als bottle: 3
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	163328	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	123305				48.23- 108.23	75.50
5.785	5.778 (1.000)	49	331562				150.57- 210.57	203.00
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	608826	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	92271				0.00- 45.71	15.16
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	602883	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	315174				23.78- 83.78	52.28
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	225468	25.0141	25.014		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	111593				27.21- 87.21	49.49
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	662928	25.0752	25.075		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	68679				0.00- 40.44	10.36

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	429811			34.95- 94.95	64.84
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	388515	25.0957	25.096	80.00- 120.00	100.00
10.914	10.921 (1.154)	95	474588			95.92- 155.92	122.15
10.921	10.921 (1.154)	176	386350			66.89- 126.89	99.44
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.716	1.702 (0.297)	65	600571	162.223	340.67	80.00- 120.00	100.00
1.716	1.744 (0.297)	51	1781068			597.63- 657.63	296.56
1.716	1.702 (0.297)	47	314666			33.72- 93.72	52.39
47 Acetone					CAS #: 67-64-1		
3.729	3.715 (0.645)	58	34246	7.99799	16.796	80.00- 120.00	100.00
3.729	3.715 (0.645)	43	129007			302.95- 362.95	376.70
52 2-Propanol					CAS #: 67-63-0		
3.901	3.887 (0.674)	45	126619	7.33722	15.408	80.00- 120.00	100.00
3.901	3.887 (0.674)	43	23985			0.00- 47.19	18.94

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080210.d
Lab Smp Id: 2107362B-19A
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	163328	9.40
108 1,4-Difluorobenze	558135	334881	781389	608826	9.08
153 Chlorobenzene-d5	542388	325433	759343	602883	11.15

		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	6.67	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.

Report Date: 05-Aug-2021 09:23

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 2107362B-19A
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/02AUG21.b/p21q0519a.m
Misc Info: 6.0 Hg->10 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.014	100.06	70-130
$ 134 Toluene-d8	25.000	25.075	100.30	70-130
$ 170 4-Bromofluorobenz	25.000	25.096	100.38	70-130

Data File: /chem/msdp.i/02AUG21.b/p080210.d

Date : 02-AUG-2021 15:52

Client ID:

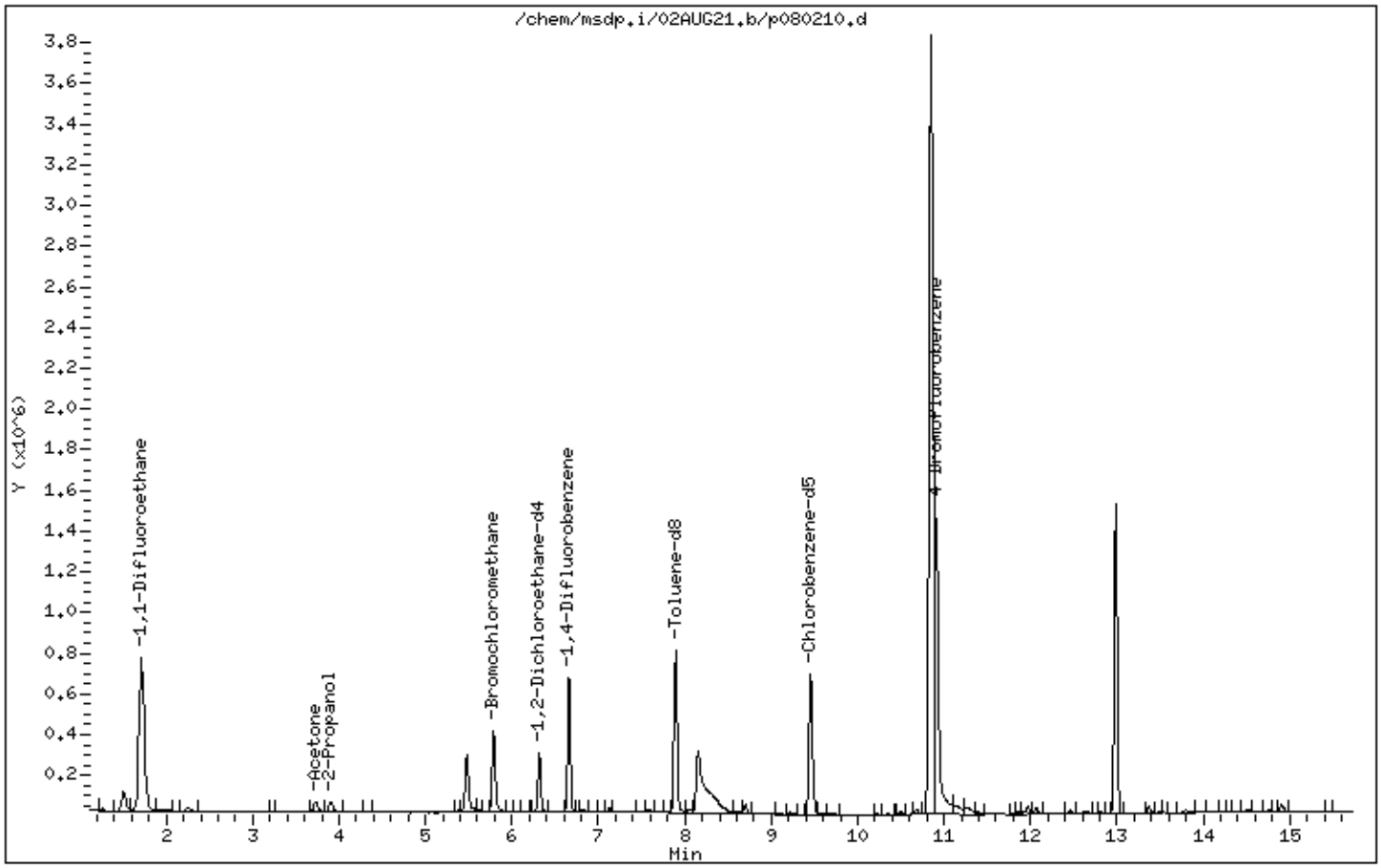
Instrument: msdp.i

Sample Info: 200ml 3344

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/02AUG21.b/p080210.d

Date : 02-AUG-2021 15:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3344

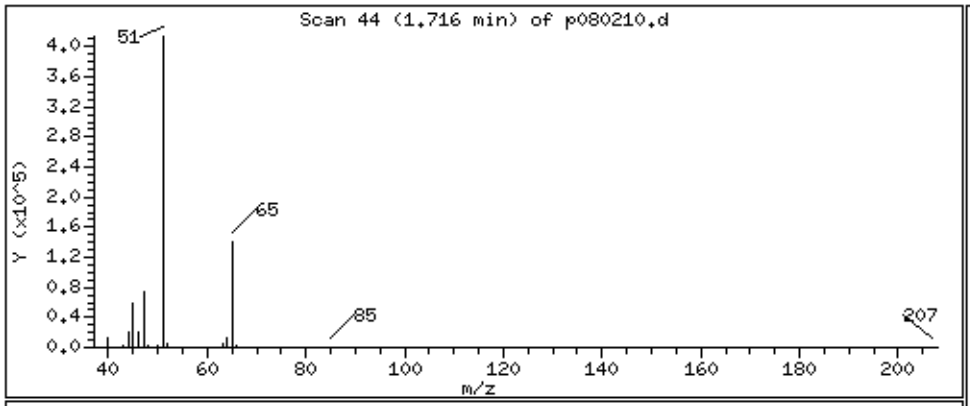
Operator: LD

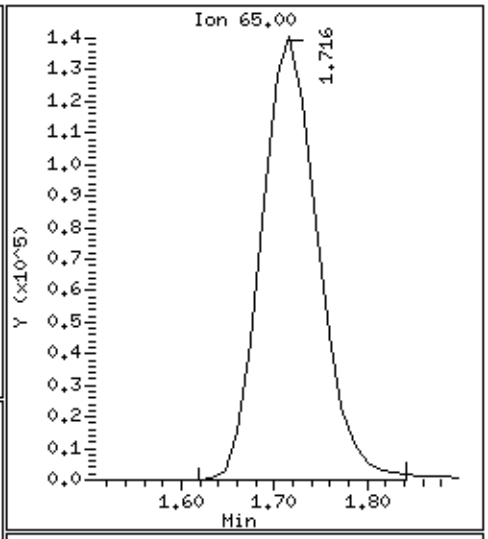
Column phase: RTX-624

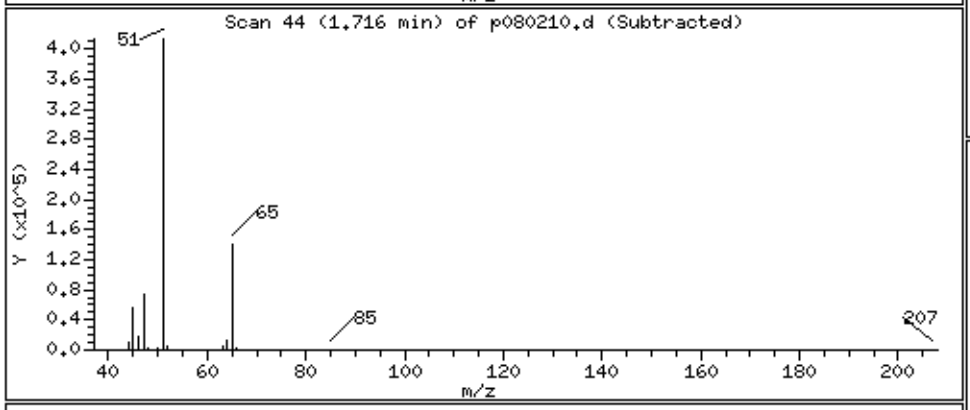
Column diameter: 0.25

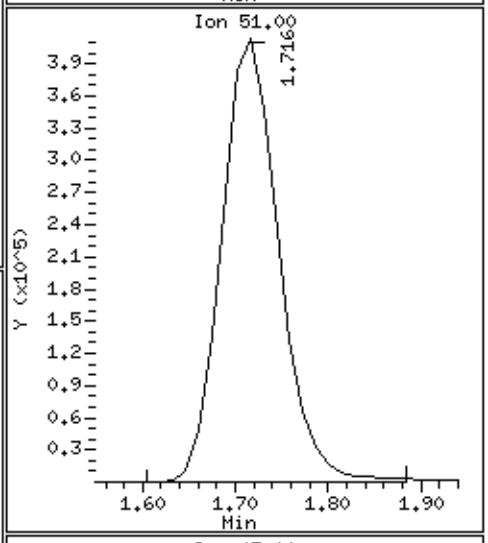
7 1,1-Difluoroethane

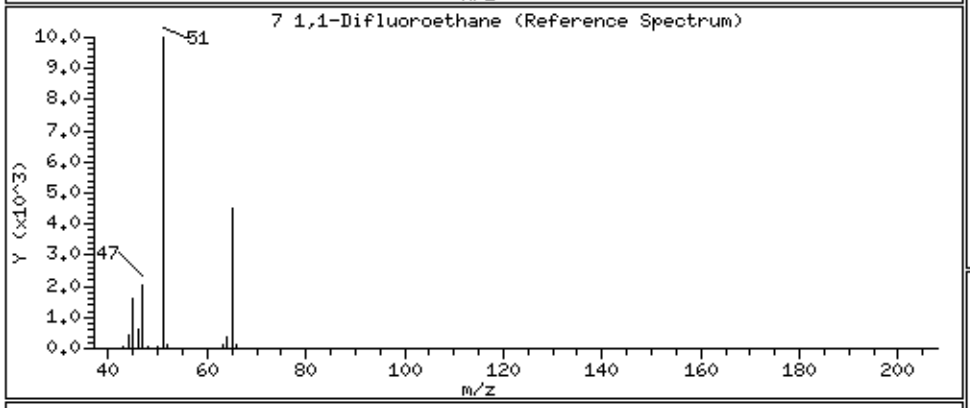
Concentration: 340.67 PPBV

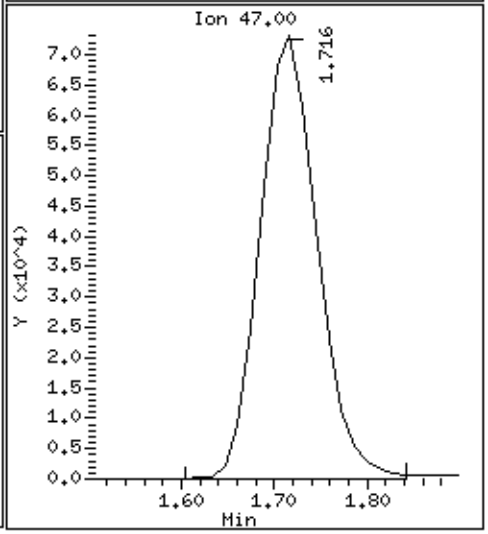


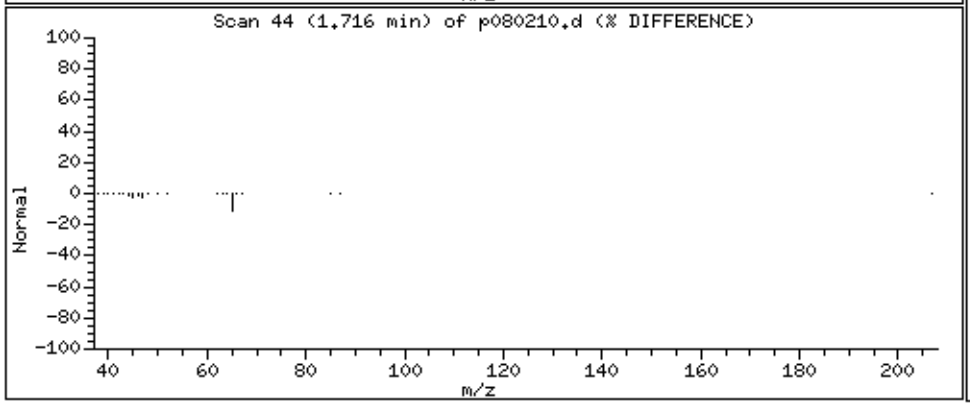












Data File: /chem/msdp.i/02AUG21.b/p080210.d

Date : 02-AUG-2021 15:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3344

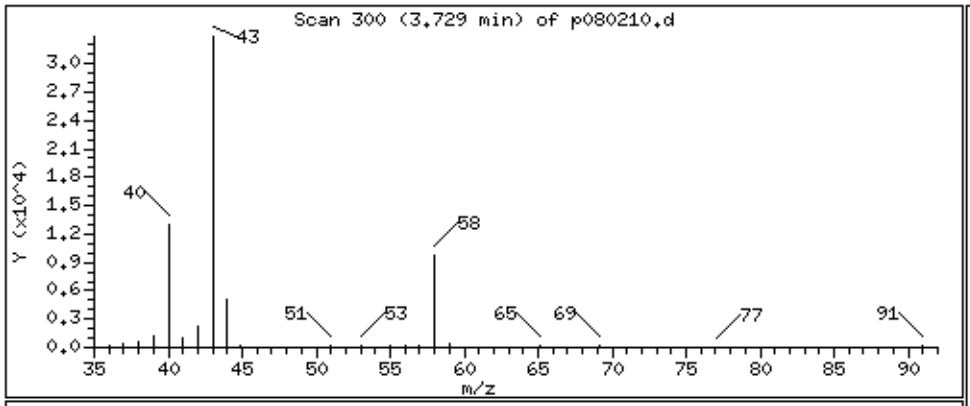
Operator: LD

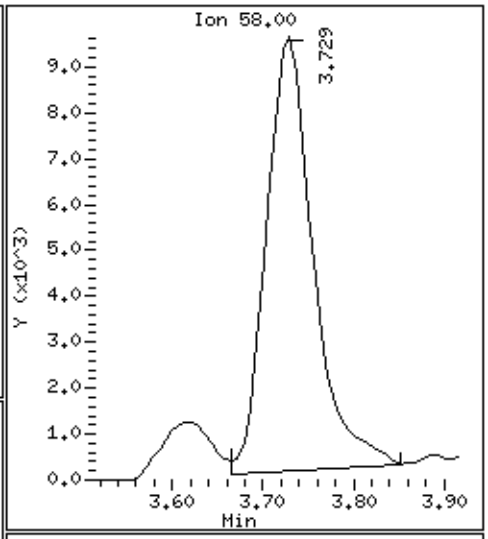
Column phase: RTX-624

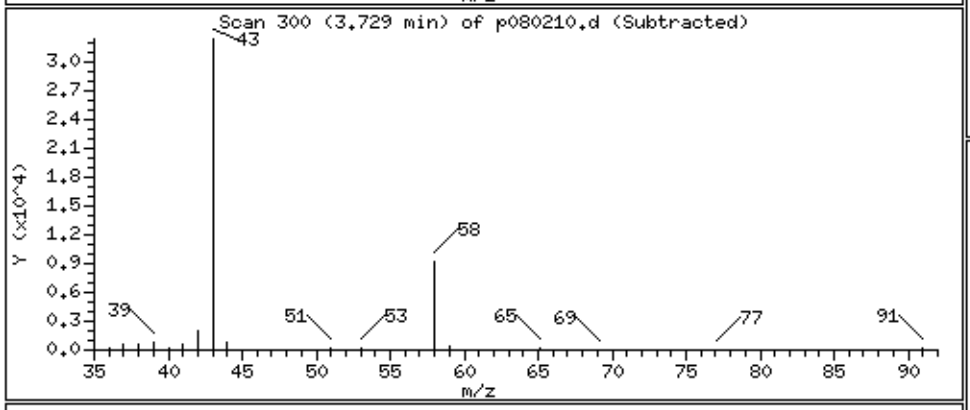
Column diameter: 0.25

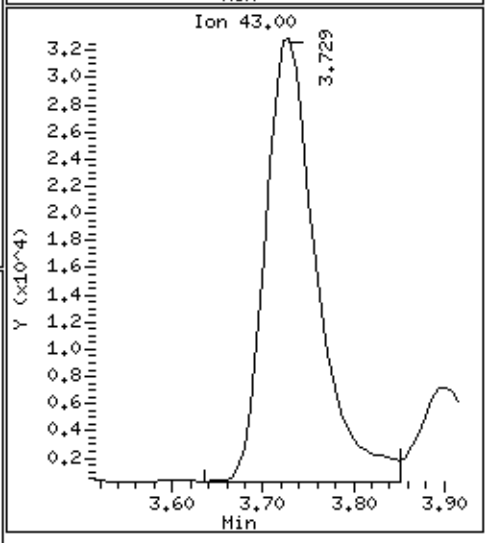
47 Acetone

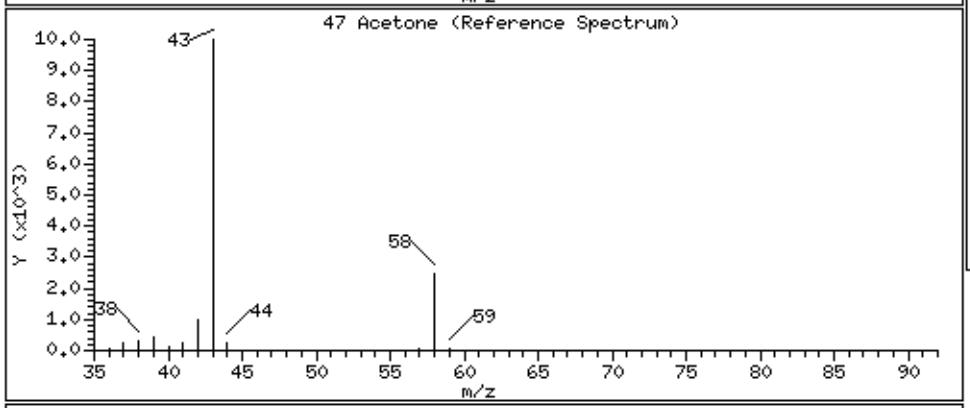
Concentration: 16.796 PPBV

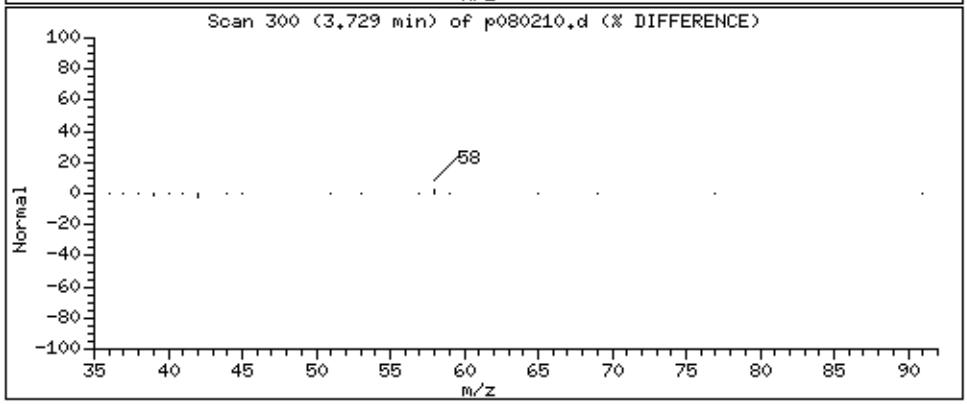












Data File: /chem/msdp.i/02AUG21.b/p080210.d

Date : 02-AUG-2021 15:52

Client ID:

Instrument: msdp.i

Sample Info: 200ml 3344

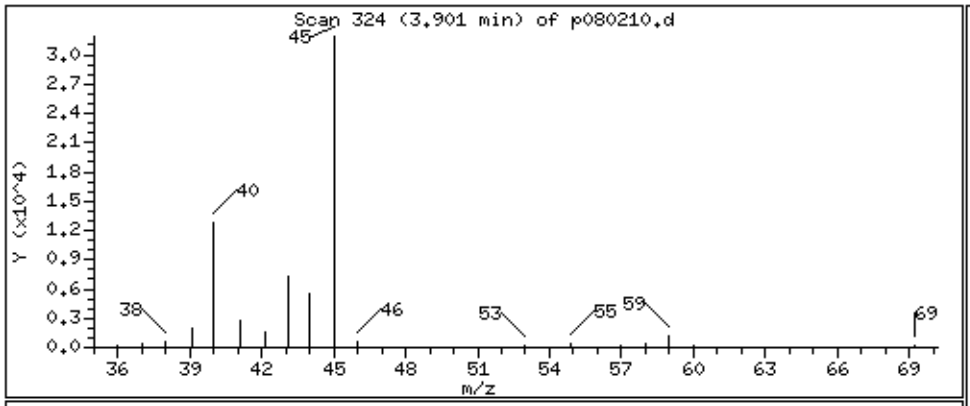
Operator: LD

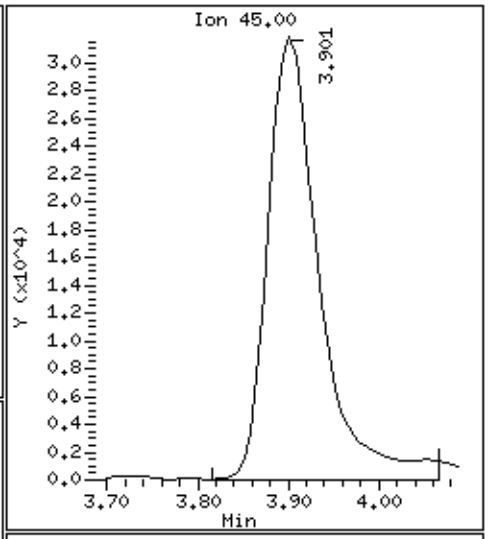
Column phase: RTX-624

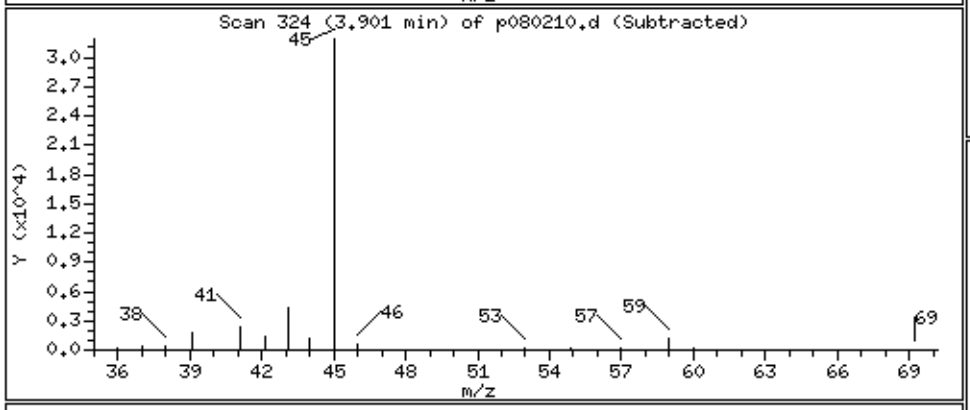
Column diameter: 0.25

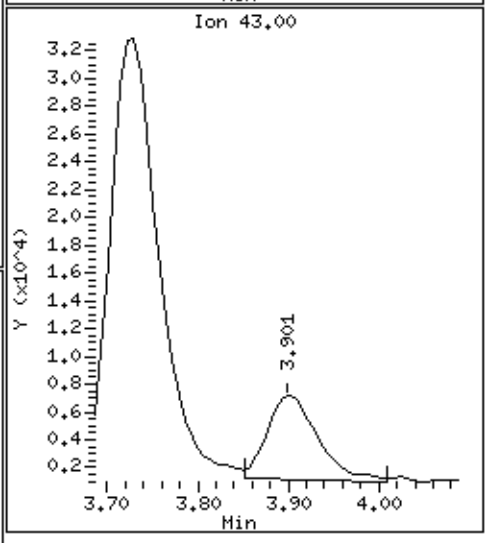
52 2-Propanol

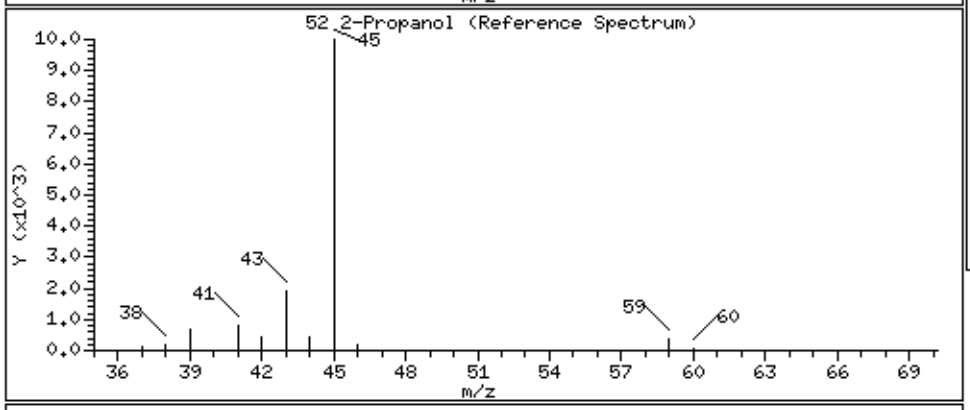
Concentration: 15.408 PPBV

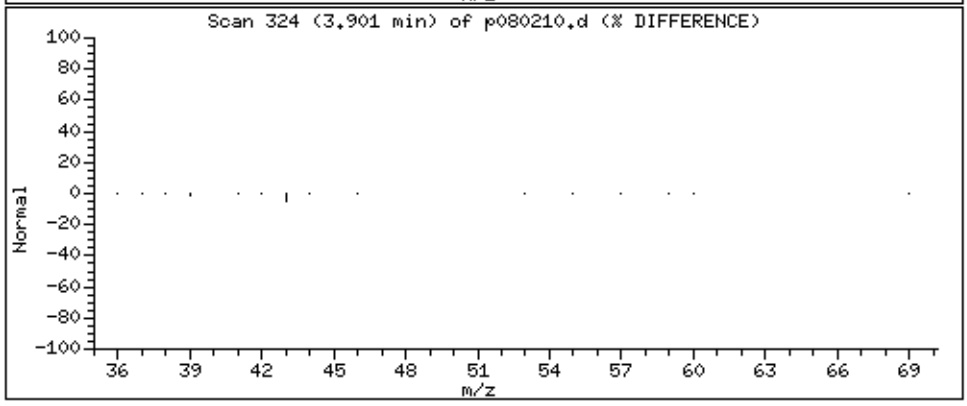












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 2107362B-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080207a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 01:34 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#: 2107362B-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080207a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 01:34 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#: 2107362B-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080207a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 01:34 PM**	

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080207a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 02-AUG-2021 13:34
Operator : LD Inst ID: msdp.i
Smp Info : 200ml 35157
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:50 lk8g Quant Type: ISTD
Cal Date : 19-MAY-2021 19:45 Cal File: p051915.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	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	167113	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	126398				48.23- 108.23	75.64
5.785	5.778 (1.000)	49	325414				150.57- 210.57	194.73
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.659	6.659 (1.000)	114	640508	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	93109				0.00- 45.71	14.54
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	625083	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	322606				23.78- 83.78	51.61
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.308	6.308 (1.090)	65	231907	25.1457	25.146		80.00- 120.00	100.00
6.308	6.308 (1.090)	67	114035				27.21- 87.21	49.17
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	684868	24.6237	24.624		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	69163				0.00- 40.44	10.10

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	449033			34.95- 94.95	65.56
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	393777	24.5322	24.532	80.00- 120.00	100.00
10.921	10.921 (1.154)	95	478973			95.92- 155.92	121.64
10.921	10.921 (1.154)	176	377837			66.89- 126.89	95.95

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080207a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: Humid

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	167113	11.94
108 1,4-Difluorobenze	558135	334881	781389	640508	14.76
153 Chlorobenzene-d5	542388	325433	759343	625083	15.25

		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	6.66	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: 02-Aug-2021 14:07

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
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/02AUG21.b/p21q0519a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104 1,2-Dichloroethan	25.000	25.146	100.58	70-130
$ 134 Toluene-d8	25.000	24.624	98.49	70-130
$ 170 4-Bromofluorobenz	25.000	24.532	98.13	70-130

Data File: /chem/msdp.i/02AUG21.b/p080207a.d

Date : 02-AUG-2021 13:34

Client ID: Lab Blank

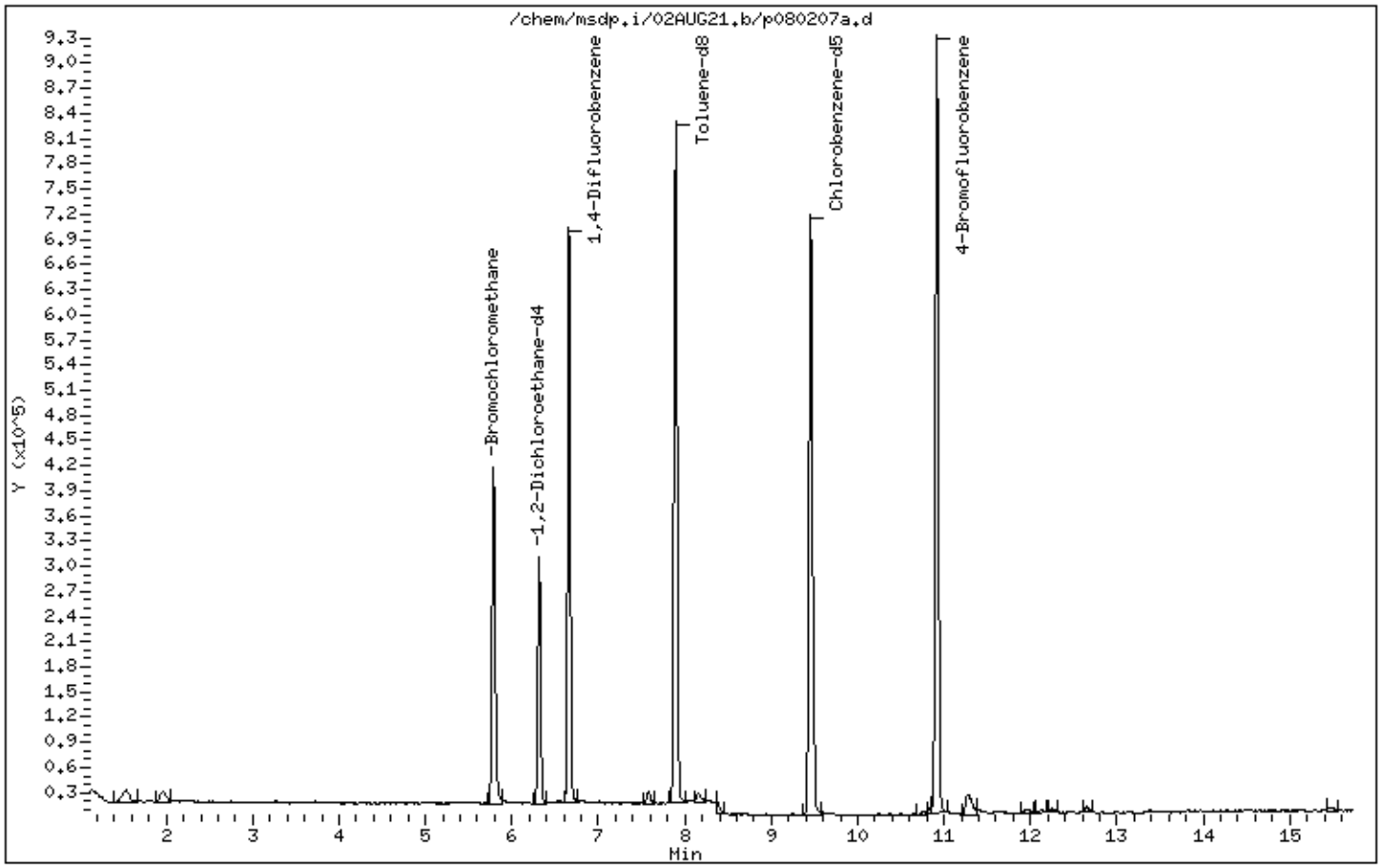
Instrument: msdp.i

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. :2107362B

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY						
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#	TOTAL OUT
1	SSV-JSS01-01	100		100		102		
2	SSV-HSS01-01	104		100		102		
3	SSV-HMBSS01-01	97		100		100		
4	SSV-GSS01-01	100		99		101		
5	SSV-GSS02-01	100		99		101		
6	SSV-FSS02-01	102		99		101		
7	SSV-FSS01-01	100		100		100		
8	Lab Blank	100		98		98		
9	CCV	104		101		101		
10	LCS	101		99		99		
11	LCSD	102		101		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: p080202.d Date : 2021-08-02 10:30:00 SDG No. : 2107362B

		Bromochloromethane	RT	1,4-Difluorobenzene	RT	Chlorobenzene-d5	RT
	24-HOUR CCV	149292	5.78	558135	6.66	542388	9.46
	UPPER LIMIT	209008	6.11	781389	6.99	759343	9.79
	LOWER LIMIT	89575	5.45	334881	6.33	325432	9.13
	CLIENT SAMPLE NO.						
1	SSV-JSS01-01	160720	5.79	597268	6.67	585655	9.46
2	SSV-HSS01-01	160235	5.79	627230	6.66	608300	9.46
3	SSV-HMBSS01-01	166281	5.78	576649	6.67	576091	9.46
4	SSV-GSS01-01	158761	5.78	589026	6.67	576526	9.46
5	SSV-GSS02-01	160135	5.78	579689	6.67	569916	9.46
6	SSV-FSS02-01	162725	5.79	621882	6.67	612998	9.46
7	SSV-FSS01-01	163328	5.79	608826	6.67	602883	9.46
8	Lab Blank	167113	5.79	640508	6.66	625083	9.46
9	CCV	149292	5.78	558135	6.66	542388	9.46
10	LCS	155775	5.78	592853	6.66	564064	9.46
11	LCSD	162538	5.79	610537	6.67	590330	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: p080203.d & p080204.d

Lab Sample ID: 22A & 22AA

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	103	103	0	
79-34-5	1,1,2,2-Tetrachloroethane	107	107	0	
79-00-5	1,1,2-Trichloroethane	110	108	1.8	
75-34-3	1,1-Dichloroethane	106	105	0.95	
75-35-4	1,1-Dichloroethene	97	98	1.0	
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	121	128	5.6	
95-63-6	1,2,4-Trimethylbenzene	104	104	0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	0	
106-93-4	1,2-Dibromoethane (EDB)	114	113	0.88	
95-50-1	1,2-Dichlorobenzene	108	107	0.93	
107-06-2	1,2-Dichloroethane	118	117	0.85	
78-87-5	1,2-Dichloropropane	106	107	0.94	
108-67-8	1,3,5-Trimethylbenzene	106	104	1.9	
106-99-0	1,3-Butadiene	121	116	4.2	
541-73-1	1,3-Dichlorobenzene	110	110	0	
106-46-7	1,4-Dichlorobenzene	111	110	0.90	
123-91-1	1,4-Dioxane	97	99	2.0	
540-84-1	2,2,4-Trimethylpentane	105	104	0.96	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	96	96	0	
591-78-6	2-Hexanone	104	103	0.97	
67-63-0	2-Propanol	110	109	0.91	
107-05-1	3-Chloropropene	90	94	4.3	
622-96-8	4-Ethyltoluene	104	104	0	
108-10-1	4-Methyl-2-pentanone	102	102	0	
67-64-1	Acetone	108	103	4.7	
107-02-8	Acrolein	ND	ND	0	
107-13-1	Acrylonitrile	ND	ND	0	
100-44-7	alpha-Chlorotoluene	102	102	0	
71-43-2	Benzene	104	104	0	
75-27-4	Bromodichloromethane	114	113	0.88	
75-25-2	Bromoform	114	113	0.88	
74-83-9	Bromomethane	92	90	2.2	
75-15-0	Carbon Disulfide	96	95	1.0	

56-23-5	Carbon Tetrachloride	111	111	0
108-90-7	Chlorobenzene	110	108	1.8
75-00-3	Chloroethane	96	96	0
67-66-3	Chloroform	107	107	0
74-87-3	Chloromethane	102	99	3.0
156-59-2	cis-1,2-Dichloroethene	105	104	0.96
10061-01-5	cis-1,3-Dichloropropene	106	107	0.94
98-82-8	Cumene	104	102	1.9
110-82-7	Cyclohexane	94	96	2.1
124-48-1	Dibromochloromethane	116	115	0.87
74-95-3	Dibromomethane	ND	ND	0
64-17-5	Ethanol	93	90	3.3
141-78-6	Ethyl Acetate	ND	ND	0
100-41-4	Ethyl Benzene	108	104	3.8
637-92-3	Ethyl-tert-butyl ether	ND	ND	0
75-69-4	Freon 11	109	108	0.92
76-13-1	Freon 113	100	99	1.0
76-14-2	Freon 114	108	103	4.7
75-71-8	Freon 12	110	107	2.8
811-97-2	Freon 134a	ND	ND	0
142-82-5	Heptane	99	100	1.0
87-68-3	Hexachlorobutadiene	127	134	5.4
110-54-3	Hexane	104	103	0.97
74-88-4	Iodomethane	ND	ND	0
108-20-3	Isopropyl ether	ND	ND	0
108-38-3	m,p-Xylene	105	103	1.9
1634-04-4	Methyl tert-butyl ether	93	92	1.1
75-09-2	Methylene Chloride	119	116	2.6
91-20-3	Naphthalene	104	111	6.5
95-47-6	o-Xylene	105	103	1.9
103-65-1	Propylbenzene	106	105	0.95
115-07-1	Propylene	ND	ND	0
100-42-5	Styrene	100	98	2.0
994-05-8	tert-Amyl methyl ether	ND	ND	0
75-65-0	tert-Butyl alcohol	ND	ND	0
127-18-4	Tetrachloroethene	113	111	1.8
109-99-9	Tetrahydrofuran	119	117	1.7
108-88-3	Toluene	103	103	0
156-60-5	trans-1,2-Dichloroethene	97	96	1.0
10061-02-6	trans-1,3-Dichloropropene	112	111	0.90
79-01-6	Trichloroethene	107	109	1.9
108-05-4	Vinyl Acetate	ND	ND	0

593-60-2	Vinyl Bromide	ND	ND	0
75-01-4	Vinyl Chloride	99	93	6.2

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

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

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					
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	*****	*****	*****	*****	*****	*****		
	*****	*****	*****				*****	*****

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					
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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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

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					
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

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					
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

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					
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

US32TAR1

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Start Cal Date : 19-MAY-2021 14:02
End Cal Date : 20-MAY-2021 00:05
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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					
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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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
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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	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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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

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	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

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	
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

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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					
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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	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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	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

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	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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	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

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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
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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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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	100.000 Level 8	200.000 Level 9	0.50000 Level 10					
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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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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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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	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: 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)

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:

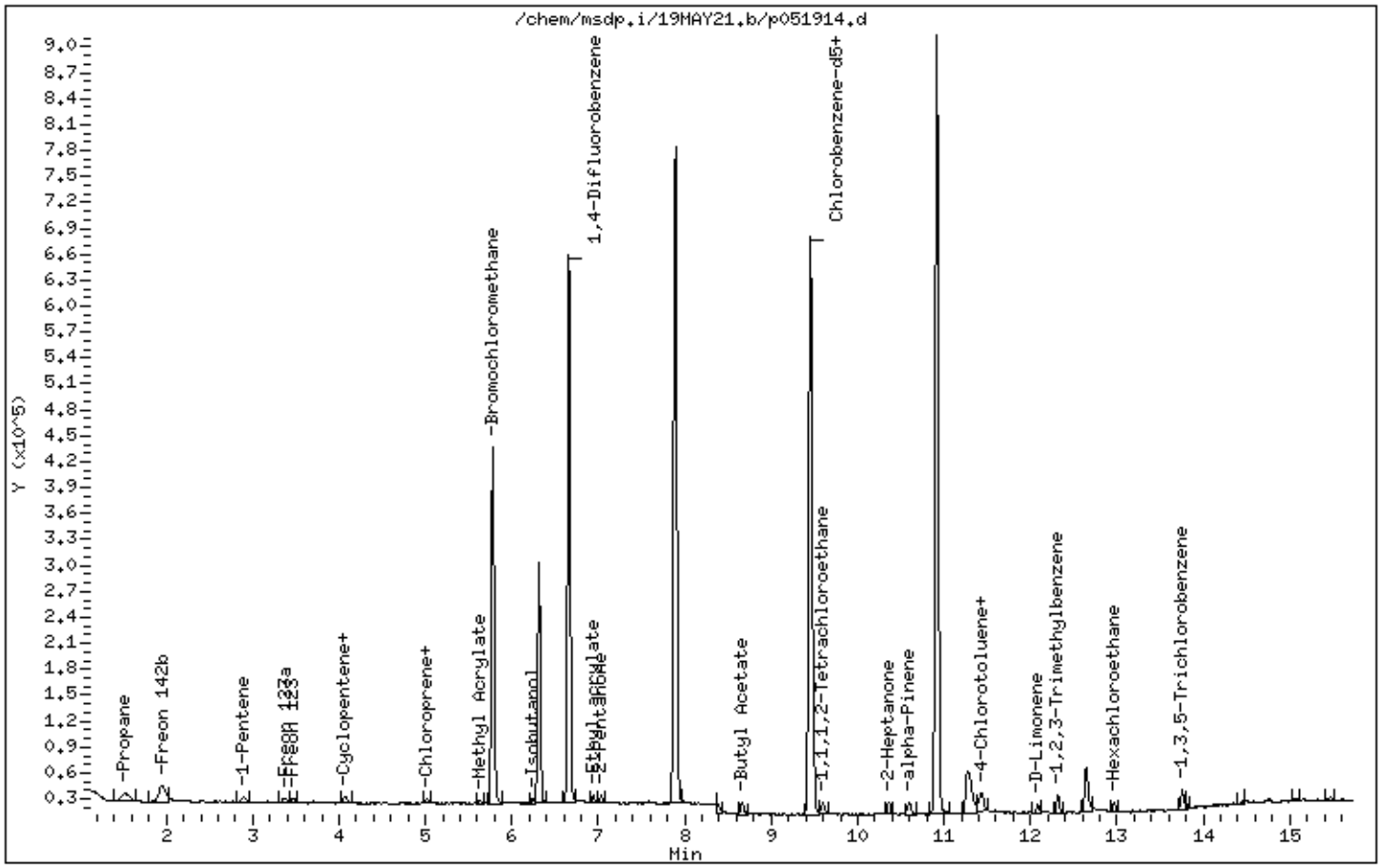
Instrument: msdp.i

Sample Info: 16mL 3018-1928

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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

				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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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:

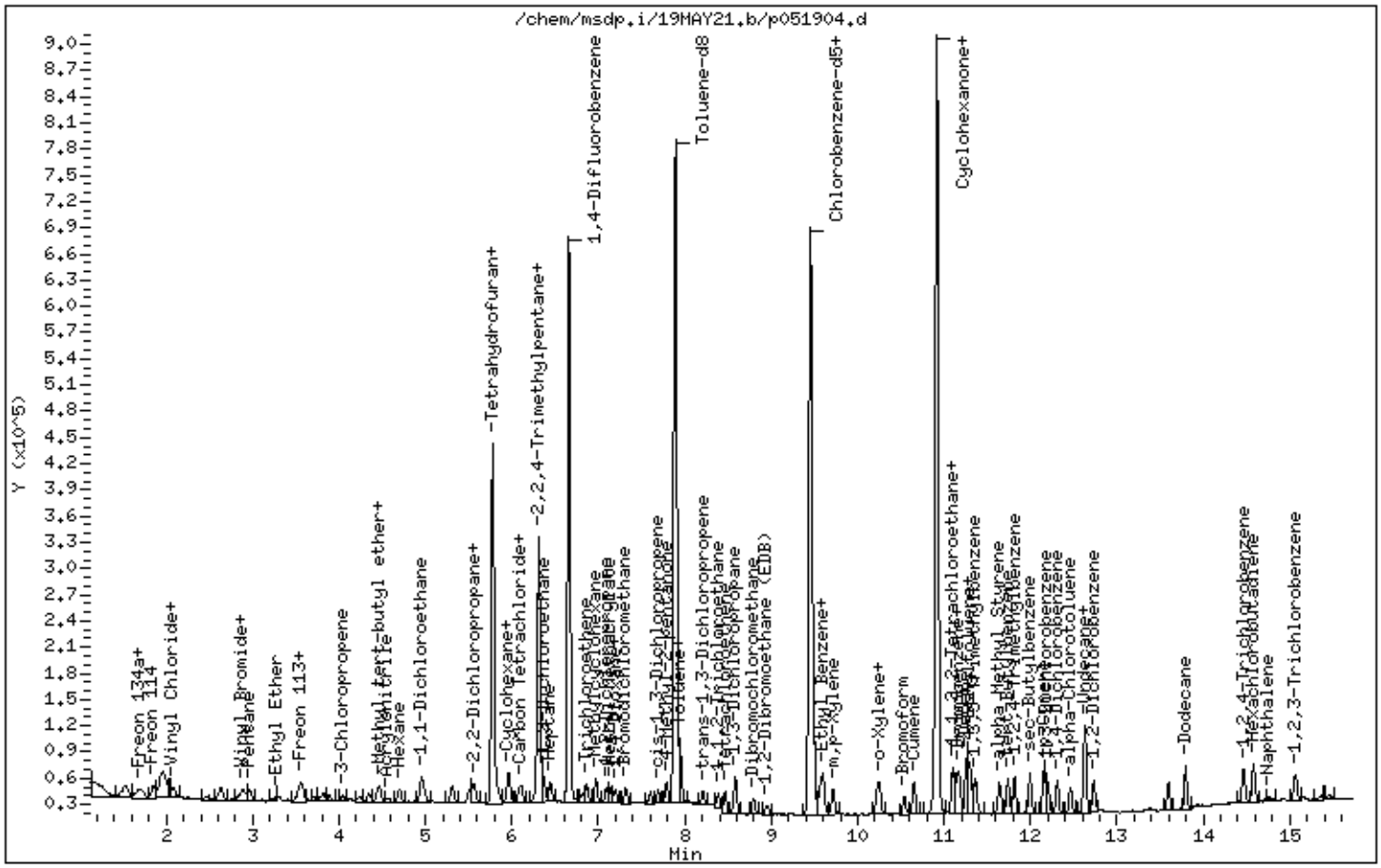
Instrument: msdp.i

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)	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:

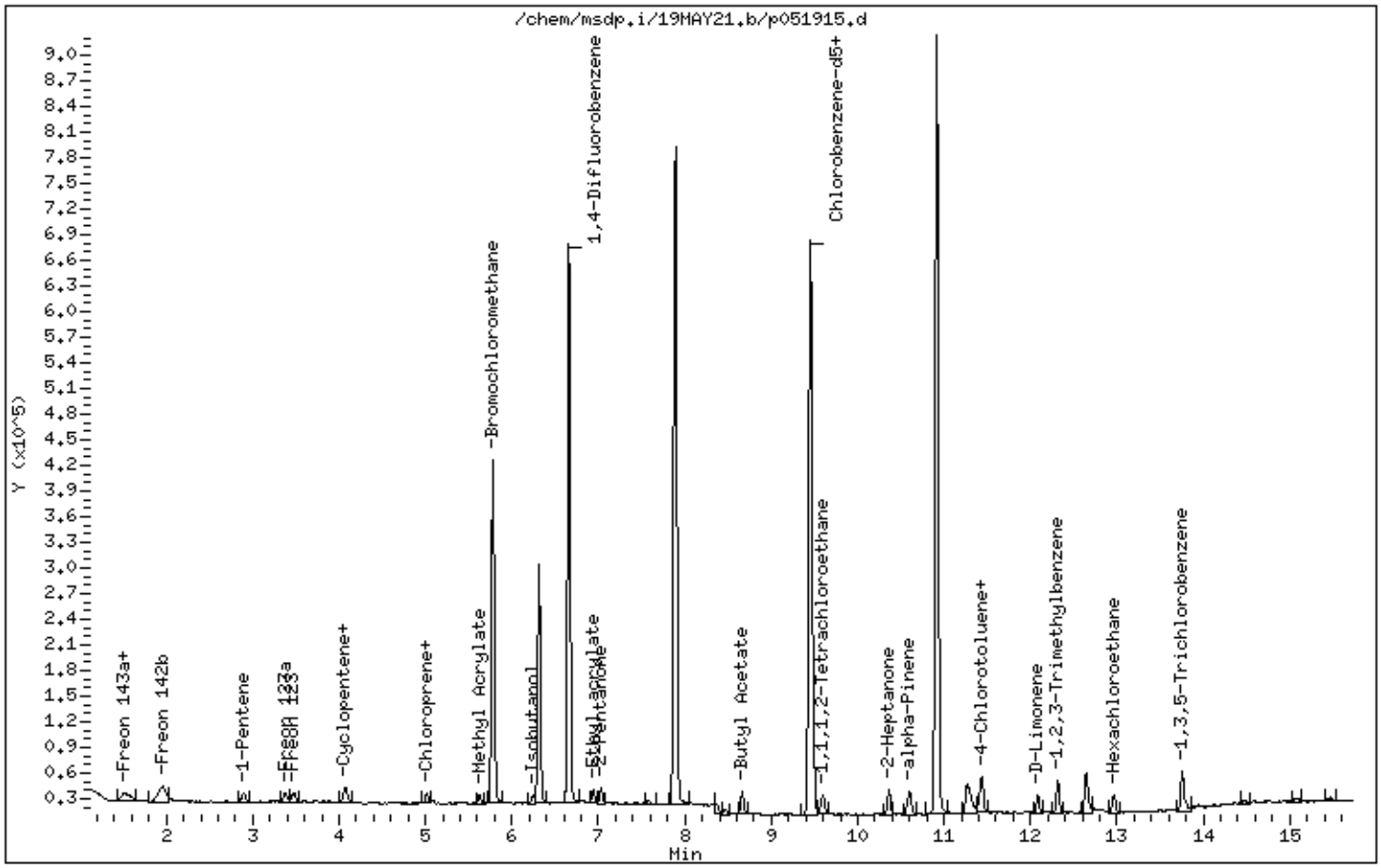
Instrument: msdp.i

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

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	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

				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

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

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:

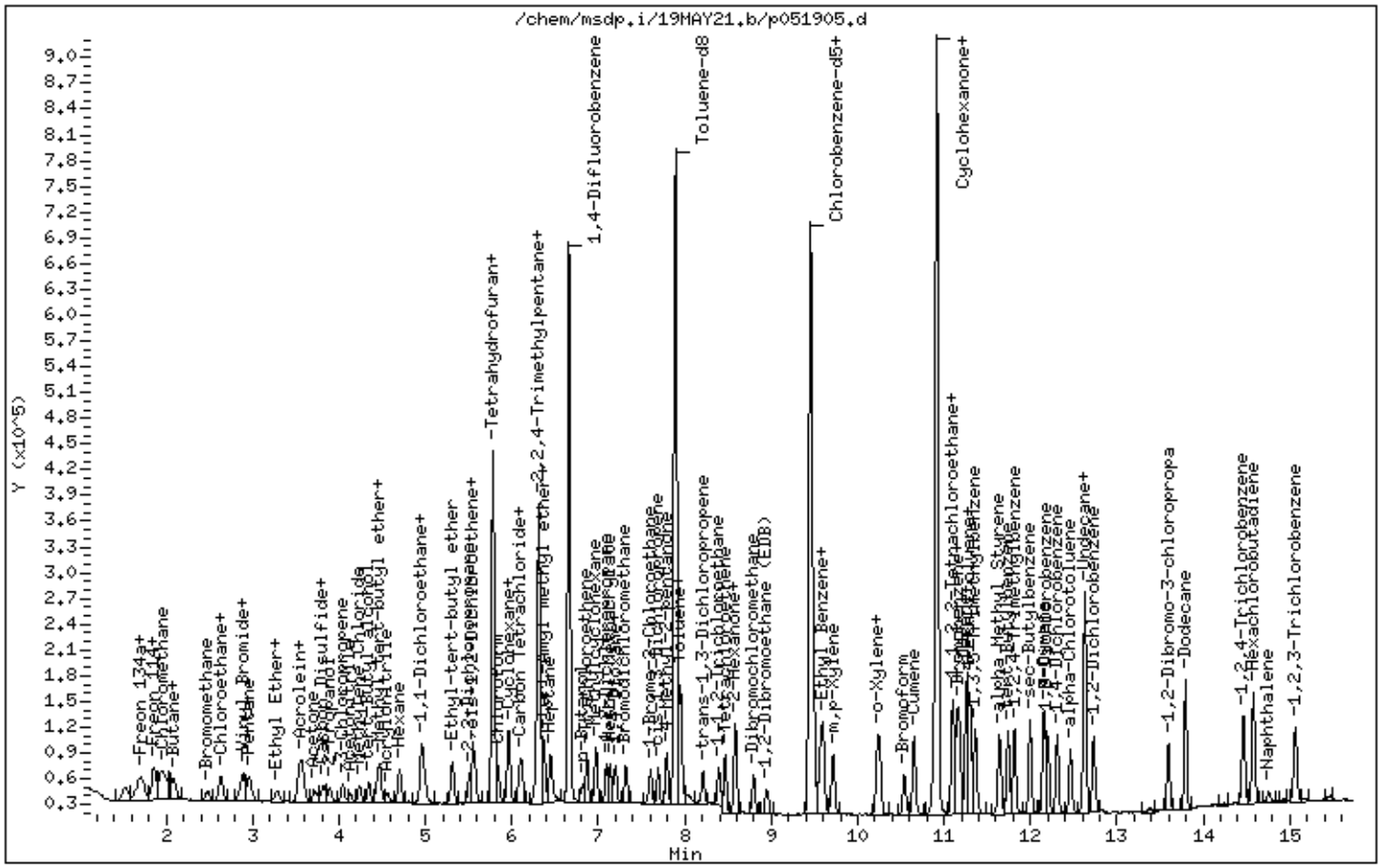
Instrument: msdp.i

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

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:

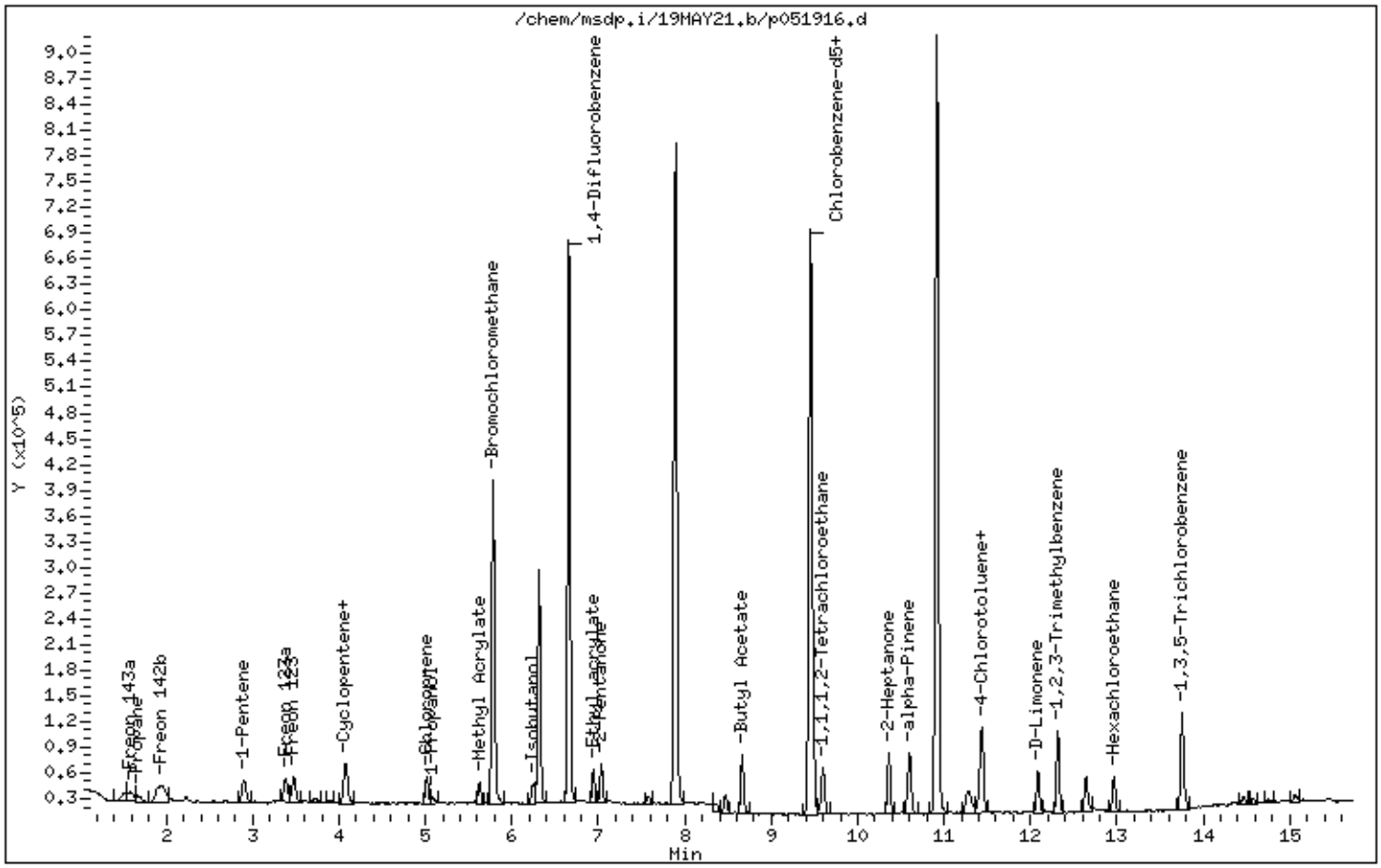
Instrument: msdp.i

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

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (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

				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	

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	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

Page 1

Date : 19-MAY-2021 15:00

Client ID:

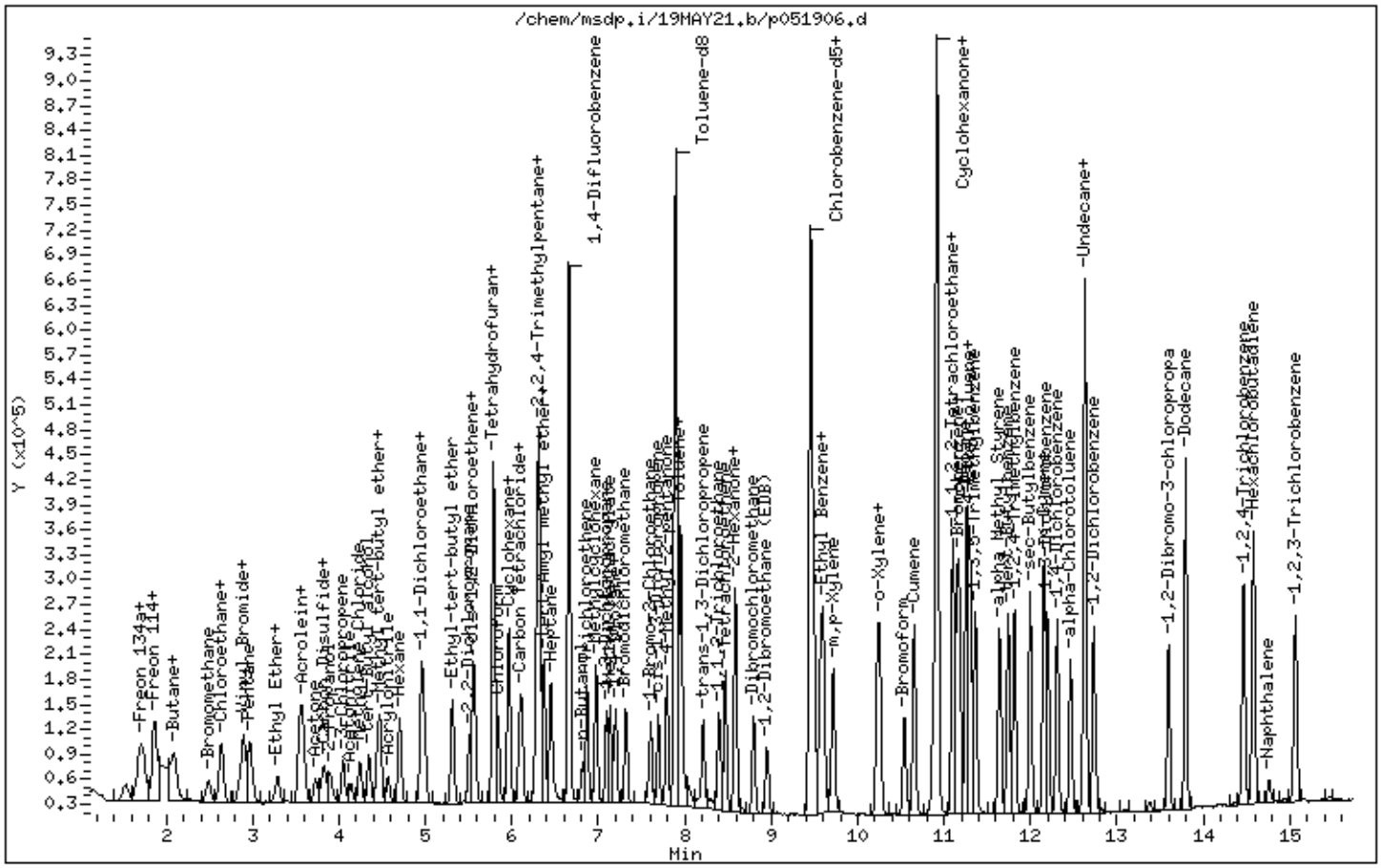
Instrument: msdp.i

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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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:

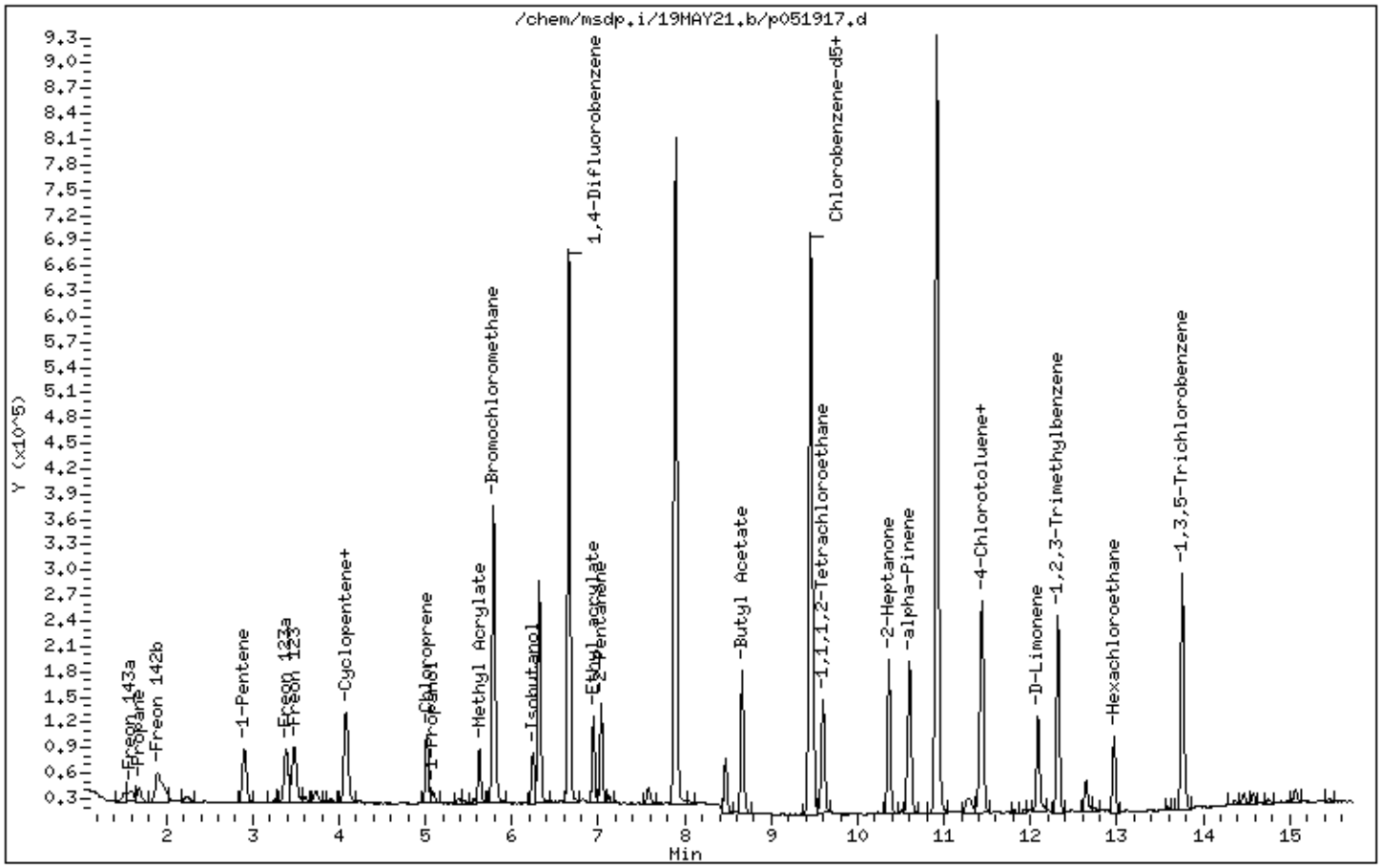
Instrument: msdp.i

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

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	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)	AMOUNTS 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

				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
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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

				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

Date : 19-MAY-2021 15:27

Client ID:

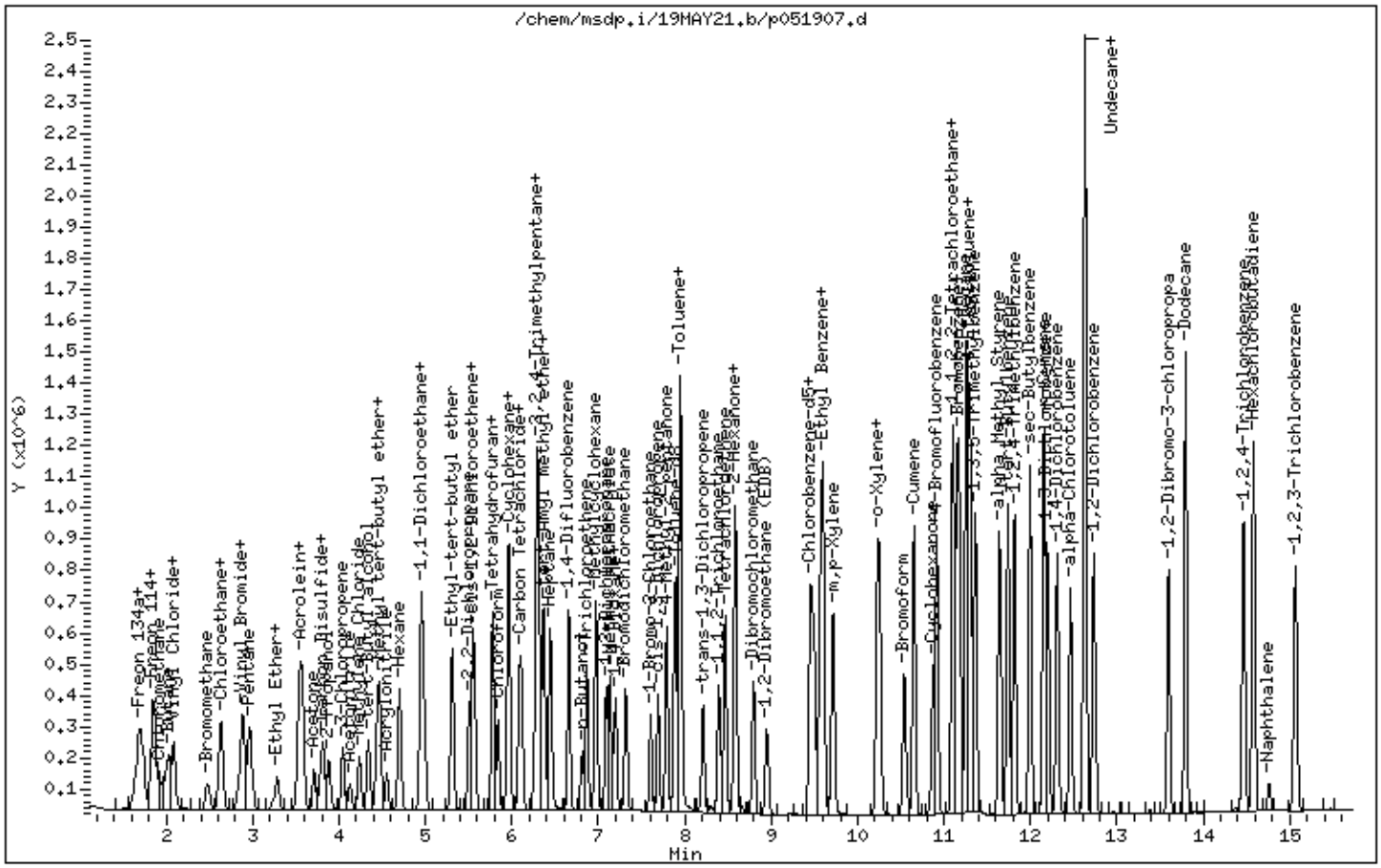
Instrument: msdp.i

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

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	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:

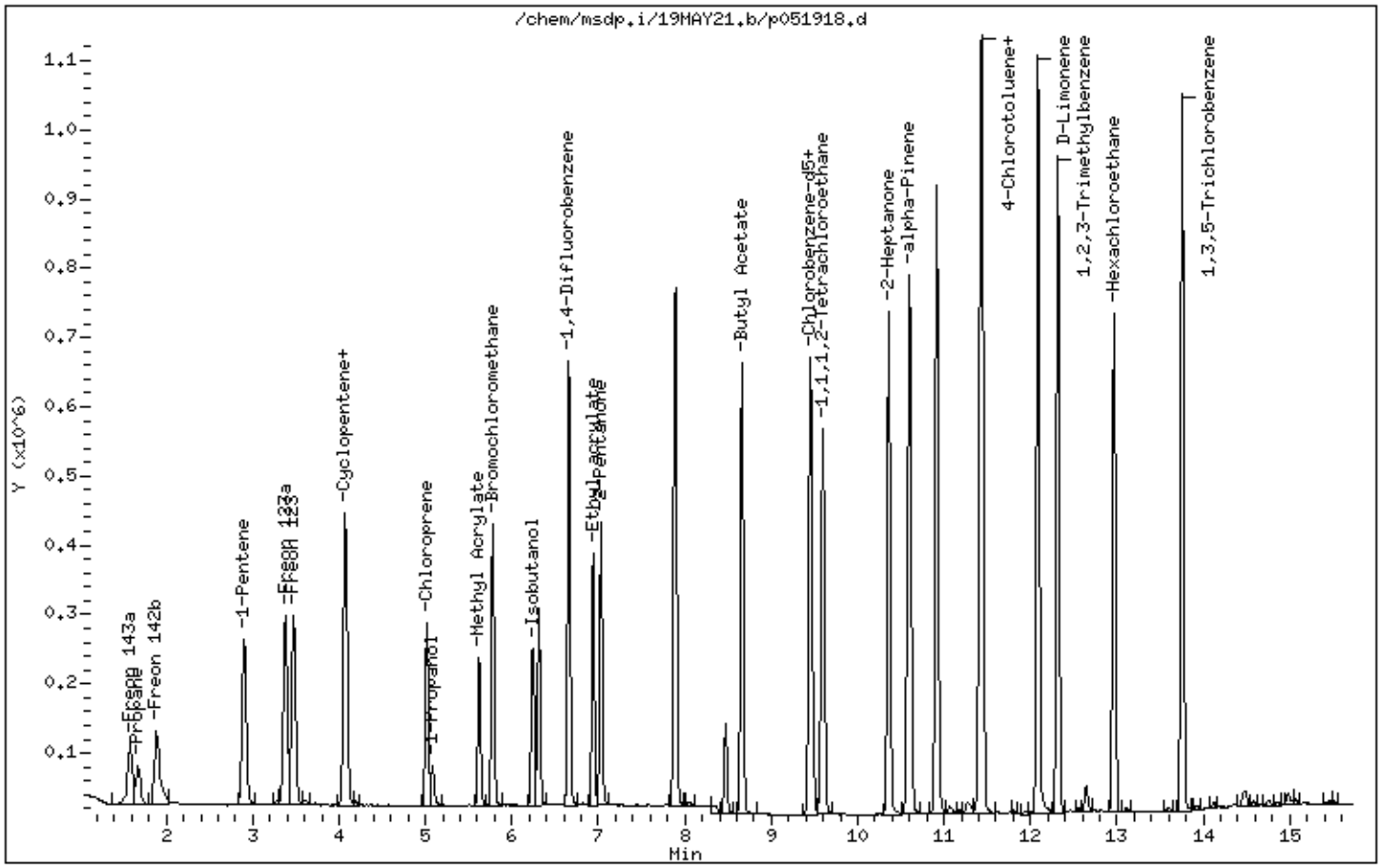
Instrument: msdp.i

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
==	====== ========	====	========	=======	=======	==========	=====
* 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

Date : 19-MAY-2021 15:55

Client ID:

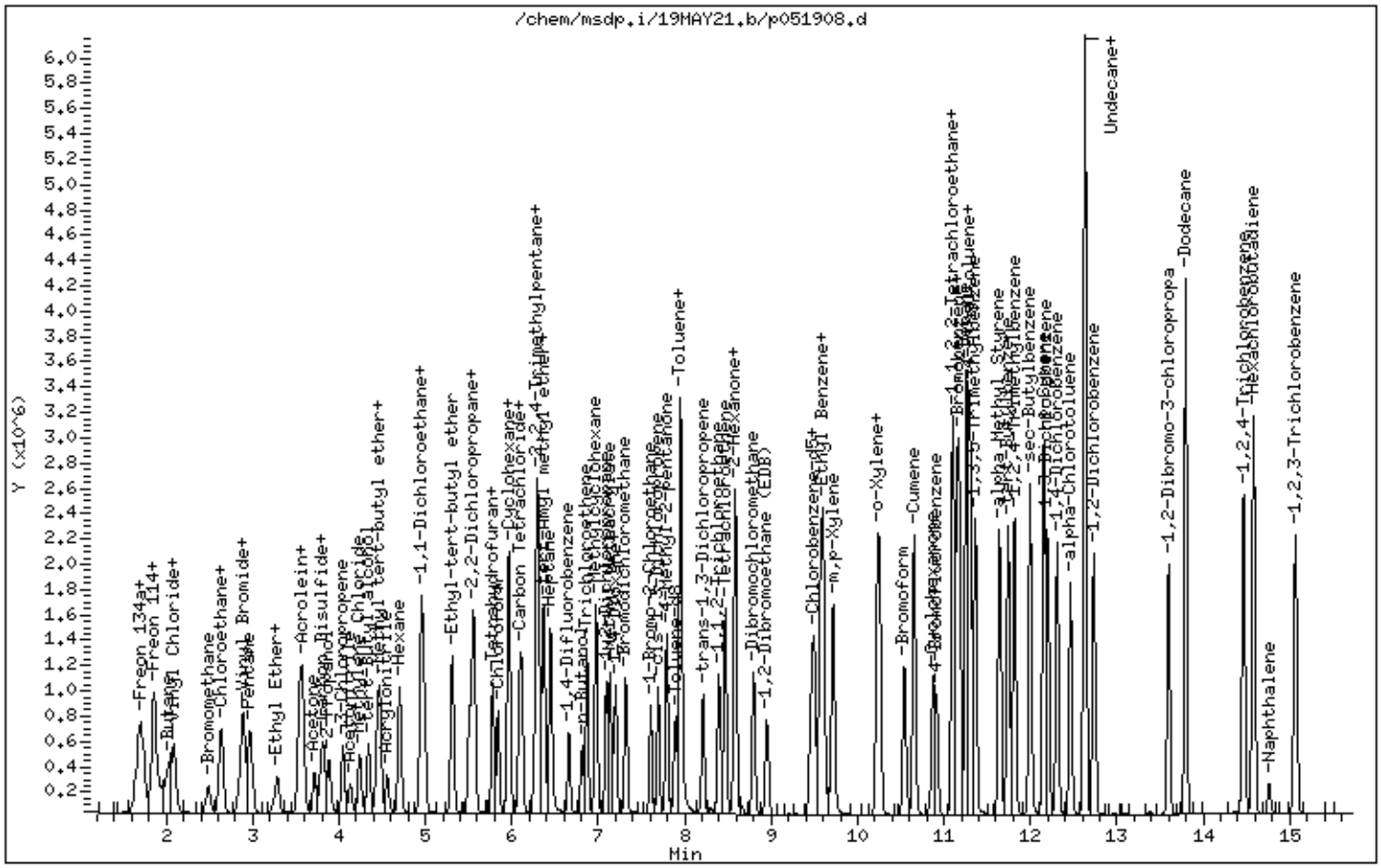
Instrument: msdp.i

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

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:

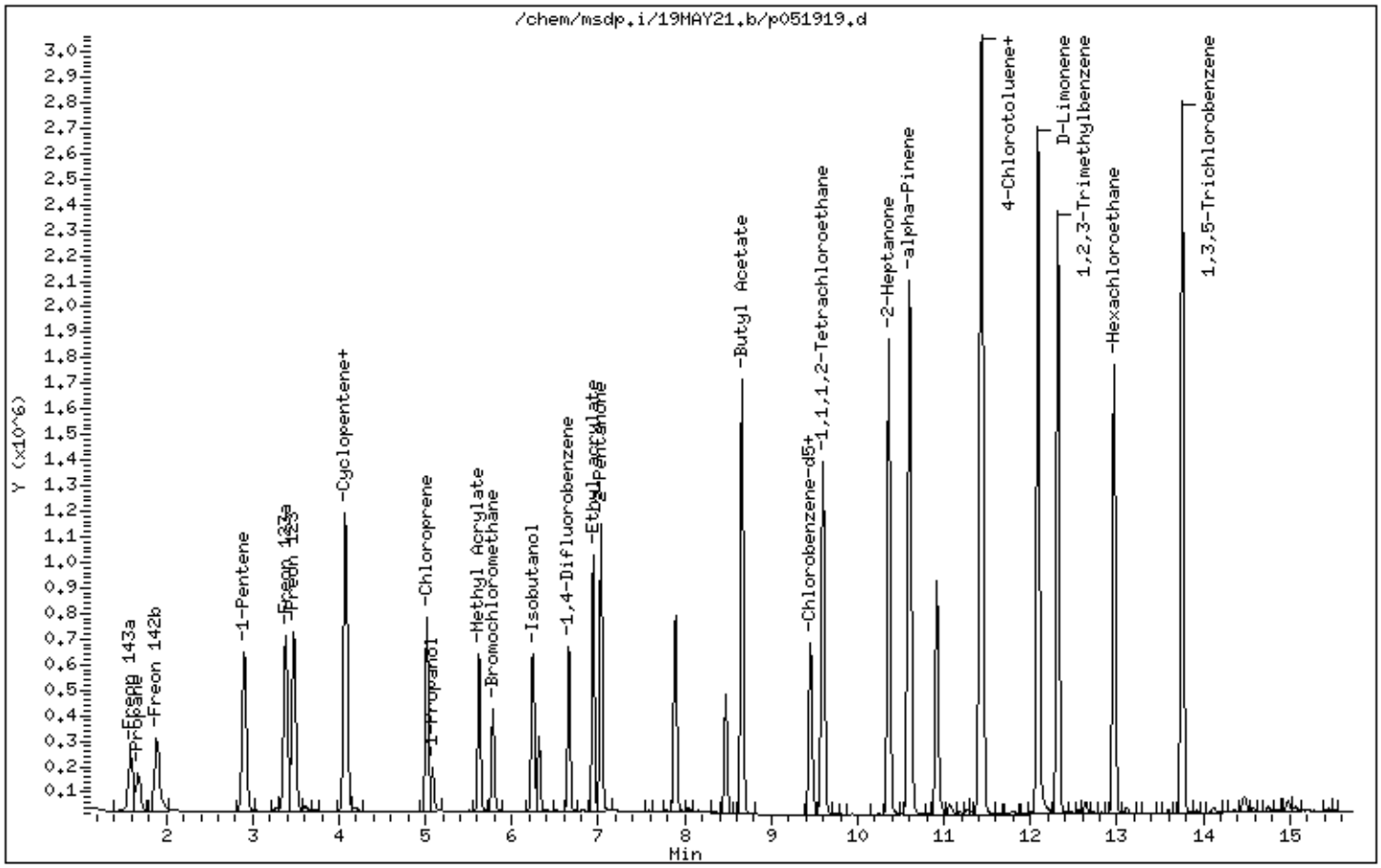
Instrument: msdp.i

Sample Info: 50mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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
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* 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
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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
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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

				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	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:

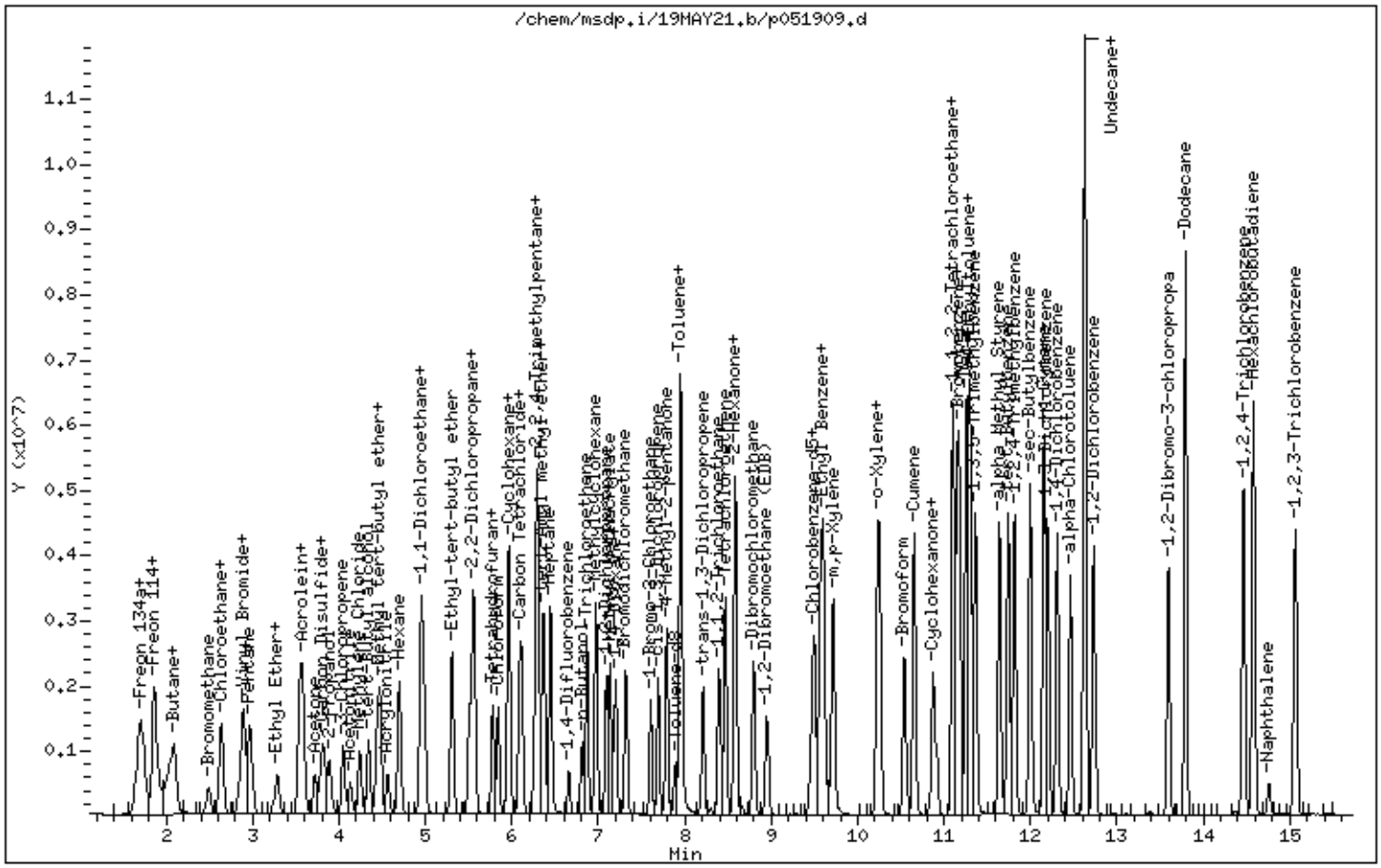
Instrument: msdp.i

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

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:

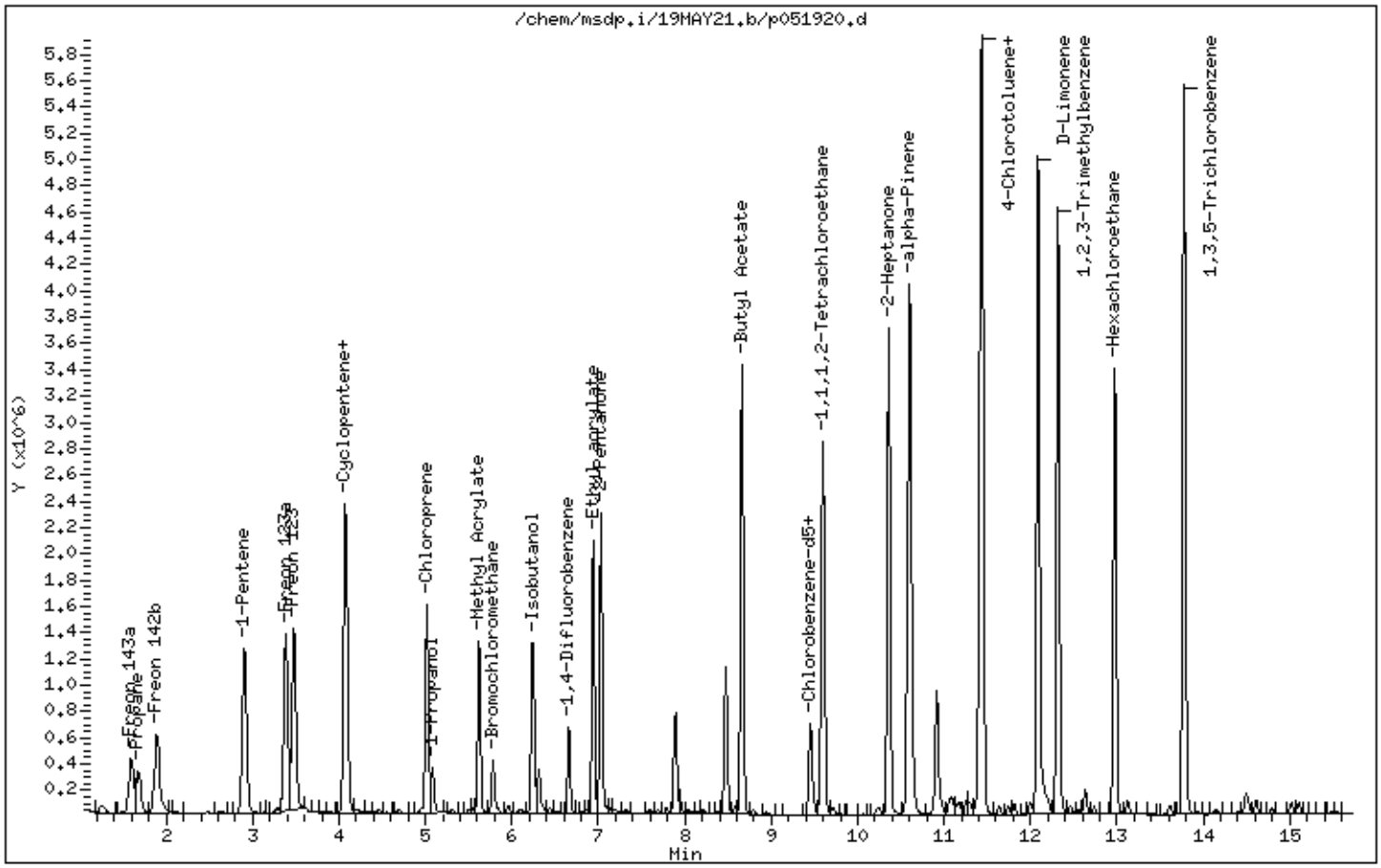
Instrument: msdp.i

Sample Info: 100mL 3018-2013

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/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)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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:

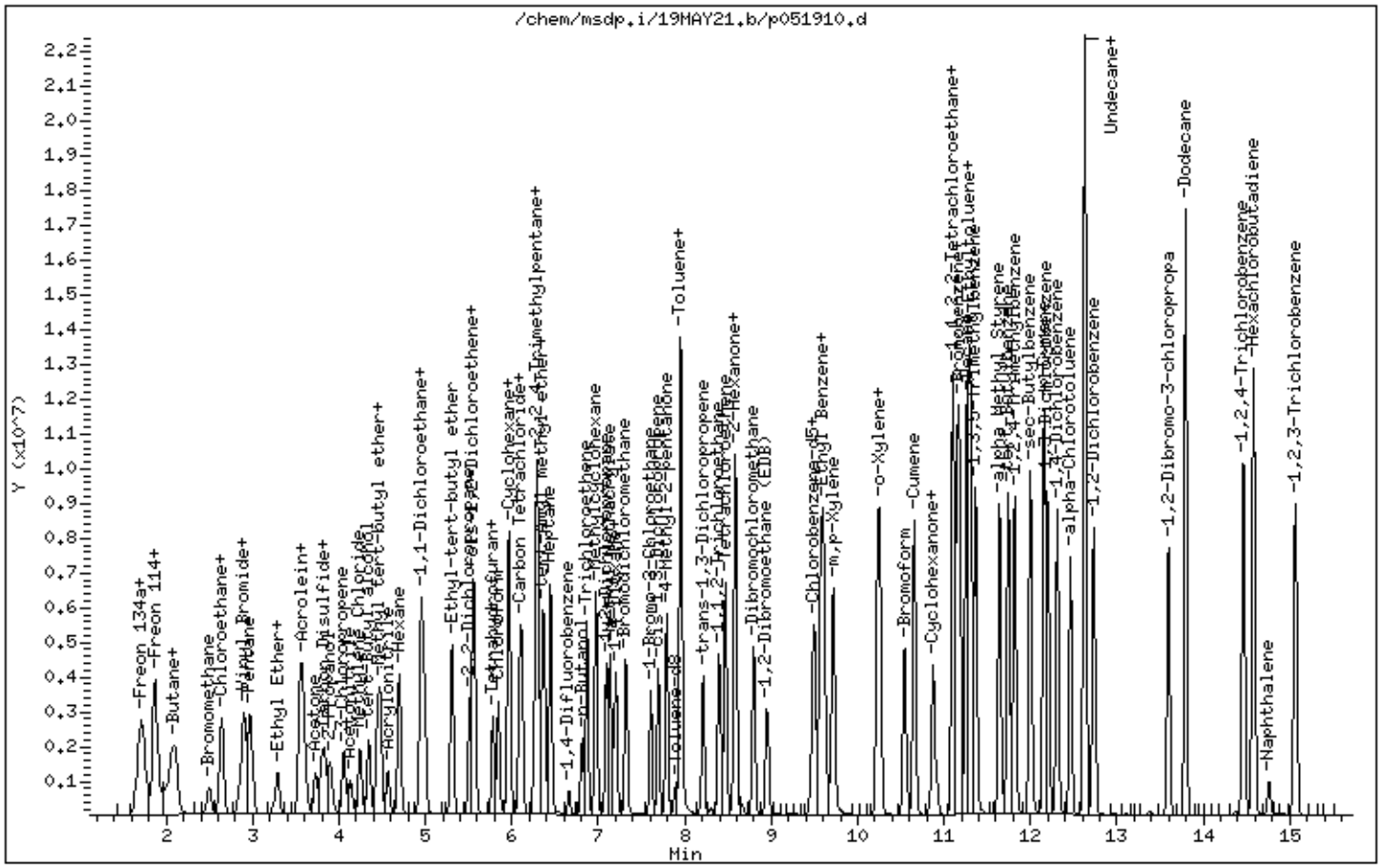
Instrument: msdp.i

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:

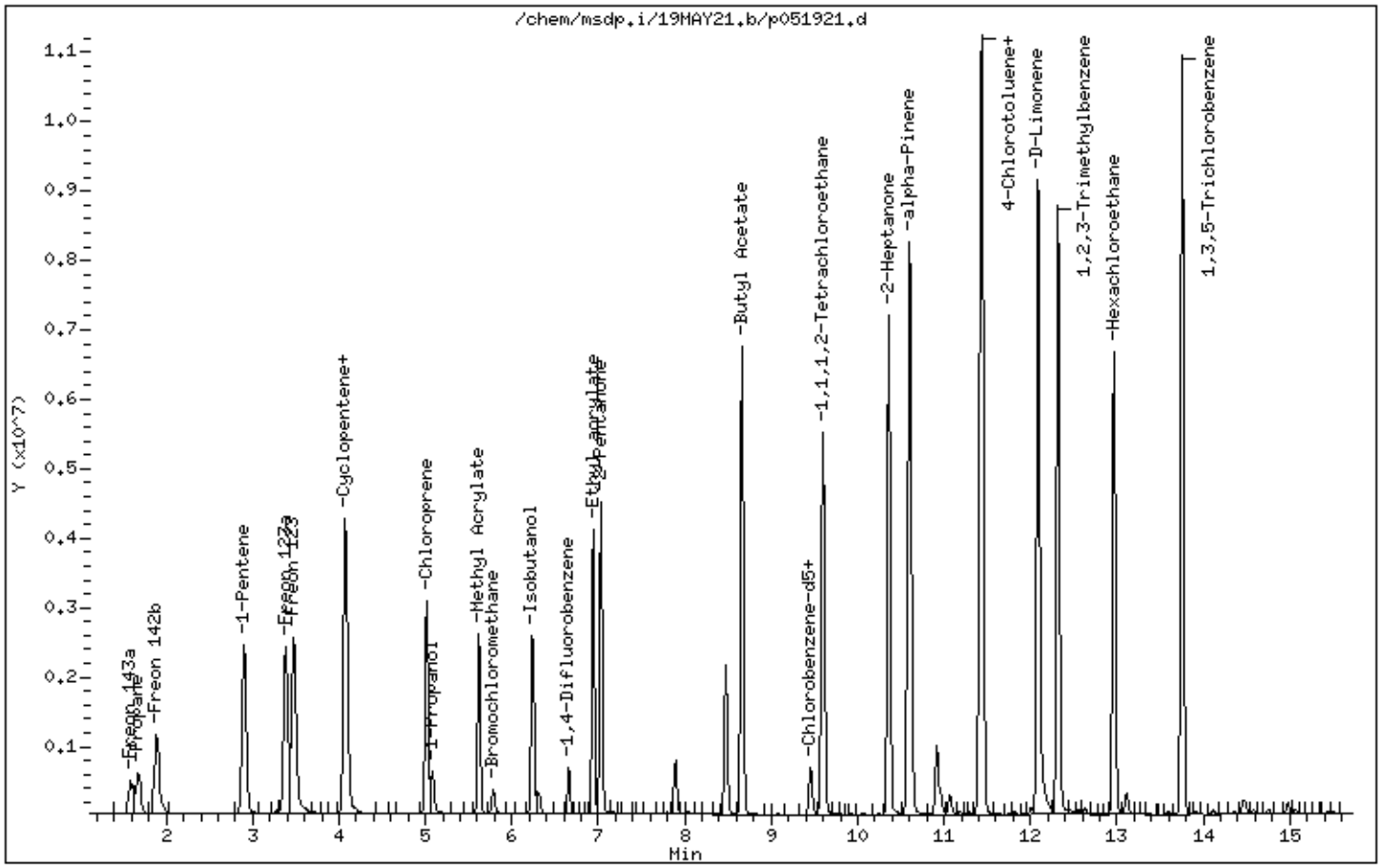
Instrument: msdp.i

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)	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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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

				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

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(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:

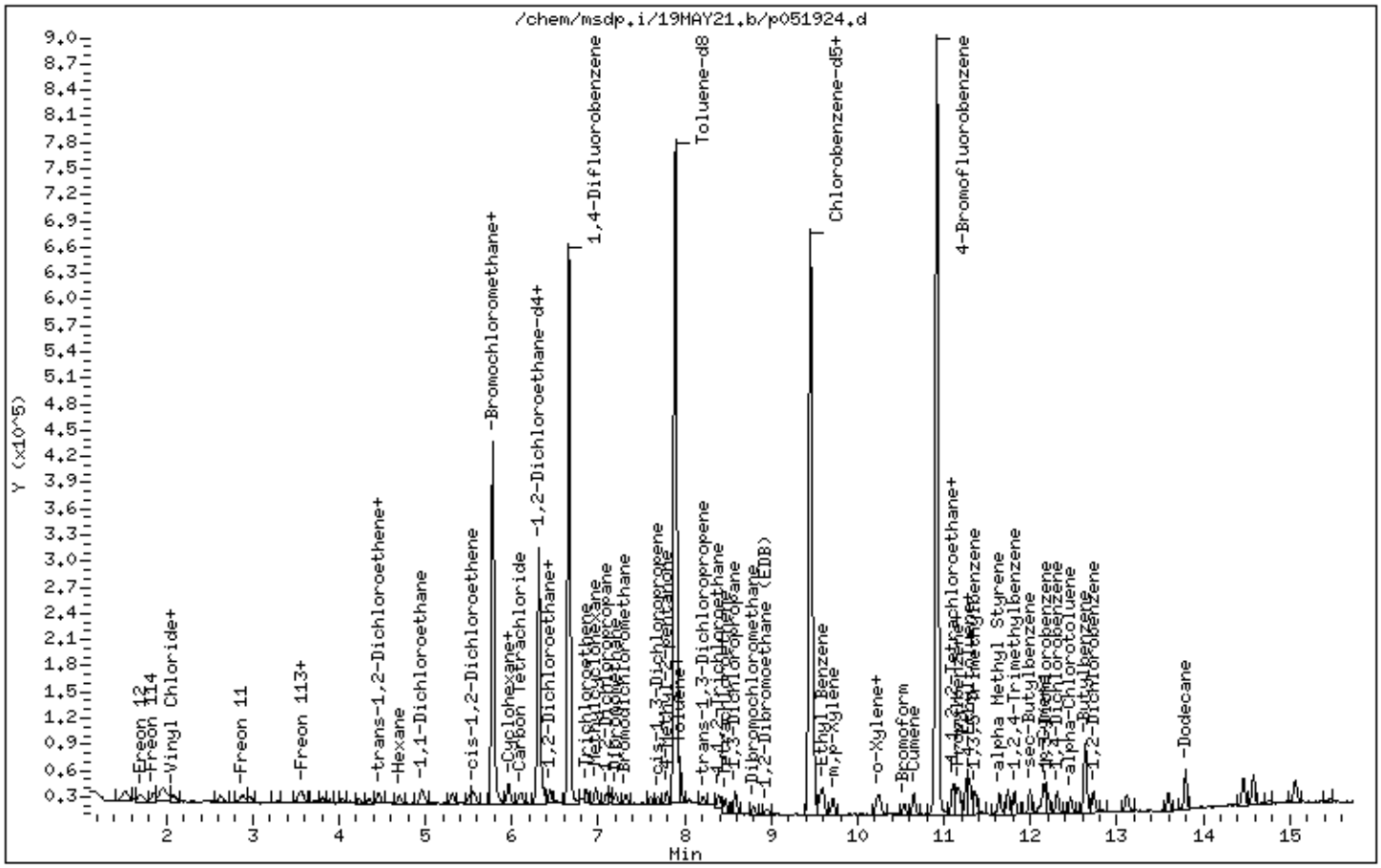
Instrument: msdp.i

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

Date : 20-MAY-2021 00:33

Client ID: ICV

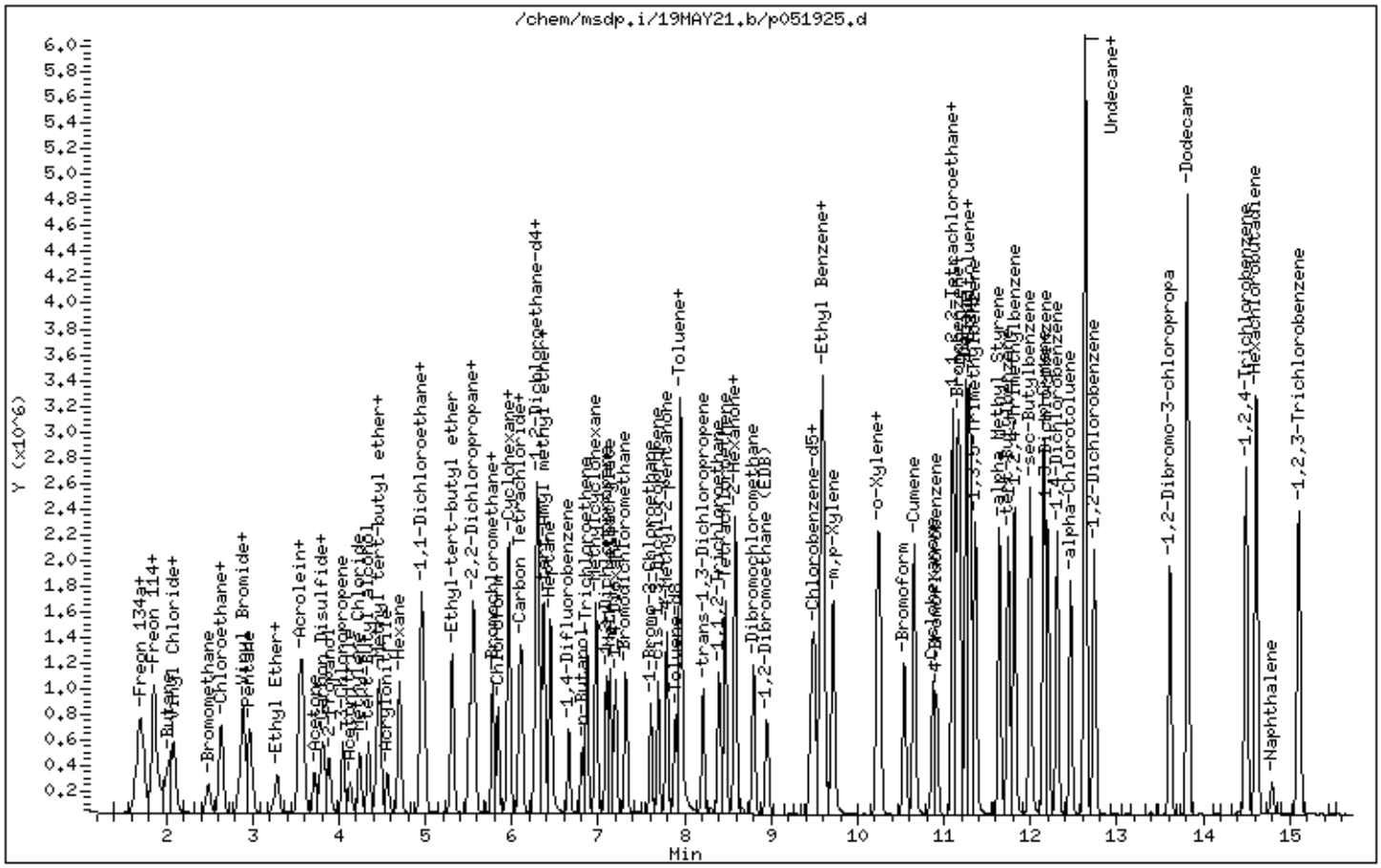
Instrument: msdp.i

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 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		~2000	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

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	391.51	314.58	349.24	392.86	398.27	317.52	435.75	346.46	343.20	365.49	41.01	118.76	2000	400	—
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	500	400	
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	500	400	—
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	500	400	7.09
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	500	400	
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	2000	400	—
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	2000	400	—
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	500	400	—
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	500	800	
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	500	400	
156 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			19.29
157 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++			~~46.24~~
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	500	800	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	500	400	8.96
165 Styrene	500	400	—
167 Bromoform	500	400	—
168 Cumene	500	800	—
175 1,1,2,2-Tetrachloroeth	500	400	—
178 Propylbenzene	500	400	—
179 1,2,3-Trichloropropane	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	PPTV	RL(PPTV)	SPRL(PPTV)	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

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.

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

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~~ MO 11/02/20 800	~~—~~ MO 11/1/20

* 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
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 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 RL 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

T015 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#: 2107362B-21A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080202**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:30 AM**

Compound	%Recovery
1,1,1,2-Tetrachloroethane	108
1,1,1-Trichloroethane	103
1,1,2,2-Tetrachloroethane	110
1,1,2-Trichloroethane	111
1,1-Dichloroethane	107
1,1-Dichloroethene	91
1,1-Difluoroethane	98
1,2,3-Trichloropropane	106
1,2,4-Trichlorobenzene	94
1,2,4-Trimethylbenzene	105
1,2-Dibromo-3-chloropropane	108
1,2-Dibromoethane (EDB)	113
1,2-Dichlorobenzene	107
1,2-Dichloroethane	120
1,2-Dichloropropane	109
1,3,5-Trimethylbenzene	107
1,3-Butadiene	118
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	109
1,4-Dioxane	102
2,2,4-Trimethylpentane	107
2-Butanone (Methyl Ethyl Ketone)	96
2-Hexanone	117
2-Propanol	112
3-Chloropropene	91
4-Ethyltoluene	105
4-Methyl-2-pentanone	109
Acetone	103
Acrolein	107
Acrylonitrile	113
alpha-Chlorotoluene	104
Benzene	104
Bromodichloromethane	115
Bromoform	113
Bromomethane	94
Carbon Disulfide	95
Carbon Tetrachloride	111
Chlorobenzene	109
Chloroethane	95
Chloroform	108
Chloromethane	117
cis-1,2-Dichloroethene	105

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Client Sample ID: CCV

Lab ID#: 2107362B-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:30 AM**	

Compound	%Recovery
cis-1,3-Dichloropropene	107
Cumene	104
Cyclohexane	95
Dibromochloromethane	114
Dibromomethane	116
Ethanol	110
Ethyl Acetate	122
Ethyl Benzene	105
Ethyl-tert-butyl ether	100
Freon 11	109
Freon 12	111
Freon 113	99
Freon 114	105
Freon 134a	113
Heptane	100
Hexachlorobutadiene	100
Hexachloroethane	130
Hexane	102
Iodomethane	115
Isopropyl ether	117
m,p-Xylene	102
Methyl tert-butyl ether	94
Methylene Chloride	123
Naphthalene	87
o-Xylene	105
Propylbenzene	106
Propylene	115
Styrene	102
tert-Amyl methyl ether	100
tert-Butyl alcohol	99
Tetrachloroethene	111
Tetrahydrofuran	122
Toluene	105
TPH ref. to Gasoline (MW=100)	100
trans-1,2-Dichloroethene	97
trans-1,3-Dichloropropene	111
Trichloroethene	109
Vinyl Acetate	99
Vinyl Bromide	95
Vinyl Chloride	96

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2107362B-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:30 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	101	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080202.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 02-AUG-2021 10:30
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2125A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:15 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	149292	25.0000		80.00- 120.00	100.00
5.778	5.778 (1.000)	128	115436			48.23- 108.23	77.32
5.778	5.778 (1.000)	49	318913			150.57- 210.57	213.62
* 108 1,4-Difluorobenzene					CAS #: 540-36-3		
6.659	6.659 (1.000)	114	558135	25.0000		80.00- 120.00	100.00
6.659	6.659 (1.000)	88	79966			0.00- 45.71	14.33
* 153 Chlorobenzene-d5					CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	542388	25.0000		80.00- 120.00	100.00
9.460	9.460 (1.000)	82	286741			23.78- 83.78	52.87
$ 104 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.308	6.308 (1.092)	65	214819	25.0000	26.073	80.00- 120.00	100.00
6.308	6.308 (1.092)	67	121269			27.21- 87.21	56.45
$ 134 Toluene-d8					CAS #: 2037-26-5		
7.891	7.891 (1.185)	98	614745	25.0000	25.364	80.00- 120.00	100.00
7.891	7.891 (1.185)	70	64397			0.00- 40.44	10.48

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 (1.185)	100	399371			34.95- 94.95	64.97
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	352282	25.0000	25.293	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	428587			95.92- 155.92	121.66
10.921	10.921 (1.154)	176	341156			66.89- 126.89	96.84
4 Freon 134a					CAS #: 811-97-2		
1.646	1.646 (0.285)	83	268022	50.0000	56.722	80.00- 120.00	100.00
1.646	1.646 (0.285)	69	215013			59.44- 119.44	80.22
1.744	1.744 (0.302)	51	1291453			419.06- 479.06	481.85
5 Propylene					CAS #: 115-07-1		
1.674	1.674 (0.290)	41	392414	50.0000	57.440	80.00- 120.00	100.00
1.674	1.674 (0.290)	42	259735			35.28- 95.28	66.19
1.674	1.674 (0.290)	39	266320			38.35- 98.35	67.87
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	166689	50.0000	49.258	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1291453			597.63- 657.63	774.77
1.702	1.702 (0.295)	47	136447			33.72- 93.72	81.86
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	741578	50.0000	55.383	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	239352			2.37- 62.37	32.28
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.744	1.744 (0.302)	67	77746	50.0000	58.780	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1291453			1501.01-1561.01	1661.11
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	687802	50.0000	52.329	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	221461			2.30- 62.30	32.20
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	854965	50.0000	56.527	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	277760			2.44- 62.44	32.49
1.870	1.870 (0.324)	58	24221			0.00- 33.36	2.83
15 Chloromethane					CAS #: 74-87-3		
1.940	1.940 (0.336)	50	454197	50.0000	58.469	80.00- 120.00	100.00
1.940	1.940 (0.336)	52	114862			0.00- 56.26	25.29
18 Butane					CAS #: 106-97-8		
2.032	2.032 (0.352)	58	80819	50.0000	44.913	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	779968			823.29- 883.29	965.07
19 Vinyl Chloride					CAS #: 75-01-4		
2.068	2.068 (0.358)	62	447406	50.0000	47.875	80.00- 120.00	100.00
2.068	2.068 (0.358)	64	136917			0.00- 59.69	30.60
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	444368	50.0000	59.121	80.00- 120.00	100.00
2.089	2.089 (0.362)	39	404564			52.37- 112.37	91.04
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	282458	50.0000	47.006	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	268200			64.07- 124.07	94.95
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	160367	50.0000	47.722	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	47279			0.04- 60.04	29.48
2.612	2.612 (0.452)	49	67147			4.54- 64.54	41.87
31 Isopentane					CAS #: 78-78-4		
2.633	2.633 (0.456)	43	577009	50.0000	56.429	80.00- 120.00	100.00
2.633	2.633 (0.456)	57	331679			34.12- 94.12	57.48
32 Vinyl Bromide					CAS #: 593-60-2		
2.841	2.841 (0.492)	106	263514	50.0000	47.444	80.00- 120.00	100.00
2.841	2.841 (0.492)	108	269830			69.27- 129.27	102.40
33 Freon 11					CAS #: 75-69-4		
2.884	2.884 (0.499)	101	773022	50.0000	54.327	80.00- 120.00	100.00
2.884	2.884 (0.499)	103	499892			34.72- 94.72	64.67
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.898	2.898 (0.502)	67	614351	50.0000	50.094	80.00- 120.00	100.00
2.898	2.898 (0.502)	69	187334			0.84- 60.84	30.49
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	938499	50.0000	56.466	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	123382			0.00- 44.98	13.15
2.970	2.970 (0.514)	72	54154			0.00- 37.39	5.77
38 Ethyl Ether					CAS #: 60-29-7		
3.285	3.285 (0.569)	74	129307	50.0000	46.114	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	273427			163.46- 223.46	211.46
3.278	3.278 (0.567)	45	449228			250.40- 310.40	347.41

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	81100	50.0000	54.778	80.00- 120.00	100.00
3.278	3.278 (0.567)	45	449228			511.19- 571.19	553.91
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	137870	50.0000	53.666	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	186370			111.10- 171.10	135.18
43 Freon 113					CAS #: 76-13-1		
3.550	3.550 (0.614)	151	523856	50.0000	49.552	80.00- 120.00	100.00
3.550	3.550 (0.614)	153	333495			33.56- 93.56	63.66
3.550	3.550 (0.614)	101	632725			89.21- 149.21	120.78
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.579	3.579 (0.619)	96	288927	50.0000	45.749	80.00- 120.00	100.00
3.579	3.579 (0.619)	98	183720			34.02- 94.02	63.59
3.579	3.579 (0.619)	61	625127			168.77- 228.77	216.36
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	201368	50.0000	51.450	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	755646			302.95- 362.95	375.25
48 Carbon Disulfide					CAS #: 75-15-0		
3.822	3.822 (0.662)	76	791654	50.0000	47.580	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	637151	50.0000	57.606	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	296023			12.22- 72.22	46.46
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	887019	50.0000	56.232	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	166732			0.00- 47.19	18.80
54 3-Chloropropene					CAS #: 107-05-1		
4.045	4.045 (0.700)	76	126729	50.0000	45.592	80.00- 120.00	100.00
4.045	4.045 (0.700)	41	649242			396.19- 456.19	512.31
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	438014	50.0000	59.578	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	224855			20.95- 80.95	51.34
4.123	4.123 (0.714)	38	48189			0.00- 41.17	11.00
59 Methylene Chloride					CAS #: 75-09-2		
4.231	4.231 (0.732)	49	627248	50.0000	61.700	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	265648			22.03- 82.03	42.35
4.231	4.231 (0.732)	51	184460			0.18- 60.18	29.41

				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	911741	50.0000	49.564	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	220016			0.00- 51.11	24.13
4.338	4.338 (0.751)	57	101398			0.00- 40.49	11.12
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	859298	50.0000	46.868	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	306484			3.10- 63.10	35.67
4.446	4.446 (0.769)	41	329531			1.28- 61.28	38.35
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.474	4.474 (0.774)	98	205547	50.0000	48.710	80.00- 120.00	100.00
4.474	4.474 (0.774)	61	605870			255.84- 315.84	294.76
4.474	4.474 (0.774)	96	324640			127.59- 187.59	157.94
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	330755	50.0000	56.306	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	394097			88.05- 148.05	119.15
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.813)	57	753195	50.0000	51.213	80.00- 120.00	100.00
4.696	4.696 (0.813)	43	578251			37.52- 97.52	76.77
4.696	4.696 (0.813)	86	81669			0.00- 41.48	10.84
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.961	4.961 (0.859)	63	675159	50.0000	53.400	80.00- 120.00	100.00
4.961	4.961 (0.859)	65	197580			0.00- 59.70	29.26
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.856)	45	1996430	50.0000	58.367	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	293327			0.00- 48.18	14.69
4.954	4.954 (0.857)	59	174995			0.00- 40.15	8.77
73 Vinyl Acetate					CAS #: 108-05-4		
4.990	4.990 (0.864)	86	80326	50.0000	49.435	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	2342923			2432.48-2492.48	2916.74
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1480754	50.0000	50.011	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	435777			1.00- 61.00	29.43
5.305	5.305 (0.918)	41	331608			0.00- 48.73	22.39
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.506	5.506 (0.953)	77	577075	50.0000	51.399	80.00- 120.00	100.00
5.506	5.506 (0.953)	79	185147			2.28- 62.28	32.08
5.506	5.506 (0.953)	97	137175			0.00- 53.93	23.77

				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	230051	50.0000	52.533	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	352470			125.75- 185.75	153.21
5.549	5.549 (0.960)	61	844652			332.40- 392.40	367.16
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	162802	50.0000	48.246	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2571891			1214.50-1274.50	1579.77
5.556	5.556 (0.962)	57	82682			14.68- 74.68	50.79
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	204033	50.0000	60.789	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	844652			452.04- 512.04	413.98
5.570	5.570 (0.964)	70	84111			22.77- 82.77	41.22
89 Tetrahydrofuran					CAS #: 109-99-9		
5.771	5.771 (0.999)	42	686097	50.0000	61.136	80.00- 120.00	100.00
5.771	5.771 (0.999)	71	143515			0.00- 55.82	20.92
5.771	5.771 (0.999)	72	154969			0.00- 57.59	22.59
92 Chloroform					CAS #: 67-66-3		
5.835	5.835 (1.010)	83	702747	50.0000	54.101	80.00- 120.00	100.00
5.835	5.835 (1.010)	85	458471			34.70- 94.70	65.24
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	447758	50.0000	47.679	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	845859			142.57- 202.57	188.91
5.957	5.957 (1.031)	41	505097			62.09- 122.09	112.81
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.964	5.964 (1.032)	97	756226	50.0000	51.534	80.00- 120.00	100.00
5.964	5.964 (1.032)	99	481714			34.02- 94.02	63.70
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.086	6.086 (1.053)	119	761715	50.0000	55.345	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	765367			70.64- 130.64	100.48
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	200384	50.0000	52.744	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	503887			226.85- 286.85	251.46
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.279 (1.087)	57	2727229	50.0000	53.352	80.00- 120.00	100.00
6.279	6.279 (1.087)	56	922241			2.24- 62.24	33.82
6.279	6.279 (1.087)	41	744703			0.00- 54.39	27.31

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 (0.946)	78	960174	50.0000	52.132	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	226522			0.00- 52.90	23.59
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	260492	50.0000	50.158	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1050644			372.79- 432.79	403.33
6.358	6.358 (0.955)	55	409326			112.09- 172.09	157.14
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	572640	50.0000	59.751	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	175426			0.79- 60.79	30.63
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	365220	50.0000	50.054	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1149036			226.53- 286.53	314.61
6.444	6.444 (0.968)	57	545435			100.85- 160.85	149.34
110 n-Butanol					CAS #: 71-36-3		
6.809	6.809 (1.023)	56	380375	50.0000	56.804	80.00- 120.00	100.00
6.809	6.809 (1.023)	41	289362			40.99- 100.99	76.07
6.809	6.809 (1.023)	43	240857			27.38- 87.38	63.32
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	488039	50.0000	54.607	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	523992			76.29- 136.29	107.37
6.867	6.867 (1.031)	97	315152			33.63- 93.63	64.58
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.089	7.089 (1.065)	63	513534	50.0000	54.385	80.00- 120.00	100.00
7.089	7.089 (1.065)	62	363642			41.07- 101.07	70.81
7.096	7.096 (1.066)	41	302664			22.53- 82.53	58.94
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	392655	50.0000	52.687	80.00- 120.00	100.00
7.132	7.132 (0.754)	41	958095			179.84- 239.84	244.00
7.139	7.139 (0.755)	100	154138			9.59- 69.59	39.26
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	256273	50.0000	51.069	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	275666			68.28- 128.28	107.57
7.175	7.175 (1.077)	57	96426			2.68- 62.68	37.63
118 Dibromomethane					CAS #: 74-95-3		
7.203	7.203 (0.761)	174	466123	50.0000	57.913	80.00- 120.00	100.00
7.203	7.203 (0.761)	93	429539			60.09- 120.09	92.15

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.203	7.203 (0.761)	95	374886			48.38- 108.38	80.43
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	797480	50.0000	57.549	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	506971			35.24- 95.24	63.57
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	625943	50.0000	53.467	80.00- 120.00	100.00
7.698	7.698 (1.156)	77	199863			2.42- 62.42	31.93
7.691	7.691 (1.155)	39	474806			37.16- 97.16	75.85
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	655975	50.0000	50.721	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	310528			15.78- 75.78	47.34
6.974	6.974 (1.047)	55	823599			84.64- 144.64	125.55
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.171)	58	523450	50.0000	54.590	80.00- 120.00	100.00
7.791	7.791 (1.170)	43	1603219			242.35- 302.35	306.28
7.798	7.798 (1.171)	85	158367			3.24- 63.24	30.25
137 Toluene					CAS #: 108-88-3		
7.948	7.948 (1.194)	91	1339317	50.0000	52.706	80.00- 120.00	100.00
7.948	7.948 (1.194)	92	773768			28.38- 88.38	57.77
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.194)	57	582696	50.0000	53.780	80.00- 120.00	100.00
7.948	7.948 (1.194)	85	457712			56.00- 116.00	78.55
7.948	7.948 (1.194)	43	1683345			228.66- 288.66	288.89
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.213 (0.868)	75	591688	50.0000	55.435	80.00- 120.00	100.00
8.213	8.213 (0.868)	77	186227			1.24- 61.24	31.47
8.213	8.213 (0.868)	39	433057			34.11- 94.11	73.19
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	488945	50.0000	55.422	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	299924			31.96- 91.96	61.34
8.400	8.400 (0.888)	83	407629			52.93- 112.93	83.37
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	685812	50.0000	55.480	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	528110			47.84- 107.84	77.01
8.464	8.464 (0.895)	131	516237			45.29- 105.29	75.27

				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	736591	50.0000	58.439	80.00- 120.00		100.00
8.586	8.586 (0.908)	43	1596967			162.87- 222.87		216.81
8.586	8.586 (0.908)	100	102316			0.00- 45.94		13.89
144 1,3-Dichloropropane					CAS #: 142-28-9			
8.579	8.579 (1.288)	76	666318	50.0000	55.217	80.00- 120.00		100.00
8.579	8.579 (1.288)	41	962431			94.99- 154.99		144.44
8.579	8.579 (1.288)	78	213601			2.05- 62.05		32.06
146 Dibromochloromethane					CAS #: 124-48-1			
8.801	8.801 (0.930)	129	942338	50.0000	57.167	80.00- 120.00		100.00
8.801	8.801 (0.930)	127	736032			47.45- 107.45		78.11
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4			
8.951	8.951 (0.946)	107	797815	50.0000	56.384	80.00- 120.00		100.00
8.951	8.951 (0.946)	109	755151			64.21- 124.21		94.65
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0			
7.605	7.605 (1.142)	63	968273	50.0000	55.888	80.00- 120.00		100.00
7.605	7.605 (1.142)	65	281304			0.00- 59.64		29.05
7.605	7.605 (1.142)	144	94149			0.00- 39.63		9.72
154 Chlorobenzene					CAS #: 108-90-7			
9.496	9.496 (1.004)	112	1170193	50.0000	54.333	80.00- 120.00		100.00
9.496	9.496 (1.004)	114	369687			1.74- 61.74		31.59
9.496	9.496 (1.004)	77	607161			25.04- 85.04		51.89
155 Ethyl Benzene					CAS #: 100-41-4			
9.567	9.567 (1.011)	106	593382	50.0000	52.689	80.00- 120.00		100.00
9.567	9.567 (1.011)	91	1790978			273.74- 333.74		301.83
156 Nonane					CAS #: 111-84-2			
9.596	9.596 (1.014)	43	1725514	50.0000	59.550	80.00- 120.00		100.00
9.596	9.596 (1.014)	57	1293684			54.16- 114.16		74.97
9.596	9.596 (1.014)	85	340056			0.00- 53.90		19.71
158 m,p-Xylene					CAS #: 108-38-3			
9.718	9.718 (1.027)	106	722578	50.0000	51.229	80.00- 120.00		100.00
9.718	9.718 (1.027)	91	1379834			163.73- 223.73		190.96
164 o-Xylene					CAS #: 95-47-6			
10.226	10.226 (1.081)	106	709355	50.0000	52.490	80.00- 120.00		100.00
10.226	10.226 (1.081)	91	1405686			177.45- 237.45		198.16
165 Styrene					CAS #: 100-42-5			
10.255	10.255 (1.084)	104	1181208	50.0000	51.109	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	546767			17.88- 77.88	46.29
167 Bromoform					CAS #: 75-25-2		
10.541	10.541 (1.114)	173	919656	50.0000	56.601	80.00- 120.00	100.00
10.541	10.541 (1.114)	171	470126			21.25- 81.25	51.12
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2211349	50.0000	52.090	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	645837			0.00- 58.52	29.21
10.649	10.649 (1.126)	51	336268			0.00- 43.00	15.21
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	895441	50.0000	58.980	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	258105			1.94- 61.94	28.82
10.871	10.871 (1.149)	42	627996			37.89- 97.89	70.13
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.107	11.107 (1.174)	83	1134772	50.0000	54.766	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	731971			35.20- 95.20	64.50
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	714274	50.0000	55.321	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	696346			67.21- 127.21	97.49
11.179	11.179 (1.182)	77	386119			29.02- 89.02	54.06
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	667674	50.0000	53.042	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2613877			366.49- 426.49	391.49
11.150	11.150 (1.179)	105	99247			0.00- 44.85	14.86
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	350045	50.0000	53.004	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	979296			280.55- 340.55	279.76
11.100	11.100 (1.173)	61	169977			15.49- 75.49	48.56
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	167073	50.0000	38.591	80.00- 120.00	100.00
11.165	11.165 (1.180)	89	142042			49.11- 109.11	85.02
11.179	11.179 (1.182)	75	979296			426.44- 486.44	586.15
182 Decane					CAS #: 124-18-5		
11.251	11.251 (1.189)	57	1706725	50.0000	51.685	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	434154			0.00- 57.66	25.44
11.258	11.258 (1.190)	142	62489			0.00- 34.09	3.66

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	720439	50.0000	52.629	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2207121			284.55- 344.55	306.36
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	581856	50.0000	54.288	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	1928652			315.17- 375.17	331.47
11.301	11.301 (1.195)	65	288445			21.55- 81.55	49.57
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1007369	50.0000	53.450	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1915791			164.93- 224.93	190.18
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	954598	50.0000	50.985	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	528234			25.30- 85.30	55.34
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1942509	50.0000	55.105	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	472095			0.00- 54.25	24.30
11.738	11.738 (1.241)	91	1119666			31.27- 91.27	57.64
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.816 (1.249)	105	1864955	50.0000	52.425	80.00- 120.00	100.00
11.816	11.816 (1.249)	120	933079			19.05- 79.05	50.03
192 sec-Butylbenzene					CAS #: 135-98-8		
11.995	11.995 (1.268)	134	603472	50.0000	55.080	80.00- 120.00	100.00
11.995	11.995 (1.268)	105	2772087			437.55- 497.55	459.36
11.995	11.995 (1.268)	91	416135			40.76- 100.76	68.96
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2570516	50.0000	53.082	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	672425			0.00- 55.54	26.16
12.160	12.160 (1.285)	91	535349			0.00- 51.48	20.83
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1329178	50.0000	54.588	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	851386			33.21- 93.21	64.05
12.196	12.196 (1.289)	111	535320			11.31- 71.31	40.27
196 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.311	12.311 (1.301)	146	1338646	50.0000	54.404	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	858487			33.90- 93.90	64.13
12.311	12.311 (1.301)	111	508165			9.45- 69.45	37.96

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	1766384	50.0000	52.277	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	413835			0.00- 53.26	23.43
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2041680	50.0000	53.527	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	1997357			58.12- 118.12	97.83
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	646240	50.0000	52.544	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2216666			314.79- 374.79	343.01
12.626	12.626 (1.335)	92	1168965			154.29- 214.29	180.89
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.740	12.740 (1.347)	146	1277648	50.0000	53.513	80.00- 120.00	100.00
12.740	12.740 (1.347)	148	814480			33.84- 93.84	63.75
12.733	12.733 (1.346)	111	522263			12.73- 72.73	40.88
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	785213	50.0000	54.300	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	642033			52.48- 112.48	81.77
13.600	13.600 (1.438)	155	610759			47.41- 107.41	77.78
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	1729271	61.8000	57.198	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1571607			52.87- 112.87	90.88
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1046982	63.0000	59.352	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1013407			65.33- 125.33	96.79
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	800346	64.4000	64.468	80.00- 120.00	100.00
14.581	14.581 (1.541)	223	504199			33.17- 93.17	63.00
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	248974	6.35000	5.523	80.00- 120.00	100.00
14.768	14.768 (1.561)	127	31497			0.00- 42.88	12.65
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.068 (1.593)	180	949407	66.6000	60.882	80.00- 120.00	100.00
15.068	15.068 (1.593)	182	902508			65.75- 125.75	95.06
15.068	15.068 (1.593)	145	316194			5.23- 65.23	33.30

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 104 1,2-Dichloroethane-d4	1.37968	1.43891	0.010	-4.29295	30.00000	Averaged
$ 134 Toluene-d8	1.08560	1.10143	0.010	-1.45804	30.00000	Averaged
$ 170 4-Bromofluorobenzene	0.64197	0.64950	0.010	-1.17308	30.00000	Averaged
4 Freon 134a	0.79126	0.89764	0.010	-13.44463	30.00000	Averaged
5 Propylene	1.14402	1.31425	0.010	-14.87973	30.00000	Averaged
7 1,1-Difluoroethane	0.56667	0.55826	0.010	1.48384	30.00000	Averaged
8 Freon 12	2.24223	2.48364	0.010	-10.76645	30.00000	Averaged
9 Chlorodifluoromethane	0.22149	0.26038	0.010	-17.56085	30.00000	Averaged
10 Freon 114	2.20100	2.30353	0.010	-4.65834	30.00000	Averaged
12 Isobutane	2.53275	2.86339	0.010	-13.05442	30.00000	Averaged
15 Chloromethane	1.30082	1.52116	0.010	-16.93864	30.00000	Averaged
18 Butane	0.30133	0.27067	0.010	10.17365	30.00000	Averaged
19 Vinyl Chloride	1.56492	1.49842	0.010	4.24935	30.00000	Averaged
20 1,3-Butadiene	1.25865	1.48824	0.010	-18.24153	30.00000	Averaged
24 Bromomethane	1.00624	0.94599	0.010	5.98754	30.00000	Averaged
30 Chloroethane	0.56273	0.53709	0.010	4.55616	30.00000	Averaged
31 Isopentane	1.71230	1.93248	0.010	-12.85887	30.00000	Averaged
32 Vinyl Bromide	0.93008	0.88254	0.010	5.11115	30.00000	Averaged
33 Freon 11	2.38274	2.58895	0.010	-8.65415	30.00000	Averaged
34 Dichlorofluoromethane	2.05367	2.05754	0.010	-0.18838	30.00000	Averaged
35 Pentane	2.78321	3.14315	0.010	-12.93247	30.00000	Averaged
38 Ethyl Ether	0.46955	0.43307	0.010	7.77087	30.00000	Averaged
39 Ethanol	0.24792	0.27162	0.010	-9.55672	30.00000	Averaged
42 Acrolein	0.43020	0.46175	0.010	-7.33255	30.00000	Averaged
43 Freon 113	1.77031	1.75446	0.010	0.89505	30.00000	Averaged
44 1,1-Dichloroethene	1.05757	0.96765	0.010	8.50195	30.00000	Averaged
47 Acetone	0.65540	0.67441	0.010	-2.90003	30.00000	Averaged
48 Carbon Disulfide	2.78620	2.65135	0.010	4.84013	30.00000	Averaged
49 Iodomethane	1.85215	2.13390	0.010	-15.21176	30.00000	Averaged
52 2-Propanol	2.64148	2.97074	0.010	-12.46502	30.00000	Averaged
54 3-Chloropropene	0.46546	0.42443	0.010	8.81515	30.00000	Averaged
57 Acetonitrile	1.23114	1.46697	0.010	-19.15501	30.00000	Averaged
59 Methylene Chloride	1.70236	2.10073	0.010	-23.40114	30.00000	Averaged
62 tert-Butyl alcohol	3.08038	3.05353	0.010	0.87142	30.00000	Averaged
63 Methyl tert-butyl ether	3.07018	2.87790	0.010	6.26300	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
64 trans-1,2-Dichloroethene	0.70664	0.68840	0.010	2.58064	30.00000	Averaged
66 Acrylonitrile	0.98368	1.10774	0.010	-12.61153	30.00000	Averaged
67 Hexane	2.46279	2.52255	0.010	-2.42638	30.00000	Averaged
71 1,1-Dichloroethane	2.11721	2.26119	0.010	-6.80065	30.00000	Averaged
72 Isopropyl ether	5.72778	6.68629	0.010	-16.73440	30.00000	Averaged
73 Vinyl Acetate	0.27210	0.26902	0.010	1.12916	30.00000	Averaged
79 Ethyl-tert-butyl ether	4.95812	4.95923	0.010	-0.02235	30.00000	Averaged
84 2,2-Dichloropropane	1.88008	1.93270	0.010	-2.79847	30.00000	Averaged
85 cis-1,2-Dichloroethene	0.73332	0.77047	0.010	-5.06574	30.00000	Averaged
86 2-Butanone	0.56506	0.54524	0.010	3.50769	30.00000	Averaged
87 Ethyl Acetate	0.56205	0.68333	0.010	-21.57871	30.00000	Averaged
89 Tetrahydrofuran	1.87928	2.29782	0.010	-22.27140	30.00000	Averaged
92 Chloroform	2.17519	2.35359	0.010	-8.20125	30.00000	Averaged
94 Cyclohexane	1.57260	1.49960	0.010	4.64207	30.00000	Averaged
96 1,1,1-Trichloroethane	2.45732	2.53269	0.010	-3.06745	30.00000	Averaged
97 Carbon Tetrachloride	2.30469	2.55108	0.010	-10.69064	30.00000	Averaged
99 1,1-Dichloropropene	0.17017	0.17951	0.010	-5.48815	30.00000	Averaged
101 2,2,4-Trimethylpentane	8.56002	9.13383	0.010	-6.70332	30.00000	Averaged
102 Benzene	0.82499	0.86016	0.010	-4.26347	30.00000	Averaged
105 tert-Amyl methyl ether	0.23262	0.23336	0.010	-0.31581	30.00000	Averaged
106 1,2-Dichloroethane	0.42928	0.51299	0.010	-19.50235	30.00000	Averaged
107 Heptane	0.32683	0.32718	0.010	-0.10813	30.00000	Averaged
110 n-Butanol	0.29994	0.34076	0.010	-13.60771	30.00000	Averaged
111 Trichloroethene	0.40032	0.43721	0.010	-9.21414	30.00000	Averaged
114 1,2-Dichloropropane	0.42295	0.46004	0.010	-8.77098	30.00000	Averaged
116 Methyl Methacrylate	0.34351	0.36197	0.010	-5.37490	30.00000	Averaged
117 1,4-Dioxane	0.22478	0.22958	0.010	-2.13742	30.00000	Averaged
118 Dibromomethane	0.37098	0.42969	0.010	-15.82618	30.00000	Averaged
122 Bromodichloromethane	0.62070	0.71441	0.010	-15.09882	30.00000	Averaged
126 cis-1,3-Dichloropropene	0.52438	0.56075	0.010	-6.93410	30.00000	Averaged
127 Methylcyclohexane	0.57930	0.58765	0.010	-1.44187	30.00000	Averaged
131 4-Methyl-2-pentanone	0.42950	0.46893	0.010	-9.17921	30.00000	Averaged
137 Toluene	1.13821	1.19981	0.010	-5.41247	30.00000	Averaged
136 Octane	0.48532	0.52200	0.010	-7.55920	30.00000	Averaged
139 trans-1,3-Dichloropropene	0.49197	0.54545	0.010	-10.86923	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
141 1,1,2-Trichloroethane	0.40664	0.45073	0.010	-10.84305	30.00000	Averaged
142 Tetrachloroethene	0.56977	0.63221	0.010	-10.95952	30.00000	Averaged
143 2-Hexanone	0.58097	0.67902	0.010	-16.87748	30.00000	Averaged
144 1,3-Dichloropropane	0.54052	0.59691	0.010	-10.43389	30.00000	Averaged
146 Dibromochloromethane	0.75978	0.86869	0.010	-14.33467	30.00000	Averaged
148 1,2-Dibromoethane (EDB)	0.65220	0.73546	0.010	-12.76745	30.00000	Averaged
151 1-Bromo-2-Chloroethane	0.77603	0.86742	0.010	-11.77611	30.00000	Averaged
154 Chlorobenzene	0.99271	1.07874	0.010	-8.66643	30.00000	Averaged
155 Ethyl Benzene	0.51909	0.54701	0.010	-5.37835	30.00000	Averaged
156 Nonane	1.33556	1.59066	0.010	-19.10092	30.00000	Averaged
158 m,p-Xylene	0.65013	0.66611	0.010	-2.45766	30.00000	Averaged
164 o-Xylene	0.62290	0.65392	0.010	-4.97994	30.00000	Averaged
165 Styrene	1.06528	1.08889	0.010	-2.21721	30.00000	Averaged
167 Bromoform	0.74891	0.84778	0.010	-13.20253	30.00000	Averaged
168 Cumene	1.95673	2.03853	0.010	-4.18027	30.00000	Averaged
169 Cyclohexanone	0.69978	0.82546	0.010	-17.95981	30.00000	Averaged
175 1,1,2,2-Tetrachloroethane	0.95505	1.04609	0.010	-9.53221	30.00000	Averaged
177 Bromobenzene	0.59512	0.65845	0.010	-10.64200	30.00000	Averaged
178 Propylbenzene	0.58019	0.61549	0.010	-6.08447	30.00000	Averaged
179 1,2,3-Trichloropropane	0.30440	0.32269	0.010	-6.00908	30.00000	Averaged
181 trans-1,4-Dichloro-2-butene	0.19955	0.15402	0.010	22.81811	30.00000	Averaged
182 Decane	1.52203	1.57334	0.010	-3.37097	30.00000	Averaged
183 4-Ethyltoluene	0.63096	0.66414	0.010	-5.25793	30.00000	Averaged
184 2-Chlorotoluene	0.49401	0.53638	0.010	-8.57637	30.00000	Averaged
185 1,3,5-Trimethylbenzene	0.86871	0.92864	0.010	-6.89917	30.00000	Averaged
188 alpha Methyl Styrene	0.86300	0.87999	0.010	-1.96977	30.00000	Averaged
189 tert-Butylbenzene	1.62480	1.79070	0.010	-10.21021	30.00000	Averaged
190 1,2,4-Trimethylbenzene	1.63968	1.71921	0.010	-4.84993	30.00000	Averaged
192 sec-Butylbenzene	0.50500	0.55631	0.010	-10.16088	30.00000	Averaged
194 p-Cymene	2.23203	2.36963	0.010	-6.16449	30.00000	Averaged
195 1,3-Dichlorobenzene	1.12231	1.22530	0.010	-9.17637	30.00000	Averaged
196 1,4-Dichlorobenzene	1.13414	1.23403	0.010	-8.80715	30.00000	Averaged
199 alpha-Chlorotoluene	1.55742	1.62834	0.010	-4.55356	30.00000	Averaged
201 Undecane	1.75810	1.88212	0.010	-7.05438	30.00000	Averaged
202 Butylbenzene	0.56690	0.59574	0.010	-5.08745	30.00000	Averaged

US32TAR1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 02-AUG-2021 10:30
Lab File ID: p080202.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/02AUG21.b/p21q0519a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
204 1,2-Dichlorobenzene	1.10047	1.17780	0.010	-7.02639	30.00000	Averaged
206 1,2-Dibromo-3-chloropropane	0.66653	0.72385	0.010	-8.59994	30.00000	Averaged
207 Dodecane	1.39351	1.28975	0.010	7.44655	30.00000	Averaged
213 1,2,4-Trichlorobenzene	0.81307	0.76600	0.010	5.78961	30.00000	Averaged
215 Hexachlorobutadiene	0.57222	0.57282	0.010	-0.10615	30.00000	Averaged
216 Naphthalene	2.07796	1.80722	0.010	13.02934	30.00000	Averaged
222 1,2,3-Trichlorobenzene	0.71877	0.65706	0.010	8.58517	30.00000	Averaged

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080202.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 02-AUG-2021
Calibration Time: 11:55
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	163500	98100	228900	149292	-8.69
108 1,4-Difluorobenze	617655	370593	864717	558135	-9.64
153 Chlorobenzene-d5	600967	360580	841354	542388	-9.75

		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.

Data File: /chem/msdp.i/02AUG21.b/p080202.d

Page 1

Date : 02-AUG-2021 10:30

Client ID: CCV

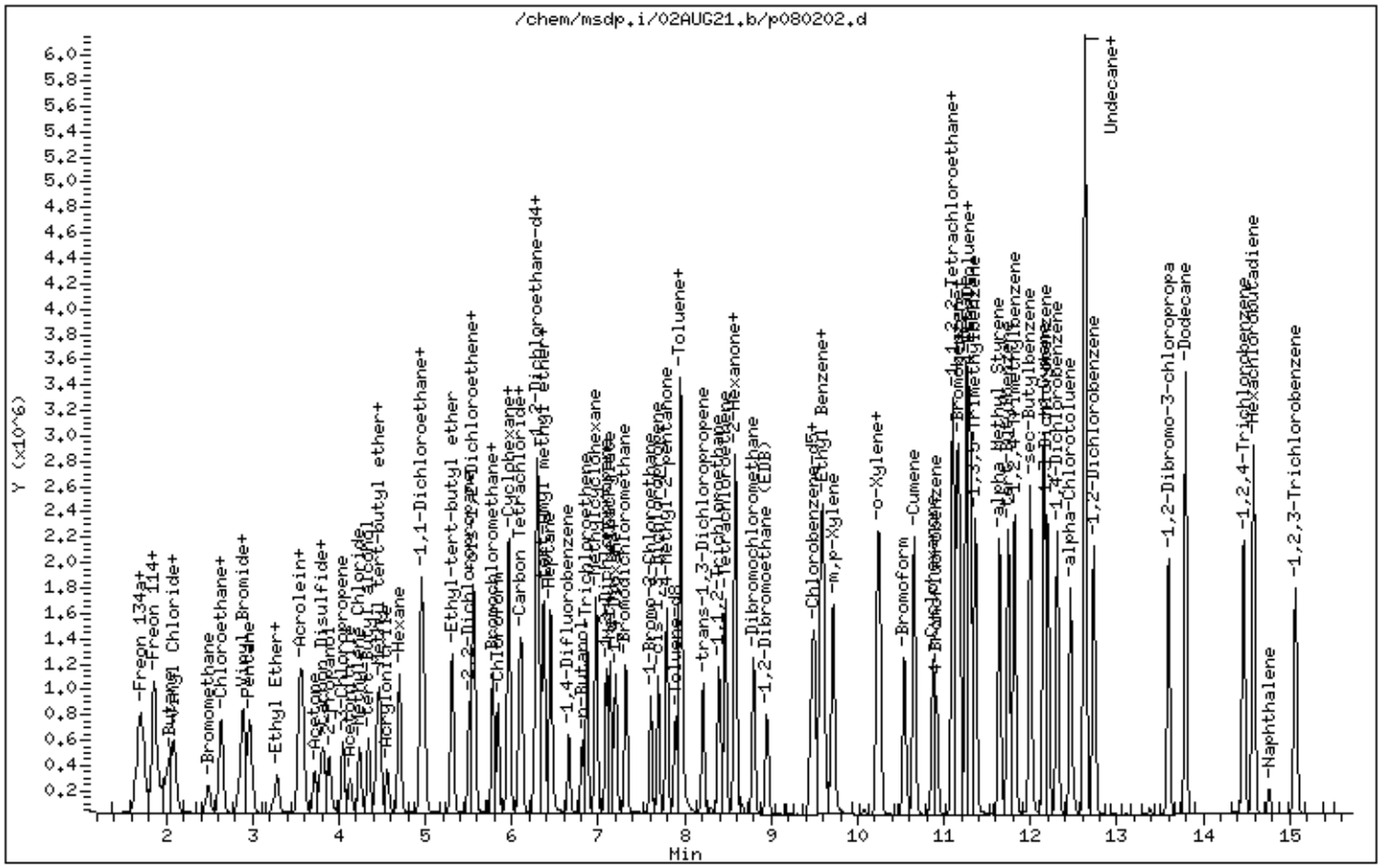
Instrument: msdp.i

Sample Info: 100mL 3018-2125A

Operator: LD

Column phase: RTX-624

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 2107362B-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:58 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	103	70-130
1,1,2,2-Tetrachloroethane	107	70-130
1,1,2-Trichloroethane	110	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	121	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	114	70-130
1,2-Dichlorobenzene	108	70-130
1,2-Dichloroethane	118	70-130
1,2-Dichloropropane	106	70-130
1,3,5-Trimethylbenzene	106	70-130
1,3-Butadiene	121	70-130
1,3-Dichlorobenzene	110	70-130
1,4-Dichlorobenzene	111	70-130
1,4-Dioxane	97	70-130
2,2,4-Trimethylpentane	105	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
2-Hexanone	104	70-130
2-Propanol	110	70-130
3-Chloropropene	90	70-130
4-Ethyltoluene	104	70-130
4-Methyl-2-pentanone	102	70-130
Acetone	108	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	102	70-130
Benzene	104	70-130
Bromodichloromethane	114	70-130
Bromoform	114	70-130
Bromomethane	92	70-130
Carbon Disulfide	96	70-130
Carbon Tetrachloride	111	70-130
Chlorobenzene	110	70-130
Chloroethane	96	70-130
Chloroform	107	70-130
Chloromethane	102	70-130
cis-1,2-Dichloroethene	105	70-130

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Client Sample ID: LCS

Lab ID#: 2107362B-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:58 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	106	70-130
Cumene	104	70-130
Cyclohexane	94	70-130
Dibromochloromethane	116	70-130
Dibromomethane	Not Spiked	
Ethanol	93	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	108	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	109	70-130
Freon 12	110	70-130
Freon 113	100	70-130
Freon 114	108	70-130
Freon 134a	Not Spiked	
Heptane	99	70-130
Hexachlorobutadiene	127	70-130
Hexachloroethane	Not Spiked	
Hexane	104	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	105	70-130
Methyl tert-butyl ether	93	70-130
Methylene Chloride	119	70-130
Naphthalene	104	60-140
o-Xylene	105	70-130
Propylbenzene	106	70-130
Propylene	Not Spiked	
Styrene	100	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	113	70-130
Tetrahydrofuran	119	70-130
Toluene	103	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	97	70-130
trans-1,3-Dichloropropene	112	70-130
Trichloroethene	107	70-130
Vinyl Acetate	Not Spiked	
Vinyl Bromide	Not Spiked	
Vinyl Chloride	99	70-130

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2107362B-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 10:58 AM**	

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080203.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 02-AUG-2021 10:58
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:15 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	
5.778	5.778 (1.000)	130	155775	25.0000			80.00- 120.00	100.00
5.778	5.778 (1.000)	128	118100				48.23- 108.23	75.81
5.778	5.778 (1.000)	49	317019				150.57- 210.57	203.51
* 108 1,4-Difluorobenzene							CAS #: 540-36-3	
6.659	6.659 (1.000)	114	592853	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	86075				0.00- 45.71	14.52
* 153 Chlorobenzene-d5							CAS #: 3114-55-4	
9.460	9.460 (1.000)	117	564064	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	295182				23.78- 83.78	52.33
$ 104 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.308	6.308 (1.092)	65	216671	25.2037	25.204		80.00- 120.00	100.00
6.308	6.308 (1.092)	67	126178				27.21- 87.21	58.23
$ 134 Toluene-d8							CAS #: 2037-26-5	
7.891	7.891 (1.185)	98	639098	24.8251	24.825		80.00- 120.00	100.00
7.891	7.891 (1.185)	70	66821				0.00- 40.44	10.46

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	412555			34.95- 94.95	64.55
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	360083	24.8598	24.860	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	438370			95.92- 155.92	121.74
10.921	10.921 (1.154)	176	349660			66.89- 126.89	97.11
4 Freon 134a					CAS #: 811-97-2		
1.646	1.646 (0.285)	83	294173	59.6660	59.666	80.00- 120.00	100.00
1.646	1.646 (0.285)	69	232164			59.44- 119.44	78.92
1.744	1.744 (0.302)	51	1317942			419.06- 479.06	448.02
5 Propylene					CAS #: 115-07-1		
1.688	1.674 (0.292)	41	400395	56.1691	56.169	80.00- 120.00	100.00
1.688	1.674 (0.292)	42	268183			35.28- 95.28	66.98
1.688	1.674 (0.292)	39	274265			38.35- 98.35	68.50
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.295)	65	174631	49.4577	49.458	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1317942			597.63- 657.63	754.70
1.702	1.702 (0.295)	47	136885			33.72- 93.72	78.38
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	769784	55.0974	55.097	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	244318			2.37- 62.37	31.74
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.744 (0.304)	67	75246	54.5227	54.523	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1317942			1501.01-1561.01	1751.51
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	737178	53.7518	53.752	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	231343			2.30- 62.30	31.38
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.324)	43	882709	55.9329	55.933	80.00- 120.00	100.00
1.870	1.870 (0.324)	42	282552			2.44- 62.44	32.01
1.870	1.870 (0.324)	58	26606			0.00- 33.36	3.01
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	415487	51.2604	51.260	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	103820			0.00- 56.26	24.99
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.353)	58	93562	49.8310	49.831	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)							
2.039	2.032 (0.353)	43	853062			823.29- 883.29	911.76
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	481783	49.4086	49.408	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	143612			0.00- 59.69	29.81
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.363)	54	474194	60.4636	60.464	80.00- 120.00	100.00
2.096	2.089 (0.363)	39	572590			52.37- 112.37	120.75
24 Bromomethane					CAS #: 74-83-9		
2.483	2.483 (0.430)	94	288401	45.9979	45.998	80.00- 120.00	100.00
2.483	2.483 (0.430)	96	267810			64.07- 124.07	92.86
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.452)	64	169054	48.2134	48.213	80.00- 120.00	100.00
2.612	2.612 (0.452)	66	48055			0.04- 60.04	28.43
2.612	2.612 (0.452)	49	70333			4.54- 64.54	41.60
31 Isopentane					CAS #: 78-78-4		
2.641	2.633 (0.457)	43	594870	55.7553	55.755	80.00- 120.00	100.00
2.641	2.633 (0.457)	57	339995			34.12- 94.12	57.15
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.493)	106	278061	47.9801	47.980	80.00- 120.00	100.00
2.848	2.841 (0.493)	108	273025			69.27- 129.27	98.19
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	811079	54.6296	54.630	80.00- 120.00	100.00
2.891	2.884 (0.500)	103	529526			34.72- 94.72	65.29
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.898 (0.503)	67	636600	49.7483	49.748	80.00- 120.00	100.00
2.906	2.898 (0.503)	69	196024			0.84- 60.84	30.79
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.514)	43	920644	53.0869	53.087	80.00- 120.00	100.00
2.970	2.970 (0.514)	57	120759			0.00- 44.98	13.12
2.970	2.970 (0.514)	72	54290			0.00- 37.39	5.90
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.570)	74	141097	48.2255	48.225	80.00- 120.00	100.00
3.285	3.285 (0.569)	59	286899			163.46- 223.46	203.33
3.285	3.278 (0.569)	45	471265			250.40- 310.40	334.00

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	83569	54.0967	54.097	80.00- 120.00	100.00
3.285	3.278 (0.569)	45	471265			511.19- 571.19	563.92
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.612)	55	146972	54.8283	54.828	80.00- 120.00	100.00
3.536	3.536 (0.612)	56	201735			111.10- 171.10	137.26
43 Freon 113					CAS #: 76-13-1		
3.557	3.550 (0.616)	151	551192	49.9686	49.968	80.00- 120.00	100.00
3.557	3.550 (0.616)	153	354253			33.56- 93.56	64.27
3.550	3.550 (0.614)	101	668466			89.21- 149.21	121.28
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.621)	96	320793	48.6810	48.681	80.00- 120.00	100.00
3.586	3.579 (0.621)	98	201272			34.02- 94.02	62.74
3.586	3.579 (0.621)	61	683025			168.77- 228.77	212.92
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.643)	58	220849	54.0791	54.079	80.00- 120.00	100.00
3.715	3.715 (0.643)	43	796188			302.95- 362.95	360.51
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.822 (0.663)	76	834038	48.0413	48.041	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.657)	142	699140	60.5800	60.580	80.00- 120.00	100.00
3.794	3.794 (0.657)	127	316588			12.22- 72.22	45.28
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.673)	45	909485	55.2575	55.257	80.00- 120.00	100.00
3.887	3.887 (0.673)	43	171291			0.00- 47.19	18.83
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.045 (0.701)	76	130928	45.1430	45.143	80.00- 120.00	100.00
4.052	4.045 (0.701)	41	673884			396.19- 456.19	514.70
57 Acetonitrile					CAS #: 75-05-8		
4.123	4.123 (0.714)	41	434664	56.6615	56.661	80.00- 120.00	100.00
4.123	4.123 (0.714)	40	230534			20.95- 80.95	53.04
4.123	4.123 (0.714)	38	49313			0.00- 41.17	11.35
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.231 (0.733)	49	633498	59.7222	59.722	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	267685			22.03- 82.03	42.26
4.238	4.231 (0.733)	51	187042			0.18- 60.18	29.53

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
62 tert-Butyl alcohol					CAS #: 75-65-0		
4.345	4.338 (0.752)	59	915462	47.6956	47.696	80.00- 120.00	100.00
4.338	4.338 (0.751)	41	214318			0.00- 51.11	23.41
4.345	4.338 (0.752)	57	97339			0.00- 40.49	10.63
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.769)	73	888874	46.4642	46.464	80.00- 120.00	100.00
4.446	4.446 (0.769)	57	316410			3.10- 63.10	35.60
4.446	4.446 (0.769)	41	339322			1.28- 61.28	38.17
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.481	4.474 (0.776)	98	213884	48.5761	48.576	80.00- 120.00	100.00
4.481	4.474 (0.776)	61	636411			255.84- 315.84	297.55
4.481	4.474 (0.776)	96	336469			127.59- 187.59	157.31
66 Acrylonitrile					CAS #: 107-13-1		
4.560	4.560 (0.789)	52	344971	56.2819	56.282	80.00- 120.00	100.00
4.560	4.560 (0.789)	53	401075			88.05- 148.05	116.26
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.813)	57	795106	51.8132	51.813	80.00- 120.00	100.00
4.696	4.696 (0.813)	43	599597			37.52- 97.52	75.41
4.696	4.696 (0.813)	86	83302			0.00- 41.48	10.48
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.961 (0.860)	63	699138	52.9957	52.996	80.00- 120.00	100.00
4.969	4.961 (0.860)	65	204005			0.00- 59.70	29.18
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.856)	45	1980326	55.4871	55.487	80.00- 120.00	100.00
4.954	4.954 (0.857)	87	297306			0.00- 48.18	15.01
4.947	4.954 (0.856)	59	180815			0.00- 40.15	9.13
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.990 (0.865)	86	83866	49.4659	49.466	80.00- 120.00	100.00
4.990	4.990 (0.864)	43	1771065			2432.48-2492.48	2111.77
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.918)	59	1513282	48.9829	48.983	80.00- 120.00	100.00
5.305	5.305 (0.918)	87	448655			1.00- 61.00	29.65
5.305	5.305 (0.918)	41	325501			0.00- 48.73	21.51
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.954)	77	593589	50.6699	50.670	80.00- 120.00	100.00
5.513	5.506 (0.954)	79	191237			2.28- 62.28	32.22
5.513	5.506 (0.954)	97	144288			0.00- 53.93	24.31

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	239428	52.3989	52.399	80.00- 120.00	100.00
5.549	5.549 (0.960)	96	371493			125.75- 185.75	155.16
5.549	5.549 (0.960)	61	890574			332.40- 392.40	371.96
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.962)	72	169687	48.1941	48.194	80.00- 120.00	100.00
5.563	5.563 (0.963)	43	2621610			1214.50-1274.50	1544.96
5.556	5.556 (0.962)	57	84613			14.68- 74.68	49.86
87 Ethyl Acetate					CAS #: 141-78-6		
5.570	5.570 (0.964)	45	205524	58.6853	58.685	80.00- 120.00	100.00
5.549	5.549 (0.960)	61	890574			452.04- 512.04	433.32
5.577	5.570 (0.965)	70	84768			22.77- 82.77	41.24
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (1.000)	42	694923	59.3453	59.345	80.00- 120.00	100.00
5.778	5.771 (1.000)	71	145139			0.00- 55.82	20.89
5.778	5.771 (1.000)	72	161364			0.00- 57.59	23.22
92 Chloroform					CAS #: 67-66-3		
5.842	5.835 (1.011)	83	727972	53.7105	53.710	80.00- 120.00	100.00
5.842	5.835 (1.011)	85	471083			34.70- 94.70	64.71
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.031)	84	461683	47.1160	47.116	80.00- 120.00	100.00
5.957	5.957 (1.031)	56	883444			142.57- 202.57	191.35
5.957	5.957 (1.031)	41	514348			62.09- 122.09	111.41
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.964 (1.033)	97	790458	51.6249	51.625	80.00- 120.00	100.00
5.971	5.964 (1.033)	99	507638			34.02- 94.02	64.22
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.055)	119	799778	55.6927	55.693	80.00- 120.00	100.00
6.086	6.086 (1.053)	117	794960			70.64- 130.64	99.40
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.115	6.115 (0.918)	110	205643	50.9584	50.958	80.00- 120.00	100.00
6.115	6.115 (0.918)	75	519614			226.85- 286.85	252.68
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.279 (1.087)	57	2796485	52.4299	52.430	80.00- 120.00	100.00
6.279	6.279 (1.087)	56	936032			2.24- 62.24	33.47
6.279	6.279 (1.087)	41	748509			0.00- 54.39	26.77

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	1018651	52.0679	52.068	80.00- 120.00	100.00
6.301	6.301 (0.946)	77	237817			0.00- 52.90	23.35
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.955)	87	266468	48.3039	48.304	80.00- 120.00	100.00
6.358	6.358 (0.955)	73	1066575			372.79- 432.79	400.26
6.358	6.358 (0.955)	55	415292			112.09- 172.09	155.85
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.958)	62	600023	58.9420	58.942	80.00- 120.00	100.00
6.380	6.380 (0.958)	64	181679			0.79- 60.79	30.28
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.968)	71	385507	49.7403	49.740	80.00- 120.00	100.00
6.444	6.444 (0.968)	43	1177952			226.53- 286.53	305.56
6.444	6.444 (0.968)	57	555387			100.85- 160.85	144.07
110 n-Butanol					CAS #: 71-36-3		
6.809	6.809 (1.023)	56	325371	45.7443	45.744	80.00- 120.00	100.00
6.809	6.809 (1.023)	41	247941			40.99- 100.99	76.20
6.809	6.809 (1.023)	43	204695			27.38- 87.38	62.91
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.031)	95	509662	53.6870	53.687	80.00- 120.00	100.00
6.867	6.867 (1.031)	130	554317			76.29- 136.29	108.76
6.867	6.867 (1.031)	97	333511			33.63- 93.63	65.44
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.089 (1.066)	63	532957	53.1371	53.137	80.00- 120.00	100.00
7.096	7.089 (1.066)	62	380691			41.07- 101.07	71.43
7.096	7.096 (1.066)	41	301848			22.53- 82.53	56.64
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	396956	51.2177	51.218	80.00- 120.00	100.00
7.139	7.132 (0.755)	41	975579			179.84- 239.84	245.76
7.139	7.139 (0.755)	100	156723			9.59- 69.59	39.48
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.077)	88	259082	48.6052	48.605	80.00- 120.00	100.00
7.175	7.175 (1.077)	58	277593			68.28- 128.28	107.14
7.175	7.175 (1.077)	57	97603			2.68- 62.68	37.67
118 Dibromomethane					CAS #: 74-95-3		
7.203	7.203 (0.761)	174	489661	58.4998	58.500	80.00- 120.00	100.00
7.203	7.203 (0.761)	93	448317			60.09- 120.09	91.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.203	7.203 (0.761)	95	389549			48.38- 108.38	79.55
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.099)	83	837832	56.9207	56.921	80.00- 120.00	100.00
7.318	7.318 (1.099)	85	531925			35.24- 95.24	63.49
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.691	7.691 (1.155)	75	661592	53.2027	53.203	80.00- 120.00	100.00
7.691	7.698 (1.155)	77	207139			2.42- 62.42	31.31
7.691	7.691 (1.155)	39	488762			37.16- 97.16	73.88
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.047)	83	671278	48.8646	48.865	80.00- 120.00	100.00
6.974	6.974 (1.047)	98	317738			15.78- 75.78	47.33
6.974	6.974 (1.047)	55	840145			84.64- 144.64	125.16
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.171)	58	517483	50.8069	50.807	80.00- 120.00	100.00
7.798	7.791 (1.171)	43	1544701			242.35- 302.35	298.50
7.798	7.798 (1.171)	85	152892			3.24- 63.24	29.55
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.195)	91	1391078	51.5373	51.537	80.00- 120.00	100.00
7.956	7.948 (1.195)	92	807311			28.38- 88.38	58.03
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.194)	57	610316	53.0301	53.030	80.00- 120.00	100.00
7.948	7.948 (1.194)	85	470672			56.00- 116.00	77.12
7.948	7.948 (1.194)	43	1713272			228.66- 288.66	280.72
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.213 (0.868)	75	621913	56.0273	56.027	80.00- 120.00	100.00
8.213	8.213 (0.868)	77	195958			1.24- 61.24	31.51
8.213	8.213 (0.868)	39	445642			34.11- 94.11	71.66
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	505801	55.1290	55.129	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	315049			31.96- 91.96	62.29
8.400	8.400 (0.888)	83	423323			52.93- 112.93	83.69
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	725673	56.4485	56.448	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	562401			47.84- 107.84	77.50
8.464	8.464 (0.895)	131	539616			45.29- 105.29	74.36

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	678773	51.7823	51.782	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1446743			162.87- 222.87	213.14
8.586	8.586 (0.908)	100	96060			0.00- 45.94	14.15
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.288)	76	680983	53.1274	53.127	80.00- 120.00	100.00
8.579	8.579 (1.288)	41	935759			94.99- 154.99	137.41
8.579	8.579 (1.288)	78	216875			2.05- 62.05	31.85
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	993596	57.9606	57.961	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	778084			47.45- 107.45	78.31
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	839667	57.0612	57.061	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	787048			64.21- 124.21	93.73
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.142)	63	994172	54.0225	54.022	80.00- 120.00	100.00
7.605	7.605 (1.142)	65	289772			0.00- 59.64	29.15
7.605	7.605 (1.142)	144	96894			0.00- 39.63	9.75
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1226749	54.7704	54.770	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	389772			1.74- 61.74	31.77
9.496	9.496 (1.004)	77	638990			25.04- 85.04	52.09
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	630207	53.8087	53.809	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1857512			273.74- 333.74	294.75
156 Nonane					CAS #: 111-84-2		
9.596	9.596 (1.014)	43	1771155	58.7767	58.777	80.00- 120.00	100.00
9.596	9.596 (1.014)	57	1317182			54.16- 114.16	74.37
9.603	9.596 (1.015)	85	349657			0.00- 53.90	19.74
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	588144	46.9003	46.900	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	564064			57.42- 117.42	95.91
9.596	9.603 (1.014)	95	213783			5.70- 65.70	36.35
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	770515	52.5283	52.528	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1478717			163.73- 223.73	191.91

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	739391	52.6100	52.610	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1482315			177.45- 237.45	200.48
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1200191	49.9344	49.934	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	560017			17.88- 77.88	46.66
167 Bromoform					CAS #: 75-25-2		
10.541	10.541 (1.114)	173	966597	57.2042	57.204	80.00- 120.00	100.00
10.541	10.541 (1.114)	171	494826			21.25- 81.25	51.19
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2287303	51.8089	51.809	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	660063			0.00- 58.52	28.86
10.649	10.649 (1.126)	51	339051			0.00- 43.00	14.82
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	671346	42.5203	42.520	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	190937			1.94- 61.94	28.44
10.871	10.871 (1.149)	42	461795			37.89- 97.89	68.79
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.107 (1.173)	83	1157842	53.7322	53.732	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	754006			35.20- 95.20	65.12
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	756241	56.3206	56.320	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	732630			67.21- 127.21	96.88
11.179	11.179 (1.182)	77	441548			29.02- 89.02	58.39
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	696974	53.2422	53.242	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2726763			366.49- 426.49	391.23
11.150	11.150 (1.179)	105	100866			0.00- 44.85	14.47
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	366997	53.4360	53.436	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1150865			280.55- 340.55	313.59
11.100	11.100 (1.173)	61	174229			15.49- 75.49	47.47
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	321101	71.3182	71.318	80.00- 120.00	100.00(R)
11.179	11.165 (1.182)	89	220502			49.11- 109.11	68.67
11.179	11.179 (1.182)	75	1150865			426.44- 486.44	358.41

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	1727057	50.2914	50.291	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	441531			0.00- 57.66	25.57
11.258	11.258 (1.190)	142	64319			0.00- 34.09	3.72
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.286 (1.193)	120	739709	51.9601	51.960	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2302628			284.55- 344.55	311.29
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	607809	54.5304	54.530	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2007157			315.17- 375.17	330.23
11.301	11.301 (1.195)	65	297966			21.55- 81.55	49.02
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1037628	52.9395	52.939	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	1998620			164.93- 224.93	192.61
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	857989	44.0641	44.064	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	465790			25.30- 85.30	54.29
189 tert-Butylbenzene					CAS #: 98-06-6		
11.745	11.745 (1.242)	119	1977011	53.9287	53.929	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	488066			0.00- 54.25	24.69
11.738	11.738 (1.241)	91	1145312			31.27- 91.27	57.93
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.816 (1.249)	105	1919922	51.8962	51.896	80.00- 120.00	100.00
11.816	11.816 (1.249)	120	988427			19.05- 79.05	51.48
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.995 (1.268)	134	620054	54.4192	54.419	80.00- 120.00	100.00
11.996	11.995 (1.268)	105	2848693			437.55- 497.55	459.43
11.996	11.995 (1.268)	91	431050			40.76- 100.76	69.52
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2629018	52.2041	52.204	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	694309			0.00- 55.54	26.41
12.160	12.160 (1.285)	91	543687			0.00- 51.48	20.68
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.203	12.203 (1.290)	146	1397486	55.1881	55.188	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	899847			33.21- 93.21	64.39
12.196	12.196 (1.289)	111	554382			11.31- 71.31	39.67

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	1416889	55.3706	55.371	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	905524			33.90- 93.90	63.91
12.311	12.311 (1.301)	111	537989			9.45- 69.45	37.97
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1797489	51.1531	51.153	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	425049			0.00- 53.26	23.65
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2152231	54.2572	54.257	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2079571			58.12- 118.12	96.62
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	665174	52.0049	52.005	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2273729			314.79- 374.79	341.82
12.626	12.626 (1.335)	92	1197802			154.29- 214.29	180.07
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.740 (1.346)	146	1337985	53.8868	53.887	80.00- 120.00	100.00
12.733	12.740 (1.346)	148	857641			33.84- 93.84	64.10
12.733	12.733 (1.346)	111	551053			12.73- 72.73	41.19
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	827536	55.0277	55.028	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	662515			52.48- 112.48	80.06
13.600	13.600 (1.438)	155	637474			47.41- 107.41	77.03
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	1992637	63.3765	63.376	80.00- 120.00	100.00
13.801	13.801 (1.459)	43	1792863			52.87- 112.87	89.97
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1285241	70.0595	70.059	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1231410			65.33- 125.33	95.81
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	949980	73.5809	73.581	80.00- 120.00	100.00
14.581	14.581 (1.541)	223	598660			33.17- 93.17	63.02
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	284251	6.06285	6.063	80.00- 120.00	100.00
14.760	14.768 (1.560)	127	34351			0.00- 42.88	12.08
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.068	15.068 (1.593)	180	1161912	71.6463	71.646	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)							
15.068	15.068 (1.593)	182	1107824			65.75- 125.75	95.34
15.068	15.068 (1.593)	145	396117			5.23- 65.23	34.09

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080203.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	155775	4.34
108 1,4-Difluorobenze	558135	334881	781389	592853	6.22
153 Chlorobenzene-d5	542388	325433	759343	564064	4.00

		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.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
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/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	59.666	119.33	70-130
5 Propylene	50.000	56.169	112.34	70-130
7 1,1-Difluoroethan	50.000	49.458	98.92	70-130
8 Freon 12	50.000	55.097	110.19	70-130
9 Chlorodifluoromet	50.000	54.523	109.05	70-130
10 Freon 114	50.000	53.752	107.50	70-130
12 Isobutane	50.000	55.933	111.87	70-130
15 Chloromethane	50.000	51.260	102.52	70-130
18 Butane	50.000	49.831	99.66	70-130
19 Vinyl Chloride	50.000	49.408	98.82	70-130
20 1,3-Butadiene	50.000	60.464	120.93	70-130
24 Bromomethane	50.000	45.998	92.00	70-130
30 Chloroethane	50.000	48.213	96.43	70-130
31 Isopentane	50.000	55.755	111.51	70-130
32 Vinyl Bromide	50.000	47.980	95.96	70-130
33 Freon 11	50.000	54.630	109.26	70-130
34 Dichlorofluoromet	50.000	49.748	99.50	70-130
35 Pentane	50.000	53.087	106.17	70-130
38 Ethyl Ether	50.000	48.225	96.45	70-130
39 Ethanol	58.000	54.097	93.27	70-130
42 Acrolein	58.000	54.828	94.53	70-130
43 Freon 113	50.000	49.968	99.94	70-130
44 1,1-Dichloroethen	50.000	48.681	97.36	70-130
47 Acetone	50.000	54.079	108.16	70-130
48 Carbon Disulfide	50.000	48.041	96.08	70-130
49 Iodomethane	50.000	60.580	121.16	70-130
52 2-Propanol	50.000	55.257	110.51	70-130
54 3-Chloropropene	50.000	45.143	90.29	70-130
57 Acetonitrile	50.000	56.661	113.32	70-130
59 Methylene Chlorid	50.000	59.722	119.44	70-130
62 tert-Butyl alcoho	50.000	47.696	95.39	70-130
63 Methyl tert-butyl	50.000	46.464	92.93	70-130
64 trans-1,2-Dichlor	50.000	48.576	97.15	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	56.282	112.56	70-130
67	Hexane	50.000	51.813	103.63	70-130
71	1,1-Dichloroethan	50.000	52.996	105.99	70-130
72	Isopropyl ether	50.000	55.487	110.97	70-130
73	Vinyl Acetate	50.000	49.466	98.93	70-130
79	Ethyl-tert-butyl	50.000	48.983	97.97	70-130
84	2,2-Dichloropropa	50.000	50.670	101.34	70-130
85	cis-1,2-Dichloroe	50.000	52.399	104.80	70-130
86	2-Butanone	50.000	48.194	96.39	70-130
87	Ethyl Acetate	50.000	58.685	117.37	70-130
89	Tetrahydrofuran	50.000	59.345	118.69	70-130
92	Chloroform	50.000	53.710	107.42	70-130
94	Cyclohexane	50.000	47.116	94.23	70-130
96	1,1,1-Trichloroet	50.000	51.625	103.25	70-130
99	1,1-Dichloroprope	50.000	50.958	101.92	70-130
97	Carbon Tetrachlor	50.000	55.693	111.39	70-130
101	2,2,4-Trimethylpe	50.000	52.430	104.86	70-130
102	Benzene	50.000	52.068	104.14	70-130
105	tert-Amyl methyl	50.000	48.304	96.61	70-130
106	1,2-Dichloroethan	50.000	58.942	117.88	70-130
107	Heptane	50.000	49.740	99.48	70-130
110	n-Butanol	50.000	45.744	91.49	70-130
111	Trichloroethene	50.000	53.687	107.37	70-130
118	Dibromomethane	50.000	58.500	117.00	70-130
127	Methylcyclohexane	50.000	48.865	97.73	70-130
114	1,2-Dichloropropa	50.000	53.137	106.27	70-130
116	Methyl Methacryla	50.000	51.218	102.44	70-130
117	1,4-Dioxane	50.000	48.605	97.21	70-130
122	Bromodichlorometh	50.000	56.921	113.84	70-130
126	cis-1,3-Dichlorop	50.000	53.203	106.41	70-130
131	4-Methyl-2-pentan	50.000	50.807	101.61	70-130
136	Octane	50.000	53.030	106.06	70-130
137	Toluene	50.000	51.537	103.07	70-130
139	trans-1,3-Dichlor	50.000	56.027	112.05	70-130
141	1,1,2-Trichloroet	50.000	55.129	110.26	70-130
142	Tetrachloroethene	50.000	56.448	112.90	70-130
143	2-Hexanone	50.000	51.782	103.56	70-130
144	1,3-Dichloropropa	50.000	53.127	106.25	70-130
146	Dibromochlorometh	50.000	57.961	115.92	70-130
148	1,2-Dibromoethane	50.000	57.061	114.12	70-130
151	1-Bromo-2-Chloroe	50.000	54.022	108.05	70-130
154	Chlorobenzene	50.000	54.770	109.54	70-130
155	Ethyl Benzene	50.000	53.809	107.62	70-130
156	Nonane	50.000	58.777	117.55	70-130
157	1,1,1,2-Tetrachlo	50.000	46.900	93.80	70-130
158	m,p-Xylene	50.000	52.528	105.06	70-130
164	o-Xylene	50.000	52.610	105.22	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165	Styrene	50.000	49.934	99.87	70-130
167	Bromoform	50.000	57.204	114.41	70-130
168	Cumene	50.000	51.809	103.62	70-130
169	Cyclohexanone	50.000	42.520	85.04	70-130
175	1,1,2,2-Tetrachlo	50.000	53.732	107.46	70-130
177	Bromobenzene	50.000	56.320	112.64	70-130
178	Propylbenzene	50.000	53.242	106.48	70-130
179	1,2,3-Trichloropr	50.000	53.436	106.87	70-130
181	trans-1,4-Dichlor	50.000	71.318	142.64*	70-130
182	Decane	50.000	50.291	100.58	70-130
183	4-Ethyltoluene	50.000	51.960	103.92	70-130
184	2-Chlorotoluene	50.000	54.530	109.06	70-130
185	1,3,5-Trimethylbe	50.000	52.939	105.88	70-130
188	alpha Methyl Styr	50.000	44.064	88.13	70-130
189	tert-Butylbenzene	50.000	53.929	107.86	70-130
190	1,2,4-Trimethylbe	50.000	51.896	103.79	70-130
192	sec-Butylbenzene	50.000	54.419	108.84	70-130
194	p-Cymene	50.000	52.204	104.41	70-130
195	1,3-Dichlorobenze	50.000	55.188	110.38	70-130
196	1,4-Dichlorobenze	50.000	55.371	110.74	70-130
199	alpha-Chlorotolue	50.000	51.153	102.31	70-130
201	Undecane	50.000	54.257	108.51	70-130
202	Butylbenzene	50.000	52.005	104.01	70-130
204	1,2-Dichlorobenze	50.000	53.887	107.77	70-130
206	1,2-Dibromo-3-chl	50.000	55.028	110.06	70-130
207	Dodecane	50.000	63.376	126.75	70-130
213	1,2,4-Trichlorobe	58.000	70.059	120.79	70-130
215	Hexachlorobutadie	58.000	73.581	126.86	70-130
216	Naphthalene	5.800	6.063	104.53	60-140
222	1,2,3-Trichlorobe	58.000	71.646	123.53	70-130

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104	1,2-Dichloroethan	25.000	25.204	100.81	70-130
$ 134	Toluene-d8	25.000	24.825	99.30	70-130
$ 170	4-Bromofluorobenz	25.000	24.860	99.44	70-130

Data File: /chem/msdp.i/02AUG21.b/p080203.d

Date : 02-AUG-2021 10:58

Client ID: LCS

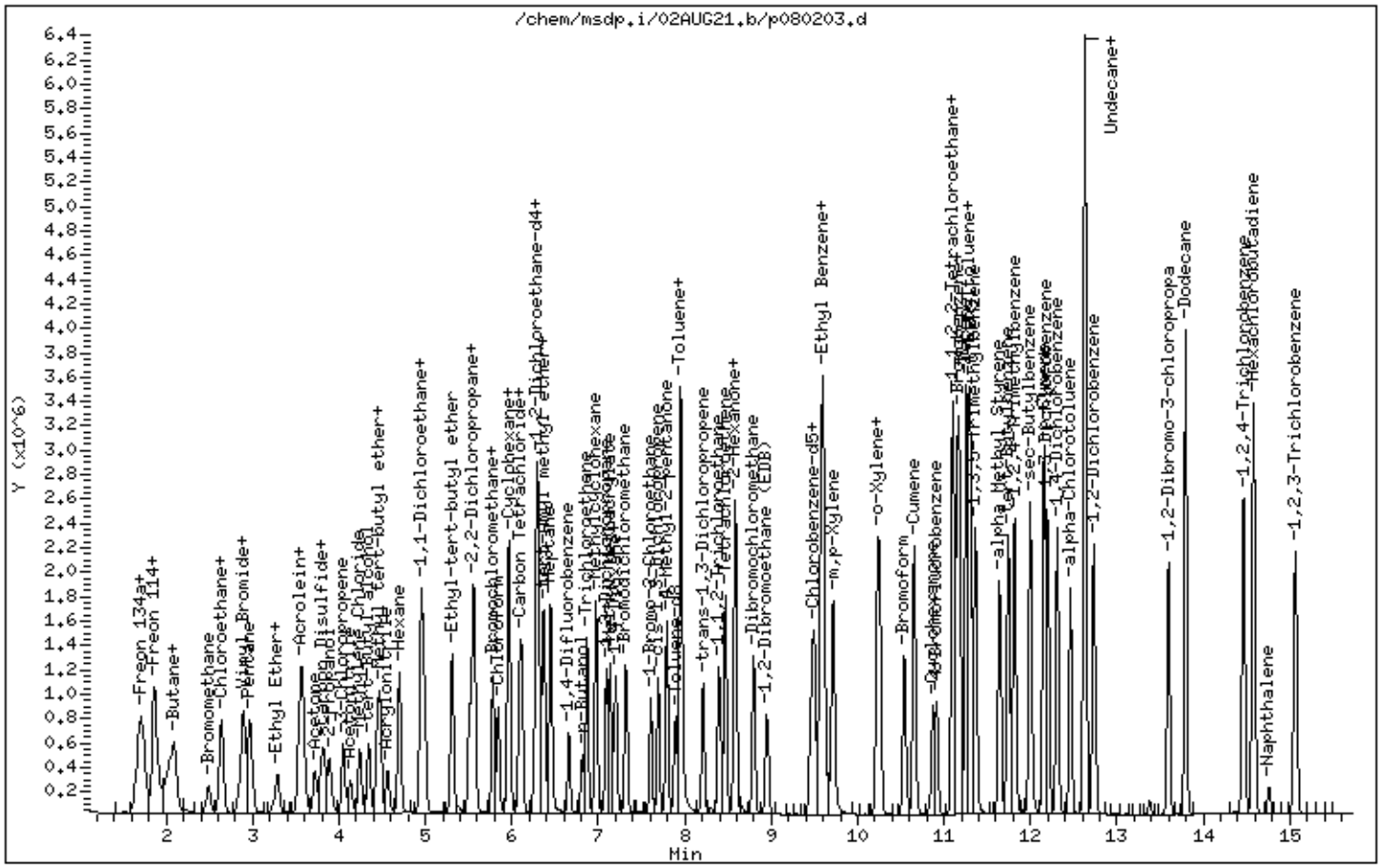
Instrument: msdp.i

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#: 2107362B-22AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 11:27 AM**	

Compound	%Recovery	Method Limits
1,1,1,2-Tetrachloroethane	Not Spiked	
1,1,1-Trichloroethane	103	70-130
1,1,2,2-Tetrachloroethane	107	70-130
1,1,2-Trichloroethane	108	70-130
1,1-Dichloroethane	105	70-130
1,1-Dichloroethene	98	70-130
1,1-Difluoroethane	Not Spiked	
1,2,3-Trichloropropane	Not Spiked	
1,2,4-Trichlorobenzene	128	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2-Dibromo-3-chloropropane	Not Spiked	
1,2-Dibromoethane (EDB)	113	70-130
1,2-Dichlorobenzene	107	70-130
1,2-Dichloroethane	117	70-130
1,2-Dichloropropane	107	70-130
1,3,5-Trimethylbenzene	104	70-130
1,3-Butadiene	116	70-130
1,3-Dichlorobenzene	110	70-130
1,4-Dichlorobenzene	110	70-130
1,4-Dioxane	99	70-130
2,2,4-Trimethylpentane	104	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
2-Hexanone	103	70-130
2-Propanol	109	70-130
3-Chloropropene	94	70-130
4-Ethyltoluene	104	70-130
4-Methyl-2-pentanone	102	70-130
Acetone	103	70-130
Acrolein	Not Spiked	
Acrylonitrile	Not Spiked	
alpha-Chlorotoluene	102	70-130
Benzene	104	70-130
Bromodichloromethane	113	70-130
Bromoform	113	70-130
Bromomethane	90	70-130
Carbon Disulfide	95	70-130
Carbon Tetrachloride	111	70-130
Chlorobenzene	108	70-130
Chloroethane	96	70-130
Chloroform	107	70-130
Chloromethane	99	70-130
cis-1,2-Dichloroethene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 2107362B-22AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 11:27 AM**	

Compound	%Recovery	Method Limits
cis-1,3-Dichloropropene	107	70-130
Cumene	102	70-130
Cyclohexane	96	70-130
Dibromochloromethane	115	70-130
Dibromomethane	Not Spiked	
Ethanol	90	70-130
Ethyl Acetate	Not Spiked	
Ethyl Benzene	104	70-130
Ethyl-tert-butyl ether	Not Spiked	
Freon 11	108	70-130
Freon 12	107	70-130
Freon 113	99	70-130
Freon 114	103	70-130
Freon 134a	Not Spiked	
Heptane	100	70-130
Hexachlorobutadiene	134 Q	70-130
Hexachloroethane	Not Spiked	
Hexane	103	70-130
Iodomethane	Not Spiked	
Isopropyl ether	Not Spiked	
m,p-Xylene	103	70-130
Methyl tert-butyl ether	92	70-130
Methylene Chloride	116	70-130
Naphthalene	111	60-140
o-Xylene	103	70-130
Propylbenzene	105	70-130
Propylene	Not Spiked	
Styrene	98	70-130
tert-Amyl methyl ether	Not Spiked	
tert-Butyl alcohol	Not Spiked	
Tetrachloroethene	111	70-130
Tetrahydrofuran	117	70-130
Toluene	103	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
trans-1,2-Dichloroethene	96	70-130
trans-1,3-Dichloropropene	111	70-130
Trichloroethene	109	70-130
Vinyl Acetate	Not Spiked	
Vinyl Bromide	Not Spiked	
Vinyl Chloride	93	70-130

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Client Sample ID: LCSD

Lab ID#: 2107362B-22AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p080204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/2/21 11:27 AM**	

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

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

US32TAR1

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02AUG21.b/p080204.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 02-AUG-2021 11:27
Operator : LD Inst ID: msdp.i
Smp Info : 100mL 3018-2122A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02AUG21.b/p21q0519a.m
Meth Date : 02-Aug-2021 12:15 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 (PPBV)	CONCENTRATIONS FINAL (PPBV)		
RT	EXP RT (REL RT)	MASS	RESPONSE				TARGET RANGE	RATIO
* 90 Bromochloromethane						CAS #: 74-97-5		
5.785	5.778 (1.000)	130	162538	25.0000			80.00- 120.00	100.00
5.785	5.778 (1.000)	128	125589				48.23- 108.23	77.27
5.778	5.778 (1.000)	49	342764				150.57- 210.57	210.88
* 108 1,4-Difluorobenzene						CAS #: 540-36-3		
6.666	6.659 (1.000)	114	610537	25.0000			80.00- 120.00	100.00
6.659	6.659 (1.000)	88	89221				0.00- 45.71	14.61
* 153 Chlorobenzene-d5						CAS #: 3114-55-4		
9.460	9.460 (1.000)	117	590330	25.0000			80.00- 120.00	100.00
9.460	9.460 (1.000)	82	304192				23.78- 83.78	51.53
$ 104 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.315	6.308 (1.092)	65	227775	25.3928	25.393		80.00- 120.00	100.00
6.315	6.308 (1.092)	67	126920				27.21- 87.21	55.72
$ 134 Toluene-d8						CAS #: 2037-26-5		
7.891	7.891 (1.184)	98	666830	25.1521	25.152		80.00- 120.00	100.00
7.891	7.891 (1.184)	70	66658				0.00- 40.44	10.00

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	431983			34.95- 94.95	64.78
$ 170 4-Bromofluorobenzene					CAS #: 460-00-4		
10.921	10.921 (1.154)	174	384023	25.3330	25.333	80.00- 120.00	100.00
10.914	10.914 (1.154)	95	469942			95.92- 155.92	122.37
10.921	10.921 (1.154)	176	368254			66.89- 126.89	95.89
4 Freon 134a					CAS #: 811-97-2		
1.647	1.646 (0.285)	83	303923	59.0784	59.078	80.00- 120.00	100.00
1.647	1.646 (0.285)	69	243339			59.44- 119.44	80.07
1.744	1.744 (0.302)	51	1353999			419.06- 479.06	445.51
5 Propylene					CAS #: 115-07-1		
1.688	1.674 (0.292)	41	404032	54.3207	54.321	80.00- 120.00	100.00
1.688	1.674 (0.292)	42	270574			35.28- 95.28	66.97
1.688	1.674 (0.292)	39	280979			38.35- 98.35	69.54
7 1,1-Difluoroethane					CAS #: 75-37-6		
1.702	1.702 (0.294)	65	182016	49.4040	49.404	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1353999			597.63- 657.63	743.89
1.702	1.702 (0.294)	47	137664			33.72- 93.72	75.63
8 Freon 12					CAS #: 75-71-8		
1.716	1.716 (0.297)	85	782563	53.6812	53.681	80.00- 120.00	100.00
1.716	1.716 (0.297)	87	253453			2.37- 62.37	32.39
9 Chlorodifluoromethane					CAS #: 75-45-6		
1.758	1.744 (0.304)	67	80981	56.2368	56.237	80.00- 120.00	100.00
1.744	1.744 (0.302)	51	1353999			1501.01-1561.01	1671.99
10 Freon 114					CAS #: 76-14-2		
1.856	1.856 (0.321)	135	735208	51.3774	51.377	80.00- 120.00	100.00
1.856	1.856 (0.321)	137	235264			2.30- 62.30	32.00
12 Isobutane					CAS #: 75-28-5		
1.870	1.870 (0.323)	43	898479	54.5631	54.563	80.00- 120.00	100.00
1.870	1.870 (0.323)	42	292001			2.44- 62.44	32.50
1.870	1.870 (0.323)	58	28302			0.00- 33.36	3.15
15 Chloromethane					CAS #: 74-87-3		
1.954	1.940 (0.338)	50	418897	49.5305	49.530	80.00- 120.00	100.00
1.954	1.940 (0.338)	52	107825			0.00- 56.26	25.74
18 Butane					CAS #: 106-97-8		
2.039	2.032 (0.352)	58	94111	48.0376	48.038	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)							
2.039	2.032 (0.352)	43	882653			823.29- 883.29	937.88
19 Vinyl Chloride					CAS #: 75-01-4		
2.075	2.068 (0.359)	62	472370	46.4274	46.427	80.00- 120.00	100.00
2.075	2.068 (0.359)	64	137873			0.00- 59.69	29.19
20 1,3-Butadiene					CAS #: 106-99-0		
2.096	2.096 (0.362)	54	475074	58.0551	58.055	80.00- 120.00	100.00
2.096	2.089 (0.362)	39	424168			52.37- 112.37	89.28
24 Bromomethane					CAS #: 74-83-9		
2.490	2.483 (0.430)	94	295417	45.1562	45.156	80.00- 120.00	100.00
2.490	2.483 (0.430)	96	277476			64.07- 124.07	93.93
30 Chloroethane					CAS #: 75-00-3		
2.612	2.612 (0.451)	64	175081	47.8546	47.854	80.00- 120.00	100.00
2.612	2.612 (0.451)	66	50102			0.04- 60.04	28.62
2.612	2.612 (0.451)	49	69120			4.54- 64.54	39.48
31 Isopentane					CAS #: 78-78-4		
2.641	2.633 (0.456)	43	601685	54.0472	54.047	80.00- 120.00	100.00
2.641	2.633 (0.456)	57	356371			34.12- 94.12	59.23
32 Vinyl Bromide					CAS #: 593-60-2		
2.848	2.841 (0.492)	106	287570	47.5561	47.556	80.00- 120.00	100.00
2.848	2.841 (0.492)	108	279952			69.27- 129.27	97.35
33 Freon 11					CAS #: 75-69-4		
2.891	2.884 (0.500)	101	833401	53.7972	53.797	80.00- 120.00	100.00
2.891	2.884 (0.500)	103	544553			34.72- 94.72	65.34
34 Dichlorofluoromethane					CAS #: 75-43-4		
2.906	2.898 (0.502)	67	663663	49.7050	49.705	80.00- 120.00	100.00
2.906	2.898 (0.502)	69	203348			0.84- 60.84	30.64
35 Pentane					CAS #: 109-66-0		
2.970	2.970 (0.513)	43	938868	51.8849	51.885	80.00- 120.00	100.00
2.970	2.970 (0.513)	57	125300			0.00- 44.98	13.35
2.970	2.970 (0.513)	72	57849			0.00- 37.39	6.16
38 Ethyl Ether					CAS #: 60-29-7		
3.292	3.285 (0.569)	74	144268	47.2573	47.257	80.00- 120.00	100.00
3.285	3.285 (0.568)	59	302475			163.46- 223.46	209.66
3.285	3.278 (0.568)	45	482600			250.40- 310.40	334.52

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	83749	51.9573	51.957	80.00- 120.00	100.00
3.285	3.278 (0.568)	45	481763			511.19- 571.19	575.24
42 Acrolein					CAS #: 107-02-8		
3.536	3.536 (0.611)	55	146914	52.5263	52.526	80.00- 120.00	100.00
3.536	3.536 (0.611)	56	211554			111.10- 171.10	144.00
43 Freon 113					CAS #: 76-13-1		
3.558	3.550 (0.615)	151	572493	49.7400	49.740	80.00- 120.00	100.00
3.558	3.550 (0.615)	153	366238			33.56- 93.56	63.97
3.550	3.550 (0.614)	101	692006			89.21- 149.21	120.88
44 1,1-Dichloroethene					CAS #: 75-35-4		
3.586	3.579 (0.620)	96	335313	48.7669	48.767	80.00- 120.00	100.00
3.586	3.579 (0.620)	98	212645			34.02- 94.02	63.42
3.586	3.579 (0.620)	61	705665			168.77- 228.77	210.45
47 Acetone					CAS #: 67-64-1		
3.715	3.715 (0.642)	58	218816	51.3517	51.352	80.00- 120.00	100.00
3.715	3.715 (0.642)	43	812407			302.95- 362.95	371.27
48 Carbon Disulfide					CAS #: 75-15-0		
3.830	3.822 (0.662)	76	860406	47.4978	47.498	80.00- 120.00	100.00
49 Iodomethane					CAS #: 74-88-4		
3.794	3.794 (0.656)	142	751243	62.3859	62.386	80.00- 120.00	100.00
3.794	3.794 (0.656)	127	338461			12.22- 72.22	45.05
52 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.672)	45	932733	54.3118	54.312	80.00- 120.00	100.00
3.887	3.887 (0.672)	43	170314			0.00- 47.19	18.26
54 3-Chloropropene					CAS #: 107-05-1		
4.052	4.045 (0.700)	76	141662	46.8114	46.811	80.00- 120.00	100.00
4.052	4.045 (0.700)	41	701135			396.19- 456.19	494.94
57 Acetonitrile					CAS #: 75-05-8		
4.131	4.123 (0.714)	41	439283	54.8808	54.881	80.00- 120.00	100.00
4.131	4.123 (0.714)	40	229125			20.95- 80.95	52.16
4.131	4.123 (0.714)	38	50075			0.00- 41.17	11.40
59 Methylene Chloride					CAS #: 75-09-2		
4.238	4.231 (0.733)	49	642554	58.0552	58.055	80.00- 120.00	100.00
4.238	4.238 (0.733)	84	275693			22.03- 82.03	42.91
4.238	4.231 (0.733)	51	190949			0.18- 60.18	29.72

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 (0.750)	59	959227	47.8961	47.896	80.00- 120.00	100.00
4.338	4.338 (0.750)	41	225663			0.00- 51.11	23.53
4.338	4.338 (0.750)	57	104214			0.00- 40.49	10.86
63 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.446	4.446 (0.768)	73	921098	46.1450	46.145	80.00- 120.00	100.00
4.446	4.446 (0.768)	57	332119			3.10- 63.10	36.06
4.446	4.446 (0.768)	41	332879			1.28- 61.28	36.14
64 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.482	4.474 (0.775)	98	220840	48.0687	48.069	80.00- 120.00	100.00
4.482	4.474 (0.775)	61	655032			255.84- 315.84	296.61
4.482	4.474 (0.775)	96	351500			127.59- 187.59	159.17
66 Acrylonitrile					CAS #: 107-13-1		
4.567	4.560 (0.789)	52	354876	55.4886	55.489	80.00- 120.00	100.00
4.567	4.560 (0.789)	53	415521			88.05- 148.05	117.09
67 Hexane					CAS #: 110-54-3		
4.696	4.696 (0.812)	57	827314	51.6686	51.668	80.00- 120.00	100.00
4.696	4.696 (0.812)	43	616655			37.52- 97.52	74.54
4.696	4.696 (0.812)	86	88991			0.00- 41.48	10.76
71 1,1-Dichloroethane					CAS #: 75-34-3		
4.969	4.961 (0.859)	63	725269	52.6888	52.689	80.00- 120.00	100.00
4.969	4.961 (0.859)	65	208668			0.00- 59.70	28.77
72 Isopropyl ether					CAS #: 108-20-3		
4.947	4.947 (0.855)	45	2039113	54.7568	54.757	80.00- 120.00	100.00
4.947	4.954 (0.855)	87	309115			0.00- 48.18	15.16
4.947	4.954 (0.855)	59	188811			0.00- 40.15	9.26
73 Vinyl Acetate					CAS #: 108-05-4		
4.997	4.990 (0.864)	86	84587	47.8153	47.815	80.00- 120.00	100.00
4.997	4.990 (0.864)	43	1815390			2432.48-2492.48	2146.16
79 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.305	5.305 (0.917)	59	1589100	49.2966	49.296	80.00- 120.00	100.00
5.305	5.305 (0.917)	87	462308			1.00- 61.00	29.09
5.305	5.305 (0.917)	41	330322			0.00- 48.73	20.79
84 2,2-Dichloropropane					CAS #: 594-20-7		
5.513	5.506 (0.953)	77	619315	50.6661	50.666	80.00- 120.00	100.00
5.513	5.506 (0.953)	79	201304			2.28- 62.28	32.50
5.513	5.506 (0.953)	97	144395			0.00- 53.93	23.32

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	247476	51.9065	51.906	80.00- 120.00	100.00
5.549	5.549 (0.959)	96	382314			125.75- 185.75	154.49
5.549	5.549 (0.959)	61	919418			332.40- 392.40	371.52
86 2-Butanone					CAS #: 78-93-3		
5.556	5.556 (0.960)	72	177372	48.2802	48.280	80.00- 120.00	100.00
5.563	5.563 (0.962)	43	2675575			1214.50-1274.50	1508.45
5.556	5.556 (0.960)	57	87998			14.68- 74.68	49.61
87 Ethyl Acetate					CAS #: 141-78-6		
5.577	5.570 (0.964)	45	211764	57.9510	57.951	80.00- 120.00	100.00
5.549	5.549 (0.959)	61	919418			452.04- 512.04	434.17
5.577	5.570 (0.964)	70	88992			22.77- 82.77	42.02
89 Tetrahydrofuran					CAS #: 109-99-9		
5.778	5.771 (0.999)	42	716751	58.6623	58.662	80.00- 120.00	100.00
5.778	5.771 (0.999)	71	151420			0.00- 55.82	21.13
5.778	5.771 (0.999)	72	168722			0.00- 57.59	23.54
92 Chloroform					CAS #: 67-66-3		
5.843	5.835 (1.010)	83	759515	53.7058	53.706	80.00- 120.00	100.00
5.843	5.835 (1.010)	85	493810			34.70- 94.70	65.02
94 Cyclohexane					CAS #: 110-82-7		
5.957	5.957 (1.030)	84	489916	47.9167	47.917	80.00- 120.00	100.00
5.957	5.957 (1.030)	56	912779			142.57- 202.57	186.31
5.957	5.957 (1.030)	41	526701			62.09- 122.09	107.51
96 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.971	5.964 (1.032)	97	819919	51.3207	51.321	80.00- 120.00	100.00
5.971	5.964 (1.032)	99	518540			34.02- 94.02	63.24
97 Carbon Tetrachloride					CAS #: 56-23-5		
6.093	6.086 (1.053)	119	832772	55.5771	55.577	80.00- 120.00	100.00
6.093	6.086 (1.053)	117	831504			70.64- 130.64	99.85
99 1,1-Dichloropropene					CAS #: 563-58-6		
6.122	6.115 (0.918)	110	214133	51.5253	51.525	80.00- 120.00	100.00
6.115	6.115 (0.917)	75	538161			226.85- 286.85	251.32
101 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.279	6.279 (1.085)	57	2892020	51.9648	51.965	80.00- 120.00	100.00
6.279	6.279 (1.085)	56	956402			2.24- 62.24	33.07
6.279	6.279 (1.085)	41	765808			0.00- 54.39	26.48

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	1046574	51.9457	51.946	80.00- 120.00	100.00
6.301	6.301 (0.945)	77	241968			0.00- 52.90	23.12
105 tert-Amyl methyl ether					CAS #: 994-05-8		
6.358	6.358 (0.954)	87	275507	48.4958	48.496	80.00- 120.00	100.00
6.358	6.358 (0.954)	73	1112377			372.79- 432.79	403.76
6.358	6.358 (0.954)	55	427399			112.09- 172.09	155.13
106 1,2-Dichloroethane					CAS #: 107-06-2		
6.380	6.380 (0.957)	62	612126	58.3893	58.389	80.00- 120.00	100.00
6.380	6.380 (0.957)	64	186463			0.79- 60.79	30.46
107 Heptane					CAS #: 142-82-5		
6.444	6.444 (0.967)	71	399417	50.0424	50.042	80.00- 120.00	100.00
6.444	6.444 (0.967)	43	1206638			226.53- 286.53	302.10
6.444	6.444 (0.967)	57	573975			100.85- 160.85	143.70
110 n-Butanol					CAS #: 71-36-3		
6.810	6.809 (1.021)	56	337581	46.0862	46.086	80.00- 120.00	100.00
6.810	6.809 (1.021)	41	256540			40.99- 100.99	75.99
6.810	6.809 (1.021)	43	204114			27.38- 87.38	60.46
111 Trichloroethene					CAS #: 79-01-6		
6.867	6.867 (1.030)	95	531626	54.3786	54.378	80.00- 120.00	100.00
6.867	6.867 (1.030)	130	576568			76.29- 136.29	108.45
6.867	6.867 (1.030)	97	342645			33.63- 93.63	64.45
114 1,2-Dichloropropane					CAS #: 78-87-5		
7.096	7.089 (1.064)	63	552292	53.4699	53.470	80.00- 120.00	100.00
7.096	7.089 (1.064)	62	392978			41.07- 101.07	71.15
7.096	7.096 (1.064)	41	298920			22.53- 82.53	54.12
116 Methyl Methacrylate					CAS #: 80-62-6		
7.139	7.139 (0.755)	69	418384	51.5806	51.581	80.00- 120.00	100.00
7.139	7.132 (0.755)	41	1002521			179.84- 239.84	239.62
7.139	7.139 (0.755)	100	162982			9.59- 69.59	38.96
117 1,4-Dioxane					CAS #: 123-91-1		
7.175	7.175 (1.076)	88	271838	49.5210	49.521	80.00- 120.00	100.00
7.175	7.175 (1.076)	58	285236			68.28- 128.28	104.93
7.175	7.175 (1.076)	57	98970			2.68- 62.68	36.41
118 Dibromomethane					CAS #: 74-95-3		
7.211	7.203 (0.762)	174	505132	57.6630	57.663	80.00- 120.00	100.00
7.203	7.203 (0.761)	93	455544			60.09- 120.09	90.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
118 Dibromomethane (continued)							
7.203	7.203 (0.761)	95	405083			48.38- 108.38	80.19
122 Bromodichloromethane					CAS #: 75-27-4		
7.318	7.318 (1.098)	83	854385	56.3640	56.364	80.00- 120.00	100.00
7.318	7.318 (1.098)	85	553104			35.24- 95.24	64.74
126 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.698	7.691 (1.155)	75	684258	53.4316	53.432	80.00- 120.00	100.00
7.698	7.698 (1.155)	77	218604			2.42- 62.42	31.95
7.691	7.691 (1.154)	39	497874			37.16- 97.16	72.76
127 Methylcyclohexane					CAS #: 108-87-2		
6.974	6.974 (1.046)	83	698783	49.3935	49.393	80.00- 120.00	100.00
6.974	6.974 (1.046)	98	328089			15.78- 75.78	46.95
6.974	6.974 (1.046)	55	858799			84.64- 144.64	122.90
131 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.798	7.798 (1.170)	58	533933	50.9036	50.904	80.00- 120.00	100.00
7.798	7.791 (1.170)	43	1586037			242.35- 302.35	297.05
7.798	7.798 (1.170)	85	161132			3.24- 63.24	30.18
137 Toluene					CAS #: 108-88-3		
7.956	7.948 (1.193)	91	1427656	51.3605	51.360	80.00- 120.00	100.00
7.956	7.948 (1.193)	92	828240			28.38- 88.38	58.01
136 Octane					CAS #: 111-65-9		
7.948	7.948 (1.192)	57	625812	52.8015	52.802	80.00- 120.00	100.00
7.948	7.948 (1.192)	85	481704			56.00- 116.00	76.97
7.948	7.948 (1.192)	43	1759848			228.66- 288.66	281.21
139 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.213	8.213 (0.868)	75	646982	55.6924	55.692	80.00- 120.00	100.00
8.213	8.213 (0.868)	77	200778			1.24- 61.24	31.03
8.213	8.213 (0.868)	39	459201			34.11- 94.11	70.98
141 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.400	8.400 (0.888)	97	520863	54.2448	54.245	80.00- 120.00	100.00
8.400	8.400 (0.888)	99	319604			31.96- 91.96	61.36
8.400	8.400 (0.888)	83	433462			52.93- 112.93	83.22
142 Tetrachloroethene					CAS #: 127-18-4		
8.464	8.464 (0.895)	166	747631	55.5690	55.569	80.00- 120.00	100.00
8.464	8.464 (0.895)	129	579741			47.84- 107.84	77.54
8.464	8.464 (0.895)	131	556448			45.29- 105.29	74.43

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	704773	51.3736	51.374	80.00- 120.00	100.00
8.586	8.586 (0.908)	43	1479411			162.87- 222.87	209.91
8.586	8.586 (0.908)	100	102249			0.00- 45.94	14.51
144 1,3-Dichloropropane					CAS #: 142-28-9		
8.579	8.579 (1.287)	76	699664	53.0038	53.004	80.00- 120.00	100.00
8.579	8.579 (1.287)	41	966342			94.99- 154.99	138.12
8.579	8.579 (1.287)	78	230142			2.05- 62.05	32.89
146 Dibromochloromethane					CAS #: 124-48-1		
8.801	8.801 (0.930)	129	1031428	57.4905	57.490	80.00- 120.00	100.00
8.801	8.801 (0.930)	127	808449			47.45- 107.45	78.38
148 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.951	8.951 (0.946)	107	871834	56.6110	56.611	80.00- 120.00	100.00
8.951	8.951 (0.946)	109	823203			64.21- 124.21	94.42
151 1-Bromo-2-Chloroethane					CAS #: 107-04-0		
7.605	7.605 (1.141)	63	1030601	54.3800	54.380	80.00- 120.00	100.00
7.605	7.605 (1.141)	65	303765			0.00- 59.64	29.47
7.605	7.605 (1.141)	144	100180			0.00- 39.63	9.72
154 Chlorobenzene					CAS #: 108-90-7		
9.496	9.496 (1.004)	112	1270162	54.1855	54.185	80.00- 120.00	100.00
9.496	9.496 (1.004)	114	404234			1.74- 61.74	31.83
9.496	9.496 (1.004)	77	665054			25.04- 85.04	52.36
155 Ethyl Benzene					CAS #: 100-41-4		
9.567	9.567 (1.011)	106	639615	52.1821	52.182	80.00- 120.00	100.00
9.567	9.567 (1.011)	91	1927287			273.74- 333.74	301.32
156 Nonane					CAS #: 111-84-2		
9.603	9.596 (1.015)	43	1843912	58.4686	58.469	80.00- 120.00	100.00
9.603	9.596 (1.015)	57	1406510			54.16- 114.16	76.28
9.603	9.596 (1.015)	85	373686			0.00- 53.90	20.27
157 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.596	9.596 (1.014)	131	612427	46.6637	46.664	80.00- 120.00	100.00
9.460	9.460 (1.000)	117	590330			57.42- 117.42	96.39
9.596	9.603 (1.014)	95	218107			5.70- 65.70	35.61
158 m,p-Xylene					CAS #: 108-38-3		
9.718	9.718 (1.027)	106	793494	51.6880	51.688	80.00- 120.00	100.00
9.718	9.718 (1.027)	91	1536889			163.73- 223.73	193.69

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	754765	51.3145	51.314	80.00- 120.00	100.00
10.226	10.226 (1.081)	91	1517450			177.45- 237.45	201.05
165 Styrene					CAS #: 100-42-5		
10.255	10.255 (1.084)	104	1235287	49.1079	49.108	80.00- 120.00	100.00
10.255	10.255 (1.084)	78	580420			17.88- 77.88	46.99
167 Bromoform					CAS #: 75-25-2		
10.541	10.541 (1.114)	173	995693	56.3043	56.304	80.00- 120.00	100.00
10.541	10.541 (1.114)	171	515479			21.25- 81.25	51.77
168 Cumene					CAS #: 98-82-8		
10.649	10.649 (1.126)	105	2356256	50.9961	50.996	80.00- 120.00	100.00
10.649	10.649 (1.126)	120	684234			0.00- 58.52	29.04
10.649	10.649 (1.126)	51	340031			0.00- 43.00	14.43
169 Cyclohexanone					CAS #: 108-94-1		
10.871	10.871 (1.149)	55	688293	41.6540	41.654	80.00- 120.00	100.00
10.871	10.871 (1.149)	98	197735			1.94- 61.94	28.73
10.871	10.871 (1.149)	42	471129			37.89- 97.89	68.45
175 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.100	11.107 (1.173)	83	1208165	53.5730	53.573	80.00- 120.00	100.00
11.100	11.100 (1.173)	85	775807			35.20- 95.20	64.21
177 Bromobenzene					CAS #: 108-86-1		
11.107	11.107 (1.174)	156	776111	55.2287	55.229	80.00- 120.00	100.00
11.107	11.107 (1.174)	158	757550			67.21- 127.21	97.61
11.179	11.179 (1.182)	77	452104			29.02- 89.02	58.25
178 Propylbenzene					CAS #: 103-65-1		
11.150	11.150 (1.179)	120	722383	52.7280	52.728	80.00- 120.00	100.00
11.150	11.150 (1.179)	91	2804747			366.49- 426.49	388.26
11.150	11.150 (1.179)	105	107729			0.00- 44.85	14.91
179 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.179	11.179 (1.182)	110	378309	52.6322	52.632	80.00- 120.00	100.00
11.179	11.179 (1.182)	75	1188231			280.55- 340.55	314.09
11.100	11.100 (1.173)	61	179345			15.49- 75.49	47.41
181 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.179	11.179 (1.182)	53	334246	70.9348	70.935	80.00- 120.00	100.00(R)
11.179	11.165 (1.182)	89	230369			49.11- 109.11	68.92
11.179	11.179 (1.182)	75	1188231			426.44- 486.44	355.50

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	1888303	52.5403	52.540	80.00- 120.00	100.00
11.251	11.251 (1.189)	71	487326			0.00- 57.66	25.81
11.258	11.258 (1.190)	142	71726			0.00- 34.09	3.80
183 4-Ethyltoluene					CAS #: 622-96-8		
11.286	11.286 (1.193)	120	773911	51.9439	51.944	80.00- 120.00	100.00
11.286	11.286 (1.193)	105	2400765			284.55- 344.55	310.21
184 2-Chlorotoluene					CAS #: 95-49-8		
11.308	11.308 (1.195)	126	622471	53.3611	53.361	80.00- 120.00	100.00
11.308	11.308 (1.195)	91	2075496			315.17- 375.17	333.43
11.301	11.301 (1.195)	65	295642			21.55- 81.55	47.49
185 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.365	11.365 (1.201)	120	1067729	52.0514	52.051	80.00- 120.00	100.00
11.365	11.365 (1.201)	105	2035681			164.93- 224.93	190.66
188 alpha Methyl Styrene					CAS #: 98-83-9		
11.645	11.645 (1.231)	118	881511	43.2578	43.258	80.00- 120.00	100.00
11.645	11.645 (1.231)	103	486250			25.30- 85.30	55.16
189 tert-Butylbenzene					CAS #: 98-06-6		
11.738	11.745 (1.241)	119	2030186	52.9152	52.915	80.00- 120.00	100.00
11.745	11.745 (1.242)	134	504146			0.00- 54.25	24.83
11.738	11.738 (1.241)	91	1198705			31.27- 91.27	59.04
190 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.816	11.816 (1.249)	105	2009680	51.9054	51.905	80.00- 120.00	100.00
11.816	11.816 (1.249)	120	1015636			19.05- 79.05	50.54
192 sec-Butylbenzene					CAS #: 135-98-8		
11.996	11.995 (1.268)	134	642848	53.9095	53.909	80.00- 120.00	100.00
11.996	11.995 (1.268)	105	2954324			437.55- 497.55	459.57
11.996	11.995 (1.268)	91	446869			40.76- 100.76	69.51
194 p-Cymene					CAS #: 99-87-6		
12.160	12.160 (1.285)	119	2756185	52.2942	52.294	80.00- 120.00	100.00
12.160	12.160 (1.285)	134	717341			0.00- 55.54	26.03
12.160	12.160 (1.285)	91	573706			0.00- 51.48	20.82
195 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.196	12.203 (1.289)	146	1457964	55.0147	55.015	80.00- 120.00	100.00
12.203	12.203 (1.290)	148	928872			33.21- 93.21	63.71
12.196	12.196 (1.289)	111	575551			11.31- 71.31	39.48

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	1467343	54.7910	54.791	80.00- 120.00	100.00
12.311	12.311 (1.301)	148	936342			33.90- 93.90	63.81
12.311	12.311 (1.301)	111	563552			9.45- 69.45	38.41
199 alpha-Chlorotoluene					CAS #: 100-44-7		
12.461	12.461 (1.317)	91	1869764	50.8424	50.842	80.00- 120.00	100.00
12.461	12.461 (1.317)	126	441579			0.00- 53.26	23.62
201 Undecane					CAS #: 1120-21-4		
12.640	12.640 (1.336)	57	2272845	54.7485	54.748	80.00- 120.00	100.00
12.640	12.640 (1.336)	43	2191609			58.12- 118.12	96.43
202 Butylbenzene					CAS #: 104-51-8		
12.626	12.626 (1.335)	134	694499	51.8817	51.882	80.00- 120.00	100.00
12.626	12.626 (1.335)	91	2366476			314.79- 374.79	340.75
12.626	12.626 (1.335)	92	1252306			154.29- 214.29	180.32
204 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.733	12.740 (1.346)	146	1391530	53.5498	53.550	80.00- 120.00	100.00
12.733	12.740 (1.346)	148	889520			33.84- 93.84	63.92
12.733	12.733 (1.346)	111	571738			12.73- 72.73	41.09
206 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
13.600	13.600 (1.438)	157	867048	55.0898	55.090	80.00- 120.00	100.00
13.600	13.600 (1.438)	75	687507			52.48- 112.48	79.29
13.600	13.600 (1.438)	155	674158			47.41- 107.41	77.75
207 Dodecane					CAS #: 112-40-3		
13.801	13.801 (1.459)	57	2352594	71.4958	71.496	80.00- 120.00	100.00(R)
13.801	13.801 (1.459)	43	2108400			52.87- 112.87	89.62
213 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
14.467	14.467 (1.529)	180	1420034	73.9630	73.963	80.00- 120.00	100.00
14.467	14.467 (1.529)	182	1354523			65.33- 125.33	95.39
215 Hexachlorobutadiene					CAS #: 87-68-3		
14.581	14.581 (1.541)	225	1050312	77.7325	77.732	80.00- 120.00	100.00(R)
14.581	14.581 (1.541)	223	651967			33.17- 93.17	62.07
216 Naphthalene					CAS #: 91-20-3		
14.768	14.768 (1.561)	128	315885	6.43779	6.438	80.00- 120.00	100.00
14.761	14.768 (1.560)	127	38426			0.00- 42.88	12.16
222 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
15.069	15.068 (1.593)	180	1353318	79.7360	79.736	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	15.068 (1.593)	182	1289818			65.75- 125.75	95.31
15.069	15.068 (1.593)	145	458322			5.23- 65.23	33.87

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

US32TAR1

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p080204.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LD
Method File: /chem/msdp.i/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 02-AUG-2021
Calibration Time: 10:30
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
90 Bromochloromethan	149292	89575	209009	162538	8.87
108 1,4-Difluorobenze	558135	334881	781389	610537	9.39
153 Chlorobenzene-d5	542388	325433	759343	590330	8.84

		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	6.67	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.

US32TAR1

RECOVERY REPORT

Client Name: Client SDG: 02AUG21
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/02AUG21.b/p21q0519a.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Freon 134a	50.000	59.078	118.16	70-130
5 Propylene	50.000	54.321	108.64	70-130
7 1,1-Difluoroethan	50.000	49.404	98.81	70-130
8 Freon 12	50.000	53.681	107.36	70-130
9 Chlorodifluoromet	50.000	56.237	112.47	70-130
10 Freon 114	50.000	51.377	102.75	70-130
12 Isobutane	50.000	54.563	109.13	70-130
15 Chloromethane	50.000	49.530	99.06	70-130
18 Butane	50.000	48.038	96.08	70-130
19 Vinyl Chloride	50.000	46.427	92.85	70-130
20 1,3-Butadiene	50.000	58.055	116.11	70-130
24 Bromomethane	50.000	45.156	90.31	70-130
30 Chloroethane	50.000	47.854	95.71	70-130
31 Isopentane	50.000	54.047	108.09	70-130
32 Vinyl Bromide	50.000	47.556	95.11	70-130
33 Freon 11	50.000	53.797	107.59	70-130
34 Dichlorofluoromet	50.000	49.705	99.41	70-130
35 Pentane	50.000	51.885	103.77	70-130
38 Ethyl Ether	50.000	47.257	94.51	70-130
39 Ethanol	58.000	51.957	89.58	70-130
42 Acrolein	58.000	52.526	90.56	70-130
43 Freon 113	50.000	49.740	99.48	70-130
44 1,1-Dichloroethen	50.000	48.767	97.53	70-130
47 Acetone	50.000	51.352	102.70	70-130
48 Carbon Disulfide	50.000	47.498	95.00	70-130
49 Iodomethane	50.000	62.386	124.77	70-130
52 2-Propanol	50.000	54.312	108.62	70-130
54 3-Chloropropene	50.000	46.811	93.62	70-130
57 Acetonitrile	50.000	54.881	109.76	70-130
59 Methylene Chlorid	50.000	58.055	116.11	70-130
62 tert-Butyl alcoho	50.000	47.896	95.79	70-130
63 Methyl tert-butyl	50.000	46.145	92.29	70-130
64 trans-1,2-Dichlor	50.000	48.069	96.14	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
66	Acrylonitrile	50.000	55.489	110.98	70-130
67	Hexane	50.000	51.668	103.34	70-130
71	1,1-Dichloroethan	50.000	52.689	105.38	70-130
72	Isopropyl ether	50.000	54.757	109.51	70-130
73	Vinyl Acetate	50.000	47.815	95.63	70-130
79	Ethyl-tert-butyl	50.000	49.296	98.59	70-130
84	2,2-Dichloropropa	50.000	50.666	101.33	70-130
85	cis-1,2-Dichloroe	50.000	51.906	103.81	70-130
86	2-Butanone	50.000	48.280	96.56	70-130
87	Ethyl Acetate	50.000	57.951	115.90	70-130
89	Tetrahydrofuran	50.000	58.662	117.32	70-130
92	Chloroform	50.000	53.706	107.41	70-130
94	Cyclohexane	50.000	47.917	95.83	70-130
96	1,1,1-Trichloroet	50.000	51.321	102.64	70-130
99	1,1-Dichloroprope	50.000	51.525	103.05	70-130
97	Carbon Tetrachlor	50.000	55.577	111.15	70-130
101	2,2,4-Trimethylpe	50.000	51.965	103.93	70-130
102	Benzene	50.000	51.946	103.89	70-130
105	tert-Amyl methyl	50.000	48.496	96.99	70-130
106	1,2-Dichloroethan	50.000	58.389	116.78	70-130
107	Heptane	50.000	50.042	100.08	70-130
110	n-Butanol	50.000	46.086	92.17	70-130
111	Trichloroethene	50.000	54.378	108.76	70-130
118	Dibromomethane	50.000	57.663	115.33	70-130
127	Methylcyclohexane	50.000	49.393	98.79	70-130
114	1,2-Dichloropropa	50.000	53.470	106.94	70-130
116	Methyl Methacryla	50.000	51.581	103.16	70-130
117	1,4-Dioxane	50.000	49.521	99.04	70-130
122	Bromodichlorometh	50.000	56.364	112.73	70-130
126	cis-1,3-Dichlorop	50.000	53.432	106.86	70-130
131	4-Methyl-2-pentan	50.000	50.904	101.81	70-130
136	Octane	50.000	52.802	105.60	70-130
137	Toluene	50.000	51.360	102.72	70-130
139	trans-1,3-Dichlor	50.000	55.692	111.38	70-130
141	1,1,2-Trichloroet	50.000	54.245	108.49	70-130
142	Tetrachloroethene	50.000	55.569	111.14	70-130
143	2-Hexanone	50.000	51.374	102.75	70-130
144	1,3-Dichloropropa	50.000	53.004	106.01	70-130
146	Dibromochlorometh	50.000	57.490	114.98	70-130
148	1,2-Dibromoethane	50.000	56.611	113.22	70-130
151	1-Bromo-2-Chloroe	50.000	54.380	108.76	70-130
154	Chlorobenzene	50.000	54.185	108.37	70-130
155	Ethyl Benzene	50.000	52.182	104.36	70-130
156	Nonane	50.000	58.469	116.94	70-130
157	1,1,1,2-Tetrachlo	50.000	46.664	93.33	70-130
158	m,p-Xylene	50.000	51.688	103.38	70-130
164	o-Xylene	50.000	51.314	102.63	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
165	Styrene	50.000	49.108	98.22	70-130
167	Bromoform	50.000	56.304	112.61	70-130
168	Cumene	50.000	50.996	101.99	70-130
169	Cyclohexanone	50.000	41.654	83.31	70-130
175	1,1,2,2-Tetrachlo	50.000	53.573	107.15	70-130
177	Bromobenzene	50.000	55.229	110.46	70-130
178	Propylbenzene	50.000	52.728	105.46	70-130
179	1,2,3-Trichloropr	50.000	52.632	105.26	70-130
181	trans-1,4-Dichlor	50.000	70.935	141.87*	70-130
182	Decane	50.000	52.540	105.08	70-130
183	4-Ethyltoluene	50.000	51.944	103.89	70-130
184	2-Chlorotoluene	50.000	53.361	106.72	70-130
185	1,3,5-Trimethylbe	50.000	52.051	104.10	70-130
188	alpha Methyl Styr	50.000	43.258	86.52	70-130
189	tert-Butylbenzene	50.000	52.915	105.83	70-130
190	1,2,4-Trimethylbe	50.000	51.905	103.81	70-130
192	sec-Butylbenzene	50.000	53.909	107.82	70-130
194	p-Cymene	50.000	52.294	104.59	70-130
195	1,3-Dichlorobenze	50.000	55.015	110.03	70-130
196	1,4-Dichlorobenze	50.000	54.791	109.58	70-130
199	alpha-Chlorotolue	50.000	50.842	101.68	70-130
201	Undecane	50.000	54.748	109.50	70-130
202	Butylbenzene	50.000	51.882	103.76	70-130
204	1,2-Dichlorobenze	50.000	53.550	107.10	70-130
206	1,2-Dibromo-3-chl	50.000	55.090	110.18	70-130
207	Dodecane	50.000	71.496	142.99*	70-130
213	1,2,4-Trichlorobe	58.000	73.963	127.52	70-130
215	Hexachlorobutadie	58.000	77.732	134.02*	70-130
216	Naphthalene	5.800	6.438	111.00	60-140
222	1,2,3-Trichlorobe	58.000	79.736	137.48*	70-130

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 104	1,2-Dichloroethan	25.000	25.393	101.57	70-130
$ 134	Toluene-d8	25.000	25.152	100.61	70-130
$ 170	4-Bromofluorobenz	25.000	25.333	101.33	70-130

Data File: /chem/msdp.i/02AUG21.b/p080204.d

Page 1

Date : 02-AUG-2021 11:27

Client ID: LCSD

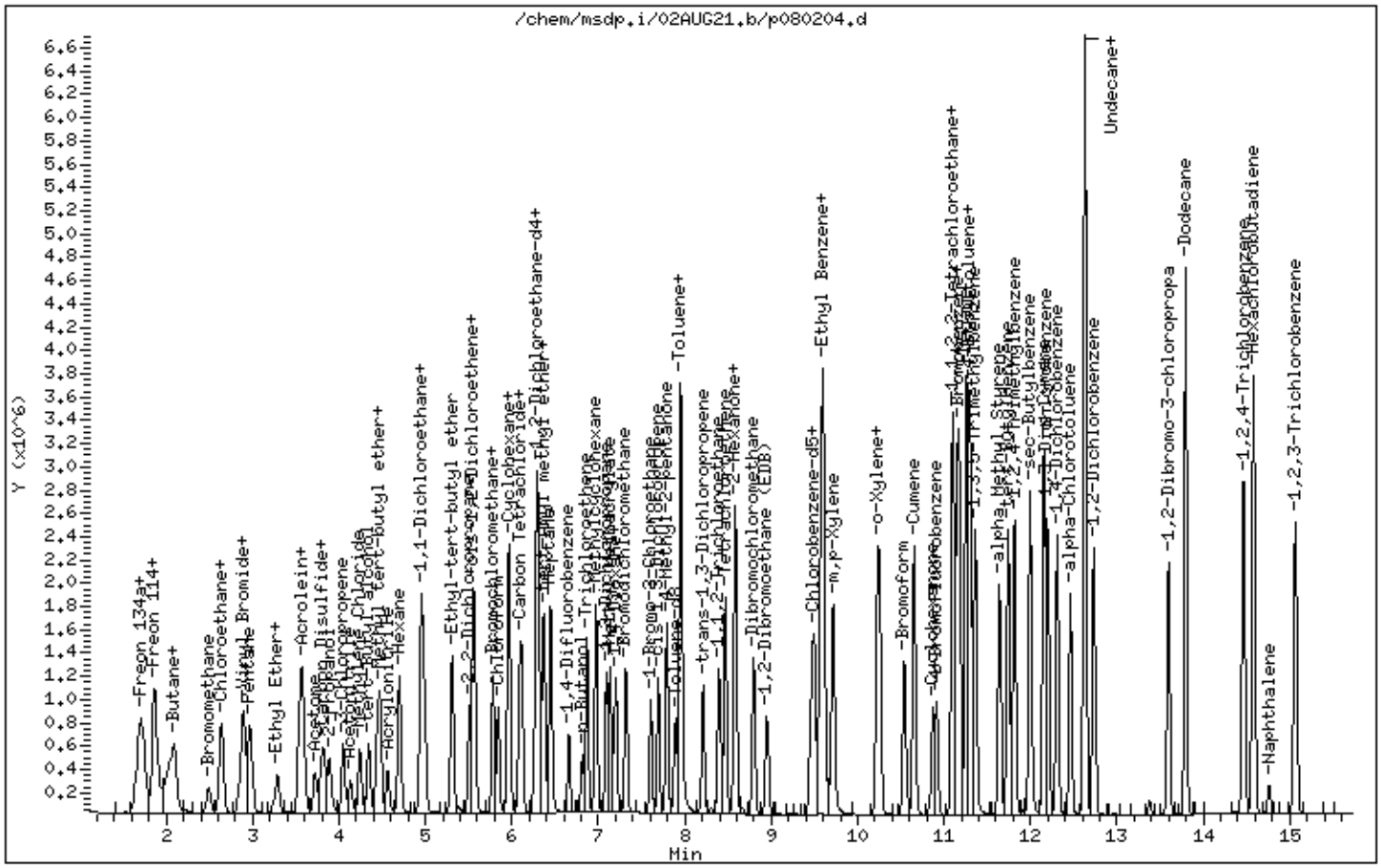
Instrument: msdp.i

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: (114968/119664) * 100 = 96.08%							**SOP# 6**					
		3234-10	**Exp. Date:**		**8/17/21**			**Vacuum:**	NA				
	BCM	149,292				Please check all standards							
	1,4-DFB	558,135				Surr.# 3234-10		**Exp. Date:**	**8/17/21**	Surrogate# NA		**Exp. Date:**	**NA**
	CB-d5	542,388				CCV: 3018-2125A		**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
√	P080201	BFB Tune Check	3234-10	4	36ng	200ml	1.00	LD	LD	8/2/2021	0948	LD	Exp. 8/17/21. leg validation
√	P080202	CCV	3018-2125A	13	50ppbv (100ppbv)	100mL	1.00	LD	LD	8/2/2021	1030	LD	Exp. 9/28/21; 0 out
√	P080203	LCS	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	8/2/2021	1058	LD	Exp. 9/23/21. 1 out AT-20
√	P080204	LCSD	3018-2122A	14	50ppbv (100ppbv)	100mL	1.00	LD	LD	8/2/2021	1127	LD	Exp. 9/23/21; RPD ok
√	P080205	CCVsp	3018-2013	12	50ppbv (200ppbv)	50mL	1.00	LD	LD	8/2/2021	1155	LD	Exp. 8/04/21; 2 out
√	P080206	TPHg Calib	3234-26A	11	500ppbv(625ppbv)	160mL	1.00	LD	LD	8/2/2021	1225	LD	Exp. 9/03/21;
√	P080207	Lab Blank	35157	11	Humid	200ml	1.00	LD	LD	8/2/2021	1334	LD	leg validation
√	P080208	2107362B-14A	B2103	1	5.0 Hg->10 psi	200ml	2.02	mb	LD	8/2/2021	1454	mb	
√	P080209	2107362B-18A	N2012	2	5.0 Hg->10 psi	200ml	2.02	mb	LD	8/2/2021	1523	mb	
√	P080210	2107362B-19A	3344	3	6.0 Hg->10 psi	200ml	2.10	mb	LD	8/2/2021	1552	mb	
√	P080211	2107362B-13A	N3113	4	7.0 Hg->10 psi	200ml	2.19	mb	LD	8/2/2021	1622	mb	
√	P080212	2107362B-16A	N3870	5	6.5 Hg->10 psi	90mL	4.77	mb	LD	8/2/2021	1650	mb	dil TC
√	P080213	2107362B-17A	N6045	6	5.0 Hg->10 psi	50mL	8.06	mb	LD	8/2/2021	1718	mb	dil TC
√	P080214	2107362B-15A	N5570	7	6.0 Hg->10 psi	32mL	13.1	mb	LD	8/2/2021	1746	mb	dil TC
√	P080215	2107684-01A	S1407	8	5.9 Hg->10.1 psi	120mL	350	mb	LD	8/2/2021	1815	mb	Can Dilution 100X, DF=350, dil TC
X	P080216	2107684-02A	O0762	9	6.5 Hg->9.8 psi	90mL	4.73	mb	LD	8/2/2021	1844	mb	overdil rr @ 200ml

MJ3 8/5/21

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

					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	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

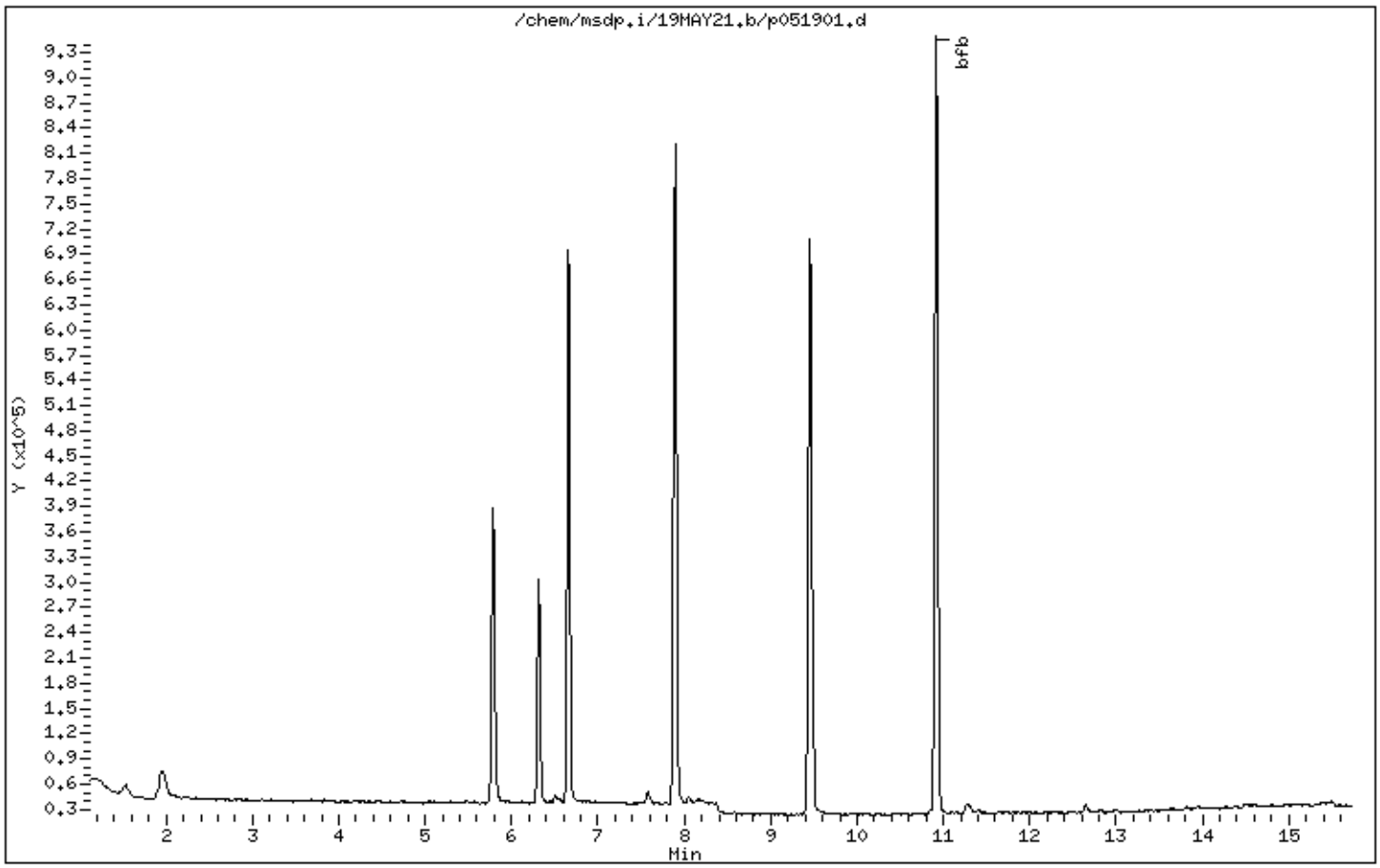
Sample Info: 200ml #3234-10;BFB;BFB

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

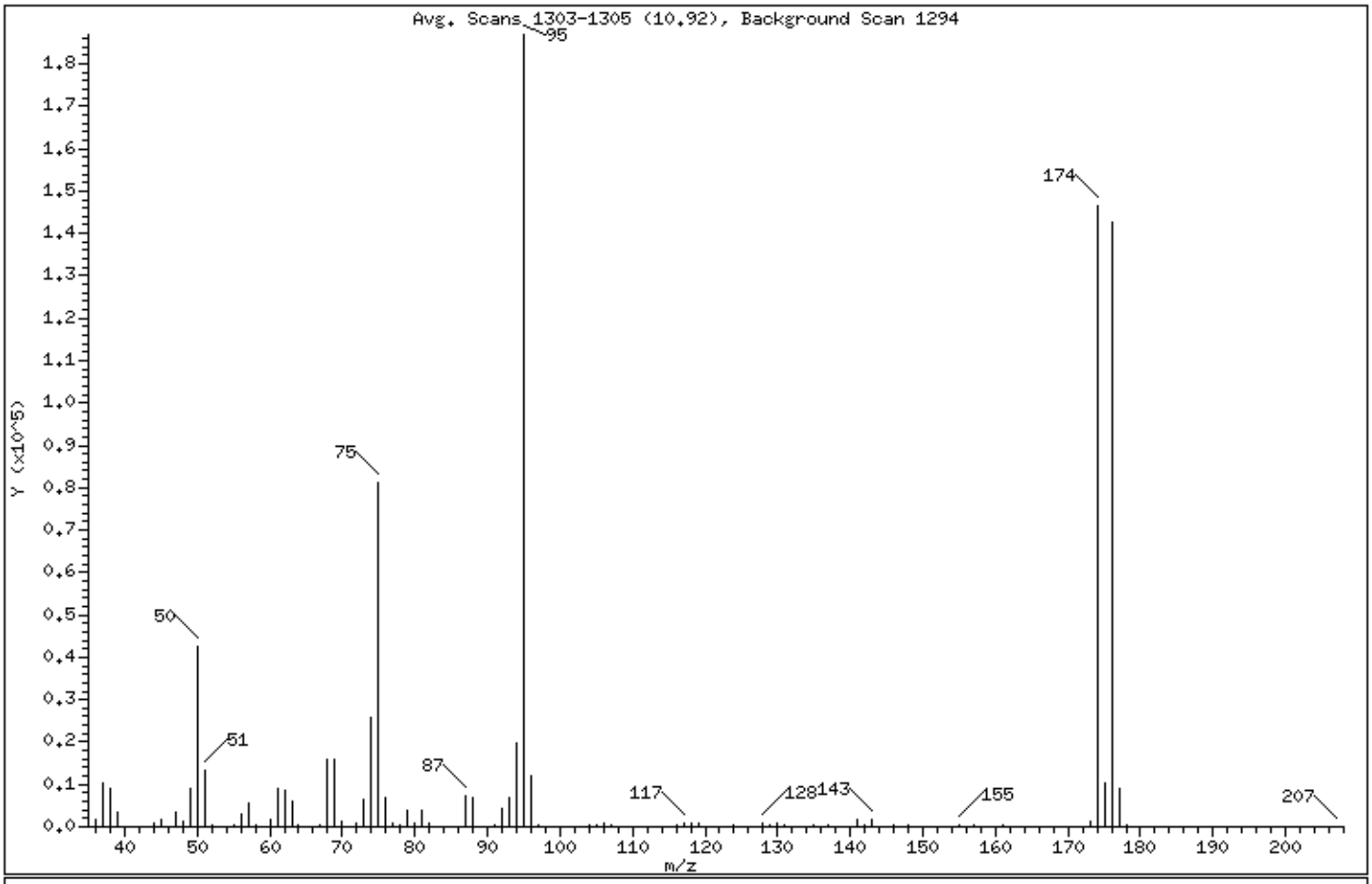
Volume Injected (uL): 1.0

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/02AUG21.b/p080201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 02-AUG-2021 09:48
Operator : LD Inst ID: msdp.i
Smp Info : 200ml #3234-10;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdp.i/02AUG21.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		
10.914	10.993	-0.079	95	151616			100.00- 100.00	100.00
10.914	10.993	-0.079	50	42439			8.00- 40.00	27.99
10.914	10.993	-0.079	75	70424			30.00- 66.00	46.45
10.914	10.993	-0.079	96	10108			5.00- 9.00	6.67
10.914	10.993	-0.079	173	1172			0.00- 1.99	0.98
10.914	10.993	-0.079	174	119664			50.01- 120.00	78.93
10.914	10.993	-0.079	175	8386			4.00- 9.00	7.01
10.914	10.993	-0.079	176	114968			93.00- 101.00	96.08
10.914	10.993	-0.079	177	7492			5.00- 9.00	6.52

Data File: /chem/msdp.i/02AUG21.b/p080201.d

Date : 02-AUG-2021 09:48

Client ID: BFB

Instrument: msdp.i

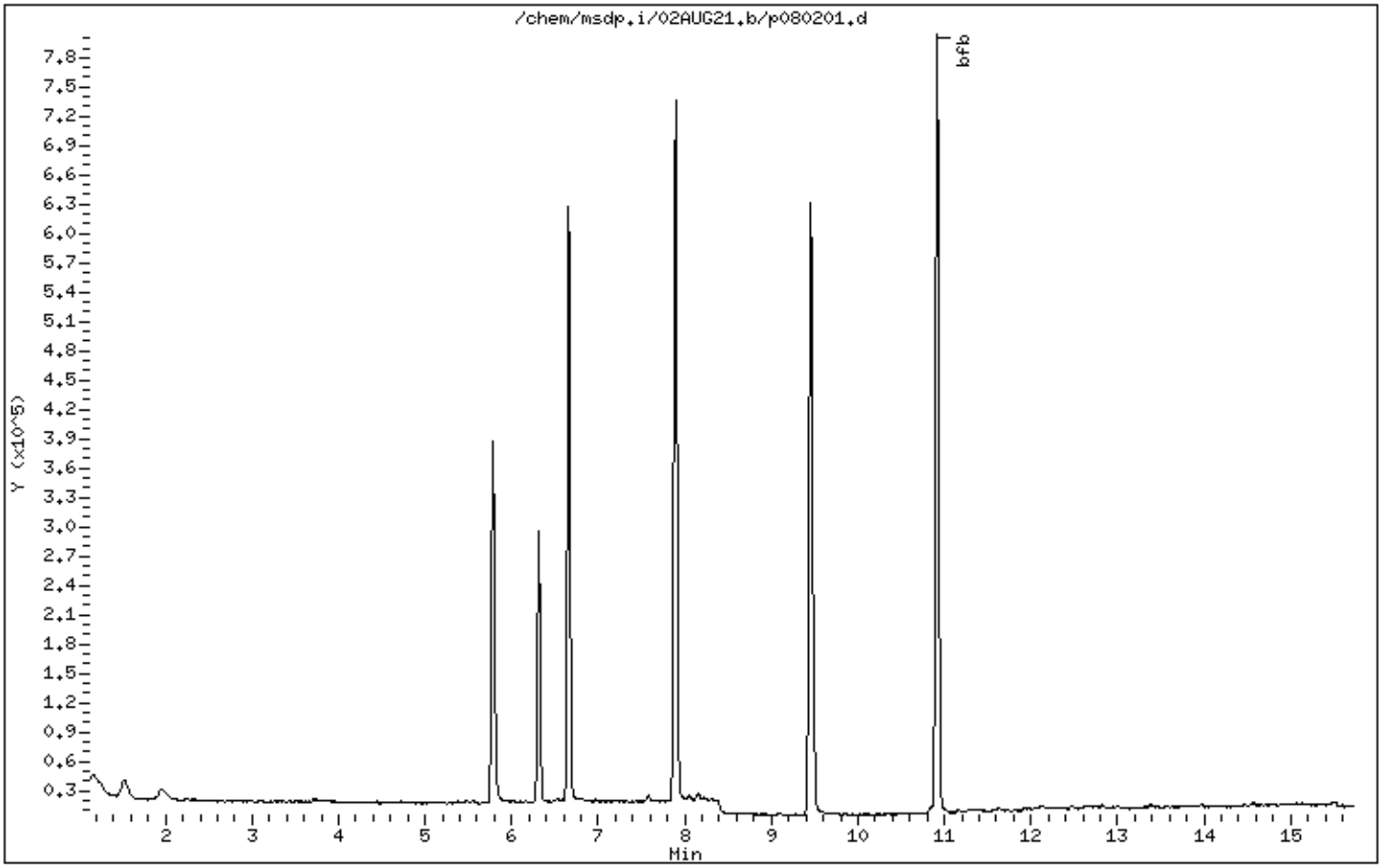
Sample Info: 200ml #3234-10;BFB;BFB

Volume Injected (uL): 1.0

Operator: LD

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/02AUG21.b/p080201.d

Date : 02-AUG-2021 09:48

Client ID: BFB

Instrument: msdp.i

Sample Info: 200ml #3234-10;BFB;BFB

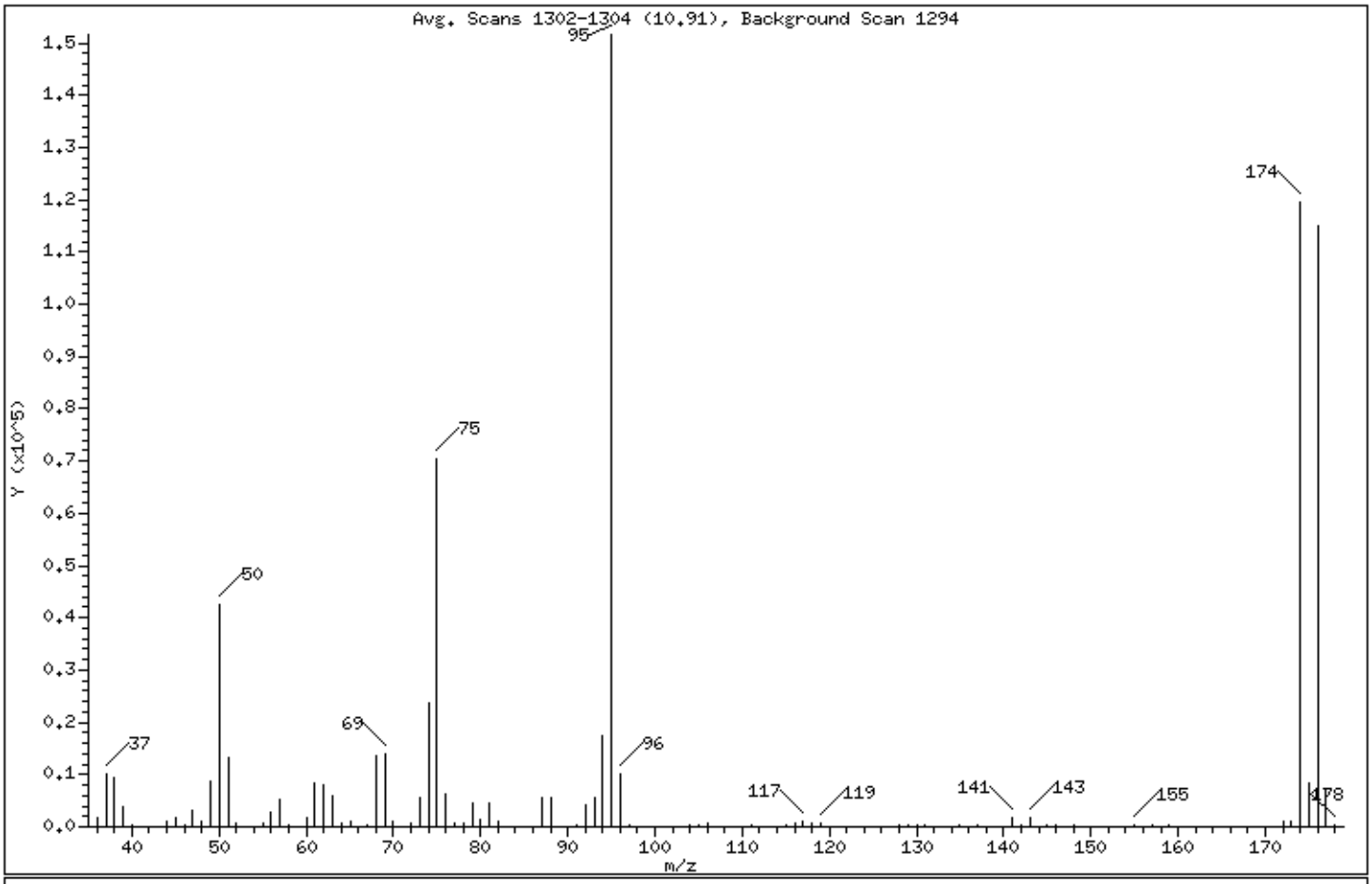
Volume Injected (uL): 1.0

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	27.99
75	30.00 - 66.00% of mass 95	46.45
96	5.00 - 9.00% of mass 95	6.67
173	Less than 1.99% of mass 174	0.77 (0.98)
174	50.01 - 120.00% of mass 95	78.93
175	4.00 - 9.00% of mass 174	5.53 (7.01)
176	93.00 - 101.00% of mass 174	75.83 (96.08)
177	5.00 - 9.00% of mass 176	4.94 (6.52)

Date : 02-AUG-2021 09:48

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: p080201.d
Spectrum: Avg. Scans 1302-1304 (10.91), Background Scan 1294
Location of Maximum: 95.00
Number of points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1669	64.00	771	95.00	151616	140.00	164
37.00	10114	65.00	907	96.00	10108	141.00	1605
38.00	9487	67.00	425	97.00	303	142.00	194
39.00	3707	68.00	13597	98.00	36	143.00	1676
40.00	180	69.00	14110	103.00	33	144.00	33
41.00	29	70.00	1064	104.00	484	145.00	213
43.00	60	72.00	859	105.00	197	146.00	184
44.00	1120	73.00	5716	106.00	778	148.00	417
45.00	1753	74.00	23752	107.00	144	150.00	163
46.00	204	75.00	70424	109.00	117	153.00	121
47.00	3134	76.00	6136	111.00	229	155.00	319
48.00	1130	77.00	794	112.00	137	157.00	279
49.00	8563	78.00	632	113.00	173	159.00	225
50.00	42432	79.00	4555	115.00	187	161.00	147
51.00	13104	80.00	1354	116.00	653	171.00	123
52.00	594	81.00	4561	117.00	1157	172.00	1105
53.00	158	82.00	1069	118.00	640	173.00	1172
54.00	158	83.00	127	119.00	868	174.00	119664
55.00	607	85.00	82	124.00	43	175.00	8386
56.00	2865	86.00	137	126.00	34	176.00	114968
57.00	5338	87.00	5613	128.00	463	177.00	7492
58.00	239	88.00	5735	129.00	269	178.00	283
60.00	1766	91.00	520	130.00	473		
61.00	8203	92.00	4012	131.00	275		
62.00	7926	93.00	5660	135.00	306		
63.00	6097	94.00	17448	137.00	316		

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.

Samples SSV-JSS01-01, SSV-HSS01-01, SSV-HMBSS01-01, SSV-GSS01-01, SSV-GSS02-01, SSV-FSS02-01 and SSV-FSS01-01 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 #: 2107362

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 Kuhlhardt Project # 60632793.6
Sampler: T. Headrick
Site Name:

Special Instructions/Notes: Level IV Reporting
Invoicing To:
SWPP Queen
Report Email To:
Robert.Kuhlhardt@AECOM.com

Turnaround Time (Rush surcharges may apply)
Standard ✓ 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-VW61A-01	1L3927	21473	7/15/21	0625	7/15/21	0632	-26.5	-5			X				
02A	SG-VW61B-01	1L2913	25444	7/15/21	0653	7/15/21	0658	-27	-1			X				
03A	SG-VW62-01	LC1134	24649	7/15/21	0729	7/15/21	0734	-26	-5			X				
04A	SG-VW30A-03	1028	22504	7/15/21	0811	7/15/21	0817	-27	-5			X				
05A	SG-VW30B-03	1L3365	21418	7/15/21	0855	7/15/21	0901	-27	-5			X				
06A	SG-VW63A-01	1L1839	21412	7/15/21	0946	7/15/21	0954	-26.5	-5			X				
07A	SG-VW63B-01	1L2038	20557	7/15/21	1014	7/15/21	1022	-27	-5			X				
08A	SG-VW64A-01	1L2201	100503	7/15/21	1059	7/15/21	1109	-27	-5			X				
09A	SG-VW64B-01	1L3957	25035	7/15/21	1136	7/15/21	1141	-26.5	-5			X				
10A	SG-VW29A-02	1L2315	25303	7/15/21	1233	7/15/21	1238	-27.5	-4			X				
11A	SG-VW29B-02	1L2741	20283	7/15/21	1257	7/15/21	1305	-28	-5			X				
~~12A~~	SG-VW28B-02	1L3231	25472	7/15/21	1345	7/15/21	1350	-25.5	-5			X				
13A	SSV-JSS01-01	1L3079	21427	7/15/21	1448	7/15/21	1454	-28	-5			X				
14A	SSV-HSS01-01	LC662	21416	7/15/21	1505	7/15/21	1513	-27.5	-5			X				
15A	SSV-HMB5501-01	1L3375	25462	7/15/21	1525	7/15/21	1530	-26.5	-5			X				
16A	SSV-GSS01-01	1L3868	21476	7/15/21	1546	7/15/21	1553	-27	-5			X				

	Date	Time		Date	Time
Relinquished by: (Signature/Affiliation)	7/15/21	1815	Received by: (Signature/Affiliation)	7/15/21	1815
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		
Relinquished by: (Signature/Affiliation)			Received by: (Signature/Affiliation)		

Lab Use Only

Shipper Name: FD | Custody Seals Intact? Yes No None | Good

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

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 # 60632193.6

Sampler: T. Headrick

Site Name:

Special Instructions/Notes: Level IV Reporting
Invoicing TO:
SWSP 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	SSV-GSS02-01	IL2180	25474	7/15/21	1604	7/15/21	1609	-27	-5			X			
18A	SSV-FSS02-01	IL2668	25387	7/15/21	1626	7/15/21	1633	-27.5	-5			X			
19A	SSV-FSS01-01	3344	21406	7/15/21	1642	7/15/21	1649	-27	-5			X			

Relinquished by: (Signature/Affiliation)	Date 7/15/21	Time 1815	Received by: (Signature/Affiliation)	Date 7/15/21	Time 1815
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: FD | Custody Seals Intact? | Yes | No | None | 6.0 C

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 2107362B

Client

Mr. Robert Kohlhardt
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

Phone

916-679-2000

Fax

916-679-2900

Date Promised: 08/05/21
Date Completed: 8/5/21
Date Received: 7/15/21
PO#:
Project#: 60632793.6 SMUD 59th St

Total $: $ 1,071.00
Logged By: JCW

Sales Rep: DaV

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
13A	SSV-JSS01-01	TO-15	7/15/2021	7.0 "Hg	$150.00
14A	SSV-HSS01-01	TO-15	7/15/2021	5.0 "Hg	$150.00
15A	SSV-HMBSS01-01	TO-15	7/15/2021	6.0 "Hg	$150.00
16A	SSV-GSS01-01	TO-15	7/15/2021	6.5 "Hg	$150.00
17A	SSV-GSS02-01	TO-15	7/15/2021	5.0 "Hg	$150.00
18A	SSV-FSS02-01	TO-15	7/15/2021	5.0 "Hg	$150.00
19A	SSV-FSS01-01	TO-15	7/15/2021	6.0 "Hg	$150.00
20A	Lab Blank	TO-15	NA	NA	$0.00
21A	CCV	TO-15	NA	NA	$0.00
22A	LCS	TO-15	NA	NA	$0.00
22AA	LCSD	TO-15	NA	NA	$0.00

Misc. Charges eCVP (7) @ $3.00 each. $21.00

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 alphanumeric)

eurofins | Air Toxics

Analysis Request /Canister Chain of Custody

For Laboratory Use Only
PID: ______ Workorder #: 2107362

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

page--of ---

Client: AECom
Project Name: SMUD 59th St
Project Manager: Robert Kohlhardt Project # 60632793.6
Sampler: T. Headrick
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 ✓ Rush ________ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Date	Start Sampling Time	Stop Sampling Date	Stop Sampling Time	Canister Vacuum/Pressure Initial (in Hg)	Final (in Hg)	Lab Use Only Receipt	Final (psig) Gas: N_2 / He	Requested Analyses TO-15			
01A	SG-VW61A-01	1L3927	21473	7/15/21	0625	7/15/21	0632	-26.5	-5			X			
02A	SG-VW61B-01	1L2913	25444	7/15/21	0653	7/15/21	0658	-27	-1			X			
03A	SG-VW62-01	LC1134	24649	7/15/21	0729	7/15/21	0734	-26	-5			X			
04A	SG-VW30A-03	1028	22504	7/15/21	0811	7/15/21	0817	-27	-5			X			
05A	SG-VW30B-03	1L3365	21418	7/15/21	0855	7/15/21	0901	-27	-5			X			
06A	SG-VW63A-01	1L1839	21412	7/15/21	0946	7/15/21	0954	-26.5	-5			X			
07A	SG-VW63B-01	1L2038	20557	7/15/21	1014	7/15/21	1022	-27	-5			X			
08A	SG-VW64A-01	1L2201	100503	7/15/21	1059	7/15/21	1109	-27	-5			X			
09A	SG-VW64B-01	1L3957	25035	7/15/21	1136	7/15/21	1141	-26.5	-5			X			
10A	SG-VW29A-02	1L2315	25303	7/15/21	1233	7/15/21	1238	-27.5	-4			X			
11A	SG-VW29B-02	1L2741	20283	7/15/21	1257	7/15/21	1305	-28	-5			X			
12A	SG-VW28B-02	1L3231	25472	7/15/21	1345	7/15/21	1350	-25.5	-5			X			
13A	SSV-JSS01-01	1L3079	21427	7/15/21	1448	7/15/21	1454	-28	-5			X			
14A	SSV-HSS01-01	LC662	21416	7/15/21	1505	7/15/21	1513	-27.5	-5			X			
15A	SSV-HMBSS01-01	1L3375	25462	7/15/21	1525	7/15/21	1530	-26.5	-5			X			
16A	SSV-GSS01-01	1L3868	21476	7/15/21	1546	7/15/21	1553	-27	-5			X			

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature]	7/15/21	1815	[signature] EAT	7/15/21	1815

Lab Use Only

Shipper Name:	Custody Seals Intact?	Yes	No	None	
HD				(None circled)	Good

Other Records

Air Toxics Ltd.

File Results

Data File: File Information: p080211.d
Sample #: 2107362B-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(7958993.74813819 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080211.d
Sample #: 2107362B-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2546	1.255	71478	
	Unknown Peak 1.5205	1.521	158643	
	Unknown Peak 1.5904	1.590	104143	
	1,1-Difluoroethane	1.716	356655	
	Unknown Peak 1.9542	1.954	52410	
	Unknown Peak 2.2537	2.254	90075	
	Ethanol	3.257	223400	
	Acetone	3.729	149921	
	2-Propanol	3.901	135990	
	Unknown Peak 4.3525	4.353	16180	
	Unknown Peak 5.3768	5.377	22649	
	Unknown Peak 5.4771	5.477	891620	
✓	Bromochloromethane	5.785	1021514	
	Unknown Peak 5.9714	5.971	17241	
✓	1,2-Dichloroethane-d4	6.315	651356	
✓	1,4-Difluorobenzene	6.666	1441863	
✓	Unknown Peak 6.8166	6.817	42561	
	Unknown Peak 6.9957	6.996	24830	
	Unknown Peak 7.1246	7.125	29387	
	Unknown Peak 7.5830	7.583	32826	
✓	Toluene-d8	7.891	1817111	
	Unknown Peak 8.0486	8.049	61158	
	Unknown Peak 8.1561	8.156	3647333	
	Tetrachloroethene	8.471	223274	
	Unknown Peak 8.6145	8.615	47605	
✓	Unknown Peak 8.7005	8.701	49839	
✓	Chlorobenzene-d5	9.460	1887944	
✓	Unknown Peak 9.7105	9.710	39465	
✓	Unknown Peak 10.226	10.226	17720	
✓	Unknown Peak 10.362	10.362	12140	
	Unknown Peak 10.505	10.506	20248	
	4-Bromofluorobenzene	10.921	19749237	
	Unknown Peak 11.143	11.143	212422	
✓	Unknown Peak 11.257	11.258	199921	
	Unknown Peak 11.393	11.394	15102	
✓	Unknown Peak 11.608	11.609	31221	
✓	Unknown Peak 11.809	11.809	22285	
	Unknown Peak 11.852	11.852	17051	
	Unknown Peak 11.974	11.974	126902	
	Unknown Peak 12.074	12.074	61905	
✓	Unknown Peak 12.360	12.361	12252	
✓	Unknown Peak 12.453	12.454	35183	
✓	Unknown Peak 12.633	12.633	103159	
	Unknown Peak 12.812	12.812	41678	
	Unknown Peak 12.991	12.991	2123649	
✓	Unknown Peak 13.177	13.177	26320	
✓	Unknown Peak 13.306	13.306	50660	
✓	Unknown Peak 13.363	13.364	77080	
✓	Unknown Peak 13.535	13.536	69700	
	Unknown Peak 13.643	13.643	15642	
✓	Unknown Peak 13.743	13.743	29439	
✓	Unknown Peak 13.800	13.801	50728	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080211.d
Sample #: 2107362B-13A
Client ID:
Spike Level: 0
Dilution Factor: 2.19

	Compounds	RT	Peak Area	10
☑	Unknown Peak 13.958	13.958	96758	
☑	Unknown Peak 14.115	14.116	33496	
	Unknown Peak 14.387	14.388	35347	
☑	Unknown Peak 14.495	14.495	76430	
☑	Unknown Peak 14.610	14.610	34193	
	Unknown Peak 14.918	14.918	83069	
☑	Unknown Peak 15.154	15.154	28658	
	Unknown Peak 15.455	15.455	17298	

Air Toxics Ltd.

File Results

Data File: File Information: p080208.d
Sample #: 2107362B-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(8557923.22251036 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080208.d
Sample #: 2107362B-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2548	1.255	63690	
	Unknown Peak 1.5067	1.507	299847	
	Propylene	1.689	130214	
✓	1,1-Difluoroethane	1.717	11781	
✓	Unknown Peak 1.8704	1.870	20194	
✓	Unknown Peak 2.0247	2.025	76343	
	Unknown Peak 2.2467	2.247	93947	
✓	Unknown Peak 2.6335	2.634	83496	
	Freon 11	2.891	139882	
✓	Unknown Peak 3.2639	3.264	34624	
✓	Unknown Peak 3.3785	3.379	19172	
✓	Unknown Peak 3.5432	3.543	11723	
	Acetone	3.722	260016	
	2-Propanol	3.901	135756	
	Unknown Peak 4.0733	4.073	36938	
✓	Unknown Peak 4.1879	4.188	44945	
	Unknown Peak 4.3455	4.346	38212	
✓	Unknown Peak 5.3841	5.384	45240	
	Unknown Peak 5.4773	5.477	870272	
✓	Unknown Peak 5.5561	5.556	99667	
✓	Bromochloromethane	5.785	1065039	
	Unknown Peak 6.1076	6.108	14481	
✓	1,2-Dichloroethane-d4	6.315	711243	
	Unknown Peak 6.5231	6.523	12717	
✓	1,4-Difluorobenzene	6.659	1489424	
✓	Unknown Peak 6.8168	6.817	19081	
	Trichloroethene	6.867	126427	
✓	Unknown Peak 7.0388	7.039	15680	
	Unknown Peak 7.1248	7.125	29552	
✓	Unknown Peak 7.3182	7.318	20663	
	Unknown Peak 7.5760	7.576	44341	
	Unknown Peak 7.6333	7.633	12579	
	Unknown Peak 7.7981	7.798	11774	
✓	Toluene-d8	7.891	1863109	
✓	Toluene	7.956	66069	
	Unknown Peak 8.0488	8.049	79004	
	Unknown Peak 8.1562	8.156	4125587	
	Tetrachloroethene	8.464	4734022	
	Unknown Peak 8.6147	8.615	38936	
	Unknown Peak 8.7006	8.701	60776	
	Unknown Peak 8.7651	8.765	17147	
✓	Unknown Peak 8.9155	8.916	14028	
	Unknown Peak 9.0158	9.016	10388	
✓	Unknown Peak 9.2164	9.216	36026	
✓	Chlorobenzene-d5	9.460	2002942	
✓	Unknown Peak 9.5602	9.560	59116	
✓	m,p-Xylene	9.718	78247	
✓	Unknown Peak 10.226	10.226	29485	
	Unknown Peak 10.355	10.355	51028	
✓	Unknown Peak 10.498	10.499	21326	
✓	Unknown Peak 10.684	10.685	12569	
	4-Bromofluorobenzene	10.921	23754707	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080208.d
Sample #: 2107362B-14A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
☐	Unknown Peak 11.150	11.150	88697	☐
☑	Unknown Peak 11.257	11.258	241470	☐
☐	Unknown Peak 11.393	11.394	24387	☐
☑	Unknown Peak 11.623	11.623	26607	☐
☑	Unknown Peak 11.816	11.817	28148	☐
☐	Unknown Peak 11.852	11.852	39094	☐
☐	Unknown Peak 11.974	11.974	135534	☐
☑	Unknown Peak 12.074	12.074	64483	☐
☑	Unknown Peak 12.310	12.311	15521	☐
☑	Unknown Peak 12.454	12.454	54049	☐
☑	Unknown Peak 12.640	12.640	52002	☐
☐	Unknown Peak 12.812	12.812	16660	☐
☐	Unknown Peak 12.991	12.991	4539444	☐
☑	Unknown Peak 13.363	13.364	54114	☐
☑	Unknown Peak 13.499	13.500	11289	☐
☑	Unknown Peak 13.643	13.643	13110	☐
☑	Unknown Peak 13.800	13.801	45901	☐
☐	Unknown Peak 14.724	14.725	14711	☐
☐	Unknown Peak 14.911	14.911	113776	☐

Air Toxics Ltd.

File Results

Data File: File Information: p080214.d
Sample #: 2107362B-15A
Client ID:
Spike Level: 0
Dilution Factor: 13.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9171787.83864948 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080214.d
Sample #: 2107362B-15A
Client ID:
Spike Level: 0
Dilution Factor: 13.1

	Compounds	RT	Peak Area	10
	Unknown Peak 1.1708	1.171	155829	
	Unknown Peak 1.5066	1.507	14966320	
	1,1-Difluoroethane	1.703	2299966	
	Unknown Peak 1.9544	1.954	91963	
	Unknown Peak 2.0533	2.053	25464	
	Unknown Peak 2.2252	2.225	19037	
	Unknown Peak 3.2567	3.257	11928	
	Unknown Peak 3.7151	3.715	15124	
	Unknown Peak 3.8942	3.894	21513	
	Unknown Peak 5.4773	5.477	69549	
✓	Bromochloromethane	5.778	1045169	
✓	1,2-Dichloroethane-d4	6.308	654211	
✓	1,4-Difluorobenzene	6.666	1403713	
	Unknown Peak 6.8382	6.838	38106	
✓	Toluene-d8	7.891	1737733	
	Unknown Peak 8.1491	8.149	159793	
	Unknown Peak 8.3568	8.357	39855	
	Tetrachloroethene	8.464	72456	
✓	Chlorobenzene-d5	9.460	1880585	
	Unknown Peak 10.842	10.842	1473863	
✓	4-Bromofluorobenzene	10.921	2357839	
✓	Unknown Peak 11.272	11.272	14409	
✓	Unknown Peak 11.924	11.924	47420	
✓	Unknown Peak 12.647	12.648	18889	
	Unknown Peak 12.819	12.819	11960	
	Unknown Peak 12.991	12.991	438520	
	Unknown Peak 13.105	13.106	12423	
	Unknown Peak 13.363	13.364	12391	
	Unknown Peak 14.903	14.904	25013	
✓	Unknown Peak 15.462	15.463	11819	

Air Toxics Ltd.

File Results

Data File: File Information: p080212.d
Sample #: 2107362B-16A
Client ID:
Spike Level: 0
Dilution Factor: 4.77

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	93	(10806366.8447695 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080212.d
Sample #: 2107362B-16A
Client ID:
Spike Level: 0
Dilution Factor: 4.77

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2547	1.255	61908	
	Unknown Peak 1.5066	1.507	831155	
	1,1-Difluoroethane	1.702	3101774	
	Unknown Peak 1.9543	1.954	38382	
	Unknown Peak 2.2395	2.240	44359	
	Unknown Peak 3.2495	3.250	16901	
	Unknown Peak 3.7223	3.722	40167	
	2-Propanol	3.894	78793	
✓	Unknown Peak 5.4772	5.477	480676	
✓	Bromochloromethane	5.778	1021337	
	Unknown Peak 6.1075	6.108	10652	
✓	1,2-Dichloroethane-d4	6.308	654143	
✓	1,4-Difluorobenzene	6.666	1431495	
	Unknown Peak 6.7307	6.731	21534	
✓	Unknown Peak 6.8238	6.824	18077	
	Unknown Peak 7.1247	7.125	13210	
	Unknown Peak 7.576	7.576	17505	
✓	Toluene-d8	7.891	1762386	
✓	Unknown Peak 8.0487	8.049	40188	
	Unknown Peak 8.1562	8.156	1583453	
	Unknown Peak 8.7006	8.701	24875	
✓	Chlorobenzene-d5	9.460	1868857	
✓	Unknown Peak 9.5601	9.560	21254	
✓	Unknown Peak 9.7106	9.711	23753	
✓	Unknown Peak 10.226	10.226	11332	
	Unknown Peak 10.849	10.850	7840396	
✓	4-Bromofluorobenzene	10.921	3260192	
	Unknown Peak 11.150	11.150	46180	
✓	Unknown Peak 11.264	11.265	91281	
✓	Unknown Peak 11.401	11.401	14871	
✓	Unknown Peak 11.816	11.817	10416	
	Unknown Peak 11.852	11.852	16008	
	Unknown Peak 11.974	11.974	57825	
	Unknown Peak 12.088	12.089	26231	
✓	Unknown Peak 12.468	12.468	14657	
✓	Unknown Peak 12.647	12.647	35901	
	Unknown Peak 12.812	12.812	13755	
	Unknown Peak 12.991	12.991	1229209	
✓	Unknown Peak 13.363	13.364	19240	
✓	Unknown Peak 13.800	13.801	15943	
	Unknown Peak 14.910	14.911	28827	
✓	Unknown Peak 15.469	15.470	10367	

Air Toxics Ltd.

File Results

Data File: File Information: p080213.d
Sample #: 2107362B-17A
Client ID:
Spike Level: 0
Dilution Factor: 8.06

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	0	(9316595.40610672 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080213.d
Sample #: 2107362B-17A
Client ID:
Spike Level: 0
Dilution Factor: 8.06

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2547	1.255	60839	
	Unknown Peak 1.5065	1.507	599289	
	1,1-Difluoroethane	1.702	2646698	
	Unknown Peak 1.9542	1.954	34373	
	Unknown Peak 2.2323	2.232	33527	
	Unknown Peak 3.2494	3.249	23088	
	Unknown Peak 3.7150	3.715	78321	
	Unknown Peak 3.8941	3.894	47210	
	Unknown Peak 4.9327	4.933	14616	
	Unknown Peak 5.3840	5.384	13194	
	Unknown Peak 5.4771	5.477	212605	
	Unknown Peak 5.5559	5.556	15160	
✓	Bromochloromethane	5.778	1030584	
✓	1,2-Dichloroethane-d4	6.308	654745	
✓	1,4-Difluorobenzene	6.666	1411816	
✓	Unknown Peak 6.8238	6.824	17166	
	Unknown Peak 7.5759	7.576	11546	
✓	Unknown Peak 7.8051	7.805	10089	
✓	Toluene-d8	7.891	1745215	
	Unknown Peak 8.1561	8.156	330211	
	Unknown Peak 8.3710	8.371	55828	
✓	Unknown Peak 8.7005	8.701	12875	
✓	Chlorobenzene-d5	9.460	1861522	
	Unknown Peak 10.842	10.842	3006296	
✓	4-Bromofluorobenzene	10.921	2508490	
✓	Unknown Peak 11.279	11.279	20552	
	Unknown Peak 11.401	11.401	11237	
	Unknown Peak 11.966	11.967	27957	
✓	Unknown Peak 12.081	12.081	14348	
✓	Unknown Peak 12.640	12.640	18386	
	Unknown Peak 12.991	12.991	526498	
✓	Unknown Peak 13.800	13.801	10807	
	Unknown Peak 14.903	14.904	17352	

Air Toxics Ltd.

File Results

Data File: File Information: p080209.d
Sample #: 2107362B-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	98	(12794269.8732625 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080209.d
Sample #: 2107362B-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2548	1.255	69995	
	Unknown Peak 1.5067	1.507	302681	
	Propylene	1.689	1610867	
	1,1-Difluoroethane	1.717	275754	
✓	Unknown Peak 1.8704	1.870	66281	
✓	Unknown Peak 2.0319	2.032	254341	
	Unknown Peak 2.2539	2.254	133971	
✓	Unknown Peak 2.6407	2.641	31260	
✓	Unknown Peak 2.8986	2.899	15783	
✓	Unknown Peak 2.9702	2.970	76566	
✓	Unknown Peak 3.2639	3.264	23189	
	Acetone	3.730	150688	
	Carbon Disulfide	3.830	42913	
	2-Propanol	3.901	137473	
✓	Unknown Peak 4.1235	4.123	24122	
	Unknown Peak 4.3455	4.346	73995	
✓	Unknown Peak 4.6249	4.625	19264	
✓	Unknown Peak 4.7037	4.704	26625	
✓	Unknown Peak 5.0833	5.083	22697	
✓	Unknown Peak 5.3269	5.327	13477	
	Unknown Peak 5.3770	5.377	34453	
	Unknown Peak 5.4773	5.477	1203056	
✓	Unknown Peak 5.5561	5.556	105999	
	Unknown Peak 5.7137	5.714	27261	
✓	Bromochloromethane	5.785	1130519	
✓	Unknown Peak 5.9644	5.964	63284	
	Unknown Peak 6.1148	6.115	219045	
✓	1,2-Dichloroethane-d4	6.315	747589	
✓	1,4-Difluorobenzene	6.666	1475928	
✓	Unknown Peak 6.8168	6.817	46177	
✓	Unknown Peak 6.9743	6.974	55095	
	Unknown Peak 7.0317	7.032	24132	
	Unknown Peak 7.1248	7.125	43375	
✓	Unknown Peak 7.3038	7.304	37212	
✓	Unknown Peak 7.4113	7.411	95578	
✓	Unknown Peak 7.5760	7.576	82110	
✓	Unknown Peak 7.7336	7.734	55545	
✓	Unknown Peak 7.7981	7.798	33976	
✓	Toluene-d8	7.891	1886624	
✓	Toluene	7.956	133649	
	Unknown Peak 8.0488	8.049	88337	
	Unknown Peak 8.1563	8.156	2529841	
	Tetrachloroethene	8.471	621992	
	Unknown Peak 8.6147	8.615	71929	
	Unknown Peak 8.7078	8.708	94809	
	Unknown Peak 8.7651	8.765	22020	
✓	Unknown Peak 8.9728	8.973	28115	
✓	Unknown Peak 9.0230	9.023	20982	
✓	Unknown Peak 9.1233	9.123	30386	
✓	Chlorobenzene-d5	9.460	1968069	
✓	Ethyl Benzene	9.567	88687	
✓	m,p-Xylene	9.718	250675	

List of Selected Compounds

Data File: File Information: p080209.d
Sample #: 2107362B-18A
Client ID:
Spike Level: 0
Dilution Factor: 2.02

	Compounds	RT	Peak Area	10
☑	Unknown Peak 9.8682	9.868	15247	
☑	Unknown Peak 9.9470	9.947	13885	
☑	Unknown Peak 10.075	10.076	71962	
☑	o-Xylene	10.226	130769	
☐	Unknown Peak 10.384	10.384	51707	
☑	Unknown Peak 10.434	10.434	16751	
☐	Unknown Peak 10.505	10.506	46399	
☑	Unknown Peak 10.692	10.692	105838	
☐	4-Bromofluorobenzene	10.921	15700756	
☑	Unknown Peak 11.150	11.150	55970	
☑	4-Ethyltoluene	11.258	511447	
☑	1,3,5-Trimethylbenzene	11.365	144616	
☑	Unknown Peak 11.472	11.473	29567	
☑	Unknown Peak 11.608	11.609	179446	
☑	1,2,4-Trimethylbenzene	11.817	270828	
☐	Unknown Peak 11.974	11.974	254344	
☑	Unknown Peak 12.081	12.082	197025	
☑	Unknown Peak 12.174	12.175	62467	
☑	Unknown Peak 12.282	12.282	51553	
☑	Unknown Peak 12.318	12.318	105387	
☑	Unknown Peak 12.454	12.454	77292	
☑	Unknown Peak 12.532	12.533	66904	
☑	Unknown Peak 12.633	12.633	504204	
☑	Unknown Peak 12.762	12.762	33250	
☑	Unknown Peak 12.805	12.805	62383	
☑	Unknown Peak 12.905	12.905	67320	
☐	Unknown Peak 12.984	12.984	3374677	
☑	Unknown Peak 13.163	13.163	45839	
☑	Unknown Peak 13.242	13.242	12434	
☑	Unknown Peak 13.306	13.307	102080	
☑	Unknown Peak 13.363	13.364	147750	
☑	Unknown Peak 13.464	13.464	41415	
☑	Unknown Peak 13.514	13.514	101411	
☑	Unknown Peak 13.621	13.622	65209	
☑	Unknown Peak 13.743	13.743	24624	
☑	Unknown Peak 13.800	13.801	151685	
☑	Unknown Peak 13.879	13.880	30315	
☑	Unknown Peak 13.951	13.951	106058	
☑	Unknown Peak 14.051	14.051	18074	
☑	Unknown Peak 14.123	14.123	28772	
☑	Unknown Peak 14.230	14.231	13366	
☑	Unknown Peak 14.388	14.388	66072	
☑	Unknown Peak 14.502	14.503	74238	
☑	Unknown Peak 14.603	14.603	36694	
☑	Unknown Peak 14.681	14.682	13690	
☑	Unknown Peak 14.760	14.761	30630	
☐	Unknown Peak 14.911	14.911	185448	
☐	Unknown Peak 15.154	15.155	41279	

Air Toxics Ltd.

File Results

Data File: File Information: p080210.d
Sample #: 2107362B-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

Compound	Amount (ppbv)	(Area - Blank Area)/ RF * DF
TNMOC (Ref. to Gasolin	89	(12361577.5300862 - 9478044.4758898 / 68202)

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080210.d
Sample #: 2107362B-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
	Unknown Peak 1.2546	1.255	75921	
	Unknown Peak 1.5065	1.507	404519	
	1,1-Difluoroethane	1.716	3279366	
	Unknown Peak 1.9542	1.954	45699	
	Unknown Peak 2.2466	2.247	77334	
✓	Unknown Peak 3.2494	3.249	11945	
	Acetone	3.729	193597	
	2-Propanol	3.901	178769	
	Unknown Peak 4.3525	4.353	11006	
	Unknown Peak 5.3840	5.384	28815	
	Unknown Peak 5.4771	5.477	846483	
	Unknown Peak 5.6204	5.620	13848	
✓	Bromochloromethane	5.785	1060003	
	Unknown Peak 5.9427	5.943	13365	
	Unknown Peak 6.1146	6.115	12948	
✓	1,2-Dichloroethane-d4	6.315	680382	
✓	1,4-Difluorobenzene	6.666	1462423	
✓	Unknown Peak 6.8166	6.817	28260	
✓	Unknown Peak 7.0387	7.039	12864	
	Unknown Peak 7.1246	7.125	47328	
	Unknown Peak 7.4613	7.461	10806	
	Unknown Peak 7.5759	7.576	42700	
✓	Unknown Peak 7.7979	7.798	10925	
✓	Toluene-d8	7.891	1863656	
	Unknown Peak 8.0486	8.049	66725	
	Unknown Peak 8.1561	8.156	2461285	
	Unknown Peak 8.6217	8.622	45863	
	Unknown Peak 8.7005	8.701	121447	
	Unknown Peak 9.1159	9.116	17130	
✓	Unknown Peak 9.2234	9.223	34091	
✓	Chlorobenzene-d5	9.460	1946931	
✓	Unknown Peak 9.5457	9.546	29063	
✓	Unknown Peak 9.7105	9.710	46770	
✓	Unknown Peak 10.226	10.226	15816	
	Unknown Peak 10.362	10.362	23252	
	Unknown Peak 10.505	10.506	44606	
✓	Unknown Peak 10.684	10.685	62676	
	Unknown Peak 10.849	10.849	13644324	
✓	4-Bromofluorobenzene	10.921	4371140	
	Unknown Peak 11.143	11.143	238648	
✓	Unknown Peak 11.257	11.258	213874	
✓	Unknown Peak 11.393	11.394	35395	
✓	Unknown Peak 11.816	11.816	25402	
	Unknown Peak 11.852	11.852	31085	
	Unknown Peak 11.974	11.974	131822	
✓	Unknown Peak 12.067	12.067	86164	
✓	Unknown Peak 12.453	12.454	58040	
✓	Unknown Peak 12.640	12.640	59287	
	Unknown Peak 12.819	12.819	16075	
	Unknown Peak 12.984	12.984	3644873	
✓	Unknown Peak 13.363	13.364	96263	
	Unknown Peak 13.499	13.500	22252	

Air Toxics Ltd.

List of Selected Compounds

Data File: File Information: p080210.d
Sample #: 2107362B-19A
Client ID:
Spike Level: 0
Dilution Factor: 2.1

	Compounds	RT	Peak Area	10
✓	Unknown Peak 13.643	13.643	14833	
✓	Unknown Peak 13.800	13.801	79043	
	Unknown Peak 14.122	14.123	22465	
✓	Unknown Peak 14.230	14.230	14153	
✓	Unknown Peak 14.387	14.388	12482	
✓	Unknown Peak 14.509	14.510	29697	
	Unknown Peak 14.760	14.760	20021	
	Unknown Peak 14.910	14.911	89941	
	Unknown Peak 15.462	15.462	11548	

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Curve Response Factors
p080206.d

Compound	Ave. RF	% RSD
TPH	68202	0.00041

LD 8/2/2

Air Toxics Ltd.

File Response Factors

Data File: p080206.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

Compound	RF	RT
TPH	68201.722517620	

Air Toxics Ltd.

List of Selected Compounds

Data File: p080206.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 1.5345	0.21	1.535	97565	
✓	Unknown Peak 1.8843	0.05	1.884	22172	
✓	Butane	0.67	2.039	315671	
✓	Unknown Peak 2.2466	0.06	2.247	27959	
✓	Unknown Peak 2.5117	0.03	2.512	12657	
✓	Isopentane	3.21	2.641	1503503	
✓	Unknown Peak 2.9701	1.13	2.970	529169	
✓	Unknown Peak 3.1707	0.16	3.171	74462	
✓	Ethanol	1.37	3.242	640545	
✓	Unknown Peak 3.3927	0.39	3.393	180087	
✓	Unknown Peak 3.5360	0.12	3.536	57552	
✓	Unknown Peak 3.7365	0.02	3.737	10535	
✓	Unknown Peak 4.0804	1.52	4.080	708716	
✓	Unknown Peak 4.1090	1.41	4.109	657591	
✓	Unknown Peak 4.4027	0.64	4.403	300697	
✓	Unknown Peak 4.6176	0.09	4.618	40348	
✓	Hexane	0.74	4.696	347649	
✓	Unknown Peak 4.8182	0.07	4.818	31664	
✓	Unknown Peak 4.8826	0.12	4.883	54549	
✓	Unknown Peak 4.9256	0.11	4.926	50820	
✓	Unknown Peak 5.0116	0.06	5.012	28318	
✓	Unknown Peak 5.0832	0.08	5.083	39393	
✓	Unknown Peak 5.2265	1.41	5.226	661134	
✓	Unknown Peak 5.3267	0.57	5.327	266026	
✓	Unknown Peak 5.3840	0.10	5.384	48955	
✓	Bromochloromethane	2.42	5.785	1130423	
✓	Tetrahydrofuran	0.66	5.893	310705	
✓	Cyclohexane	1.58	5.957	740941	
✓	Unknown Peak 6.0574	0.73	6.057	342176	
	2,2,4-Trimethylpentane	6.72	6.287	3143255	
	Benzene	0.08	6.301	38130	
✓	1,2-Dichloroethane-d4	16.42	6.315	7678353	
✓	Heptane	0.80	6.451	373037	
✓	Unknown Peak 6.5874	0.26	6.587	119855	
✓	1,4-Difluorobenzene	3.52	6.666	1647154	
✓	Unknown Peak 6.7808	0.11	6.781	51143	
✓	Unknown Peak 6.8167	0.12	6.817	54039	
✓	Unknown Peak 6.9384	1.31	6.938	611628	
✓	Methylcyclohexane	2.27	6.974	1063647	
✓	Unknown Peak 7.0530	0.97	7.053	453784	
✓	Unknown Peak 7.1247	0.24	7.125	113547	
✓	Unknown Peak 7.1748	0.13	7.175	60591	
✓	Unknown Peak 7.3037	4.68	7.304	2186687	
✓	Unknown Peak 7.4112	7.14	7.411	3339770	
✓	Unknown Peak 7.5759	0.91	7.576	426716	
✓	Unknown Peak 7.7120	1.88	7.712	880181	
✓	Unknown Peak 7.7908	0.36	7.791	170278	
✓	Toluene-d8	4.42	7.891	2067113	
	4-Methyl-2-pentanone	0.02	7.891	7580	
✓	Toluene	4.14	7.956	1935723	
✓	Unknown Peak 8.0344	0.28	8.034	128681	
✓	Unknown Peak 8.1490	0.33	8.149	156249	

Air Toxics Ltd.

List of Selected Compounds

Data File: p080206.d
Sample #: 3234-26A
Client ID: Calib
Spike Level: 500
Dilution Factor: 1

	Compounds	% Area	RT	Peak Area	10
✓	Unknown Peak 8.2421	0.71	8.242	330808	
✓	Unknown Peak 8.3854	0.14	8.385	65573	
✓	Unknown Peak 8.5215	0.12	8.521	54055	
✓	Unknown Peak 8.7149	0.08	8.715	35299	
✓	Unknown Peak 8.9011	0.05	8.901	21230	
✓	Unknown Peak 8.9727	0.14	8.973	63649	
✓	Unknown Peak 9.1232	0.08	9.123	36110	
✓	Unknown Peak 9.2306	0.06	9.231	27239	
✓	Unknown Peak 9.3739	0.09	9.374	41082	
✓	Chlorobenzene-d5	4.17	9.460	1951988	
✓	Ethyl Benzene	0.82	9.567	384374	
✓	m,p-Xylene	2.81	9.718	1313209	
✓	Unknown Peak 9.9541	0.05	9.954	22236	
✓	Unknown Peak 10.054	0.04	10.054	17994	
✓	o-Xylene	0.99	10.226	464402	
✓	Unknown Peak 10.505	0.05	10.506	23150	
✓	Cumene	0.26	10.649	120784	
✓	Unknown Peak 10.734	0.21	10.735	100542	
✓	4-Bromofluorobenzene	5.17	10.921	2417151	
✓	Propylbenzene	0.18	11.150	83954	
✓	4-Ethyltoluene	1.36	11.258	636841	
✓	1,3,5-Trimethylbenzene	0.46	11.365	215080	
✓	Unknown Peak 11.623	0.56	11.623	261302	
✓	1,2,4-Trimethylbenzene	1.10	11.816	515700	
✓	Unknown Peak 11.945	0.41	11.945	193600	
✓	Unknown Peak 12.117	0.19	12.117	87475	
✓	Unknown Peak 12.239	0.48	12.239	224176	
✓	Unknown Peak 12.317	0.32	12.318	148504	
✓	Unknown Peak 12.482	0.21	12.483	100209	
✓	Unknown Peak 12.547	0.22	12.547	103834	
✓	Unknown Peak 12.597	0.27	12.597	124445	
✓	Unknown Peak 12.647	0.15	12.647	71789	
✓	Unknown Peak 12.740	0.07	12.741	32527	
✓	Unknown Peak 12.826	0.06	12.826	27000	
✓	Unknown Peak 12.919	0.11	12.920	52698	
✓	Unknown Peak 12.955	0.10	12.955	44481	
✓	Unknown Peak 13.034	0.13	13.034	61954	
✓	Unknown Peak 13.177	0.10	13.177	47358	
✓	Unknown Peak 13.378	0.06	13.378	30003	
✓	Unknown Peak 13.521	0.25	13.521	115355	
✓	Unknown Peak 13.772	0.03	13.772	13417	
✓	Unknown Peak 13.836	0.08	13.836	36149	
✓	Unknown Peak 13.951	0.02	13.951	11256	
✓	Unknown Peak 14.015	0.07	14.016	32219	
✓	Unknown Peak 14.366	0.03	14.367	14521	
✓	Unknown Peak 14.538	0.05	14.538	22603	
✓	Unknown Peak 14.796	0.06	14.796	29425	

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 # 2107362B	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:** MSPP 8/2/21	**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: QC-1 out LCSD, LB-079

A1	A2	A3	A4	D	*Section 2* – Sample Analysis				
					Initials/Date	**A1:** MS 8/2/21	**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				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: A1: 15A-17A; dil TR, 13A, 14A, 18A, 19A: full LCS ds

D1	D2	D3	D4	T	3T	*Section 3* – Target Data Reduction	**Technical Review Needed? Circle one: Yes/No**		**T:**	
						Initials/Instrument/Date	**D1:** MSD-1 MS 8/5/21	**D2:**	**D3:**	**D4:**
NA						CAR # *(if applicable)*				
✓						Spectra Verified *(documentation of spectral defense included if applicable)*				
✓						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: MS 8/5/21	**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