

APPENDIX D
Noise Model Calculations

LT-01-Ldn
Long-Term 24 Hour Continuous Noise Monitoring
 Model Input Sheet



Project: 6 - SMUD1745 TA Jackson Excelsior

Date: Existi Wednesday, October 29, 2025

Thursday, October 30, 2025

Site: LT-01

Hour	Leq	Lmax	L50	L90
19:00	63.6	82.1	41.5	55.2
20:00	61.8	79.2	39.3	51.7
21:00	60.3	78.5	41.9	49.2
22:00	57.0	76.4	37.3	45.4
23:00	55.9	76.0	38.0	43.4
0:00	52.7	74.7	35.8	39.8
1:00	52.5	75.5	35.3	40.1
2:00	52.6	74.1	34.9	39.3
3:00	55.3	78.3	35.2	41.5
4:00	58.0	81.3	41.7	47.0
5:00	63.1	79.9	45.9	53.2
6:00	65.6	78.3	51.6	59.7
7:00	68.5	80.2	53.4	65.6
8:00	67.8	78.8	52.5	63.9
9:00	66.3	83.9	45.0	56.8
10:00	66.0	81.4	41.4	55.0
11:00	64.9	80.1	45.9	54.2
12:00	66.4	83.3	43.5	56.0
13:00	66.6	82.6	45.0	57.3
14:00	68.0	83.3	44.7	60.4
15:00	69.1	82.4	45.0	63.7
16:00	70.2	86.5	46.4	66.8
17:00	69.2	81.0	48.7	65.0
18:00	66.3	78.8	44.7	59.5

Daytime (7 a.m. - 10 p.m.)
 Nighttime (10 p.m. - 7 a.m.)

Averages			
Leq	Lmax	L50	L90
67.0	81.5	45.3	58.7
59.5	77.2	39.5	45.5

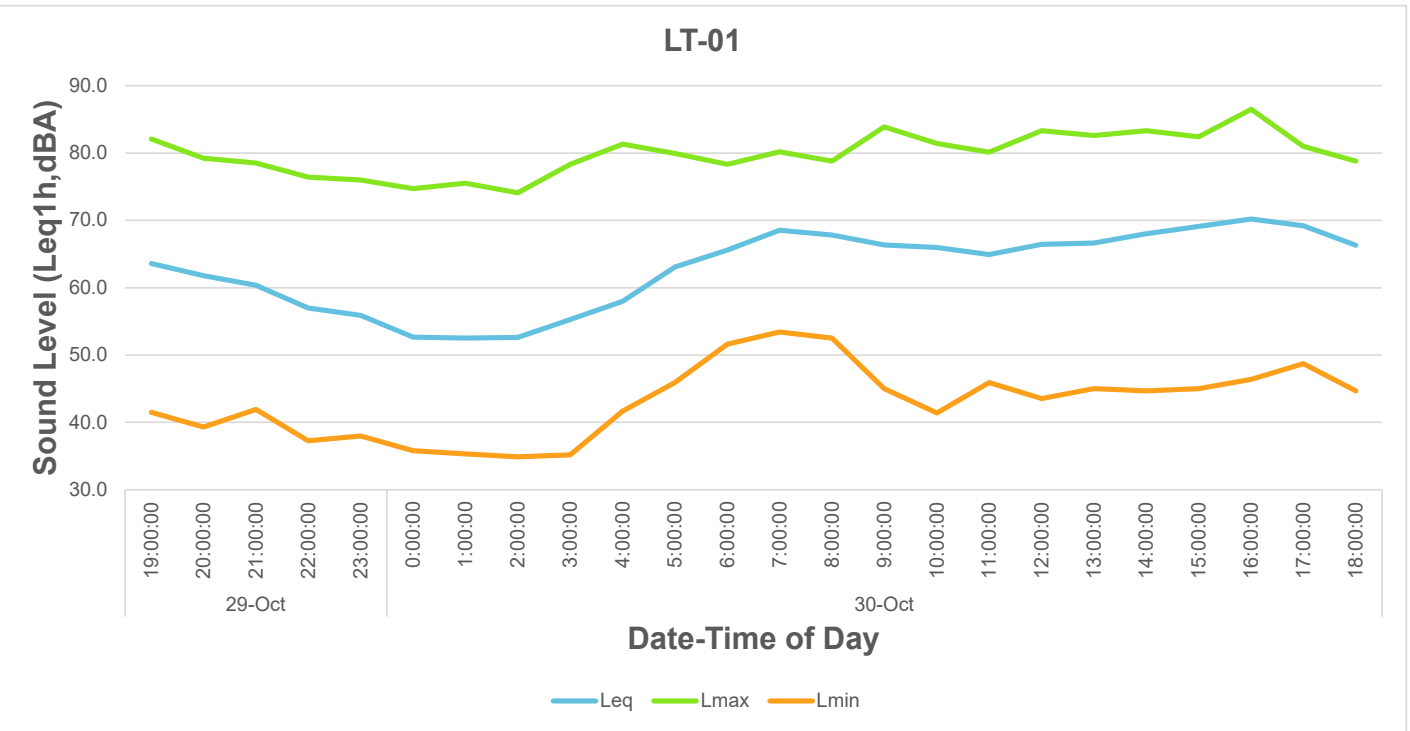
Daytime (7 a.m. - 10 p.m.)
 Nighttime (10 p.m. - 7 a.m.)

Uppermost-Level			
Leq	Lmax	L50	L90
70.2	86.5	53.4	66.8
65.6	81.3	51.6	59.7

Percentage of Energy	
Daytime	90%
Nighttime	10%

Calculated L _{dn} , dBA
68.1

Date	Time	Leq	Lmax	Lmin
29-Oct	19:00:00	63.6	82.1	41.5
	20:00:00	61.8	79.2	39.3
	21:00:00	60.3	78.5	41.9
	22:00:00	57.0	76.4	37.3
	23:00:00	55.9	76	38
30-Oct	0:00:00	52.7	74.7	35.8
	1:00:00	52.5	75.5	35.3
	2:00:00	52.6	74.1	34.9
	3:00:00	55.3	78.3	35.2
	4:00:00	58.0	81.3	41.7
	5:00:00	63.1	79.9	45.9
	6:00:00	65.6	78.3	51.6
	7:00:00	68.5	80.2	53.4
	8:00:00	67.8	78.8	52.5
	9:00:00	66.3	83.9	45
	10:00:00	66.0	81.4	41.4
	11:00:00	64.9	80.1	45.9
	12:00:00	66.4	83.3	43.5
	13:00:00	66.6	82.6	45
	14:00:00	68.0	83.3	44.7
	15:00:00	69.1	82.4	45
	16:00:00	70.2	86.5	46.4
	17:00:00	69.2	81	48.7
	18:00:00	66.3	78.8	44.7



LT-02-Ldn
Long-Term 24 Hour Continuous Noise Monitoring
 Model Input Sheet



Project: 6 - SMUD1745 TA Jackson Excelsior

Date: Existi Wednesday, October 29, 2025

Thursday, October 30, 2025

Site: LT-02

Hour	Leq	Lmax	L50	L90
19:00	69.0	84.1	44.8	62.0
20:00	67.4	80.4	45.3	59.6
21:00	67.2	85.0	44.7	59.2
22:00	66.0	80.5	40.4	55.9
23:00	64.2	81.1	37.4	49.3
0:00	60.9	81.8	33.2	43.7
1:00	60.9	81.1	33.3	45.6
2:00	60.7	78.7	32.3	39.8
3:00	62.8	80.5	35.1	47.1
4:00	66.5	87.6	44.5	56.3
5:00	70.5	86.0	50.6	64.8
6:00	72.4	86.2	55.0	70.2
7:00	72.3	85.3	54.9	70.1
8:00	72.4	87.8	52.8	69.5
9:00	71.3	82.8	45.6	67.1
10:00	71.5	91.6	41.7	67.0
11:00	71.0	84.3	41.5	66.0
12:00	71.4	82.6	43.7	68.0
13:00	71.0	89.7	42.9	66.9
14:00	70.5	83.2	42.0	66.6
15:00	70.9	91.4	42.3	67.2
16:00	71.2	91.2	44.2	67.7
17:00	71.3	83.0	45.2	68.3
18:00	70.0	87.6	48.6	65.2

Daytime (7 a.m. - 10 p.m.)
 Nighttime (10 p.m. - 7 a.m.)

Averages			
Leq	Lmax	L50	L90
70.8	86.0	45.3	66.0
67.0	82.6	40.2	52.5

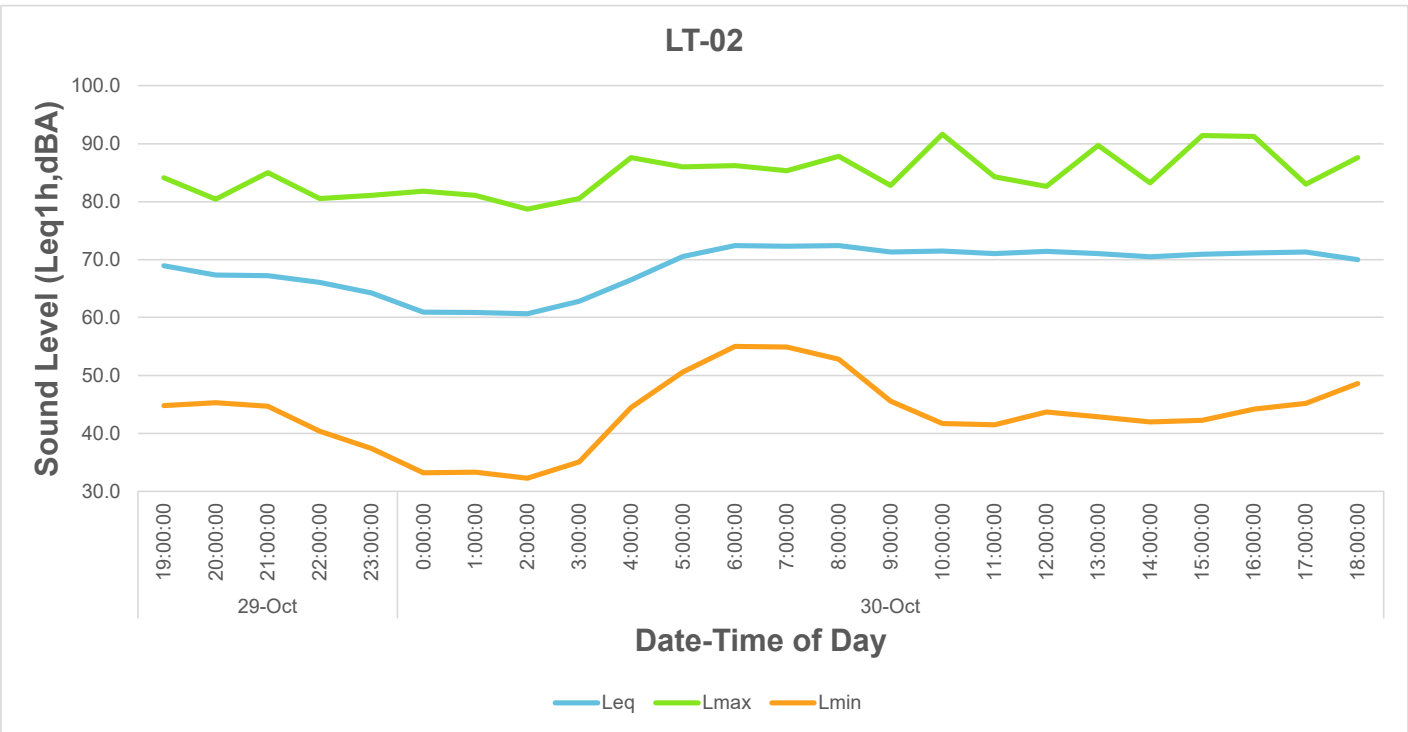
Daytime (7 a.m. - 10 p.m.)
 Nighttime (10 p.m. - 7 a.m.)

Uppermost-Level			
Leq	Lmax	L50	L90
72.4	91.6	54.9	70.1
72.4	87.6	55.0	70.2

Percentage of Energy	
Daytime	80%
Nighttime	20%

Calculated L _{dn} , dBA
74.2

Date	Time	Leq	Lmax	Lmin
29-Oct	19:00:00	69.0	84.1	44.8
	20:00:00	67.4	80.4	45.3
	21:00:00	67.2	85	44.7
	22:00:00	66.0	80.5	40.4
	23:00:00	64.2	81.1	37.4
30-Oct	0:00:00	60.9	81.8	33.2
	1:00:00	60.9	81.1	33.3
	2:00:00	60.7	78.7	32.3
	3:00:00	62.8	80.5	35.1
	4:00:00	66.5	87.6	44.5
	5:00:00	70.5	86	50.6
	6:00:00	72.4	86.2	55
	7:00:00	72.3	85.3	54.9
	8:00:00	72.4	87.8	52.8
	9:00:00	71.3	82.8	45.6
	10:00:00	71.5	91.6	41.7
	11:00:00	71.0	84.3	41.5
	12:00:00	71.4	82.6	43.7
	13:00:00	71.0	89.7	42.9
	14:00:00	70.5	83.2	42
	15:00:00	70.9	91.4	42.3
	16:00:00	71.2	91.2	44.2
	17:00:00	71.3	83	45.2
	18:00:00	70.0	87.6	48.6



ST-01

SLM & RTA Summary

Translated: 2-Nov-25 13:04:51
 File Translated: C:\LARDAV\SLMUTIL\SMUD Jackson Station\ST_001.slmdl
 Model Number: 824
 Serial Number: A2624
 Firmware Rev: 4.29
 Software Version: 3.12
 Name: AECOM
 Descr1: 2020 L St
 Descr2: Sacramento, CA
 Setup: SLM&RTA.ssa
 Setup Descr: SLM & Real-Time Analyzer
 Location:
 Note 1:
 Note 2:

Overall Any Data

Start Time: 30-Oct-25 16:00:14
 Elapsed Time: 15:00.6

	A Weight	C Weight	Flat
Leq:	72.0 dBA	76.4 dBC	76.8 dBF
SEL:	101.6 dBA	105.9 dBC	106.4 dBF
Peak:	94.2 dBA	105.2 dBC	105.9 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14
Lmax (slow):	81.1 dBA	94.2 dBC	94.4 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14
Lmin (slow):	41.5 dBA	55.5 dBC	57.9 dBF
	10/30/2025 16:06	10/30/2025 16:06	10/30/2025 16:06
Lmax (fast):	83.7 dBA	97.4 dBC	97.5 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14
Lmin (fast):	40.7 dBA	54.3 dBC	56.3 dBF
	10/30/2025 16:06	10/30/2025 16:07	10/30/2025 16:07
Lmax (impulse):	84.3 dBA	98.1 dBC	98.3 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14
Lmin (impulse):	41.7 dBA	55.9 dBC	58.4 dBF
	10/30/2025 16:06	10/30/2025 16:06	10/30/2025 16:10

ST-01

Spectra
Start Time:
Freq Hz

	30-Oct-25	16:00:14 Run Time:	15:00.6			
	Leq 1/3 Oct	Leq 1/1 Oct	Max 1/3 Oct	Max 1/1 Oct	Min 1/3 Oct	Min 1/1 Oct
12.5	55.6		68.3		26.3	
16	55.5	60.7	68.7	73.7	26.8	33.1
20	56.5		69.7		30.5	
25	61		70.5		48.9	
31.5	60.2	69.3	65.6	76.2	32.7	49.1
40	67.9		74.3		34	
50	64		80.1		35.3	
63	62.7	68.6	81.2	88.1	36.1	40.9
80	64.6		86.1		36.9	
100	67.6		92.6		36.4	
125	66.5	70.9	93.6	96.3	35.4	42.3
160	63.3		82.2		39.7	
200	59.5		75.9		34.8	
250	58.4	63.9	72.4	81.3	29.9	36.9
315	59.5		78.9		29.7	
400	60.3		76		26.9	
500	62.2	67.9	75.3	79.6	27	32.8
630	65.4		72.4		29.6	
800	66.3		72.7		31.3	
1000	65.6	70	69.9	75.7	31.9	35.9
1250	63.4		69.4		29.8	
1600	60		67		26.5	
2000	56.2	62.1	65.3	70.3	23.4	29.3
2500	53.1		63.5		22.6	
3150	50.4		63.9		21.8	
4000	47.7	53	62	66.9	20.4	25.5
5000	45		59.6		19.6	
6300	42.8		58.9		18.9	
8000	40.7	45.5	58.3	63.6	19.3	23.9
10000	36.8		59.3		19.3	
12500	32		52		19.1	
16000	27	33.7	46.5	53.3	20.3	25.4
20000	24.3		40.9		21.9	

Ln Start Level: 15 dB

L 2.00	77.9 dBA
L 8.00	76.2 dBA
L 25.00	74.2 dBA
L 50.00	70.3 dBA
L 90.00	47.5 dBA
L 95.00	44.5 dBA

ST-01

Detector:	Slow		
Weighting:	A		
SPL Exceedance Level 1:	65.0 dB	Exceeded:	19 times
SPL Exceedance level 2:	80 dB	Exceeded:	3 times
Peak-1 Exceedance Level:	100 dB	Exceeded:	3 times
Peak-2 Exceedance Level:	120 dB	Exceeded:	0 times
Hysteresis:		3	
Overloaded:	0 time(s)		
Paused:	0 times for 00:00:00.0		

Current Any Data

Start Time:	30-Oct-25	16:00:14
Elapsed Time:	15:00.6	

	A Weight	C Weight	Flat
Leq:	72.0 dBA	76.4 dBC	76.8 dBF
SEL:	101.6 dBA	105.9 dBC	106.4 dBF
Peak:	94.2 dBA	105.2 dBC	105.9 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14

Lmax (slow):	81.1 dBA	94.2 dBC	94.4 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14
Lmin (slow):	41.5 dBA	55.5 dBC	57.9 dBF
	10/30/2025 16:06	10/30/2025 16:06	10/30/2025 16:06

Lmax (fast):	83.7 dBA	97.4 dBC	97.5 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14
Lmin (fast):	40.7 dBA	54.3 dBC	56.3 dBF
	10/30/2025 16:06	10/30/2025 16:07	10/30/2025 16:07

Lmax (impulse):	84.3 dBA	98.1 dBC	98.3 dBF
	10/30/2025 16:14	10/30/2025 16:14	10/30/2025 16:14
Lmin (impulse):	41.7 dBA	55.9 dBC	58.4 dBF
	10/30/2025 16:06	10/30/2025 16:06	10/30/2025 16:10

Calibrated:	1/1/2000 2:45	Offset: -46.3 dB
Checked:	10/30/2025 15:49	Level: 113.9 dB
Calibrator	597860	Level: 114.0 dB
Cal Records Count:	0	

Interval Records:	Enabled	Number Interval Records:	16
History Records:	Enabled	Number History Records:	3604
Run/Stop Records:		Number Run/Stop Records:	2

ST-02

SLM & RTA Summary

Translated: 2-Nov-25 13:05:49
 File Translated: C:\LARDAV\SLMUTIL\SMUD Jackson Station\ST_002.slmdl
 Model Number: 824
 Serial Number: A2624
 Firmware Rev: 4.29
 Software Version: 3.12
 Name: AECOM
 Descr1: 2020 L St
 Descr2: Sacramento, CA
 Setup: SLM&RTA.ssa
 Setup Descr: SLM & Real-Time Analyzer
 Location:
 Note 1:
 Note 2:

Overall Any Data

Start Time: 30-Oct-25 16:21:07
 Elapsed Time: 16:35.1

	A Weight	C Weight	Flat
Leq:	73.3 dBA	77.6 dBC	78.0 dBF
SEL:	103.3 dBA	107.6 dBC	108.0 dBF
Peak:	104.2 dBA	112.0 dBC	112.2 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26
Lmax (slow):	90.6 dBA	98.6 dBC	98.7 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26
Lmin (slow):	44.0 dBA	55.8 dBC	58.0 dBF
	10/30/2025 16:25	10/30/2025 16:25	10/30/2025 16:32
Lmax (fast):	94.2 dBA	101.8 dBC	101.9 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26
Lmin (fast):	43.2 dBA	54.7 dBC	57.0 dBF
	10/30/2025 16:21	10/30/2025 16:25	10/30/2025 16:32
Lmax (impulse):	94.9 dBA	102.4 dBC	102.5 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26
Lmin (impulse):	44.0 dBA	56.4 dBC	58.6 dBF
	10/30/2025 16:25	10/30/2025 16:25	10/30/2025 16:32

ST-02

Spectra
Start Time:
Freq Hz

Leq 1/3 Oct	30-Oct-25	16:21:07 Run Time:		16:35.1	
	Leq 1/1 Oct	Max 1/3 Oct	Max 1/1 Oct	Min 1/3 Oct	Min 1/1 Oct
12.5	57.3		57.3		32.2
16	65.9	68.7	57.3	69.1	33.4
20	64.8		68.5		32.6
25	59.5		63.6		36.7
31.5	59.9	65.7	66.9	76.8	36.3
40	62.7		76.1		37.3
50	62		67		39.1
63	67.6	72.2	87.6	98.3	39.6
80	69.7		97.9		41
100	65.6		79.3		41.1
125	63.8	69	81.2	86.8	38.3
160	62.7		84.2		35.9
200	65.5		92.8		30.4
250	63.7	68.9	92.5	96.5	28.4
315	62.7		89.2		23.6
400	64.4		90.3		26.7
500	64.4	69.6	86.7	92.3	29.1
630	65.5		82.3		30.5
800	67.2		82.7		32.5
1000	66.8	71.1	79.3	85.3	31.6
1250	64.5		78.5		30.2
1600	61.6		74.3		28.7
2000	57.8	63.7	73.9	79.6	25.3
2500	54.9		75.9		22.2
3150	52.3		71.9		20
4000	50.3	55.2	72.2	75.7	18.3
5000	47.5		67.4		17.7
6300	45.1		65		17.7
8000	43.5	48.1	65.3	68.8	18.3
10000	39.6		60.4		18.9
12500	34.8		55.1		19.2
16000	28.8	36.1	47	55.8	20.5
20000	25.1		39.8		22

Ln Start Level: 15 dB

L 2.00	79 dBA
L 8.00	76.8 dBA
L 25.00	74.6 dBA
L 50.00	71.8 dBA
L 90.00	57.2 dBA
L 95.00	54.1 dBA

ST-02

Detector:	Slow		
Weighting:	A		
SPL Exceedance Level 1:	65.0 dB	Exceeded:	28 times
SPL Exceedance level 2:	80 dB	Exceeded:	5 times
Peak-1 Exceedance Level:	100 dB	Exceeded:	4 times
Peak-2 Exceedance Level:	120 dB	Exceeded:	0 times
Hysteresis:		3	
Overloaded:	0 time(s)		
Paused:	0 times for 00:00:00.0		

Current Any Data

Start Time:	30-Oct-25	16:21:07
Elapsed Time:	16:35.1	

	A Weight	C Weight	Flat
Leq:	73.3 dBA	77.6 dBC	78.0 dBF
SEL:	103.3 dBA	107.6 dBC	108.0 dBF
Peak:	104.2 dBA	112.0 dBC	112.2 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26

Lmax (slow):	90.6 dBA	98.6 dBC	98.7 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26
Lmin (slow):	44.0 dBA	55.8 dBC	58.0 dBF
	10/30/2025 16:25	10/30/2025 16:25	10/30/2025 16:32

Lmax (fast):	94.2 dBA	101.8 dBC	101.9 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26
Lmin (fast):	43.2 dBA	54.7 dBC	57.0 dBF
	10/30/2025 16:21	10/30/2025 16:25	10/30/2025 16:32

Lmax (impulse):	94.9 dBA	102.4 dBC	102.5 dBF
	10/30/2025 16:26	10/30/2025 16:26	10/30/2025 16:26
Lmin (impulse):	44.0 dBA	56.4 dBC	58.6 dBF
	10/30/2025 16:25	10/30/2025 16:25	10/30/2025 16:32

Calibrated:	1/1/2000 2:45	Offset: -46.3 dB
Checked:	10/30/2025 15:49	Level: 113.9 dB
Calibrator	597860	Level: 114.0 dB
Cal Records Count:	0	

Interval Records:	Enabled	Number Interval Records:	17
History Records:	Enabled	Number History Records:	3982
Run/Stop Records:		Number Run/Stop Records:	2

ST-03

SLM & RTA Summary

Translated: 2-Nov-25 13:06:14
 File Translated: C:\LARDAV\SLMUTIL\SMUD Jackson Station\ST_003.simdl
 Model Number: 824
 Serial Number: A2624
 Firmware Rev: 4.29
 Software Version: 3.12
 Name: AECOM
 Descr1: 2020 L St
 Descr2: Sacramento, CA
 Setup: SLM&RTA.ssa
 Setup Descr: SLM & Real-Time Analyzer
 Location:
 Note 1:
 Note 2:

Overall Any Data

Start Time: 30-Oct-25 16:45:07
 Elapsed Time: 15:00.3

	A Weight	C Weight	Flat
Leq:	66.1 dBA	72.4 dBC	72.8 dBF
SEL:	95.7 dBA	101.9 dBC	102.4 dBF
Peak:	90.4 dBA	99.9 dBC	100.4 dBF
	10/30/2025 16:45	10/30/2025 16:47	10/30/2025 16:47
Lmax (slow):	76.2 dBA	88.3 dBC	88.4 dBF
	10/30/2025 16:47	10/30/2025 16:47	10/30/2025 16:47
Lmin (slow):	43.5 dBA	54.7 dBC	56.8 dBF
	10/30/2025 16:52	10/30/2025 16:49	10/30/2025 16:53
Lmax (fast):	78.6 dBA	91.4 dBC	91.5 dBF
	10/30/2025 16:47	10/30/2025 16:47	10/30/2025 16:47
Lmin (fast):	42.9 dBA	53.7 dBC	55.3 dBF
	10/30/2025 16:52	10/30/2025 16:53	10/30/2025 16:53
Lmax (impulse):	79.0 dBA	91.9 dBC	92.0 dBF
	10/30/2025 16:47	10/30/2025 16:47	10/30/2025 16:47
Lmin (impulse):	43.3 dBA	55.6 dBC	57.7 dBF
	10/30/2025 16:52	10/30/2025 16:49	10/30/2025 16:49

ST-03

Spectra
Start Time:
Freq Hz

	30-Oct-25	16:45:07 Run Time:	15:00.3			
	Leq 1/3 Oct	Leq 1/1 Oct	Max 1/3 Oct	Max 1/1 Oct	Min 1/3 Oct	Min 1/1 Oct
12.5	53.1		58.2		29.4	
16	59.1	61.8	58.9	64.1	31.4	35.2
20	57		60.6		30.3	
25	58.6		61.9		44	
31.5	55.5	62.2	65.1	69.2	35.6	45.6
40	57.5		65.5		39	
50	57.5		65.3		35	
63	62	67	76.6	85.4	36.4	40.5
80	64.5		84.7		35.6	
100	64.9		75.7		36.4	
125	62.8	67.8	86.7	87.5	36.4	40.8
160	59.9		77.8		35	
200	58.5		75.5		30	
250	57.7	62.4	73.6	79	34	36.5
315	56.4		73.4		29.6	
400	55.7		68		27.9	
500	56.3	61.7	65.1	71.6	27.7	33.4
630	58.4		66.9		29.9	
800	59.6		66.7		31.5	
1000	59.1	63.6	68.7	72.4	33.9	37.3
1250	57.4		67.2		31.9	
1600	54.8		65.6		27.6	
2000	51.6	57.2	60.6	67.6	21.5	29.2
2500	48.8		59.6		20.5	
3150	46.4		62.3		19	
4000	43.8	49	56.7	64	18.8	23.4
5000	40.5		55.4		18.1	
6300	38		51.2		18.1	
8000	35.3	40.3	43	52.3	18.8	23.5
10000	30.3		42.3		19.1	
12500	25.5		33.3		19.1	
16000	22.4	28.6	26.1	34.4	20.4	25.4
20000	23.1		23.8		22	

Ln Start Level: 15 dB

L 2.00	72.1 dBA
L 8.00	70.4 dBA
L 25.00	67.8 dBA
L 50.00	64.4 dBA
L 90.00	48.7 dBA
L 95.00	45.8 dBA

ST-03

Detector:	Slow		
Weighting:	A		
SPL Exceedance Level 1:	65.0 dB	Exceeded:	31 times
SPL Exceedance level 2:	80 dB	Exceeded:	0 times
Peak-1 Exceedance Level:	100 dB	Exceeded:	1 times
Peak-2 Exceedance Level:	120 dB	Exceeded:	0 times
Hysteresis:		3	
Overloaded:	0 time(s)		
Paused:	0 times for 00:00:00.0		

Current Any Data

Start Time:	30-Oct-25	16:45:07
Elapsed Time:	15:00.3	

	A Weight	C Weight	Flat
Leq:	66.1 dBA	72.4 dBC	72.8 dBF
SEL:	95.7 dBA	101.9 dBC	102.4 dBF
Peak:	90.4 dBA	99.9 dBC	100.4 dBF
	10/30/2025 16:45	10/30/2025 16:47	10/30/2025 16:47
Lmax (slow):	76.2 dBA	88.3 dBC	88.4 dBF
	10/30/2025 16:47	10/30/2025 16:47	10/30/2025 16:47
Lmin (slow):	43.5 dBA	54.7 dBC	56.8 dBF
	10/30/2025 16:52	10/30/2025 16:49	10/30/2025 16:53
Lmax (fast):	78.6 dBA	91.4 dBC	91.5 dBF
	10/30/2025 16:47	10/30/2025 16:47	10/30/2025 16:47
Lmin (fast):	42.9 dBA	53.7 dBC	55.3 dBF
	10/30/2025 16:52	10/30/2025 16:53	10/30/2025 16:53
Lmax (impulse):	79.0 dBA	91.9 dBC	92.0 dBF
	10/30/2025 16:47	10/30/2025 16:47	10/30/2025 16:47
Lmin (impulse):	43.3 dBA	55.6 dBC	57.7 dBF
	10/30/2025 16:52	10/30/2025 16:49	10/30/2025 16:49

Calibrated:	1/1/2000 2:45	Offset: -46.3 dB
Checked:	10/30/2025 15:49	Level: 113.9 dB
Calibrator	597860	Level: 114.0 dB
Cal Records Count:	0	

Interval Records:	Enabled	Number Interval Records:	16
History Records:	Enabled	Number History Records:	3603
Run/Stop Records:		Number Run/Stop Records:	2

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L_{max}) at 50 feet ¹	Factor ¹
Threshold*	634	60	Backhoe	78	0.4
	50	88	Dozer	82	0.4
LT-01	100	80	Excavator	81	0.4
LT-02	350	66	Front End Loader	79	0.4
			Grader	85	0.4
			Scraper	84	0.4
			Compactor (ground)	83	0.2
			Dump Truck	76	0.4
			Dump Truck	76	0.4
			Dump Truck	76	0.4
			Pickup Truck	75	0.4
			Pickup Truck	75	0.4
			Generator	81	0.5

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L_{eq} dBA at 50 feet ²
Backhoe	74.0
Dozer	78.0
Excavator	77.0
Front End Loader	75.0
Grader	81.0
Scraper	80.0
Compactor (ground)	76.0
Dump Truck	72.0
Dump Truck	72.0
Dump Truck	72.0
Pickup Truck	71.0
Pickup Truck	71.0
Generator	78.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

87.6

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, J;

² Based on the following from the Federal Transit Noise and Vibrati

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage Factor ¹
				Noise Levels (L _{max}) at 50 feet ¹	
Threshold*	1,443	50	Excavator	81	0.4
	50	87	Dozer	82	0.4
LT-01	100	79	Front End Loader	79	0.4
LT-02	350	65	Compactor (ground)	83	0.2
			Scraper	84	0.4
			Backhoe	78	0.4
			Dump Truck	76	0.4
			Dump Truck	76	0.4
			Vacuum Street Sweeper	82	0.1
			Pickup Truck	75	0.4
			Generator	81	0.5
			Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Excavator	77.0
Dozer	78.0
Front End Loader	75.0
Compactor (ground)	76.0
Scraper	80.0
Backhoe	74.0
Dump Truck	72.0
Dump Truck	72.0
Vacuum Street Sweeper	72.0
Pickup Truck	71.0
Generator	78.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

86.5

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, J_e

² Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L _{max}) at 50 feet ¹	Factor ¹
Threshold*	473	60	Backhoe	78	0.4
	50	84	Excavator	81	0.4
LT-01	100	77	Auger Drill Rig	84	0.2
LT-02	350	63	Man Lift	75	0.2
			Generator	81	0.5
			Roller	80	0.2
			Dump Truck	76	0.4
			Dump Truck	76	0.4
			Vacuum Street Sweeper	82	0.1
			Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Backhoe	74.0
Excavator	77.0
Auger Drill Rig	77.0
Man Lift	68.0
Generator	78.0
Roller	73.0
Dump Truck	72.0
Dump Truck	72.0
Vacuum Street Sweeper	72.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

84.4

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, J_e

² Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)	Assumptions:	Reference Emission	Usage Factor ¹
				Noise Levels (L_{max}) at 50 feet ¹	
Threshold*	515	60	Excavator	81	0.4
	50	85	Backhoe	78	0.4
LT-01	100	78	Auger Drill Rig	84	0.2
LT-02	350	64	Concrete Pump Truck	81	0.2
			Man Lift	75	0.2
			Front End Loader	79	0.4
			Flat Bed Truck	74	0.4
			Dump Truck	76	0.4
			Generator	81	0.5
			Welder / Torch	74	0.05
			Pickup Truck	75	0.4
			Vacuum Street Sweeper	82	0.1
			Roller	80	0.2
			Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L_{eq} dBA at 50 feet ²
Excavator	77.0
Backhoe	74.0
Auger Drill Rig	77.0
Concrete Pump Truck	74.0
Man Lift	68.0
Front End Loader	75.0
Flat Bed Truck	70.0
Dump Truck	72.0
Generator	78.0
Welder / Torch	61.0
Pickup Truck	71.0
Vacuum Street Sweeper	72.0
Roller	73.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

85.3

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, Jø

² Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L_{max}) at 50 feet ¹	Factor ¹
Threshold*	464	60	Crane	81	0.16
	50	84	Drill Rig Truck	79	0.2
LT-01	100	77	Man Lift	75	0.2
LT-02	350	63	Concrete Pump Truck	81	0.2
			Backhoe	78	0.4
			Front End Loader	79	0.4
			Man Lift	75	0.2
			Flat Bed Truck	74	0.4
			Dump Truck	76	0.4
			Generator	81	0.5
			Welder / Torch	74	0.05
			Vacuum Street Sweeper	82	0.1
			Pickup Truck	75	0.4
			Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L_{eq} dBA at 50 feet ²
Crane	73.0
Drill Rig Truck	72.0
Man Lift	68.0
Concrete Pump Truck	74.0
Backhoe	74.0
Front End Loader	75.0
Man Lift	68.0
Flat Bed Truck	70.0
Dump Truck	72.0
Generator	78.0
Welder / Torch	61.0
Vacuum Street Sweeper	72.0
Pickup Truck	71.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

84.2

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, Jø

² Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L _{max}) at 50 feet ¹	Factor ¹
Threshold*	399	60	Crane	81	0.16
	50	83	Man Lift	75	0.2
LT-01	100	75	Man Lift	75	0.2
LT-02	350	61	Drill Rig Truck	79	0.2
			Front End Loader	79	0.4
			Generator	81	0.5
			Welder / Torch	74	0.05
			Flat Bed Truck	74	0.4
			Pickup Truck	75	0.4
			Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Crane	73.0
Man Lift	68.0
Man Lift	68.0
Drill Rig Truck	72.0
Front End Loader	75.0
Generator	78.0
Welder / Torch	61.0
Flat Bed Truck	70.0
Pickup Truck	71.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

82.6

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, J_e

² Based on the following from the Federal Transit Noise and Vibrati

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L _{max}) at 50 feet ¹	Factor ¹
Threshold*	426	60	Crane	81	0.16
	50	83	Man Lift	75	0.2
LT-01	100	76	Man Lift	75	0.2
LT-02	350	62	Drill Rig Truck	79	0.2
			Front End Loader	79	0.4
			Flat Bed Truck	74	0.4
			Dump Truck	76	0.4
			Pickup Truck	75	0.4
			Generator	81	0.5
			Welder / Torch	74	0.05
			Vacuum Street Sweeper	82	0.1
			Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Crane	73.0
Man Lift	68.0
Man Lift	68.0
Drill Rig Truck	72.0
Front End Loader	75.0
Flat Bed Truck	70.0
Dump Truck	72.0
Pickup Truck	71.0
Generator	78.0
Welder / Torch	61.0
Vacuum Street Sweeper	72.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

83.3

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, J_e

² Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L _{max}) at 50 feet ¹	Factor ¹
Threshold*	459	60	Paver	77	0.5
	50	84	Roller	80	0.2
LT-01	100	77	Compactor (ground)	83	0.2
LT-02	350	63	Grader	85	0.4
			Vacuum Street Sweeper	82	0.1
			Dump Truck	76	0.4
			Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Paver	74.0
Roller	73.0
Compactor (ground)	76.0
Grader	81.0
Vacuum Street Sweeper	72.0
Dump Truck	72.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

84.1

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, J_e

² Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60726026 - SMUD1745 TA Jackson Excelsior



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L_{max}) at 50 feet ¹	Factor ¹
Threshold*	317	60	Pickup Truck	75	0.4
	50	80	Pickup Truck	75	0.4
LT-01	100	73	Generator	81	0.5
LT-02	350	59	Pickup Truck	75	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L_{eq} dBA at 50 feet ²
Pickup Truck	71.0
Pickup Truck	71.0
Generator	78.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

80.0

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, J_e

² Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold