
BASELINE NOISE MEASUREMENTS

Site Number: 1			
Recorded By: Alden Louaas			
Job Number: 2019-185			
Date: 9/24/19			
Time: 11:14 a.m.			
Location: Adjacent to Park Avenue and south of Cajon Street.			
Source of Peak Noise: Vehicles on Park Avenue and helicopters flying.			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
68.3	45.9	78.9	108.7

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0005120	8/05/2019	
	Microphone	Larson Davis	377B02	174464	8/05/2019	
	Preamp	Larson Davis	PRMLxT1L	042852	8/05/2019	
	Calibrator	Larson Davis	CAL200	14105	8/02/2019	
Weather Data						
Est.	Duration: 10 minutes			Sky: Clear		
	Note: dBA Offset = 0.02			Sensor Height (ft): 4 ft		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	4-7		85		29.9	

Photo of Measurement Location



Summary				
File Name on Meter	LxT_Data.147			
File Name on PC	SLM_0005120_LxT_Data_147.00.ldbin			
Serial Number	0005120			
Model	SoundExpert® LxT			
Firmware Version	2.302			
User	Alden			
Location	Hemet			
Job Description	2019-185			
Note				

Measurement				
Description				
Start	2019-09-24 11:14:47			
Stop	2019-09-24 11:24:47			
Duration	00:10:00.0			
Run Time	00:10:00.0			
Pause	00:00:00.0			
Pre Calibration	2019-09-24 10:27:21			
Post Calibration	None			
Calibration Deviation	---			

Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRMLxT1L			
Microphone Correction	Off			
Integration Method	Linear			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	A Weighting			
OBA Max Spectrum	Bin Max			
Overload	122.8 dB			
	A	C	Z	
Under Range Peak	79.1	76.1	81.1 dB	
Under Range Limit	27.1	26.5	31.8 dB	
Noise Floor	17.0	17.4	22.7 dB	

Results				
L _{Aeq}	68.3			
L _{AE}	96.0			
E _A	446.605 μPa²h			
L _Z peak (max)	2019-09-24 11:21:36	108.7 dB		
L _A Smax	2019-09-24 11:15:02	78.9 dB		
L _A Smin	2019-09-24 11:22:44	45.9 dB		

SEA	-99.94 dB							
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LZ _{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LZ _{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LZ _{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s						
Community Noise	Ldn	LDay 07:00-22:00	LNight 22:00-07:00	Lden	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00	dB
	68.3	68.3	-99.94	68.3	68.3	-99.94	-99.94	
LC _{eq}	76.3 dB							
LA _{eq}	68.3 dB							
LC _{eq} - LA _{eq}	8.0 dB							
LA _{leq}	70.7 dB							
LA _{eq}	68.3 dB							
LA _{leq} - LA _{eq}	2.5 dB							
Leq	A		C		Z			
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp		
	68.3		76.3					
	78.9	2019/09/24 11:15:02						
	45.9	2019/09/24 11:22:44						
LPeak(max)					108.7	2019/09/24 11:21:36		
# Overloads	0							
Overload Duration	0.0 s							
# OBA Overloads	46							
OBA Overload Duration	219.8 s							

Statistics		
LAI5.00	73.9 dB	
LAI10.00	72.7 dB	
LAI33.30	68.3 dB	
LAI50.00	65.2 dB	
LAI66.60	61.0 dB	
LAI90.00	53.2 dB	

Site Number: 2			
Recorded By: Alden Louaas			
Job Number: 2019-185			
Date: 9/24/19			
Time: 10:58 a.m.			
Location: On East Menlo Avenue and east of Chino Lane.			
Source of Peak Noise: Vehicles on adjacent roadways.			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
68.5	46.2	79.7	114.1

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0005120	8/05/2019	
	Microphone	Larson Davis	377B02	174464	8/05/2019	
	Preamp	Larson Davis	PRMLxT1L	042852	8/05/2019	
	Calibrator	Larson Davis	CAL200	14105	8/02/2019	
Weather Data						
Est.	Duration: 10 minutes			Sky: Clear		
	Note: dBA Offset = 0.02			Sensor Height (ft): 4 ft		
	Wind Ave Speed (mph)	Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)		
	3-5	82		29.9		

Photo of Measurement Location



Summary				
File Name on Meter	LxT_Data.146			
File Name on PC	SLM_0005120_LxT_Data_146.00.ldbin			
Serial Number	0005120			
Model	SoundExpert® LxT			
Firmware Version	2.302			
User	Alden			
Location	Hemet			
Job Description	2019-185			
Note				

Measurement				
Description				
Start	2019-09-24 10:57:53			
Stop	2019-09-24 11:07:53			
Duration	00:10:00.0			
Run Time	00:10:00.0			
Pause	00:00:00.0			
Pre Calibration	2019-09-24 10:27:21			
Post Calibration	None			
Calibration Deviation	---			

Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRMLxT1L			
Microphone Correction	Off			
Integration Method	Linear			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	A Weighting			
OBA Max Spectrum	Bin Max			
Overload	122.8 dB			
	A	C	Z	
Under Range Peak	79.1	76.1	81.1	dB
Under Range Limit	27.1	26.5	31.8	dB
Noise Floor	17.0	17.4	22.7	dB

Results				
LAeq	68.5			
LAE	96.3			
EA	470.824 µPa²h			
LZpeak (max)	2019-09-24 11:02:00	114.1 dB		
LASmax	2019-09-24 10:58:51	79.7 dB		
LASmin	2019-09-24 10:59:21	46.2 dB		

SEA	-99.94 dB							
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LZ _{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LZ _{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s						
LZ _{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s						
Community Noise	Ldn	LDay 07:00-22:00	LNight 22:00-07:00	Lden	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00	
	68.5	68.5	-99.94	68.5	68.5	-99.94	-99.94	dB
LC _{eq}	74.9 dB							
LA _{eq}	68.5 dB							
LC _{eq} - LA _{eq}	6.4 dB							
LA _{Ieq}	71.5 dB							
LA _{eq}	68.5 dB							
LA _{Ieq} - LA _{eq}	3.0 dB							
Leq	A		C		Z			
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp		
	68.5		74.9					
	79.7	2019/09/24 10:58:51						
	46.2	2019/09/24 10:59:21						
LPeak(max)					114.1	2019/09/24 11:02:00		
# Overloads	0							
Overload Duration	0.0 s							
# OBA Overloads	57							
OBA Overload Duration	344.6 s							

Statistics		
LAI5.00	74.5 dB	
LAI10.00	73.1 dB	
LAI33.30	68.0 dB	
LAI50.00	64.3 dB	
LAI66.60	59.1 dB	
LAI90.00	51.6 dB	

Site Number: 3			
Recorded By: Alden Louaas			
Job Number: 2019-185			
Date: 9/24/19			
Time: 10:36 a.m.			
Location: Adjacent to Project site on North Girard Street			
Source of Peak Noise: Vehicles on adjacent roadways.			
Noise Data			
Leq (dB)	Lmin (dB)	Lmax (dB)	Peak (dB)
56.2	43.2	72.9	107.6

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0005120	8/05/2019	
	Microphone	Larson Davis	377B02	174464	8/05/2019	
	Preamp	Larson Davis	PRMLxT1L	042852	8/05/2019	
	Calibrator	Larson Davis	CAL200	14105	8/02/2019	
Weather Data						
Est.	Duration: 10 minutes			Sky: Clear		
	Note: dBA Offset = 0.02			Sensor Height (ft): 4 ft		
	Wind Ave Speed (mph)	Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)		
	3-5	81		29.9		

Photo of Measurement Location



Summary				
File Name on Meter	LxT_Data.145			
File Name on PC	SLM_0005120_LxT_Data_145.00.ldbin			
Serial Number	0005120			
Model	SoundExpert® LxT			
Firmware Version	2.302			
User	Alden			
Location	Hemet			
Job Description	2019-185			
Note				

Measurement				
Description				
Start	2019-09-24 10:36:56			
Stop	2019-09-24 10:46:56			
Duration	00:10:00.0			
Run Time	00:10:00.0			
Pause	00:00:00.0			
Pre Calibration	2019-09-24 10:27:21			
Post Calibration	None			
Calibration Deviation	---			

Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRMLxT1L			
Microphone Correction	Off			
Integration Method	Linear			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	A Weighting			
OBA Max Spectrum	Bin Max			
Overload	122.8 dB			
	A	C	Z	
Under Range Peak	79.1	76.1	81.1 dB	
Under Range Limit	27.1	26.5	31.8 dB	
Noise Floor	17.0	17.4	22.7 dB	

Results				
LAeq	56.2			
LAE	83.9			
EA	27.577 µPa²h			
LZpeak (max)	2019-09-24 10:46:19	107.6 dB		
LASmax	2019-09-24 10:38:26	72.9 dB		
LASmin	2019-09-24 10:36:56	43.2 dB		

SEA	-99.94 dB								
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s							
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s							
LZ _{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s							
LZ _{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s							
LZ _{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s							
Community Noise	Ldn	LDay 07:00-22:00	LNight 22:00-07:00	Lden	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00	dB	
	56.2	56.2	-99.94	56.2	56.2	-99.94	-99.94		
LC _{eq}	71.0 dB								
LA _{eq}	56.2 dB								
LC _{eq} - LA _{eq}	14.8 dB								
LA _{1eq}	58.6 dB								
LA _{eq}	56.2 dB								
LA _{1eq} - LA _{eq}	2.5 dB								
Leq	A		C		Z				
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp			
	56.2		71.0						
	72.9	2019/09/24 10:38:26							
	43.2	2019/09/24 10:36:56							
LPeak(max)					107.6	2019/09/24 10:46:19			
# Overloads	0								
Overload Duration	0.0 s								
# OBA Overloads	43								
OBA Overload Duration	248.0 s								

Statistics	
LAI5.00	61.0 dB
LAI10.00	53.5 dB
LAI33.30	49.6 dB
LAI50.00	48.0 dB
LAI66.60	47.0 dB
LAI90.00	45.8 dB

PROJECT TRAFFIC NOISE

Project Number: 2019-185
Project Name: Hemet TTM

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Urban Crossroads 2019
Community Noise Descriptor: L_{dn}: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Traffic Volumes		
						Medium Trucks	Heavy Trucks	CNEL at 100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL		Day	Eve	Night
Analysis Condition-Existing Conditions																
East Menlo Avenue																
Between South Jacinto Avenue and North Girard Street	2	0	3,123	35	0.5	1.8%	0.7%	53.6	-	-	37	81	100	2,427	397	300
Between North Girard Street and Deardorff Drive	2	0	3,006	35	0.5	1.8%	0.7%	53.4	-	-	37	79	100	2,336	382	289
West of South Jacinto Avenue	2	0	3,006	35	0.5	1.8%	0.7%	53.4	-	-	37	79	100	2,336	382	289
East of Deardorff Drive	2	0	3,420	35	0.5	1.8%	0.7%	54.0	-	-	40	86	100	2,657	434	328
South San Jacinto Avenue (Highway 79)																
North of East Menlo Avenue	4	0	6,984	40	0.5	1.8%	0.7%	58.5	-	-	80	172	100	5,427	887	670
South of East Menlo Avenue	4	0	5,994	40	0.5	1.8%	0.7%	57.9	-	-	72	156	100	4,657	761	575
North Girard Street																
North of East Menlo Avenue	2	0	315	35	0.5	1.8%	0.7%	43.6	-	-	-	-	100	245	40	30
South of East Menlo Avenue	2	0	882	35	0.5	1.8%	0.7%	48.1	-	-	-	35	100	685	112	85
Deardorff Drive																
South of East Menlo Avenue	2	0	126	25	0.5	1.8%	0.7%	37.0	-	-	-	-	100	98	16	12

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2019-185
Project Name: Hemet TTM

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Urban Crossroads 2019
Community Noise Descriptor: L_{dn}: _____ CNEL: _____ x _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes			
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL				
Analysis Condition-Existing+Project																	
East Menlo Avenue																	
	Between South Jacinto Avenue and North Girard Street	2	0	3,240	35	0.5	1.8%	0.7%	53.8	-	-	38	83	100	2,517	411	311
	Between North Girard Street and Deardorff Drive	2	0	3,087	35	0.5	1.8%	0.7%	53.6	-	-	37	80	100	2,399	392	296
	West of South Jacinto Avenue	2	0	2,997	35	0.5	1.8%	0.7%	53.4	-	-	36	79	100	2,329	381	288
	East of Deardorff Drive	2	0	3,447	35	0.5	1.8%	0.7%	54.0	-	-	40	86	100	2,678	438	331
South San Jacinto Avenue (Highway 79)																	
	North of East Menlo Avenue	4	0	7,560	40	0.5	1.8%	0.7%	58.9	-	-	84	182	100	5,874	960	726
	South of East Menlo Avenue	4	0	6,021	40	0.5	1.8%	0.7%	57.9	-	-	72	156	100	4,678	765	578
North Girard Street																	
	North of East Menlo Avenue	2	0	756	35	0.5	1.8%	0.7%	47.4	-	-	-	-	100	587	96	73
	South of East Menlo Avenue	2	0	918	35	0.5	1.8%	0.7%	48.3	-	-	-	36	100	713	117	88
Deardorff Drive																	
	South of East Menlo Avenue	2	0	135	25	0.5	1.8%	0.7%	37.3	-	-	-	-	100	105	17	13