



MEMORANDUM

To: Robert Miller
Turner Construction

From: Zack Dennis
ATS Consulting

Date: December 13, 2007

Subject: Monthly Noise Report for Raintree Noise Monitors, October 2007

This memorandum presents the results of the noise monitoring near the Raintree residential complex near the West Los Angeles College (WLAC) campus. There are four monitors positioned near the property lines of the Raintree complex to monitor truck noise from the haul road that runs from the northwest corner of campus to Jefferson Boulevard. Each monitor is an independent station consisting of a microphone, sound level meter, cellphone modem, and assorted ancillary equipment. The locations of the monitors are shown in Figure 1.

Currently Monitors 3 and 4 are not active due to problems providing power. We are working with Raintree to provide AC power to the units and will begin reporting data as soon as this occurs.

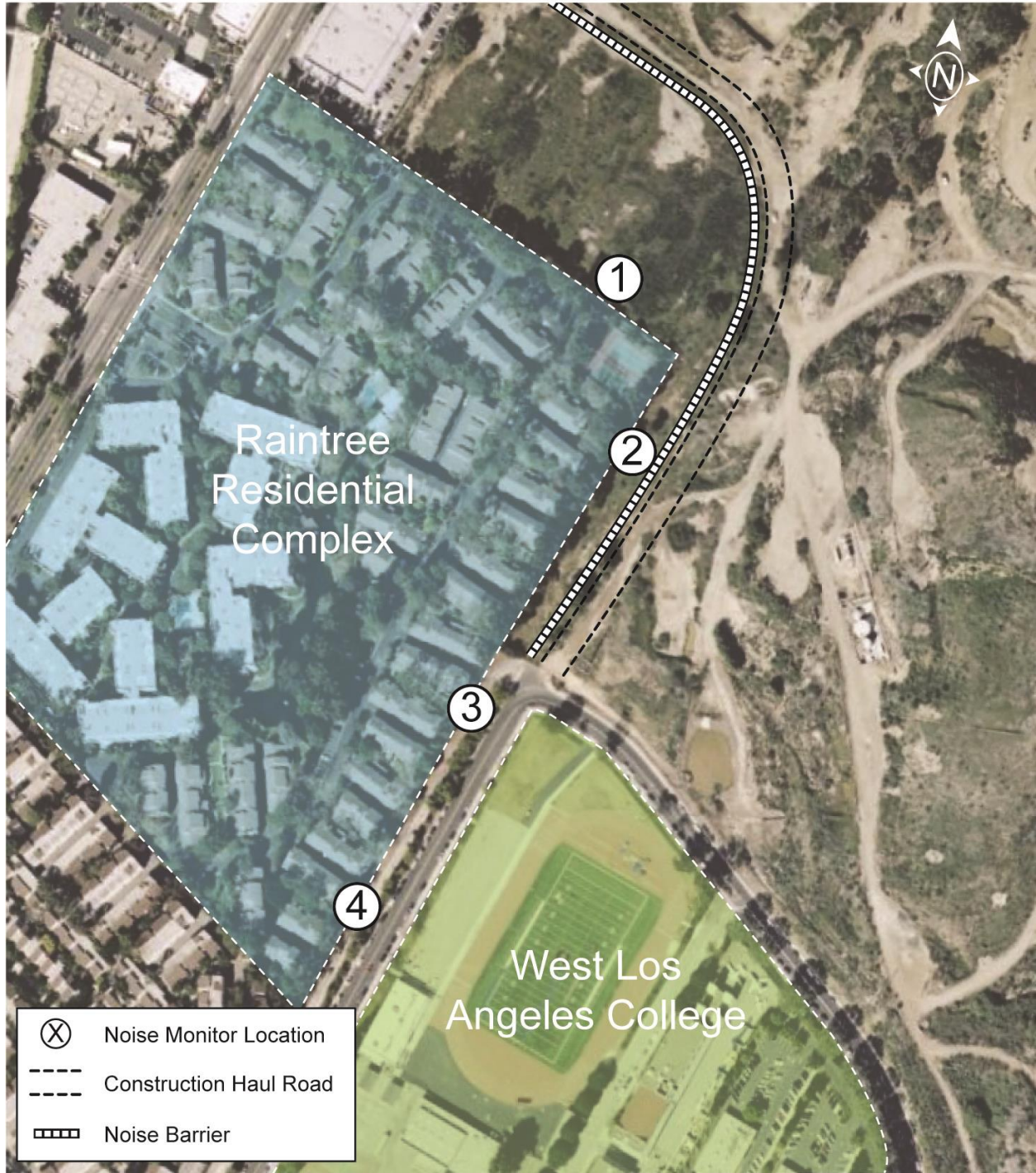


Figure 1: Noise Monitor Locations

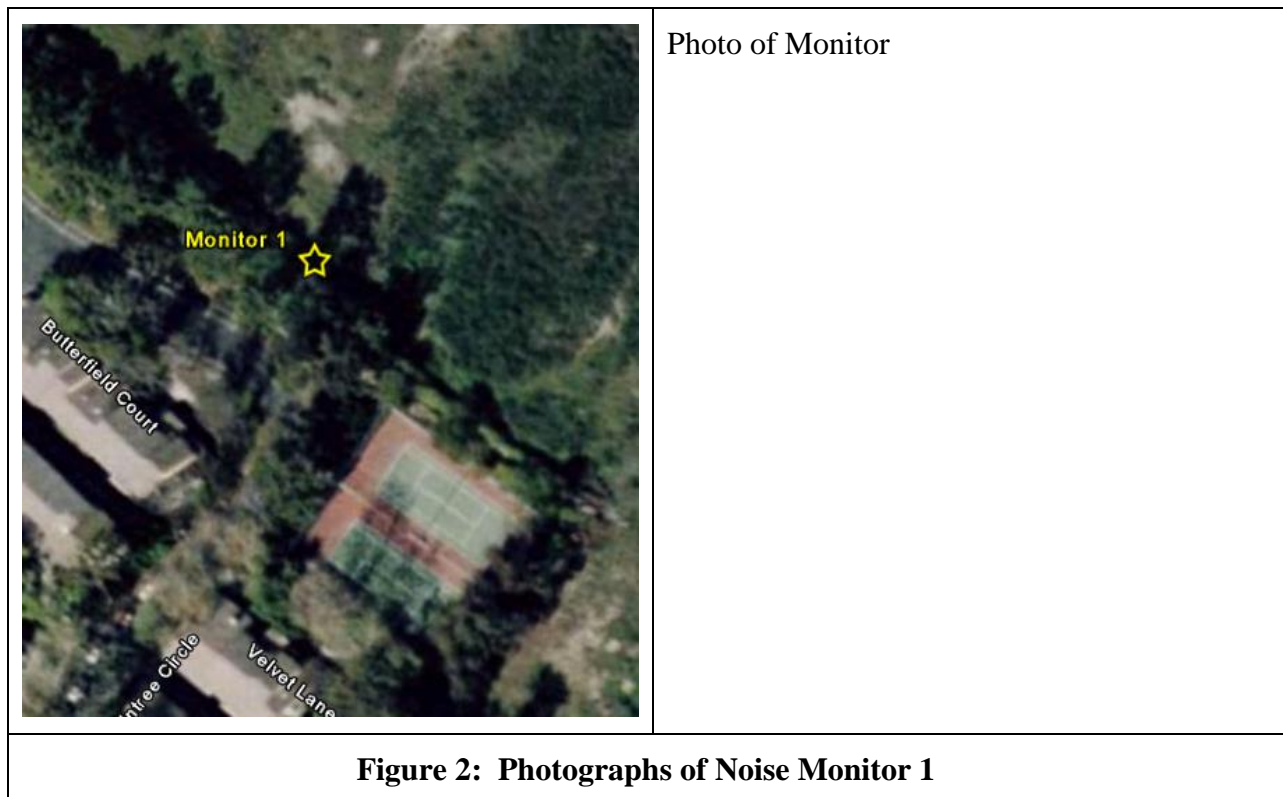


Monitor 1

Monitor 1 is located to the northeast of the Raintree complex, near the property wall that separates Raintree Circle from where the haul road cuts through to Jefferson Boulevard. Due to topography, the microphone head is approximately level with the upper stories of the Raintree residences. The monitor is located about 250 feet away from the closest point on the haul road. Prior to construction activity, the primary noise sources in this area were residential traffic noise and athletic activity on the nearby tennis courts.

Table 1. Summary of Monthly Results, Monitor 1				
Metric	Sound Level, dBA			
	Average	Maximum	Minimum	Standard Deviation
Day-Night Sound Level (Ldn)	55	58	52	1.5
Daytime Hourly Leq	51	56	47	2.0

Source: ATS Consulting, 2005



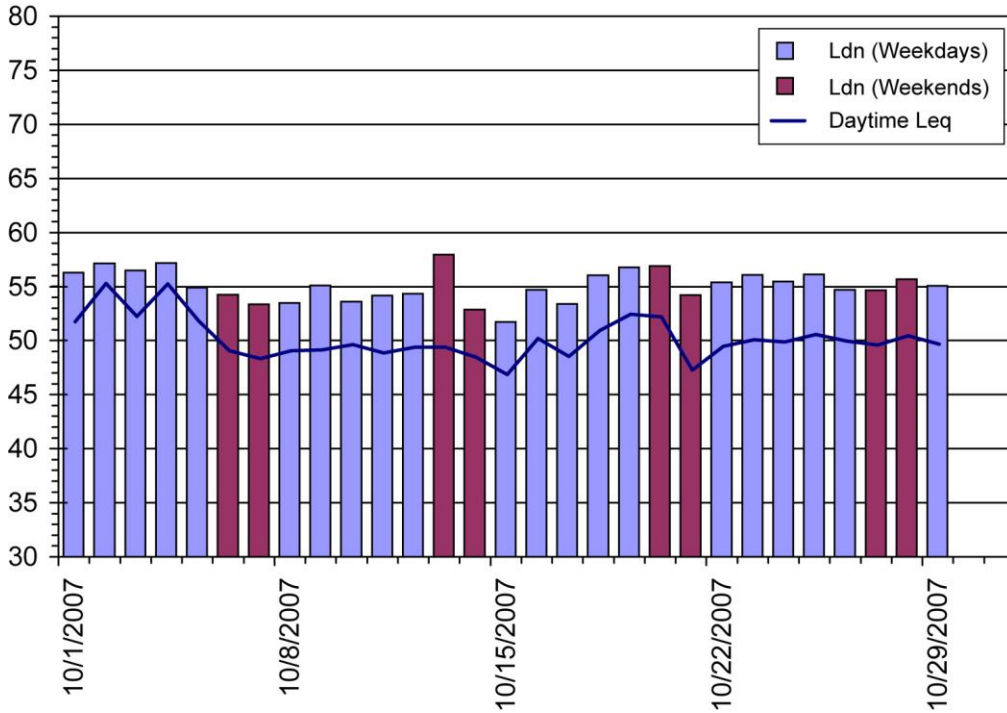


Figure 3: Ldn and Daytime Leq Results

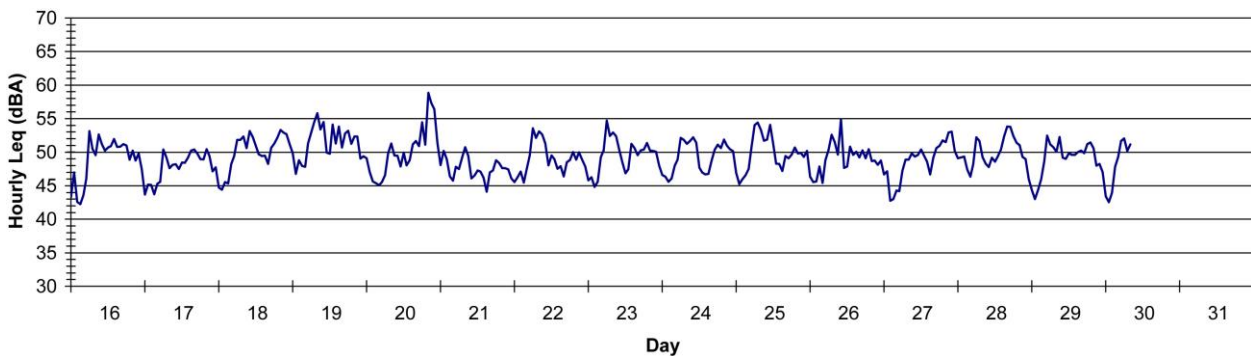
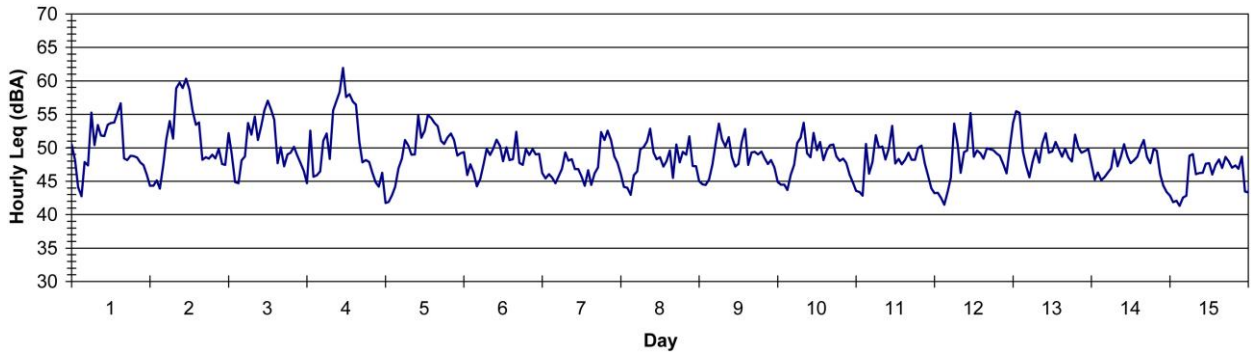


Figure 4: Hourly Leq Results



**Table 2. Daily Results
Monitor 1, June 2007**

Date	Sound Level, dBA			
	Daytime Leq	Maximum	Minimum	Ldn
10/1/07	52	64	42	56
10/2/07	56	68	42	57
10/3/07	53	68	43	56
10/4/07	56	70	40	57
10/5/07	52	65	40	55
10/6/07	50	65	42	54
10/7/07	49	63	39	53
10/8/07	50	70	41	53
10/9/07	50	68	42	55
10/10/07	50	67	41	54
10/11/07	49	67	41	54
10/12/07	50	65	40	54
10/13/07	50	68	42	58
10/14/07	49	68	40	53
10/15/07	47	63	39	52
10/16/07	51	67	40	55
10/17/07	49	66	41	53
10/18/07	51	65	42	56
10/19/07	53	72	43	57
10/20/07	53	69	41	57
10/21/07	48	65	38	54
10/22/07	50	66	40	55
10/23/07	51	68	40	56
10/24/07	50	63	40	55
10/25/07	51	66	41	56
10/26/07	51	66	42	55
10/27/07	50	65	39	55
10/28/07	51	63	39	56
10/29/07	50	67	41	55
10/30/07	-- ¹	-- ¹	-- ¹	-- ¹
10/31/07	-- ¹	-- ¹	-- ¹	-- ¹

Notes:
1. Noise levels were not recorded due to monitor battery failure.



Discussion

During the first week of October the daytime noise levels were somewhat higher than typical values, and similar to the values observed during the last week of September. This was due to the construction of the haul road and the construction of noise walls along the haul road. Once construction was completed, noise levels in the area returned to the typical levels that have been observed historically. On October 30, the monitor lost power due to a battery failure. The batteries had been damaged by running empty during September when the photovoltaic cell was moved into the shade during brush clearing, and eventually were unable to charge sufficiently during the daytime to sustain monitor operations overnight.

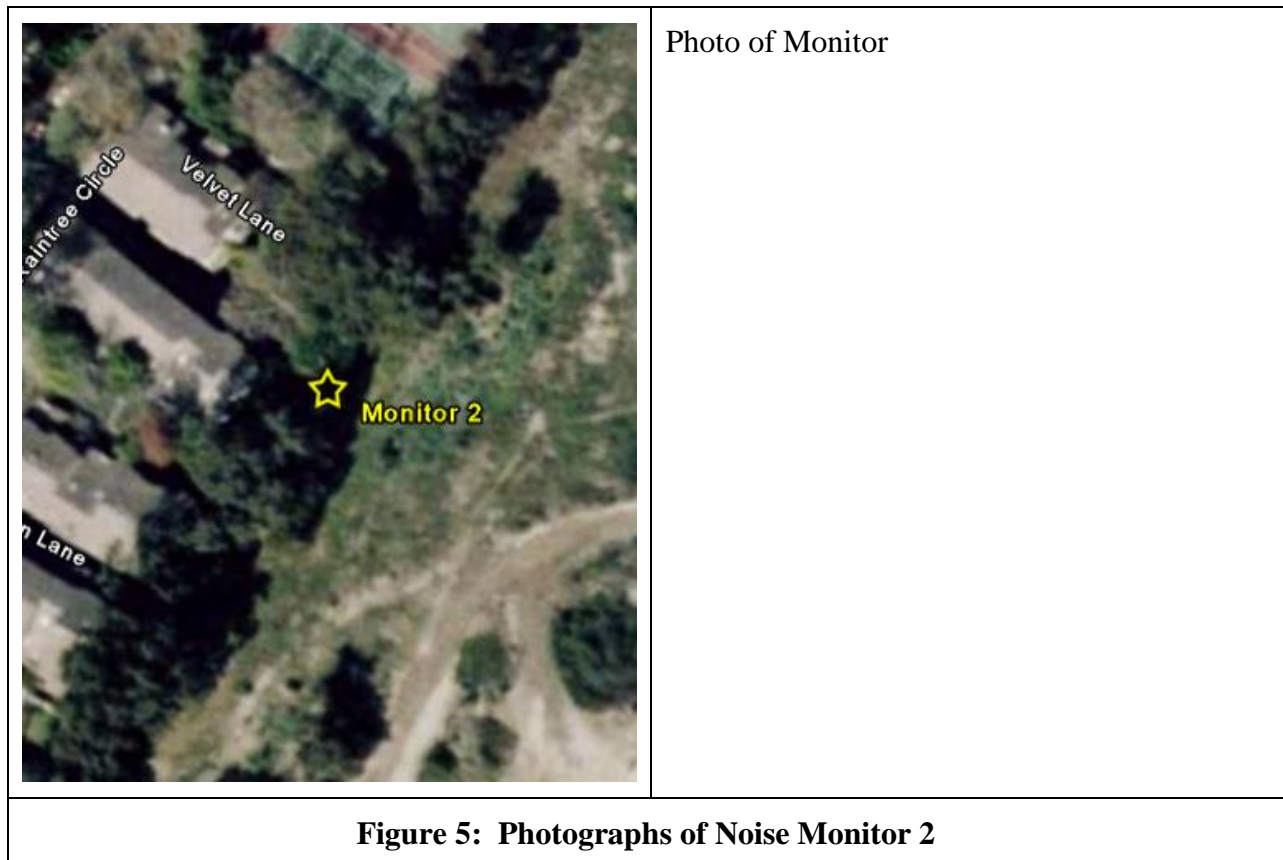


Monitor 2

Monitor 2 is located near the northeast corner of the Raintree complex, south of the tennis courts and close to the property fence on the eastern edge of the Raintree complex. The microphone head is approximately level with the lower stories of the Raintree residences. The monitor is located about 100 feet away from the closest point on the haul road. Prior to construction activity, the primary noise sources in this area were residential traffic noise and athletic activity on the nearby tennis courts.

Table 3. Summary of Monthly Results, Monitor 1				
Metric	Hourly Sound Level, dBA			
	Average	Maximum	Minimum	Standard Deviation
Day-Night Sound Level (Ldn)	56	63	53	2.5
Daytime Hourly Leq	54	64	48	4.3

Source: ATS Consulting, 2007



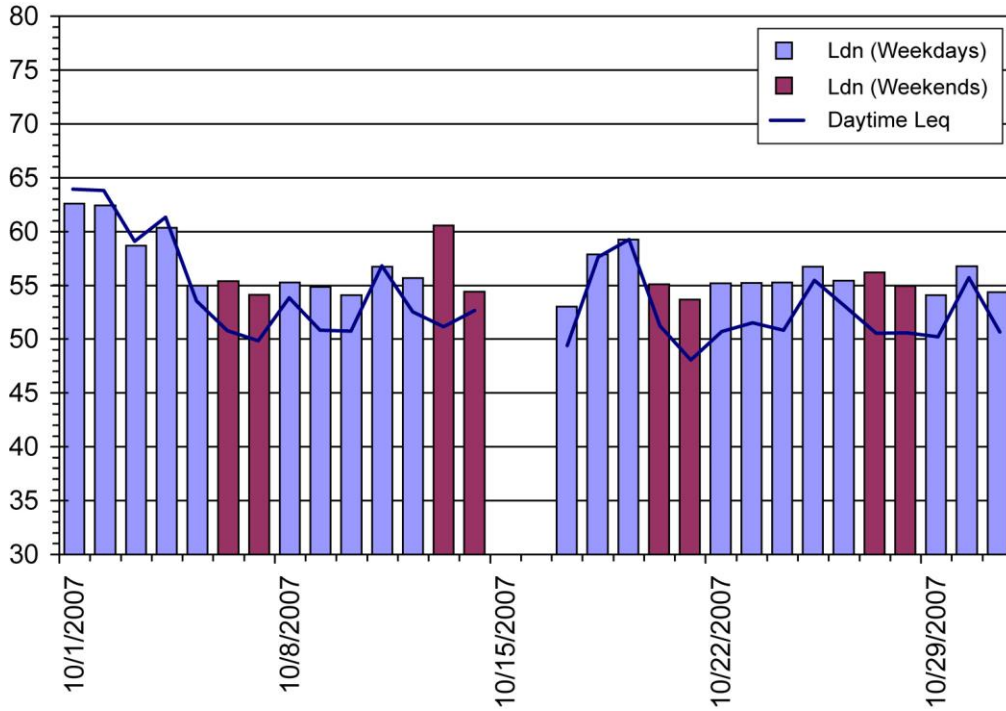


Figure 6: Ldn and Daytime Leq Results

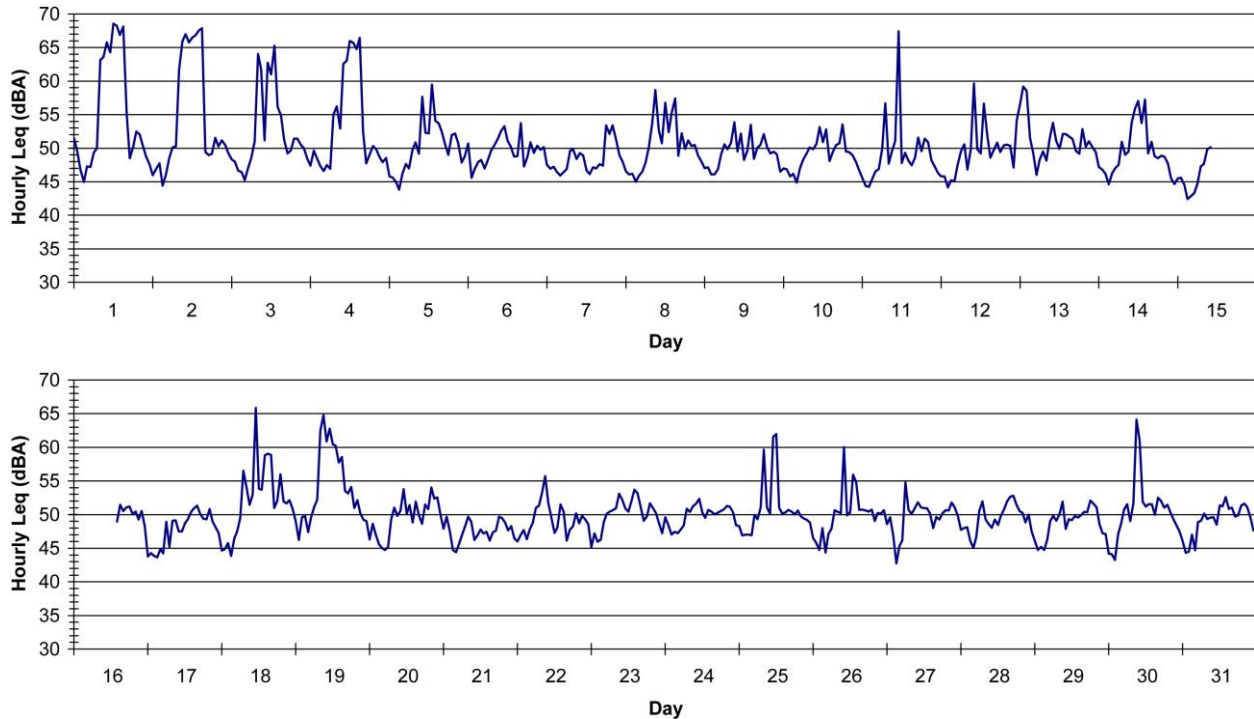


Figure 7: Hourly Leq Results



Table 4. Daily Results Monitor 2, October 2007				
Date	Sound Level, dBA			
	Daytime Leq	Maximum	Minimum	Ldn
10/1/07	64	75	42	63
10/2/07	64	74	43	62
10/3/07	59	76	43	59
10/4/07	61	76	42	60
10/5/07	54	71	41	55
10/6/07	51	67	41	55
10/7/07	50	66	40	54
10/8/07	54	72	39	55
10/9/07	51	72	41	55
10/10/07	51	70	40	54
10/11/07	57	78	41	57
10/12/07	53	76	41	56
10/13/07	51	72	40	61
10/14/07	53	73	42	54
10/15/07	-- ¹	-- ¹	-- ¹	-- ¹
10/16/07	-- ¹	-- ¹	-- ¹	-- ¹
10/17/07	49	68	39	53
10/18/07	58	78	40	58
10/19/07	59	77	42	59
10/20/07	51	69	40	55
10/21/07	48	63	36	54
10/22/07	51	69	39	55
10/23/07	52	66	40	55
10/24/07	51	64	42	55
10/25/07	55	77	41	57
10/26/07	53	75	42	55
10/27/07	51	76	40	56
10/28/07	51	62	38	55
10/29/07	50	66	39	54
10/30/07	56	74	39	57
10/31/07	51	71	40	54

Notes:
1. Data was lost when cell modem was changed.



Discussion

During the month of September the noise levels in the vicinity of Monitor 2 were higher than was observed during June, July, and August. The average Ldn of 56 dBA was higher than the typical Ldn of 54 dBA, and the daytime Leq of 54 dBA was higher than the typical daytime Leq of about 51 dBA. This is primarily due to the activity during the last week of the month, between September 24 and 28. We believe this corresponds to the time when the haul road was constructed.