



MEMORANDUM

To: Robert Miller
Turner Construction

From: Zack Dennis
ATS Consulting

Date: December 13, 2007

Subject: Monthly Noise Report for Raintree Noise Monitors, July 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.

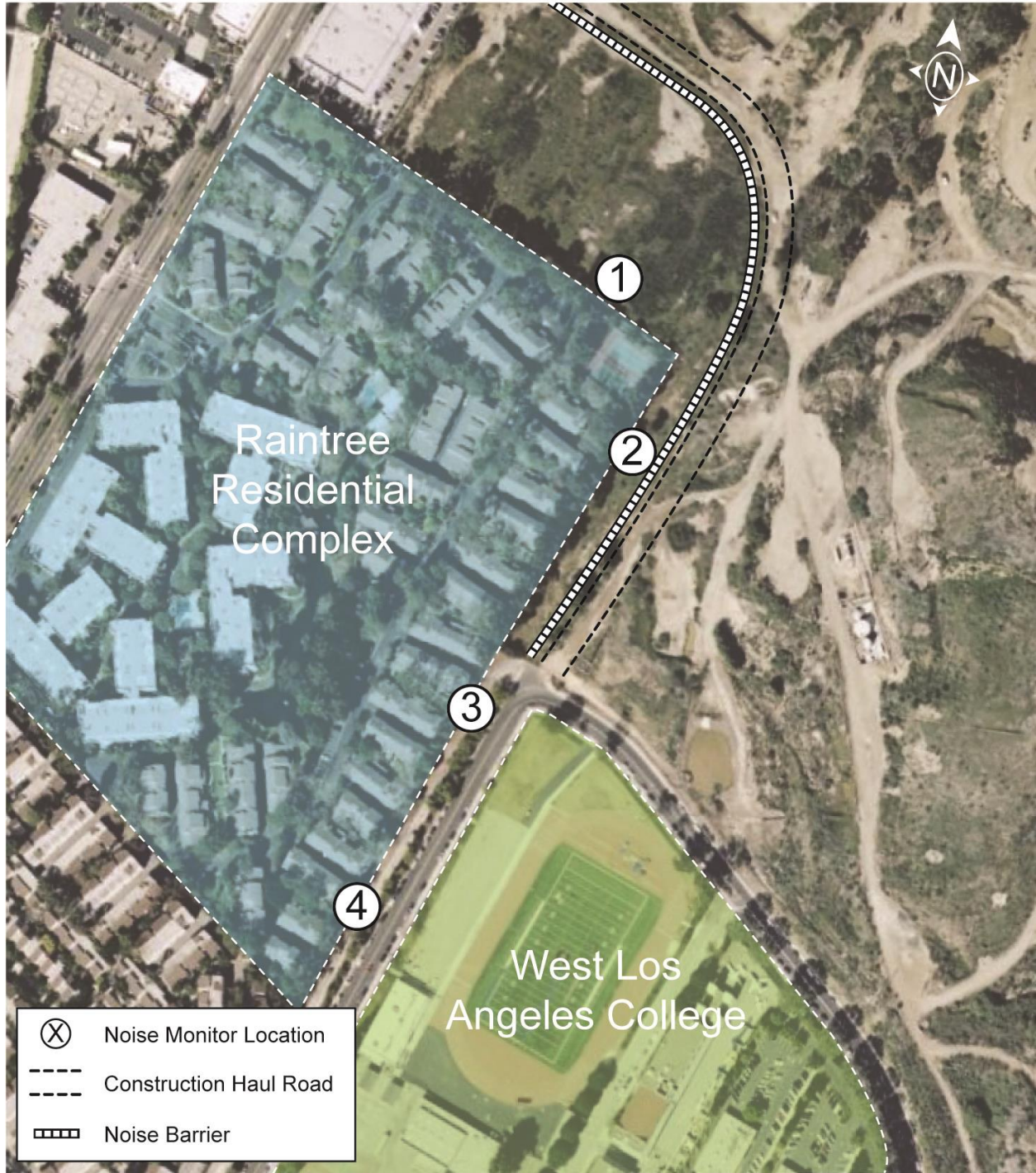


Figure 1: Noise Monitor Locations

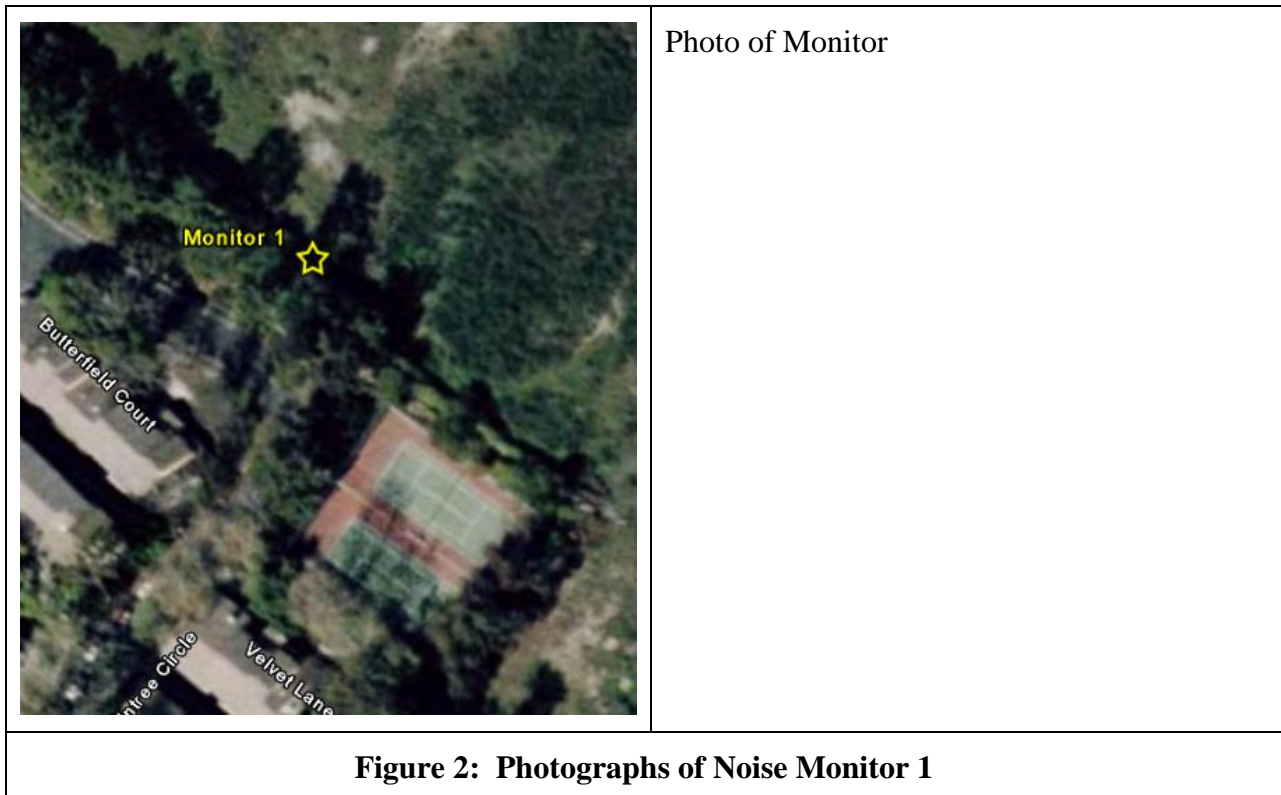


Monitor 1

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) | 52 | 56 | 49 | 1.5 |
| Daytime Hourly Leq | 48 | 57 | 45 | 2.0 |

Source: ATS Consulting, 2005



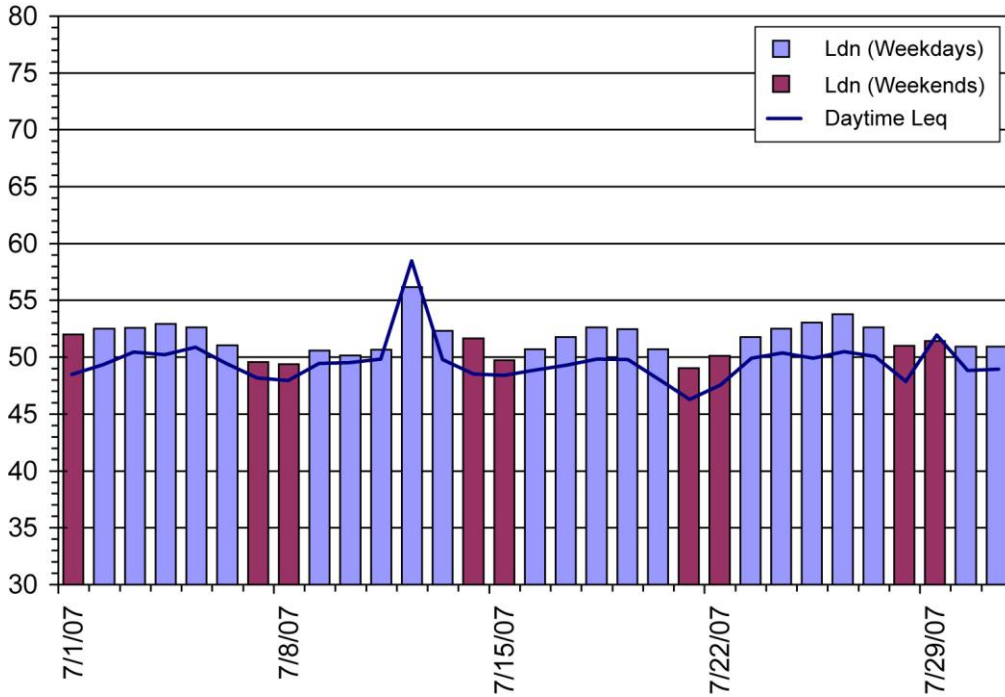


Figure 3: Ldn and Daytime Leq Results

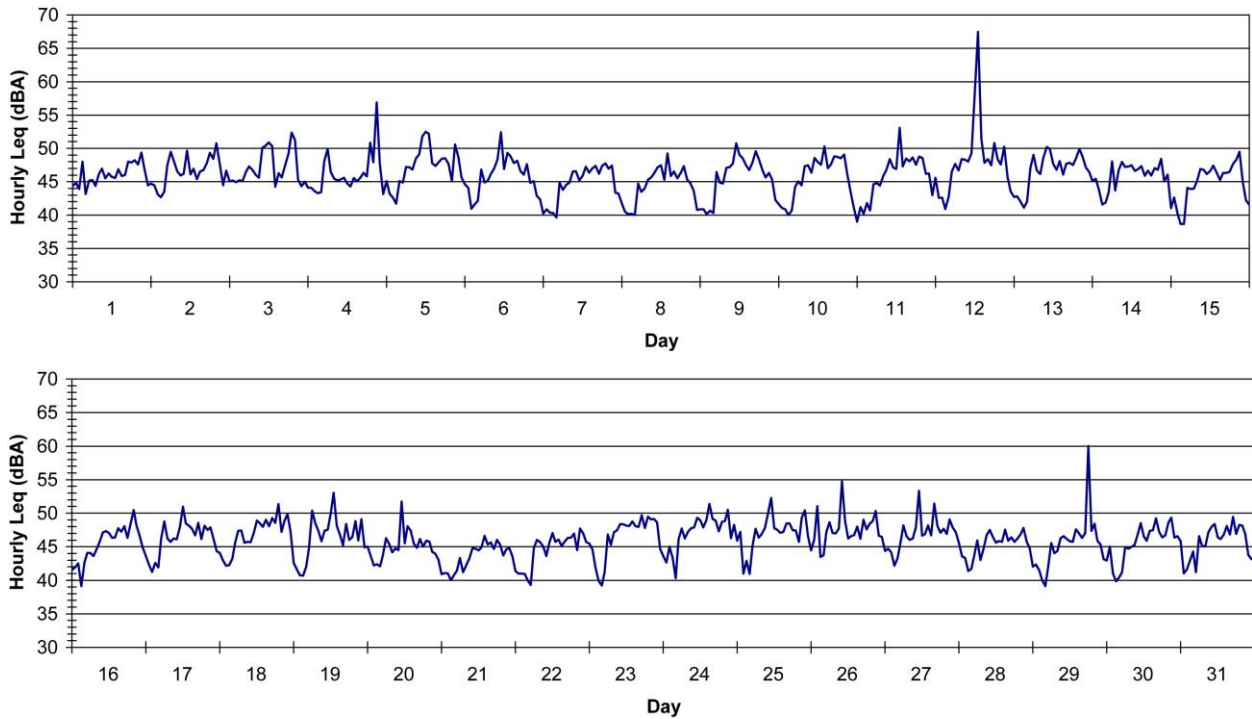


Figure 4: Hourly Leq Results



| Date | Sound Level, dBA | | | |
|-------------|-------------------------|----------------|----------------|------------|
| | Daytime Leq | Maximum | Minimum | Ldn |
| 7/1/07 | 47 | 64 | 40 | 52 |
| 7/2/07 | 48 | 62 | 41 | 53 |
| 7/3/07 | 49 | 63 | 41 | 53 |
| 7/4/07 | 49 | 66 | 41 | 53 |
| 7/5/07 | 49 | 62 | 40 | 53 |
| 7/6/07 | 48 | 60 | 39 | 51 |
| 7/7/07 | 47 | 62 | 38 | 50 |
| 7/8/07 | 46 | 62 | 38 | 49 |
| 7/9/07 | 48 | 66 | 39 | 51 |
| 7/10/07 | 48 | 61 | 38 | 50 |
| 7/11/07 | 48 | 63 | 37 | 51 |
| 7/12/07 | 57 | 74 | 39 | 56 |
| 7/13/07 | 48 | 60 | 40 | 52 |
| 7/14/07 | 47 | 60 | 39 | 52 |
| 7/15/07 | 47 | 64 | 37 | 50 |
| 7/16/07 | 47 | 58 | 37 | 51 |
| 7/17/07 | 48 | 58 | 39 | 52 |
| 7/18/07 | 48 | 66 | 39 | 53 |
| 7/19/07 | 48 | 62 | 39 | 52 |
| 7/20/07 | 46 | 59 | 39 | 51 |
| 7/21/07 | 45 | 57 | 38 | 49 |
| 7/22/07 | 46 | 62 | 37 | 50 |
| 7/23/07 | 48 | 59 | 38 | 52 |
| 7/24/07 | 49 | 60 | 38 | 53 |
| 7/25/07 | 48 | 61 | 39 | 53 |
| 7/26/07 | 49 | 64 | 40 | 54 |
| 7/27/07 | 48 | 65 | 40 | 53 |
| 7/28/07 | 46 | 60 | 40 | 51 |
| 7/29/07 | 50 | 76 | 38 | 51 |
| 7/30/07 | 47 | 60 | 38 | 51 |
| 7/31/07 | 47 | 61 | 37 | 51 |

Source: ATS Consulting, 2005



Discussion

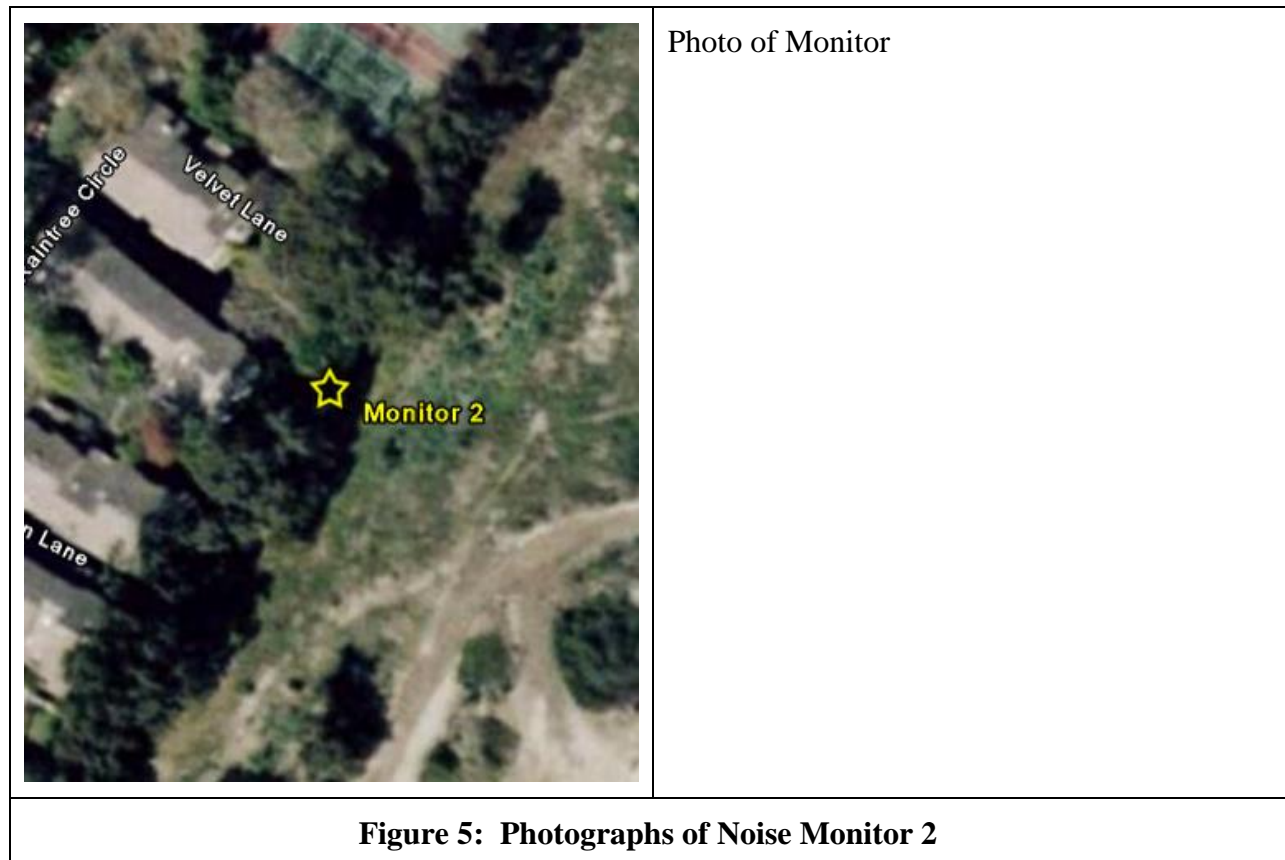
During the month of July the overall noise levels were very consistent with historical values. On July 12, an hourly noise level of 68 dBA was observed between 1 and 2 p.m. The Lmax during this time period was 74 dBA, suggesting that the event was of short duration, possibly caused by a low-altitude airplane or helicopter overflight. A similar event, though not as severe, occurred on July 29 between 7 and 8 p.m.



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) | 54 | 65 | 51 | 2.7 |
| Daytime Hourly Leq | 51 | 67 | 48 | 3.8 |
| Source: ATS Consulting, 2005 | | | | |



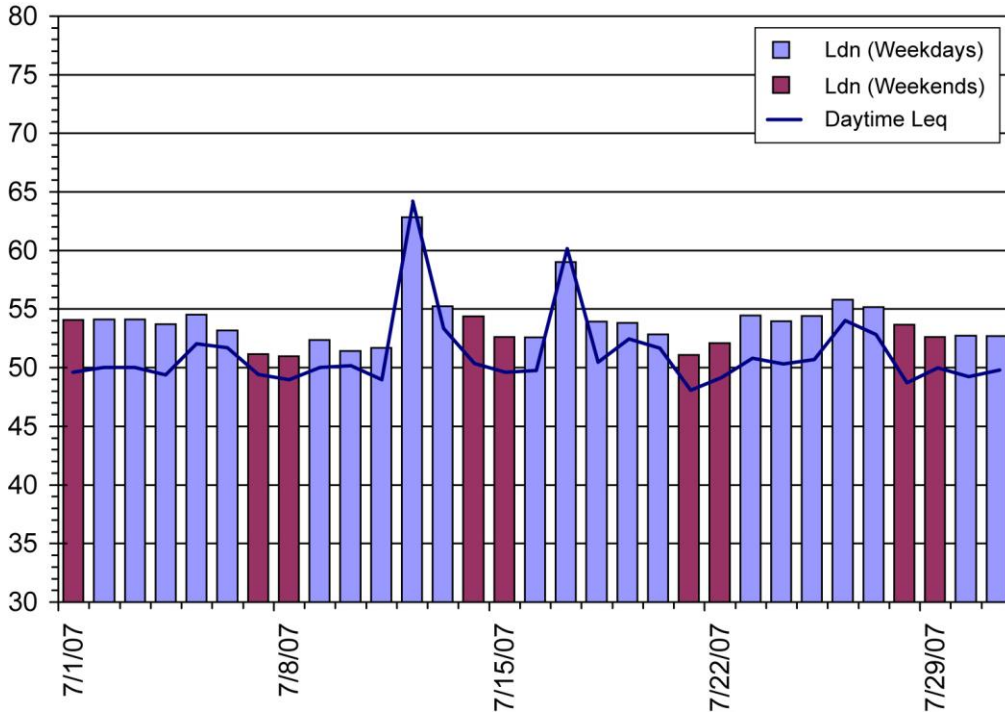


Figure 6: Ldn and Daytime Leq Results

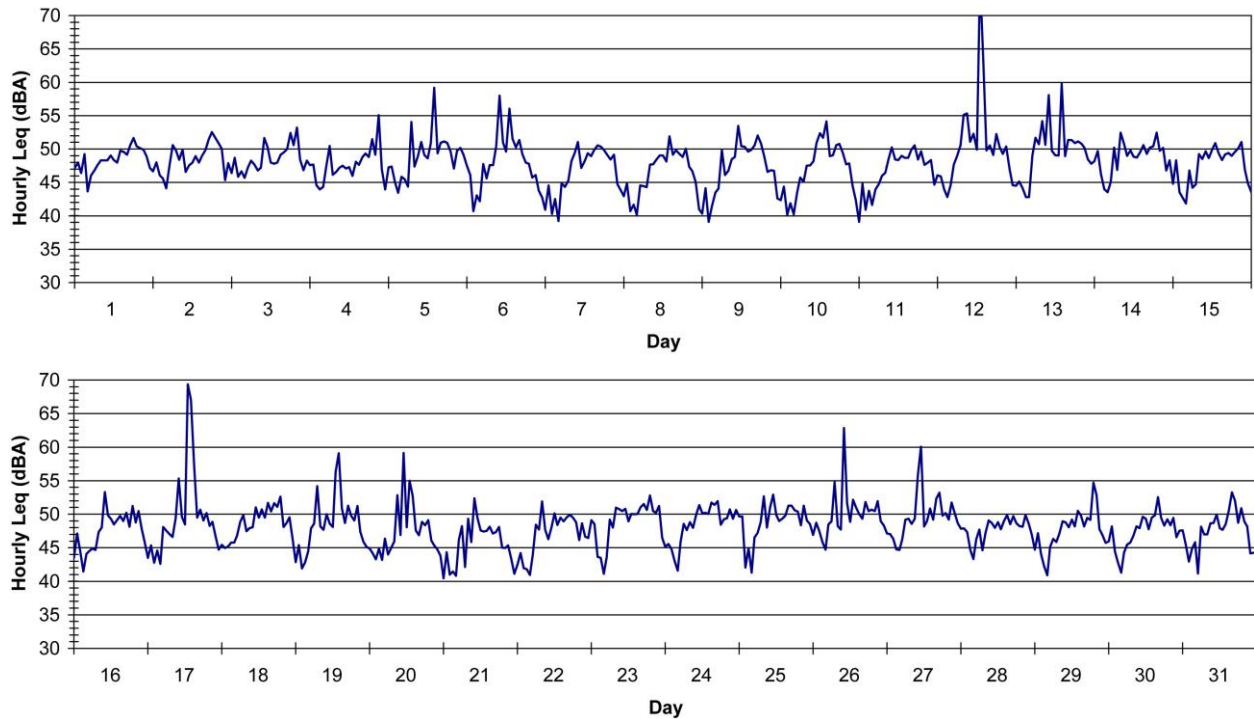


Figure 7: Hourly Leq Results



**Table 4. Daily Results
Monitor 2, June 2007**

| Date | Sound Level, dBA | | | |
|---------|------------------|---------|---------|-----|
| | Daytime Leq | Maximum | Minimum | Ldn |
| 7/1/07 | 49 | 65 | 41 | 54 |
| 7/2/07 | 50 | 64 | 42 | 54 |
| 7/3/07 | 50 | 65 | 43 | 54 |
| 7/4/07 | 49 | 66 | 42 | 54 |
| 7/5/07 | 52 | 70 | 41 | 55 |
| 7/6/07 | 52 | 72 | 38 | 53 |
| 7/7/07 | 49 | 63 | 38 | 51 |
| 7/8/07 | 49 | 65 | 38 | 51 |
| 7/9/07 | 50 | 68 | 37 | 52 |
| 7/10/07 | 50 | 66 | 37 | 51 |
| 7/11/07 | 49 | 60 | 37 | 52 |
| 7/12/07 | 64 | 89 | 40 | 63 |
| 7/13/07 | 53 | 72 | 40 | 55 |
| 7/14/07 | 50 | 63 | 40 | 54 |
| 7/15/07 | 49 | 65 | 38 | 53 |
| 7/16/07 | 50 | 64 | 37 | 53 |
| 7/17/07 | 60 | 78 | 41 | 59 |
| 7/18/07 | 50 | 66 | 40 | 54 |
| 7/19/07 | 52 | 71 | 40 | 54 |
| 7/20/07 | 51 | 74 | 40 | 53 |
| 7/21/07 | 48 | 68 | 37 | 51 |
| 7/22/07 | 49 | 63 | 37 | 52 |
| 7/23/07 | 51 | 62 | 39 | 54 |
| 7/24/07 | 50 | 60 | 38 | 54 |
| 7/25/07 | 51 | 64 | 39 | 54 |
| 7/26/07 | 54 | 73 | 41 | 56 |
| 7/27/07 | 53 | 74 | 41 | 55 |
| 7/28/07 | 48 | 61 | 40 | 54 |
| 7/29/07 | 50 | 65 | 40 | 53 |
| 7/30/07 | 49 | 62 | 39 | 53 |
| 7/31/07 | 50 | 64 | 37 | 53 |

Source: ATS Consulting, 2005



Discussion

During the month of July the overall noise levels were very consistent with historical values, with the exception of July 12. On July 12, an hourly noise level of 76 dBA was observed between 1 and 2 p.m. The L_{max} during this time period was 89 dBA, suggesting that the event was of short duration, possibly caused by a low-altitude airplane or helicopter overflight. This corresponds very closely to a similar event recorded at Monitor 1. Fairly high noise levels were recorded between 3 and 6 p.m. on July 17, leading to a daytime Leq of 60 and an L_{dn} of 59. It is likely this noise was caused by gardening and landscaping activities taking place at a moderate distance from the monitor.