Helicopter Sound Level Evaluations at Selected Locations near the IBM - T. J. Watson Research Center

IBM Corporation

July 2012

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Prepared by: SSM Group, Inc.

Robert A. Pfromm

Robert A. Pfromm, CIH

SSM File 108934.0166 Task 4

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Introduction

At the request of the IBM Corporation, Inc. (IBM), a sound level survey was performed to evaluate helicopter noise related to the planned "Helistop" at the IBM - T.J. Watson Research Center. Four sampling locations were chosen by IBM and SSM Group, Inc. (SSM). SSM was requested through Hill & Bell Associates Engineers, LLC (HBA) to provide Industrial Hygiene expertise to plan and perform the sound level evaluations and to review the collected data to arrive at conclusions related to the observations and findings. These representative sampling locations were chosen due to their proximity to residences near the IBM facility property line and/or their proximity to the likely helicopter flight path or the presence of a possible concurrent noise source (the Taconic Parkway and Rt. 134). The evaluation was performed on July 3, 2012. This report details those sound level evaluations and their findings.

Sound level or "noise" evaluations are generally performed with either a sound level meter (some with datalogging capability as was used for this project) or with noise dosimeters (which are used more for noise exposure in industrial situations). The unit for describing measurements of sound levels is called the decibel (or dB) and is plotted on a logarithmic scale. In measuring sound levels for evaluations of the type performed at IBM, an instrument setting that applies a weighting factor to the varying sound frequency intensities is used. The "A"-weighted sound scale used here, weights or adjusts the frequencies to resemble noise as perceived by the human ear; this "A"-weighting is expressed in units called dBA and is the standard used for noise evaluations of this type.

Summary

The project was carefully planned to coordinate the availability of the helicopter and flight crew, the acceptable coverage of potential neighborhood sound level exposure by the choice of representative locations, sampling equipment availability and security for the equipment when in place (observer/chaperones), and a helicopter flight plan which would represent typical flight operations to and from the facility and use of the "Helistop".

Appropriate equipment was chosen and a sampling plan developed to provide as much data as possible. The sampling locations and the assigned IBM observer are noted below, and the sampling locations are included on the sampling diagram in the Appendices. The sampled locations were as follows:

Location #1 – located on Old Kitchawan Rd. on IBM property across the street from a residence. Observer – Ibrahim Warsame (Fluor).

Location #2 – located on the closed Rt. 134 entrance ramp at the Taconic Parkway. Observer – John Schimitsch (Fluor).
Location #3 – located on Waste Water Treatment Plant Road on IBM property. Observer – Loredana Pullano (IBM).
Location #4 – located at the end of the Syska/Barnes Cul de Sac in front of a residence. Observer – Mark DiCicco (IBM).

On July 3, 2012 the sampling plan was implemented, with sound level equipment placed and IBM personnel assigned to each unit and location for security and observation. The helicopter then performed a series of approaches and departures, to and from the proposed "Helistop" location. Upon completion, the sound level meters were recovered and returned to the SSM office for download and review as data graphs and data files.

The data graphs and data files (included in the Appendices) give a clear indication of normal background noise for the individual locations. The increase in sound level from the helicopter activities and most additional noise produced by other regular sources (passing cars, trucks, planes, dogs, etc.), were also clearly defined except for Location #2. Location #2, located on the closed Rt. 134 entrance ramp at the Taconic Parkway, had so much vehicular noise that it was not possible to accurately distinguish the helicopter sound contribution from the truck and car traffic noise.

A Summary of the sampling results as shown in the graphs follows:

- At **Location #1**, the background noise level fluctuated with peaks at approximately 50 dBA, while the helicopter peaked at 71.5 dBA during the departure to the north and was slightly higher during a flyover.
- At **Location #2**, the background noise level fluctuated in the mid 60 dBA range with a number of excursions to 70 dBA and several to the mid or upper 70's, but none of the peaks during the helicopter approaches was significantly louder than the background noise levels during the same period. The helicopter sound contribution could not be separated from the background noise for this evaluation.
- At **Location #3**, the background noise level was quite stable at slightly less than 50 dBA, with almost no excursions except for three vehicles which passed the sampler (one before the helicopter arrival and two after). The vehicle which passed before the helicopter arrival was actually 3.1 dBA louder (at 75.7 dBA) than the loudest helicopter approach (at 72.6 dBA) at this location.

- At **Location #4**, the background was in the low to mid 40 dBA range with a number of excursions from vehicles and planes unrelated to this evaluation that approached or slightly exceeded 50 dBA. The loudest helicopter sound level was 72.4 dBA during a flyover and 64.5 dBA during the departure to the north.

Since "noise" or sound levels are known to be reduced substantially by distance from the source, the sound levels here as expected were also significantly attenuated or reduced at the sampling locations due to the distances from the "Helistop" to the sampling locations and/or the altitude of the helicopter during actual flight time as compared to the sound levels spot measured near the "Helistop". The duration of the Helicopter contribution to local sound levels at the four sampling locations was also quite short, and these findings are detailed in the Evaluation and Findings section.

Procedure

On July 3, 2012, Robert Pfromm, CIH, an SSM Project Manager and an ABIH Certified Industrial Hygienist (CIH), was on site at the T.J. Watson Research Center of the IBM Corporation, Inc. (IBM) (located in Yorktown Heights, NY) to set up four datalogging sound level monitoring stations. The sampling locations (detailed below) were chosen by IBM to provide sound level data from representative locations close to residential areas that were in proximity to the proposed flight paths to and from the facility, and to compare those sound levels to existing sound levels (background noise levels) from other sources near those locations. The weather was relatively clear with a few clouds, and a barely detectable wind speed of approximately 5 mph from the northwest (NW) to west-northwest (WNW).

3M/Quest Technologies SoundPro DL Sound Level Meters (DL) were chosen to collect the data, due to their ease of use, accuracy and datalogging capability. Each DL was mounted on a tripod that placed the unit's microphone at a height of about four (4) ft. from the ground and each unit was set to datalog using slow response and to evaluate results using the "A" weighting scale which simulates human hearing (the "A" weighting scale is the standard for industrial and municipal noise evaluations). Approximately an hour before the intended arrival of the IBM helicopter (a Sikorsky S76 B), the SSM CIH, with the assistance of Daniel Chess, an IBM Advisory Engineer, went to each of the four intended sampling locations to set up the data recording stations for the sound level evaluation. Additional IBM personnel (one per sampler) were also assigned to observe or "chaperone" the samplers and to record the time and location for any noise generating sources noted during the evaluation, such as vehicles, lawnmowers, other mechanical equipment, animals (barking dogs, etc.) and any other significant sources.

With the samplers set up, the background sound levels at the four locations were monitored, prior to the arrival of the helicopter in the area. To represent the presence of the helicopter in the area during normal flight operations, the following flight profiles were used:

- A fly-over of the IBM site at 2000 feet MSL (mean sea level) which is approximately 1500 feet AGL (above ground level).
- A fly-over of the IBM site at 1500 feet MSL which is approximately 1000 feet AGL.
- An approach from the west to a hover at ground level, rotate at the future "helistop" and depart to the north.
- An approach from the north to a hover at ground level, rotate at the future "helistop" and depart to the west.
- Final departure fly-over at approximately 2000 ft. MSL.

The sound levels at each of these four locations were also monitored for a brief period after the helicopter departed the area for additional background noise levels. Upon completion of the sampling process, the sound level meters were recovered and the observations sheets prepared by the observer/"chaperones" were collected. Upon return to the SSM offices, the data collected by the sound level meters was downloaded, reviewed and prepared in graphic form. The recorded times of the five helicopter flight plan elements as noted by Mr. Pfromm at the "Helistop" and the times of additional noise events as recorded by the four observers at the sampling locations were compared to the recorded data and graphs and used to identify sound level peaks on the graphs. This data will provide a comparison of the helicopter sound levels during normal flight operation in and out of the T.J. Watson Research Center to typical background noise levels and will indicate typical durations of helicopter noise levels at those locations.

Results Evaluation

The narrative for this section refers to the labeled sound level graphs for each location (included in the Appendices) and only discusses the sound "peaks" which visibly exceeded the background noise levels, except for Location #2 where this did not occur. The data tables were reviewed during the development of the graphs and are included in the Appendices. The evaluations at each location provide the following results:

- At **Location #1** (located on Old Kitchawan Rd. on IBM property across the street from a residence), during the background level data collection prior to the initial helicopter arrival at 10:24, the background noise level fluctuated with most peaks at approximately 50 dBA, the following noise excursions and sources were noted:

  9:41:44, an SUV on Old Kitchawan Rd. passed the sampling location and a tractor trailer passed by on Rt. 134 for a combined noise level of 65 dBA;

  9:53:14, a truck on Old Kitchawan Rd. passed the sampling location for a reading of 63.2 dBA;

  10:06:14, a number of trucks and cars passed on Rt. 134 for a reading of 53.1 dBA.

- At **Location #1**, the helicopter passes occurred from 10:24:44 to 10:42:14. The sound levels during the helicopter passes at this location were as follows:

  10:24:44, the helicopter performs a flyover at 2000 ft. MSL (1500 ft. AGL) with a sound level reading of 65.8 dBA;

  10:30:14, the helicopter performs a flyover at 1500 ft. MSL (1000 ft. AGL) with a sound level reading of 71.6 dBA;

  10:33:44, the helicopter approaches the "Helistop" from the west and hovers at ground level before departing to the north (see next item) with a sound level reading of 62.9 dBA;

  10:34:44, the helicopter completes a departure to the north after hovering at ground level with a sound level reading of 71.5 dBA;

  10:38:14, the helicopter approaches the "Helistop" from the north and hovers at ground level before departing to the west (see next item) with a sound level reading of 70.0 dBA;

  10:39:44, the helicopter completes a departure to the west after hovering at ground level with a sound level reading of 63.6 dBA;

  10:42:14, the helicopter performs a flyover at approximately 2000 ft. MSL (1500 ft. AGL) as it returns to the airport with a sound level reading of 60.2 dBA.

- At **Location #1**, during the post helicopter background level data collection, the following noise excursion and source was noted:

  10:51:14, during the post-helicopter background noise level sampling, a dog was barking at the house across the street from the sampler with a sound level reading of 60.9 dBA.

- At **Location #2** (located on the closed Rt. 134 entrance ramp at the Taconic Parkway), during the background level data collection prior to the initial helicopter arrival at 10:24, the background noise level fluctuated with most peaks between approximately 50 and 70 dBA (due to traffic noise at this location); the following noise excursions and sources were noted and are based

primarily on a comparison of the observers noted times to the graph, as none of the peaks which occurred during the helicopter flyovers are significantly different from the background noise:

9:41:33, a tractor trailer passed by the sampling location on Rt. 134 for a reading of 79.0 dBA;

9:53:33, a tractor trailer entered the closed ramp (construction entrance) sampling location for a reading of 75.6 dBA;

10:00:03, a tractor trailer passed on Rt. 134 for a reading of 63.4 dBA;

10:19:03, a tractor trailer passed on Rt. 134 for a reading of 67.4 dBA;

10:23:03, a tractor trailer passed on Rt. 134 for a reading of 68.5 dBA.

- At **Location #2**, the helicopter passes occurred from 10:24:33 to 10:42:03. The sound levels during the helicopter passes at this location were as follows:

  10:24:33, the helicopter performs a flyover at 2000 ft. MSL (1500 ft. AGL) with a sound level reading of 62.8 dBA;

  10:30:33, the helicopter performs a flyover at 1500 ft. MSL (1000 ft. AGL) with a sound level reading of 71.1 dBA;

  10:34:03, the helicopter approaches the "Helistop" from the west and hovers at ground level before departing to the north (see next item) with a sound level reading of 61.2 dBA;

  10:35:03, the helicopter completes a departure to the north after hovering at ground level with a sound level reading of 70.05 dBA;

  10:37:33, the helicopter approaches the "Helistop" from the north and hovers at ground level before departing to the west (see next item) with a sound level reading of 70.3 dBA;

  10:39:33, the helicopter completes a departure to the west after hovering at ground level with a sound level reading of 67.0 dBA;

  10:42:03, the helicopter performs a flyover at approximately 2000 ft. MSL (1500 ft. AGL) with a sound level reading of 64.8 dBA, as it returns to the airport.

- At **Location #2**, during the post helicopter background level data collection, the following noise excursions and sources were noted:

  10:45:23, a truck on Rt. 134, passed the sampling location for a reading of 70.10 dBA;

  10:47:03, a truck on Rt. 134, passed the sampling location for a sound level reading of 65.7 dBA;

  10:49:03, a dump truck on Rt. 134, passed the sampling location for a sound level reading of 69.4 dBA.

- At **Location #3** (located southwest of the "Helistop" on the IBM road leading to the treatment plant and was near several houses close to the property line), the background noise level was quite stable at slightly less than 50 dBA, with almost no excursions. During the background level

data collection prior to the initial helicopter arrival at 10:24, there were only a few noise excursions above the background level, mostly related to the infrequent traffic on the Treatment Plant Road. The following noise excursions and sources were noted:

9:45:17, an airplane was heard for a reading of 55.0 dBA;

10:13:17, a landscaping vehicle passed by the sampling location on Treatment Plant Rd. for a reading of 75.7 dBA.

- At **Location #3**, the helicopter passes occurred from 10:24:47 to 10:42:17. The sound levels during the helicopter passes at this location were as follows:

  10:24:47, the helicopter performs a flyover at 2000 ft. MSL (1500 ft. AGL) with a sound level reading of 70.8 dBA;

  10:30:17, the helicopter performs a flyover at 1500 ft. MSL (1000 ft. AGL) with a sound level reading of 72.6 dBA;

  10:33:47, the helicopter approaches the "Helistop" from the west and hovers at ground level before departing to the north (see next item) with a sound level reading of 61.8 dBA;

  10:34:47, the helicopter completes a departure to the north after hovering at ground level with a sound level reading of 60.3 dBA;

  10:38:17, the helicopter approaches the "Helistop" from the north and hovers at ground level before departing to the west (see next item) with a sound level reading of 59.9 dBA;

  10:39:47, the helicopter completes a departure to the west after hovering at ground level with a sound level reading of 66.8 dBA;

  10:42:17, the helicopter performs a flyover at approximately 2000 ft. MSL (1500 ft. AGL) with a sound level reading of 66.6 dBA, as it returns to the airport.

- At **Location #3**, during the post helicopter background level data collection, the following noise excursion and sources were noted:

  10:56:17, a van passed by the sampling location on Treatment Plant Road, for a reading of 64.0 dBA;

  11:02:17, a van passed by the sampling location on Treatment Plant Road, for a reading of 64.0 dBA.

- At **Location #4** (located at the end of the Syska/Barnes Cul de Sac), the background was in the low to mid 40 dBA range with a number of excursions from vehicles and planes unrelated to this evaluation that approached or slightly exceeded 50 dBA. During the background level data collection prior to the initial helicopter arrival at about 10:25, there were only a few noise excursions above the background level. The following noise excursions and sources were noted:

9:42:05, truck noise near sampling location was heard for a reading of 53.1 dBA;

9:45:05, an airplane was heard for a reading of 47.0 dBA;

9:54:05, an airplane was heard for a reading of 49.4 dBA;

10:05:05, a car drove by the sampling location for a reading of 50.9 dBA;

10:12:35, an airplane was heard for a reading of 43.9 dBA;

10:15:05, an airplane was heard for a reading of 48.1 dBA.

- At **Location #4**, the helicopter passes occurred from 10:25:05 to 10:42:05. The sound levels during the helicopter passes at this location were as follows:

  10:25:05, the helicopter performs a flyover at 2000 ft. MSL (1500 ft. AGL) with a sound level reading of 69.5 dBA;

  10:30:05, the helicopter performs a flyover at 1500 ft. MSL (1000 ft. AGL) with a sound level reading of 72.4 dBA;

  10:33:35, the helicopter approaches the "Helistop" from the west and hovers at ground level before departing to the north (see next item) with a sound level reading of 60.3 dBA;

  10:34:35, the helicopter completes a departure to the north after hovering at ground level with a sound level reading of 64.5 dBA;

  10:38:35, the helicopter approaches the "Helistop" from the north and hovers at ground level before departing to the west (see next item) with a sound level reading of 61.1 dBA;

  10:39:35, the helicopter completes a departure to the west after hovering at ground level with a sound level reading of 58.8 dBA;

  10:42:05, the helicopter performs a flyover at approximately 2000 ft. MSL (1500 ft. AGL) with a sound level reading of 60.0 dBA, as it returns to the airport.

- At **Location #4**, during the post helicopter background level data collection, the following noise excursion and sources were noted:

  No significant noise sources were identified at this location after the helicopter departed the area.

Findings

It is common practice for projects like this to compare measured sound levels to common noise sources as a reference point for discussion. In most cases these common example noise sources produce a range of sound levels. For this project the maximum noise levels for the helicopter during any of the various segments of the flight profile (over flights, approaches or departures) were between 64 to 72 dBA. Common noise sources which produce sound levels in this range are as follows: **a typical business office**

(from conversation and office equipment), **a typical shower, a flushing toilet, a dishwasher, or a window air conditioner.**

At **Location #1**, the maximum measured sound level from the approach and departure flights was 71.5 dBA which is comparable to the range of sound levels from the example sources listed above. The total duration of the datalogged sound levels from the helicopter were 4 minutes for the west approach, hover and then north departure and 5 minutes for the north approach, hover and then west departure; **however, the maximum noise levels occurred only for 30 to 60 seconds for each event and possibly less.**

The helicopter contribution to the ambient sound levels at **Location #2** could not be accurately distinguished from the traffic noise at that location; however, the measured noise levels during the entire sampling period including at the time periods when the helicopter approaches occurred were comparable to the maximum noise levels at Location #1 and in fact were slightly less. The example sources of comparable noise levels could be the same as Location #1.

The maximum measured sound level for **Location #3** from the approach and departure flights was 66.8 dBA which is also comparable to the sound levels from the previous example sources for Locations #1 and #2. The duration of the datalogged sound levels from the helicopter were 4 minutes for the west approach, hover and then north departure and just 2.5 minutes for the north approach, hover and then west departure, however as with Location #1, **the maximum noise levels occurred only for 30 to 60 seconds for each event and possibly less.** It was not clear why the north approach/west departure was of shorter duration at this location but the terrain and building obstruction between the sampling location and a portion of the flight path may have been a contributing factor or optionally, with the north approach the sampling location was on the far side of the property and the helicopter had to approach closer before the sampler could detect it, reducing the duration of the measurement.

The maximum measured sound level for **Location #4** from the approach and departure flights was 64.5 dBA which is also comparable to the sound levels from the previous example sources noted for Locations #1, #2 and #3. The duration of the datalogged sound levels from the helicopter were 4.5 minutes for the west approach, hover and then north departure and just 3.5 minutes for the north approach, hover and then west departure, however as with Locations #1 and #3, **the maximum noise levels occurred only for 30 to 60 seconds for each event and possibly less.** The shorter duration in this case also appears to be due to the sampling location being in the opposite direction from the departure pathway (the sampler is east of the "Helistop" and the helicopter departed to the west so it basically got out of detection range faster).

The 2000 ft. and 1500 ft. over flights were not considered in the noise comparisons for this section as the IBM helicopter would not perform those flight profiles but would make the approach and departures that were considered here. The 2000 ft. and 1500 ft. over flights were useful to see what kind of sound levels would be produced by a helicopter transiting the area at cruising speed and at those altitudes.

The various results evaluated for this project should be considered worst case scenarios, especially the approach, hover and departures results, as it is important to note that during actual helicopter operations there would usually be an approach followed by a landing and the shutdown of the engines, followed by disembarkation of the passengers. When it is time to leave, the passengers would return to the helicopter, the engines would be restarted and the helicopter would depart. Consequently, the duration of elevated sound levels from actual helicopter operations would be considerably shorter for an approach and landing followed sometime later by a take-off and departure than for the continuous approach and departure examples used in this evaluation.

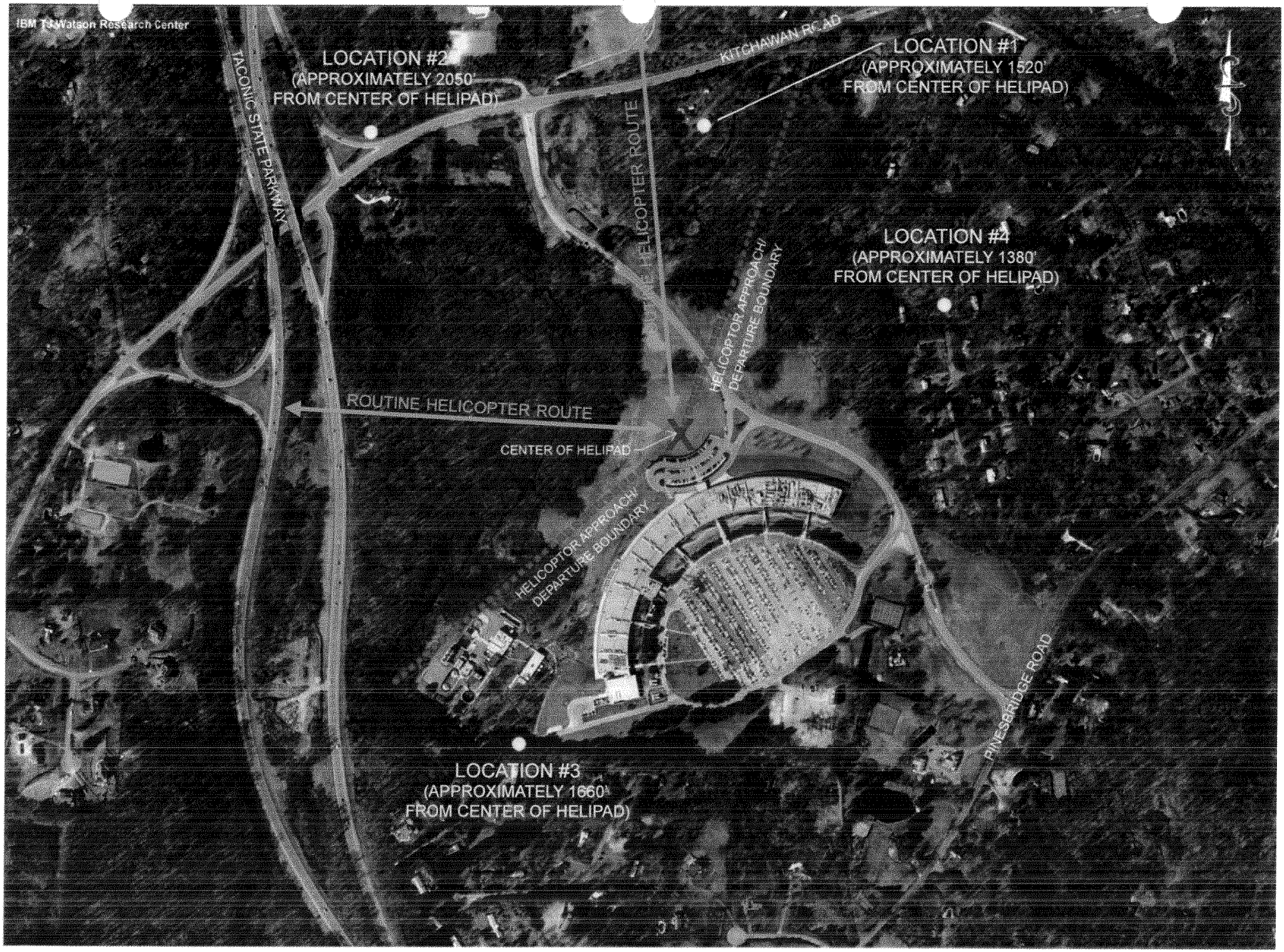
Conclusions

The sound level readings recorded at each location from the helicopter's activities were surprisingly low with no sound level reading exceeding dBA's in the low 70s and durations of a fraction of a minute at the maximum levels during the point of closest approach to any of the sampling locations. In addition, the entire duration of the measurable sound level was no more than 5 minutes for any location and most were considerably less. The findings indicated relatively low maximum sound levels, short duration of measurable sound levels during approaches and departures and very short duration of maximum sound levels. It was also reported that helicopter operations to this facility are expected to be of limited frequency (1 to 2 times a month). Consequently, it is unlikely the limited helicopter activities at the "Helistop" for the IBM - T.J. Watson Research Center will negatively impact the surrounding properties in any significant way. In fact, a positive aspect for the presence of the "Helistop" will be its designation by IBM as an available landing location for medical emergency helicopter operations for the surrounding area.

If there are any questions pertaining to this evaluation or the report developed from it, please contact SSM for additional assistance.

Appendix A

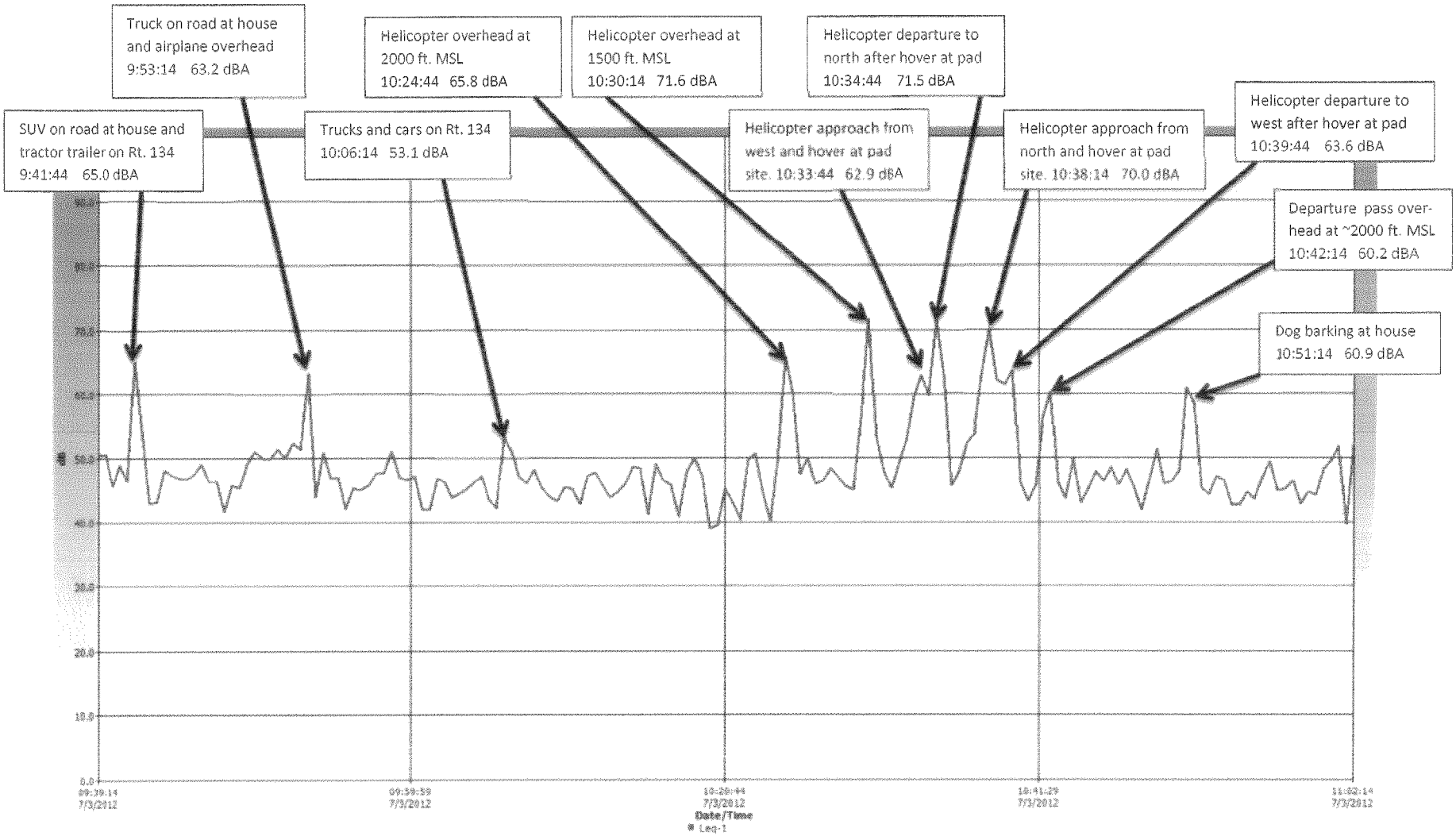
Site Map


IBM TJ Watson Research Center
LOCATION #2
(APPROXIMATELY 2050'
FROM CENTER OF HELIPAD)
KITCHAWAN ROAD
LOCATION #1
(APPROXIMATELY 1520'
FROM CENTER OF HELIPAD)
TACONIC STATE PARKWAY
HELICOPTER ROUTE
HELICOPTER APPROACH/
DEPARTURE BOUNDARY
LOCATION #4
(APPROXIMATELY 1380'
FROM CENTER OF HELIPAD)
ROUTINE HELICOPTER ROUTE
CENTER OF HELIPAD
HELICOPTER APPROACH/
DEPARTURE BOUNDARY
PINESBRIDGE ROAD
LOCATION #3
(APPROXIMATELY 1660'
FROM CENTER OF HELIPAD)

Appendix B

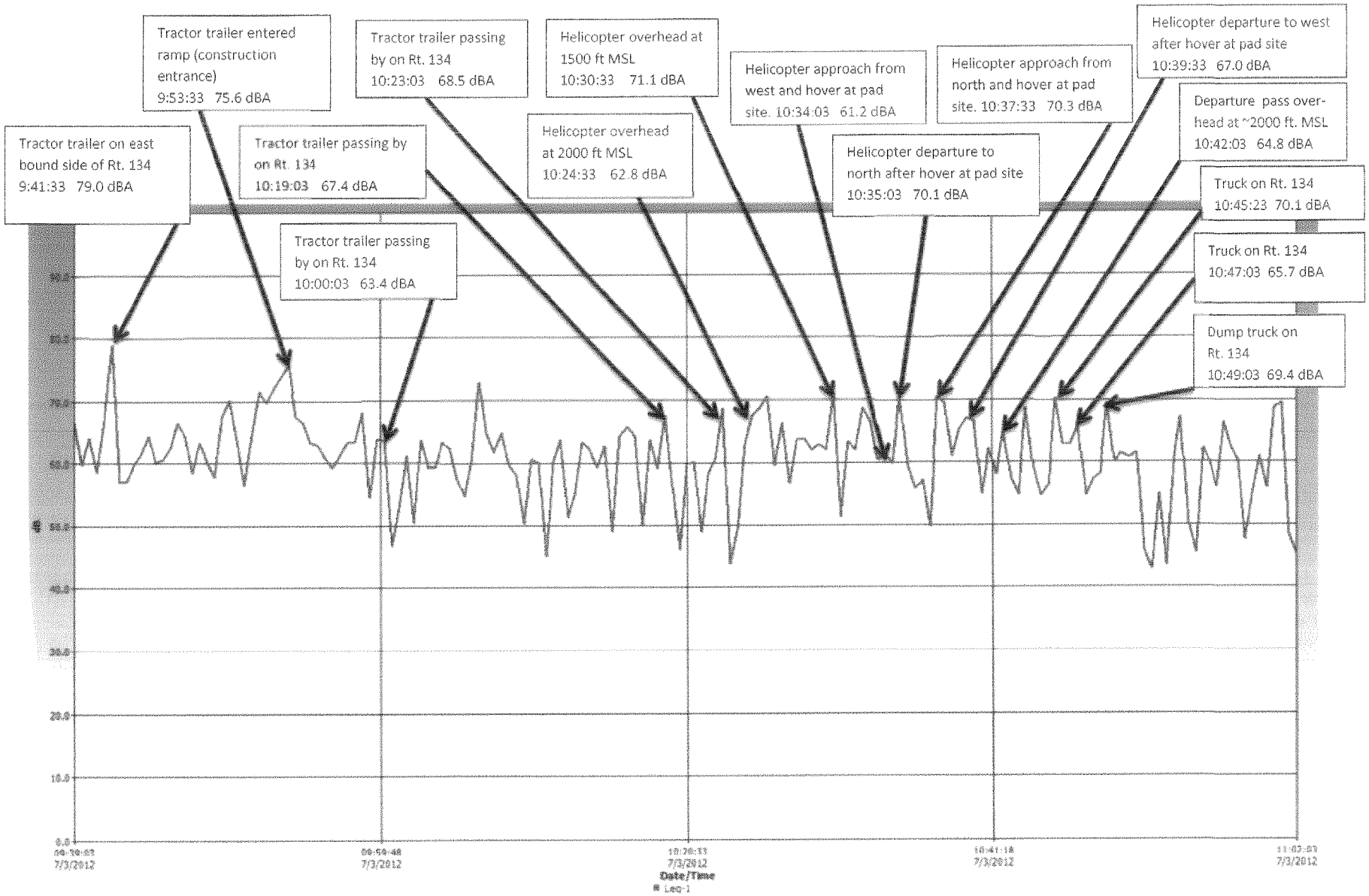
Sample Result Graphs and Expanded Sound Level Scale Graph

Sound Level Evaluation – Helicopter Approaches at Proposed Pad Site – July 3, 2012 - Sampling Location #1 Old Kitchawan Road



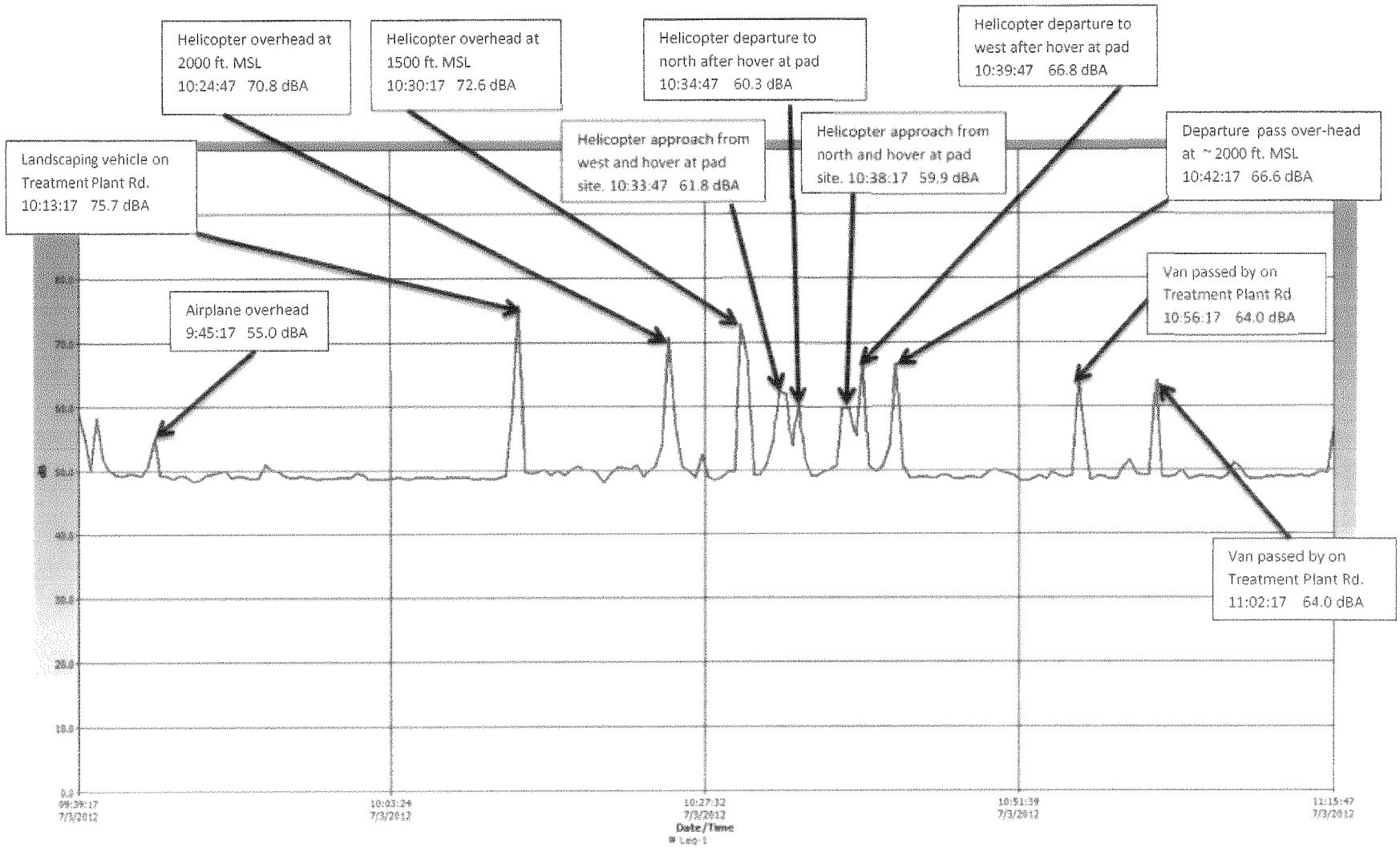
All sample times are plus or minus 20 seconds.

Sound Level Evaluation – Helicopter Approaches at Proposed Pad Site – July 3, 2012 - Sampling Location #2 Taconic Ramp & Rt. 134



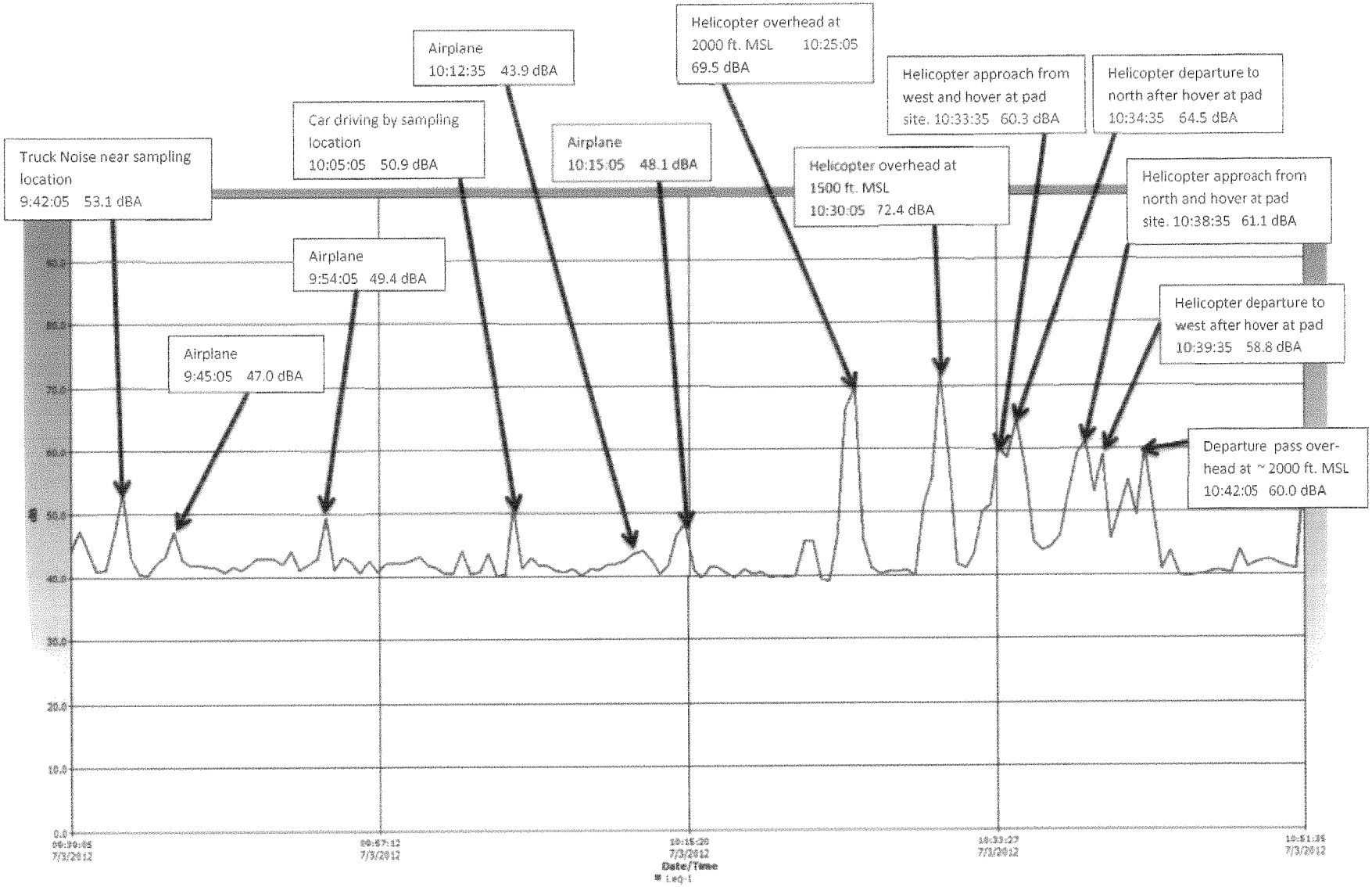
Due to the excessive traffic noise (tractor trailers, cars, SUV's etc.) at this sampling site, it is very difficult to pick out the helicopter contribution.

Sound Level Evaluation – Helicopter Approaches at Proposed Pad Site – July 3, 2012 - Sampling Location #3 Treatment Plant Road



All sample times are plus or minus 20 seconds.

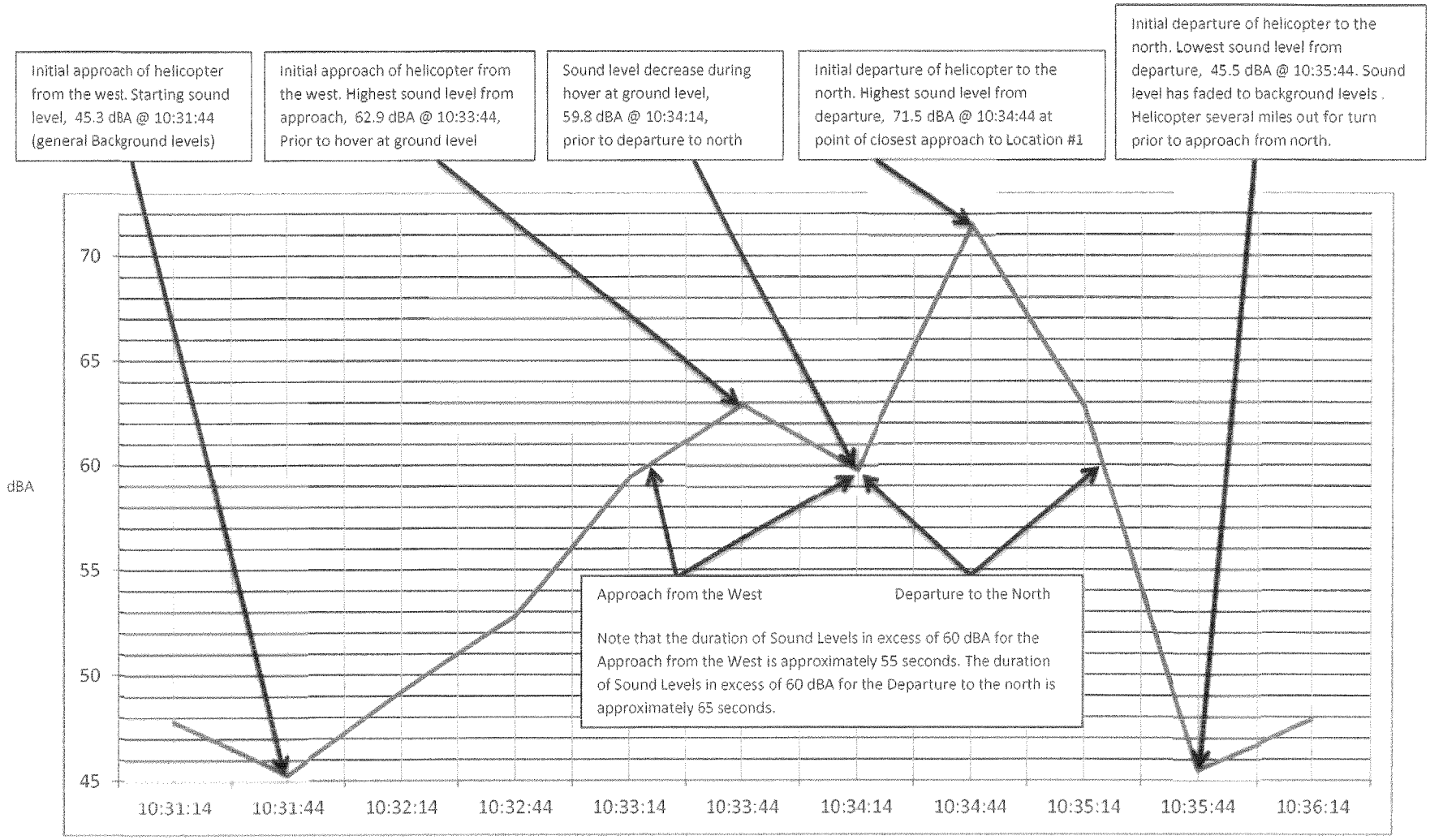
Sound Level Evaluation – Helicopter Approaches at Proposed Pad Site – July 3, 2012
Sampling Location #4 Syska/Barnes Cul de Sac



All sample times are plus or minus 20 seconds.

Sound Level Evaluation – Helicopter Approaches at Proposed IBM "Helistop" Pad Site – July 3, 2012
Sampling Location #1 Old Kitchawan Road

Expanded Sound Level Scale (dBA) on Left Side and Time Scale on Bottom for Helicopter Initial Approach from West, Hover and Departure to North



All sample times are plus or minus 20 seconds. SSM # 108934.0166

Time – Hr: Min: Sec

Appendix C

Data Files

Sampling Location #1

7/6/2012

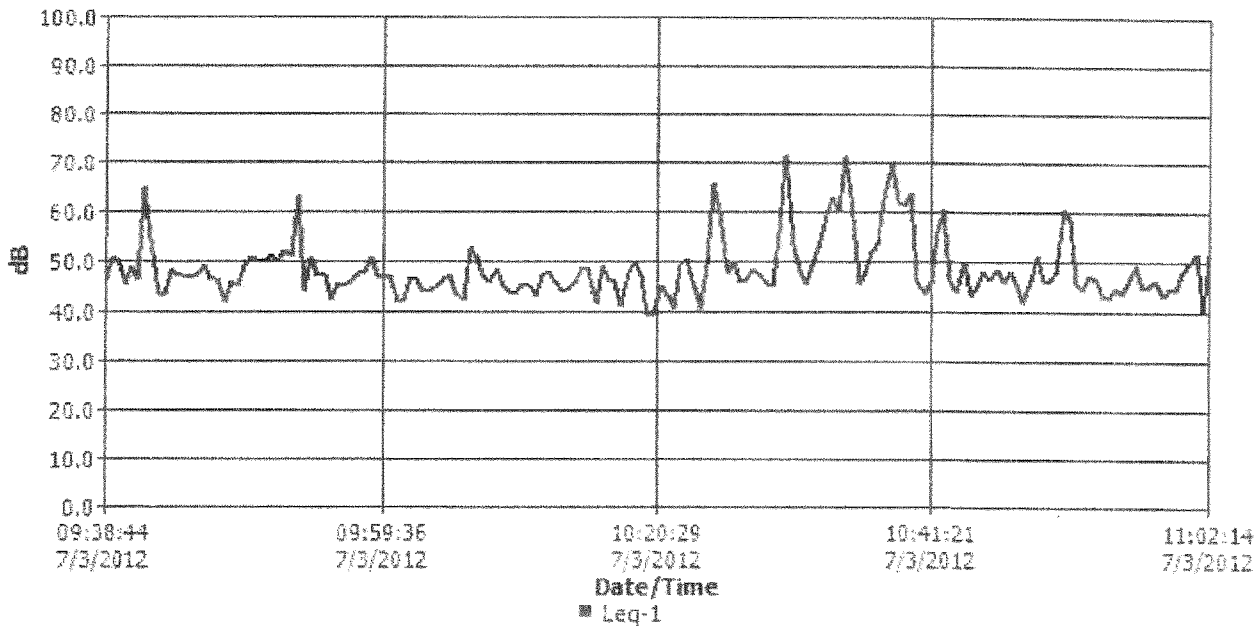
Information Panel

Name	7/3/12 Location #1 Old Kitchawan Rd. Unit 14608
Start Time	Tuesday, July 03, 2012 09:14:44
Stop Time	Tuesday, July 03, 2012 11:02:39
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	62.9 dB	Exchange Rate	1	3 dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	5 dB
Weighting	2	C	Response	2	FAST

Logged Data Chart



Logged Data Table

Timestamp	Leq-1
7/3/2012 9:38:44 AM	46.2
7/3/2012 9:39:14 AM	50.4
7/3/2012 9:39:44 AM	50.5
7/3/2012 9:40:14 AM	45.6
7/3/2012 9:40:44 AM	48.9
7/3/2012 9:41:14 AM	46.4
7/3/2012 9:41:44 AM	65.0
7/3/2012 9:42:14 AM	54.2
7/3/2012 9:42:44 AM	42.9
7/3/2012 9:43:14 AM	43.2
7/3/2012 9:43:44 AM	48.2
7/3/2012 9:44:14 AM	47.3
7/3/2012 9:44:44 AM	46.9
7/3/2012 9:45:14 AM	46.7
7/3/2012 9:45:44 AM	47.4
7/3/2012 9:46:14 AM	49.1
7/3/2012 9:46:44 AM	46.3
7/3/2012 9:47:14 AM	46.4
7/3/2012 9:47:44 AM	41.7
7/3/2012 9:48:14 AM	45.7
7/3/2012 9:48:44 AM	45.2

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 9:49:14 AM	49.1
7/3/2012 9:49:44 AM	51.0
7/3/2012 9:50:14 AM	50.0
7/3/2012 9:50:44 AM	49.8
7/3/2012 9:51:14 AM	51.2
7/3/2012 9:51:44 AM	49.9
7/3/2012 9:52:14 AM	52.2
7/3/2012 9:52:44 AM	51.2
7/3/2012 9:53:14 AM	63.2
7/3/2012 9:53:44 AM	43.9
7/3/2012 9:54:14 AM	50.8
7/3/2012 9:54:44 AM	46.9
7/3/2012 9:55:14 AM	47.0
7/3/2012 9:55:44 AM	42.0
7/3/2012 9:56:14 AM	45.3
7/3/2012 9:56:44 AM	45.0
7/3/2012 9:57:14 AM	45.7
7/3/2012 9:57:44 AM	47.6
7/3/2012 9:58:14 AM	47.8
7/3/2012 9:58:44 AM	51.0
7/3/2012 9:59:14 AM	47.0
7/3/2012 9:59:44 AM	46.6
7/3/2012 10:00:14 AM	47.1
7/3/2012 10:00:44 AM	41.8
7/3/2012 10:01:14 AM	42.0
7/3/2012 10:01:44 AM	46.8
7/3/2012 10:02:14 AM	46.1
7/3/2012 10:02:44 AM	43.8
7/3/2012 10:03:14 AM	44.3
7/3/2012 10:03:44 AM	45.1
7/3/2012 10:04:14 AM	46.1
7/3/2012 10:04:44 AM	47.1
7/3/2012 10:05:14 AM	43.5
7/3/2012 10:05:44 AM	42.2
7/3/2012 10:06:14 AM	53.1
7/3/2012 10:06:44 AM	50.9
7/3/2012 10:07:14 AM	47.2
7/3/2012 10:07:44 AM	45.9
7/3/2012 10:08:14 AM	48.2
7/3/2012 10:08:44 AM	45.2
7/3/2012 10:09:14 AM	43.9
7/3/2012 10:09:44 AM	43.2
7/3/2012 10:10:14 AM	45.4
7/3/2012 10:10:44 AM	45.1
7/3/2012 10:11:14 AM	42.8
7/3/2012 10:11:44 AM	47.2
7/3/2012 10:12:14 AM	47.8
7/3/2012 10:12:44 AM	45.7
7/3/2012 10:13:14 AM	43.7
7/3/2012 10:13:44 AM	44.7
7/3/2012 10:14:14 AM	45.8
7/3/2012 10:14:44 AM	48.6
7/3/2012 10:15:14 AM	48.3
7/3/2012 10:15:44 AM	41.1
7/3/2012 10:16:14 AM	49.1
7/3/2012 10:16:44 AM	46.4
7/3/2012 10:17:14 AM	45.7
7/3/2012 10:17:44 AM	40.8
7/3/2012 10:18:14 AM	47.8
7/3/2012 10:18:44 AM	49.9
7/3/2012 10:19:14 AM	47.2
7/3/2012 10:19:44 AM	38.8
7/3/2012 10:20:14 AM	39.3
7/3/2012 10:20:44 AM	45.1
7/3/2012 10:21:14 AM	43.0
7/3/2012 10:21:44 AM	40.4
7/3/2012 10:22:14 AM	49.6
7/3/2012 10:22:44 AM	50.6
7/3/2012 10:23:14 AM	44.5
7/3/2012 10:23:44 AM	40.3
7/3/2012 10:24:14 AM	49.4
7/3/2012 10:24:44 AM	65.8
7/3/2012 10:25:14 AM	60.0
7/3/2012 10:25:44 AM	47.4
7/3/2012 10:26:14 AM	50.0
7/3/2012 10:26:44 AM	45.8
7/3/2012 10:27:14 AM	46.4

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 10:27:44 AM	48.3
7/3/2012 10:28:14 AM	47.1
7/3/2012 10:28:44 AM	45.6
7/3/2012 10:29:14 AM	44.9
7/3/2012 10:29:44 AM	56.3
7/3/2012 10:30:14 AM	71.6
7/3/2012 10:30:44 AM	53.0
7/3/2012 10:31:14 AM	47.8
7/3/2012 10:31:44 AM	45.3
7/3/2012 10:32:14 AM	49.2
7/3/2012 10:32:44 AM	52.8
7/3/2012 10:33:14 AM	59.4
7/3/2012 10:33:44 AM	62.9
7/3/2012 10:34:14 AM	59.8
7/3/2012 10:34:44 AM	71.5
7/3/2012 10:35:14 AM	62.8
7/3/2012 10:35:44 AM	45.5
7/3/2012 10:36:14 AM	47.9
7/3/2012 10:36:44 AM	52.1
7/3/2012 10:37:14 AM	53.8
7/3/2012 10:37:44 AM	62.9
7/3/2012 10:38:14 AM	70.0
7/3/2012 10:38:44 AM	62.1
7/3/2012 10:39:14 AM	61.4
7/3/2012 10:39:44 AM	63.6
7/3/2012 10:40:14 AM	45.9
7/3/2012 10:40:44 AM	43.2
7/3/2012 10:41:14 AM	45.7
7/3/2012 10:41:44 AM	56.3
7/3/2012 10:42:14 AM	60.2
7/3/2012 10:42:44 AM	45.9
7/3/2012 10:43:14 AM	43.6
7/3/2012 10:43:44 AM	49.8
7/3/2012 10:44:14 AM	42.9
7/3/2012 10:44:44 AM	45.1
7/3/2012 10:45:14 AM	47.9
7/3/2012 10:45:44 AM	46.3
7/3/2012 10:46:14 AM	48.4
7/3/2012 10:46:44 AM	45.7
7/3/2012 10:47:14 AM	48.1
7/3/2012 10:47:44 AM	45.4
7/3/2012 10:48:14 AM	41.9
7/3/2012 10:48:44 AM	46.3
7/3/2012 10:49:14 AM	51.2
7/3/2012 10:49:44 AM	45.8
7/3/2012 10:50:14 AM	46.2
7/3/2012 10:50:44 AM	48.0
7/3/2012 10:51:14 AM	60.9
7/3/2012 10:51:44 AM	58.5
7/3/2012 10:52:14 AM	45.3
7/3/2012 10:52:44 AM	44.2
7/3/2012 10:53:14 AM	47.1
7/3/2012 10:53:44 AM	46.4
7/3/2012 10:54:14 AM	42.6
7/3/2012 10:54:44 AM	42.6
7/3/2012 10:55:14 AM	44.6
7/3/2012 10:55:44 AM	43.5
7/3/2012 10:56:14 AM	46.8
7/3/2012 10:56:44 AM	49.3
7/3/2012 10:57:14 AM	44.8
7/3/2012 10:57:44 AM	45.1
7/3/2012 10:58:14 AM	46.4
7/3/2012 10:58:44 AM	42.8
7/3/2012 10:59:14 AM	44.6
7/3/2012 10:59:44 AM	44.1
7/3/2012 11:00:14 AM	48.1
7/3/2012 11:00:44 AM	49.5
7/3/2012 11:01:14 AM	51.7
7/3/2012 11:01:44 AM	39.5
7/3/2012 11:02:14 AM	51.9

Location # 2

7/6/2012

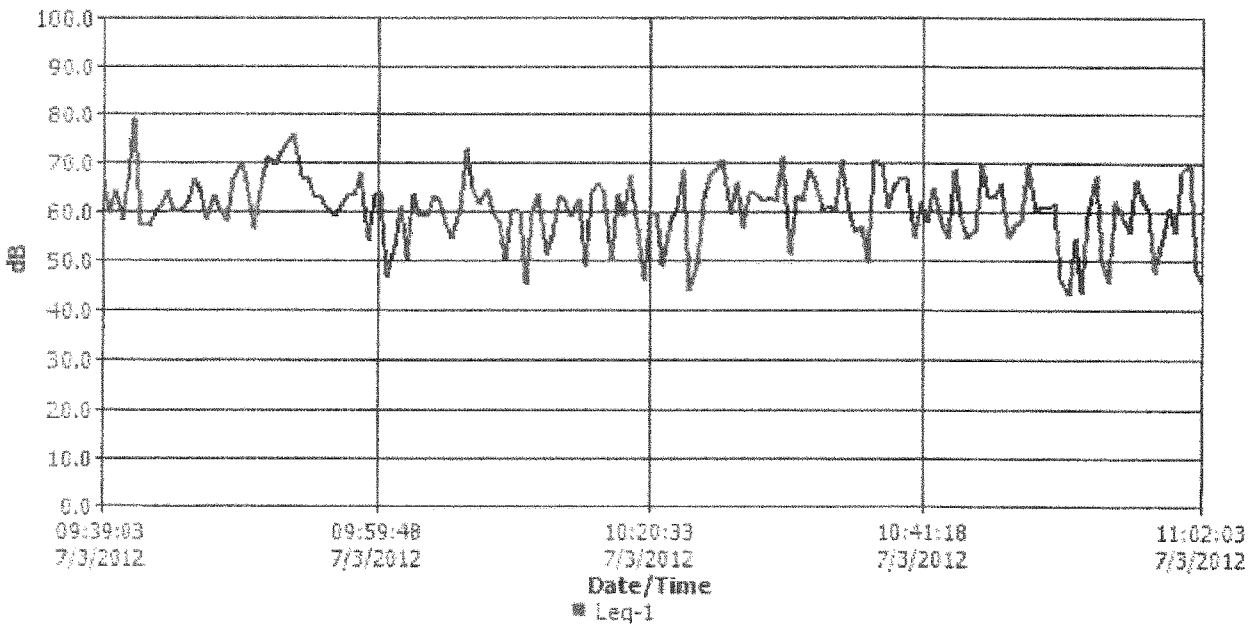
Information Panel

Name	7/3/12 Location #2 Taconic Ramp (NB) @ Rt. 134 Unit # 12200
Start Time	Tuesday, July 03, 2012 09:28:33
Stop Time	Tuesday, July 03, 2012 11:07:20
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	64.9 dB	Exchange Rate	1	3 dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	5 dB
Weighting	2	C	Response	2	FAST

Logged Data Chart



Logged Data Table

Timestamp	Leq-1
7/3/2012 9:39:03 AM	66.3
7/3/2012 9:39:33 AM	59.6
7/3/2012 9:40:03 AM	64.0
7/3/2012 9:40:33 AM	58.5
7/3/2012 9:41:03 AM	66.8
7/3/2012 9:41:33 AM	79.0
7/3/2012 9:42:03 AM	57.0
7/3/2012 9:42:33 AM	57.1
7/3/2012 9:43:03 AM	59.8
7/3/2012 9:43:33 AM	61.4
7/3/2012 9:44:03 AM	64.3
7/3/2012 9:44:33 AM	60.0
7/3/2012 9:45:03 AM	60.5
7/3/2012 9:45:33 AM	62.2
7/3/2012 9:46:03 AM	66.4
7/3/2012 9:46:33 AM	64.3
7/3/2012 9:47:03 AM	58.3
7/3/2012 9:47:33 AM	63.3
7/3/2012 9:48:03 AM	60.1
7/3/2012 9:48:33 AM	57.7
7/3/2012 9:49:03 AM	67.2

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 9:49:33 AM	70.0
7/3/2012 9:50:03 AM	63.6
7/3/2012 9:50:33 AM	56.4
7/3/2012 9:51:03 AM	64.5
7/3/2012 9:51:33 AM	71.3
7/3/2012 9:52:03 AM	69.6
7/3/2012 9:52:33 AM	72.0
7/3/2012 9:53:03 AM	73.9
7/3/2012 9:53:33 AM	75.6
7/3/2012 9:54:03 AM	67.2
7/3/2012 9:54:33 AM	66.4
7/3/2012 9:55:03 AM	63.3
7/3/2012 9:55:33 AM	62.9
7/3/2012 9:56:03 AM	60.6
7/3/2012 9:56:33 AM	59.1
7/3/2012 9:57:03 AM	61.1
7/3/2012 9:57:33 AM	63.2
7/3/2012 9:58:03 AM	63.4
7/3/2012 9:58:33 AM	68.0
7/3/2012 9:59:03 AM	54.3
7/3/2012 9:59:33 AM	63.7
7/3/2012 10:00:03 AM	63.4
7/3/2012 10:00:33 AM	46.6
7/3/2012 10:01:03 AM	52.9
7/3/2012 10:01:33 AM	61.1
7/3/2012 10:02:03 AM	50.4
7/3/2012 10:02:33 AM	63.5
7/3/2012 10:03:03 AM	59.1
7/3/2012 10:03:33 AM	59.2
7/3/2012 10:04:03 AM	63.2
7/3/2012 10:04:33 AM	62.2
7/3/2012 10:05:03 AM	57.6
7/3/2012 10:05:33 AM	54.5
7/3/2012 10:06:03 AM	60.3
7/3/2012 10:06:33 AM	72.8
7/3/2012 10:07:03 AM	64.6
7/3/2012 10:07:33 AM	61.7
7/3/2012 10:08:03 AM	64.7
7/3/2012 10:08:33 AM	59.6
7/3/2012 10:09:03 AM	58.0
7/3/2012 10:09:33 AM	50.2
7/3/2012 10:10:03 AM	60.5
7/3/2012 10:10:33 AM	59.9
7/3/2012 10:11:03 AM	44.9
7/3/2012 10:11:33 AM	60.1
7/3/2012 10:12:03 AM	63.5
7/3/2012 10:12:33 AM	51.2
7/3/2012 10:13:03 AM	54.9
7/3/2012 10:13:33 AM	63.3
7/3/2012 10:14:03 AM	62.1
7/3/2012 10:14:33 AM	59.1
7/3/2012 10:15:03 AM	62.5
7/3/2012 10:15:33 AM	48.7
7/3/2012 10:16:03 AM	64.1
7/3/2012 10:16:33 AM	65.6
7/3/2012 10:17:03 AM	64.2
7/3/2012 10:17:33 AM	49.9
7/3/2012 10:18:03 AM	63.5
7/3/2012 10:18:33 AM	59.0
7/3/2012 10:19:03 AM	67.4
7/3/2012 10:19:33 AM	56.1
7/3/2012 10:20:03 AM	46.0
7/3/2012 10:20:33 AM	59.7
7/3/2012 10:21:03 AM	60.1
7/3/2012 10:21:33 AM	48.8
7/3/2012 10:22:03 AM	58.1
7/3/2012 10:22:33 AM	60.6
7/3/2012 10:23:03 AM	68.5
7/3/2012 10:23:33 AM	43.7
7/3/2012 10:24:03 AM	49.3
7/3/2012 10:24:33 AM	62.8
7/3/2012 10:25:03 AM	67.4
7/3/2012 10:25:33 AM	68.5
7/3/2012 10:26:03 AM	70.4
7/3/2012 10:26:33 AM	59.4
7/3/2012 10:27:03 AM	66.2
7/3/2012 10:27:33 AM	56.7

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 10:28:03 AM	63.5
7/3/2012 10:28:33 AM	63.7
7/3/2012 10:29:03 AM	62.0
7/3/2012 10:29:33 AM	62.8
7/3/2012 10:30:03 AM	62.0
7/3/2012 10:30:33 AM	71.1
7/3/2012 10:31:03 AM	51.2
7/3/2012 10:31:33 AM	63.2
7/3/2012 10:32:03 AM	61.9
7/3/2012 10:32:33 AM	68.6
7/3/2012 10:33:03 AM	66.3
7/3/2012 10:33:33 AM	60.4
7/3/2012 10:34:03 AM	61.2
7/3/2012 10:34:33 AM	59.8
7/3/2012 10:35:03 AM	70.5
7/3/2012 10:35:33 AM	59.5
7/3/2012 10:36:03 AM	55.7
7/3/2012 10:36:33 AM	57.1
7/3/2012 10:37:03 AM	49.6
7/3/2012 10:37:33 AM	70.3
7/3/2012 10:38:03 AM	69.3
7/3/2012 10:38:33 AM	60.9
7/3/2012 10:39:03 AM	65.2
7/3/2012 10:39:33 AM	67.0
7/3/2012 10:40:03 AM	66.5
7/3/2012 10:40:33 AM	54.7
7/3/2012 10:41:03 AM	62.1
7/3/2012 10:41:33 AM	58.0
7/3/2012 10:42:03 AM	64.8
7/3/2012 10:42:33 AM	57.4
7/3/2012 10:43:03 AM	54.6
7/3/2012 10:43:33 AM	68.5
7/3/2012 10:44:03 AM	58.9
7/3/2012 10:44:33 AM	54.5
7/3/2012 10:45:03 AM	56.2
7/3/2012 10:45:33 AM	70.1
7/3/2012 10:46:03 AM	62.8
7/3/2012 10:46:33 AM	62.8
7/3/2012 10:47:03 AM	65.7
7/3/2012 10:47:33 AM	54.5
7/3/2012 10:48:03 AM	57.2
7/3/2012 10:48:33 AM	58.1
7/3/2012 10:49:03 AM	69.4
7/3/2012 10:49:33 AM	60.0
7/3/2012 10:50:03 AM	61.3
7/3/2012 10:50:33 AM	60.6
7/3/2012 10:51:03 AM	61.5
7/3/2012 10:51:33 AM	45.7
7/3/2012 10:52:03 AM	42.8
7/3/2012 10:52:33 AM	54.7
7/3/2012 10:53:03 AM	43.5
7/3/2012 10:53:33 AM	59.6
7/3/2012 10:54:03 AM	67.3
7/3/2012 10:54:33 AM	50.0
7/3/2012 10:55:03 AM	45.4
7/3/2012 10:55:33 AM	62.1
7/3/2012 10:56:03 AM	59.6
7/3/2012 10:56:33 AM	55.8
7/3/2012 10:57:03 AM	66.4
7/3/2012 10:57:33 AM	62.3
7/3/2012 10:58:03 AM	60.1
7/3/2012 10:58:33 AM	47.4
7/3/2012 10:59:03 AM	54.8
7/3/2012 10:59:33 AM	60.8
7/3/2012 11:00:03 AM	55.7
7/3/2012 11:00:33 AM	68.4
7/3/2012 11:01:03 AM	69.4
7/3/2012 11:01:33 AM	48.1
7/3/2012 11:02:03 AM	45.3

Location #3

7/6/2012

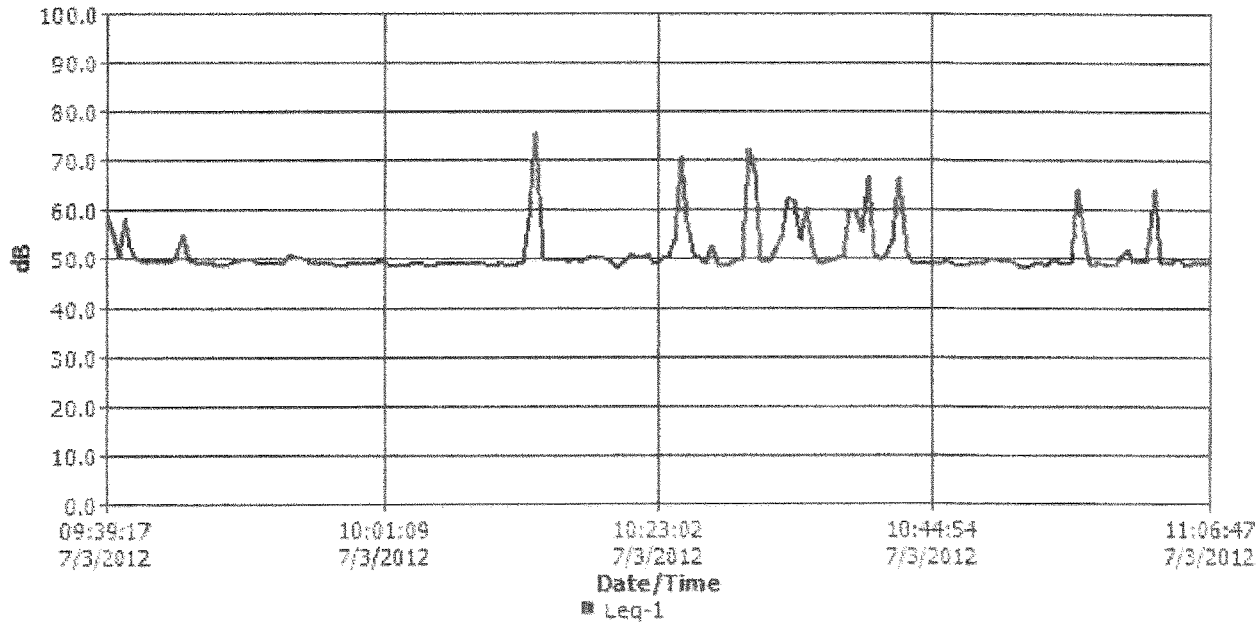
Information Panel

Name	7/3/12 Location #3 IWTP Road Unit # 11894
Start Time	Tuesday, July 03, 2012 09:38:47
Stop Time	Tuesday, July 03, 2012 11:16:05
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	61.3 dB	Exchange Rate	1	3 dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	5 dB
Weighting	2	C	Response	2	FAST

Logged Data Chart



Logged Data Table

Timestamp	Leq-1
7/3/2012 9:39:17 AM	58.8
7/3/2012 9:39:47 AM	54.9
7/3/2012 9:40:17 AM	50.0
7/3/2012 9:40:47 AM	58.3
7/3/2012 9:41:17 AM	51.9
7/3/2012 9:41:47 AM	50.2
7/3/2012 9:42:17 AM	49.3
7/3/2012 9:42:47 AM	49.0
7/3/2012 9:43:17 AM	49.4
7/3/2012 9:43:47 AM	49.3
7/3/2012 9:44:17 AM	49.0
7/3/2012 9:44:47 AM	50.7
7/3/2012 9:45:17 AM	55.0
7/3/2012 9:45:47 AM	49.0
7/3/2012 9:46:17 AM	49.1
7/3/2012 9:46:47 AM	48.6
7/3/2012 9:47:17 AM	49.2
7/3/2012 9:47:47 AM	48.9
7/3/2012 9:48:17 AM	48.2
7/3/2012 9:48:47 AM	48.4
7/3/2012 9:49:17 AM	49.2

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 9:49:47 AM	49.4
7/3/2012 9:50:17 AM	49.7
7/3/2012 9:50:47 AM	50.0
7/3/2012 9:51:17 AM	48.7
7/3/2012 9:51:47 AM	49.1
7/3/2012 9:52:17 AM	48.9
7/3/2012 9:52:47 AM	48.6
7/3/2012 9:53:17 AM	48.8
7/3/2012 9:53:47 AM	51.0
7/3/2012 9:54:17 AM	50.1
7/3/2012 9:54:47 AM	49.8
7/3/2012 9:55:17 AM	49.1
7/3/2012 9:55:47 AM	48.7
7/3/2012 9:56:17 AM	48.9
7/3/2012 9:56:47 AM	48.9
7/3/2012 9:57:17 AM	48.7
7/3/2012 9:57:47 AM	48.5
7/3/2012 9:58:17 AM	48.8
7/3/2012 9:58:47 AM	48.6
7/3/2012 9:59:17 AM	48.8
7/3/2012 9:59:47 AM	48.7
7/3/2012 10:00:17 AM	48.8
7/3/2012 10:00:47 AM	49.5
7/3/2012 10:01:17 AM	49.2
7/3/2012 10:01:47 AM	48.5
7/3/2012 10:02:17 AM	48.5
7/3/2012 10:02:47 AM	48.5
7/3/2012 10:03:17 AM	48.6
7/3/2012 10:03:47 AM	48.7
7/3/2012 10:04:17 AM	48.8
7/3/2012 10:04:47 AM	48.5
7/3/2012 10:05:17 AM	48.8
7/3/2012 10:05:47 AM	48.8
7/3/2012 10:06:17 AM	48.7
7/3/2012 10:06:47 AM	48.8
7/3/2012 10:07:17 AM	48.6
7/3/2012 10:07:47 AM	48.7
7/3/2012 10:08:17 AM	48.7
7/3/2012 10:08:47 AM	48.7
7/3/2012 10:09:17 AM	48.9
7/3/2012 10:09:47 AM	48.4
7/3/2012 10:10:17 AM	48.6
7/3/2012 10:10:47 AM	48.6
7/3/2012 10:11:17 AM	48.4
7/3/2012 10:11:47 AM	48.7
7/3/2012 10:12:17 AM	49.1
7/3/2012 10:12:47 AM	58.7
7/3/2012 10:13:17 AM	75.7
7/3/2012 10:13:47 AM	49.6
7/3/2012 10:14:17 AM	49.4
7/3/2012 10:14:47 AM	49.6
7/3/2012 10:15:17 AM	50.1
7/3/2012 10:15:47 AM	49.0
7/3/2012 10:16:17 AM	49.9
7/3/2012 10:16:47 AM	49.1
7/3/2012 10:17:17 AM	50.1
7/3/2012 10:17:47 AM	50.6
7/3/2012 10:18:17 AM	49.9
7/3/2012 10:18:47 AM	50.1
7/3/2012 10:19:17 AM	49.3
7/3/2012 10:19:47 AM	48.0
7/3/2012 10:20:17 AM	49.3
7/3/2012 10:20:47 AM	50.3
7/3/2012 10:21:17 AM	50.4
7/3/2012 10:21:47 AM	50.1
7/3/2012 10:22:17 AM	50.8
7/3/2012 10:22:47 AM	48.9
7/3/2012 10:23:17 AM	50.0
7/3/2012 10:23:47 AM	50.6
7/3/2012 10:24:17 AM	53.9
7/3/2012 10:24:47 AM	70.8
7/3/2012 10:25:17 AM	56.9
7/3/2012 10:25:47 AM	50.7
7/3/2012 10:26:17 AM	49.8
7/3/2012 10:26:47 AM	48.7
7/3/2012 10:27:17 AM	52.4
7/3/2012 10:27:47 AM	48.9

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 10:28:17 AM	48.3
7/3/2012 10:28:47 AM	48.8
7/3/2012 10:29:17 AM	49.7
7/3/2012 10:29:47 AM	49.8
7/3/2012 10:30:17 AM	72.6
7/3/2012 10:30:47 AM	67.3
7/3/2012 10:31:17 AM	49.1
7/3/2012 10:31:47 AM	49.2
7/3/2012 10:32:17 AM	50.9
7/3/2012 10:32:47 AM	54.5
7/3/2012 10:33:17 AM	62.3
7/3/2012 10:33:47 AM	61.8
7/3/2012 10:34:17 AM	53.8
7/3/2012 10:34:47 AM	60.3
7/3/2012 10:35:17 AM	51.5
7/3/2012 10:35:47 AM	48.9
7/3/2012 10:36:17 AM	49.1
7/3/2012 10:36:47 AM	49.7
7/3/2012 10:37:17 AM	49.9
7/3/2012 10:37:47 AM	50.6
7/3/2012 10:38:17 AM	59.9
7/3/2012 10:38:47 AM	59.7
7/3/2012 10:39:17 AM	55.2
7/3/2012 10:39:47 AM	66.8
7/3/2012 10:40:17 AM	50.7
7/3/2012 10:40:47 AM	49.7
7/3/2012 10:41:17 AM	50.7
7/3/2012 10:41:47 AM	53.8
7/3/2012 10:42:17 AM	66.6
7/3/2012 10:42:47 AM	50.7
7/3/2012 10:43:17 AM	48.6
7/3/2012 10:43:47 AM	48.8
7/3/2012 10:44:17 AM	48.9
7/3/2012 10:44:47 AM	48.8
7/3/2012 10:45:17 AM	48.6
7/3/2012 10:45:47 AM	49.2
7/3/2012 10:46:17 AM	49.0
7/3/2012 10:46:47 AM	48.5
7/3/2012 10:47:17 AM	48.5
7/3/2012 10:47:47 AM	48.9
7/3/2012 10:48:17 AM	48.7
7/3/2012 10:48:47 AM	48.6
7/3/2012 10:49:17 AM	49.5
7/3/2012 10:49:47 AM	50.1
7/3/2012 10:50:17 AM	49.6
7/3/2012 10:50:47 AM	49.3
7/3/2012 10:51:17 AM	49.0
7/3/2012 10:51:47 AM	48.2
7/3/2012 10:52:17 AM	48.1
7/3/2012 10:52:47 AM	48.6
7/3/2012 10:53:17 AM	49.1
7/3/2012 10:53:47 AM	48.5
7/3/2012 10:54:17 AM	49.7
7/3/2012 10:54:47 AM	49.0
7/3/2012 10:55:17 AM	48.7
7/3/2012 10:55:47 AM	49.0
7/3/2012 10:56:17 AM	64.0
7/3/2012 10:56:47 AM	55.2
7/3/2012 10:57:17 AM	48.3
7/3/2012 10:57:47 AM	48.9
7/3/2012 10:58:17 AM	48.9
7/3/2012 10:58:47 AM	48.5
7/3/2012 10:59:17 AM	48.5
7/3/2012 10:59:47 AM	50.3
7/3/2012 11:00:17 AM	51.6
7/3/2012 11:00:47 AM	49.3
7/3/2012 11:01:17 AM	49.0
7/3/2012 11:01:47 AM	49.2
7/3/2012 11:02:17 AM	64.0
7/3/2012 11:02:47 AM	48.8
7/3/2012 11:03:17 AM	48.7
7/3/2012 11:03:47 AM	49.0
7/3/2012 11:04:17 AM	50.0
7/3/2012 11:04:47 AM	48.5
7/3/2012 11:05:17 AM	48.8
7/3/2012 11:05:47 AM	49.1
7/3/2012 11:06:17 AM	48.8

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 11:06:47 AM	48.8

Location #4

7/6/2012

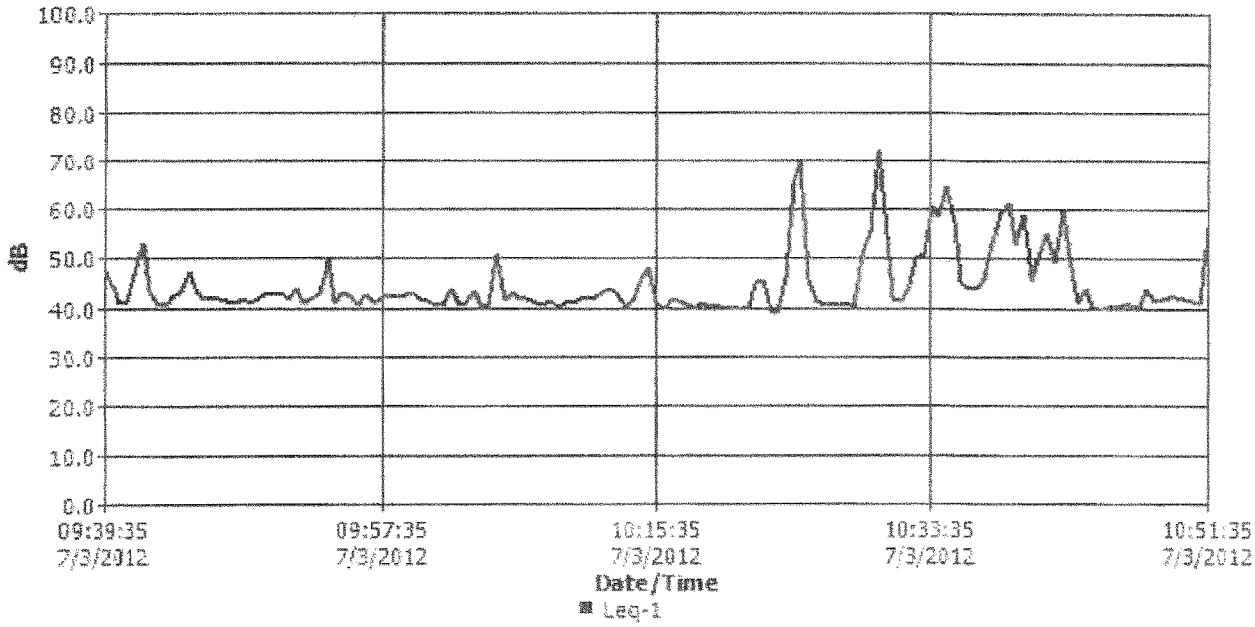
Information Panel

Name	7/3/12 Location #4 Syska/Barnes Cul de Sac Unit # 14605
Start Time	Tuesday, July 03, 2012 09:04:05
Stop Time	Tuesday, July 03, 2012 10:51:56
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	54.4 dB	Exchange Rate	1	3 dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	1/1	Exchange Rate	2	5 dB
Weighting	2	C	Response	2	FAST

Logged Data Chart



Logged Data Table

Timestamp	Leq-1
7/3/2012 9:39:35 AM	47.3
7/3/2012 9:40:05 AM	44.1
7/3/2012 9:40:35 AM	40.8
7/3/2012 9:41:05 AM	41.2
7/3/2012 9:41:35 AM	46.8
7/3/2012 9:42:05 AM	53.1
7/3/2012 9:42:35 AM	42.9
7/3/2012 9:43:05 AM	40.5
7/3/2012 9:43:35 AM	40.3
7/3/2012 9:44:05 AM	42.1
7/3/2012 9:44:35 AM	43.2
7/3/2012 9:45:05 AM	47.0
7/3/2012 9:45:35 AM	42.8
7/3/2012 9:46:05 AM	41.7
7/3/2012 9:46:35 AM	41.8
7/3/2012 9:47:05 AM	41.6
7/3/2012 9:47:35 AM	41.4
7/3/2012 9:48:05 AM	40.7
7/3/2012 9:48:35 AM	41.6
7/3/2012 9:49:05 AM	41.0
7/3/2012 9:49:35 AM	41.9

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 9:50:05 AM	42.9
7/3/2012 9:50:35 AM	42.7
7/3/2012 9:51:05 AM	42.8
7/3/2012 9:51:35 AM	41.9
7/3/2012 9:52:05 AM	43.9
7/3/2012 9:52:35 AM	41.0
7/3/2012 9:53:05 AM	41.9
7/3/2012 9:53:35 AM	42.8
7/3/2012 9:54:05 AM	49.4
7/3/2012 9:54:35 AM	41.0
7/3/2012 9:55:05 AM	43.1
7/3/2012 9:55:35 AM	42.1
7/3/2012 9:56:05 AM	40.6
7/3/2012 9:56:35 AM	42.4
7/3/2012 9:57:05 AM	40.7
7/3/2012 9:57:35 AM	42.0
7/3/2012 9:58:05 AM	42.1
7/3/2012 9:58:35 AM	42.0
7/3/2012 9:59:05 AM	42.4
7/3/2012 9:59:35 AM	43.1
7/3/2012 10:00:05 AM	41.7
7/3/2012 10:00:35 AM	41.3
7/3/2012 10:01:05 AM	40.4
7/3/2012 10:01:35 AM	40.6
7/3/2012 10:02:05 AM	43.9
7/3/2012 10:02:35 AM	40.4
7/3/2012 10:03:05 AM	40.7
7/3/2012 10:03:35 AM	43.5
7/3/2012 10:04:05 AM	40.0
7/3/2012 10:04:35 AM	40.3
7/3/2012 10:05:05 AM	50.9
7/3/2012 10:05:35 AM	41.1
7/3/2012 10:06:05 AM	42.9
7/3/2012 10:06:35 AM	41.6
7/3/2012 10:07:05 AM	41.5
7/3/2012 10:07:35 AM	40.8
7/3/2012 10:08:05 AM	40.6
7/3/2012 10:08:35 AM	41.2
7/3/2012 10:09:05 AM	39.9
7/3/2012 10:09:35 AM	41.1
7/3/2012 10:10:05 AM	40.9
7/3/2012 10:10:35 AM	41.7
7/3/2012 10:11:05 AM	41.9
7/3/2012 10:11:35 AM	42.3
7/3/2012 10:12:05 AM	43.4
7/3/2012 10:12:35 AM	43.9
7/3/2012 10:13:05 AM	42.5
7/3/2012 10:13:35 AM	40.2
7/3/2012 10:14:05 AM	41.6
7/3/2012 10:14:35 AM	46.4
7/3/2012 10:15:05 AM	48.1
7/3/2012 10:15:35 AM	40.9
7/3/2012 10:16:05 AM	39.7
7/3/2012 10:16:35 AM	41.4
7/3/2012 10:17:05 AM	41.3
7/3/2012 10:17:35 AM	40.4
7/3/2012 10:18:05 AM	39.6
7/3/2012 10:18:35 AM	41.0
7/3/2012 10:19:05 AM	40.2
7/3/2012 10:19:35 AM	40.5
7/3/2012 10:20:05 AM	39.7
7/3/2012 10:20:35 AM	39.9
7/3/2012 10:21:05 AM	39.7
7/3/2012 10:21:35 AM	39.9
7/3/2012 10:22:05 AM	45.2
7/3/2012 10:22:35 AM	45.3
7/3/2012 10:23:05 AM	39.2
7/3/2012 10:23:35 AM	39.0
7/3/2012 10:24:05 AM	46.3
7/3/2012 10:24:35 AM	66.3
7/3/2012 10:25:05 AM	69.6
7/3/2012 10:25:35 AM	45.4
7/3/2012 10:26:05 AM	41.1
7/3/2012 10:26:35 AM	40.3
7/3/2012 10:27:05 AM	40.5
7/3/2012 10:27:35 AM	40.6
7/3/2012 10:28:05 AM	40.9

Logged Data Table (cont'd)

Timestamp	Leq-1
7/3/2012 10:28:35 AM	40.0
7/3/2012 10:29:05 AM	50.8
7/3/2012 10:29:35 AM	55.4
7/3/2012 10:30:05 AM	72.4
7/3/2012 10:30:35 AM	58.8
7/3/2012 10:31:05 AM	41.7
7/3/2012 10:31:35 AM	41.2
7/3/2012 10:32:05 AM	43.3
7/3/2012 10:32:35 AM	50.0
7/3/2012 10:33:05 AM	51.0
7/3/2012 10:33:35 AM	60.3
7/3/2012 10:34:05 AM	58.5
7/3/2012 10:34:35 AM	64.5
7/3/2012 10:35:05 AM	57.0
7/3/2012 10:35:35 AM	45.1
7/3/2012 10:36:05 AM	43.8
7/3/2012 10:36:35 AM	44.3
7/3/2012 10:37:05 AM	45.9
7/3/2012 10:37:35 AM	53.3
7/3/2012 10:38:05 AM	59.2
7/3/2012 10:38:35 AM	61.1
7/3/2012 10:39:05 AM	52.8
7/3/2012 10:39:35 AM	58.8
7/3/2012 10:40:05 AM	45.6
7/3/2012 10:40:35 AM	50.4
7/3/2012 10:41:05 AM	54.9
7/3/2012 10:41:35 AM	49.3
7/3/2012 10:42:05 AM	60.0
7/3/2012 10:42:35 AM	50.3
7/3/2012 10:43:05 AM	40.9
7/3/2012 10:43:35 AM	43.6
7/3/2012 10:44:05 AM	40.0
7/3/2012 10:44:35 AM	39.6
7/3/2012 10:45:05 AM	40.0
7/3/2012 10:45:35 AM	40.1
7/3/2012 10:46:05 AM	40.5
7/3/2012 10:46:35 AM	40.5
7/3/2012 10:47:05 AM	40.2
7/3/2012 10:47:35 AM	43.8
7/3/2012 10:48:05 AM	41.2
7/3/2012 10:48:35 AM	41.7
7/3/2012 10:49:05 AM	42.2
7/3/2012 10:49:35 AM	42.3
7/3/2012 10:50:05 AM	41.5
7/3/2012 10:50:35 AM	41.2
7/3/2012 10:51:05 AM	40.9
7/3/2012 10:51:35 AM	56.7

SSM GROUP, INC.
Engineering and Environmental Services
ssmgroup.com

Reading
1047 North Park Road
PO Box 6307
Reading, PA 19610-0307
P: 610.621.2000
F: 610.621.2001

Lehigh Valley
City Line Plaza, Suite 300
2005 City Line Road
Bethlehem, PA 18017-7701
P: 610.849.9700
F: 610.849.9701

Harrisburg
First Floor
417 Walnut Street
Harrisburg, PA 17101-1918
P: 717.230.1487
F: 610.621.2001

York
P.O. Box 2287
York PA, 17405
P: 717.699.2880
F: 610.621.2001