
Belcheff & Associates, Inc.

Municipal Engineering & Management
TBPE Reg. No. F-368

100 Trophy Club Dr., Ste. 103
Trophy Club, Texas 76262

March 30, 2011

Ron Ruthven
Community Development and Public Works Director
100 Main Street
Colleyville, Texas 76034

Re: Trinity Well Site Inspection Report

Dear Ron:

Attached is a weekly inspection summary report for the Titan, Trinity well site.

Horizontal drilling on the "B" well should be complete this week. The rig will then skid over to drill the surface hole for well "C."

If you have any questions, feel free to contact me.

Respectfully,



Christopher Polidore, P.E.
Gas Inspector – City of Colleyville

Cc: George Belcheff

City of Colleyville Oil and Gas Well Drilling and Production – Inspection Report

Well/Pipeline Identification: Trinity
7504 Pleasant Run
Colleyville, Texas 76034

Date(s): March 22-28, 2011

Inspector: Christopher Polidore
Belcheff & Associates, Inc.

General Comments:

This past week involved primarily horizontal drilling activities which, while technology intensive, is lengthy, and for the most part, uneventful.

The drilling of well “B” is complete and the production casing is being secured. Once the well “B” is complete, the schedule involves drilling the surface hole on well “C,” perhaps starting sometime on March 31, 2011. The surface casing for the “C” well is already on site.

Noise

During horizontal drilling, typically all drilling pipe is loaded in the rig, and the noise related to loading and moving pipe sections is minimal. During this time frame, I took the opportunity to perform a noise survey on the effectiveness of the noise walls, as well as establishing a baseline drilling profile. The most apparent noise inside the site is from the electric generators.

There were no noise complaints this past week. A few of the daily noise reports did show noise spikes that were unrelated to the drilling operations.

Dust/Erosion

Again, the entrance drive was swept regularly. With the landscaping in progress, even though there has been no dust issues, the new sodded areas will insure minimal, if any, dust related issues. There was no indication of any erosion problems during this past week’s rain.

Environmental

On 3/24 around 9am, a small diesel fuel spill occurred while a worker was refueling a piece of heavy equipment. The spill was below TCEQ reportable amounts and was cleaned up immediately, and appropriately.

A new MSDS was provided regarding a new product on site.

The Army Corp of Engineers responded to a complaint about dumping in the adjacent creeks. They found no basis for the complaint.

Housekeeping/Storage

No issues.

Documentation/Reporting

Daily sound monitoring reports continue to be provided.

Traffic Control

It was noted to Public Works on 3/29/2011, the south edge of the road surface on Pleasant Run about 30 feet prior to the entrance to the site, appears to be separating. An assessment of this has not yet been provided.

Landscaping

Landscaping has progressed in front of the site. A PowerPoint of the progress should be available on the City website.

Security

As reported by the security guard, individuals continue to be interesting in accessing the site. The site is on private property and entering the site requires personal protective equipment.

Signage

No issues.

Fire

No issues.

Work Hours

No issues.

Safety

No issues.

General Site Conditions

Almost daily washing of the rig and ancillary equipment continued through this week.

Other Ordinance/SUP Specific

No issues.

Regulatory Compliance

No issues.

General Documentation - Trinity Site

Documentation of Sound measurements were taken on March 25, 2011 for a drilling baseline of sound wall effectiveness during the drilling process, which is predominantly the electric generators and drilling rig. The logging was based on 1-minute Leq readings, for a duration of 3 minutes, using the more protective ISO 3dB exchange rate. The data presented here has been simplify and limited for future comparison.

Location Definition:

1. Generator - within the generator sound wall
2. Outside GW – just outside the generator sound wall
3. Outside W1 – about 10 feet outside the first sound wall for the site
4. In Front W2 – about 10 feet inside the second sound wall for the site
5. Outside W2 – about 10 feet outside the second sound wall for the site.

Sound Reading Definitions:

1. dBA L1 is the “A” weighted sound level that can be expected 1% of the time
2. dBA L90 is the “A” weighted sound level that can be expected 90% of the time
3. dBC - decibel measurements using the “C” weighted sound scale which includes more low frequency attributes

Note: Sound measurement in decibels (dB) is logarithmic. When two identical sound levels are added, the resulting increase is 3dB. As the two sound levels being added differ in value, when they are 20dB apart or more, the resulting sound level increases by 0dB. This does not mean that the lower sound level is not heard. In fact it is integrated with the higher sound level.

Observations:

As shown in Exhibit 1, using dBA, L90 values, the first sound wall reduces the noise level about a 20dBA. The sound report for the Trinity site indicated a 17dBA reduction. While not plotted in Exhibit 1, the data shows about a 15dBC reduction in lower frequency levels. As sound levels come close to ambient levels, the effectiveness of noise mitigation diminishes, since one cannot reduce the natural ambient sound without complete isolation. This results in a 7.6dBA reduction, about 1/2 volume, by the second sound wall. A reduction like this has also been noticed in the daily monitoring reports once the second sound wall was installed.

During the sound survey, 1/3 Octave readings were also taken. Exhibit 2, is the result of 1/3 Octave readings for the 3-minute time period. The sound reduction is noticeable along the entire frequency spectrum. One of the predominant complaints received during drilling operations is low frequency noise. While this noise survey was performed during steady drilling operations, one can see that sound mitigation efforts are more effective in higher frequencies. While the sound levels are reduced overall, the shape of the 1/3 Octave profile, shows more reduction in the higher frequencies than the lower frequencies, which is typical for almost all sound walls. Effectiveness of walls, either manufactured sound walls or part of a building, depends on a number of parameters. In general the density pattern and surface contour are primary contributors to wall effectiveness. Most high-end sound walls, such as those for performance theaters, are compared at the 500Hz frequency. Sound mitigation below that range becomes more complicated. Low frequency sounds travel much further and can acoustically couple and transmit through the surrounding infrastructure, as well as exhibit reverberation, and other acoustic phenomenon more easily than higher frequencies. A simple example would be the bass sound emanating from a passing automobile stereo system.

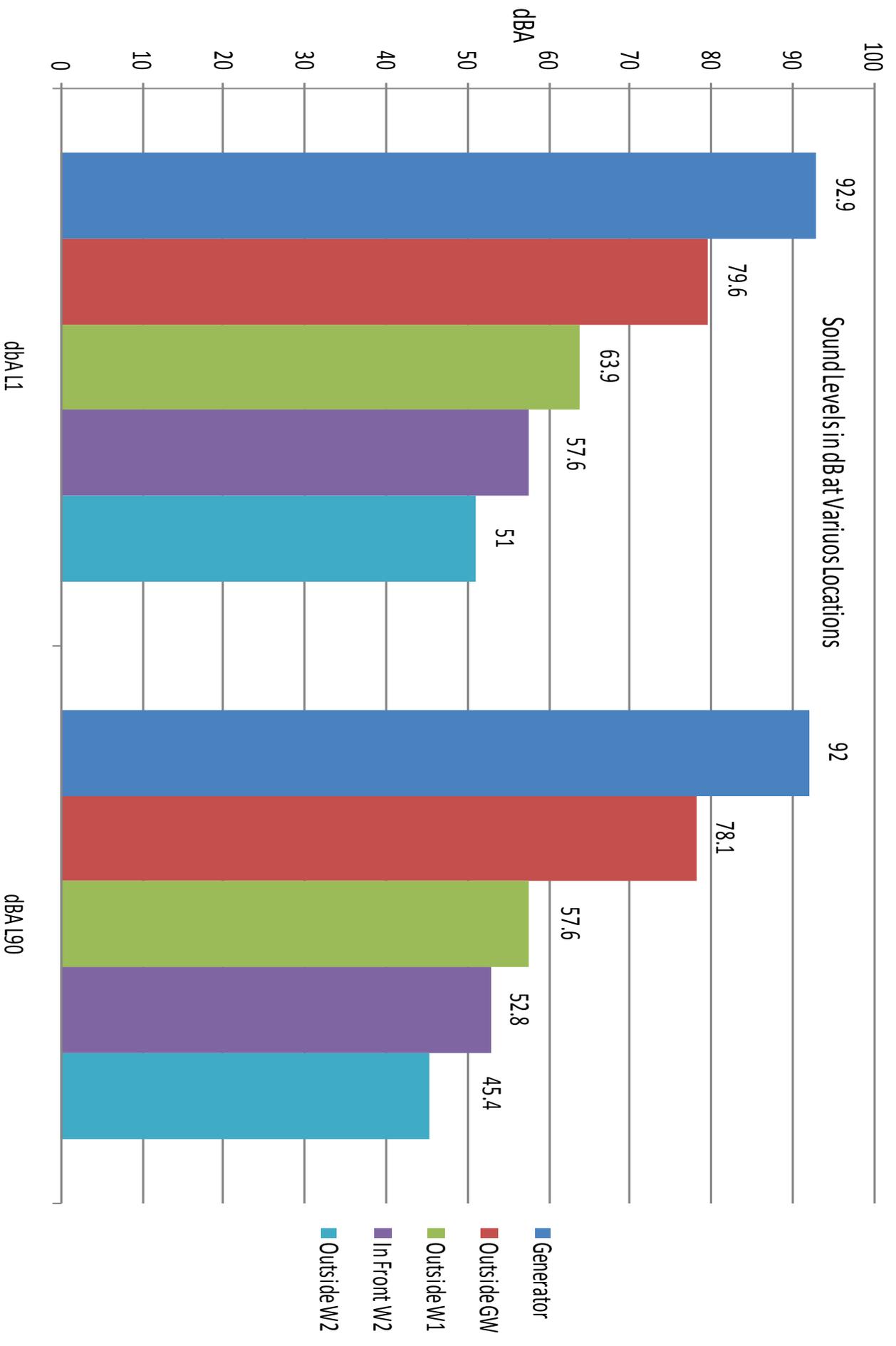


Exhibit 1

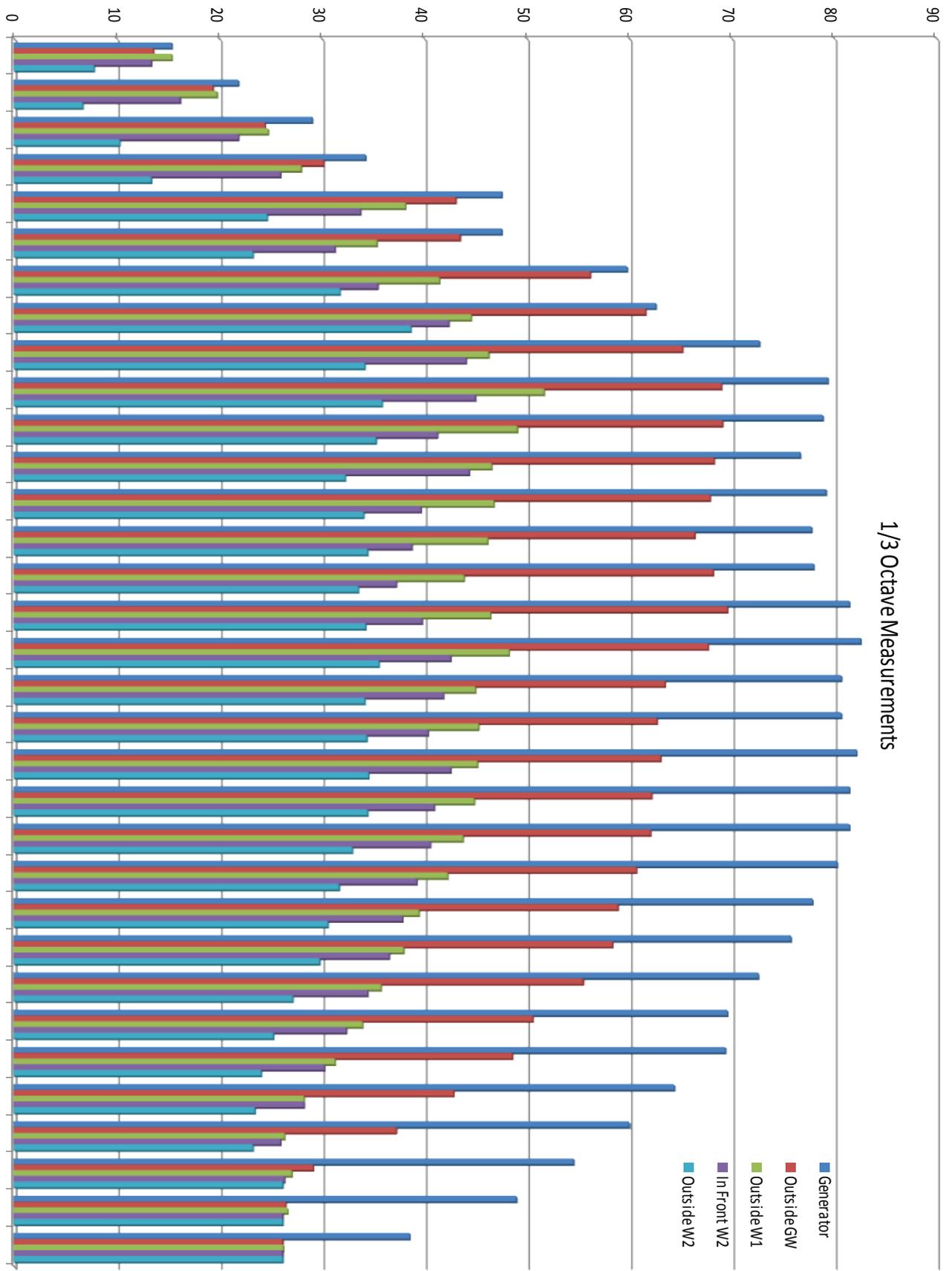


Exhibit 2

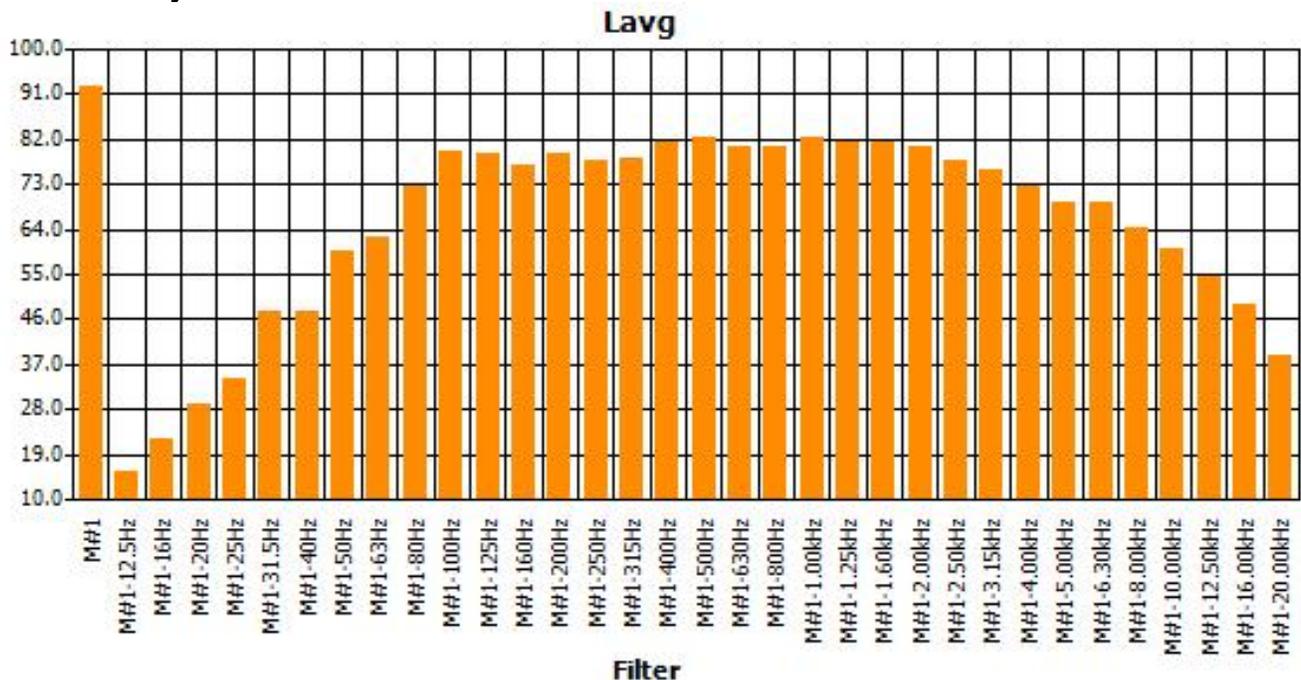
Information Panel

Name	Inside Generator Sound Wall Trinity S010_BIK030007_25032011_173541
Start Time	Friday, March 25, 2011 09:13:36
Stop Time	Friday, March 25, 2011 09:16:38
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Lavg 12.5Hz.	1	15.4 dB	Lavg 16Hz.	1	21.9 dB
Lavg 20Hz.	1	29.1 dB	Lavg 25Hz.	1	34.3 dB
Lavg 31.5Hz.	1	47.6 dB	Lavg 40Hz.	1	47.6 dB
Lavg 50Hz.	1	59.8 dB	Lavg 63Hz.	1	62.6 dB
Lavg 80Hz.	1	72.7 dB	Lavg 100Hz.	1	79.4 dB
Lavg 125Hz.	1	78.9 dB	Lavg 160Hz.	1	76.7 dB
Lavg 200Hz.	1	79.2 dB	Lavg 250Hz.	1	77.8 dB
Lavg 315Hz.	1	78 dB	Lavg 400Hz.	1	81.5 dB
Lavg 500Hz.	1	82.6 dB	Lavg 630Hz.	1	80.7 dB
Lavg 800Hz.	1	80.7 dB	Lavg 1kHz.	1	82.2 dB
Lavg 1.25kHz.	1	81.5 dB	Lavg 1.6kHz.	1	81.5 dB
Lavg 2kHz.	1	80.3 dB	Lavg 2.5kHz.	1	77.9 dB
Lavg 3.15kHz.	1	75.8 dB	Lavg 4kHz.	1	72.6 dB
Lavg 5kHz.	1	69.6 dB	Lavg 6.3kHz.	1	69.4 dB
Lavg 8kHz.	1	64.4 dB	Lavg 10kHz.	1	60 dB
Lavg 12.5kHz.	1	54.6 dB	Lavg 16kHz.	1	49 dB
Lavg 20kHz.	1	38.6 dB	Lavg	2	102.8 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	1/3
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Filter Summary Chart



General Data Panel

Description	Meter	Value	Description	Meter	Value
Lmin	1	91.5 dB	Lmax	1	93.2 dB
L1	1	92.9 dB	L10	1	92.7 dB
L50	1	92.3 dB	L90	1	92 dB
Lavg	2	102.8 dB	Lmin	2	100.2 dB
Lmax	2	105.9 dB	Lpk	2	117.1 dB

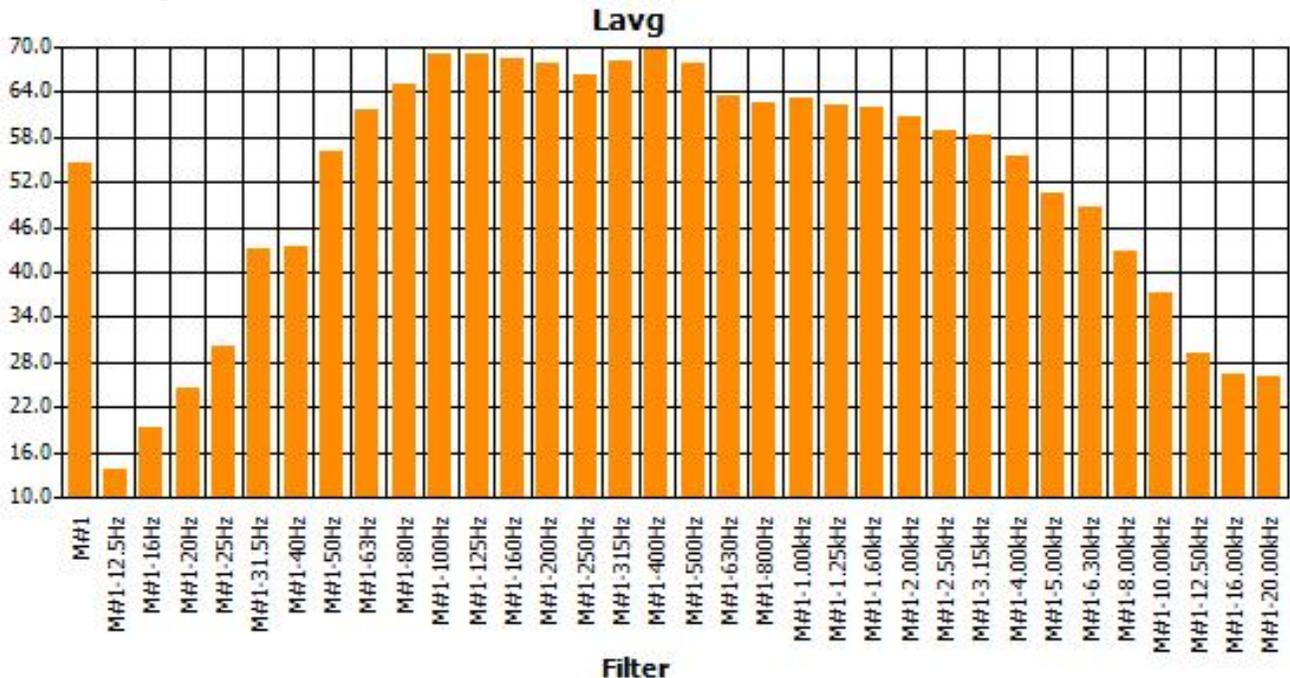
Information Panel

Name	Outside Generator Sound Wall Trinity S011_BIK030007_25032011_170549
Start Time	Friday, March 25, 2011 09:17:37
Stop Time	Friday, March 25, 2011 09:20:39
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Lavg 12.5Hz.	1	13.6 dB	Lavg 16Hz.	1	19.4 dB
Lavg 20Hz.	1	24.5 dB	Lavg 25Hz.	1	30.2 dB
Lavg 31.5Hz.	1	43.1 dB	Lavg 40Hz.	1	43.5 dB
Lavg 50Hz.	1	56.2 dB	Lavg 63Hz.	1	61.6 dB
Lavg 80Hz.	1	65.2 dB	Lavg 100Hz.	1	69 dB
Lavg 125Hz.	1	69.1 dB	Lavg 160Hz.	1	68.3 dB
Lavg 200Hz.	1	67.9 dB	Lavg 250Hz.	1	66.4 dB
Lavg 315Hz.	1	68.2 dB	Lavg 400Hz.	1	69.6 dB
Lavg 500Hz.	1	67.7 dB	Lavg 630Hz.	1	63.5 dB
Lavg 800Hz.	1	62.7 dB	Lavg 1kHz.	1	63.1 dB
Lavg 1.25kHz.	1	62.2 dB	Lavg 1.6kHz.	1	62.1 dB
Lavg 2kHz.	1	60.7 dB	Lavg 2.5kHz.	1	58.9 dB
Lavg 3.15kHz.	1	58.4 dB	Lavg 4kHz.	1	55.5 dB
Lavg 5kHz.	1	50.6 dB	Lavg 6.3kHz.	1	48.6 dB
Lavg 8kHz.	1	42.9 dB	Lavg 10kHz.	1	37.3 dB
Lavg 12.5kHz.	1	29.2 dB	Lavg 16kHz.	1	26.5 dB
Lavg 20kHz.	1	26.2 dB	Lavg	2	94.5 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	1/3
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Filter Summary Chart



General Data Panel

Description	Meter	Value	Description	Meter	Value
Lmin	1	77.1 dB	Lmax	1	80.5 dB
L1	1	79.6 dB	L10	1	79.2 dB
L50	1	78.6 dB	L90	1	78.1 dB
Lavg	2	94.5 dB	Lmin	2	91.7 dB
Lmax	2	97.2 dB	Lpk	2	107.5 dB

Information Panel

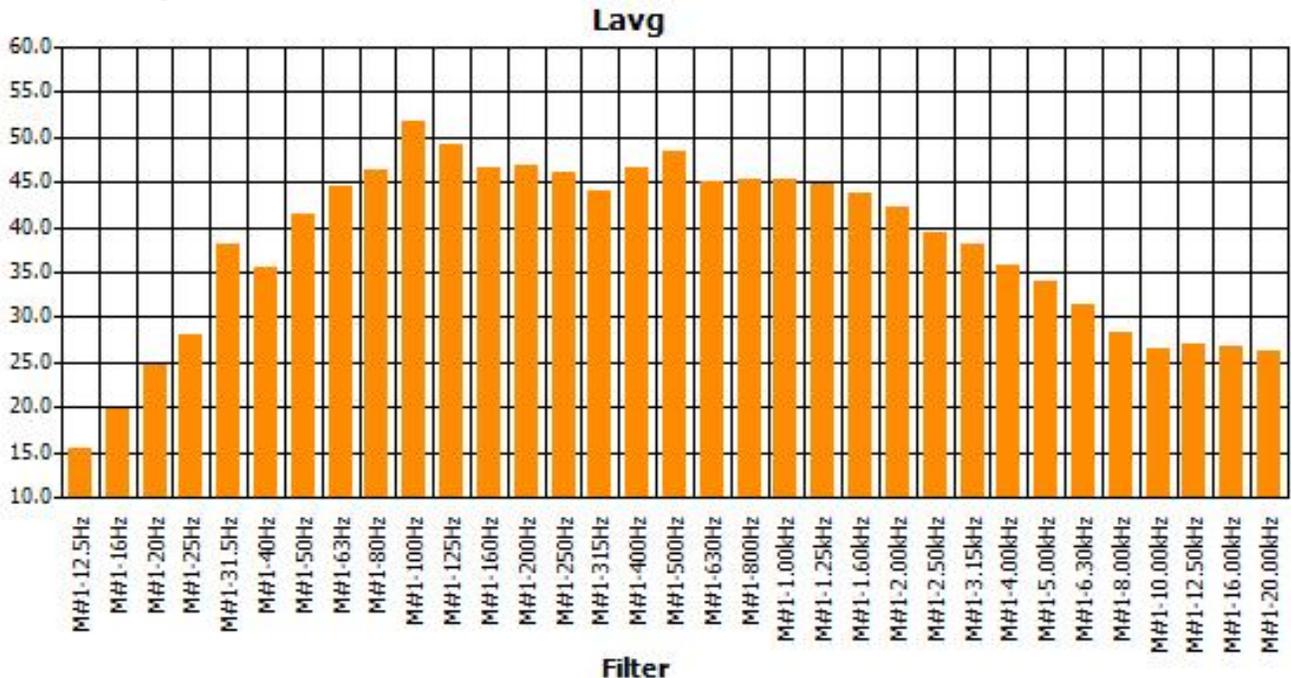
Name
Start Time
Stop Time
Device Model Type
Comments

Outside First Sound wall Trinity S012_BIK030007_25032011_170549
Friday, March 25, 2011 09:29:42
Friday, March 25, 2011 09:32:43
SoundPro DL

General Data Panel

Description	Meter	Value	Description	Meter	Value
Lavg 12.5Hz.	1	15.4 dB	Lavg 16Hz.	1	19.8 dB
Lavg 20Hz.	1	24.8 dB	Lavg 25Hz.	1	28 dB
Lavg 31.5Hz.	1	38.2 dB	Lavg 40Hz.	1	35.4 dB
Lavg 50Hz.	1	41.5 dB	Lavg 63Hz.	1	44.6 dB
Lavg 80Hz.	1	46.3 dB	Lavg 100Hz.	1	51.7 dB
Lavg 125Hz.	1	49.1 dB	Lavg 160Hz.	1	46.6 dB
Lavg 200Hz.	1	46.8 dB	Lavg 250Hz.	1	46.2 dB
Lavg 315Hz.	1	43.9 dB	Lavg 400Hz.	1	46.5 dB
Lavg 500Hz.	1	48.3 dB	Lavg 630Hz.	1	45 dB
Lavg 800Hz.	1	45.3 dB	Lavg 1kHz.	1	45.2 dB
Lavg 1.25kHz.	1	44.9 dB	Lavg 1.6kHz.	1	43.8 dB
Lavg 2kHz.	1	42.3 dB	Lavg 2.5kHz.	1	39.5 dB
Lavg 3.15kHz.	1	38 dB	Lavg 4kHz.	1	35.8 dB
Lavg 5kHz.	1	34 dB	Lavg 6.3kHz.	1	31.3 dB
Lavg 8kHz.	1	28.3 dB	Lavg 10kHz.	1	26.4 dB
Lavg 12.5kHz.	1	27.1 dB	Lavg 16kHz.	1	26.7 dB
Lavg 20kHz.	1	26.3 dB	Lavg	2	79.4 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	1/3
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Filter Summary Chart



General Data Panel

Description	Meter	Value	Description	Meter	Value
Lmin	1	56.5 dB	Lmax	1	73.8 dB
L1	1	63.9 dB	L10	1	59.8 dB
L50	1	58.5 dB	L90	1	57.6 dB
Lavg	2	79.4 dB	Lmin	2	73.7 dB
Lmax	2	93.1 dB	Lpk	2	101.7 dB

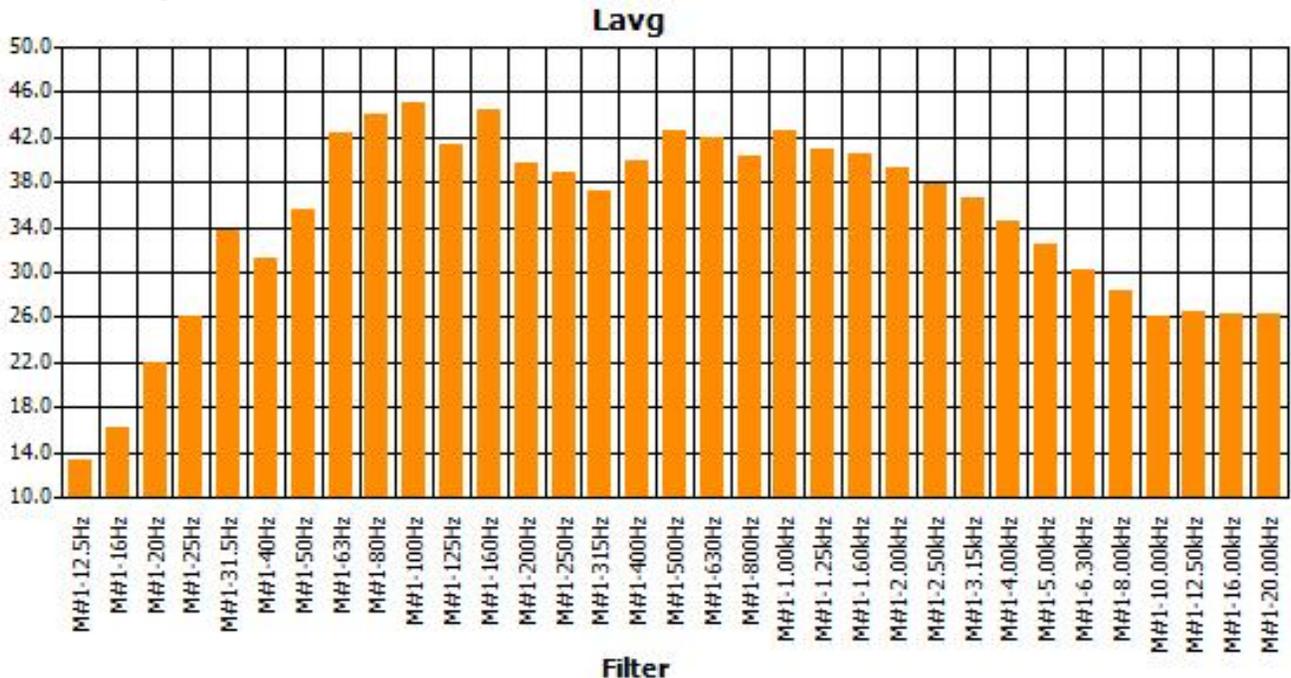
Information Panel

Name	In front of second sound wall Trinity S013_BIK030007_25032011_170550
Start Time	Friday, March 25, 2011 09:33:51
Stop Time	Friday, March 25, 2011 09:36:53
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Lavg 12.5Hz.	1	13.4 dB	Lavg 16Hz.	1	16.2 dB
Lavg 20Hz.	1	21.9 dB	Lavg 25Hz.	1	26 dB
Lavg 31.5Hz.	1	33.8 dB	Lavg 40Hz.	1	31.3 dB
Lavg 50Hz.	1	35.5 dB	Lavg 63Hz.	1	42.4 dB
Lavg 80Hz.	1	44.1 dB	Lavg 100Hz.	1	45 dB
Lavg 125Hz.	1	41.3 dB	Lavg 160Hz.	1	44.4 dB
Lavg 200Hz.	1	39.7 dB	Lavg 250Hz.	1	38.8 dB
Lavg 315Hz.	1	37.3 dB	Lavg 400Hz.	1	39.8 dB
Lavg 500Hz.	1	42.6 dB	Lavg 630Hz.	1	41.9 dB
Lavg 800Hz.	1	40.4 dB	Lavg 1kHz.	1	42.6 dB
Lavg 1.25kHz.	1	41 dB	Lavg 1.6kHz.	1	40.6 dB
Lavg 2kHz.	1	39.3 dB	Lavg 2.5kHz.	1	37.9 dB
Lavg 3.15kHz.	1	36.6 dB	Lavg 4kHz.	1	34.5 dB
Lavg 5kHz.	1	32.4 dB	Lavg 6.3kHz.	1	30.3 dB
Lavg 8kHz.	1	28.3 dB	Lavg 10kHz.	1	26 dB
Lavg 12.5kHz.	1	26.4 dB	Lavg 16kHz.	1	26.2 dB
Lavg 20kHz.	1	26.2 dB	Lavg	2	72.1 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	1/3
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Filter Summary Chart



General Data Panel

Description	Meter	Value	Description	Meter	Value
Lmin	1	51.1 dB	Lmax	1	61.3 dB
L1	1	57.6 dB	L10	1	55.9 dB
L50	1	53.9 dB	L90	1	52.8 dB
Lavg	2	72.1 dB	Lmin	2	71.1 dB
Lmax	2	91.8 dB	Lpk	2	100.6 dB

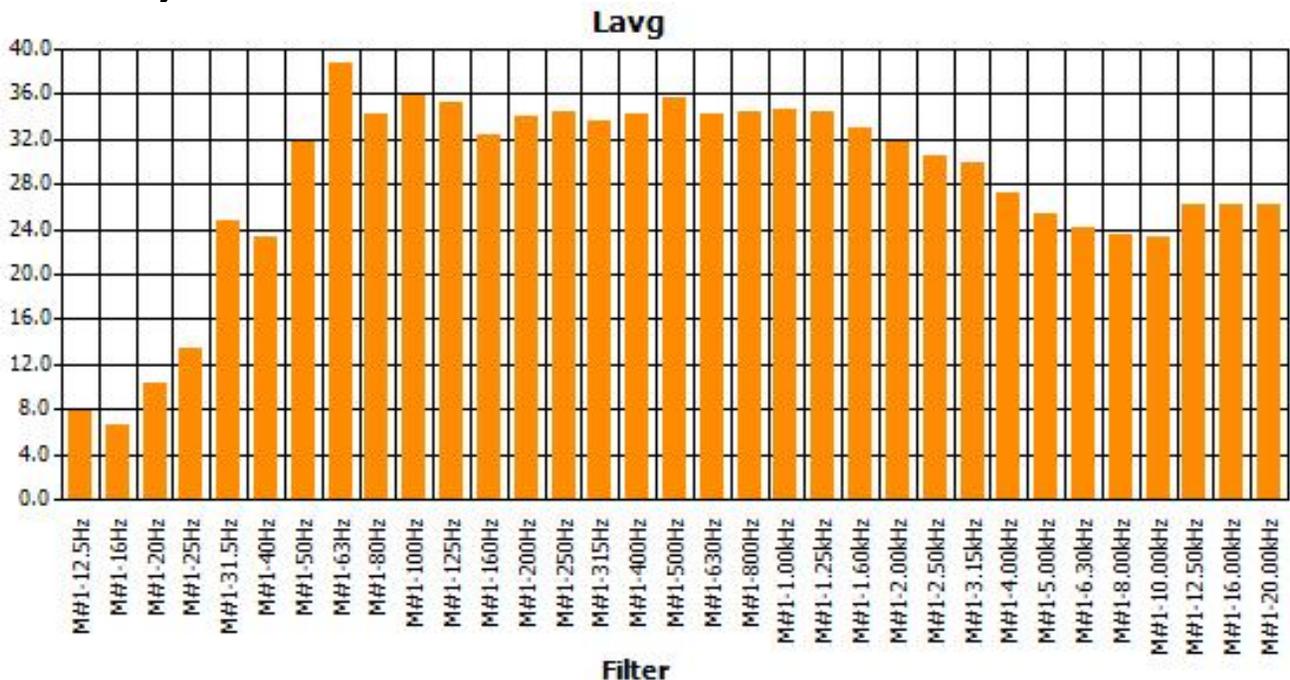
Information Panel

Name	Beyond Second Sound Wall Trinity S014_BIK030007_25032011_170550
Start Time	Friday, March 25, 2011 09:38:17
Stop Time	Friday, March 25, 2011 09:41:18
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Lavg 12.5Hz.	1	7.8 dB	Lavg 16Hz.	1	6.7 dB
Lavg 20Hz.	1	10.3 dB	Lavg 25Hz.	1	13.4 dB
Lavg 31.5Hz.	1	24.7 dB	Lavg 40Hz.	1	23.3 dB
Lavg 50Hz.	1	31.8 dB	Lavg 63Hz.	1	38.7 dB
Lavg 80Hz.	1	34.2 dB	Lavg 100Hz.	1	35.9 dB
Lavg 125Hz.	1	35.3 dB	Lavg 160Hz.	1	32.3 dB
Lavg 200Hz.	1	34.1 dB	Lavg 250Hz.	1	34.5 dB
Lavg 315Hz.	1	33.6 dB	Lavg 400Hz.	1	34.3 dB
Lavg 500Hz.	1	35.6 dB	Lavg 630Hz.	1	34.2 dB
Lavg 800Hz.	1	34.4 dB	Lavg 1kHz.	1	34.6 dB
Lavg 1.25kHz.	1	34.5 dB	Lavg 1.6kHz.	1	33 dB
Lavg 2kHz.	1	31.7 dB	Lavg 2.5kHz.	1	30.6 dB
Lavg 3.15kHz.	1	29.8 dB	Lavg 4kHz.	1	27.2 dB
Lavg 5kHz.	1	25.3 dB	Lavg 6.3kHz.	1	24.1 dB
Lavg 8kHz.	1	23.5 dB	Lavg 10kHz.	1	23.3 dB
Lavg 12.5kHz.	1	26.2 dB	Lavg 16kHz.	1	26.2 dB
Lavg 20kHz.	1	26.2 dB	Lavg	2	--
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	1/3
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Filter Summary Chart



General Data Panel

Description	Meter	Value	Description	Meter	Value
Lmin	1	44 dB	Lmax	1	54.1 dB
L1	1	51 dB	L10	1	49.1 dB
L50	1	46.7 dB	L90	1	45.4 dB
Lavg	2	--	Lmin	2	64.3 dB
Lmax	2	72.8 dB	Lpk	2	81.6 dB

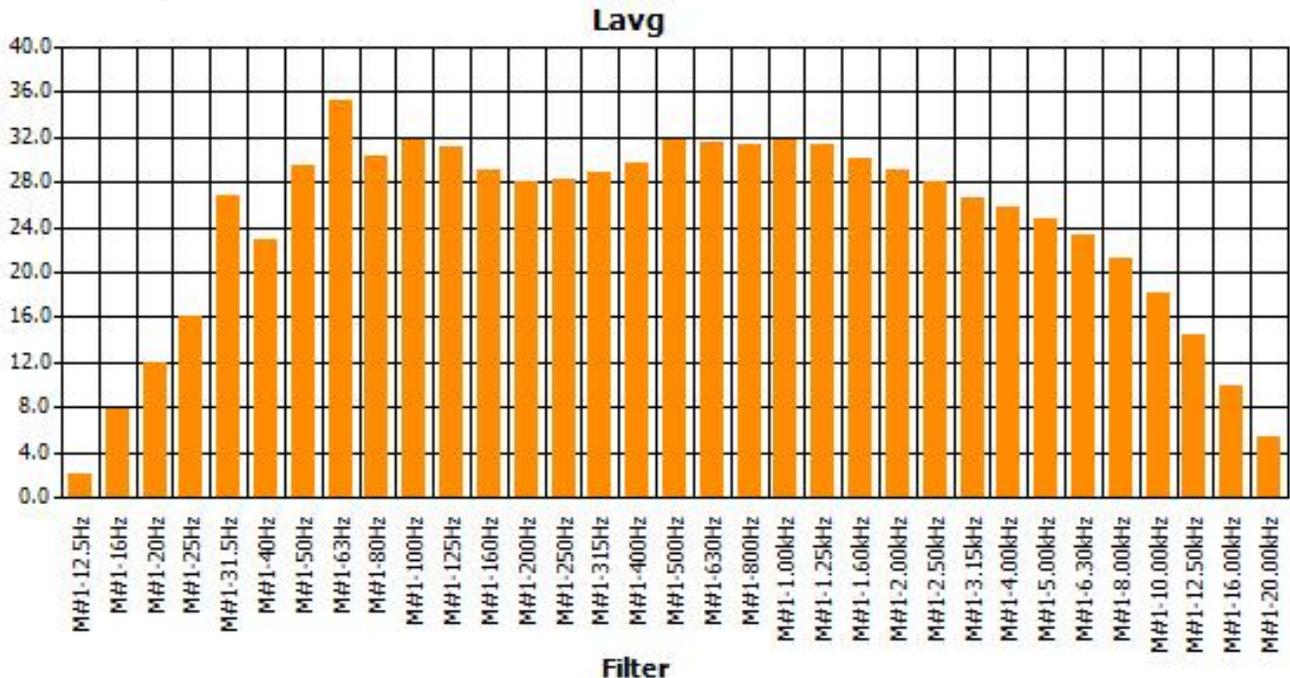
Information Panel

Name	Outside Second Sound Wall x S021_BIK030007_26032011_152817
Start Time	Saturday, March 26, 2011 13:57:41
Stop Time	Saturday, March 26, 2011 14:00:53
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Lavg 12.5Hz.	1	2.1 dB	Lavg 16Hz.	1	7.8 dB
Lavg 20Hz.	1	11.9 dB	Lavg 25Hz.	1	16.1 dB
Lavg 31.5Hz.	1	26.9 dB	Lavg 40Hz.	1	22.8 dB
Lavg 50Hz.	1	29.5 dB	Lavg 63Hz.	1	35.3 dB
Lavg 80Hz.	1	30.3 dB	Lavg 100Hz.	1	31.8 dB
Lavg 125Hz.	1	31.2 dB	Lavg 160Hz.	1	29 dB
Lavg 200Hz.	1	28 dB	Lavg 250Hz.	1	28.2 dB
Lavg 315Hz.	1	28.9 dB	Lavg 400Hz.	1	29.7 dB
Lavg 500Hz.	1	31.7 dB	Lavg 630Hz.	1	31.6 dB
Lavg 800Hz.	1	31.3 dB	Lavg 1kHz.	1	31.8 dB
Lavg 1.25kHz.	1	31.3 dB	Lavg 1.6kHz.	1	30.2 dB
Lavg 2kHz.	1	29.1 dB	Lavg 2.5kHz.	1	28 dB
Lavg 3.15kHz.	1	26.5 dB	Lavg 4kHz.	1	25.7 dB
Lavg 5kHz.	1	24.8 dB	Lavg 6.3kHz.	1	23.2 dB
Lavg 8kHz.	1	21.2 dB	Lavg 10kHz.	1	18.2 dB
Lavg 12.5kHz.	1	14.4 dB	Lavg 16kHz.	1	10 dB
Lavg 20kHz.	1	5.4 dB	Lavg	2	47.8 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	1/3
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Filter Summary Chart



General Data Panel

Description	Meter	Value	Description	Meter	Value
Lmin	1	39 dB	Lmax	1	53.6 dB
L1	1	50.5 dB	L10	1	45.4 dB
L50	1	42.9 dB	L90	1	41.7 dB
Lavg	2	47.8 dB	Lmin	2	60.6 dB
Lmax	2	80.6 dB	Lpk	2	89.6 dB

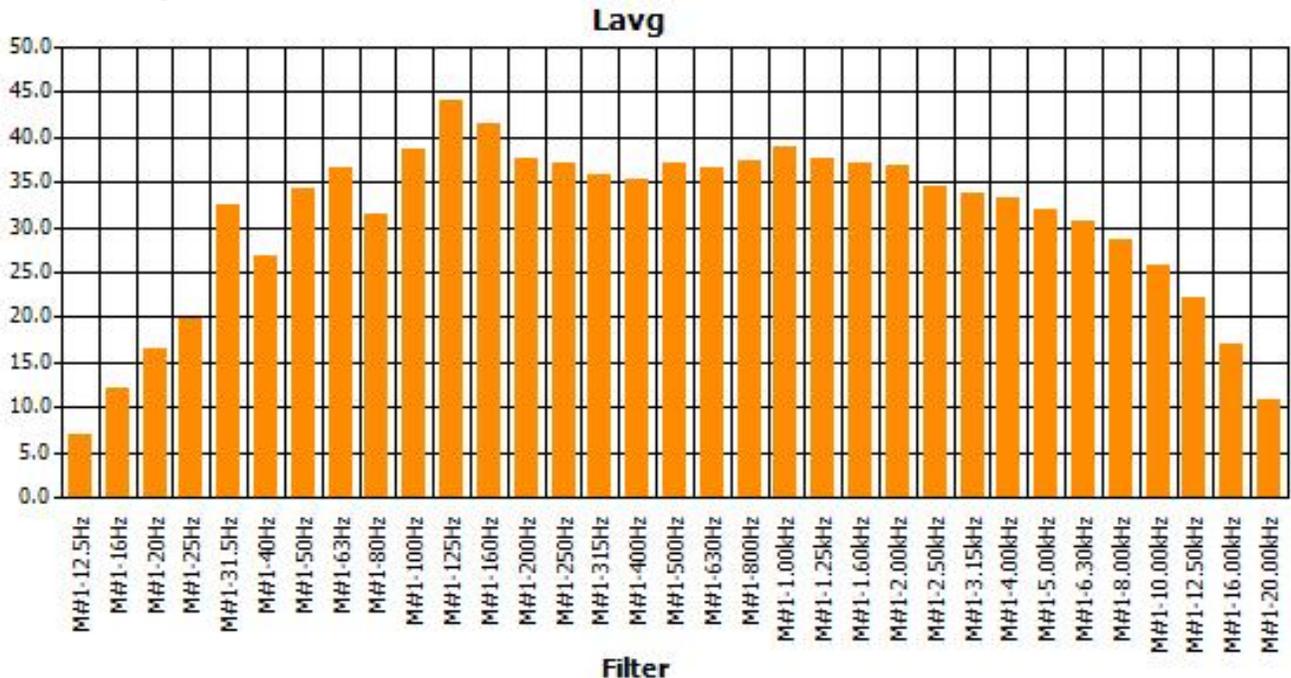
Information Panel

Name	In Front of Second Soundwall x S019_BIK030007_26032011_152817
Start Time	Saturday, March 26, 2011 13:50:36
Stop Time	Saturday, March 26, 2011 13:53:37
Device Model Type	SoundPro DL
Comments	

General Data Panel

Description	Meter	Value	Description	Meter	Value
Lavg 12.5Hz.	1	7 dB	Lavg 16Hz.	1	12.1 dB
Lavg 20Hz.	1	16.4 dB	Lavg 25Hz.	1	19.9 dB
Lavg 31.5Hz.	1	32.6 dB	Lavg 40Hz.	1	26.9 dB
Lavg 50Hz.	1	34.3 dB	Lavg 63Hz.	1	36.5 dB
Lavg 80Hz.	1	31.4 dB	Lavg 100Hz.	1	38.7 dB
Lavg 125Hz.	1	44 dB	Lavg 160Hz.	1	41.5 dB
Lavg 200Hz.	1	37.7 dB	Lavg 250Hz.	1	37.2 dB
Lavg 315Hz.	1	35.8 dB	Lavg 400Hz.	1	35.3 dB
Lavg 500Hz.	1	37 dB	Lavg 630Hz.	1	36.7 dB
Lavg 800Hz.	1	37.3 dB	Lavg 1kHz.	1	38.9 dB
Lavg 1.25kHz.	1	37.7 dB	Lavg 1.6kHz.	1	37 dB
Lavg 2kHz.	1	36.8 dB	Lavg 2.5kHz.	1	34.6 dB
Lavg 3.15kHz.	1	33.8 dB	Lavg 4kHz.	1	33.2 dB
Lavg 5kHz.	1	31.9 dB	Lavg 6.3kHz.	1	30.6 dB
Lavg 8kHz.	1	28.5 dB	Lavg 10kHz.	1	25.7 dB
Lavg 12.5kHz.	1	22.1 dB	Lavg 16kHz.	1	17.1 dB
Lavg 20kHz.	1	10.8 dB	Lavg	2	57 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	1/3
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Filter Summary Chart



General Data Panel

Description	Meter	Value	Description	Meter	Value
Lmin	1	47.7 dB	Lmax	1	59.7 dB
L1	1	55.6 dB	L10	1	52.3 dB
L50	1	50.6 dB	L90	1	49.3 dB
Lavg	2	57 dB	Lmin	2	66.2 dB
Lmax	2	83.4 dB	Lpk	2	91.9 dB

Behrens and Associates, Inc.

Environmental Noise Control



March 24, 2011

Titan Operating, LLC
111 West 4th Street STE 300
Fort Worth, Texas 76102

Attention: Tom Strother

Subject: TCC 1H Drill Site Continuous Operational Sound Level Survey

Dear Mr. Strother:

Please find the attached charts displaying the measured operational sound levels at the TCC 1H drill site in Colleyville, TX, from Wednesday, March 23, to Thursday, March 24, 2011. The charts display the measured hourly average sound levels and the 1-minute average (Leq) sound levels at Monitoring Location #1 (north of drill site), and Monitoring Location #2,(west of drill site).

Please contact me if you have any questions or comments.

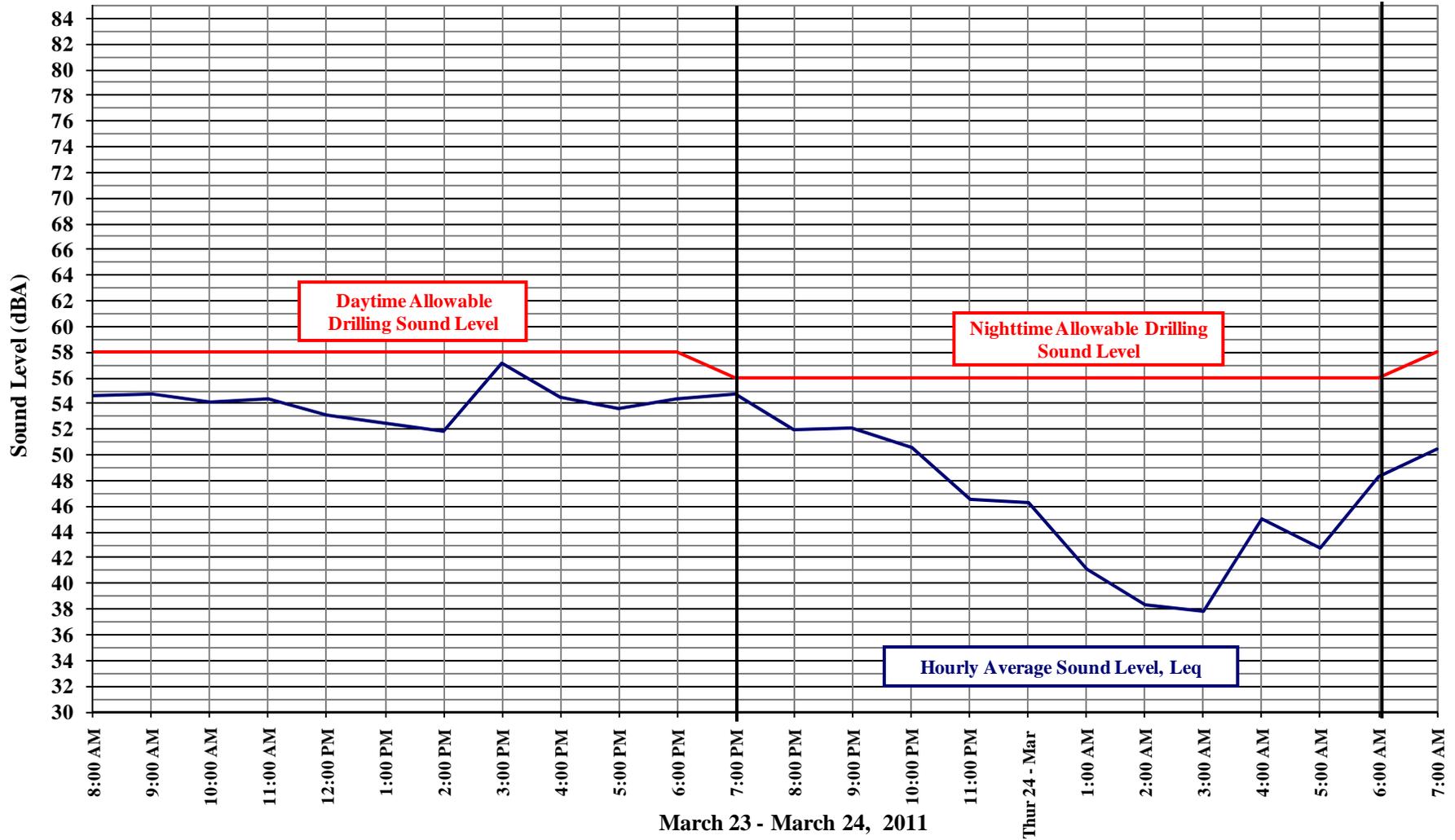
Very truly yours,

Don Behrens
President
95-4460624

Attachments

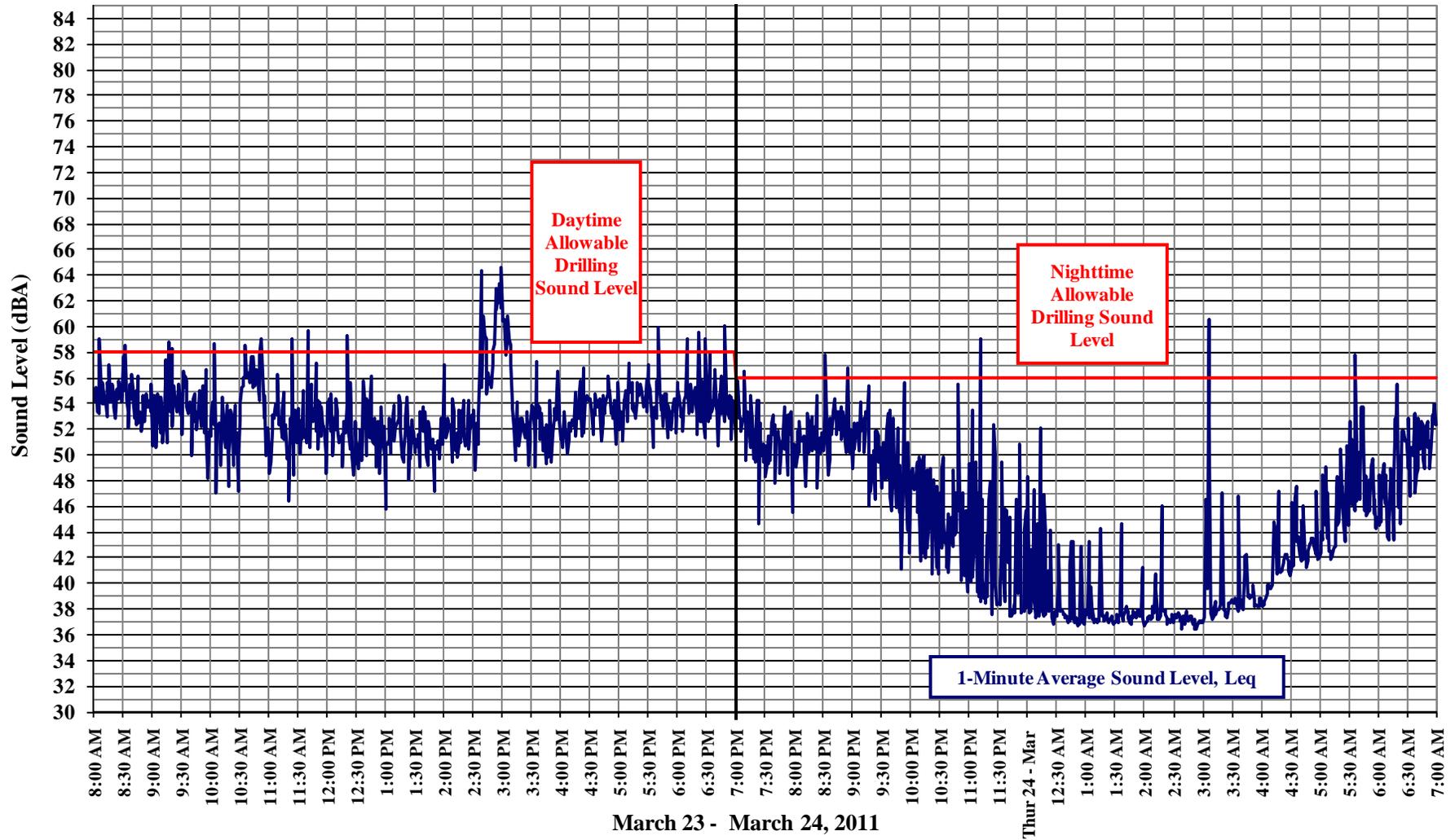


Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring



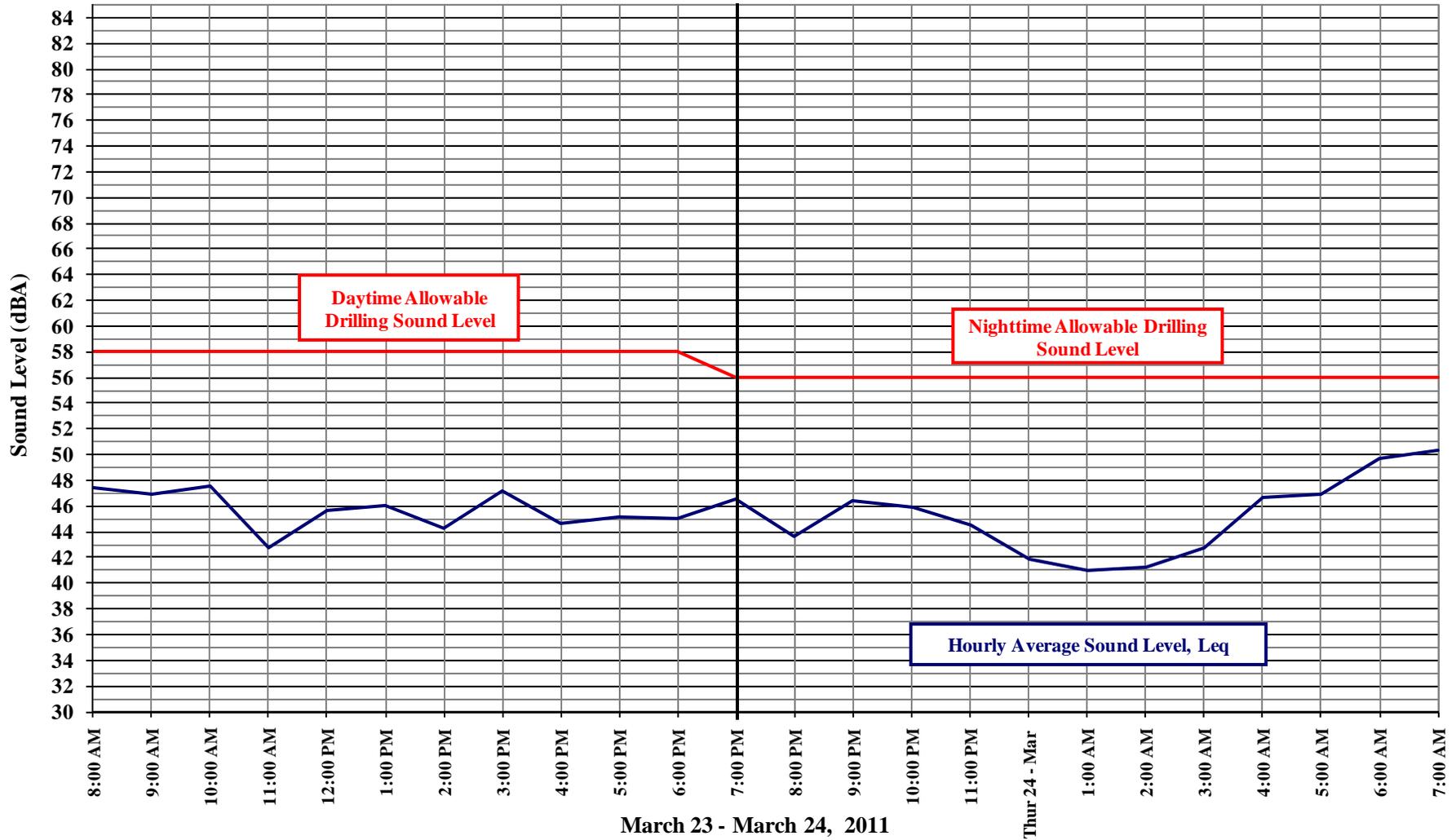


Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring



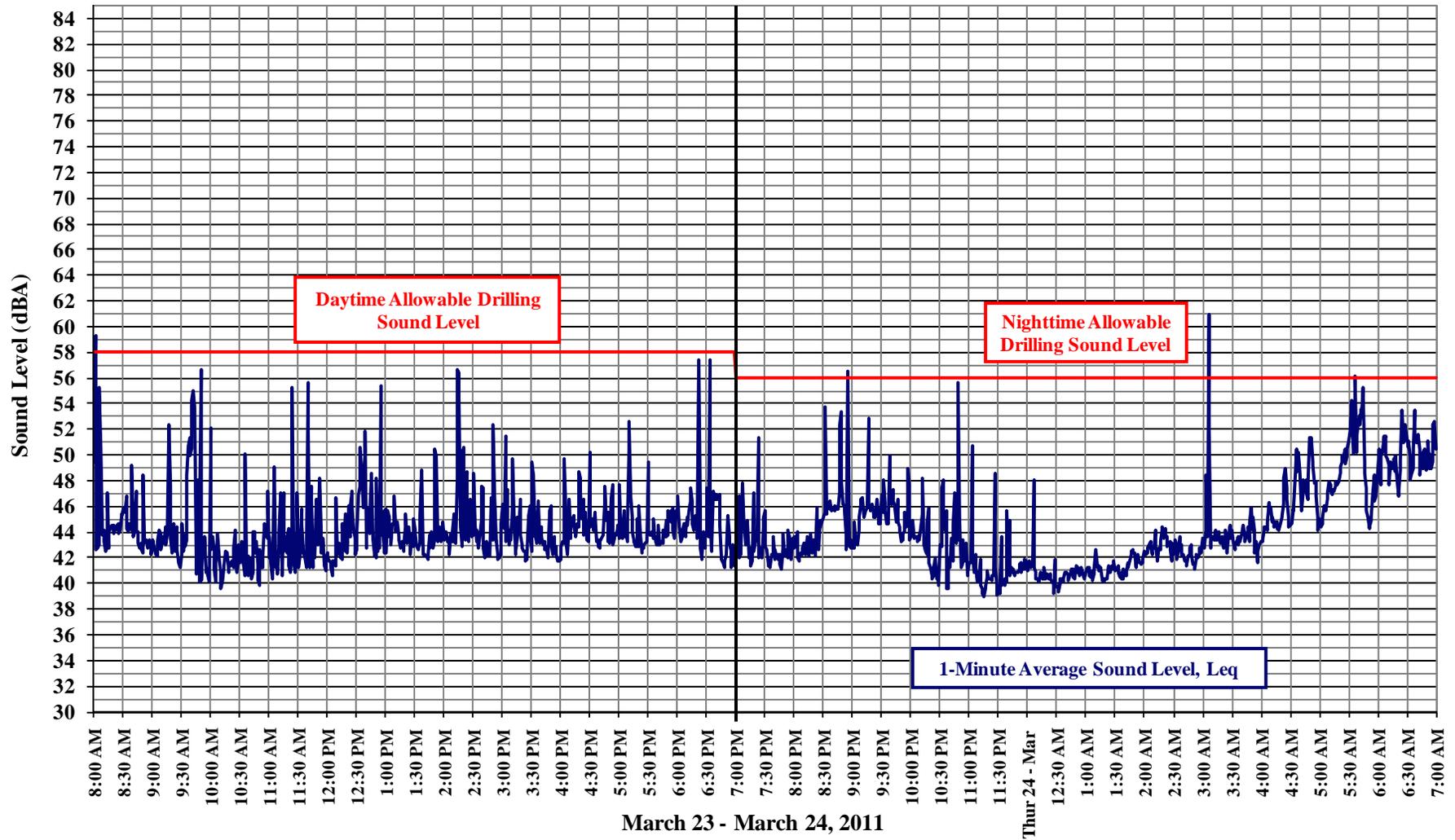


Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring





Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring



Behrens and Associates, Inc.

Environmental Noise Control



March 25, 2011

Titan Operating, LLC
111 West 4th Street STE 300
Fort Worth, Texas 76102

Attention: Tom Strother

Subject: TCC 1H Drill Site Continuous Operational Sound Level Survey

Dear Mr. Strother:

Please find the attached charts displaying the measured operational sound levels at the TCC 1H drill site in Colleyville, TX, from Thursday, March 24, to Friday, March 25, 2011. The charts display the measured hourly average sound levels and the 1-minute average (Leq) sound levels at Monitoring Location #1 (north of drill site), and Monitoring Location #2,(west of drill site).

Please contact me if you have any questions or comments.

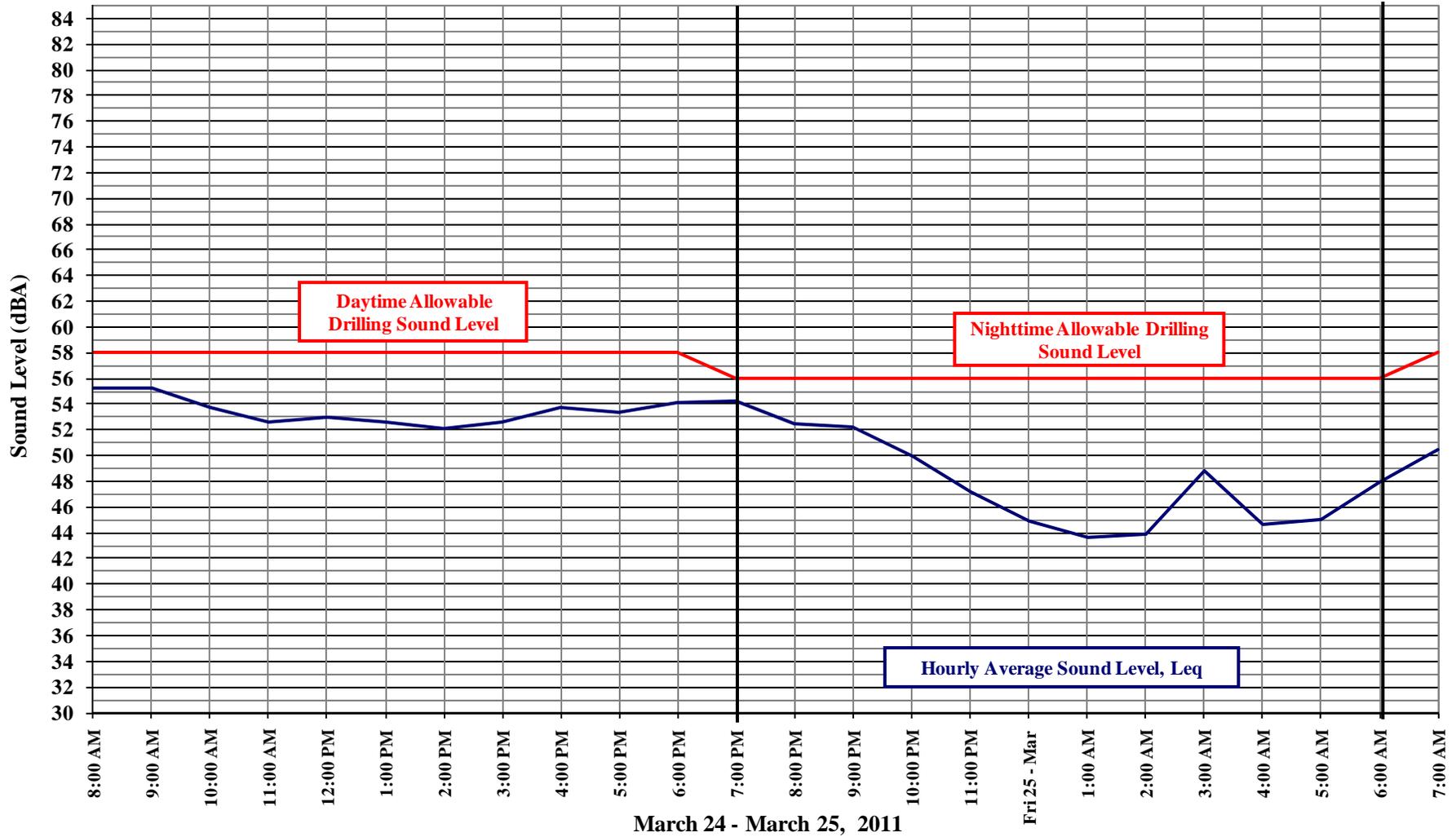
Very truly yours,

Don Behrens
President
95-4460624

Attachments

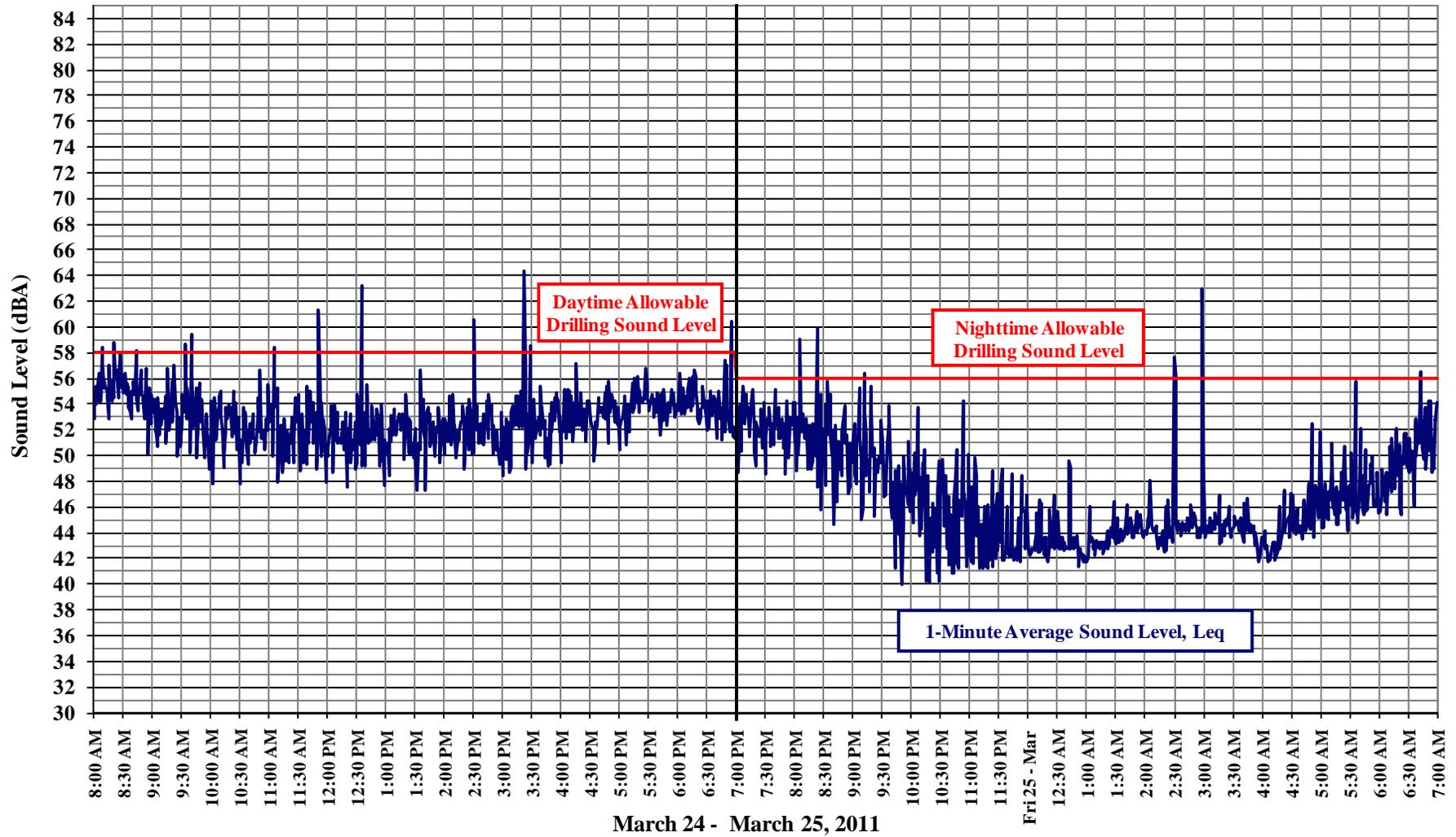


Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring



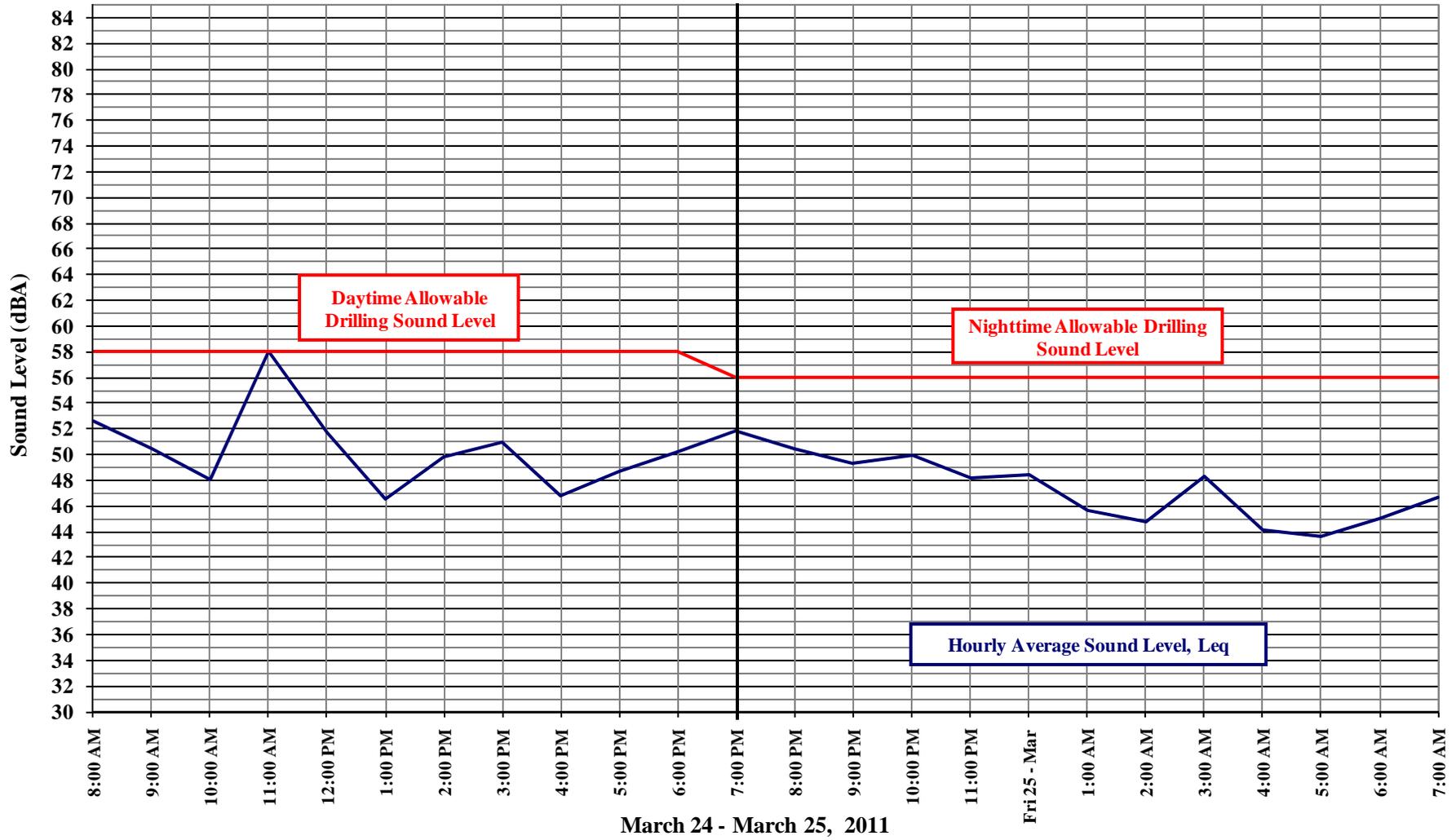


Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring



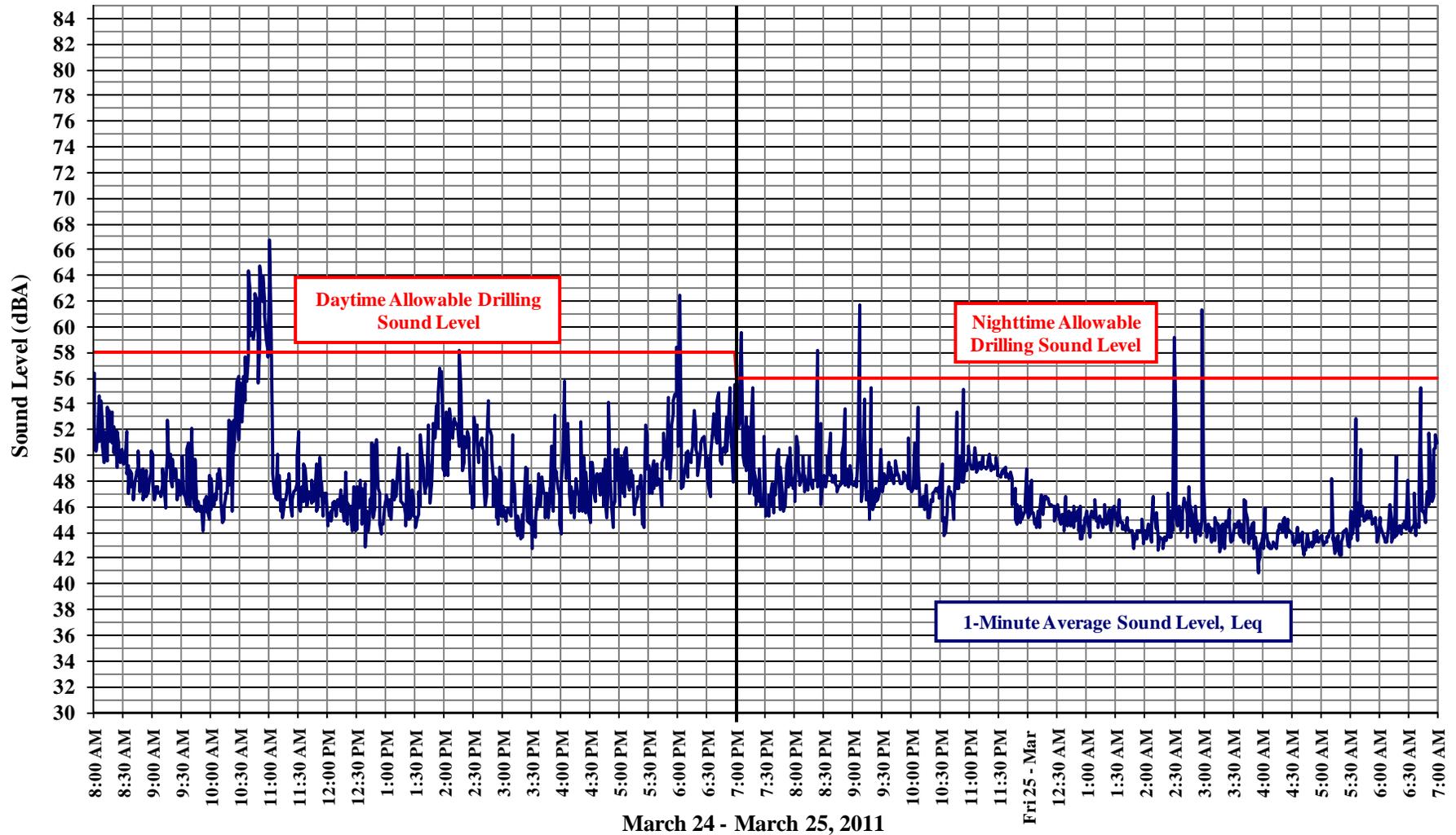


Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring





Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring



Behrens and Associates, Inc.

Environmental Noise Control



March 26, 2011

Titan Operating, LLC
111 West 4th Street STE 300
Fort Worth, Texas 76102

Attention: Tom Strother

Subject: TCC 1H Drill Site Continuous Operational Sound Level Survey

Dear Mr. Strother:

Please find the attached charts displaying the measured operational sound levels at the TCC 1H drill site in Colleyville, TX, from Friday, March 25, to Saturday, March 26, 2011. The charts display the measured hourly average sound levels and the 1-minute average (Leq) sound levels at Monitoring Location #1 (north of drill site), and Monitoring Location #2,(west of drill site).

The measured hourly sound levels were out of compliance with the allowable drilling sound levels at Monitoring Location #2 during the 10:00 PM hour on Friday, March 25, 2011. Review of an audio recording made during the monitoring period revealed off-site noise from air traffic in the vicinity of the monitoring location as the cause of the elevated sound levels.

Please contact me if you have any questions or comments.

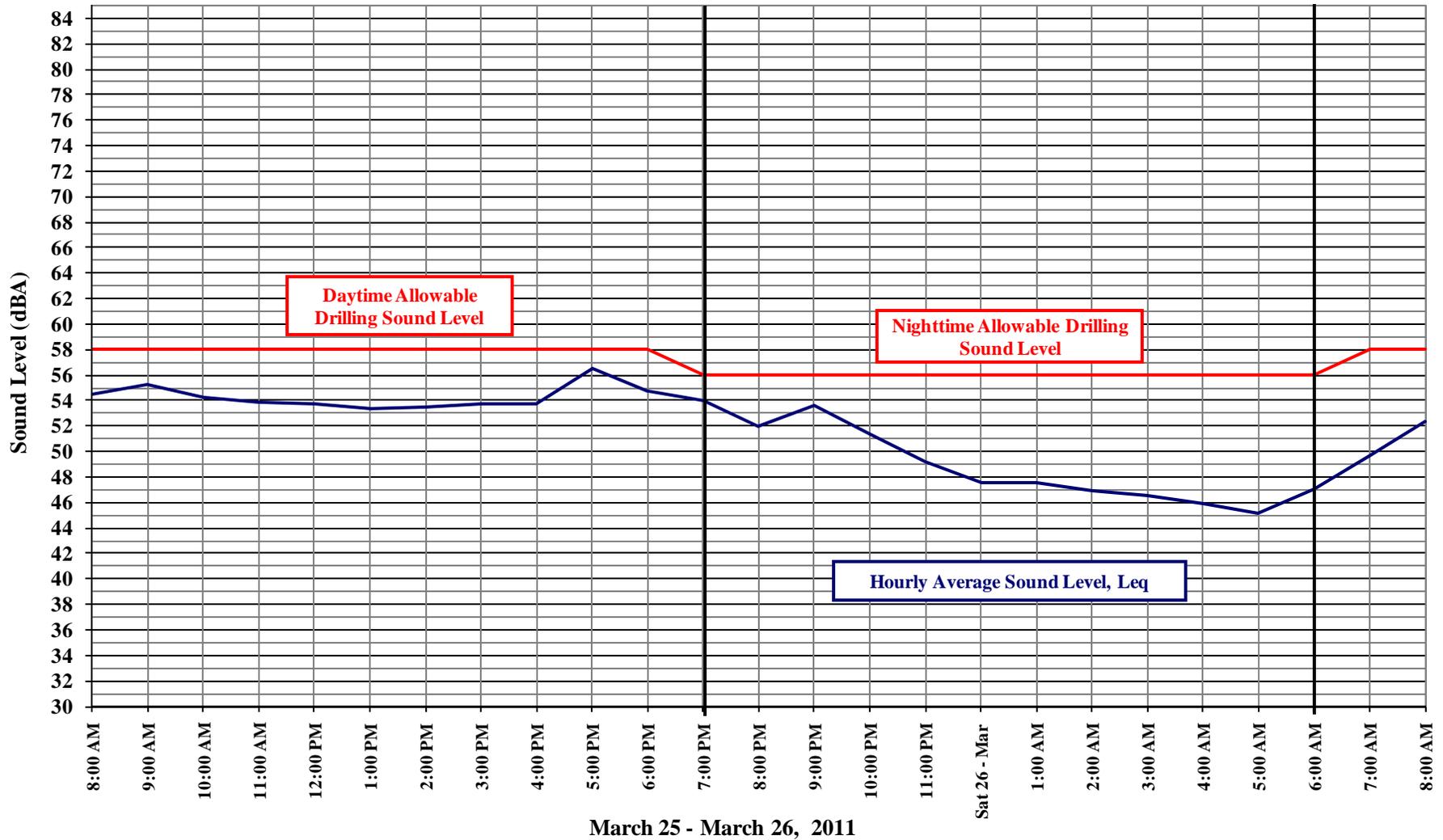
Very truly yours,

Don Behrens
President
95-4460624

Attachments

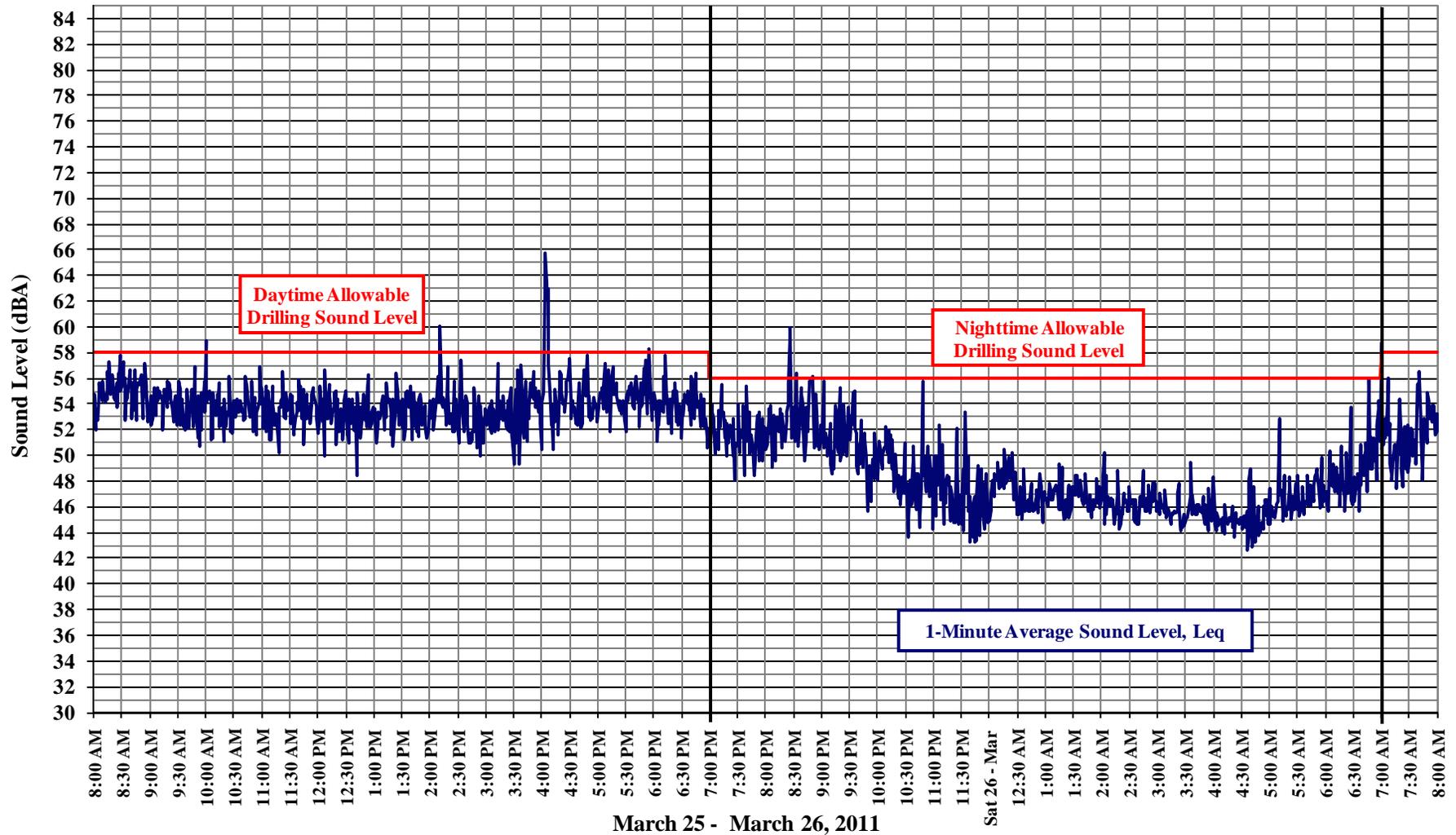


Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring



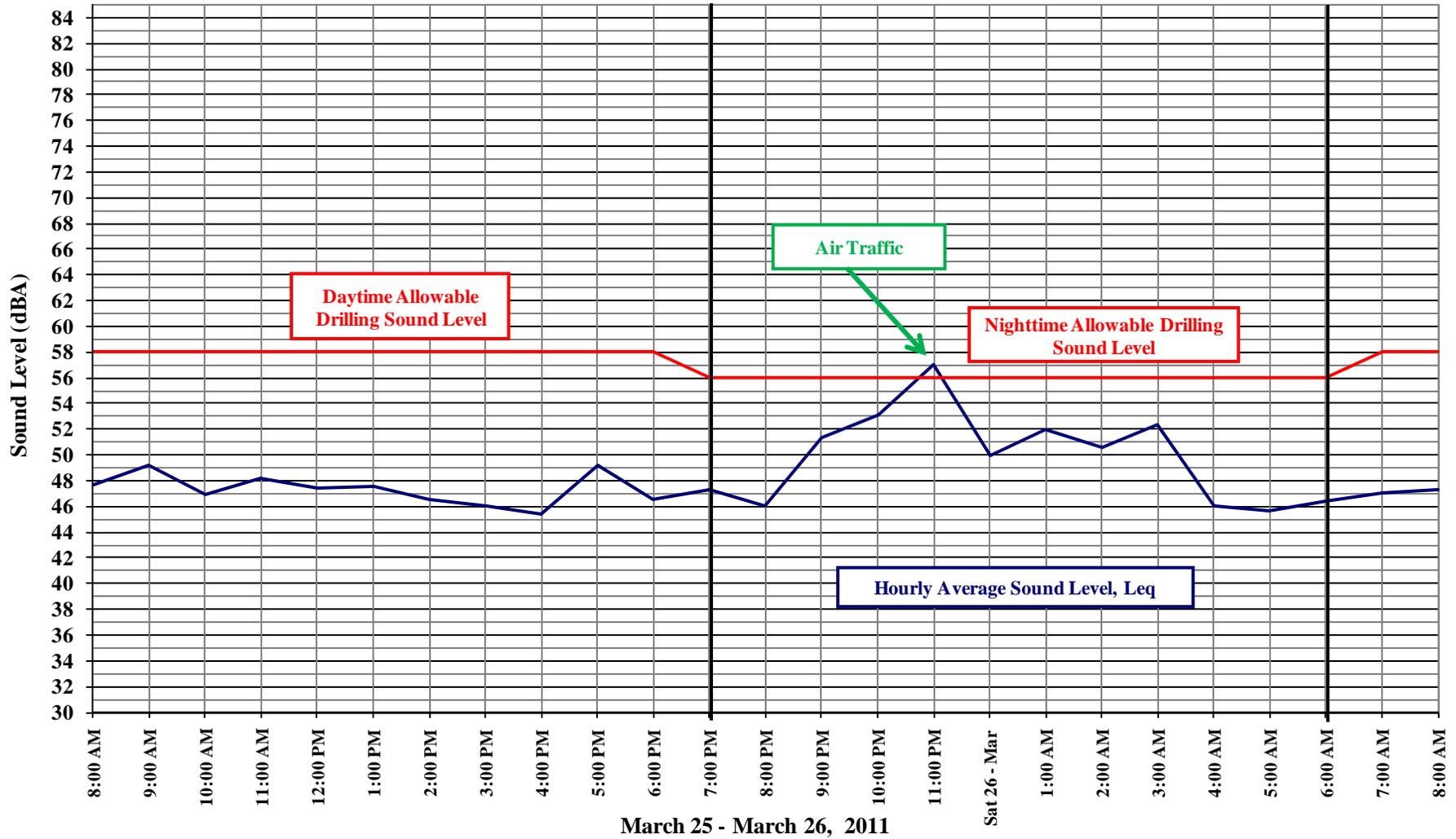


Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring



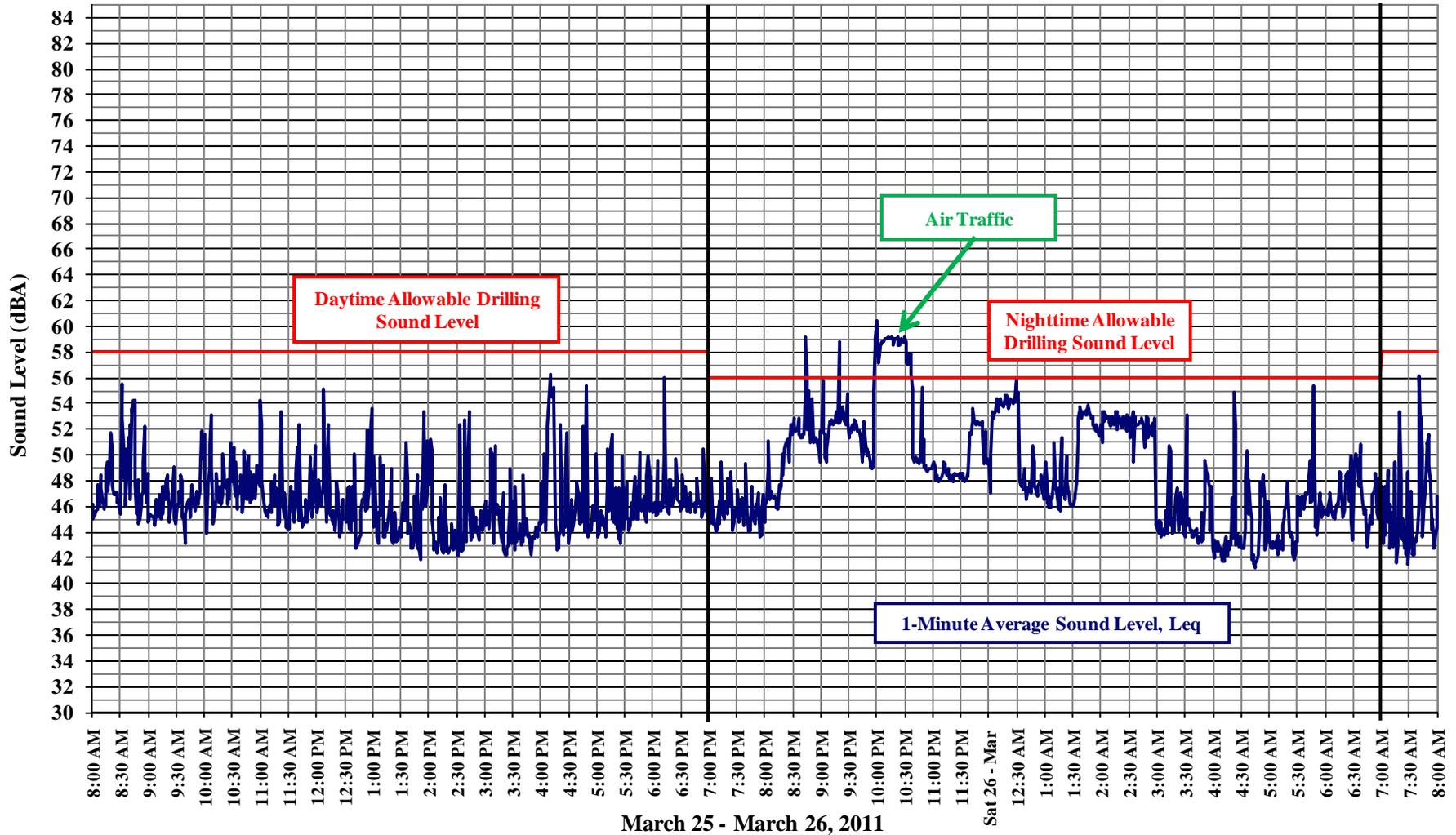


Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring





Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring



Behrens and Associates, Inc.

Environmental Noise Control



March 28, 2011

Titan Operating, LLC
111 West 4th Street STE 300
Fort Worth, Texas 76102

Attention: Tom Strother

Subject: TCC 1H Drill Site Continuous Operational Sound Level Survey

Dear Mr. Strother:

Please find the attached charts displaying the measured operational sound levels at the TCC 1H drill site in Colleyville, TX, from Saturday, March 26, to Monday, March 28, 2011. The charts display the measured hourly average sound levels and the 1-minute average (Leq) sound levels at Monitoring Location #1 (north of drill site), and Monitoring Location #2,(west of drill site).

Please contact me if you have any questions or comments.

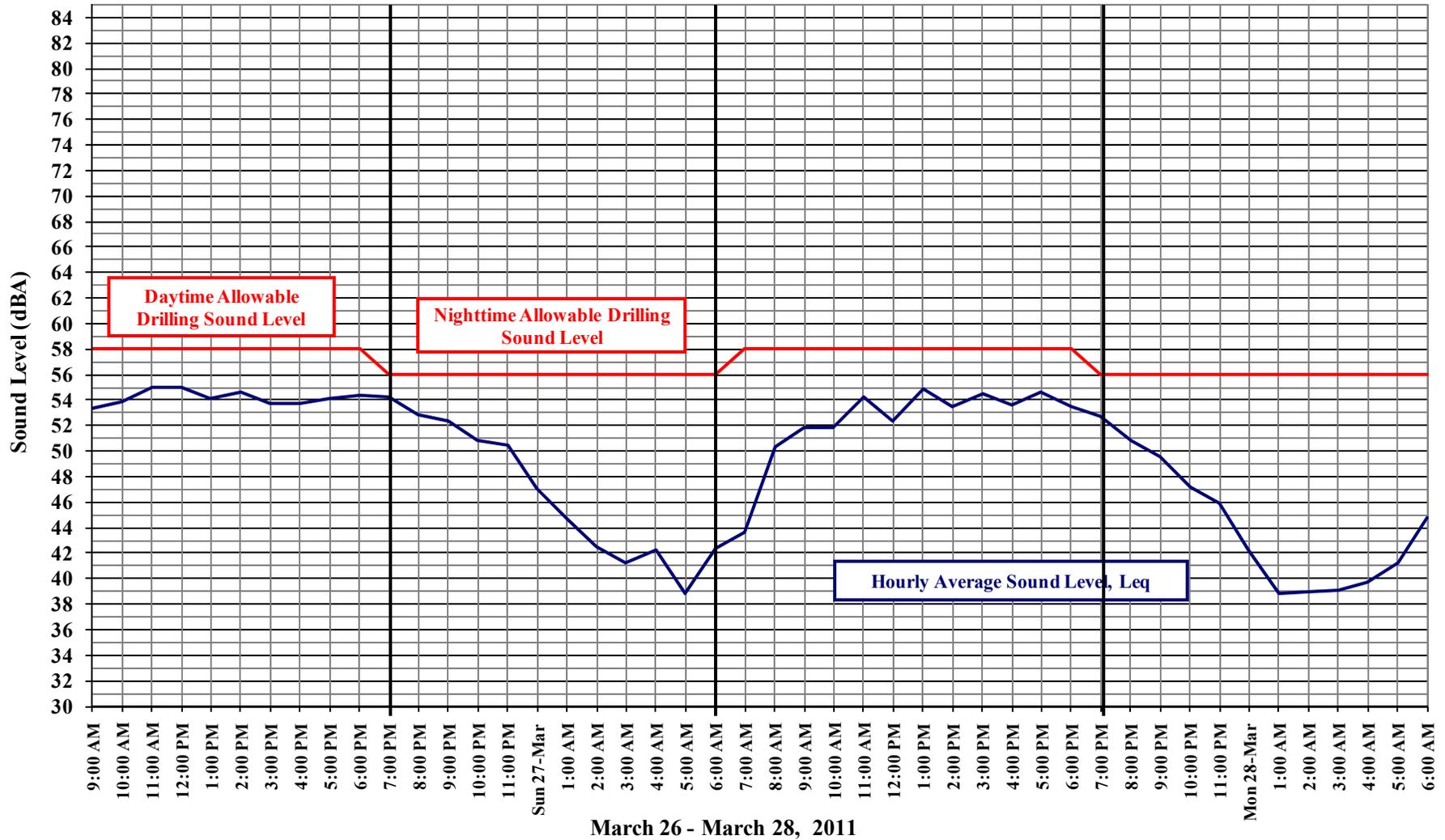
Very truly yours,

Don Behrens
President
95-4460624

Attachments

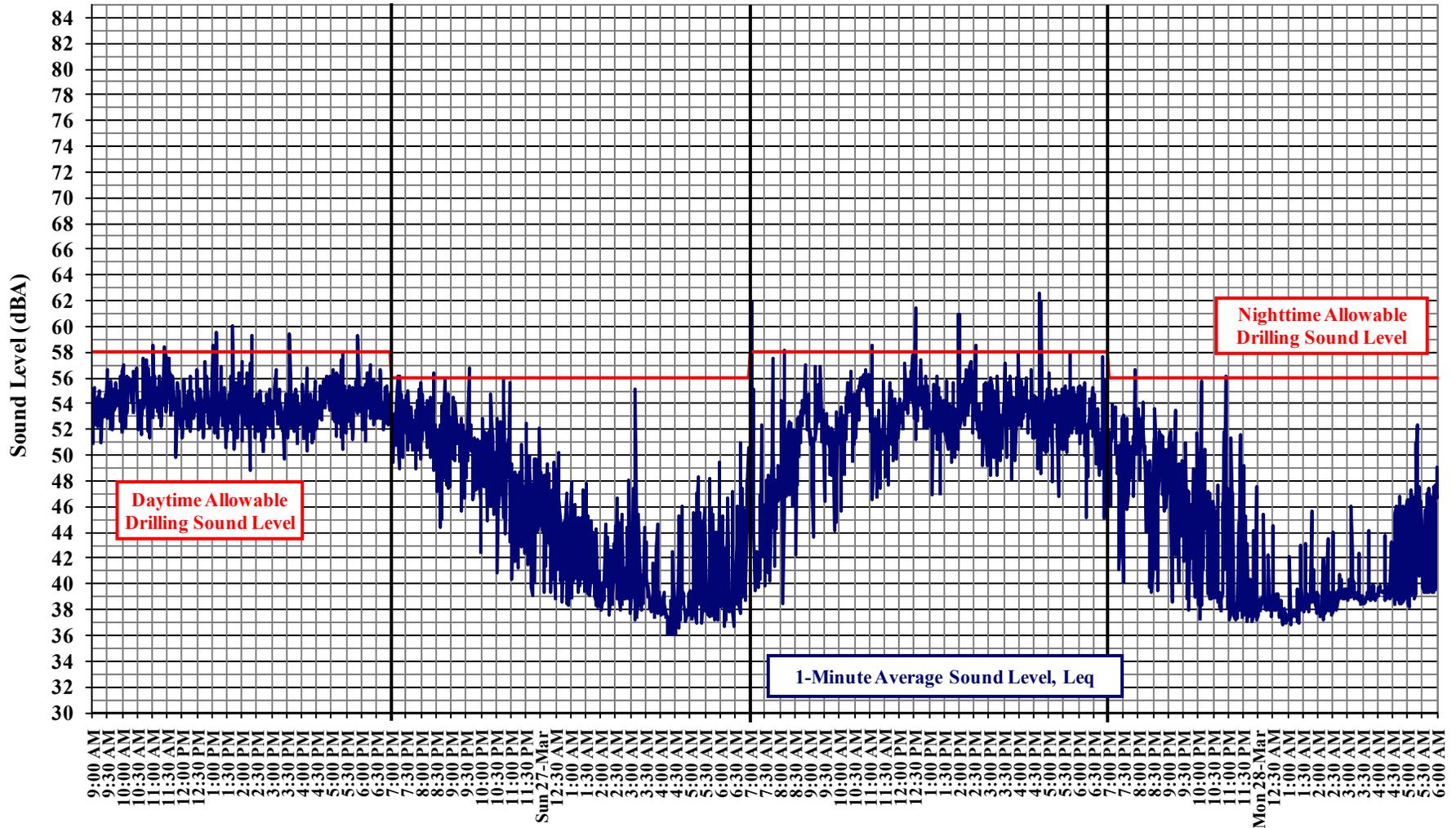


Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring





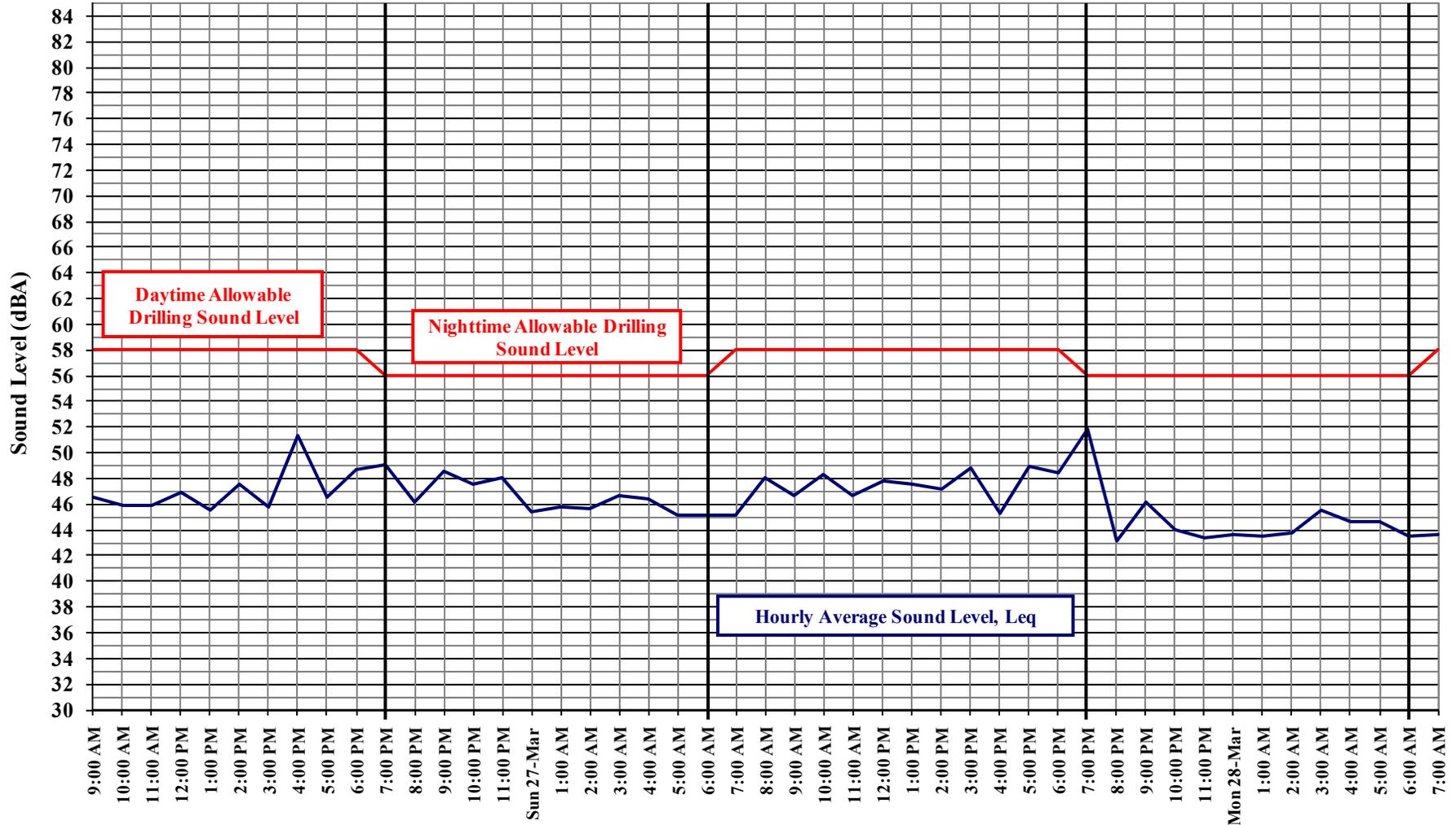
Titan Operating TCC 1H Drill Site - Monitoring Location #1 Continuous Sound Level Monitoring



March 26 - March 28, 2011



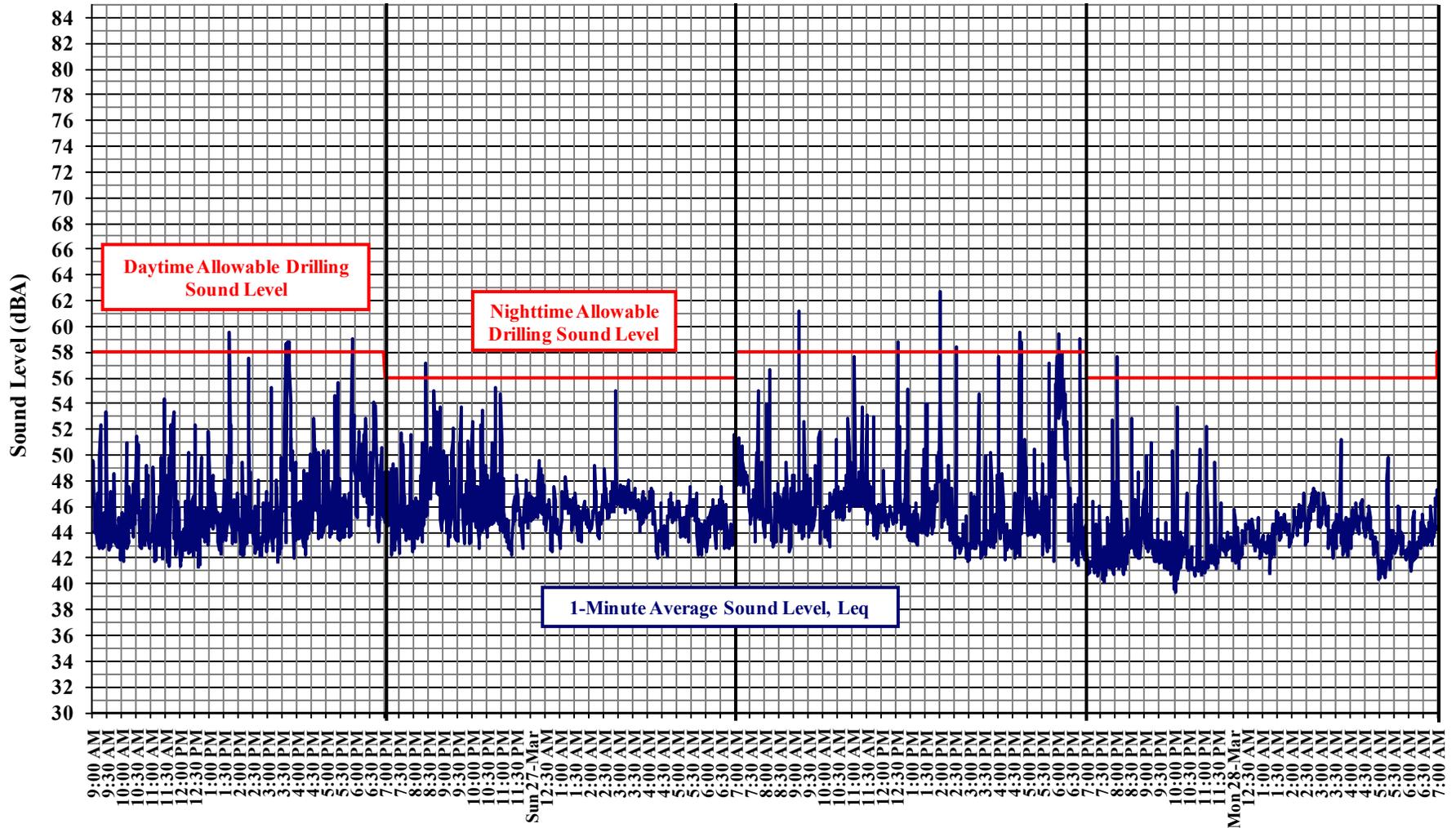
Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring



March 26 - March 28, 2011



Titan Operating TCC 1H Drill Site - Monitoring Location #2 Continuous Sound Level Monitoring



March 26 - March 28, 2011