

May 28, 2015

VibraTechinc.com

Mr. Kevin Even
Village of Waunakee
500 West Main Street
Waunakee, WI 53597

777 Roosevelt Road
Suite 110
Glen Ellyn, IL 60137

Phone 630.858.0681
Fax 630.858.0682

**Re: Blast Monitoring Summary –
Falcon Drilling & Blasting / Kilkenny Development**

Dear Mr. Even:

The following is our report and analysis of the ground vibrations at the above project for the time period of May 13, 2015 to May 28, 2015. In addition to summarizing the project and the monitoring results this report will also give general historical background information regarding the effects of blasting.

PROJECT DESCRIPTION

Vibra-Tech has been contracted by the Village of Waunakee to conduct independent monitoring of the effects from blasting operations by Falcon Drilling and Blasting in association with the Kilkenny Development project. As required by the Village of Waunakee and the State of Wisconsin the blasting contractor has been monitoring the blasting with their own portable seismograph at the closest structure to the blasting activity. In addition to this monitoring, Vibra-Tech has installed four seismographs at various locations in the vicinity of the blasting activity in order to verify that blasting effects are below all established regulations and to characterize the overall effects of the blasting on the surrounding neighborhoods. The map below shows the monitoring locations during this time period.

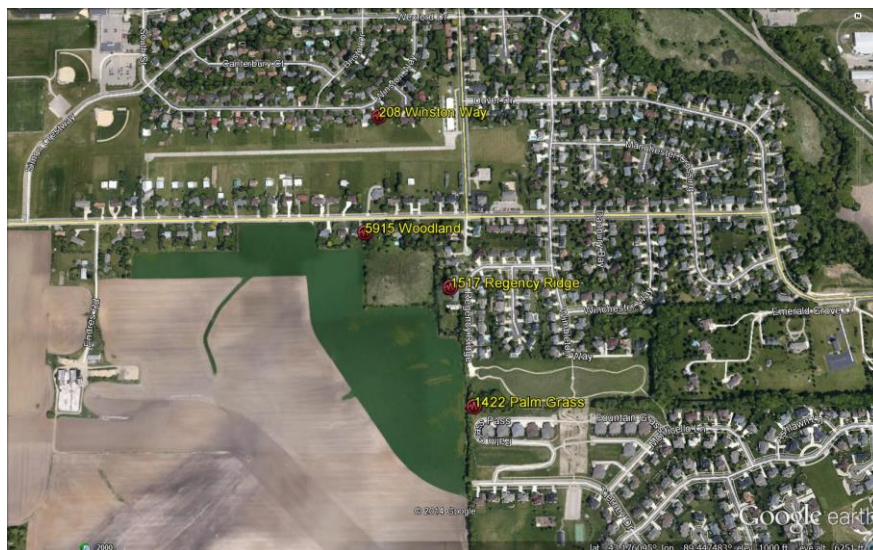


Figure 1: Map of Seismograph Locations

GROUND VIBRATION and AIR OVERPRESSURE DAMAGE CRITERIA

Seismological research by the U.S. Bureau of Mines, foreign investigative groups and individual seismologists has established criteria relating the occurrence of structural damage to certain frequencies and levels of ground motion.

USBM Report of Investigations 8507¹ states that residential structures are most prone to damage as a

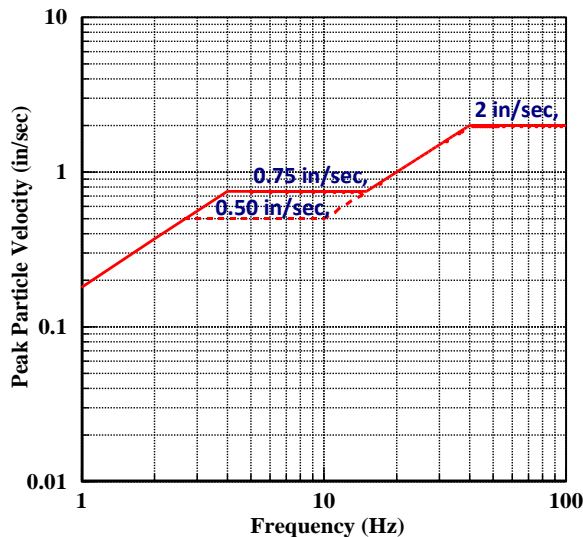


Figure 2: U.S. Bureau of Mines Recommended Vibration Criteria
(From RI-8507)

result of vibration energy within the frequency range of 4-12 hertz. Within this range a 0.50 inch-per-second maximum particle velocity is recommended for the protection of plaster on lath interior construction. A maximum particle velocity of 0.75 inch-per-second is recommended for the protection of modern drywall interior construction. Above 12 hertz the maximum particle velocity limit increases as the frequency increases up to 40 hertz. Above 40 hertz, a constant 2.0 inches-per-second level is recommended to protect interior walls and ceilings of structures. Figure 2 is a graphical representation of the USBM recommended criteria as shown in the velocity versus frequency curve.

The limits cited above are designed to prevent the occurrence of even threshold damage to the most brittle portions of a structure. More massive materials such as brick and mortar can withstand vibrations greater than 2.0 inches-per-second. A study by Crawford and Ward² established the threshold level of damage to be 3.0 inches-per-second for masonry walls regardless of type. Far greater velocities would be required to damage poured concrete. Motion on the order of 8 to 10 inches-per-second would be required before blasting vibrations could be considered responsible.

In conjunction with the ground vibration recording, peak air overpressure was also monitored. Structural damage as a result of air overpressure is generally considered not to be possible without extensive window breakage, as the glass is the weakest portion of a structure's exterior where this pressure acts. Windowpanes are designed to safely withstand changes of 1.0 psi (170 dB) when properly installed, and even in the worst situation a pane should be able to withstand 0.1 lbs/in (150 dB). Air

¹ Siskind, David et al, Structure Response and Damage Produced by the Ground Vibration from Blasting, U.S. Bureau of Mines RI 8507, 1980.

² Crawford, R., and H.S. Ward, Dynamic Strains in Concrete and Masonry Walls, National Research Council of Canada, Note 54, December 1965.

overpressures from blasting rarely exceed 0.01 psi. (130 dB), about one one-hundredth of the overpressure that a window can safely withstand.

The U.S. Bureau of Mines has concluded in its Report of Investigations RI 8485³ based on a minimal probability of the most superficial type of damage in a residential-type structure that 133 dB(L) represents a safe maximum air overpressure level for a 2 Hz High-Pass system.

RESEARCH on REPEATED VIBRATIONS from RI-8896

In 1984, the USBM published RI-8896 entitled, "Effects of Repeated Blasting on a Wood Frame House". This study was the first to document long term strain response on a house. Strain is an engineering measure of deformation used to predict failure. A strain of 1 mil/in indicates that on average, every inch of a material was stretched or compressed one thousandth of an inch. For example, the length of an eight foot long section of wallboard would change by approximately ± 0.1 in. Long-term strain measurements allowed blast-induced strains to be compared with those produced by changes in environmental factors such as temperature, humidity, and human activity.

During this study the Bureau arranged to have a wood-frame test house built in the path of an advancing surface coal mine so that the effects of repeated blasting on a residential house could be studied. In a two-year test period 587 production blasts were fired with peak particle velocities ranging from 0.10 in/sec to 6.94 in/sec. Later the entire house was shaken mechanically to produce fatigue cracking in walls. The first crack appeared in a drywall tape joint after the equivalent of 56,000 cycles. This is the equivalent of 28 years of shaking by blast-induced ground motions of 0.50 in/sec twice a day.

HUMAN PERCEPTIBILITY to VIBRATIONS

The objective of this section of the report is to show that human perception to low levels of vibration is extremely sensitive. As evidenced by the graph shown in Figure 3, human perception to vibrations can be as low as 0.01 in/sec, well below any criteria for structural damage. Human tolerance to vibration decreased not only when it occurs within their homes, but also when the cause of the vibration is not readily apparent or anticipated. Human reaction is dependent on the vibration and amplitude of the vibration event, as well as innumerable other factors beyond the operator's control. Because of this great human subjectivity complaints about blast/construction vibrations cannot be totally eliminated. Discernable vibrations however, are by no means criteria for possibility of structural damage.

The startling effect of blast vibrations must not be underestimated when considering human tolerance to vibration in their homes. Often seismographs are used to perform field demonstrations for concerned residents in their homes. The vibrations produced by normal household activity are measured within a residence and compared to the levels resulting from blasting/construction activities. Normal household

³ Siskind, David et al, Structure Response and Damage Produced by Airblast from Surface Mining, U.S. Bureau of Mines, RI 8485, 1980.

vibration levels frequently exceed those produced by blasting/construction activities by several times. But when the vibration source is familiar, and the vibrations are expected, as with most common household vibrations, people are much less alarmed than when ground vibrations from blasting/construction activities arrive unexpectedly.

The majority of the studies done on human tolerance to vibrations have been of steady-state sources, meaning that the amplitude and frequency content of the energy source remain constant over the test period.

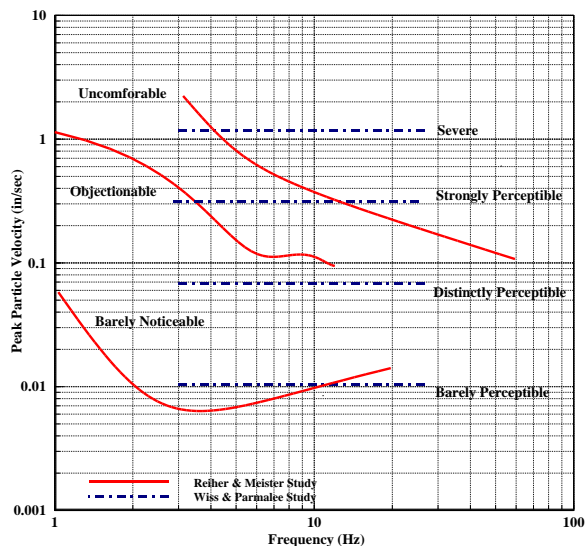


Figure 3: Human Perception to Ground Vibrations

This type of testing usually results in an event of relatively longer duration than a typical mine or quarry blast event. Since the vibration limits in the following studies require a reasonable level of comfort from long-term vibration sources; they are certainly more restrictive than for sources of short duration and infrequent occurrence such as blasting.

Figure 3 is the compilation of two different studies on human response to steady-state and transient vibrations. The first study denoted on the graph by response levels, represented by the solid line, was completed by Reiher and Meister in 1931. In this study 15 people were subjected to 5-minute duration vertical and horizontal

vibrations in a variety of body positions. The study established the threshold levels of subjective human response as defined by three categories. The threshold levels were described as “Barely Noticeable, Objectionable, and Uncomfortable”.

These levels were comparable to subjective responses in a second study completed by Wiss and Parmelee in 1974. The Wiss and Parmelee threshold levels of subjective human response are denoted by response levels represented by the dashed line in Figure 3. Four thresholds of subjective human response to vibration were categorized and are described as “Barely Perceptible, Distinctly Perceptible, Strongly Perceptible, and Severe”. In this study, the responses of 40 people to transient vibrations consisting of damped 5-second sinusoidal pulses between the frequencies of 2.5 to 25 Hertz (Hz) were observed. All subjects were standing on an open platform and subjected to vertical vibrations. The study found that responses depended on vibration levels and damping, but were independent of frequency.

LOCAL BLASTING REGULATIONS

The State of Wisconsin has adopted the USBM RI-8507 vibration criteria shown in Figure 2 as its blasting regulations (SPS 307.44). Furthermore, the Village of Waunakee has a blasting limit of 1.35 in/sec. Both regulations require that blasting operations shall be monitored with a seismograph at the closest structure.

INDEPENDENT BLAST MONITORING RESULTS

During this monitoring period (May 13, 2015 to May 28, 2015) there have been a total of forty-three (43) blasts that occurred on the project. A summary of the results of the monitoring for each location is shown below.

5915 Woodland Dr. (S/N #9547)

The peak particle velocity for this location during this monitoring period was 0.303 in/sec at 19.2 hertz, which occurred on May 22, 2015 at 08:43.

1517 Regency Ridge Dr. (S/N #8001/#7817)

The peak particle velocity for this location during this monitoring period was 0.805 in/sec at 21.7 hertz, which occurred on May 20, 2015 at 14:49.

1422 Palm Grass Pass (S/N #9539)

The peak particle velocity for this location during this monitoring period was 0.053 in/sec at 31.3 hertz, which occurred on May 19, 2015 at 10:54.

208 Winston Way (S/N #9471)

The peak particle velocity for this location during this monitoring period was 0.048 in/sec at 26.3 hertz, which occurred on May 28, 2015 at 16:43.

Below, in Figure 4 the data is also plotted against the State of Wisconsin vibration criteria (SPS 307.44) and the Village of Waunakee vibration limit.

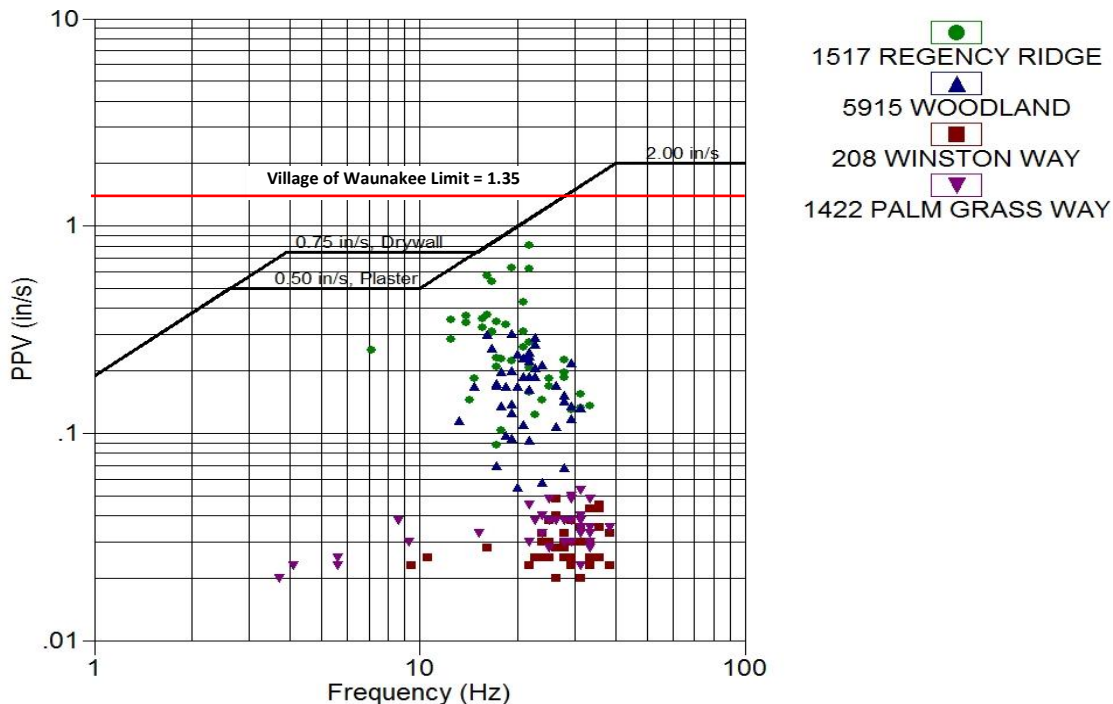


Figure 4: Seismic Data Plotted to USBM RI-8507

CONCLUSION

All of the blast monitoring results from this monitoring period were below the regulatory limits. Particularly, the State of Wisconsin vibration criteria (SPS 307.44), which is derived from the USBM RI-8507 recommended limits for the protection of residential structures was not exceeded. The most significant peak particle velocity recording for this monitoring period was 0.683 ips at 17.2 hertz, which is 78.8% of the limit at that frequency. As discussed earlier in this report, the USBM RI-8507 vibration criteria was established for the protection of the most vulnerable parts of residential home construction. Therefore, in the opinion of the author it is not possible for the blasting that occurred during this monitoring period to have caused or contributed to any cosmetic or structural damage to neighboring homes.

A data summary table of all seismic monitoring reports for this monitoring period has been included at the end of this report. If you have any questions, please contact our office at (630) 858-0681.

Sincerely,

Vibra-Tech, Inc.

A handwritten signature in black ink, appearing to read "Mike Spors".

Mike Spors, E.I.T.

Area Manager

Vibra-Tech Seismic Analysis

Village of Waunakee - Kilkenny Farms

	Date	Time	Location	PPV Max	FREQ Max	DB	Most Significant PV	Most Significant HZ	Most Significant %
1	05/13/2015	10:52:16	1517 Regency Ridge	0.168	25.000	76	0.080	9.4	16.0
2	05/13/2015	10:52:19	5915 Woodland	0.208	22.700	115	0.115	8.9	23.0
3	05/13/2015	10:52:07	208 Winston Way	0.023	33.300	102	0.020	10.4	3.8
4	05/13/2015	13:16:38	1517 Regency Ridge	0.210	17.200	76	0.210	17.2	24.2
5	05/13/2015	13:16:41	5915 Woodland	0.198	17.900	112	0.198	17.9	22.0
6	05/13/2015	13:16:28	1422 Palm Grass Way	0.038	26.300	102	0.018	10.2	3.4
7	05/13/2015	15:37:34	1517 Regency Ridge	0.428	20.800	76	0.373	17.9	41.5
8	05/13/2015	15:37:38	5915 Woodland	0.153	27.800	109	0.123	8.1	24.5
9	05/13/2015	15:37:25	1422 Palm Grass Way	0.048	25.000	103	0.025	8.5	5.0
10	05/13/2015	15:37:26	208 Winston Way	0.028	16.100	104	0.020	8.5	4.0
11	05/14/2015	09:21:16	1517 Regency Ridge	0.260	20.800	76	0.248	17.2	28.6
12	05/14/2015	09:21:19	5915 Woodland	0.055	20.000	110	0.053	16.1	6.5
13	05/14/2015	09:21:17	1422 Palm Grass Way	0.035	33.300	112	0.018	10.0	3.5
14	05/14/2015	09:21:17	208 Winston Way	0.025	35.700	102	0.013	8.9	2.5
15	05/14/2015	10:53:10	1517 Regency Ridge	0.310	20.800	76	0.310	20.8	29.6
16	05/14/2015	10:53:13	5915 Woodland	0.058	23.800	104	0.040	11.6	6.8
17	05/14/2015	10:53:11	1422 Palm Grass Way	0.035	31.300	106	0.015	10.6	2.8
18	05/14/2015	10:53:12	208 Winston Way	0.030	27.800	100	0.013	10.0	2.5
19	05/14/2015	13:05:56	1517 Regency Ridge	0.228	17.900	119	0.135	9.8	27.0
20	05/14/2015	13:05:56	5915 Woodland	0.070	17.200	107	0.053	9.6	10.5
21	05/14/2015	13:05:55	1422 Palm Grass Way	0.033	15.200	108	0.030	10.2	5.8
22	05/14/2015	14:30:18	1517 Regency Ridge	0.368	13.900	122	0.368	13.9	52.6
23	05/14/2015	14:30:18	5915 Woodland	0.098	18.500	107	0.070	8.1	14.0
24	05/14/2015	14:30:17	1422 Palm Grass Way	0.038	8.600	113	0.038	8.6	7.5
25	05/14/2015	14:30:17	208 Winston Way	0.025	22.700	103	0.025	9.4	5.0
26	05/14/2015	16:04:35	1517 Regency Ridge	0.353	12.500	122	0.353	12.5	56.1
27	05/14/2015	16:04:35	5915 Woodland	0.068	27.800	109	0.035	9.1	7.0
28	05/14/2015	16:04:34	1422 Palm Grass Way	0.038	31.300	117	0.023	6.9	4.5
29	05/14/2015	16:04:34	208 Winston Way	0.020	26.300	103	0.018	8.1	3.5
30	05/15/2015	08:35:35	1517 Regency Ridge	0.323	15.600	121	0.323	15.6	41.1
31	05/15/2015	08:35:33	5915 Woodland	0.135	17.900	105	0.110	13.9	15.8
32	05/15/2015	08:35:32	1422 Palm Grass Way	0.035	31.300	113	0.023	9.1	4.5
33	05/15/2015	08:35:32	208 Winston Way	0.020	31.300	101	0.018	10.9	3.2
34	05/15/2015	10:53:34	1517 Regency Ridge	0.223	19.200	124	0.138	10.0	27.5
35	05/15/2015	10:53:31	5915 Woodland	0.125	19.200	109	0.115	10.2	22.4
36	05/15/2015	10:53:30	1422 Palm Grass Way	0.048	29.400	110	0.023	8.9	4.5
37	05/15/2015	10:53:31	208 Winston Way	0.035	31.300	103	0.025	10.4	4.8
38	05/18/2015	10:36:59	1517 Regency Ridge	0.305	16.700	121	0.305	16.7	36.4
39	05/18/2015	10:36:58	5915 Woodland	0.168	20.000	112	0.090	7.8	18.0
40	05/18/2015	10:37:00	1422 Palm Grass Way	0.040	31.300	106	0.018	6.9	3.5
41	05/18/2015	10:36:58	208 Winston Way	0.028	27.800	112	0.020	8.5	4.0
42	05/18/2015	13:30:41	1517 Regency Ridge	0.230	17.200	121	0.215	14.3	29.9
43	05/18/2015	13:30:40	5915 Woodland	0.245	21.700	113	0.245	21.7	22.4
44	05/18/2015	13:30:42	1422 Palm Grass Way	0.038	27.800	112	0.035	19.2	3.6
45	05/18/2015	13:30:41	208 Winston Way	0.030	29.400	104	0.020	8.2	4.0
46	05/18/2015	15:03:52	1517 Regency Ridge	0.208	21.700	118	0.208	21.7	19.0
47	05/18/2015	15:03:51	5915 Woodland	0.170	17.200	116	0.118	5.4	23.5
48	05/18/2015	15:03:53	1422 Palm Grass Way	0.050	29.400	103	0.023	7.2	4.5
49	05/18/2015	15:03:52	208 Winston Way	0.030	23.800	109	0.020	9.6	4.0
50	05/19/2015	08:23:42	1517 Regency Ridge	0.345	17.200	124	0.345	17.2	39.8
51	05/19/2015	08:23:41	5915 Woodland	0.163	21.700	111	0.163	21.7	14.9
52	05/19/2015	08:23:41	1422 Palm Grass Way	0.033	33.300	111	0.018	5.2	3.5
53	05/19/2015	08:23:41	208 Winston Way	0.025	25.000	102	0.018	10.4	3.3
54	05/19/2015	08:27:00	1517 Regency Ridge	0.208	21.700	119	0.120	12.2	19.6

Vibra-Tech Seismic Analysis

Village of Waunakee - Kilkenny Farms

	Date	Time	Location	PPV Max	FREQ Max	DB	Most Significant PV	Most Significant HZ	Most Significant %
55	05/19/2015	08:26:58	5915 Woodland	0.200	19.200	109	0.195	17.2	22.5
56	05/19/2015	08:26:59	1422 Palm Grass Way	0.038	22.700	111	0.020	5.0	4.0
57	05/19/2015	08:26:59	208 Winston Way	0.030	25.000	101	0.020	8.2	4.0
58	05/19/2015	09:36:48	1517 Regency Ridge	0.355	15.600	122	0.355	15.6	45.2
59	05/19/2015	09:36:47	5915 Woodland	0.093	21.700	108	0.068	8.3	13.5
60	05/19/2015	09:36:48	1422 Palm Grass Way	0.033	23.800	110	0.023	8.8	4.5
61	05/19/2015	09:36:48	208 Winston Way	0.025	29.400	104	0.025	9.4	5.0
62	05/19/2015	10:54:35	1517 Regency Ridge	0.625	19.200	123	0.625	19.2	64.7
63	05/19/2015	10:54:34	5915 Woodland	0.138	19.200	108	0.138	19.2	14.2
64	05/19/2015	10:54:35	1422 Palm Grass Way	0.053	31.300	106	0.043	10.4	8.1
65	05/19/2015	10:54:35	208 Winston Way	0.028	26.300	101	0.028	10.2	5.4
66	05/20/2015	11:00:40	1517 Regency Ridge	0.308	16.700	123	0.308	16.7	36.7
67	05/20/2015	11:00:39	5915 Woodland	0.290	22.700	113	0.290	22.7	25.4
68	05/20/2015	11:00:37	1422 Palm Grass Way	0.045	21.700	109	0.033	6.6	6.5
69	05/20/2015	11:00:31	208 Winston Way	0.025	23.800	105	0.020	11.4	3.5
70	05/20/2015	12:36:16	1517 Regency Ridge	0.183	14.700	120	0.183	14.7	24.7
71	05/20/2015	12:36:15	5915 Woodland	0.188	20.800	115	0.173	13.9	24.7
72	05/20/2015	12:36:13	1422 Palm Grass Way	0.030	33.300	106	0.025	6.0	5.0
73	05/20/2015	12:36:07	208 Winston Way	0.025	10.600	105	0.025	10.6	4.7
74	05/20/2015	13:36:19	1517 Regency Ridge	0.285	12.500	124	0.285	12.5	45.4
75	05/20/2015	13:36:18	5915 Woodland	0.110	20.800	112	0.073	9.8	14.5
76	05/20/2015	13:36:16	1422 Palm Grass Way	0.030	29.400	108	0.025	5.3	5.0
77	05/20/2015	13:36:10	208 Winston Way	0.025	27.800	105	0.020	6.5	4.0
78	05/20/2015	14:49:19	1517 Regency Ridge	0.805	21.700	127	0.683	17.2	78.8
79	05/20/2015	14:49:18	5915 Woodland	0.188	22.700	112	0.165	18.5	17.7
80	05/20/2015	14:49:16	1422 Palm Grass Way	0.048	33.300	111	0.030	11.4	5.3
81	05/20/2015	14:49:10	208 Winston Way	0.025	33.300	103	0.025	11.4	4.4
82	05/20/2015	16:17:32	1517 Regency Ridge	0.253	7.100	122	0.253	7.1	50.5
83	05/20/2015	16:17:31	5915 Woodland	0.118	29.400	113	0.070	9.6	14.0
84	05/20/2015	16:17:29	1422 Palm Grass Way	0.030	9.300	108	0.030	9.3	6.0
85	05/20/2015	16:17:23	208 Winston Way	0.023	21.700	103	0.023	10.4	4.3
86	05/21/2015	13:57:48	1517 Regency Ridge	0.573	16.100	124	0.573	16.1	70.6
87	05/21/2015	13:57:50	5915 Woodland	0.135	29.400	110	0.070	12.5	11.1
88	05/21/2015	13:57:51	1422 Palm Grass Way	0.035	38.500	106	0.023	4.1	4.5
89	05/21/2015	13:57:49	208 Winston Way	0.033	38.500	111	0.030	9.3	6.0
90	05/21/2015	15:16:31	1517 Regency Ridge	0.195	27.800	122	0.155	13.5	22.8
91	05/21/2015	15:16:33	5915 Woodland	0.223	21.700	112	0.223	21.7	20.4
92	05/21/2015	15:16:34	1422 Palm Grass Way	0.033	31.300	106	0.025	8.3	5.0
93	05/21/2015	15:16:32	208 Winston Way	0.023	29.400	110	0.020	6.6	4.0
94	05/21/2015	16:48:13	1517 Regency Ridge	0.620	21.700	125	0.508	16.1	62.6
95	05/21/2015	16:48:14	5915 Woodland	0.230	20.800	112	0.230	20.8	22.0
96	05/21/2015	16:48:15	1422 Palm Grass Way	0.038	25.000	110	0.033	8.5	6.5
97	05/21/2015	16:48:14	208 Winston Way	0.040	26.300	103	0.025	7.5	5.0
98	05/22/2015	08:43:53	1517 Regency Ridge	0.158	21.700	119	0.095	7.2	19.0
99	05/22/2015	08:43:52	5915 Woodland	0.303	19.200	112	0.303	19.2	31.3
100	05/22/2015	08:43:52	1422 Palm Grass Way	0.023	4.100	104	0.020	4.3	4.0
101	05/22/2015	08:43:52	208 Winston Way	0.030	25.000	104	0.025	7.0	5.0
102	05/22/2015	09:37:31	1517 Regency Ridge	0.123	22.700	121	0.115	5.0	23.0
103	05/22/2015	09:37:30	5915 Woodland	0.143	27.800	112	0.085	7.8	17.0
104	05/22/2015	09:37:31	1422 Palm Grass Way	0.023	5.600	104	0.023	10.4	4.3
105	05/22/2015	09:37:31	208 Winston Way	0.023	9.400	103	0.023	9.4	4.5
106	05/22/2015	11:22:57	1517 Regency Ridge	0.225	27.800	122	0.195	6.6	39.0
107	05/22/2015	11:22:56	5915 Woodland	0.095	19.200	113	0.080	10.0	16.0
108	05/22/2015	11:22:56	1422 Palm Grass Way	0.030	27.800	104	0.023	5.1	4.5

Vibra-Tech Seismic Analysis

Village of Waunakee - Kilkenny Farms

	Date	Time	Location	PPV Max	FREQ Max	DB	Most Significant PV	Most Significant HZ	Most Significant %
109	05/22/2015	11:22:57	208 Winston Way	0.033	23.800	103	0.025	10.2	4.9
110	05/22/2015	12:34:42	1517 Regency Ridge	0.373	16.100	122	0.260	6.3	52.0
111	05/22/2015	12:34:41	5915 Woodland	0.133	31.300	112	0.073	8.9	14.5
112	05/22/2015	12:34:41	1422 Palm Grass Way	0.035	38.500	103	0.030	8.1	6.0
113	05/22/2015	12:34:42	208 Winston Way	0.045	35.700	103	0.028	12.8	4.3
114	05/22/2015	14:13:47	1517 Regency Ridge	0.135	33.300	119	0.110	10.6	20.6
115	05/22/2015	14:13:46	5915 Woodland	0.213	23.800	113	0.133	9.4	26.5
116	05/22/2015	14:13:46	1422 Palm Grass Way	0.023	31.300	105	0.018	3.8	3.5
117	05/22/2015	14:13:47	208 Winston Way	0.043	35.700	103	0.018	9.6	3.5
118	05/26/2015	08:28:41	1517 Regency Ridge	0.185	27.800	118	0.108	6.8	21.5
119	05/26/2015	08:28:47	5915 Woodland	0.235	21.700	112	0.205	18.5	22.0
120	05/26/2015	08:28:53	1422 Palm Grass Way	0.028	33.300	104	0.023	5.7	4.5
121	05/26/2015	08:28:48	208 Winston Way	0.033	27.800	105	0.023	9.4	4.5
122	05/26/2015	09:56:21	1517 Regency Ridge	0.333	18.500	120	0.333	18.5	35.7
123	05/26/2015	09:56:26	5915 Woodland	0.170	26.300	112	0.133	14.7	17.9
124	05/26/2015	09:56:32	1422 Palm Grass Way	0.040	23.800	105	0.025	4.8	5.0
125	05/26/2015	09:56:28	208 Winston Way	0.038	25.000	107	0.028	13.5	4.0
126	05/27/2015	09:07:59	1517 Regency Ridge	0.538	16.700	120	0.538	16.7	64.2
127	05/27/2015	09:08:08	5915 Woodland	0.115	13.200	114	0.115	13.2	17.4
128	05/27/2015	09:08:10	1422 Palm Grass Way	0.028	25.000	112	0.023	3.9	4.5
129	05/27/2015	09:08:00	208 Winston Way	0.038	25.000	104	0.025	7.8	5.0
130	05/27/2015	11:10:59	1517 Regency Ridge	0.130	29.400	117	0.078	6.3	15.5
131	05/27/2015	11:11:04	5915 Woodland	0.298	16.100	112	0.298	16.1	36.7
132	05/27/2015	11:11:07	1422 Palm Grass Way	0.038	29.400	106	0.018	4.9	3.5
133	05/27/2015	11:10:57	208 Winston Way	0.025	29.400	106	0.025	11.4	4.4
134	05/27/2015	12:20:41	1517 Regency Ridge	0.145	23.800	120	0.110	13.5	16.2
135	05/27/2015	12:20:49	5915 Woodland	0.218	29.400	121	0.155	17.2	17.9
136	05/27/2015	12:20:42	208 Winston Way	0.030	31.300	106	0.020	11.4	3.5
137	05/27/2015	13:45:30	1517 Regency Ridge	0.155	31.300	117	0.123	10.9	22.4
138	05/27/2015	13:45:39	5915 Woodland	0.168	18.500	114	0.138	12.2	22.4
139	05/27/2015	13:45:41	1422 Palm Grass Way	0.020	3.700	107	0.020	3.7	4.0
140	05/27/2015	13:45:32	208 Winston Way	0.038	29.400	104	0.028	10.9	5.0
141	05/27/2015	15:59:49	1517 Regency Ridge	0.340	13.900	126	0.340	13.9	48.7
142	05/27/2015	15:59:58	5915 Woodland	0.173	17.200	111	0.173	17.2	19.9
143	05/27/2015	16:00:00	1422 Palm Grass Way	0.030	21.700	107	0.025	10.0	5.0
144	05/27/2015	15:59:51	208 Winston Way	0.030	33.300	103	0.030	10.2	5.8
145	05/28/2015	08:29:25	1517 Regency Ridge	0.088	17.200	104	0.053	9.6	10.5
146	05/28/2015	08:29:24	5915 Woodland	0.240	20.000	114	0.218	17.2	25.1
147	05/28/2015	09:48:06	1517 Regency Ridge	0.103	17.900	112	0.103	17.9	11.4
148	05/28/2015	09:48:06	5915 Woodland	0.258	16.700	118	0.225	13.2	34.0
149	05/28/2015	09:48:07	208 Winston Way	0.023	38.500	107	0.020	9.4	4.0
150	05/28/2015	11:53:39	1517 Regency Ridge	0.145	14.300	122	0.130	11.1	23.3
151	05/28/2015	11:53:39	5915 Woodland	0.188	21.700	118	0.138	10.9	25.2
152	05/28/2015	11:53:41	1422 Palm Grass Way	0.025	5.600	105	0.025	5.6	5.0
153	05/28/2015	11:53:40	208 Winston Way	0.035	35.700	107	0.023	9.3	4.5
154	05/28/2015	14:14:35	1517 Regency Ridge	0.133	31.300	118	0.103	6.7	20.5
155	05/28/2015	14:14:35	5915 Woodland	0.168	14.700	118	0.168	14.7	22.7
156	05/28/2015	14:14:37	1422 Palm Grass Way	0.050	29.400	105	0.018	4.1	3.5
157	05/28/2015	14:14:36	208 Winston Way	0.043	33.300	107	0.015	11.1	2.7
158	05/28/2015	15:14:55	1517 Regency Ridge	0.183	25.000	121	0.128	8.9	25.5
159	05/28/2015	15:14:55	5915 Woodland	0.108	26.300	112	0.093	8.9	18.5
160	05/28/2015	15:14:58	1422 Palm Grass Way	0.030	33.300	106	0.020	4.5	4.0
161	05/28/2015	15:14:57	208 Winston Way	0.030	29.400	105	0.025	9.4	5.0
162	05/28/2015	16:43:57	1517 Regency Ridge	0.275	21.700	122	0.275	17.2	31.7

Vibra-Tech Seismic Analysis

Village of Waunakee - Kilkenny Farms

	Date	Time	Location	PPV Max	FREQ Max	DB	Most Significant PV	Most Significant HZ	Most Significant %
163	05/28/2015	16:43:57	5915 Woodland	0.268	22.700	115	0.268	22.7	23.4
164	05/28/2015	16:44:00	1422 Palm Grass Way	0.038	22.700	110	0.023	6.0	4.5
165	05/28/2015	16:43:59	208 Winston Way	0.048	26.300	108	0.025	10.4	4.8